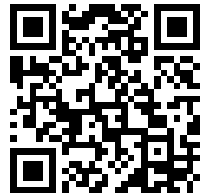
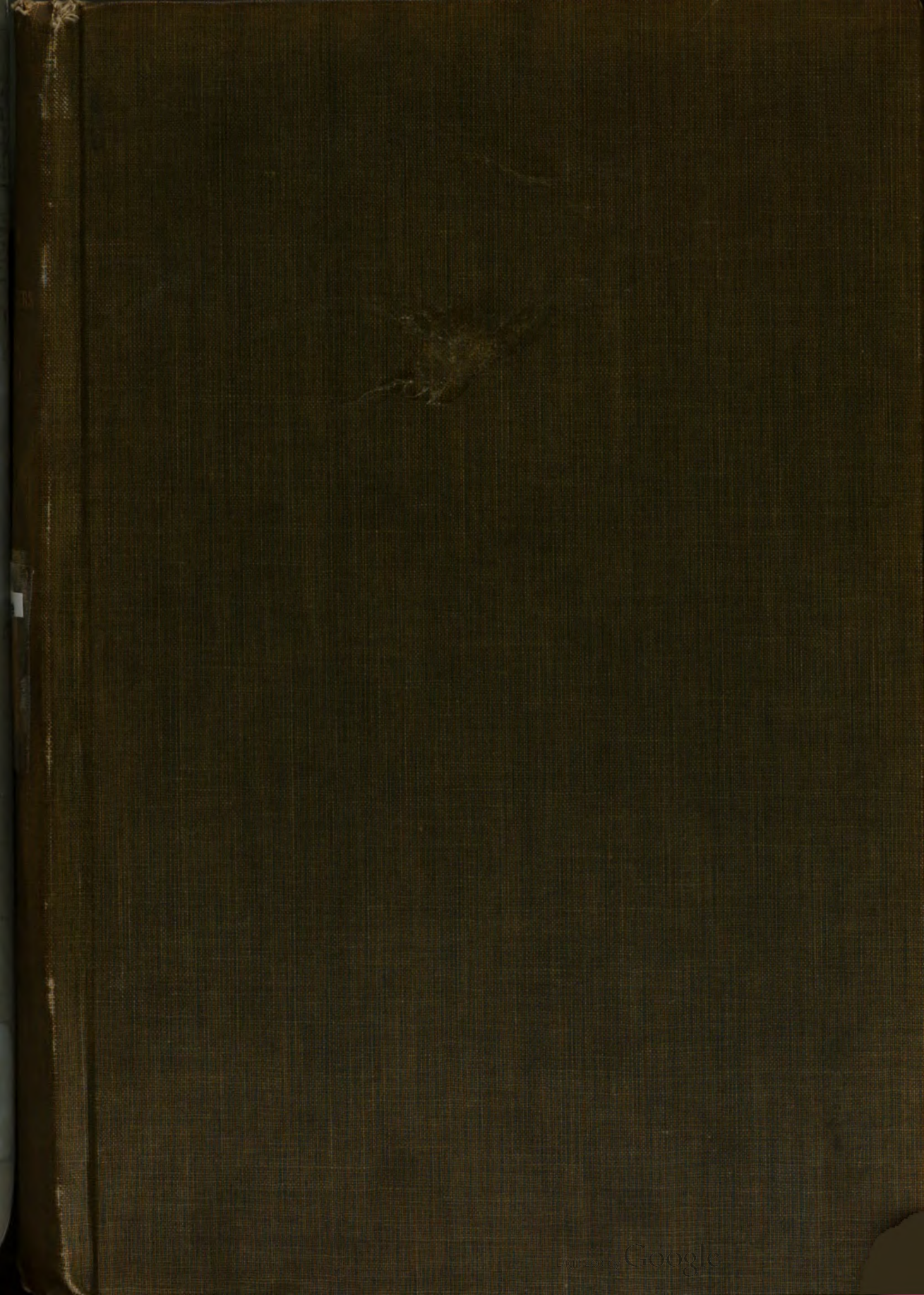
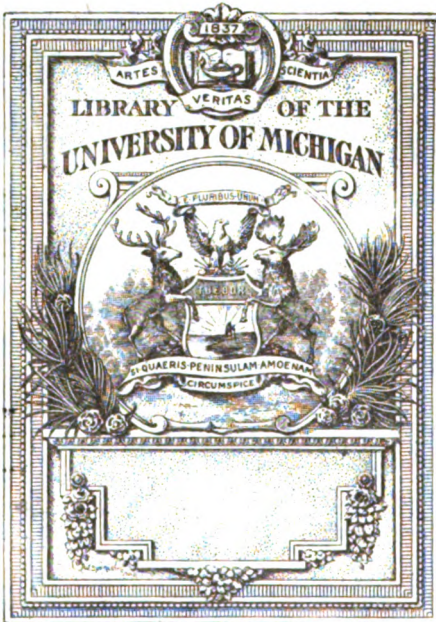

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NINETEENTH BIENNIAL REPORT
OF THE
STATE BOARD
OF
FISH COMMISSIONERS
FOR FISCAL YEARS 1909 AND 1910



BY AUTHORITY

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STATE BOARD OF FISH COMMISSIONERS.

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DELBERT H. POWER.....Vice-President

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SEYMOUR BOWER..... Superintendent
GEORGE D. MUSSEY..... Secretary
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NINETEENTH BIENNIAL REPORT OF THE MICHIGAN STATE
BOARD OF FISH COMMISSIONERS.

To His Excellency, the Governor:

The State Board of Fish Commissioners herewith beg leave to report:

That at their request the superintendent, Seymour Bower, has made a complete and exhaustive report, hereto appended, of the affairs and needs of the state relative to the propagation of food fishes. It contains all such information as those who are interested may desire concerning the work of this board not only for the past two years but for a long time previous.

Nothing need be added by the board to this report except to say that the board concurs in the recommendations made by the superintendent.

It is well known that for a number of years past the appropriations for current expenses have been insufficient to maintain the necessary repairs at nearly all of our stations. No business man needs to be told that when repairs are not kept up as they should be the cost of up-keep will naturally and constantly increase. We therefore call attention to the much-needed repairs at the several stations and urge that sufficient appropriations be made to put all the property of the state in a reasonable state of repair.

We also endorse the recommendation of our superintendent relative to the new work that should be done at the Harrietta, Mill Creek, Drayton Plains and Paris stations, and in the Upper Peninsula. With these improvements, it is the belief of the board that the increasing demand of the public for fish planting in all parts of the state can be reasonably met.

The time for the discussion of the advisability of artificial propagation of food fishes in this and other states has long passed. It is well settled that the stocking of inland lakes and rivers of a state has proved to be of great advantage and comfort to the citizens of the state where such work has been properly and efficiently carried on. Accepting this to be true, the only question that remains is that of the proper expenditure to be made to bring about the desired result. The sooner the artificial propagation of food fishes is brought to the highest practical efficiency, the better for all—and surely the better from an economical standpoint.

But it should be added that if we are to utilize our inland waters to the best advantage, we must know more than we now know of fish life and of the character of the waters as well as the kind of fish for which they are adapted: To this end there should be an annual appropriation to be devoted exclusively to experimental work and investigation.

Of course, the successful artificial propagation of food fishes is nec-

essarily accompanied by state protection. This work is confided to another department. This board is glad to testify to the co-operation of that department with the work of this board, especially during the past two years.

This board is fully of the belief that it need not be long before every inland lake and stream can be made to produce food in quantities sufficient to meet all reasonable demands for it. But to accomplish this there must be furnished sufficient capital for the up-keep of the state property in use for this purpose, and for reasonable and economical improvements.

Respectfully submitted,

C. D. JOSLYN,
D. H. POWER,
FRED POSTAL,
Commissioners.

SUPERINTENDENT'S REPORT.

To the State Board of Fish Commissioners, Detroit, Mich.:

Gentlemen—The following report, nominally for the biennial period ending June 30, 1910, is respectfully submitted. This report, however, really covers only the last half of the biennial term under consideration, so far as special or construction work is concerned. The reason is that reports have heretofore been made by calendar years, except the financial statement and inventory; hence the special work of the first half of the fiscal year ending June 30, 1909, was included in our last published report. The last half of the fiscal year ending June 30, 1909, like every corresponding period, was devoted exclusively to fish cultural work or making preparations for it, so that no construction work not already reported and published was carried on in the present biennial period, except during the first half of the fiscal year ending June 30, 1910. Attention is called to the fact that the construction work of the last half of the calendar year, 1910, which really includes all of that work for the entire calendar year, 1910, and heretofore reported in that way is not due to be reported until June 30, 1912, a delay of a year and a half, due to the plan of reporting by fiscal years.

APPROPRIATIONS.

If there is one thing more than another to which I desire to call your attention and to make as emphatic as possible, it is the obvious fact that under existing conditions our appropriations for current expenses are quite insufficient to keep our buildings and other property in decent repair and at the same time to hold the production of fish to its present volume. For a number of years we have been struggling and fighting and straining every point to increase our output of fish, in response to an ever increasing demand. In view, however, of the marked increase in the cost of materials and labor, with no corresponding increase in appropriations, it has been impossible to make much headway. For the most part it has been a constant struggle to keep up the average output and even this has been possible only by neglecting some of our buildings and property and allowing them to run down for want of timely repairs. This board should not be, and I believe need not be, driven to such extremities. I believe that a circular letter setting forth the true situation and placed in the hands of our applicants for fish and all who are interested in maintaining and increasing the supply of food and game fish, would result in a substantial increase in our appropriations. Our fishing constituency is unquestionably a large and powerful one and when stirred to action their influence would undoubtedly be reflected in the action of the legislature. We should have not one penny less than \$50,000.00 per year for current expenses and I believe that fisheries interests will see that we get it if we but call their attention to our necessities. With this sum we could keep our properties in respectable repair, make a large proportionate increase in the output of food and game fish, including some of the common and popular varieties that we

produce scarcely at all at the present time, and last but by no means least, do justice to a number of our employees whose compensation has not been increased for years. In ordinary pursuits the efficiency of employees of experience and faithful service is recognized, and we should therefore at least equalize their compensation to correspond with the greatly increased cost of living.

From the year 1900 to 1909 inclusive, a period of ten years, our appropriations for current expenses averaged approximately \$31,000.00 per year or only \$4,000.00 less than at the present time. Our average appropriation for current expenses for the years 1895, 1896 and 1897, 13 to 15 years ago, was \$28,000.00 per year as against only \$35,000.00 at the present time and we now have one more hatchery to maintain. Ten to fifteen years ago fish food cost exactly one-half what it does today. Subsistence for our teams has likewise nearly doubled in cost. Twelve to fifteen years ago common labor was abundant at \$1.25 per day and now it is more or less scarce at \$1.75 to \$2.00 per day. Lumber is another item many grades of which have more than doubled in value during the period mentioned, and so it goes all along down the line. It is almost impossible to name a single item that has not advanced in price. Measured by purchasing power our annual appropriations have been reduced in the face of an ever increasing demand for our products, and the wages of our experienced employees have in effect been cut down, whereas they should have been increased at least sufficient to keep pace with the increased cost of living.

I believe furthermore that we should put it up to the fishing interests and all who are in favor of increasing and perpetuating the supply of food and game fishes, not only to assume some part of the responsibility of securing increased appropriations but also to place appropriations for current operating expenses on a permanent or perpetual basis. With a fixed minimum fund at our disposal we could plan our work to much better advantage, thus adding to its efficiency and the volume of the output. The state of Wisconsin has a standing appropriation of \$37,000.00 per year for current expenses of the Board of Fish Commissioners, to which has recently been added a substantial revenue from fees accruing from rod licenses. This amounted to \$7,000.00 last year, making the total for current expenses \$44,000.000 per year, or \$11,000.00 more than Michigan appropriates for like purposes. During the four years ending June 30, 1911, Wisconsin appropriated \$35,000.00 for special purposes. Our special fund for the same period was but little more than half that sum or, to be exact, \$18,410.00.

The state of Minnesota has a standing or perpetual appropriation of \$35,000.000 per year for the propagation and protection of fish and game.

ROD LICENSE.

I desire to again call your attention to the justice and fairness of a rod license law, the net revenue from same to be devoted exclusively to the propagation, or to the propagation and protection, of food and game fish. In my judgment such a law should exempt all persons under 18 years of age and also all persons fishing in waters flowing through or bordering upon their own lands. The fee for non-residents should be much higher than for residents of

the state but the former should be allowed to carry home at least a day's legal catch of any kind of fish. The absolute justice of compelling all who fish in public waters to contribute a small sum towards perpetuating the supply cannot be questioned, and under the exemption and privilege above indicated a small fee for residents and a larger one for non-residents cannot be considered excessive or burdensome. Practically without exception anglers from outside the state would be more than willing to pay the license fee for the mere privilege of taking home a day's legal catch. A large majority of the anglers visiting this state are from Ohio, Indiana, Illinois and the southern states, in all of which brook trout and rainbow trout are practically unknown. The exhibition at home of the result of a day's fishing in some of Michigan's famous trout waters would serve as an excellent advertisement, and thus the exaction of a license that grants this privilege would increase rather than decrease the number of visiting anglers. The average non-resident fisherman and resorter who is attracted to our state mainly by the fact that excellent fishing is to be enjoyed expends from \$50.00 to \$200.00 for the outing. I believe that the addition of a trifling percentage to this expense would not keep a single angler away, particularly when the fee for the privilege of fishing carries with it an added privilege of much greater value than the added cost, to 99 anglers out of every 100.

Several years ago I urged your honorable body to make a strong effort to secure the passage of a rod license law, and at the same time recommended that one-half of the net revenue therefrom be used by this board for the propagation of fish and the other half by the State Game and Fish Warden for the enforcement of the laws for their protection. On more mature reflection, however, I am of the opinion that no recommendation should be made to the legislature as to the disposition of the revenue, other than that it should go to the two departments. Both are indispensable to progress in fishery conservation and both must be supported by appropriations or licenses, or appropriations and licenses. Each should be treated on its respective merits and the allotment of license moneys made accordingly. It would seem more fitting, however, that a proper division or distribution of the license revenue should be based on the judgment of the people of the state, acting through their law-making body, rather than on the recommendations of either department.

PERCH, BLUE GILLS AND SUNFISH.

I desire to urgently recommend the propagation of perch, blue gills and sunfish on a very much larger scale than heretofore. Indeed such work as we have attempted along this line is so limited that it can hardly be said to have little more than passed the experimental stage. These splendid fish are pre-eminently the peoples' fish and, with perhaps the exception of the colder trout waters, will thrive in every pond, river and lake in the state. They cater to the needs of a larger angling constituency perhaps than all other kinds of fish combined. They are nearly always free biters, are easily caught and hence do not require any special angling skill nor expensive tackle. For these reasons I believe that hereafter the development of our facilities at the Mill Creek and Drayton Plains pond stations and also at any similar stations that may

be established in the future should include provisions for rapidly increasing the production of these popular fish.

The hatching of perch at Mill Creek, although conducted on a small scale, has been a distinct success and has demonstrated the fact that perch in the fry stage may be produced in large numbers at a low average cost as compared with many other kinds of fish. Blue gills and sunfish are, unlike the perch, bed protectors and therefore cannot be produced as fry in relatively large numbers. It will be necessary therefore to ship them in a more advanced stage; thus the smaller number will be compensated by their size as compared with infant perch.

HARRIETTA STATION.

The appropriation for special improvements at this station for the fiscal year ending June 30th, 1910, was only \$700.00. This was expended in completing concrete ponds between the hatchery and highway and in constructing two concrete dams. The larger of these dams, near the east line of our property, is thrown across Slagle Creek, diverting at will a part or all of its flow into the spring water canal and thence to the pond system below. The smaller dam is joined to the larger at right angles and intercepts a spring brook and turns it into the spring water canal. Under peculiar and unusual conditions, however, this spring brook receives considerable flood water which by a shifting of slashboards may be turned into Slagle Creek. Thus it will be seen that these dams place the entire flow of Slagle Creek under control for pond service, while it serves as a waste channel on those rare occasions when floods must be turned aside.

This station is now equipped with a sufficient number of fry races and fry ponds for the present, but there is most urgent need of a number of large ponds for trout a year old and upwards. Our experience with the one large, deep pond on the premises has demonstrated the fact that ponds of this depth and area are far more efficient and productive than are the smaller and shoaler ones. If any additional evidence on this point were needed a comparison of the work of several public and private trout hatcheries shows conclusively that pond systems embracing a number of large ponds are far more productive than those having a much larger number of small ones. The most productive brook trout plant in the United States uses large ponds exclusively, that is, those that are much larger and deeper relatively for each size of trout from the time they are taken from the feeding troughs. Even the ponds in which they are first introduced are as large as the average pond at most trout stations. A number of years' experience at that hatchery as well as our own experience with the large pond at Harrietta proves that trout grow much faster in the larger ponds than in the smaller ones and also that they suffer little or no loss from diseases. When held in small or shoal ponds trout are far more susceptible to diseases of various kinds and the death rate is always much higher than in ponds having ample depth and area. Epidemic losses are unknown in the larger ponds and their carrying capacity for brood stock is actually much greater for a given water supply than the greatest number of smaller ponds that an equal volume of inflow will support. The larger ponds have still other advantages or perhaps it would be more correct to say that these advantages are

merely a natural result of their being large. At Harrietta the greater depth of our one large pond makes room for a much heavier growth of vegetation and this in turn is responsible for the production of a much larger supply of natural food. This growth likewise takes up and neutralizes the excrement and surplus food, thus preventing foulness, and at the same time keeps the great bulk of the water cool, since the sun's rays penetrate but little below the surface.

I therefore urgently recommend that a system of large ponds be developed at Harrietta as rapidly as appropriations will permit. It would be economy for the state to appropriate a suitable sum at once and thus place this station on a producing basis commensurate with the demand for trout throughout the state. Not only is the volume and quality of the water supply at this place equal to the task of producing nearly all of the brook trout needed for a satisfactory annual distribution, but the relative cost per thousand of fish turned out would thus be very greatly reduced. Now that we have under control the entire volume of Slagle Creek as well as the numerous large springs on the premises, an appropriation of \$15,000.00 would undoubtedly provide a sufficient number of large ponds to enable us to turn out 10,000,000 brook trout annually.

Next in importance to increased pond facilities for Harrietta is the necessity of making provision against loss by theft. There is no doubt that some of our ponds were raided about a year ago, resulting in the loss of a considerable percentage of the breeding stock. The pond area should be enclosed by an eight or ten foot wire fence and a number of lights should be so stationed as to illuminate the ponds and surroundings clearly from any point on the higher ground overlooking them. With no lights and no fence it is impossible for a night watchman to prevent poaching, especially from the valley ponds, near the railroad track. A watchman can make the rounds only about once in thirty minutes, which leaves plenty of time between calls for several seine hauls in the smaller ponds. With a high fence, however, and with the grounds lighted so that they may be overlooked for a considerable distance there would be practically no danger of fish being stolen.

Aside from providing greatly increased facilities for carrying adult trout and taking such measures as are necessary to protect them from loss by theft, the improvements and repairs needed at this station for the next biennial period are inexpensive. The residence needs painting and some minor repairs, and additional hatching facilities will be needed. It was planned some time ago to pave the bottom and sides of the spring water canal, but this does not seem to be of pressing importance, and I recommend therefore that this work be postponed until after the more important features are taken care of. It has also been planned to turn Slagle Creek from its present channel immediately west of the hatchery to a new channel at the base of the bluff to the westward, thus straightening its course and making room for a pond between the hatchery and new channel. This, however, would involve more expense in proportion to the pond area developed than to build new ponds north of the highway and should therefore follow rather than precede the construction of the latter.

A gas engine for cutting fish food should by all means be installed as the saving in labor will pay the cost of the engine in a single year.

DRAYTON PLAINS STATION.

The propagation of large mouth bass has been carried on successfully at this station from the time the first ponds were ready for business. Like other crops the yield has been heavier some years than others but there have been no failures. This, however, cannot be said of our efforts to propagate small mouth bass at this place. Either the conditions are not right or else we have failed to discover how to take advantage of them successfully. True, small mouth bass are not native to the river and chain of lakes from which our water supply is drawn, except one lake several miles below our ponds, but this is no valid reason why the species should not breed there, for it often occurs that fish grow much larger and multiply more rapidly in waters other than their own. I believe therefore that we should continue our breeding experiments with small mouth bass at Drayton, but should surrender no more pond room for this purpose than is necessary to thoroughly try out every suggestion that gives promise of solving the small mouth problem in these waters.

The more urgent of the special improvements needed at this station include a liberal expansion of pond facilities, not alone with a view to increasing the output of large mouth bass, but rather to make a good beginning in the hatching of perch, bluegills and sunfish.

As stated elsewhere, bluegills and sunfish may be hatched successfully only on their natural beds and under the guardianship of the male fish. The spawning habits of perch, however, are wholly different. They make no spawning beds or nests, nor do they guard their spawn or protect their offspring.

Perch spawn may be hatched successfully in large numbers and the fry saved for shipping only by using hatching jars and fry tanks such as are required for whitefish and wall-eyed pike. This indispensable feature must be provided if we are to turn out perch fry economically and in effective numbers. I recommend therefore that a battery of jar and fry tanks be installed in the main building, of a capacity of not less than fifty million perch fry.

This project carries with it the necessity of pumping sufficient water to run the battery and this in turn brings up the question of power, of which, however, there is an abundance on the premises that is now going to waste. The surplus flow from our upper pond, although having only a four foot head, is ample to develop sufficient electrical energy not only to run the perch battery but also to pump water for other purposes and to light the buildings and grounds. By utilizing this wasted energy we could provide adequate fire protection, either by direct pressure or an elevated tank.

Power is needed and could be employed to excellent advantage in cleaning the ponds. With power and a pump suitable for pumping muck and sand this work could be done better than by hand labor and far more economically.

With a little power harnessed up and ready for immediate use we could also have a continuous flow of well water whenever desired, a feature of special value and importance during the midsummer shipping season when the temperature of our ponds and the river ranges from 80 to 90 degrees. When taken from such high temperatures young

bass appear to be tender or at any rate they are not hardy. To insure their delivery in prime condition they must be hardened or conditioned for a time in colder water. The comparative ease and uniform success with which bass are delivered from the Mill Creek station is due in no small degree to their excellent condition when scapped from the tanks and turned into the shipping cans, and this in turn is due to the fact that the station is blest with a gravity flow of spring water.

At the Drayton station water of a temperature of forty-eight is found in abundance at a depth of eight to ten feet. A flow of well water should therefore be made available to temper the warmer water to suit while bass are being prepared for shipment, also to fill the shipping cans. As the season for hatching and distributing perch fry is over before hot weather sets in, the proposed perch tanks would serve perfectly as storage for bass that are being seasoned or conditioned for shipment.

In view therefore of the necessity of providing a small pumping plant, if we are to hatch perch at this station, as well as the many advantages of having a flow of well water at our command for this and other useful purposes, the conversion of the power now going to waste into electrical energy is strongly indicated and recommended.

In a former report attention was called to what is known as Judd's Creek and to its occasional June floods which as the land lays must discharge through several of our ponds. Ordinarily this creek is too insignificant for consideration and even its floods are relatively not heavy, but they come just when the pond outlets must be protected by screens of extra fine mesh to prevent the escape of infant bass. On our recommendation an appropriation of \$360.00 was made by the last legislature for a sewer pipe to intercept the flood water and turn it into the main river. Through an unfortunate clerical error the appropriation provided for only 360 feet of pipe, whereas the shortest and most economical route requires 630 feet. No steps have been taken towards putting in this sewer as there is no advantage in starting the work before a further appropriation is made for completing it, and the appropriation for the 360 feet is still in the hands of our treasurer.

The overseer's residence, or rather the wood sections of it, should be moved to higher ground and remodelled, and the old or brick section should then be used as an icehouse. Since ponds were built near by, the water seeps through the light or sandy soil, making the cellar damp and unsanitary. Moreover, in its present location it does not command a view of all of the ponds. The best location for a dwelling is a high and dry knoll in the southeast corner of the orchard, facing the south and not only overlooking all of the ponds but also all lands available for ponds.

The main item of repair for this station for the next biennial term is a new roof for the mill or main building.

As reported by Overseer J. L. Brass, improvements and repairs were made during the fiscal year ending June 30, 1910, as follows:— Built one new pond 104 feet by 114 feet at water line, and 3 to 5 feet deep; changed water connections between a number of ponds, using concrete in place of wood; repaired and strengthened east bank of pond number 3; and took up, cleaned and relaid sewer pipe that drains seepage water from the cellar of overseer's dwelling.

MILL CREEK STATION.

Combining the totals of all sizes of small and large mouth bass shipped from Mill Creek during the full season of 1910, we find that the record breaking season of 1909 was beaten, whatever the shifting of the records from calendar to fiscal years may show. The total for this year was 1,800,000, an increase of upwards of 300,000 over 1909. Surpassing its own record is equivalent to breaking all like records everywhere, for the Mill Creek bass station is the acknowledged leader in discoveries and resourceful methods that make for success in its special line of work, evidenced by the fact that for a number of years it has outdistanced all competitors in this country in the production of both small and large mouth bass.

For the past three seasons not a single unproductive small mouth bed has been found in the station ponds, and thus another record is broken and a new precedent established in bass culture. The credit for this splendid showing is due almost wholly to the genius of Assistant State Superintendent Lydell. The study and thought that he gives to the solution of problems in bass culture will be apparent on reading his latest contribution to bass breeding literature, published elsewhere in this report.

Nevertheless, despite the splendid progress made in this branch of fish culture, there is a limit to the producing capacity of every controlled or cultivated as well as wild pond, and this limit has about been reached at Mill Creek. Increased production is now simply and almost wholly a question of more ponds. In their present stage of development the combined output of our two bass stations furnished but a small percentage of the number of young bass required to meet the pressing demand. Breeding ponds and still more breeding ponds must be built, to the utmost limit of the lands available for pond development at or near these stations. We need a greater production of young bass, to reinforce the natural supply, than any other state because Michigan has more bass lakes and streams or a greater area of bass waters, than any other state in the union.

The completion of the two large ponds now partly built ends all further pond construction at this station until more land is acquired. Just below and adjoining our present ponds there are about four acres of marshy land suitable for pond development that should be bought by this Board at the earliest possible date.

In addition to buying the above land and completing the two ponds now partly built, a number of other improvements should be provided for in our next appropriation. First in importance is a new hatching house. Aside from the residence, a small and inexpensive but comfortable cottage, the main building on the premises is the barn, a necessary adjunct that serves its purpose well; but the apology for a building that by courtesy is called a fish hatchery is a disgrace to a great state that boasts and is conceded the leadership in bass culture. It was built at a time when the propagation of bass had scarcely passed the experimental stage and when appropriations for this work were on an experimental basis. Not only is the building in poor condition and most of the equipment beyond repair but the work has far outgrown both. We need much greater hatching capacity, especially for perch.

and much more tank room for storing and properly taking care of fry of all kinds. With sufficient jar and tank equipment we might easily have doubled our output of perch fry last spring. With enlarged facilities it would be advantageous and convenient to greatly increase shipments of wall-eyed pike from this point; and with hatching room and the right accommodations this station would be an excellent and economical point from which to distribute trout, to the extent that the limited inflow of spring water will take care of them. For all shipments going east, west and south, Grand Rapids is the real starting point and there is no better shipping center in the state, no place from which so wide a radius may be covered with equal facility and economy.

As a new icehouse and food room must be built next year, perhaps the old hatchery could be so remodeled as to serve this purpose. If not, it should be moved over near the barn and used as storage for bulky equipment that should be housed.

The barn must have a new foundation and the bridge across Mill Creek new abutments. Concrete is recommended for both.

A concrete border or strip at the water line should be laid around every pond not already paved or otherwise protected, to prevent washing and destruction of the banks. The latter are of very light soil and are constantly being eaten into and undermined.

An item of special value that should be added to the equipment next season is a portable gasoline engine and pump, for cleaning ponds. In order to secure the required depth the kettle of most of the ponds drops below the drainage level. To clean out the water and mud from these kettles, also the layer of mud and sediment elsewhere, is an annual task of no small proportions. Mill Creek flows many miles through cultivated hills and valleys and hence at times comes to our ponds freighted with a heavy load of silt and soil wash. Bailing and hand pumps and shovels have been resorted to in cleaning the ponds, but the work may be done with much greater facility and economy by having sufficient power to flush and wash the mud into the sewers and kettles, then pump the latter dry. To insure the greatest possible production of natural food for young bass the following season, ponds must be drained and exposed for a time in the fall; and it is of special importance that every kettle and pocket be completely emptied in order that no fingerling bass may be carried over. A limited number of yearling bass in a breeding pond will make heavy inroads on the output of fry and fingerlings. It takes several hundred fry to make a comfortable meal for a yearling, and during the season that they attain their most rapid growth, yearlings have a reputation of eating between meals.

Another needed improvement for this station is a lighting plant, either gasoline or acetylene. Although only five miles from the heart of Grand Rapids, neither gas nor electricity is available for illuminating purposes and is not likely to be for many years. For all shipments of fish teamed to Grand Rapids in time to go out on the morning trains it is necessary to begin putting them up before daylight, and a much better lighting service is needed for this work than is afforded by oil lamps and lanterns.

Since the last biennial report was published the following improvements have been added and repairs made. Reported by Mr. Lydell.

A concrete dam was built across Mill Creek above the hatchery on the

site of the old wooden structure that was entirely rotted away. It furnishes head water to feed the station ponds. The new dam was built 4 feet wider and 2 feet higher than the old one and has wings extending both up and down stream, also a concrete intake box. Two feet of concrete was put in the bottom on base of dam on account of quicksand pockets. The walls are 8 feet high, 2 feet thick at the base and 8 inches at the top. A concrete top or bridge 6 feet wide and reinforced by four 6 inch steel girders connects the side walls.

Six hundred feet of new 12 inch wood pump log or feed pipe was laid to replace old pipe rotted away. Some of the old pipe was used later for sewers. This new pipe is the main feed pipe for supplying the hatchery ponds.

New raceways were built from ponds X, 4, 5 and 9. These raceways or outlets are of concrete with wood top and door.

A concrete wall was built on the east side of pond No. 5. This wall is 108 feet long and 2 feet high, 6 inches thick at the base and 4 at the top. This pond being close to the natural creek, gave us a great deal of trouble on account of crawfish boring through the bank. This barrier was put in to stop these depredations.

A concrete vault was built for the closets, with a 12 inch sewer extending 50 feet to Mill Creek. This vault is flushed by the overflow of pond X.

One new pond known as No. 9, 150 by 225 feet, was built so we could use it for breeding purposes during the season of 1910 but it was not completed. Connections for this pond were made from pond No. 7 with a 5 inch iron feed pipe.

One hundred feet of 12 inch sewer pipe was laid from pond No. 7. This sewer is 5 feet under ground and laid in the bank between Ponds No. 7 and 9, and eventually will be extended through to Mill Creek.

The dwelling has been painted two coats, and minor repairs to screens, seines and raceways have been made as needed.

The following articles have been added to the equipment:

Thirty-five concrete bed weights 6x8x12 inches. These weights are used to hold down the bass nests in place of a common rock formerly used.

Thirty circular fry retainers 3 feet, 6 inches in diameter by 4 feet high, made of galvanized wire.

Four wire fry cages 2 feet square by 2 feet deep.

One new 1 ton platform spring wagon; one five year old horse; one heavy double dirt wagon; one set double harness.

SOO STATION AND PROPOSED NEW HATCHERY FOR LAKE FISHES FOR THE UPPER PENINSULA.

For a number of years attention has been called to the urgent need of establishing a hatchery in the upper peninsula for the production of lake fish, more especially black bass, which cannot be produced at the Soo station. A hatchery and pond plant for hatching the above and other lake fish is an absolute necessity if we are to do anything like justice to the hundreds of splendid lakes above the straits.

It is true that a few small lots of bass are delivered to upper peninsula waters each year from our bass hatchery near Grand Rapids, but

the distance is too great for a safe and economical distribution. Besides, the Grand Rapids plant is already overtaxed to supply waters within its own sphere of safe and economical work. With no intent to discriminate but in the very nature of things the lakes above the straits will continue to be neglected under present conditions. Only by having a pond station in the upper peninsula is it practicable to supply the lakes of that section with an equitable proportion of our output of certain kinds of lake fish.

The additional station that we so urgently need and must have should not be hastily located. A number of the most promising situations should be studied and carefully investigated and the utmost care exercised. It should be established with the sole idea and purpose of securing maximum results at minimum cost. A few prospective sites have already been examined and we have in view a number of tentative situations to be looked over.

The expansion by the government of its canal and lockage facilities at the Soo during the past few years has made our hatchery more and more isolated and inaccessible, and an appropriation for a preliminary survey for a fourth lock, to be built where the hatchery now stands, has already been made. We are thus driven to the necessity of moving our building or abandoning it, probably within the next year. A tentative offer of another location has been made, and the proposed site, the extreme northeast corner of the government reservation, is much better than the present one ever was, since it is accessible both by land and water. Still another and a more important item in favor of the prospective location is that our water supply would be drawn from the city mains. We would then be free from dangers such as anchor ice, freezing, low water and roily water that are a constant menace in our present location and that for years have caused much trouble and anxiety. Indeed we were forced to suspend the hatching of wall-eyed pike at this station the past two seasons, on account of roily water. The two serious objections that have been raised and justly so against our present location—inaccessibility and unsafe and unsatisfactory water supply—would be completely and forever eliminated. Once moved and established on the new site and connected with the city mains we would have a first class hatchery, well and fully equipped and well located for hatching and distributing brook trout, lake trout, rainbow trout, whitefish, wall-eyed pike and landlocked salmon.

The building and hatchery equipment are ample for state and government purposes, and for many years will accommodate an equitable allotment for the upper peninsula of our prospective output of the above kinds of fish, also as many eggs of lake trout and whitefish as the federal fish commission may be induced to send here for hatching and convenient distribution to Great Lake waters, chiefly for shipments to Manistique, St. Ignace, Detour and Whitefish Bay. Inasmuch as the hatching facilities are ample for both commissions it will be better and more economical for all concerned to continue to use the hatchery jointly, so long at least as the government assumes or exercises full and exclusive control of the work of propagating fish for the state's border waters.

On account of uncertain and unsettled conditions and a strong probability that another lock would be built and thus compel us to move,

the State made no repairs nor improvements to buildings and grounds during the period covered by this report. The government, however, rebuilt the whitefish battery and fry tank, at an expense of nearly \$400.00. The hatchery should be painted as soon as it is moved. As it has been a stranger to paint for 12 years possibly three coats will be required to do a good job.

The boiler and engine in our steam launch "Ouananiche" are nearly worn out and must soon be replaced. The government inspector has given warning that they will stand only one or two more inspections. Superintendent Marks recommends that a gasoline engine and accessories be installed in their place and his recommendation is heartily approved. A 14 horsepower gasoline engine and outfit such as is needed will cost not more than half as much as a steam outfit of equal power, and then one man can run the boat in place of two.

As the number of developed eggs of wall-eyed pike we are able to secure from the Bureau of Fisheries is insufficient to meet the demand for the fry, I recommend that efforts be made to collect an additional supply of spawn on our own account from certain bays and waters between the Soo and Detour, where for many years the spawners were taken in considerable numbers before net fishing was prohibited. After careful investigation Superintendent Marks is confident that a few trapnets set on or near their known spawning grounds in these waters will yield a number of million of eggs. Practical men are willing to do the fishing and take the fish as compensation in full after the spawn has been secured, by substantially the plan employed elsewhere in taking spawning fish from prohibited waters or during closed seasons. In this way the expense of saving the ova is greatly reduced, while the number of fish taken is under control and does not go beyond the limits of our hatching capacity. The outlook for making a substantial increase in our output of wall-eyed pike fry is so promising in this field that the work should be taken up in the near future or whenever funds are available.

DETROIT STATION.

The hatchery at Detroit is one of the largest and best equipped in the country for hatching whitefish and wall-eyed pike. It is occupied exclusively by the U. S. Bureau of Fisheries during the whitefish season but is used in common by the government and state during the two spring months in which wall-eyed pike eggs are developed and the fry hatched and shipped. Under the terms of our contract with the Bureau the government pays the ground rent, keeps the building and permanent equipment in repair and turns over to this board each year a large consignment of developed eggs of wall-eyed pike, the number varying somewhat according to the season. The spring of 1909 was favorable for the collection of these eggs, hence the number we received from the Bureau was above the average. On the other hand 1910 was a lean year and our allotment was smaller than usual, or about 28 per cent below that of 1909.

Wall-eyed pike fry are feeble swimmers when first hatched and mostly settle to the bottom of the tanks for a few days. They develop rapidly, however, especially in a rising temperature, and soon swim up freely and are strong and vigorous. Then, a week or so later, according

to the temperature of the water, they begin to attack one another, impelled no doubt by extreme hunger. Their ferocity at this stage is not at all in keeping with their diminutive size and tender age. The process of elimination and speedy extermination is worked out in this way: One little pike seizes another little pike by the tail and swallows it as far as the head, which is much larger than the body and won't go down, and then we have one small pike with two big heads. Having doubled its cargo and perhaps appeased its hunger, it is less active and is soon seized in like manner and itself becomes a victim, and the result is one little pike with three big heads in a row, tandem fashion, swimming laboriously about. By this time usually the frail and nondescript craft is nearly floundered and soon goes down with all on board, though occasionally it manages to keep afloat until the passenger list is increased to four or five. And thus, in a tank crowded with perhaps five million infant pike held a few days too long or until driven by hunger to attack one another, is this tragedy enacted and reenacted indefinitely until all perish in this way or starve.

It is obvious that the time in which pike fry may be shipped at their best is very short and it is equally apparent that their distribution must be rushed with a full head of steam on every minute. Formerly all deliveries for the lower peninsula were made from Detroit, but it was found impossible to cover so much ground from one point in the short time that the fry are in prime condition; therefore in the past few years one-third to one-half of our available supply of pike-perch eggs has been transferred to Mill Creek and the distribution of fry for the western part of the lower peninsula made from that point. This plan has worked out well and has enabled us to make deliveries on practically all applications for suitable waters in the lower peninsula in the seasons that we have had fish enough to go around. In this connection it is worth noting that good judgment and a considerable degree of skill are required to lay out and route up car and messenger trips to cover so much territory in so little time, and economically, and at the same time anticipate the exact period in which the fry will be at their best. Of course this is true to a greater or less degree in the distribution of all kinds of fish, but more especially with those that develop rapidly and that cannot be taken care of in large numbers on either natural or artificial food.

For several years except the past two a consignment of developed pike-perch eggs has been sent to the Soo hatchery each season, for the benefit of suitable waters above the Straits. The condition of the water supply there the past two seasons, due to dredging and dumping by government contractors, was such that pike fry could not be safely handled.

During the twelve years that the Detroit hatchery has been leased to the U. S. Bureau of Fisheries, many repairs and improvements have been made by the government. One of the two whitefish batteries has been rebuilt new throughout. All of the fry tanks have likewise been rebuilt complete. A new concrete floor has been laid in both the hatching and tank rooms. The roof has been reshingled and the building has been painted every two years. All told the government has laid out approximately five thousand dollars in this way and the building and equipment are in much better condition today than they were when the Bureau assumed control.

PARIS STATION.

This is the oldest and in many respects the most important station operated by this Board. It is the main distributing center for both brook and rainbow trout. Trackage and housing are also provided here for that grizzled and groggy but game old veteran, the "Fontinalis," which without the shadow of a doubt has carried and safely delivered more real goods in the way of fish that produce results than any similar car in existence. This statement is no reflection on the work of other cars but the "Fontinalis" has been in use longer than any other distributing car engaged in strictly local or short-run service.

Our entire output of rainbow trout is derived from eggs taken at this station. The production during the two years covered by this report, over five million, is a record breaker, being more than three-fold greater than for any preceding biennial period since rainbow trout were hatched by this Board. However, the limit has practically been reached until more pond room is provided. Our ponds are now crowded to their capacity. The recent completion of the fingerling raceway provided ample capacity for trout of that size so long as we ship most of the output as fry or advanced fry. What we need and are short of at the present time is more spawning ponds and more ponds for advancing the yearlings to full adult size. Preliminary steps have been taken towards the construction of a large pond in the valley of Big Buckhorn Creek, between the highway and railroad right of way, and this will make a splendid rearing pond, but it is not suitable for a spawning pond. The most economical way to provide the necessary additional spawning facilities is to enlarge the old spawning ponds and races below the railroad, also refashion the two ponds just east and north of the hatchery and unite them into one large pond with one large spawning race. Additional rearing ponds should also be built between these spawning ponds and the mouth of Cheney Creek.

So many repairs and improvements are needed at this station that one is at a loss to know just where to begin or to leave off, and nearly all are of the most urgent nature. Some items are irretrievably beyond the patching and repair stage and must be rebuilt complete. Included in this class are the hatchery floor and most of the troughs and tanks, the roof of this and a number of other buildings and the main waste and supply race below the railroad. Not only is the floor itself in wretched condition but the joists are rotted away and also the sills in many places. Concrete is recommended for the new floor—in fact this is the only material that should be used for the floor and foundation of any fish hatchery. Concrete is also much more stable as well as economical in the long run for raceways, waste flumes, conduits, overflows, sidewalks, bridges, vaults and foundations of all kinds. Nowhere is this class of work done more economically than at the Paris hatchery, for the reason that we have a good gravel pit on the premises, conveniently located, and our regular force includes good mechanics skilled in form and concrete work.

A different plan of heating the buildings should be adopted and provision made for using coal. The price of wood having more than doubled within 20 years, its use for fuel has become an extravagance that is open to criticism. Attention was called to this fact during the last

two sessions of the legislature but our estimate for a suitable and more economical system of heating was disallowed.

A lighting plant should also be installed, either gasoline or acetlyene. Our buildings should at least be as well lighted as the average village store, especially during the shipping season, when perhaps a third or more of the fish are put up at night for the night or early morning trains.

The buildings that need reshingling or new roofing of some kind are the new hatchery, old hatchery, wing to barn, three outhouses, tool house, water tank, store house and car house.

In addition to the main hatchery, four other buildings need a new floor and foundation, namely, the storage shed, food house, barn near overseer's residence and barn on Buckhorn Creek. Concrete is recommended for these jobs and also for a new foundation for the water tank that is used for fire protection and lawn sprinkling.

An inexpensive but important item of equipment that should be added is two spawning houses, either portable or stationary, one to be located in the midst of the spawning ponds west of the highway and the other below the railroad. Rainbow trout begin to spawn sometimes in January and never later than February or when the weather is so severe that the spawning fish and the eggs should be handled under cover. As the fish must or should be stripped with bare hands the comfort of employees should receive some consideration, aside from the fact that with the work done under fairly comfortable conditions all essential details are likely to receive greater care and attention.

Two new foot bridges are needed across the waste ditch west of the highway, also a new wagon bridge across the waste canal below the railroad. Concrete construction is recommended.

Our last appropriation provides for the building of a limited amount of new fence during the ensuing fiscal year, but we still need about 400 rods more and this item should be included in our estimates.

A new approach or driveway to the car house in its new location should be built through the grove east of the railroad track.

Most of the buildings have been painted one coat within the past two or three years, but as they had not received any paint for a number of years preceding, at least one coat and in some instances two should be given to practically every building on the premises within the next two years, also to the water tank, raceway covers, pond shades, etc. The distributing car should also be painted.

Considerable new sidewalk is needed and the steps over the railroad must be rebuilt. Concrete of course, is recommended.

If we are to do anything in the way of beautifying the grounds and putting the premises on a par or in keeping with state institutions generally, we must have a small greenhouse. Some additional shrubbery should also be provided.

Two other important items of equipment in the line of economy and efficiency that should be supplied are a gasoline engine and pump, to furnish power for cutting fish food and to keep the water tank filled. The increase in the pond and raceway stock during the past two or three years and the corresponding increase in food requirements again calls attention to the fact that we have outgrown hand power as an economical method of grinding our meat food. These items have been

in our legislative estimates for this station two or three times and disallowed. However, the prospective changes at the Soo station will soon release the engine and pump in use there for several years, but still in good condition, and they should then be transferred at once to Paris.

Since the last published report the following repairs and improvements at the Paris station are reported by Superintendent J. P. Marks:

Built extension to fingerling race in upper grove, 160 feet long by six feet wide inside, with side walls of concrete 3 feet deep and six inches thick.

Screen wire covers in 16 foot sections were provided for this extension. Screen wire and board covers in alternate sections were also built for the lower half or that part of the race that was constructed in 1907. These covers protect the young fish from kingfishers and other enemies and keep out the leaves.

Near the head of the above race a concrete dam was built in Cheney Creek to turn the water into the race, which is also fed by the Little Buckhorn. The new dam is 2 feet high by 30 feet long and the apron is 6 feet by 30 feet.

Our main fry race is on the opposite side of Cheney Creek, running nearly parallel with the new fingerling race, and is fed by a spring of rather limited flow. To reinforce this supply, 50 feet of 5 inch pump log was laid across the creek, connecting the two races and tapping the inflow of the larger race. Built a concrete distributing chamber at the head, so that the flow of either creek is available for either or both the fry and fingerling races.

Cleaned out the ravine of Big Buckhorn creek between the highway and the railroad, as a necessary preliminary to creating a large rearing pond simply by building a dam at the foot, along the railroad right of way, where the ravine narrows down to a small neck. The dam will be built during the fiscal year ending June 30, 1911. This pond will have an area of over 2 acres and a depth of 2 to 16 feet. The timber in the ravine furnished 6,000 feet of logs, 150 fence posts and 50 cords of wood.

A number of minor repairs and small jobs were taken care of, such as laying tile for turning surface water away from the fingerling race, painting race covers, rooms in overseer's residence, wash room and closets in hatchery, clearing out brush through grove for a driveway to car house, repairs to platform east side of hatchery, new steps to porch of overseer's residence, temporary repairs to hatchery floor and tanks, repairs to fry race and covers, etc.

DISTRIBUTION SERVICE.

Our distributing car "Fontinalis" should have been consigned to the scrap heap years ago. However, by constant repairing and renewing various parts from time to time we have managed to keep it running. It is too light and too small for the service even if it were new. Its utmost capacity is 150 cans, whereas we are hard pressed at times for a car that will carry 250 to 300 cans of fish besides ice and a reserve supply of fresh water. With a larger car we could distribute our fish more rapidly and economically and at exactly the right time to insure the best results. One car, however, cannot take care of the distribution ser-

vice during the height of the season when fish must be shipped from four or five hatcheries at the same time. For a number of years we have employed in addition to the "Fontinalis" one and sometimes two baggage cars, besides sending out extra messengers in baggage cars of regular trains. We should have a new car of a maximum capacity of 300 cans and use the "Fontinalis" only during the height of the season, when more than one car must be in service. Under this plan the "Fontinalis" with careful nursing may last five or six years, whereas a practically continuous service of about six months each year will force it into the scrap heap within three or four years.

An opportunity to secure a new car, or rather the use of one under very favorable conditions, is likely to be afforded within the next year or two. The Park Board of Detroit is planning at the present time to build a car to transfer fish from the seaboard for the Belle Isle Aquarium. This service does not exceed five trips per year, only two of which are made in the Spring or during the time that our distribution is in progress. I have informally discussed with the director of the Aquarium the feasibility of the Park Board and State Fish Commission using the proposed new car jointly. The plan outlined is for the Park Board to buy the car and equip it with the necessary facilities for taking care of live fish, to be used by that Board as required for its seaboard trips. This service would probably require not to exceed 50 days in each year.

During the remainder of the year it is to be housed and tracked at the Paris station and placed wholly at our disposal for our own distribution service, we to keep the car in repair. This arrangement would be an excellent one for all concerned. The Park Board has no trackage and housing facilities and it is practically impossible to secure and provide them economically and conveniently. Yet that Board has been seriously handicapped ever since the Aquarium was started, and conditions have gone from bad to worse until they are driven to the necessity of providing a suitable car for the above service. On the other hand we already have trackage facilities and it would cost not to exceed \$200.00 to extend our car house to accommodate another car, which would be at our disposal from 80 per cent to 90 per cent of the time. The repair bill for a new car would be almost nominal for a good many years. Tentative plans for the proposed car have already been considered, and utility, efficiency, safety and ample carrying capacity are the main points to be worked out. During the past two or three sessions of the legislature we have called attention to the necessity of providing a new car for the Board of Fish Commissioners, but with no results. I therefore urgently recommend that negotiations with the Park Board be continued and that such official action be taken as may be necessary to secure a new car for joint use on a fair and equitable basis.

Our delivery service is still further and ever more seriously handicapped on account of a shortage of cans. For several weeks during the height of the shipping season each year we need at least 1,500 cans, whereas we have only about 40 per cent of that number. Fortunately however, for the past few years the Bureau of Fisheries has happened to be a position to loan us 300 to 400 cans during the rush, but even then there has been a continual shortage at every hatchery. We have

been obliged to resort to every makeshift, starting a procession of empties back and forth and around again and again from one hatchery to another, in an urgent but often vain effort to keep pace with the exigencies of the shipping service. Not infrequently have car and messenger trips been cancelled or postponed and allotments cut down because of a famine in cans; and not infrequently have restricted shipping facilities compelled us to hold our fry and young fish a little too long, thus preventing their delivery at exactly the right time to be in the pink of condition. No private business enterprise would for one moment permit itself to be harassed and crippled in this way. As a constant menace to the efficiency of our work these conditions have become well nigh intolerable. Furthermore we must face the fact that the partial and temporary relief afforded through the courtesy of the Bureau of Fisheries is uncertain and may be cut off at any time through the requirements of the Bureau's own work. We should therefore make a determined stand during the next legislative session for a special appropriation sufficient to provide at least 600 steel clad cans.

STATISTICS OF THE COMMERCIAL FISHERIES.

At the last session of the legislature a law was passed that requires commercial fishermen to report their annual catch to the State Game, Fish and Forestry Warden, thus practically turning the statistical work over to that department. As this law did not take effect until 1909 and as our agent had already partly collected the figures for 1908, it was decided to complete the latter year.

The statistics for 1908 are published elsewhere in this report and cover only Michigan waters of the Great Lakes. The total catch of all kinds for 1908, about thirty-four and one-third million pounds, is the same as the average for the ten years from 1891 to 1900, inclusive, but there was a heavy falling off from the two preceding years of '06 and '07. The average for these two years was approximately fifty million pounds, which is high water mark since we began taking statistics in 1891. These two years are also high water mark with respect to the amount of apparatus employed. There were no marked fluctuations in the use of pound nets in the 18 years ending with 1908, but there was a heavy increase in gill net mileage; this averaged 3,000 miles for the ten years beginning with 1891, then rose quite rapidly to 6,100 miles in 1906 and 8,100 miles in 1907, dropping back to 5,400 miles in 1908.

Of the principal varieties whitefish seem to be holding up well. The catch for 1908 was in round figures five million pounds, exactly the average for the seven years ending with 1908. The total for the preceding seven years, or from 1895 to 1901, inclusive, was about 27 million pounds, or an average of a little less than four million per year.

Lake trout fell off heavily in 1908, the catch being about 6,500,000 pounds as compared with an average of over 10,000,000 for the six years preceding. The 1908 figures run about parallel with the years 1895 to 1900, inclusive.

The 1908 herring catch went back to the average of ten to fifteen years ago, or about 12 million pounds. The average for the nine preceding years was over 17 million pounds, the banner year being 1907, with upwards of 20 million pounds.

Pike-perch fell away in 1908 to a total catch of about 1,500,000 pounds, a loss of half a million from 1907 and more than a million from some former years.

Perch also show a considerable decline in 1908, the total of two million being the lowest since 1896.

Suckers fell away heavily in '08. The catch was four million pounds, while the average for the preceding five years was 5,600,000 pounds.

It seems unnecessary to make further comparisons. With the exception of some species and localities it is difficult to arrive at any conclusion other than that fish are gradually diminishing in numbers in our border waters and that we are experiencing the effects of overfishing. High prices have made the business profitable where it was formerly unprofitable and stimulated the industry perhaps to an excessive degree, evidenced by the fact that, with some exceptions, there is a gradual decrease in the catch *per unit of fishing effort*. This condition is more likely to grow worse than to improve so long as an overwhelming majority of nearly all kinds of fish are caught either on their feeding grounds or while migrating towards their spawning grounds, and hence are barred utterly from reproducing their kind or of being reproduced in hatcheries. It seems obvious that the catch of some kinds of fish at least cannot be continued at high water mark indefinitely if only a small fraction of the spawn is allowed to ripen or reach the reproductive stage, yet the logical if not inevitable outcome of some of our present fishery laws is to bring about this very condition.

PAPERS.

Four papers read at recent meetings of the American Fisheries Society should in my judgment be published in this report. Copies of same are filed herewith. They answer a good many questions that arise in our official correspondence and give more detailed and special information than is practicable in ordinary business communications. Original and valuable points and experiences are also brought out that will be appreciated by those more seasoned in fish cultural effort. The titles and authors are as follows:—

The collection of Fishes in Small ponds. By Dr. C. H. Townsend, Director of Aquarium, New York City.

Fish Culture on the Farm. By Hon. J. J. Stranahan, U. S. Bureau of Fisheries, Bullochville, Ga.

Increasing and Insuring the Natural Food Supply and Output of Small Mouth Black Bass Fry, and Notes on Combination of Breeding and Rearing Ponds. By Dwight Lydell, Asst. State Supt. Comstock Park, Mich.

The Rainbow Trout in Michigan. By the undersigned.

Respectfully submitted,

SEYMOUR BOWER,
Superintendent.

FISH PLANTS

For Fiscal Year Ending June 30, 1909, and Fiscal Year
Ending June 30, 1910

Report of Statistical Agent, Financial Statement and
Inventory

NINETEENTH REPORT—STATE FISHERIES.

BROOK TROUT PLANTS, 1909.

FRY.

For fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alcona county:				
Lower South Branch of Pine River	Curtis	William Ellis	Mar. 30	7,500
McGinn Creek	Clinton and Mitchell	S. K. McCollum	Mar. 30	6,000
Silver Creek	Mitchell	John A. Pattee	Mar. 30	4,500
Wolf Creek	Mitchell	John A. Pattee	Mar. 30	3,000
Little North Branch	Several	W. A. Blackburn	April 2	6,000
Newton Creek	Caledonia	Chase Benjamin Gun Club	April 2	6,000
McKnight Creek	Several	Edward B. Wyman	April 2	3,000
Black River	Harrisville, Haynes and Alcona	F. J. Elmer	April 5	9,000
Vennetten Creek	Mikado	C. E. Lovelace	April 5	6,000
Sucker Creek	T. 27 N. R. 8 E.	W. S. Linton	April 5	7,500
West Branch	T. 27 N. R. 6 and 7 E.	W. S. Linton	April 5	7,500
Black River	Alcona	C. W. Luce	April 5	9,000
Alger county:				
Dexter Creek	Mathias	Geo. M. Mills	April 27	3,000
Scott Creek	Mathias	Geo. M. Mills	April 27	7,000
Stony Creek	Mathias & West Limestone	Geo. M. Mills	April 27	3,000
Squaw Creek	Munising	Fred S. Case	May 16	4,000
Robinson's Creek	Au Train	Fred S. Case	May 16	4,000
Big Indian Creek and tributaries	Munising	Fred S. Case	May 16	12,000
Cold Spring and Creek	Au Train	Fred S. Case	May 16	2,000
Anna River	Munising	Will F. Cox	May 16	2,000
Bohemian Creek	Several	H. A. St. John	May 17	2,000
Branches of North Manistique River	Munising	H. A. St. John	May 17	2,000
Buck Creek	Munising	H. A. St. John	May 17	6,000
Furnace Creek	Munising	H. A. St. John	May 17	2,000
Miner's River	Munising	H. A. St. John	May 17	4,000
Stutt's Creek	Munising	H. A. St. John	May 17	4,000
Au Train River	Munising	H. A. St. John	May 17	4,000
Slapneek Creek	Munising	H. A. St. John	May 17	6,000
Sucker River	Rock River	H. R. Harris	May 17	6,000
West Branch Sucker River	Rock River	H. R. Harris	May 17	6,000
Grand Marnis Lake	Burt	Thos. J. McCann	May 22	12,000
	Burt	Lewis Williams	May 22	3,000
	Burt	L. W. Nettleton	May 22	3,000
Allegan county:				
Mann's Creek	Manlius	C. L. Fosdick	Mar. 2	3,000
Maure's Creek	Clyde	Wm. C. Whitbeck	Mar. 2	3,000
Silver Creek	Gun Plains	Ed. J. Anderson	Mar. 8	2,000
Delanos and Abrams Creeks	Gun Plains and Otsego	William Crispe	Mar. 8	2,000
No Name	Leighton	Alfred S. Nelson	Mar. 8	1,000
Dowd's Creek	Heath and Monterey	Chas. E. Bond	Mar. 15	5,000
Bear Creek	Heath and Monterey	Carl P. Symon	Mar. 15	5,000
Roger's Creek	Allegan	Harry Dyer	Mar. 15	2,000
Sand Creek	Heath	Adam Plotts	Mar. 15	2,000
Alpena county:				
Beaver Creek	Ossineke	C. W. Luce	April 2	15,000
Been Creek	Green	Fred Ward	April 2	9,000
Norwegian Creek	Alpena	Chase Benjamin Gun Club	April 2	3,000
North Branch	Maple Ridge	Frank DeLong	April 2	12,000
Scott Creek	Ossineke	Chase Benjamin Gun Club	April 2	3,000
Antrim county:				
Finch Creek	Custer and Helena	C. L. Bailey	Mar. 29	3,000
Headwaters of Cedar River	Mancelona	C. L. Bailey	Mar. 29	12,000
Cascade Creek and Racket River, tributaries to Jordan River	Chestonia	R. C. Bennett	Mar. 29	7,000
Cold Creek	Mancelona	A. C. Fenn	Mar. 29	3,000
Jordan River	Chestonia and Jordan	A. C. Fenn	Mar. 29	10,000
Cedar River	Mancelona and others	John A. Verdier	Mar. 29	4,500
Saloon Creek	Mancelona	C. W. Crapo	Mar. 29	4,500
Burdie Creek	Central Lake	O. P. Barber	April 7	2,000
Morlman Creek	Central Lake	O. P. Barber	April 7	1,000
E. Barnes Creek	Echo	E. Barnes	April 7	2,000
James Barnes Creek	Echo	James Barnes	April 7	1,000
S. Barnes Creek	Echo	Solon Barnes	April 7	1,000
Noyes Creek	Banks	W. A. Boss	April 7	1,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Antrim cou. ty.—Continued:				
Barker and Thompson Creeks	Jordan	Empey Brothers	April 7	4,000
Kocher Creek	Jordan	Mrs. J. W. Kocher	April 7	1,000
Cedar River	Kearney	Bellaire R. and G. Club	April 7	6,000
No Name	Forest Home	Bellaire R. and G. Club	April 7	1,000
Shanty Creek	Custer	Bellaire R. and G. Club	April 7	1,000
Cady Creek	Central Lake	W. S. Richardson	April 7	3,000
Ogletree Creek	Banks and Central Lake	W. F. Carpenter	April 7	2,000
Campbell's Creek	Banks	C. S. Campbell	April 7	3,000
Dyer Creek	Banks	C. S. Campbell	April 7	2,000
Town Line Creek	Banks	Dr. L. M. Newton	April 7	3,000
Pencil Creek	Banks	Wm. Slough	April 7	2,000
Jordan River	Several	Carl Strobel	April 7	8,000
Mitchell Creek	Milton	L. N. Spring	April 7	2,000
Paradise Creek	Milton	L. N. Spring	April 7	2,000
Petobago Creek	Milton	L. N. Spring	April 7	1,000
Hillman's Creek	Banks	L. Van Skiver	April 7	2,000
Arenac county:				
Big Creek	Mason, Arenac and Au Gres	C. D. Brooks	April 5	9,000
Dead Branch	Deep River and Arenac	C. D. Brooks	April 5	9,000
Town Line Creek	Clayton and Mason	C. D. Brooks	April 5	6,000
Baraga county:				
West Branch	Baraga	Wm. C. Birk	May 11	4,000
Carp River	Baraga	John A. Cochran	May 11	2,000
Clear Creek	Baraga	John A. Cochran	May 11	2,000
Gallagher Creek	Baraga	John A. Cochran	May 11	2,000
Pine Creek	Baraga	John A. Cochran	May 11	2,000
Kelsey Creek	Baraga	A. B. Cosgrove	May 11	4,000
Hersey Creek	Baraga	Joseph Getzen	May 11	2,000
Six Mile Creek	Baraga	Joseph Getzen	May 11	2,000
Clear Creek	Baraga	Robert F. Kent	May 11	2,000
Plumbago Creek	Baraga	Sol Lavaek	Ma 11	2,000
Branch Sturgeon River	T. 48—34	E. W. MacPherran	May 11	2,000
Perch Creek	T. 48—25	E. W. MacPherran	May 11	4,000
Streams about 274½ Mile Post.	T. 48—34	E. W. MacPherran	May 11	20,000
Sidlaw Creek	T. 48—32	E. W. MacPherran	May 11	4,000
Spurr Creek	Spurr	Frank Perry	May 11	2,000
Cosgrove's Creek	Baraga	L. Robillard	May 11	2,000
Canal Creek	Spurr	Peter Trudell, Jr	May 11	2,000
Cliff Creek	Spurr	Peter Trudell, Jr	May 11	2,000
McDonald Creek	Spurr	Peter Trudell, Jr	May 11	2,000
Nestoria Creek	Spurr	Peter Trudell, Jr	May 11	2,000
Outlet of Three Lakes	Spurr	Peter Trudell, Jr	May 11	2,000
Outlet Trout Lake	Spurr	Peter Trudell, Jr	May 11	2,000
Sturgeon River	Laird, Elm River, Baraga and Chassell	C. M. Cahoon	May 14	4,000
Barry county:				
Crooked Creek	Assyria	F. H. Skinner	Mar. 5	3,000
Ellis Brook	Assyria	R. H. Titus	Mar. 5	2,000
Glass Creek	Hope, Rutland, Yankee Springs and Thornapple	Dougal Campbell	Mar. 8	2,000
Fall Creek	Hope	Andrew Carpenter	Mar. 8	1,000
Gull Creek	Prairieville	Dr. A. W. Crane	Mar. 8	4,000
No Name	Barry	Dr. A. W. Crane	Mar. 8	4,000
Boatwick Creek	Hope and Barry	Ellis E. Faulkner	Mar. 8	1,000
Horn Creek	Barry and Baltimore	Wm. Kelly	Mar. 8	1,500
Mink or Collins Creek	Rutland	A. N. McCarty	Mar. 8	2,000
Glass Creek	Hope and Rutland	L. McCarty	Mar. 8	2,000
Tributary of Gull Lake	Prairieville	Arch Sootman	Mar. 8	1,000
Fall Creek	Several	F. B. Barlow	Mar. 10	4,000
Cookson Creek	Yankee Springs	C. D. Bauer	Mar. 10	2,000
Tributary to Glass	Hope and Rutland	C. D. Bauer	Mar. 10	4,000
Hersey Creek	Hastings	Jay Blackney	Mar. 10	1,000
Heney Creek	Hastings	Jay Blackney	Mar. 10	1,000
Bentley Creek	Hastings	Fred C. Foster	Mar. 10	1,000
Lane Creek	Rutland	Shirley Meanes	Mar. 10	1,000
Cedar Creek	Barry, Cedar Creek, Baltimore and Hastings	W. J. Michael	Mar. 10	10,000
Last Chance Creek	Yankee Springs and Thornapple	W. J. Michael	Mar. 10	3,000
Mitchell Brook	Irving and Rutland	W. J. Michael	Mar. 10	2,000
Smith or Irving Brook and Travis Creek	Travis	W. J. Michael	Mar. 10	3,000
Kelly Creek	Baltimore	Drs. Mixer	Mar. 10	2,000
McCullum Creek	Hope	Drs. Mixer	Mar. 10	2,000
Tamarack Creek	Baltimore	Drs. Mixer	Mar. 10	2,000
Upper Cedar Creek	Baltimore	Drs. Mixer	Mar. 10	6,000
West Creek	Rutland and Hastings	Drs. Mixer	Mar. 10	2,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Barry county.—Continued:				
Hill Creek	Yankee Springs	J. H. Neiss	Mar. 10	2,000
Tributary to Cedar Creek	Hope, Baltimore and Hastings	J. H. Neiss	Mar. 10	5,000
	Baltimore	C. H. Osborn	Mar. 10	2,000
	Baltimore	C. H. Osborn	Mar. 10	1,000
Murry Creek	Irving	Keo Silsbee	Mar. 10	2,000
Power's Creek	Hope	Frank E. Harper	Mar. 17	1,000
Horn Creek	Orangeville	Frank E. Harper	Mar. 17	1,000
Draper Creek	Orangeville	Frank E. Harper	Mar. 17	1,000
Hough Creek	Orangeville	Frank E. Harper	Mar. 17	1,000
Shepherd Creek	Orangeville	Frank E. Harper	Mar. 17	1,000
			Mar. 25	3,000
Benzie county:	Blaine	Ben Little	Mar. 25	3,000
Herring Creek	Almira	Jas. W. Banks	Mar. 27	3,000
Cedar Hedge Creek	Inland	I. P. Covey	Mar. 27	6,000
Brundage Creek	Homestead	I. P. Covey	Mar. 27	3,000
Carter's Creek	Homestead	I. P. Covey	Mar. 27	3,000
Collison Creek	Almira, Inland and Homestead	I. P. Covey	Mar. 27	10,500
Platte River	Several	I. P. Covey	Mar. 27	3,000
North Branch of Platte River	Homestead and Platte	I. P. Covey	Mar. 27	3,000
South Branch of Platte River	Homestead	I. P. Covey	Mar. 27	3,000
Spring Brook or Colton Creek	Homestead	I. P. Covey	Mar. 27	1,500
Platte River	Inland, Homestead and Benzenia	F. A. Mitchell	Mar. 27	22,500
	Benzie and Grand Traverse	F. A. Mitchell	Mar. 31	18,000
	Lake	Wm. M. Carter	April 1	3,000
Betsy River	Platte	E. R. Dailey	April 1	4,500
Otter Creek	Lake	Nessen Bros.	April 1	1,500
North Branch of Platte River	Almira	Oscar Rose	April 1	7,500
Gilmore Creek	Almira	D. S. Willard	April 6	1,500
Cedar Run Creek	Almira	D. S. Willard	Mar. 2	1,000
Rose Creek	Almira	D. S. Willard	Mar. 2	1,000
		Dr. R. C. Allen	Mar. 2	1,000
Berrien county:	Berrien	Edward A. Gast	Mar. 2	4,000
Hipp Hollow Creek	Berrien	E. C. Griffin	Mar. 2	3,000
Branch of Hickory Creek	Niles	A. F. Herring	Mar. 2	3,000
Bell Creek	Niles	Claud Herring	Mar. 2	2,000
Walton Creek	Berrien	Frank Herring	Mar. 2	4,000
Towsend Creek	St. Joseph	Frank Herring, Sr.	Mar. 2	2,000
Dickenson Creek	Lincoln, St. Joseph and Lake	Frank Herring, Sr.	Mar. 2	3,000
Hickory Creek	Royalton	J. W. Isbell	Mar. 2	3,000
Yellow Creek	Oronoka	J. W. Isbell	Mar. 2	2,000
Common Creek	Buchanan	J. W. Isbell	Mar. 2	3,000
Ester's Creek	Benton	W. J. Lucker	Mar. 2	2,000
McCor's Creek	St. Joseph	W. J. Lucker	Mar. 2	2,000
Branch of Hickory Creek	Oronoka	W. J. Lucker	Mar. 2	1,000
Edison Creek	Oronoka	W. J. Lucker	Mar. 2	1,000
Lemon Creek	Buchanan	Myron E. Marrs	Mar. 2	1,000
Smith or Price Creek	Niles	Hayes Miller	Mar. 2	4,000
Jenkin's Creek	Royalton	Tage Nony	Mar. 2	2,000
Scofield Creek	Berrien and Pipestone	James E. Phillips	Mar. 2	5,000
Farmer's Creek	St. Joseph and Benton	E. E. Rowland	Mar. 2	5,000
Putnam Creek	Watervliet	A. Rieaby	Mar. 2	1,000
Spring-fed brooks near Watervliet	Bainbridge and Benton	C. E. Saefer	Mar. 2	2,000
Blue Creek	St. Joseph	Frank Tucker	Mar. 2	2,000
Ox Creek	Watervliet	F. A. Woodruff	Mar. 2	2,000
Smith's Creek	Lincoln	Samuel Jones	Mar. 12	1,000
Longfellow Creek	Pipestone	Samuel Jones	Mar. 12	3,000
Pipestone Creek	Pipestone	E. E. Woodford	Mar. 12	2,000
Stevens Creek	Niles	Albert Bujack	Mar. 15	2,000
Brandywine Creek	Bainbridge	Albert Bujack	Mar. 15	2,000
Branch of Mill Creek or Smith Creek	Bainbridge	Albert Bujack	Mar. 15	2,000
			Mar. 3	1,000
Branch county:	Union	W. H. Hubbard	Mar. 3	1,000
Stancer Creek	Batavia	Clinton Smead	Mar. 18	2,000
Haines Creek	Coldwater and Girard	F. T. Tappan	Mar. 18	8,000
Hog Creek and several branches	Coldwater and Girard	F. T. Tappan	Mar. 18	8,000
			Mar. 3	1,000
Calhoun county:	Burlington	J. J. Buford	Mar. 3	1,000
Harsh Brook	Burlington	D. D. Buell	Mar. 3	1,000
Lowell Creek	Barryton	D. D. Buell	Mar. 3	2,000
Katz Creek	Newton	A. E. Carpenter	Mar. 3	2,000
Love Creek	Newton	H. T. Carpenter	Mar. 3	1,000
Warsop Creek	Newton	H. T. Carpenter	Mar. 3	2,000
Hazelnut Creek	Newton	M. S. Emmons	Mar. 3	2,000
Corey Creek	Leroy	John Glaw	Mar. 3	1,000
Kelsey Brook	Leroy	C. M. Hall	Mar. 3	1,000
Weed Creek	Newton	D. Houghton	Mar. 3	2,000
Coryes Creek	Leroy	B. P. Long	Mar. 3	1,000
Thompson Creek	Newton and Leroy	C. H. Lowell	Mar. 3	1,000
Marble Creek	Burlington	C. H. Lowell	Mar. 3	1,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Calhoun county.—Continued:				
Beadle Creek	Burlington and Athens.	C. H. Lowell	Mar. 3	1,000
Kelsey Creek	Leroy	H. G. Shannon	Mar. 3	2,000
Pine Creek	Leroy	W. Sheffauer	Mar. 3	5,000
Davis Creek	Leroy	E. H. Watrous	Mar. 3	1,000
Shannon Creek	Leroy	W. C. Willis	Mar. 3	2,000
Pigeon Creek	Emmett	S. Bramble	Mar. 5	3,000
Kessler's Creek	Emmett	G. E. Smith	Mar. 5	3,000
Helmer's Creek	Bedford	V. E. Bush	Mar. 5	3,000
Talmadge Brook	Marshall and Fredonia.	E. L. Holmes	Mar. 5	2,000
Rice Creek	Marengo	H. C. Faulkner	Mar. 5	4,000
Bison Creek	Bedford	D. H. Frazer	Mar. 5	3,000
Seven Mile Creek	Bedford	G. H. Williams	Mar. 5	4,000
Pigeon Creek	Marshall & Emmett.	Frank Paris	Mar. 5	2,000
Austin Brook	Battle Creek	C. J. Phillips	Mar. 5	1,000
Chamberlain Drain	Homer	C. Riblet	Mar. 5	2,000
Minges Brook	Battle Creek and Emmett.	W. H. Skinner	Mar. 5	5,000
Gulf Creek	Emmett	G. A. Southerton	Mar. 5	1,000
Brace Lake Drain and Wilder Creek	Eckford and Marengo	F. A. Stuart	Mar. 5	5,000
Cass county:				
Kinsey Creek	Howard	M. E. Narris	Mar. 2	3,000
Pierson Creek	Pokagon	John Wyant	Mar. 2	1,000
Van Riper Creek	Pokagon	John Wyant	Mar. 2	1,000
Williams Brook	Pokagon	John Wyant	Mar. 2	2,000
No Name	LaGrange and Howard.	R. W. Hain	Mar. 3	2,000
Thorp Creek	Jefferson	G. E. Harmon	Mar. 3	2,000
Kegan's Creek	Jefferson	Jas. H. Kelsey	Mar. 3	2,000
Continental Mill Creek	LaGrange	C. H. Kummerle	Mar. 3	2,000
Shaw's Creek	Jefferson	C. H. Kummerle	Mar. 3	2,000
Gleason Creek	LaGrange and Penn.	J. E. Underwood	Mar. 3	2,000
Ridgeley Creek	Marcellus	S. J. Andrus	Mar. 8	2,000
Cook's Lake Creek	Wayne and Silver Creek	C. A. Hux	Mar. 12	1,000
Rocky River	Marcellus	C. S. Jones	Mar. 8	3,000
Pokagon Creek	Pokagon	J. T. Mendenhall	Mar. 12	2,000
Pokagon Creek	Pokagon and LaGrange.	M. W. Merritt	Mar. 12	3,000
Pine Lake Creek	Wayne and Silver Creek	S. P. Mosher	Mar. 12	1,000
Anthony Creek	Silver Creek	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Brodhurst Creek	Wayne	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Carmen Creek	Wayne	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Clendennen Creek	Silver Creek	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Kenney Creek	Wayne	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Miller Creek	Pokagon	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
McOmber Creek	Silver Creek	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Peavine and McKinney Creeks	Pokagon	Dowagiac Sportsmen's Asso.	Mar. 12	3,000
Pokagon Creek	Pokagon	Dowagiac Sportsmen's Asso.	Mar. 12	2,000
Silver Creek	Silver Creek	Dowagiac Sportsmen's Asso.	Mar. 12	2,000
Starrell Creek	Wayne	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Yaw Creek	Silver Creek	Dowagiac Sportsmen's Asso.	Mar. 12	1,000
Charlevoix county:				
Findley Creek	Boyne Valley	J. L. A. Galster	Mar. 29	2,000
Deer Creek	Severel	J. L. A. Galster	Mar. 29	6,000
South Boyne River	Boyne Valley	J. L. A. Galster	Mar. 29	10,000
North Boyne River	Springville and Boyne Valley.	J. L. A. Galster	Mar. 29	10,000
Collins Creek	Boyne Valley	T. S. Barber	Mar. 29	4,500
Deerlick Creek	Boyne Falls	T. S. Barber	Mar. 29	4,000
Warner Creek	Wilson and Warner.	T. S. Barber	Mar. 29	4,000
Todd Creek	South Arm	A. W. Carson	Mar. 29	2,000
Healy Creek	Wilson	W. F. Empey	April 7	3,000
Porter Creek	South Arm and Wilson	W. F. Empey	April 7	4,000
West Branch of Sturgeon River	Hudson	C. E. Hoffman	Mar. 31	16,000
McGough's Creek	Marion	L. D. Bartholomew	April 7	3,000
Nowland's Creek	Marion and Evaline.	L. D. Bartholomew	April 7	3,000
Storms Creek	Marion and Charlevoix	L. D. Bartholomew	April 7	4,000
St. Clair Creek	Severel	C. S. Campbell	April 7	2,000
Irman Creek	Echo and others.	D. D. Denney	April 7	2,000
Brown's Creek	South Arm	Carl Stroebel	April 7	8,000
Deer's Creek	Wilson	Carl Stroebel	April 7	5,000
Chebogan county:				
Lower Little Pigeon River	Koehler	J. W. Lester	Mar. 31	24,000
Elliott Creek	Benton	W. E. Shoemaker	Mar. 31	6,000
Grass Bay Creek	Benton	W. E. Shoemaker	Mar. 31	2,000
Green's Creek	Benton	W. E. Shoemaker	Mar. 31	3,000
Laparell Creek	Inverness	W. E. Shoemaker	Mar. 31	7,500
Little Black River	Beaugrand	W. E. Shoemaker	Mar. 31	6,000
Nigger Creek	Burt and Monroe.	W. E. Shoemaker	Mar. 31	7,500

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Cheboygan county.—Continued:				
Nigger Creek	Burt and Monroe	E. A. Riggs	Mar. 31	10,000
West Branch Little Sturgeon	Ellis, Koehler and Tuscarora	Clyde King	Mar. 31	22,000
McFee Creek	Nunda	B. F. Stiffler	Mar. 31	3,000
Munner's Creek	Wilmot	Chas. York	Mar. 31	3,000
Bowen Creek	Forest	J. M. Clark	April 2	3,000
Davis Creek	Forest	J. M. Clark	April 2	3,000
Gillier Creek	Forest	J. M. Clark	April 2	1,500
Grogg Creek	Forest	J. M. Clark	April 2	3,000
Milligan Creek	Waverly	J. M. Clark	April 2	6,000
McMaster Creek	Forest	J. M. Clark	April 2	4,500
McPherson Creek	Forest	J. M. Clark	April 2	3,000
Silver Creek	Forest	J. M. Clark	April 2	3,000
Stewart's Creek	Forest	J. M. Clark	April 2	1,500
Trout Creek	Inverness	W. E. Shoemaker	April 9	3,000
Welcher Creek	Waverly and Forest	J. M. Clark	April 2	3,000
Bowen's Creek	Forest	Neil Smith	April 2	3,000
Buzzell Creek	Forest	Neil Smith	April 2	3,000
Church Creek	Forest	Neil Smith	April 2	3,000
Milligan Creek	Waverly and Forest	Neil Smith	April 2	6,000
Welch Creek	Waverly and Forest	Neil Smith	April 2	3,000
Chippewa county:				
Bear Creek	Rudyard	J. C. Sass	April 27	7,000
Biscuit Creek	Trout Lake and Rudyard	J. C. Sass	April 27	9,000
Chub Creek	Rudyard and Trout Lake	J. C. Sass	April 27	7,000
Trout Brook	Rudyard and Trout Lake	J. C. Sass	April 27	7,000
Pine River	Rudyard	J. C. Sass	April 27	7,000
Albany Island Trout Stream	DeTour	S. M. Hill	May 19	6,000
Desmeaux Creek	Pickford	Dr. J. A. Cameron	May 19	9,000
Essig's Creek	Pickford	Dr. J. A. Cameron	May 19	6,000
Grant's Creek	Superior	R. P. Hudson	May 19	15,000
Lagoon Creek	Pickford	Dr. J. A. Cameron	May 19	6,000
Sweetbrier Creek	Rudyard	C. S. Osborn	May 20	9,000
Trapper's Creek	Trout Lake	C. S. Osborn	May 20	9,000
St. Mary's River	Several	Mich. Fish Commission	May 29	14,000
Clare county:				
Brennan Creek	Arthur and Hatton	W. C. Cornwell	Mar. 18	15,000
Clear Creek	Arthur and Hatton	W. C. Cornwell	Mar. 18	9,000
Middle Branch of Tobacco River	Arthur and Hatton	W. C. Cornwell	Mar. 18	15,000
North Branch of Tobacco River	Arthur and Hatton	W. C. Cornwell	Mar. 18	6,000
North Branch of Tobacco River	Hayes	G. J. Cummins	Mar. 20	12,000
Smith Creek	Greenwood	G. J. Cummins	Mar. 20	4,500
Cedar Creek	Franklin	W. E. Green	Mar. 20	4,500
Floodwood Creek	Summerfield	W. E. Green	Mar. 20	4,500
Town Line Creek	Hamilton	Andrew Hagen	Mar. 20	1,500
Green, Norway and Gishwash Creeks	Redding	Wm. Blue	Mar. 24	22,500
Clinton county:				
Jennison Creek	Eagle	F. L. Berry	Mar. 12	1,000
School Section Creek	Essex	G. H. Sowle	Mar. 23	3,000
Crawford county:				
South Branch of Au Sable and tributaries	Several	O. F. Barnes	Mar. 9	60,000
Big Creek	Maple Forest	P. J. Welch	April 3	8,000
Big Creek	Maple Forest	T. E. Douglas	April 3	8,000
East Branch of Au Sable River	Grayling	J. C. Burton	April 9	24,000
Au Sable River	Grayling	J. C. Burton	April 9	30,000
Delta county:				
Bark River	Bark River and Ford River	Timothy Killian	April 26	5,000
Day's River	Brampton	Timothy Killian	April 29	7,000
Escanaba River	Escanaba, Wells and Connell	Timothy Killian	April 26	9,000
Fish Dam River	Nahma	Timothy Killian	April 26	5,000
Ford River	Ford River	Timothy Killian	April 26	11,000
Garden Creek	Garden	Timothy Killian	April 26	5,000
Inman Brook	Masonville and Rapid River	Timothy Killian	April 26	5,000
Rapid River	Rapid River, Perkins and Brampton	Timothy Killian	April 26	5,000
Reno Creek or Brook	Escanaba	Timothy Killian	April 26	5,000
Ten Mile Creek	Bark River	Timothy Killian	April 26	5,000
Whitefish River	Rapid River	Timothy Killian	April 26	5,000
Sturgeon River	Nahma	Timothy Killian	April 26	11,000
Squaaw Brook	Bay de Noc	Timothy Killian	April 26	5,000
Day's River	Several	W. R. Callaway	April 27	7,000
Ogonts River	Mason	W. R. Callaway	April 27	9,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Delta county.—Continued:				
Scott's Creek	Severl	W. R. Callaway	April 27	7,000
Thompson River	Severl	W. R. Callaway	April 27	7,000
Black Creek	Nahma	T. B. Davis	April 27	3,000
Eighteen Mile Creek	Nahma	T. B. Davis	April 27	5,000
Mallman Creek	Nahma	T. B. Davis	April 27	5,000
Little Black Creek	Nahma	F. W. Good	April 27	5,000
West Branch of Fishdam River	Nahma	F. W. Good	April 27	5,000
Bark River	Severl	J. W. Boyle	May 24	18,000
East Branch Bark River	Severl	J. W. Boyle	May 24	6,000
West Branch of Bark River	Severl	J. W. Boyle	May 24	6,000
Dickinson county:				
Headwaters of Ford River	Sagola	J. T. Dunwoodie	May 4	2,000
Albert's Creek	Norway	J. E. Quarnstrom	May 4	4,000
Badwater Creek	Breitung	J. E. Quarnstrom	May 4	4,000
Squaw Creek	Sagola	J. F. Sullivan	May 4	2,000
Eaton county:				
Spring Brook	Severl	E. R. Britten	Mar. 10	3,000
Thornapple River and headwaters	Benton	Frank J. Johnston	Mar. 10	5,000
Emmet county:				
Carp River	Carp Lake	O. C. Cope	Mar. 29	15,000
Curtis Creek	Littlefield	Wm. L. Curtis	Mar. 29	3,000
Heber Creek	Little Traverse	Wm. L. Curtis	Mar. 29	7,000
McPhees Creek	Littlefield and Maple River	W. W. Fairbairn	Mar. 29	4,000
No Name	Friendship	B. Whittaker, Jr.	Mar. 29	2,000
Cedar Creek	Tuscarora and Springvale	J. W. Lester	Mar. 31	7,500
Maple River and tributaries	Severl	W. B. Stimson	April 5	50,000
Genesee county:				
Thread River	Burton, Grand Blanc and Atlas	A. D. Banker	Mar. 25	7,500
Gladwin county:				
Cedar River and tributaries	Sherman, Sage and Grant	F. L. Prindle	April 9	4,000
East Branch of Tittabawassee	Bourrett	H. Stephens	April 9	6,000
Middle Branch of Tittabawassee	Clement	H. Stephens	April 9	6,000
Gogebic county:				
East Branch of Ontonagon River	Watersmeet	B. E. Jussen	May 4	4,000
Tamarack River	Watersmeet	Geo. E. Moore	May 4	2,000
East Branch of Spring Creek	Watersmeet	J. R. Moore	May 4	2,000
Taylor Lake Creek	Watersmeet	J. R. Moore	May 4	2,000
Spring Creek	Watersmeet	H. H. Slocumb	May 4	4,000
Triplet Creek	Ironwood	F. J. Alexander	May 7	2,000
Birch Creek	Ironwood	Richard Banfield	May 7	2,000
Cedar Creek	Ironwood	Richard Banfield	May 7	2,000
Flink's Creek	Ironwood	James Campbell	May 7	2,000
Dellias Creek	Watersmeet	A. C. Brownell	May 7	2,000
Henderson Creek	Watersmeet	A. C. Brownell	May 7	2,000
Spring Creek	Ironwood	G. M. Cornell	May 7	2,000
Morrison Creek	Watersmeet	B. H. Darling	May 7	2,000
Sergeant Creek	Watersmeet	B. H. Darling	May 7	2,000
Grabig's Creek	Erwin	Frank Ehlers	May 7	2,000
MacDonald's Creek	Erwin	Frank Ehlers	May 7	2,000
Little Black River	Wakefield	Capt. J. F. Finnegan	May 7	4,000
Howe's Creek	Ironwood	M. A. Fitzsimmons	May 7	2,000
Jones Brook	Erwin	M. A. Fitzsimmons	May 7	2,000
McKinney Creek	Ironwood	M. A. Fitzsimmons	May 7	2,000
Kelly's Brook	Erwin	Geo. Grabig	May 7	2,000
No Name	Sec. 18, T. 46 and 49 W.	Daniel P. Green	May 7	2,000
Haymarsh Creek	Ironwood	O. S. Halem	May 7	2,000
Matterson Creek	Ironwood	Geo. D. Hough	May 7	2,000
Barr's Brook	Marenisco	Ironwood R. and G. Club	May 7	2,000
Beaver Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Big Coon Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Braydy's Brook	Ironwood	Ironwood R. and G. Club	May 7	2,000
Cornell Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Douglas Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Honey Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Kimble Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Little Coon Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Sampson Creek	Marenisco	Ironwood R. and G. Club	May 7	2,000
Shawmell's Creeklet	Ironwood	Ironwood R. and G. Club	May 7	2,000
Stabler's Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Willow Creek	Ironwood	Ironwood R. and G. Club	May 7	2,000
Beaton's Creek	Watersmeet	A. D. Johnston	May 7	6,000
Bent's Creek	Watersmeet	A. D. Johnston	May 7	3,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Gogebic county.—Continued:				
Ciscoe Outlet	Watersmeet	A. D. Johnston	May 7	9,000
Crooked Creek	Watersmeet	A. D. Johnston	May 7	3,000
Crooked Creek	Watersmeet	A. D. Johnston	May 7	3,000
Crooked Creek	Watersmeet	A. D. Johnston	May 7	3,000
Camp Two Creek	Watersmeet	A. D. Johnston	May 7	3,000
Duck Creek	Watersmeet	A. D. Johnston	May 7	3,000
Johnston Springs	Watersmeet	A. D. Johnston	May 7	2,000
Langford Creek	Marenisco	A. D. Johnston	May 7	4,000
Little Presque Isle	Watersmeet	A. D. Johnston	May 7	3,000
Longfellow Creek	Marenisco	A. D. Johnston	May 7	5,000
Slate River	Watersmeet	A. D. Johnston	May 7	3,000
Tenderfoot Creek	Watersmeet	A. D. Johnston	May 7	6,000
Thousand Island Creek	Watersmeet	A. D. Johnston	May 7	2,000
Wellington Branch	Marenisco	Fred Johnstone	May 7	2,000
Camp Two Creek	Watersmeet	Fred Johnstone	May 7	2,000
Wolf Lake Creek	Watersmeet	B. E. Jussen	May 7	2,000
Brush Creek	Ironwood	B. E. Jussen	May 7	2,000
Johnson's Creek	Ironwood	Walter Magoon	May 7	2,000
No Name	Marenisco	G. H. Mathews	May 7	2,000
Morrison Creek	Ironwood	F. A. Miller	May 7	2,000
Foley's Creek	Ironwood	F. A. Miller	May 7	2,000
Nine Mile Creek	Bessemer	F. A. Miller	May 7	4,000
Middle Branch of Ontonagon river	Watersmeet	C. M. McDonald	May 7	2,000
Two Mile Creek	Watersmeet	C. M. McDonald	May 7	2,000
Forbes Brook	Ironwood	A. McIvor	May 7	2,000
Fisher Creek	Ironwood	E. W. Murley	May 7	2,000
Ryan's Creek	Ironwood	E. W. Murley	May 7	2,000
Beaver Station Creek	Ironwood	N. D. Murphy	May 7	2,000
Lake Marion Creek	Watersmeet	N. D. Murphy	May 7	2,000
No Name	Watersmeet	E. A. Ormes	May 7	2,000
Gage's Creek	Marenisco	H. E. Patterson	May 7	2,000
Howard Creek	Bessemer	H. E. Patterson	May 7	2,000
Markstrum's Creek	Bessemer	H. E. Patterson	May 7	2,000
Beck's Creek	Ironwood	J. B. Patrick	May 7	2,000
Little Spring Creek	Ironwood	J. B. Patrick	May 7	2,000
Sutherland Creek	Ironwood	J. B. Patrick	May 7	8,000
Black River	Ironwood	W. J. Pinkerton	May 7	2,000
Millen Creek	Several	Henry Rowe	May 7	2,000
Kennedy Creek	Ironwood	J. A. Rupp	May 7	2,000
Dandy Brown's Creek	Ironwood	Jas. Sampson	May 7	2,000
Pigeon Creek	Ironwood	Jas. Sampson	May 7	2,000
Hoffman Creek	Ironwood	D. E. Sutherland	May 7	2,000
Honeywood Creek	Ironwood	D. E. Sutherland	May 7	2,000
Maple Creek	Ironwood	D. E. Sutherland	May 7	2,000
Rowe's Creek	Ironwood	D. E. Sutherland	May 7	2,000
Monroe Creek	Marenisco	F. T. Thalner	May 7	2,000
Tenderfoot Creek	Bessemer	Fred Thiele	May 7	2,000
Cox Creek	Bessemer	J. A. Vogtlin	May 7	4,000
Clear Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Crystal Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Eight Mile Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Mossie Creek	Bessemer	J. A. Vogtlin	May 7	4,000
Pine Creek	Bessemer	J. A. Vogtlin	May 7	4,000
Powder Mill Creek	Bessemer	J. A. Vogtlin	May 7	2,000
North Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Rock Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Vogtlin's Creek	Bessemer	J. A. Vogtlin	May 7	4,000
Water Works Creek	Bessemer	J. A. Vogtlin	May 7	2,000
Spring Creek	Bessemer	J. A. Vogtlin	May 7	4,000
Balsam Brook	Erwin	B. F. Whitman	May 11	4,000
Branch of Presque Isle River	48-14	E. W. MacPherran	May 11	4,000
Tributary to Lake Ruth	48-45	E. W. MacPherran		
Grand Traverse county:				
Tributaries to Duck Lake	Green Lake	G. A. Brigham	Mar. 22	3,000
Fife Lake Outlet	Fife Lake	J. V. Wright	Mar. 29	3,000
East Branch of Anderson Creek	Mayfield	G. A. Brigham	Mar. 30	3,000
West Branch Anderson Creek	Mayfield	G. A. Brigham	Mar. 30	4,500
Taber Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	1,000
Hill's Brook	Paradise	Kingsley Sportsmens Club	Mar. 30	1,000
Brownson Brook	Paradise	Kingsley Sportsmens Club	Mar. 30	3,000
Malcom Keffer Spring Brook	Paradise	Kingsley Sportsmens Club	Mar. 30	6,000
Beaver Meadow Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	3,000
Biddlecomb Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	6,000
Clark Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	3,000
East Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	3,000
Gray's Creek	Paradise	Kingsley Sportsmens Club	Mar. 30	3,000
Harrison Brook	Paradise	Kingsley Sportsmens Club	Mar. 30	4,500
Newmarsh Spring Brook	Paradise	Kingsley Sportsmens Club	Mar. 30	

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Grand Traverse county.—Continued:				
Parker Creek	Paradise	Kingsley Sportsmens Club.	Mar. 30	3,000
Slaughter House Creek	Paradise	Kingsley Sportsmens Club.	Mar. 30	1,500
Battle Creek	Acme	L. N. Spring	April 7	4,500
Folette Creek	Acme	L. N. Spring	April 7	3,000
Youba Creek	Acme	L. N. Spring	April 7	7,500
Jackson Creek	Paradise	A. B. Stimson	Mar. 30	3,000
Wynkoop's Spring Brook	Paradise	A. B. Stimson	Mar. 30	3,000
Boardman River	Garfield, Mayfield and East Bay	Traverse City Fly Cast.Club.	Mar. 30	10,000
Acme Creek	Acme	Traverse City R. and G.Club	Mar. 30	3,000
Boardman River	Severall	Traverse City R. and G. Club	Mar. 30	10,000
Mitchell Creek	East Bay	Traverse City R. and G. Club	Mar. 30	3,000
Gratiot county:				
Ayers Creek	Sumner	B. J. Gee	Mar. 20	2,000
Bullock Creek	Sumner	B. J. Gee	Mar. 20	2,000
Hillsdale county:				
Headwaters of Kalamazoo River	Scipio	L. C. Feighner	Mar. 5	3,000
McEnelly Ditch	Litchfield and Scipio	L. C. Feighner	Mar. 5	2,000
Sand Creek	Allen and Litchfield	L. C. Feighner	Mar. 5	5,000
Soap Creek	Allen, Litchfield and Butler	L. C. Feighner	Mar. 5	3,000
Doty Drain	Litchfield and Home	C. Riblet	Mar. 5	3,000
Hodges Spring Brook	Scipio	A. B. Sanderson	Mar. 5	1,000
No Name	Somerset and Rollin	A. W. Wood	Mar. 5	3,000
Houghton county:				
Otter River	Chassell	C. W. Danielson	May 11	6,000
Beaver Creek	Duncan	Wm. Kroll	May 11	8,000
Fox Creek	Duncan	Wm. Kroll	May 11	4,000
Hope Creek	Duncan and Iron River	Wm. Kroll	May 11	4,000
Jumbo Creek and branches	Duncan and Iron River	Wm. Kroll	May 11	10,000
Lee's Creek	Duncan and Interior	Wm. Kroll	May 11	4,000
Shane Creek	Duncan	Wm. Kroll	May 11	4,000
Smith Creek	Duncan	Wm. Kroll	May 11	2,000
Spargo Creek	Duncan and Iron River	Wm. Kroll	May 11	2,000
Spring Creek	Duncan and Iron River	Wm. Kroll	May 11	4,000
Stony Creek	Duncan and Iron River	Wm. Kroll	May 11	6,000
White Creek	Duncan	Wm. Kroll	May 11	2,000
Branch of Sturgeon River	Laird	J. C. Pryor	May 11	2,000
Hill Creek	Duncan	Sidnaw F. and H. Club	May 11	2,000
Johnstons Creek	Duncan	Sidnaw F. and H. Club	May 11	2,000
Little Beaver Creek	Duncan	Sidnaw F. and H. Club	May 11	2,000
Perch Creek	Duncan and Covington	Sidnaw F. and H. Club	May 11	6,000
Roycroft Creek	Duncan	Sidnaw F. and H. Club	May 11	2,000
Sidnaw Creek	Duncan	Sidnaw F. and H. Club	May 11	2,000
Southeast Branch Ontonagon River	Duncan	Sidnaw F. and H. Club	May 11	2,000
Leveque's Creek	Laird	G. W. Stannard	May 11	4,000
Small branch of Sturgeon River	Laird	H. L. Swift	May 11	4,000
Small branch of Sturgeon River	Laird	Paul D. Swift	May 11	2,000
Fike River	Chassell	Dr. P. H. Willson	May 11	4,000
Sleeping River	Elm River and Bohemia	A. D. Aldrich	May 14	4,000
West Branch of Little Traverse	Schoolcraft	T. W. Armstrong	May 14	4,000
Alston Creek	Laird	L. H. Atkin	May 14	2,000
Ravine Creek	Torch Lake	Geo. Burk	May 14	2,000
Seven Mile Creek	Calumet	Albert Barrett	May 14	4,000
Swedetown Creek	Calumet	Albert Barrett	May 14	2,000
Coach's Creek	Laird	J. G. Bertrand	May 14	2,000
Oskar Stream	Stanton	P. J. Burkman	May 14	2,000
Upper Sturgeon River	Severall	J. M. Cahoon	May 14	4,000
Silver Creek	Laird and Chassell	Wm. D. Caemley	May 14	4,000
Hallie's Creek	Torch Lake	Oscar Cuyler	May 14	2,000
Thirteen Mile Creek	Adams	Herman Dahl	May 14	4,000
Slock Creek	Hancock	A. D. Edwards	May 14	2,000
West Branch of Otter River	Laird and Duncan	H. W. Fesmig	May 14	4,000
Pump Station Creek	Adams	Chas. F. Fisher	May 14	4,000
St. John's Creek	Hancock	L. E. Gagnier	May 14	6,000
Peepsock Creek	Portage	Henry W. Grams	May 14	2,000
Hungoman Creek	Oscoda	M. J. Harrington	May 14	2,000
Pilgrim River	Portage and Adams	H. W. Hart	May 14	4,000
Murphy's Creek	Laird	James T. Healy	May 14	2,000
Little Traverse River	Schoolcraft	M. J. Hodges	May 14	2,000
Armstrong's Creek	Schoolcraft	Sam James	May 14	2,000
East Branch of Otter River	Schoolcraft	C. K. Jensen	May 14	2,000
Trap Rock River	Schoolcraft	A. G. Kaufman	May 14	4,000
East Branch Salmon Trout River	Portage and Adams	H. M. Keever	May 14	2,000
Six Mile Creek	Portage	F. W. Kroll	May 14	2,000
Sleeping River	Bohemian and Elm miver	F. W. Kroll	May 14	6,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Houghton county.—Continued:				
Stoll's Creek	Adams	F. W. Kroll	May 14	2,000
Big Traverse River	Schoolcraft	Carl Krug	May 14	4,000
Misery and Shawmut Rivers	Elm River	L. LaRochelle	May 14	6,000
East Branch of Pilgrim River	Portage	W. G. Major	May 14	2,000
Huron Dam	Portage	W. G. Major	May 14	4,000
Quinzie Creek	Portage	Edward Marcotte	May 14	2,000
North Branch of Pilgrim River	Oscoda	C. A. Mayworm	May 14	2,000
Four Mile Creek	Portage and Adams	J. J. Michels	May 14	2,000
Arcadian Mill Creek	Portage	J. C. Nelson	May 14	2,000
East Pike River	Torch Lake	J. M. Nelson	May 14	4,000
Otter Creek	Portage and Chassell	Abel Olson	May 14	8,000
Elm River	Laird and Chassell	John Paul	May 14	2,000
Little Rabbit River	Adams, Elm and Stanton	Ernest Peck	May 14	2,000
Bruneau Creek	Torch Lake	F. L. Reedham	May 14	2,000
Sawmill Creek	Laird	Wm. J. Richards	May 14	4,000
Middle Branch Firesteel River	Adams	L. H. Richardson	May 14	4,000
Colt's Creek	Elm River	J. H. Rice	May 14	2,000
South Branch of Pilgrim River	Adams	H. J. Rowf	May 14	2,000
East Branch Trap Rock River	Portage	Dr. C. Ropp	May 14	4,000
McGunn's Creek	Schoolcraft	Dr. H. E. Sangster	May 14	6,000
North Branch of Otter River	Calumet	R. Skiff Sheldon	May 14	4,000
Hennes Creek	Laird and Adams	R. H. Shields	May 14	4,000
Graverat Creek	Portage	Chas. Smith	May 14	4,000
Salmon Trout River	Stanton	J. Albert Smith	May 14	10,000
Hill's Creek	Adams	Jas. M. Taylor	May 14	2,000
Vine Creek	Calumet	M. D. Train	May 14	4,000
West Branch of the Sturgeon River	Torch Lake	A. J. Vine	May 14	4,000
West Branch of Pilgrim River	Laird	J. C. Weissmiller	May 14	4,000
Burt Creek	Portage	Geo. Williams	May 14	4,000
McCollum Creek	Elm River	Geo. Williams	May 14	2,000
Santee Creek	Torch Lake	Jos. Wise, P. M.	May 14	4,000
	Adams and Portage	Gotlieb Wurster	May 14	
Ingham county:				
Low Lake Inlet	Stockbridge	Walter Hayner	Mar. 5	2,000
Willow Creek	Aurelius	W. T. Holcomb	Mar. 10	2,000
Columbia Creek	Aurelius	W. T. Holcomb	Mar. 10	3,000
Ionia county:				
Warden Creek	Orleans	H. H. Decker	Mar. 18	3,000
White's Creek	Orleans	Archie Sweers	Mar. 18	2,000
Outlet of Woodard Lake	Orleans	W. H. Angell	Mar. 20	2,000
Tibbets Creek	Berlin	A. J. Kling	Mar. 20	2,000
Cannon Creek	Otisco	Dr. J. F. Pinkham	Mar. 20	5,000
Seeley Creek	Otisco and Grattan	Dr. J. F. Pinkham	Mar. 20	1,000
Ely Creek	Ionia and Ronald	C. A. Dalzell	Mar. 22	1,000
Holden Brook	Ronald	Newell Holden	Mar. 22	1,000
Arnold's Creek	Easton	J. Wallington	Mar. 22	1,000
Dexter Creek	Easton	J. Wallington	Mar. 22	1,000
Hawthorn's Creek	Boston	J. Wallington	Mar. 22	1,000
Hunt's Creek	Boston and Berlin	J. Wallington	Mar. 22	1,000
Pearshall Creek	Boston and Keene	J. Wallington	Mar. 22	1,000
Stevens Creek	Keene and Easton	J. Wallington	Mar. 22	1,000
Iosco county:				
Meadow Brook	Oscoda	William Elliott	April 5	3,000
Cold Creek	Tawas	C. W. Luce	April 5	6,000
Gates Creek	Tawas and Baldwin	C. W. Luce	April 5	6,000
Pickett Creek	Plainfield	C. W. Luce	April 5	12,000
Silver Creek	Willour and Baldwin	C. W. Luce	April 5	7,500
Vaughan Creek	Plainfield	C. W. Luce	April 5	
Iron county:				
Deer River	Crystal Falls	Arvid Bjork	May 4	6,000
Deer River and tributaries	Crystal Falls	C. H. Campbell	May 4	4,000
West Branch of Paint River	Stambaugh	G. M. Cornell	May 4	4,000
East Branch of East branch of Ontonagon River	Stambaugh	G. M. Cornell	May 4	4,000
Brule River	Sever	F. G. Hood & Co	May 7	10,000
Section 33 Creek	Stambaugh	Herman F. Jahn	May 4	2,000
Hemlock River	Hematite	C. E. Lawrence	May 4	6,000
Iron River	Iron River	J. R. Lyons	May 4	12,000
Holmes Creek	Crystal Falls	Geo. Premo	May 4	4,000
Little Hemlock Creek	Hematite	Geo. Premo	May 4	2,000
Net River	Hematite	Geo. Premo	May 4	10,000
New York Creek	Hematite	Geo. Premo	May 4	2,000
Paint River	Hematite	Geo. Premo	May 4	8,000
Paint River	Crystal Falls, etc	Geo. Premo	May 4	8,000
	Stambaugh	E. Swanson	May 4	

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Isabella county:				
Jenner Creek	Union	Geo. Chatterton	Mar. 15	3,000
Wheeler Creek	Union	Geo. A. Chatterton	Mar. 15	3,000
Campau Creek	Deerfield	Geo. L. Granger	Mar. 15	1,500
Coomar Creek	Deerfield	Geo. L. Granger	Mar. 15	3,000
Hibon Creek	Deerfield	Geo. L. Granger	Mar. 15	1,500
Fussman Creek	Nottawa	Geo. L. Granger	Mar. 15	3,000
Ingler Creek	Deerfield	Geo. L. Granger	Mar. 15	1,500
Labun Creek	Nottawa	Geo. L. Granger	Mar. 15	3,000
Perry Creek	Gilmore	Geo. L. Granger	Mar. 15	3,000
Phillips Creek	Deerfield	Geo. L. Granger	Mar. 15	1,500
Seymore Creek	Gilmore	Geo. L. Granger	Mar. 15	3,000
Simons Creek	Deerfield	Geo. L. Granger	Mar. 15	3,000
Stoney Creek	Deerfield	Geo. L. Granger	Mar. 15	1,500
Theisen Creek	Nottawa	Geo. L. Granger	Mar. 15	3,000
Tupman Creek	Nottawa	Geo. L. Granger	Mar. 15	3,000
Wood's Creek	Gilmore	Geo. L. Granger	Mar. 15	3,000
Zucker Creek	Deerfield	Geo. L. Granger	Mar. 15	3,000
No Name	Rolland	Ansel Moody	Mar. 18	1,000
Remick Creek	Rolland	Ansel Moody	Mar. 18	1,000
Skunk Creek and tributaries	Rolland	Ansel Moody	Mar. 18	3,000
Headwaters Coldwater River	Nottawa	Robt. Hyslop	Mar. 19	6,000
Hensatch Creek	Deerfield	Robt. Hyslop	Mar. 19	4,000
Shafer's Creek	Deerfield	Robt. Hyslop	Mar. 19	2,000
Walker Creek	Sherman	H. A. Frost	Mar. 19	4,000
Headwaters of Little Salt River	Lincoln	Geo. J. Poole	Mar. 20	6,000
Jackson county:				
Branch of North Branch of Kalamasoo River	Hanover	Frank W. McKenzie	Mar. 3	2,000
Mackey Creek	Parma	S. H. Barsdale	Mar. 5	2,000
Needham Creek	Parma	S. H. Barsdale	Mar. 5	3,000
Tributary of Michigan Center Millpond	Napoleon	L. B. Benton	Mar. 5	2,000
Thayer's Creek	Norvell	B. F. Burgess	Mar. 5	4,000
Carpenter Creek	Columbia	Geo. S. Cook	Mar. 5	2,000
Johnson Creek	Columbus	Geo. S. Cook	Mar. 5	1,000
Stoney Creek	Napoleon	D. C. Fisher	Mar. 5	2,000
Outlet of Stoney Lake	Napoleon	E. L. Griffin	Mar. 5	1,000
Winegar Creek	Parma and Sandstone	Mark B. Hawes	Mar. 5	2,000
Beaver Dam Creek	Sandstone	G. L. Hunn	Mar. 5	2,000
Knowles Creek	Concord	Jay King	Mar. 5	1,000
Cutler Creek	Concord	D. F. Moe	Mar. 5	2,000
Showerman Creek	Parma and Concord	Joe Needham	Mar. 5	2,000
Grass Lake Creek	Grass Lake	Chester R. Smith	Mar. 5	3,000
Thompson Brook	Hanover	Jeff Strale	Mar. 5	1,000
Zimmerman Brook	Norvell	Wm. F. Walker	Mar. 5	2,000
Crouch Creek	Summit	Geo. E. Beebe	Mar. 10	4,000
Cutler Creek	Spring Arbor	Geo. E. Beebe	Mar. 10	5,000
Four Mile Creek	Blackman	Geo. E. Beebe	Mar. 10	3,000
Headwaters Grand River	Liberty	Geo. E. Beebe	Mar. 10	3,000
Headwaters Kalamasoo River	Hanover	Geo. E. Beebe	Mar. 10	5,000
Inlet to Brill's Lake	Leoni	Geo. E. Beebe	Mar. 10	5,000
Leoni Creek	Leoni	Geo. E. Beebe	Mar. 10	2,000
Rice Creek	Parma	Geo. E. Beebe	Mar. 10	6,000
Snyder's Creek	Spring Arbor	Geo. E. Beebe	Mar. 10	2,000
Sandstone Creek	Sandstone and Blackman	Geo. E. Beebe	Mar. 10	5,000
Spring Brook	Parma and Springport	Geo. E. Beebe	Mar. 10	4,000
Wade Creek	Tompkins	Geo. E. Beebe	Mar. 10	2,000
Willow Creek	Grass Lake and Waterloo	Geo. E. Beebe	Mar. 10	4,000
Willow Creek	Rives	Geo. E. Beebe	Mar. 10	2,000
Indian Springs	Concord	B. W. Dier	Mar. 10	1,000
Ballard's Creek	Leoni	Vernon J. Elliott	Mar. 10	3,000
Kalkaska county:				
Rapid River	Rapid River	C. L. Bailey	Mar. 29	22,500
Twenty-two Creek	Union	Kingsley Sportsmens Club	Mar. 30	6,000
Rapid River	Several	L. N. Spring	April 7	10,000
Kalamasoo county:				
Eagle Creek	Charleston	Henry F. Beckman	Mar. 5	2,000
Winton Creek	Charleston	W. R. Wooden	Mar. 5	2,000
Chart Creek	Adams	E. J. Anderson	Mar. 8	3,000
Portage Creek	Pavilion	Robt. B. Cook	Mar. 8	3,000
Abram Creek	Alamo and Otsego	Wm. Crispie	Mar. 8	2,000
Brown's Creek	Alamo	Wm. Crispie	Mar. 8	2,000
Spring Brook	Richland	Albert Dell	Mar. 8	4,000
Campbell Creek	Alamo	N. B. Hall	Mar. 8	3,000
Axtell Creek	Kalamasoo	Henry Hobbs	Mar. 8	2,000
Davis Creek	Pavillion and Kalamasoo	Henry Hobbs	Mar. 8	5,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Kalamazoo county.—Continued:				
Portage Creek	Texas, Portage and Kalamazoo	Henry Hobbs	Mar. 8	5,000
Sumner Creek	Comstock	John Ott	Mar. 8	1,000
Telfer's Creek	Richland	R. R. Telfer	Mar. 8	1,000
Dorrance Creek	Climax	White Bros. & Co.	Mar. 8	5,000
Guchs Creek	Climax	White Bros. & Co.	Mar. 8	3,000
No Name	Climax	White Bros. & Co.	Mar. 8	3,000
Tailrace Creek	Pavillion	White Bros. & Co.	Mar. 8	5,000
Hall Spring Brook	Almena	Dr. C. A. Wise	Mar. 8	3,000
Payne Creek	Texas and Antwerp	George H. Murch	Mar. 12	3,000
Kent county:				
Harding Creek	Algoma	E. W. Bratt	Mar. 13	1,000
Munn Creek	Algoma	E. W. Bratt	Mar. 13	1,000
Porter's Creek	Courtland	E. W. Bratt	Mar. 13	1,000
Turner Creek	Algoma	E. W. Bratt	Mar. 13	2,000
Spring Creek	Solon	David Curtis	Mar. 13	4,000
Little Cedar Creek	Algoma	Alex. Dargie	Mar. 13	2,000
Green's Creek	Nelson	C. A. Green	Mar. 13	5,000
Cedar Creek	Algoma	B. E. Hill	Mar. 13	5,000
Black Creek	Nelson and Spencer	G. B. McDonald	Mar. 13	1,000
McFall's Creek	Solon	Earl Rasco	Mar. 13	1,000
No Name	Algoma	John W. Rawson	Mar. 13	3,000
Cedar Creek	Algoma	Geo. E. Rector	Mar. 13	1,000
Miner Creek	Algoma	Geo. E. Rector	Mar. 13	1,000
Stegman Creek	Courtland	Geo. E. Rector	Mar. 13	2,000
Duke Creek	Nelson and Solon	F. E. Shattuck	Mar. 13	3,000
Austin Brook	Courtland	W. H. Wheeler	Mar. 13	5,000
Becker Creek	Courtland	W. H. Wheeler	Mar. 13	5,000
Big Cedar Creek	Nelson, Solon and Algoma	W. H. Wheeler	Mar. 13	4,000
Dap Creek	Solon	W. H. Wheeler	Mar. 13	8,000
Duke Creek	Nelson and Solon	W. W. Wheeler	Mar. 13	4,000
Little Cedar Creek	Nelson, Courtland, Algoma	W. H. Wheeler	Mar. 13	5,000
Spring Creek	Solon	W. H. Wheeler	Mar. 13	5,000
Stegman Creek	Courtland	W. H. Wheeler	Mar. 13	1,000
Bayer Creek	Plainfield	John M. Bennett	Mar. 17	1,000
Boylind's Creek	Ada	John M. Bennett	Mar. 17	1,000
Hawkin Creek	Ada	John M. Bennett	Mar. 17	1,000
No Name	Plainfield	John M. Bennett	Mar. 17	2,000
Ronan Creek	Ada	Geo. W. Brantner	Mar. 17	2,000
Rum Creek	Algoma and Courtland	Geo. W. Brantner	Mar. 17	2,000
Rum Creek	Algoma and Courtland	L. N. Largo	Mar. 19	1,000
Lamberton Creek and tributaries	Grand Rapids	Geo. C. Bratt	Mar. 19	1,000
Hill Creek	Ada	Geo. C. Bratt	Mar. 19	2,000
Hogadone Creek	Walker	Geo. C. Bratt	Mar. 19	1,000
Honey Creek	Walker	Geo. C. Bratt	Mar. 20	2,000
No Name	Spencer	Fred Halland	Mar. 20	2,000
Stopes Creek and Berriger Creek	Oakfield and Eureka	F. A. Kemp	Mar. 22	2,000
Reed Creek	Algoma and Sparta	A. J. Boorom	Mar. 22	1,000
Silver Creek	Sparta	A. J. Boorom	Mar. 22	2,000
No Name	Vergennes and Lowell	John Miller	Mar. 22	3,800
Walters Creek and branches	Vergennes	John Miller	Mar. 22	2,000
Barber's Creek	Tyrone	Geo. Rexford	Mar. 22	5,000
Duke Creek	Tyrone and Solon	Geo. Rexford	Mar. 22	1,000
Snow Creek	Tyrone	Geo. Rexford	Mar. 22	3,000
Bird Creek	Vergennes	M. E. Simpson	Mar. 22	2,000
Kinyon Creek	Lowell	M. E. Simpson	Mar. 22	2,000
Koph Creek	Lowell	M. E. Simpson	Mar. 22	2,000
Spring Brook	Lowell	M. E. Simpson	Mar. 22	2,000
English Creek	Sparta	Leslie Watson	Mar. 22	3,000
Symes Creek	Sparta	Leslie Watson	Mar. 22	4,000
Crimson Creek	Mostly Oakfield	Freeman Addis	April 1	5,000
Butternut Creek	Spencer	Alonz Griswold	April 1	4,500
Tributary to Bear Creek	Cannon	Chas. Armstrong	April 3	4,500
Keweenaw county:				
Gratiot River	Eagle Harbor	Edward Bost	May 14	4,000
Silver Creek	Grant	Chas. Brown	May 14	4,000
Seward Creek	Allouez	Harry Hernan	May 14	2,000
Tobacco and Betsay Rivers	Sherman	A. Jackson and J. A. Johnson	May 14	4,000
Tobacco River	Grant	Dr. H. E. Sangster	May 14	4,000
Montreal River	Grant	A. H. Sawyer	May 14	6,000
Montreal River	Sherman	M. D. Train	May 14	4,000
Mosquito Creek	Eagle Harbor	J. Vivian, Jr.	May 14	4,000
Indian River	Sherman	W. R. Vivian	May 14	4,000
Buffalo Creek	Houghton	Chas. J. Webb	May 14	2,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Keweenaw county.—Continued:				
Traverse River.....	Grant and Schoolcraft.....	Chas. J. Webb.....	May 14	4,000
Gratiot River.....	Allouez.....	Morgan Williams.....	May 14	4,000
Trap Rock River.....	Allouez and Schoolcraft.....	Morgan Williams.....	May 14	4,000
Lake county:				
Pine and Little Manistee Rivers.....	Several.....	Geo. Cutler.....	Mar. 23	40,000
Baker, Lorse, Lacey and Stearns Creeks.....	Cherry Valley.....	Pere Marquette Club.....	Mar. 24	9,000
Middle Branch Pere Marquette.....	Cherry Valley.....	Pere Marquette Club.....	Mar. 24	12,000
North Branch of Pere Marquette.....	Pleasant Plains.....	H. W. Davis.....	Mar. 24	12,000
Sanborn or Furnsworth Creek.....	Pleasant Plains.....	H. W. Davis.....	Mar. 24	6,000
Dannaker Creek and branches.....	Pleasant Plains.....	Geo. Grant.....	Mar. 24	4,500
Sweetwater Creek.....	Elk.....	Watts R. Humphrey.....	Mar. 24	4,500
Tank Creek.....	Elk.....	Watts R. Humphrey.....	Mar. 24	1,500
Baldwin Creek.....	T. 18, R. 12 and 13 T. 17, R. 13.....	Ludington Fishing Club.....	Mar. 24	7,500
Blood's Creek.....	Pleasant Plains.....	Ludington Fishing Club.....	Mar. 24	1,500
Sanborn Creek.....	T. 17, R. 13.....	Ludington Fishing Club.....	Mar. 24	6,000
Sauble River.....	Elk, Freesoil and Sheridan.....	Ludington Fishing Club.....	Mar. 24	15,000
Sweetwater Creek.....	Elk.....	Ludington Fishing Club.....	Mar. 24	3,000
Pere Marquette River.....	Pleasant Plains and Lake.....	W. B. Mershon.....	Mar. 14	15,000
Bowman Creek.....	Pleasant Plains.....	Geo. B. Morley.....	Mar. 24	4,500
Pine and Little Manistee Rivers.....	Ellsworth, Newkirk and Dover.....	H. W. Marsh.....	Mar. 25	40,500
Sauble River.....	Elk, Freesoil and Sheridan.....	H. W. Marsh.....	Mar. 25	22,500
Erickson and Peas Creeks.....	Cherry Valley.....	J. H. Booth.....	Mar. 30	4,000
Middle Branch of P. M. River.....	T. 17 N. R. 12 W.....	J. H. Booth.....	Mar. 30	8,000
Denneher and Jenks Creeks.....	Pleasant Plains.....	H. C. Crosby.....	Mar. 22	9,000
Little Manistee River.....	Webber and Elk.....	Hon. H. D. Jewell.....	Mar. 22	30,000
Lapeer county:				
North Branch of Clinton River.....	Almont and Bruce.....	Dr. D. H. Burley.....	Mar. 25	9,000
Carpenter Creek.....	Mayfield.....	E. J. Thresher.....	Mar. 25	3,000
Miller Creek.....	Deerfield and Rich.....	E. J. Thresher.....	Mar. 25	4,000
Hough Creek.....	Arcadia, Goodland and Burnside.....	E. J. Thresher.....	Mar. 25	6,000
Headwaters Mill Creek.....	Attira, Arcadia and Goodland.....	E. J. Thresher.....	Mar. 25	6,000
Hunter's Creek.....	Lapeer and Metamora.....	Mathias Caley.....	Mar. 26	6,000
Leelanau county:				
Albrecht's Pond Inlets.....	Empire.....	D. H. Dav.....	April 1	4,500
Lardie's Creek.....	Empire.....	E. R. Dailey.....	April 1	3,000
Knox Creek.....	Empire.....	E. R. Dailey.....	April 1	3,000
Kritz Creek.....	Cleveland.....	James Daly.....	April 1	3,000
Dunn's Creek.....	Glen Arbor.....	Nessen Brothers.....	April 1	1,500
No Name.....	Salon.....	F. Nunemaker.....	April 6	3,000
Cedar Run.....	Salon and Kasson.....	A. S. Smith.....	April 6	9,000
Mossos Creek.....	Sutton's Bay.....	Hon. D. H. Power.....	June 4	10,000
Lenawee county:				
Lime Creek.....	Medina.....	O. E. Green.....	Mar. 5	4,000
Livingston county:				
Bishop Creek.....	Green Oak.....	B. T. O. Clark.....	Mar. 12	1,000
McDonnell Creek.....	Brighton.....	B. T. O. Clark.....	Mar. 12	2,000
Ore Creek.....	Hartland, Brighton and Hamburg.....	B. T. O. Clark.....	Mar. 12	7,000
South Spring Brook.....	Green Oak.....	B. T. O. Clark.....	Mar. 12	1,000
Spring Brook.....	Lyon and Green Oak.....	B. T. O. Clark.....	Mar. 12	4,000
Stewart's Creek.....	Hamburg.....	B. T. O. Clark.....	Mar. 12	1,000
Tributary to Ore Creek.....	Brighton.....	B. T. O. Clark.....	Mar. 12	1,000
Walker Creek.....	Genoa and Hamburg.....	B. T. O. Clark.....	Mar. 12	4,000
Wichert Creek.....	Genoa and Hamburg.....	B. T. O. Clark.....	Mar. 12	2,000
Willard Beech Creek.....	Brighton.....	B. T. O. Clark.....	Mar. 12	3,000
Woodruff Creek.....	Hartland.....	B. T. O. Clark.....	Mar. 12	4,000
Shiawassee Creek.....	Genoa.....	N. M. Sweet.....	Mar. 20	3,000
Denton Creek.....	Tyrone.....	J. May Davis.....	Mar. 23	2,000
Andrus Creek.....	Hartland.....	H. S. Holbridge.....	Mar. 25	3,000
Beech Creek.....	Hartland.....	H. S. Holbridge.....	Mar. 25	3,000
Luce county:				
West Branch of Sage River.....	Pontland.....	D. N. McLeod.....	April 27	7,000
Two Heart Creek.....	McMillan.....	R. C. Bradley.....	May 16	10,000
Headwaters of Tahquamenon River.....	Columbus.....	Luce Co. R. and H. Club.....	May 22	12,000
Linton Creek.....	T. 48 N. R. 8 W.....	Luce Co. R. and H. Club.....	May 22	24,000
Murphy Creek.....	T. 47 N. R. 8, 9 and 10 W.....	Luce Co. R. and H. Club.....	May 22	24,000
Tahquamenon River.....	Columbus.....	W. J. Skinner.....	May 22	6,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Macomb county:				
Benjamin Creek	Washington	H. W. Bradley	Mar. 23	2,000
Hosmer Creek	Bruce	H. W. Bradley	Mar. 23	1,000
Silver Creek	Bruce	H. W. Bradley	Mar. 23	2,000
Troop's Creek	Bruce	H. W. Bradley	Mar. 23	1,000
Mackinac county:				
Headwaters of Sage River	Hendricks	Wm. Hansen	April 27	9,000
Headwaters Millicoquin River	T. 44—10	Luce Co. R. and G. Club	May 22	6,000
Mason county:				
South Lincoln River	Victory and Sherman	D. S. Betka	Mar. 24	6,000
Swan Creek	Eden and Riverton	D. S. Betka	Mar. 24	6,000
Benn's Creek	Logan	W. M. Buffenbarger	Mar. 24	3,000
Bennett Creek	Logan and Lake	W. M. Buffenbarger	Mar. 24	2,000
Carr Creek	Logan	W. M. Buffenbarger	Mar. 24	3,000
Ingals Creek	Logan and Lake	W. M. Buffenbarger	Mar. 24	2,000
Number One Creek	Eden and Custer	J. M. Cable	Mar. 24	2,000
Weldon Creek	Branch	C. M. Dodge	Mar. 24	4,000
Lincoln River	Sherman	Henry Eoff	Mar. 24	10,500
Freeman and Poles Creek	Grant	L. Hansen	Mar. 24	6,000
Buck Creek	Branch	Ludington Fishing Club	Mar. 24	2,000
Weldon Creek	Branch and Custer	Ludington Fishing Club	Mar. 24	5,000
Old Freesoil Creek	Grant	C. B. Shuman	Mar. 24	4,500
Manistee county:				
Hatch's Creek	Cleon and Springdale	F. A. Mitchell	Mar. 25	15,000
Chief Creek	Brown	C. Fleisner	Mar. 31	3,000
Claybank Creek	Springdale	T. A. Brown	Mar. 31	7,500
Bear Creek	Springdale, Maple Grove	F. A. Mitchell	April 3	22,500
Beaver Creek	Maple Grove	T. G. Trimble	April 3	4,500
Cedar Creek	Marilla, Maple Grove and Brown	T. G. Trimble	April 3	7,500
Kaiser Creek	Bear Lake and Maple Grove	T. G. Trimble	April 3	3,000
Pine Creek	Stronach and Brown	T. G. Trimble	April 3	7,500
Green Creek	Springdale	Hans Peterson	April 6	3,000
Little Bear Creek	Pleasanton and Springdale	Hans Peterson	April 6	4,500
Wells Creek	Springdale	Hans Peterson	April 6	1,500
Marquette county:				
Spruce River	Michigamme	Peter Dolf	May 11	4,000
Michigamme River	Republic	Republic R. and G. Club	May 11	8,000
West Branch Escanaba River	Republic and Humboldt	Republic R. and G. Club	May 11	6,000
Dishno Creek	Michigamme	Osby E. Wood	May 11	2,000
Deer Creek	Ishpeming	Geo. A. Newett	May 14	6,000
Escanaba River	Ishpeming and Humboldt	Geo. A. Newett	May 14	6,000
Mullins Creek	Ishpeming	Geo. A. Newett	May 14	6,000
Ropes Creek	Ishpeming and Eby	Geo. A. Newett	May 14	6,000
Wableman's Creek	Ishpeming and Negaunee	Geo. A. Newett	May 14	6,000
Headwaters of Garlic River	Marquette	J. E. Ball	May 17	4,000
Craig's Creek	Marquette	Fred H. Begole	May 17	2,000
Tributary of Chocolay River	Sands	C. E. Carr	May 17	4,000
Cedar Creek	Chocolay	E. A. Giesregan	May 17	2,000
Foster's Creek	Chocolay	E. A. Giesregan	May 17	4,000
Laughing Whitefish River	Onota	John R. Gordon	May 17	6,000
Alden Creek	Powell	H. R. Harris	May 17	4,000
Chocolay River and branches	West Branch	H. R. Harris	May 17	10,000
Garlic River	Powell	H. R. Harris	May 17	4,000
The Pup	Powell	H. R. Harris	May 17	2,000
Wilson Creek	Powell	H. R. Harris	May 17	4,000
Bear Creek	Forsyth	G. R. Jackson	May 17	2,000
East branch and tributaries of Escanaba River	Forsyth	G. R. Jackson	May 17	6,000
Green Creek	Tilden, Richmond and For- syth	G. R. Jackson	May 17	4,000
Harlow's Creek	Marquette	Frank R. Jenks	May 17	4,000
Bear Creek	Republic	C. W. Munson	May 17	2,000
Beaver Creek	Republic	C. W. Munson	May 17	8,000
Brush Creek	Republic	C. W. Munson	May 17	2,000
Spruce River	Republic	C. W. Munson	May 17	6,000
Trout Falls Creek	Republic	C. W. Munson	May 17	2,000
Carp River	Negaunee, Ishpeming and Richmond	Negaunee R. and G. Club	May 17	8,000
Dead River	Ishpeming and Marquette	Negaunee R. and G. Club	May 17	8,000
Outlet to Goose Lake	Richmond and Negaunee	Negaunee R. and G. Club	May 17	4,000
Schwartz Creek	Forsyth, Richmond and Sands	Negaunee R. and G. Club	May 17	8,000
Black River	Humboldt	J. T. Pasco	May 17	2,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Marquette county.—Continued:				
Escanaba River	Humboldt	J. T. Pasco	May 17	8,000
Second River	Humboldt	J. T. Pasco	May 17	2,000
Captain's Creek	Republic	Republic R. and G. Club	May 17	6,000
Pickereel Lake Creek	Marquette	H. A. St. John	May 17	3,000
Bear Creek	Powell	H. A. St. John	May 17	2,000
Big Creek	Marquette	H. A. St. John	May 17	2,000
Branches of Dead River	Marquette	H. A. St. John	May 17	4,000
Cherry Creek	Marquette	H. A. St. John	May 17	4,000
Little Dead River	Ishpeming and Eby	H. A. St. John	May 17	4,000
Nelson Creek	Eby	H. A. St. John	May 17	2,000
Reany Creek	Marquette	H. A. St. John	May 17	6,000
Silver Creek	Marquette	H. A. St. John	May 17	2,000
South Branch of Wilson Creek	Marquette	H. A. St. John	May 17	2,000
Yellow Dog Creek and branches	Marquette	W. A. St. John	May 17	2,000
Whitefish River	Skandia	W. A. St. John	May 17	10,000
West Branch of Laughing Whitefish	Marquette	H. A. St. John	May 17	2,000
Campo Creek	Marquette	John W. Spear	May 17	4,000
Little Carp Creek	Marquette	John W. Spear	May 17	2,000
Mecosta county:				
Cold Spring or Ganong Creek	Big Rapids and Mecosta	C. D. Carpenter	Mar. 13	4,000
Falass or Betts Creeks	Mecosta	C. D. Carpenter	Mar. 13	2,000
Tributary to Little Muskegon	Severall	A. M. Cook	Mar. 13	2,000
Mitchell Creek	Actna	Wm. Cook	Mar. 13	3,000
East Branch of Big Creek	Actna and Deerfield	Geo. F. Haist	Mar. 13	4,000
Rosey Run	Actna	C. A. Houghtalin	Mar. 13	3,000
Big Creek	Actna and Deerfield	J. D. McManus	Mar. 13	5,000
Rhine Creek	Big Rapids	E. C. Newcombe	Mar. 13	4,000
Hyde Creek	Mecosta	Fred I. Ladner	Mar. 13	2,000
No Name	Deerfield	Issac Laird	Mar. 13	1,000
Gilbert Creek or West Branch	Martiny	Ray Carman	Mar. 18	3,000
Pointer Creek	Morton and Wheatland	Ray Carman	Mar. 18	2,000
Abbey Creek	Sheridan and Sherman	G. A. Colgrove	Mar. 18	2,000
Little Muskegon River	Morton, Martiny and Hinton	B. S. Henry	Mar. 18	6,000
Marshfield Creek	Colfax	J. W. Miller	Mar. 18	2,000
Pine River and branches	Millbrook	T. O. Pattison	Mar. 18	5,000
Bell Creek and Dead Stream or Spring Creek	T. 14	Geo. R. Sapp	Mar. 18	4,000
Indian Creek	Wheatland and Sherman	J. M. Swisher	Mar. 18	2,000
Pine River	Wheatland	J. M. Swisher	Mar. 18	2,000
West Branch of Pine River	Wheatland	J. M. Swisher	Mar. 18	1,000
Bingen Creek	Wheatland	P. J. Theisen	Mar. 18	2,000
Little Muskegon River	Wheatland and Morton	P. J. Theisen	Mar. 18	5,000
Poney Creek	Wheatland	P. J. Theisen	Mar. 18	4,000
Vliet Creek	Colfax	Joseph Zimmer	Mar. 18	2,000
Brown Creek	Ford	W. T. Laffin	Mar. 19	2,000
Isanhart Creek	Ford	W. T. Laffin	Mar. 19	1,000
Tanner Creek	Sheridan	W. T. Laffin	Mar. 19	6,000
Seaton's Creek	Hinton	A. N. Tompkins	Mar. 20	1,000
Sylvester Creek	Hinton	A. N. Tompkins	Mar. 20	3,000
Tompkins Creek	Hinton	A. N. Tompkins	Mar. 20	1,000
Seaton Creek	Hinton	C. W. Vining	Mar. 20	2,000
Thompson Creek	Hinton	C. W. Vining	Mar. 20	2,000
Little and Big Buckhorn Creeks	Mecosta	Mieh. Fish Commission	Mar. 31	25,000
Menominee county:				
Holmes Creek	Holmes	Martin Farrell	April 26	3,000
Branches of Pemenee Creek	Holmes	C. W. Wilkins	April 26	4,000
Pemenee Creek	Holmes	C. W. Wilkins	April 26	2,000
Wheeler Creek	Spaulding	John Archibald	April 27	3,000
No Name	Holmes	Martin Farrell	April 27	3,000
Forty-seven Creek	Harris	David Harris	April 27	5,000
Dickman Creek	Spaulding and Nadeau	Herman Hartwig	April 27	5,000
Wilson Creek	Spaulding and Harris	Wm. Mas	April 27	5,000
Cedar River and Tributaries	Spaulding	Nicholas Petersen	April 27	5,000
Branches of Cedar and Big Cedar River	Nadeau, Spaulding and Harris	G. T. Werline	April 27	5,000
Hay Creek	Spaulding	Bartley Wheeler	April 27	3,000
Ten Mile Creek	Spaulding and Harris	Bartley Wheeler	April 27	7,000
Brush Creek	Meyer and Spaulding	J. D. Hayes	May 4	2,000
Camp Thirteen Creek	Meyer and Holmes	J. D. Hayes	May 4	2,000
Camp Twenty-five Creek	Meyer	J. D. Hayes	May 4	2,000
Cunard's and Vesper Creek	Meyer	J. D. Hayes and A. J. Kremer	May 4	2,000
Little Cedar River	Meyer	J. D. Hayes and A. J. Kremer	May 4	4,000
Morrison Creek	Meyer	A. J. Kremer	May 4	2,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Menominee county.—Continued:				
Holmes Creek	Meyer	Byron J. Kemp	May 4	2,000
Camp Two Creek	Meyer	G. W. Earle	May 4	2,000
West Branch of Big Cedar Creek	Meyer	John H. Loomis	May 4	2,000
Camp Seven Creek	Meyer	John H. Loomis	May 4	2,000
Missaukee county:				
Clam River	Riverside and others.	Hon. C. A. Brott	Mar. 24	18,000
Chase Creek	Liberty and Caldwell	C. H. Bostick	Mar. 30	4,000
Flower Creek	Bloomfield	C. H. Bostick	Mar. 30	2,000
Golden Creek	Caldwell	C. H. Bostick	Mar. 30	12,000
Hopkins Creek	Caldwell and Bloomfield	C. H. Bostick	Mar. 30	5,000
Morse Creek	Caldwell	C. H. Bostick	Mar. 30	
Montcalm county:				
Chas. Barton Creek	Pierson and Winfield	Chas. Barton	Mar. 13	4,000
Grant Creek	Pierson	Jas. H. Brayman	Mar. 13	1,000
Whitefish Creek	Reynolds	J. G. Bush	Mar. 13	2,000
Church Creek	Winfield	J. A. Collins	Mar. 13	3,000
Indian Creek	Reynolds	Wm. H. Collins	Mar. 13	2,000
Bruce Creek	Winfield	Grant V. Fulms	Mar. 13	5,000
Handy and Fosal Creeks	Winfield	W. H. Lovely	Mar. 13	8,000
Tamarac Creek	Winfield and Reynolds	H. N. VanDenbergh	Mar. 13	6,000
Dixon Creek	Fairplains	E. E. Brown	Mar. 13	4,000
Bachman Creek	Douglas and Sidney	T. S. Earle	Mar. 18	3,000
Heminway Creek	Douglas	T. S. Earle	Mar. 18	3,000
Lucas Stream	Sidney and Stanton	T. S. Earle	Mar. 18	2,000
Carter's Creek	Bushnell	Herbert Edwards	Mar. 18	3,000
Chapin Creek	Evergreen	N. W. Newhouse	Mar. 18	1,000
Hooker Creek	Day	N. W. Newhouse	Mar. 18	
Fish Creek	Ferris, Day, Evergreen and Bloom	Wm. O. Rogers	Mar. 18	7,000
Bennett Creek	Bushnell	M. F. Perry	Mar. 18	3,000
Prairie Creek	Bushnell	M. F. Perry	Mar. 18	7,000
Pine River	Home	J. J. Wait	Mar. 18	3,000
Sackett's Creek	Home	J. J. Wait	Mar. 18	2,000
Skunk Creek	Home	J. J. Wait	Mar. 18	5,000
Wright Creek	Home	J. J. Wait	Mar. 18	2,000
Wolf Creek	Home	J. J. Wait	Mar. 18	3,000
Horton Creek	Montcalm	Geo. C. Bower	Mar. 20	1,000
Broderick Creek	Pine	F. D. Briggs	Mar. 20	2,000
Kortes Creek	Pine	F. D. Briggs	Mar. 20	3,000
West Lake Creek	Pine	F. D. Briggs	Mar. 20	1,000
West Branch Creek	Pine	F. D. Briggs	Mar. 20	3,000
Sackett's Creek	Home	F. E. Curtis	Mar. 20	2,000
South Branch of Pine River	Home	F. E. Curtis	Mar. 20	3,000
Wolf Creek	Richland	F. E. Curtis	Mar. 20	5,000
Blanchard Creek	Richland and Home	L. O. Ellison	Mar. 20	1,000
Brimmer Creek	Cato	Fred Faling	Mar. 20	1,000
Buck Lake Creek	Cato	Fred Faling	Mar. 20	2,000
Richie Creek	Cato	Fred Faling	Mar. 20	2,000
Inlet to Muscallonge Lake	Cato	Fred Faling	Mar. 20	2,000
Turk Lake Creek	Maple City	Jensen Brothers	Mar. 20	2,000
Dickerson Creek	Montcalm	E. A. Kemp	Mar. 20	4,000
Stoney Creek	Fairplains and Otisco	Dr. Jos. F. Pinkham	Mar. 20	3,000
Snaky Run	Belvedere	B. F. Randall	Mar. 20	4,000
Salt Marsh Creek	Fairplains	C. L. Rarden	Mar. 20	2,000
Tamarac Creek	Fairplains and Eureka	C. L. Rarden	Mar. 20	5,000
Brandy Creek	Cato	J. W. Seat, Jr.	Mar. 20	2,000
Fish Creek and North and South branches	Winfield	C. W. Vining	Mar. 20	
Montmorency county:				
East Branch	Severall	O. D. White	April 1	6,000
Hunt Creek	Albert and Rust	J. M. Clark	April 2	6,000
Middle Branch Au Sable River	Albert, Elmer and Maple Forest	C. M. Dutcher	April 3	4,000
Big Black Creek	Severall	C. M. Dutcher	April 3	6,000
		Gaylord Fishing Club	April 21	36,000
Muskegon county:				
Birch Brook	Fruitland	Alfred Burland	Mar. 15	1,000
The Willpond	Whitehall	Alfred Burland	Mar. 15	2,000
Streams on Sections 4 and 5	Fruitland	Alfred Burland	Mar. 15	3,000
Little Flower Creek	Claybank and White River	Wm. Broadwell	Mar. 15	4,000
Little Carlton Creek	Blue Lake, Grant and Otto	S. A. Catlin	Mar. 15	1,000
Will Creek	Montague	Geo. V. Garter	Mar. 15	2,000
Little Flower Creek	White River	John Hall	Mar. 15	2,000
Lanford Creek	Montague	Thomas Hawks	Mar. 15	

Brook trout plants, 1903.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Muskegon county.—Continued:				
Carlton Creek	Montague and Grant	Paul G. Kling	Mar. 15	5,000
Big Black Creek	Muskegon	E. D. Magoon	Mar. 15	5,000
Cedar Creek	Holton and Cedar Creek	E. D. Magoon	Mar. 15	10,000
Cleveland Creek	Blue Lake	E. D. Magoon	Mar. 15	8,000
Duck Creek	Dalton and Fruitland	E. D. Magoon	Mar. 15	4,000
Green's Creek	Fruitland and Laketon	E. D. Magoon	Mar. 15	3,000
Little Black Creek	Muskegon	E. D. Magoon	Mar. 15	5,000
Little Bear Creek	Dalton, Laketon and Muskegon	E. D. Magoon	Mar. 15	3,000
Mosquito Creek	Eggleston	E. D. Magoon	Mar. 15	5,000
Norris Creek	Ravenna, Sullivan and Fruitland	E. D. Magoon	Mar. 15	8,000
Ryerson Creek	Muskegon	E. D. Magoon	Mar. 15	2,000
Silver Creek	Blue Lake and Whitehall	E. D. Magoon	Mar. 16	5,000
Smith Creek	Montague	Otto J. Olsen	Mar. 15	2,000
Carlton Creek	Grant	Manly Wilkinson	Mar. 15	5,000
Flower Creek	Muskegon and White River	Adam Burn	Mar. 17	4,000
Skeel's Creek	Holton	Oscar Benson	Mar. 20	2,000
Skeel's Creek	Holton and Greenwood	J. A. Gerber	Mar. 20	3,000
Big Marsh Creek	Blue Lake	S. P. Murphy	Mar. 20	3,000
Cedar Creek	Holton	Stephen Skeels	Mar. 20	8,000
Lake Creek	Casnovia	A. H. Armitage	Mar. 22	2,000
Barnes Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Bateman Creek	Casnovia	J. O. Fraleigh	Mar. 22	1,000
Bears Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Herald Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Firman's Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Gilbert's Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Merkes Creek	Casnovia	J. O. Fraleigh	Mar. 22	2,000
Moore's Creek	Casnovia	J. O. Fraleigh	Mar. 22	1,000
Newaygo county:				
Reynolds Creek	Enaley	David Curtis	Mar. 13	3,000
Rosey Run	Sevel	H. M. Gibbs	Mar. 13	3,000
Ryan Creek	Croton	J. O. Nelson	Mar. 13	2,000
Simpson Creek	Enaley and Pierson	Jas. Simpson	Mar. 17	1,500
Cushman Creek	Greenwood	J. A. Gerber	Mar. 20	3,000
Minnie Creek	Sherideton	J. A. Gerber	Mar. 20	3,000
Williams Creek	Sheridan and Garfield	J. A. Gerber	Mar. 20	4,000
Flanders Creek	Denver	Geo. R. Lyon	Mar. 20	1,000
West B. Martin Creek	Denver	Geo. R. Lyon	Mar. 20	4,000
Dowling Creek	Lincoln	W. D. Sargeant	Mar. 20	4,000
Martin's Creek	Denver	W. D. Sargeant	Mar. 20	4,000
Tributary to White River	Dayton and Greenwood	Ralph Utley	Mar. 20	2,000
Wright Creek	Dayton and Denver	Geo. E. Walker	Mar. 20	2,000
Indian Creek	Casnovia and Ashland	A. H. Armitage	Mar. 22	2,000
Penoyer Creek	Sevel	S. D. Bonnes	Mar. 22	3,000
White River	Wilcox	Branch Brothers	Mar. 22	10,000
White River	Wilcox	H. D. Hopkinson	Mar. 22	10,000
Little South Branch	T. 16 R. 12 and 13 and T. 17 R. 13	Ludington Fishing Club	Mar. 22	10,000
Bigelow, Coolbrough and Cole Creeks	Brooks and East Township	S. D. Thompson	Mar. 22	9,000
Mullen Creek	Wilcox	Geo. E. Whitman	Mar. 22	2,000
Little South Branch of Pere Marquette	Monroe, Home and Pleasant Plains	Mich. Fish Commission	Mar. 23	20,000
Peas Creek	Norwich, Barton and Home	Mich. Fish Commission	April 23	20,000
Oakland county:				
Headwaters of Huron River	Springfield and White Lake	W. C. Ainsley	Mar. 23	3,000
Nameless	Bloomfield	J. H. Bortle	Mar. 23	4,500
Nameless	Bloomfield, Troy and Avon	J. H. Bortle	Mar. 23	4,500
Smith's Creek	Oakland	H. W. Bradley	Mar. 23	2,000
Headwaters Huron River	White Lake and Springfield	B. T. Cooley	Mar. 23	3,000
Weatherson Creek	Springfield	F. A. Ely	Mar. 23	2,000
Waters of Thread River	Groveland	Chas. F. Green	Mar. 23	1,500
Eastern Branch of Huron River	Springfield	E. C. Teggerdine	Mar. 23	2,000
Harris Creek	Cleveland	A. P. Bouton	Mar. 25	3,000
Pattibone Creek	Milford	F. B. Hatch	Mar. 25	1,500
Stoney Creek	Avon	E. M. Houghton, M. D.	Mar. 25	5,000
Pattibone Creek	Highland	H. S. Holdridge	Mar. 25	3,000
Sands Creek	Highland and Brighton	H. S. Holdridge	Mar. 25	3,000
Dunlap Creek	Oxford	M. L. Ailler	Mar. 25	1,000
Huron River and tributaries	Milford	T. H. Padley	Mar. 25	7,500
Sands Creek	Milford and Brighton	T. H. Padley	Mar. 25	3,000
Field's Creek	Milford and Commerce	R. S. Potts	Mar. 25	3,000
Duck Creek	Brandon and Groveland	B. G. Woolman	Mar. 25	3,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oceana county:				
Sand Creek	Blue Lake	C. W. Gasahl	Mar. 15	4,000
Pentwater River	Penwater and others	S. D. Montgomery	Mar. 15	8,000
Bear Creek	Otto	Henry Baun	Mar. 17	3,000
Wiswell Creek	Otto	Henry Baun	Mar. 17	2,000
Bear Creek	Otto	Adam Born	Mar. 17	5,000
Flower Creek	Grant and Claybank	Wm. Brocker	Mar. 17	3,000
North Branch of Beaver Creek	Leavitt	O. W. Bunting	Mar. 17	2,000
Cleveland Creek	Elbridge	Geo. H. Burns	Mar. 17	3,000
Little Carlton Creek	Blue Lake, Grant and Otto	J. B. Conger	Mar. 17	3,000
Warren Creek	Hart	R. DeVries	Mar. 17	2,000
Donaldson Creek	Hart	C. R. Foote	Mar. 17	1,200
Lambert Creek	Golden and Benona	F. A. Gasahl	Mar. 17	2,000
Stafford Creek	Golden and Hart	F. A. Gasahl	Mar. 17	1,000
Swea s Creek	Hart and Weare	F. A. Gasahl	Mar. 17	3,000
Webb Creek	Golden and Weare	F. A. Gasahl	Mar. 17	2,000
Harris Creek	Golden	C. L. Gold	Mar. 17	2,000
Hunter's Creek	Golden	C. L. Gold	Mar. 17	2,000
Meyer Creek	Golden	C. L. Gold	Mar. 17	3,000
Silver Lake Creek	Golden	C. L. Gold	Mar. 17	1,000
Weaver Creek	Elbridge	C. L. Gold	Mar. 17	6,000
Coldwater River	Elbridge	Monroe Hall	Mar. 17	6,000
Danielson Creek	Hart	Monroe G. Hall	Mar. 17	2,000
North Branch of White River	Ferry and Otto	Frank P. Hilbourn	Mar. 17	5,000
School Creek	Grant	G. A. Kantz	Mar. 17	4,000
Nelson Creek	Hart	Chas. Kreger	Mar. 17	1,000
Gene Rouse Creek	Golden	Leicht Brothers	Mar. 17	2,000
Barnes Creek	Hart	C. E. Merchant	Mar. 17	1,000
Runion Creek	Golden	L. B. Mitchell	Mar. 17	1,000
Tributary to Pentwater River	Elbridge	C. A. Nelson	Mar. 17	2,000
Knapp Creek	Elbridge	G. K. Platt	Mar. 17	1,000
Miles Creek	Elbridge	J. E. Plass	Mar. 17	2,000
Lambrix Creek	Elbridge	E. A. Post	Mar. 17	2,000
Weagan Creek	Golden	E. A. Post	Mar. 17	2,000
Big Creek	Golden and Benona	Peter Richter	Mar. 17	2,000
Dorrance Creek	Golden and Weare	Peter Richter	Mar. 17	5,000
Hobby Creek	Hart, Shelby and Benona	Shelby F. and G. Pro. Asso.	Mar. 17	4,000
Piper Creek	Shelby and Benona	Shelby F. and G. Pro. Asso.	Mar. 17	5,000
Robinson Creek	Shelby and Benona	Shelby F. and G. Pro. Asso.	Mar. 17	2,000
Stoney Creek	Shelby and Benona	Shelby F. and G. Pro. Asso.	Mar. 17	3,000
Sand Creek	Shelby and Benona	Shelby F. and G. Pro. Asso.	Mar. 17	6,000
North Branch of South Branch of Pentwater River	Otto	Chas. Smith	Mar. 17	5,000
Craig Creek	Elbridge	Ray Thompson	Mar. 17	2,000
Cobmoosa Creek	Golden	Scott Vanett	Mar. 17	5,000
Knudson Creek	Elbridge and Ferry	Otto Weinrich	Mar. 17	4,000
Williamson Creek	Otto, Greenwood and Newfield	Geo. Williamson	Mar. 17	2,000
Cushman Creek	Ferry and Otto	Geo. Williamson	Mar. 17	3,000
	Greenwood	Norman J. Lapp	Mar. 20	
Ogemaw county:				
Cramer Creek	Richland	Geo. Eymmer	April 5	3,000
Rifle River and tributaries	Richland	Geo. Eymmer	April 5	22,500
Whitney Creek	Richland	Geo. Eymmer	April 5	4,500
Gamble Creek	Rose and Cumming	Jas. Naylor	April 5	3,000
Oyster Creek	Rose	Jas. Naylor	April 5	5,000
Vaughan Creek	Rose and Cumming	Jas. Naylor	April 5	3,000
Barber Creek	Rose	A. S. Rose	April 5	9,000
Houghton Creek and branches	Rose and Cumming	A. S. Rose	April 5	6,000
Tributaries to Rifle River	Klacking	Joseph Schneider	April 5	6,000
Klacking Creek	Churchill and West Branch	Carscallen Bros	April 9	22,000
Rifle River and tributaries	Churchill	Carscallen Bros	April 9	2,000
Green's Creek	West Branch	Thos. W. Hayes	April 9	3,000
Crapo Creek	West Branch	John Tolfree	April 9	14,000
East Branch of Tittabawassee	Horton	John Tolfree	April 9	6,000
Klacking Creek	Klacking and West Branch	John Tolfree	April 9	4,500
Mansfield Creek	Edwards	John Tolfree	April 9	6,000
Prieur Creek	Klacking and Cumming	John Tolfree	April 9	4,500
Weidman Creek	West Branch	John Tolfree	April 9	14,000
West Branch of Rifle River	West Branch	John Tolfree	April 9	4,500
Wood's Creek	West Branch	John Tolfree	April 9	4,500

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Ontonagon county:				
Middle Branch of Ontonagon River	Interior and Stannard	Arbutus R. and G. Club	May 11	8,000
McAlpine Creek	Severel	Arbutus R. and G. Club	May 11	2,000
Trout Creek	Interior	Arbutus R. and G. Club	May 11	8,000
Halfway Creek	Ontonagon	Jas. P. Corgan	May 11	4,000
Cushman Creek	Rockland	J. W. Craig	May 11	2,000
Little Cranberry River	Ontonagon	T. A. Green	May 11	2,000
Town Line Creek	Ontonagon and Carp Lake	T. A. Green	May 11	4,000
Mersaw Creek	Matchwood	T. A. Kooker	May 11	6,000
Branch of Michigamme River	T. 48—39	E. W. MacPherran	May 11	2,000
Branch of Trout Creek	T. 47—37	E. W. MacPherran	May 11	4,000
Branch of Ontonagon River	T. 47—35	E. W. MacPherran	May 11	4,000
Merryweather Creek	T. 48—41	E. W. MacPherran	May 11	4,000
Bluff, One Mile and Paulding Creeks	Haight	A. B. Paine	May 11	6,000
Deer Creek	Ontonagon	Chas. F. Roosen	May 11	4,000
Crer Creek and tributaries	Stannard	Alex. Turner	May 11	6,000
Clear Creek	Rockland	W. P. Vogtlin	May 11	4,000
Sucker Creek	Rockland	W. P. Vogtlin	May 11	4,000
Rousseau Creek	Bohemia	J. D. Van Slyck	May 11	2,000
Tributary of Sleeping River	Bohemia	William Brown	May 14	4,000
Oceola county:				
Ghost Creek	Marion	Patrick White	Mar. 17	3,000
Highland Creek	Highland	Patrick White	Mar. 17	6,000
Middle Branch Muskegon River	Severel	Patrick White	Mar. 17	15,000
Senser Creek	Marion	Patrick White	Mar. 17	3,000
Twin Creek	Evart, Osceola and Cedar	C. J. Miller	Mar. 17	5,000
Cat Creek	Hersey	L. A. Moody	Mar. 25	5,000
Grindstone Creek	Hartwick and Sylvan	Wm. Ramsey	Mar. 25	6,000
Twin Creek	Evart, Osceola and Cedar	Wm. Ramsey	Mar. 25	6,000
Upper Part of Big Stone Creek	Evart	Joel Perry	Mar. 25	2,000
McDonald's Creek	Lincoln and Richmond	A. J. Auer	Mar. 30	2,000
Johnson Creek	Richmond and Chase	J. C. Holden	Mar. 30	3,000
Beaver Creek	Leroy	Geo. W. Kellogg	Mar. 29	6,000
North Hersey Creek	Lincoln	L. W. Purchase	Mar. 29	8,000
Swain, Johnson and tributaries to Hersey River	Lincoln	L. W. Purchase	Mar. 29	5,000
Sweet's Creek	Richland	John Sweet	April 1	2,000
Oscoda county:				
Upper S. Branch of Thunder Bay River	Clinton and others	J. D. Hawks	April 2	76,000
Moffet Creek	Clinton	Andrew M. McLean	April 2	4,000
East Branch of Au Sable River	Elmer and Maple Forest	Claud M. Dutcher	April 3	4,000
Otsego county:				
Headwaters Manistee River	Hayes	C. W. Crapo	Mar. 29	30,000
Sturgeon River	Corwith and others	J. W. Lester	Mar. 31	30,000
Stuart Creek	Severel	A. J. Mackenson	Mar. 31	6,000
Pigeon River	T. 31 to 34, R. 1 and 2 W.	D. M. Sly	Mar. 31	44,000
Sturgeon River	T. 31 to 33 R. 2 W.	D. M. Sly	Mar. 31	20,000
North Branch of Au Sable River	Chester	Arnold Boutill	April 3	12,000
Middle Waters of North Branch of Au Sable	Chester	M. J. Lee	April 3	12,000
Headwaters of Pigeon River	Severel	R. H. L'Hommedieu	April 9	26,000
Headwaters of Sturgeon River	Severel	R. H. L'Hommedieu	April 9	26,000
Ottawa county:				
No Name	Talmadge	Geo. C. Bratt	Mar. 19	1,000
Big Sand Creek	Talmadge	Geo. C. Bratt	Mar. 19	3,000
Little Sand Creek	Talmadge	Geo. C. Bratt	Mar. 19	1,000
Presque Isle county:				
Glazier's Creek	Allis	J. M. Clark	April 2	1,500
Gray's Creek	Allis and Forest	J. M. Clark	April 2	2,000
Rainy River	Allis and North Allis	J. M. Clark	April 2	12,000
East Branch of Rainy River	North Allis	J. M. Clark	April 2	4,000
Little Rainy River	Allis	J. M. Clark	April 2	3,000
Rogers Creek	North Allis	J. M. Clark	April 2	2,000
Stony Creek	Allis and North Allis	J. M. Clark	April 2	8,000
Trout River	Belknap and Rogers	F. C. Larke	April 2	6,000
Indian Creek	Ocequec and Case	Dr. N. C. Monroe	April 2	4,500
Rosecommon county:				
Ebern Creek	Richfield	D. Procnier	April 9	2,000
The Cut	Garrish	W. H. Lansing	April 9	16,000

Brook trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
St. Joseph county:				
James O'Brien Creek	Flowerfield	S. J. Andrus	Mar. 8	1,000
Parker's Brook	Flowerfield	S. J. Andrus	Mar. 8	1,000
Coon Hollow Creek	Faber	C. R. Jackson	Mar. 3	2,000
No Name	Lockport	C. R. Jackson	Mar. 3	1,000
Spring Creek	Lockport	Amos Ives	Mar. 3	1,000
Schoolcraft county:				
Silver Creek	Thompson	Benj. Gero	April 27	5,000
Thompson Creek	Thompson	Benj. Gero	April 27	3,000
East Branch of Manistee River	Seney and Germfask	Angus McDougall	May 22	9,000
Tuscola county:				
Goodell Creek	Dayton	E. D. Cartwright	Mar. 25	1,000
Hunt's Creek	Dayton	E. D. Cartwright	Mar. 25	1,000
No Name	Fremont	Arthur Haines	Mar. 25	1,000
Sucker Creek	Dayton	Arthur Haines	Mar. 25	5,000
Silver Creek	Dayton and Rich	Wm. Leach	Mar. 25	2,000
Phelpa Creek	Dayton	W. W. Mitchell	Mar. 25	2,000
Herb Creek	Fremont	J. W. Schermerhorn	Mar. 25	2,000
Goodfellow Creek	Dayton and Rich	C. L. Schram	Mar. 25	3,000
Mill Creek	Dayton	C. L. Schram	Mar. 25	1,000
Van Buren county:				
No Name	Keeler	Abner Leonard	Mar. 2	2,000
Foster's Brook	Keeler	W. A. Palmer	Mar. 2	4,000
Hart and Lamon's Creeks	Hartford	W. A. Palmer	Mar. 2	3,000
Pine Creek	Hartford and Keeler	W. A. Palmer	Mar. 2	3,000
Two Branches of Hog Creek	Hartford	W. A. Palmer	Mar. 2	3,000
Allen Brook	Lawrence	Edward Allen	Mar. 8	1,000
East Branch of Paw Paw River	Antwerp and Porter	H. E. Ball	Mar. 8	4,000
Newberry Brook	Antwerp and Paw Paw	Dr. R. E. Balch	Mar. 8	5,000
Fassett Brook	Hamilton	C. W. Dune	Mar. 8	1,000
Spring Brook	Hartford	C. W. Dune	Mar. 8	2,000
Spicebush Creek	Geneva and Lee	J. A. Gibson	Mar. 8	2,000
Mill Creek	Geneva	J. T. Tolles	Mar. 8	3,000
Butternut Creek	Geneva	F. T. Warner	Mar. 8	2,000
Bacon Brook	Lawrence	Jas. L. Welch	Mar. 8	1,000
Carter Brook	Paw Paw	Jas. L. Welch	Mar. 8	1,000
Chrysler's Brook	Lawrence	Jas. L. Welch	Mar. 8	1,000
Corwin Brook	Hamilton	Jas. L. Welch	Mar. 8	1,000
Dunnington Creek	Deatur	H. Hall	Mar. 12	1,000
High's Creek	Deatur	Burgette High	Mar. 12	1,000
Rix Creek	Antwerp	Harry E. Oswald	Mar. 12	5,000
Brush Creek	Hamilton and Lawrence	Chas. Zimmerman	Mar. 12	4,000
Manly Creek	Hamilton	Chas. Zimmerman	Mar. 12	1,000
Old's Creek	Hamilton	Chas. Zimmerman	Mar. 12	1,000
Strong Creek	Hamilton	Chas. Zimmerman	Mar. 12	1,000
White Creek	Hamilton and Keeler	Chas. Zimmerman	Mar. 12	2,000
Washtenaw county:				
No Name	Dexter	E. C. Glenn	Mar. 5	1,000
Schultz Creek	Dexter	Sam'l Schultz	Mar. 5	2,000
Iron Creek	Manchester	A. J. Waters	Mar. 5	4,000
Schaible Creek	Manchester	A. J. Waters	Mar. 5	2,000
Wayne county:				
Orchard Hill Spring Brook	Plymouth	D. W. Packard	Mar. 12	2,000
Wexford county:				
Walton Creek	Liberty	J. V. Wright	Mar. 29	2,000
Cedar Creek	Liberty and Cedar Creek	C. H. Bostick	Mar. 30	5,000
Taylor Creek	Liberty	C. H. Bostick	Mar. 30	1,000
Whitmore Creek	Liberty	C. H. Bostick	Mar. 30	1,000
Anderson Creek	Hanover	G. A. Brigham	Mar. 30	3,000
Husley Creek	Hanover	G. A. Brigham	Mar. 30	3,000
Dean Creek	Hanover	G. A. Brigham	Mar. 30	4,500
Fletcher Creek	Wexford	G. A. Brigham	Mar. 30	4,500
Harger Creek	Colfax and Greenwood	C. S. Guilterson	Mar. 30	2,000
Soper Creek	Colfax and Greenwood	C. S. Guilterson	Mar. 30	3,000
Big Filer Creek	Greenwood	Kingsley Sportsmen's Club	Mar. 30	2,000
Little Filer Creek	Greenwood	Kingsley Sportsmen's Club	Mar. 30	2,000
Robinson's Creek	Boone	Mich. Fish Commission	April 17	2,000
Simpson Creek	Boone	Mich. Fish Commission	April 17	2,000
Seton Creek	Slagle	Mich. Fish Commission	April 17	2,000
Chase Creek	Liberty	R. Swanson	Mar. 30	3,000

Brook trout plants, 1909.—Concluded.

County and name of waters.	Township.	Applicant.	Date.	Number.
Wexford county.—Continued:				
Buttermilk Creek.....	Greenwood.....	C. H. Tyler.....	Mar. 30	2,000
Silver Creek.....	Greenwood.....	C. H. Tyler.....	Mar. 30	3,000
Adams Creek.....	Antioch.....	F. D. Winnie.....	Mar. 30	3,000
Fletcher Creek.....	Springville.....	F. D. Winnie.....	Mar. 30	3,000
Jewett Creek.....	Springville.....	F. D. Winnie.....	Mar. 30	1,500
Preston Creek.....	Springville.....	F. D. Winnie.....	Mar. 30	3,000
Star Creek.....	Springville.....	F. D. Winnie.....	Mar. 30	4,500
Uswick Creek.....	Antioch.....	F. D. Winnie.....	Mar. 30	4,500
Total.....				5,470,000

NINETEENTH REPORT—STATE FISHERIES.

RAINBOW TROUT PLANTS, 1909.

FRY AND ADVANCED FRY.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alcona county:				
Lower South Branch Pere Marquette River	Curtis	W. M. Ellis	May 18	12,000
McGinn Creek	Clinton and Mitchell	S. K. McCollum	May 18	6,000
Black River	Harrisville, Haynes and Alcona	T. J. Elmer	June 17	10,500
Allegan county:				
Little Rapid River	Hopkins	Wm. Jones	May 3	3,000
Gregg Creek	Wayland and Martin	Wm. Jones	May 3	3,000
Tributary to Rabbit River	Leighton	A. S. Nelson	May 8	3,000
New Salem Spring Brook	Salem	Phillip Leonard	June 19	3,000
Alger county:				
East Bay	Burt	Chas. L. Hickok	July 14	6,000
East Bay	Burt	Chas. L. Hickok	June 17	4,500
Inlets to Seven Mile Lake	Burt	Chas. L. Hickok	June 17	7,500
Alpena county:				
Upper Branch of Thunder Bay River	Green	Dr. W. E. Carr	June 17	21,000
Antrim county:				
Ogletree Creek	Central Lake and Banks	O. P. Barber	June 22	3,000
Town Line Creek	Banks	O. P. Barber	June 22	6,000
Ogletree Creek	Banks and Central Lake	Dr. L. W. Newman	July 1	6,000
Town Line Creek	Banks	O. P. Barber	July 1	7,500
Baraga county:				
Canal Creek	Spurr	Peter Trudell, Jr.	June 18	1,000
Cliff Creek	Spurr	Peter Trudell, Jr.	June 18	1,500
McDonald Creek	Spurr	Peter Trudell, Jr.	June 18	1,500
Nestoria Creek	Spurr	Peter Trudell, Jr.	June 18	3,000
Three Lakes Outlet	Spurr	Peter Trudell, Jr.	June 18	4,500
Barry county:				
Fall Creek	Several	F. H. Barlow	June 10	7,500
McCullum Creek	Yankee Springs	C. D. Bauer	June 10	3,000
Tributary to Glass Creek	Yankee Springs	C. D. Bauer	June 10	3,000
Bentley Creek	Hastings	Jay Blakney	June 10	3,000
Honey Creek	Hastings	Jay Blakney	June 10	3,000
Tamarack Creek	Baltimore	John L. Jones	June 10	3,000
Cedar Creek	Barry, Cedar Creek, Baltimore and Hastings	W. J. Michael	June 10	15,000
Glass River	Barry, Pentland and Yankee Springs	W. J. Michael	June 10	7,500
High Bank River	Johnstown, Baltimore, Castleton and Groveland	W. J. Michael	June 10	7,500
Little Thornapple River	Woodland and Castleton	W. J. Michael	June 10	7,500
Mud Creek River	Woodland and Castleton	W. J. Michael	June 10	7,500
Kelly Creek	Baltimore	J. H. Neiss	June 10	3,000
Lichty's Creek	Baltimore	J. H. Neiss	June 10	3,000
Murry Creek	Baltimore	C. H. Osborn	June 10	3,000
Power's Creek	Irving	C. H. Osborn	June 10	3,000
Horn Creek	Hope	Keo Silsbee	June 10	3,000
Kelly Creek	Baltimore	Fred Stowell	June 10	4,500
Tributaries to Thornapple River	Hastings and Irving	Fred Stowell	June 10	3,000
Glass Creek	Rutland and Irving	Edgar Otis	June 12	5,000
Bensie county:				
Crystal Lake Inlet	Bensonia	David E. Burns	May 4	6,000
Berrien county:				
Hickory Creek	St. Joseph	A. F. Herring	May 6	28,500
St. Joseph River	Several	A. F. Herring	May 6	12,000
Pipestone Creek	Sodus and Pipestone	A. F. Herring	May 6	4,500
Blue Creek	Benton	J. W. Isbell	May 6	4,500
Lemon Creek	Oronoko	J. W. Isbell	May 6	4,500

Rainbow trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Berrien county.—Continued:				
Branch of St. Joseph River	Several	W. J. Lucker	May 6	4,500
Hemlock Creek	Watervliet	A. H. Woodward	May 6	3,000
Outlet of Little Paw Paw Lake	Watervliet	A. H. Woodward	May 6	1,500
Branch county:				
Coldwater River	Quincy and others	John B. Shipman	May 4	18,000
Branch Creek	Coldwater	F. T. Tappan	May 4	12,000
Hog Creek	Coldwater and Girard	F. T. Tappan	May 4	12,000
Calhoun county:				
Helmer's Creek	Battle Creek and Newton	Geo. H. Williams	May 7	3,000
Mingea Brook	Battle Creek	Geo. H. Williams	May 7	3,000
Chippewa county:				
St. Mary's River at Falls	Several	Mich. Fish Commission	June 28	40,000
Clare county:				
McKinley Creek	Sheridan	F. C. Sanford	June 23	6,000
Chord Creek	Grant	F. C. Sanford	June 23	3,000
Halstead Creek	Grant	F. C. Sanford	June 23	6,000
Halstead Creek	Grant	F. C. Sanford	July 6	7,500
Chord Creek	Grant	F. C. Sanford	July 6	3,000
McKinley Creek	Sheridan	F. C. Sanford	July 6	7,500
Cass county:				
No Name	La Grange and Howard	R. W. Hain	May 7	3,000
Al Thorp Creek	Jefferson	G. E. Harmon	May 7	3,000
Kegan Creek	Jefferson	Dr. J. H. Kelsey	May 7	3,000
Conklin Stream	Marcellus	B. F. Mikel	May 21	4,500
Big Dowagiac Creek	Decatur, Silver Creek, Wayne and Pokagon	Dowagiac Sportsmens Assn.	May 7	7,500
Little Dowagiac Creek	La Grange, Pokagon and Silver Creek	Dowagiac Sportsmens Assn.	May 7	6,000
Broadhurst Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	1,500
Carmen Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	3,000
Gage Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	1,500
Greenwood Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	3,000
Hampton Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	3,000
Hatch Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	1,500
Ireland Creek	Silver Creek	Dowagiac Sportsmens Assn.	May 7	3,000
Kenny Creek	Wayne	Dowagiac Sportsmens Assn.	May 7	1,500
Kinzie Creek	Jefferson	Dowagiac Sportsmens Assn.	May 7	3,000
Miller Creek	Pokagon	Dowagiac Sportsmens Assn.	May 7	1,500
Peavine Creek	Pokagon	Dowagiac Sportsmens Assn.	May 7	3,000
Lyle Creek	Silver Creek	Dowagiac Sportsmens Assn.	May 7	3,000
McOmer Creek	Silver Creek	Dowagiac Sportsmens Assn.	May 7	3,000
Pine Lake Creek	Wayne and Silver Creek	Dowagiac Sportsmens Assn.	May 7	3,000
Pokagon Creek	Pokagon	Dowagiac Sportsmens Assn.	May 7	4,500
Silver Creek	Silver Creek	Dowagiac Sportsmens Assn.	May 7	4,500
South Branch Dowagiac Creek	Volina, La Grange, Pokagon, and Prairie Ronde	Dowagiac Sportsmens Assn.	May 7	1,500
Tyron Creek	Wayne and Silver Creek	Dowagiac Sportsmens Assn.	May 7	1,500
Yaw Brook	Pokagon	John Wyant	May 6	3,000
Delta county:				
Whitefish Creek	Several	J. Crooks	July 14	7,500
Whitefish Creek	Several	Robt. Matterson	June 14	24,000
Dickinson county:				
Long Lake	Sagola	H. M. Boll	July 15	7,500
Long Lake	Sagola	H. M. Boll	June 15	4,000
Eaton county:				
Sandatone Creek	Oreida	Fred L. Berry	June 15	3,000
Silver Creek	Windsor	Freeman G. French	June 10	6,000
Morris Creek	Eaton Rapids	G. E. La Fever	June 10	3,000
Thornapple River	Benton	Frank J. Johnson	June 12	3,000
Emmet county:				
No Name	Littlefield	W. W. Fairbairn	May 12	3,000
Grand Traverse county:				
Boardman River	Garfield, Paradise, Union and East Bay	R. S. Hastings	June 30	30,000
Gratiot county:				
Cale Ayers Creek	Sumner	J. W. Johnson	June 15	3,000

Rainbow trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Gogebie county:				
Beaton or Blemer's Creek	Watersmeet	C. M. McDonald	July 15	3,000
Pomeroy Creek	Marenisco	A. D. Johnson	July 15	3,000
Thousand Island Lake	Watersmeet	A. D. Johnson	July 15	4,500
Sargent Creek	Watersmeet	Pat Kelly	July 15	2,000
Black River	Several	W. S. Baird	June 15	12,000
Gage's Creek	T. 46 and 49 W.	Dan'l P. Green	June 15	6,000
Pomeroy Creek	Marenisco	A. D. Johnson	June 15	6,000
Thousand Island Lake	Watersmeet	A. D. Johnson	June 15	6,000
Sargent Creek	Watersmeet	Pat Kelly	June 15	6,000
Beaton's or Blemer's Creeks	Watersmeet	C. M. McDonald	June 15	6,000
Middle Branch Ontonagon River	Watersmeet	C. M. McDonald	June 15	14,000
Jackson Creek	Bessemer	H. E. Patterson	June 15	8,000
No Name	Bessemer	J. A. Vogtlin	June 15	4,000
Houghton county:				
Graverod Creek	Stanton	Frank Rusche	June 18	7,500
Bob Lake	Laird	G. W. Stannard	June 18	3,000
Leveque's Creek	Laird	G. W. Stannard	June 18	6,000
Pike River	Chassell	Dr. P. H. Wilson	June 18	6,000
Hillsdale county:				
Branch of Raisin River	Somersset	Wm. Bickford	June 10	6,000
Branch of Raisin River	Somersset	L. S. Walworth	June 10	3,000
No Name	Somersset and Wheatland	Frank Carney	June 10	4,500
Sand Creek	Litchfield and Allen	W. D. Hounson	June 10	6,000
Emery Mills Creek	Hillsdale	W. C. Kemp	June 10	4,500
No Name	Somersset and Rollin	A. W. Wood	June 10	3,000
Huron county:				
Pinebog Creek	Hume	Hon. L. R. Thomas	July 7	4,500
Ingham county:				
Champ Creek	Onondaga	Wm. M. Carroll, J. P.	June 10	1,500
Willow Creek	Vexay and Aurelius	C. T. Mickelson	June 12	3,000
Ionia county:				
Outlet of Long Lake	Orleans	W. H. Angell	June 15	3,000
Outlet of Woodard Lake	Orleans	W. H. Angell	June 15	3,000
Wabasis Creek	Otisco	Brighton F. Hall	June 15	9,000
Perritt's Creek	Orange	Ross W. Benedict	June 15	4,500
Prairie Creek	Ionia	Charles Stein	June 15	6,000
Arnold's Creek and Millpond	Ionia	G. W. Arnold's Sons	June 15	7,500
Knapp Creek	Lyons	Dr. Thos. Weston	June 22	3,000
Speer's Spring Creek	Lyons	Dr. Thos. Weston	June 22	3,000
Strouble Creek	North Plains and Lyons	C. A. Dalzell	June 22	4,500
Nickelplate Pond	Ronald	C. A. Dalzell	June 22	1,500
Morrison Creek	Boston	John Wallington	May 21	3,000
Dexter Creek	Easton	John Wallington	May 21	4,500
Iron county:				
Brule River	Several	F. G. Hood & Co.	July 15	4,500
Section 33 Creek	Crystal Falls and others	Belmont Waples	July 15	2,000
Paint River	Crystal Falls and others	Arvid Bjork	July 15	9,000
Net River	Hematite	Geo. Premo	July 15	4,500
Paint River	Crystal Falls and others	Arvid Bjork	June 15	14,000
Brule River	Several	F. G. Hood and Co.	June 15	10,000
Net River	Hematite	Geo. Premo	June 15	10,000
Section thirty-three Creek	Iron River	Belmont Waples	June 15	6,000
Iosco county:				
Mendow Creek	Oscoda	Wm. Elliott	June 17	9,000
Isabella county:				
Chippewa River or Cedar Creek	Several	Geo. Chatterton	May 5	16,500
Jackson county:				
Leoni Creek	Leoni	Geo. E. Beebe	June 10	4,500
Crouch Creek	Summit	Geo. E. Beebe	June 10	7,500
Four Mile Creek	Blackman	Geo. E. Beebe	June 10	4,500
Headwaters of Grand River	Liberty	Geo. E. Beebe	June 10	4,500
Rice Creek	Parma	Geo. E. Beebe	June 10	12,000
Sandstone Creek	Sandstone and Blackman	Geo. E. Beebe	June 10	12,000
Snyder's Creek	Spring Arbor	Geo. E. Beebe	June 10	4,500
Tributaries of Kalamazoo River	Hanover	Geo. E. Beebe	June 10	12,000
Wade Creek	Tompkins	Geo. E. Beebe	June 10	3,000
Willow Creek	Waterloo and Grass Lake	Geo. E. Beebe	June 10	7,500
No Name	Springport	Wm. M. Carroll, J. P.	June 10	1,500

Rainbow trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Jack-on county.—Continued.				
Inlet to Farwell Lake	Hanover	G. T. Greenshaw	June 10	3,000
Headwaters of North Branch of Kalamazoo River	Hanover	Will K. Hinkley	June 10	3,000
East Branch of Kalamazoo River	Hanover	A. B. Sanderson	June 10	3,000
Umfeld Creek	Pulaski	L. S. Strait	June 10	1,500
Spring Creek	Spring Arbor	H. E. Wanger	June 10	9,000
Kent county:				
Crinion Creek	Mostly Oakfield	Freeman Addis	May 3	4,500
Cedar Creek	Algoma	N. F. Helsel	May 3	6,000
Big Cedar Creek	Algoma	B. E. Hill	May 3	4,500
Mill Creek	Grand Rapids	Dwight Lydell	May 3	12,000
Strawberry Creek	Alpine	Dwight Lydell	May 3	7,500
Cedar Creek	Algoma	E. W. Wheeler	May 3	4,500
Little Cedar Creek	Nelson, Courtland, and Algoma	E. W. Wheeler	May 3	4,500
Duke Creek	Nelson and Solon	E. W. Wheeler	May 3	4,500
Dop Creek	Solon	E. W. Wheeler	May 3	4,500
Spring Creek	Solon	E. W. Wheeler	May 3	4,500
Stegman Creek	Courtland	E. W. Wheeler	May 3	3,000
Beaverdam Creek	Oakfield	W. S. Lambertson	June 15	5,000
Walbasia Creek	Oakfield and Eureka	W. S. Lambertson	June 15	8,000
Rogue River	Tyrone	C. S. Parks	June 19	7,500
Lake county:				
Pere Marquette River	Pleasant Plains, Webber and Sweetwater	Hon. G. M. Brown	May 15	45,000
Middle Branch Pere Marquette River	17—11	Ludington Fishing Club	June 21	30,000
Middle Branch Pere Marquette River	Chase	C. Hageman	July 2	30,000
Lapeer county:				
Borsig Creek	Metamora and Dryden	P. B. Glaspie	June 24	1,500
North Branch of Clinton River	Almont, Addison, Bruce, Armada and Ray	H. W. Bradley	June 24	6,000
Bosig Creek	Metamora and Dryden	P. B. Glaspie	July 7	1,500
Luce county:				
Tahquamenon River	Columbus, McMillan and Superior	W. S. Linton	June 17	24,000
Leelanau county:				
No Name	Solon	F. Nunemaker	June 25	4,500
Crystal River	Glen Arbor	James Daly	June 25	6,000
Lenawee county:				
Tiffin River or Bear Creek	Seneca and Medina	Dr. C. M. Butler	June 10	9,000
Macomb county:				
Clifton Pond	Washington	H. W. Bradley	June 22	1,500
North Branch of Clinton River	Bruce	H. W. Bradley	June 22	3,000
Moore Creek	Richmond	Hon. T. W. McColl	July 7	3,000
Mason county:				
Pentwater River and Landis Creek	Several	John Grey	June 9	12,000
Lincoln River	Sherman	Henry Eoff	June 23	18,000
Sauble River	Freesoil	T. L. Stephens	June 24	22,500
Sauble River	Freesoil	Thos. S. Stephens	July 3	15,000
Lincoln River	Sherman	Henry Eoff	July 3	10,000
Mecosta county:				
Ryan Creek	Big Rapids	W. H. Redmond	May* 3	4,500
Little Muskegon River	Mecosta	Ray B. Carmen	June 15	10,000
North Branch Chippewa River	Ford	W. T. Lathin	June 15	15,000
Beacon Creek	Ford	W. E. Redick	June 15	3,000
South Branch of Chippewa River	Ford	W. E. Redick	June 15	12,000
Poney Creek	Wheatland and Broomfield	P. J. Theisen	June 15	5,000
Sylvester Creek	Hinton	A. N. Tompkins	June 15	3,000
Little Muskegon River	Aetna	Louis Reames	June 15	12,000
Sylvester Creek	Hinton	C. W. Vining	June 16	4,000
Tompkins Creek	Hinton	C. W. Vining	June 15	2,000
Marquette county:				
Spruce River	Michigamme	Peter Dolf	July 14	6,000
Peshekee River	Michigamme	E. M. Stensrud	July 14	8,000
Dishro Creek	Champion	E. M. Stensrud	July 14	6,000
Trout Falls Creek	Republic	B. Bengston	July 14	6,000
Wilson Creek	Humboldt	D. T. Morgan	July 14	6,000
Spruce River	Republic	C. W. Munson	July 14	6,000

Rainbow trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Marquette County.—Continued:				
Bruce Creek	Republic	C. W. Munson	July 14	7,500
Michiganme River	Republic	C. W. Munson	July 14	7,500
Me Lake	Forsythe	A. C. Seass	July 14	7,500
Trout Falls Creek	Republic	B. Bengston	June 18	4,500
Spruce River	Michiganme	Peter Dolf	June 18	4,500
Captain's Creek	Republic	Hiram R. Gamble	June 18	6,000
Escanaba River	Republic and Humboldt	Hiram R. Gamble	June 18	9,000
Dead River	Marquette, Ishpeming and others	Frank G. Jenks	June 18	7,500
Wilson's Creek	Humboldt	D. T. Morgan	June 18	6,000
Bruce Creek	Republic	C. W. Munson	June 18	7,500
Midway Creek	Humboldt	C. W. Munson	June 18	9,000
Michiganme River	Republic and Humboldt	C. W. Munson	June 18	15,000
Spruce Creek	Republic	C. W. Munson	June 18	4,500
Schwartz Creek	Forsyth, Richmond, Sands	Negaunee R. and G. Club	June 18	9,000
Carp River	Negaunee, Ishpeming and Richmond	Negaunee R. and G. Club	June 18	9,000
Me Lake	Forsythe	A. C. Seass	June 18	4,500
Dishro Creek	Champion	E. M. Stensrud	June 18	4,500
Peshke River	Michiganme	E. M. Stensrud	June 18	7,500
Menominee county:				
Cedar River	Spaulding, Meyers, Ingals-ton and Harris	John Archibald	June 15	16,000
Squaw Creek	Spaulding	John Archibald	June 14	6,000
Reed Creek	Spaulding and Nadeau	Herman Hartwig	June 14	4,000
Hermanville Pond	Meyer	J. D. Hayes	June 15	4,000
Hay Creek	Meyer and Holmes	J. D. Hayes and A. J. Kremer	June 15	4,000
Little Cedar River	Meyer	J. D. Hayes and A. J. Kremer	June 15	8,000
Holmes Creek	Meyer and Holmes	J. D. Hayes and A. J. Kremer	June 15	4,000
Camp Seven Creek	Meyer	John H. Loomis	June 15	4,000
West Branch of Cedar River	Spaulding and Dickinson	Bartley Wheeler	June 15	8,000
Montcalm county:				
Caskey Creek	Winfield	Fred Ashley	May 3	3,000
Whitefish Creek	Pierson and Reynolds	Sid V. Bullock	May 3	4,500
Tributaries to Tamarack Creek	Pierson and Reynolds	Burt Collins	May 3	12,000
Foss Id Creek	Winfield	H. M. Gibbs	May 3	3,000
Little Muskegon River	Reynolds	H. M. Gibbs	May 3	12,000
Rossman Creek	Cato	J. B. Haskins	May 3	4,500
Tamarack Creek	Reynolds	W. H. Lovely	May 3	12,000
Braudy Creek	Winfield	Dr. J. O. Nelson	May 3	4,500
Church Creek	Maple Valley and Reynolds	Jas. Pemberton	May 3	4,500
Indian Creek	Reynolds	A. B. Potts	May 3	3,000
Handy Creek	Reynolds	W. N. Van Denbergh	May 3	4,500
Handy Creek	Reynolds	C. Wolfe	May 3	4,500
Main Part of Fish Creek	Crystal	O. D. White	May 8	4,500
Broderick Creek	Pine	F. D. Briggs	May 14	3,000
Kortez Creek	Pine	F. D. Briggs	May 14	4,500
West Branch Creek	Pine	F. D. Briggs	May 14	3,000
West Lake Creek	Pine	F. D. Briggs	May 14	6,000
Blanchard Creek	Richland	G. E. Brown	June 15	2,000
Fish Creek	Ferris, Day and others	T. S. Earle	June 15	10,000
Bushnell Creek	Bushnell	W. B. Hoople	June 15	3,000
Outlet of Muscalonge Lake	Maple Valley and Spencer	Jensn Brothers	June 15	2,000
Corlan Creek	Ferris	J. W. Johnson	June 15	2,000
Tamarack Creek	Winfield	Lynch and Winters	June 15	5,000
Rice Creek	Pierson and Reynolds	W. J. Smith	June 18	4,500
Muskegon county:				
Cedar or Big Cedar Creek	Helton	Wm. Pomeroy	June 19	12,000
Newaygo county:				
Ryan Creek	Several	W. A. Bruner	May 3	3,000
Borden Creek	Several	H. N. Vandenberg	May 3	3,000
Cold Springs	T. 14 and 15	Geo. R. Lyons	June 19	3,000
White River	Several	Wm. Pomeroy	June 19	12,000
Outlet to Robinson's Lake	Sherman	Ed. Streichhirsch	June 19	3,000
Crockery Creek	Grant	Allen J. Titus	June 19	12,000
White River	Several	F. Utley	June 19	12,000
South Branch of White River	Denver, Greenwood and Everett	Geo. E. Walker	June 19	16,500
Little South Branch Pere Marquette River	Several	R. H. Randall	June 27	50,000
Pear Creek	Norwich, Barton and Home	R. H. Randall	June 27	20,000

Rainbow trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oakland county:				
Stoney Creek	Oakland, Washington and Shelby	H. W. Bradley	June 22	4,500
Headquarters of Huron River	White Lake and Springfield	B. T. Cooley	June 22	4,500
Inlet to Deer Lake	Springfield	O. N. Gardiner	June 22	1,500
Thurston Creek	Orion	A. R. Bellaire	June 24	1,500
Paint Creek	Orion	C. S. Chapman	June 24	3,000
Hummer Creek	Orion	Philo Ensley	June 24	1,500
Field Creek	Commerce	T. G. Forbes	June 24	3,000
Wallace Creek	White Lake and Commerce	T. G. Forbes	June 24	4,500
Pettitons Creek	Milford and Highland	F. B. Hatch	June 24	3,000
Painting Creek	Oxford	Albert Marshall	June 24	1,500
Lanning Creek	Oxford	Robt. Marshall	June 24	1,500
Huron River	White Lake	Henry McWitley	June 24	12,000
Frelon Creek	Commerce	T. H. Padley	June 24	4,500
Small Spring Brook Flowing into Ball Lake	Commerce	T. H. Padley	June 24	1,500
Tributaries to Huron River	Milford and Commerce	T. H. Padley	June 24	12,000
Big Spring Creek and Round Lake	Highland	R. S. Potts	June 24	3,000
Indian Garden Lake	Milford	R. S. Potts	June 24	3,000
Sherwood Creek	Milford	R. S. Potts	June 24	3,000
Farmer's Creek	Oxford and Orion	C. L. Randall	June 24	1,500
Gardner Creek	Oxford	Harry Sharrette	June 24	1,500
Goose Creek	Brandon	A. Sutherland	June 24	1,500
Paint Creek	Orion	C. S. Chapman	July 7	4,500
Hummer Creek	Orion	Philo Ensley	July 7	1,500
Thurston Creek	Orion	A. R. Bellaire	July 7	1,500
Farmer's Creek	Orion and Oxford	A. R. Bellaire	July 7	1,500
Paint Creek	Oxford	Albert Marshall	July 7	1,500
Lanning Creek	Oxford	Robt. Marshall	July 7	1,500
Goose Creek	Brandon	A. Sutherland	July 7	1,500
Gardner Brook	Oxford	Harry Sharrette	July 7	1,500
Big Spring Creek	Highland	W. S. Lovejoy	July 7	1,500
Huron River	White Lake	Henry McWitley	July 7	15,000
Sherwood Creek	Milford	R. S. Potts	July 7	3,000
Indian Garden Lake Inlets	Milford	R. S. Potts	July 7	1,500
Huron River above Pottes Dam	Milford	R. S. Potts	July 7	1,500
Small Spring Brook flowing into Ball Lake	Commerce	T. H. Padley	July 7	1,500
Frelon Creek	Commerce	T. H. Padley	July 7	4,500
Huron River	Milford	T. H. Padley	July 7	15,000
Wallace Creek	Whittaker and Commerce	Tom Forbes	July 7	4,500
Ogemaw county:				
C. K. Eddy Creek	Richland	Geo. Eyster	June 17	4,500
Silver Creek	Richland	Geo. Eyster	June 17	7,500
Rifle River	Richland	Geo. Eyster	June 17	10,500
Rifle River	Rose, Cumming and others	Hon. A. S. Rose	June 17	10,500
Rifle River	Richland	Geo. Eyster	July 7	7,000
Rifle River	Rose and others	Hon. A. S. Rose	July 7	8,000
Ontonagon county:				
Cascade River	Severall	G. A. Bergland	July 15	2,500
Cascade River	Severall	G. A. Bergland	July 15	6,000
Oscoda county:				
Hersey River above and below Reed City	Lincoln, Richmond, Hersey	J. H. Crocker	May 12	12,000
Oscana county:				
Bear Creek	Otto	Henry Baun	June 12	4,500
Wiswell Creek	Otto	Henry Baun	June 12	3,000
Cedar Creek	Elbridge	Ralph De Vries	June 12	4,500
South Branch of Pentwater River	Hart	Ralph De Vries	June 12	4,500
Pentwater River	Hart and Elbridge	F. P. Hillbourn	June 12	4,500
North Branch of White River	Otto and Ferry	G. A. Kants	June 12	4,500
Gales Mill Pond	Elbridge	L. B. Mitchell	June 12	1,000
Gene Rouse Creek	Hart	L. B. Mitchell	June 12	2,000
Pentwater River	Elbridge, Hart and Pentwater	Rufus Skeels	June 12	9,000
Runion Creek	Elbridge	J. A. Thompson	June 12	3,000
May Creek	Elbridge	Ray Thompson	June 12	3,000
North Branch of South Branch of Pentwater River	Elbridge	Ray Thompson	June 12	3,000
Knudson Creek	Otto, Greenwood and Newfield	Ray Thompson	June 12	3,000
Williamson Creek	Ferry and Otto	Geo. Williamson	June 12	4,500
Reed Creek	Ferry and Elbridge	Geo. Williamson	June 12	3,000
North Branch of White River	Newfield, Ferry, Otto and Blue Lake	Fred W. Wright	June 12	3,500
		Earl Anderson	June 19	10,500

Rainbow trout plants, 1909.—Concluded.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oscoda county: Clear Lake		Hon. A. S. Rose	June 17	4,500
Otsego county: Sturgeon River	Livingston	A. M. Hilton	May 1	15,000
Presque Isle county: Ocqueoc River	Case	Chas. Atkins	June 17	13,500
Little Ocqueoc River	Ocqueoc	Chas. Atkins	June 17	4,500
Swan River	Belknap and Pulaski	F. D. Larke	June 17	6,000
Trout River	Belknap and Rogers	F. D. Larke	June 17	6,000
Drum Lake	Bismarck	F. L. Baird	July 7	15,000
Schoolcraft county: Hughes Lake Inlet	Harrison	Abraham Hughes	July 14	4,500
Hughes Lake Inlet	Harrison	Abraham Hughes	June 14	6,000
Sanilac county: Black River Tributaries	Lexington	C. J. Reynolds	July 7	7,500
St. Clair county: Belle River	Riley	Hon. T. D. McCall	July 7	4,500
St. Joseph county: Bear Creek	Leonidas and Waukesha	T. E. Kline	June 12	3,000
Fish Lake Outlet also outlet to Hawkins Lake into Fish Lake	Burr Oak	James R. Smith	May 3	4,500
Inlet to Klinge Lake	White Pigeon	Perry L. Turner	June 24	4,500
Tuscola county: Sucker Creek	Dayton	Arthur Haines	June 24	4,500
Fryer's Creek	Dayton	E. D. Cartwright	June 24	1,500
Sucker Creek	Dayton	Arthur Haines	July 7	7,500
Fryer's Creek	Dayton	E. D. Cartwright	July 7	1,500
Van Buren county: North Branch of Big Dowagiac Creek	Decatur, Wayne and others.	Dowagiac Sportamen's Assn.	May 7	9,000
Washtenaw county: Huron River and Mill Creek	Several	L. D. Alley	May 7	4,500
Wayne county: Miller's Creek	Plymouth	D. W. Packard	June 24	4,500
Wexford county: Buttermilk Creek	Greenwood	C. H. Tyler	May 12	4,500
Total				2,243,000

RAINBOW TROUT PLANTS.

FINGERLINGS, NOS. 2 AND 3.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Allegan county: New Salem Spring Brook	Salem	Philip Leonard	Oct. 15	1,000
Alger county: Inlets to Seven Mile Lake	Burt	Chas. L. Hickok	Nov. 5	1,000
Calhoun county: Newman's Brook		V. H. Bramble	Oct. 8	1,500
Clare county: Budd Lake	Hayes and Harrison	Geo. J. Cummins	Oct. 15	1,000
Lake county: Pere Marquette River	Several	Hon. G. M. Brown	Aug. 31	21,000
Pere Marquette River	Several	Hon. G. M. Brown	Oct. 26	10,000
Muskegon county: Inlet to Big Blue Lake	Blue Lake	Hon. F. J. Russell	Oct. 23	1,500
Newaygo county: Post's Creek	Ashland	A. J. Titus	Oct. 15	1,000
Crockery Creek	Grant	A. J. Titus	Oct. 15	1,500
Pierson Creek	Ashland	A. J. Titus	Oct. 15	1,000
Oakland county: Long Lake	Orion	W. A. Benjamin	Oct. 12	1,000
Oscoda county: Clear Lake		Hon. A. S. Rose	Oct. 16	1,000
Shiawassee county: Maple River	Burns, Vernon and others	C. P. Bentley	Oct. 14	1,500
Hardy Creek	Bennington	John F. Salisbury	Oct. 14	1,000
Wayne county: No Name	Northville	W. W. Thayer	Sept. 7	2,000
Wexford county: Buttermilk Creek	Greenwood	C. H. Tyler	Oct. 10	2,000
Total				49,000

NINETEENTH REPORT—STATE FISHERIES.

LAKE TROUT PLANTS, 1909.

FRY.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alcona county:				
Hubbard Lake	T. 28 N. R. 7 E.	W. S. Linton	May 19	24,000
North Lake	Curtis	J. H. Hayes	May 19	12,000
Antrim county:				
Torch Lake	Several	William Childs	April 21	50,000
Elk Lake	Milton and Traverse	L. N. Spring	April 21	50,000
Grass Lake	Kearney, Forest Home, Helena and Custer.	A. B. Wooton	April 21	20,000
Baraga county:				
Beaufort Lake	Spurr	Peter Trudell Jr.	June 11	30,000
Lake George	Spurr	Peter Trudell, Jr.	June 11	15,000
Trout Lake	Spurr	Peter Trudell, Jr.	June 11	15,000
Barry county:				
Fair Lake	Barry	Dewitt Collister	April 17	10,000
Gulkey Lake	Barry	Add Pennock	April 17	10,000
Benzie county:				
Lake Ann	Almira	Ladew Berry	April 23	20,000
Woodbuck Twin Lake	Almira	G. F. Decker	April 23	10,000
Vallean Lake	Almira	M. L. Lake	April 23	10,000
Heathler Lake	Almira	Wm. E. C. McCowan	April 23	10,000
Big Platte Lake	Benzonia	Will A. Lear	May 4	20,000
Little Platte Lake	Benzonia	Will A. Lear	May 4	20,000
Round Lake	Lake	Will A. Lear	May 4	10,000
Berrien county:				
Hess Lake	Lake	Frank Herring, Sr.	April 16	10,000
Branch county:				
Marble Lake	Quincy	C. A. Bishop	April 17	20,000
Messenger Pond	Coldwater	F. T. Tappan	April 17	10,000
Kenyon Lake	Sherwood	Leo E. Wood	April 17	10,000
Coldwater Lake	Kinderhook	F. T. Tappan	May 4	40,000
Honey Lake	Noble	J. Frohriep & Sons	May 21	8,000
Long Lake	Noble	J. Frohriep & Sons	May 21	8,000
Calhoun county:				
Nottawasippsee Lake	Fredonia and Tekonsha	E. L. Holmes	April 19	20,000
Duck Lake	Clarence	L. J. Devring	April 19	30,000
Cass county:				
Birch Lake	Porter	H. W. Roth	April 17	10,000
Charlevoix county:				
South Arm of Pine Lake	South Arm	Clyde Hipp	April 21	40,000
Cheboygan county:				
Burt Lake	Burt	J. W. Lester	April 25	151,500
Mullett Lake	Burt	Mich. Fish Commission	April 25	151,500
Chippewa county:				
Whitefish Bay	Whitefish	E. Endress	June 13	208,000
Clare county:				
Budd Lake	Harrison	Geo. J. Cummins	April 30	20,000
Big Long Lake	Forest	W. E. Green	April 30	20,000
Elbow Lake	Franklin	W. E. Green	April 30	10,000
Crooked Lake	Garfield	M. F. Robinson	April 26	20,000
Dickinson county:				
Sawyer Lake	Sagola	Ed. Kalisch	June 8	15,000
Genesee county:				
Copnaconic Lake	Grand Blanc, Fenton and Holly	A. D. Banker	April 26	35,000

Lake trout plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Gogebic county:				
Thousand Island Lake.....	Watersmeet.....	Marvin Hughitt, Jr.....	June 8	30,000
Clark Lake.....	Watersmeet.....	A. D. Johnston.....	June 8	30,000
Whitefish Lake.....	Watersmeet.....	A. D. Johnston.....	June 8	30,000
Duck Lake.....	T. 44—39.....	Pat Kelly.....	June 8	30,000
Beaton's Lake.....	Watersmeet.....	C. M. McDonald.....	June 8	30,000
Bass Lake.....	Watersmeet.....	J. L. Kelly.....	June 8	30,000
Grand Traverse county:				
Black Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	10,000
Blue Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	10,000
Crooked Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	20,000
Hogback Lake.....	Paradise.....	Kingsley Sportsmen's Club..	April 22	10,000
Long Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	20,000
Rennie Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	20,000
Round Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	10,000
Spider Lake.....	Union.....	Kingsley Sportsmen's Club..	April 22	10,000
Hillsdale county:				
Cub Lake.....	Woodbridge and Cambria...	Wm. F. Savage.....	April 19	20,000
Houghton county:				
Lake Roland.....	Elm River.....	A. L. Heibel.....	June 11	9,000
Bob Lake.....	Leard.....	Fred Nelson.....	June 11	15,000
Twelve Mile Lake.....	Adams.....	W. E. Parnell.....	June 11	9,000
Lake Gerald.....	Elm River.....	Frank Purnerville.....	June 11	9,000
Lake Eva.....	Stanton.....	Geo. Williams.....	June 11	9,000
Otter Lake.....	Chassell.....	Geo. Williams.....	June 11	9,000
Twin Lakes.....	Union and Elm.....	Geo. Williams.....	June 11	9,000
Long Lake.....	Elm River.....	E. H. Wright.....	June 11	9,000
Klatt's Lake.....	Winona.....	E. H. Wright.....	June 11	9,000
Ionia county:				
Woodard Lake.....	Ronald.....	Ira Conkey.....	May 14	7,500
Jordan Lake.....	Odesa and Woodland.....	Fay Diamond.....	April 16	20,000
Iosco county:				
Long Lake.....	Plainfield.....	M. H. Crary.....	May 19	16,000
Iron county:				
Fortune Lake.....	Crystal Falls.....	W. J. Richards.....	June 8	30,000
Holmes Lake.....	Crystal Falls.....	Arvid Bjork.....	June 8	30,000
Section Five Lake.....	Iron River.....	I. W. Byers.....	June 8	30,000
Sunset Lake.....	Bates.....	I. W. Byers.....	June 8	30,000
Chicagoan Lake.....	Stambaugh.....	F. G. Hood & Co.....	June 8	30,000
Mahoney Lake.....	Stambaugh.....	F. G. Hood & Co.....	June 8	30,000
Jackson county:				
Ackerson Lake.....	Napoleon.....	Geo. E. Beebe.....	April 19	10,000
Big Portage Lake.....	Henrietta and Waterloo....	Geo. E. Beebe.....	April 19	20,000
Brill's Lake.....	Leoni.....	Geo. E. Beebe.....	April 19	10,000
Brown's Lake.....	Summit.....	Geo. E. Beebe.....	April 19	10,000
Gillett's Lake.....	Leoni.....	Geo. E. Beebe.....	April 19	20,000
Spring Arbor Lake.....	Spring Arbor.....	Geo. E. Beebe.....	April 19	10,000
Vandercook's Lake.....	Summit.....	Geo. E. Beebe.....	April 19	10,000
Wolf Lake.....	Leoni, Grass Lake and Napoleon.....	Geo. E. Beebe.....	April 19	20,000
Kalamazoo county:				
Howard Lake.....	Schoolcraft.....	P. W. Ballinger.....	April 17	10,000
Gull Lake.....	Richland, Bars and Barry....	Landlord Chipman.....	April 17	40,000
Rawson's Lake.....	Schoolcraft.....	Chas. Maile.....	April 17	10,000
Indian Lake.....	Pavilion.....	White Bros. and H. Fisher..	May 21	20,000
Kent county:				
Lincoln Lake.....	Spencer.....	Simon W. Bigler.....	May 14	7,500
Schram Lake and Round Lake.....	Oakfield.....	Freeman Addis.....	May 8	10,000
Clear Lake.....	Solon.....	Ed. W. Wheeler.....	May 3	10,000
Spring Lake.....	Solon.....	Ed. W. Wheeler.....	May 3	10,000
Lake county:				
Sand Lake.....	Elk and Stronach.....	Dr. Earl Fairbanks.....	April 23	20,000
Lenawee county:				
Devil's Lake.....	Rollin and Woodstock.....	W. J. Hampton & Son.....	April 19	30,000
Leelanau county:				
Glen Lake.....	Glen Arbor, Empire and Kasson.....	D. H. Day.....	April 23	20,000
Glen Lake.....	Glen Harbor and Empire....	James Daly.....	April 23	20,000

Lake trout plants, 1909.—Concluded.

County and name of water.	Township.	Applicant.	Date.	Number.
Livingston county: Indian Lake or Lakes	Deerfield	Chas. E. Nichols	May 5	16,000
Manistee county: Crystal Lake	Stronach	A. R. Atherton	April 23	10,000
Long Lake	Stronach	A. R. Atherton	April 23	10,000
Marquette county: St. John's Lake	Republic	B. Bengtson	June 11	15,000
Allen's Lake	Republic	C. W. Munson	June 11	15,000
K. C. Lake	Humboldt	C. W. Munson	June 11	15,000
Perch Lake	Republic	C. W. Munson	June 11	15,000
Skinner's Lake	Republic	C. W. Munson	June 11	15,000
Dewey, Charboneau, Island and Johnston Lakes	Tilden and Republic	Geo. A. Newett	June 11	45,000
Bass Lake	Forsyth	A. C. Seass	June 11	15,000
Little Lake	Forsyth	A. C. Seass	June 11	15,000
Me Lake	Forsyth	A. C. Seass	June 11	15,000
Michiganme Lake	Marquette	C. F. Sundstrom	June 11	15,000
No Name	Ishpeming	William Tellefson	June 11	15,000
Goose Lake	Republic	Emil Wohlstrom	June 11	15,000
Sineson Lake	Republic	Emil Wohlstrom	June 11	15,000
Lake on Section 24 T. 45, R. 30	Republic	Emil Wohlstrom	June 11	15,000
Three Lakes	Republic	Chas. E. Haggerson	June 11	15,000
Mecosta county: Chippewa Lake	Chippewa	C. L. Grant	May 11	20,000
Montcalm county: Crystal Falls	Crystal	C. W. LaDu	May 8	20,000
Montmorency county: South Wolf Lake	Albert	A. J. Welch	May 1	20,000
Muskegon county: Wolf Lake	Eggleston	E. D. Morgan	May 10	28,000
Newaygo county: Diamond Lake	Lincoln	Capt. W. H. Bigelow	May 24	30,000
Oakland county: Pine Lake	West Bloomfield	Mark Harger	May 6	16,000
Maceday Lake	Waterford	C. C. Craigie	June 11	5,000
Joon Lake	Waterford	Mich. Fish Commission	June 11	6,500
Van Norman Lake	Independence and Waterford	S. E. Thomas	May 21	40,000
Ontonagon county: Lake Gogebic	Severall	Alex. Martin	June 11	15,000
Oscoda county: McCullum Lake	Clinton	S. K. McCollum	May 18	12,000
Otsego county: Big Lake or Lake Twenty-seven	Elmira	Ernest Pettifor	May 12	15,000
Ottawa county: Crockerly Lake	Chester	Dr. E. O. Cilley	May 10	20,000
Rosecommon county: Clear Lake	Nester	R. J. McMillan	April 27	12,000
St. Joseph county: Palmer Lake	Colon	J. K. Farrand and A. J. Born	April 19	20,000
Sturgeon Lake	Colon	J. K. Farrand and A. J. Born	April 19	20,000
Long Lake	Colon	C. A. Boyer	April 17	20,000
Portage Lake	Mendon	J. L. Potter	April 16	20,000
Van Buren county: Lake George	Lawrence	Carlton Vandever	April 16	10,000
Lake Cora	Paw Paw	Clarence E. Fox	April 16	20,000
Washtenaw county: Iron Lake	Manchester	Anson J. Gall	April 19	20,000
Little Portage Lake	Dexter	Hon. H. W. Newkirk	April 17	20,000
Total				2,811,500

LAKE TROUT PLANTS, 1909.

FINGERLINGS, No. 2.

County and name of waters.	Township.	Applicant.	Date.	Number.
Berrien county: Paw Paw Lake.....	Watervliet.....	A. A. Woodward.....	July 30	3,000

BROWN TROUT PLANTS.

FRY AND ADVANCED FRY.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Mecosta county: Paris Creek.....	Green.....	Mich. Fish Commission.....	Mar. 29	50,000
Newaygo county: Little South Branch of Pere Marquette River.....	Several.....	Mich. Fish Commission.....	June 27	30,000
Total.....				80,000

LAND-LOCKED SALMON PLANTS.

FRY AND FINGERLINGS.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Grand Traverse county: Boardman Lake.....	Garfield.....	Traverse City R. and G. Club, Traverse City.....	June 4	7,000

WALL-EYED PIKE PLANTS.

FRY.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alcona county:				
North Lake	Curtis	J. H. Hayes	June 1	160,000
Hubbard Lake	T. 28 N. R. 7 E.	W. S. Linton	June 1	500,000
Allegan county:				
Kalamazoo River	Gun Plains	Wm. Crispe	May 22	100,000
Green Lake	Leighton	Pryor Brothers	May 22	75,000
Kalamazoo Lake and River	Saugatuck and Manlius	Chas. E. Bird	June 2	125,000
Goshorn Lake	Saugatuck and Laketon	Mrs. C. G. Comstock	June 2	75,000
Antrim county:				
Lime Lake	Banks	Albert Byers	May 27	75,000
Intermediate Lake	Central Lake	Wm. Roberts	May 27	125,000
Wilson Lake	Banks	Wm. Roberts	May 27	100,000
Bass Lake	Elk Rapids	L. N. Spring	May 27	125,000
Elk Lake	Milton	L. N. Spring	May 27	175,000
Grass Lake	Kearney and Custer	A. B. Wooton	May 27	100,000
Barry county:				
Fair Lake	Barry	D. Collier	May 22	150,000
Little Gilkey Lake	Barry	Wm. Evans	May 22	50,000
Wilson and Lawrence Lakes	Barry	Geo. Lawrence	May 22	75,000
Hall Lake	Barry	M. M. Manning	May 22	75,000
Pleasant Lake	Barry	Frank Norwood	May 22	150,000
Crowded Lake	Prairieville and Barry	A. Pennoek	May 22	75,000
Gulkey Lake	Barry	A. Pennoek	May 22	75,000
Long Lake	Hope	John Acker	June 8	75,000
Greenaway Lake	Hope	D. Campbell	June 8	50,000
Lake 21	Hope	O. J. Kingsbury	June 8	50,000
Perch Lake	Hope	Frank Maynard	June 8	50,000
Pine Lake	Prairieville	A. J. Shelp	June 8	75,000
Collins Lake	Rutland	O. V. Stamm	June 8	75,000
Mud Lake	Hope	A. E. Patton	June 8	50,000
Asiby Lake	Hope	John M. Payne	June 8	50,000
Benzie county:				
Ransom Lake	Almira	G. F. Decker	May 24	75,000
Woodback Twin Lake	Almira	G. F. Decker	May 24	75,000
Bryan Lake	Almira	M. L. Lake	May 24	125,000
Lake Ann	Almira	M. L. Lake	May 24	150,000
Vallean Lake	Almira	M. L. Lake	May 24	125,000
Manwarren Lake	Almira	D. S. Willard	May 24	75,000
Bass Lake	Lake	Fred Balitz	May 25	75,000
Otter Lake	Lake	Fred Balitz	May 25	100,000
Round Lake	Lake	John W. Cruise	May 25	100,000
Long Lake	Almira	D. E. Burns	May 29	150,000
Little Platte Lake	Benzonia	Wm. A. Lear	May 29	125,000
Big Platte Lake	Benzonia	Wm. A. Lear	May 29	125,000
Platte River	Lake	E. R. Dailey	May 29	250,000
Berrien county:				
Long Lake	Berrien	Calvin Murphy	June 2	100,000
Murphy Lake	Berrien	Calvin Murphy	June 2	75,000
Smith's Lake	Berrien and Pokagon	Calvin Murphy	June 2	100,000
St. Joseph River	Several	Dudley Wallace	June 2	25,000
Branch county:				
Lavine Lake	Kinderhook	Leigh Kanouse	May 26	200,000
Goodrich Lake	Sherwood	Henry Runyan	May 26	100,000
North, South, Randall, Morrison, Craig and Bennet Lakes	Coldwater	F. T. Tappan	May 26	400,000
Hyman Lake	Sherwood	John Q. Palmer	May 27	200,000
Lehr Lake	Sherwood	Dor Waterman	May 27	180,000
Lower Lake	Sherwood	Leo E. Wood	May 27	200,000
Fish Lake	Noble	J. Frohriep & Sons	June 4	75,000
Honey Lake	Noble	J. Frohriep & Sons	June 4	75,000
Mallow Lake	Noble	J. Frohriep & Sons	June 4	75,000
Long Lake	Noble	J. Frohriep & Sons	June 4	75,000
Matteson Lake	Matteson	Werner and Bishop	June 4	100,000

Wall-eyed pike plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Calhoun county:				
St. Joseph River	Clarendon	G. E. Ballentine	May 24	200,000
Beadle Lake	Emmet	C. E. Kistler	May 24	200,000
Lake of the Woods	Lee	H. C. Faulkner	May 26	120,000
Lyon Lake	Fredonia	H. C. Faulkner	May 26	120,000
Maynard Lake	Eckford	H. C. Faulkner	May 26	120,000
Rice Creek	Marengo and Lee	H. C. Faulkner	May 26	120,000
Duck Lake	Clarence	L. J. Devring	May 26	300,000
Ceresco Pond	Marshall	E. T. Hough	May 27	200,000
Marshall Millpond	Marshall and Marengo	Geo. A. Johnson	May 27	160,000
Cass county:				
Hemlock Lake	Marcellus	Elmer C. Davis	May 22	150,000
Big Fish Lake	Marcellus	C. S. Jones	May 22	75,000
Miller Lake	Marcellus	C. S. Jones	May 22	75,000
Saddlebag Lake	Volinia and Marcellus	C. S. Jones	May 22	75,000
Skyhawk Lake	Marcellus	C. S. Jones	May 22	75,000
Huyck Lake	Marcellus	C. S. Jones	May 22	75,000
Eagle Lake	Ontwa	Paul H. Savage	May 22	75,000
Diamond Lake	LaGrange, Jefferson, Calvin and Penn	Perry L. Turner	May 22	100,000
Dristel Lake	Newburg	W. Hutchings	May 24	300,000
Stone Lake	LaGrange	E. Lamb	May 24	200,000
Kirk's Lake	Penn and Newburg	Fred Marsh	May 24	200,000
Mud Lake	Calvin	H. H. Roth	June 5	75,000
		H. H. Roth	June 5	75,000
Charlevoix county:				
Lake 26	Marion	Dick O'Neill	May 27	75,000
Hoffman Lake	Hudson	H. F. Hoffman	June 4	100,000
Cheloygan county:				
Long Lake	Grant and Benton	F. S. Burgess	June 2	300,000
Black Lake	Grant	Wm. E. Shoemaker	June 2	400,000
Burt Lake	Tuscarora	Wm. E. Shoemaker	June 2	400,000
Devereaux Lake	Grant	Wm. E. Shoemaker	June 2	500,000
Mullet Lake	Grant, Inverness and Koehler	Wm. E. Shoemaker	June 2	400,000
Clare county:				
Eight Mile Lake	Garfield	W. B. Cook	May 28	250,000
Bass, Brennan and Beebe Lakes	Severel	W. C. Cornwall	May 28	250,000
Black Lake	Garfield	John Neepser	May 28	125,000
Arnold Lake	Hayes	F. Weatherhead	May 28	200,000
Eaton county:				
Grand River	Delta	Crane & McGee	May 22	100,000
Pine Lake	Walton	J. A. Downer	May 22	75,000
Hodgeman Lake	Eaton	Frank Johnson	May 22	50,000
Grand River	Delta	W. Lazell	May 29	375,000
Grand River	Severel	Mich. Fish Commission	May 29	100,000
Grand River	Windsor	F. G. French	June 3	200,000
Emmet county:				
Carp Lake	Carp Lake and Hebron	O. C. Cope	May 20	100,000
Arnitt's Lake	McKinley	H. G. Delsworth	May 20	100,000
Crooked River	Littlefield and Maple River	W. W. Fairbairn	May 20	100,000
Round Lake	Bear Creek	Henry Lindig	May 20	150,000
Round Lake	Custer	Tindle & Jackson	May 20	100,000
Genesee county:				
Copnarconic Lake	Grand Blanc, Fenton and Holly	A. D. Banker	May 27	300,000
Long Lake	Fenton	W. A. Paterson	June 2	400,000
Gladwin county:				
Cedar Lake	Clement	Herbert Stephens	June 4	200,000
Elk Lake	Clement	Herbert Stephens	June 4	200,000
Indian Lake	Clement	Herbert Stephens	June 4	200,000
Grand Traverse county:				
Fife Lake	Fife Lake	L. L. Maxam	May 20	100,000
Little Mud Lake	East Bay	J. F. Gibbs	May 24	75,000
Blue Lake	Union	Kingsley Sportsmen's Club	May 24	100,000
Black Lake	Union	Kingsley Sportsmen's Club	May 24	100,000
Cedar Lake	Mayfield	Kingsley Sportsmen's Club	May 24	75,000
Rennie's Lake	Union	Kingsley Sportsmen's Club	May 24	100,000
Porter Lake	Mayfield	Kingsley Sportsmen's Club	May 24	75,000
Duck Lake	Green Lake	W. Pennington	May 26	100,000
Green Lake	Green Lake	W. Pennington	May 26	100,000

Wail-eyed pike plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Grand Traverse county.—Continued:				
Boardman River.....	Traverse and Garfield.....	W. G. Pierre.....	May 26	75,000
Bellows Lake.....	Long Lake and Almira.....	J. M. Thomas.....	May 26	100,000
Silver Lake.....	Garfield.....	Traverse City Fly Casting Club.....	May 26	75,000
Long Lake.....	Long and Green Lake.....	Trav. City R. and G. Club.....	May 26	100,000
Spider Lake.....	East Bay.....	Trav. City R. and G. Club.....	May 26	100,000
Hogstack Lake.....	Mayfield and East Bay.....	Trav. City R. and G. Club.....	May 29	75,000
Hillsdale county:				
Bird Lake.....	Jefferson.....	C. M. Warner.....	May 26	2500
Sand Lake.....	Hillsdale.....	W. M. Kemp.....	June 3	375,000
Ingham county:				
Lowe Lake.....	Stockbridge.....	C. H. Lowe.....	June 4	300,000
Grand River.....	Williamston.....	C. M. Ruce.....	May 29	300,000
Iosco county:				
Sand Lake.....	Grant.....	J. A. Jackson.....	June 1	240,000
Indian Lake.....	Plainfield.....	C. W. Luce.....	June 1	500,000
Van Etten Lake.....	Oscoda.....	A. R. Weir.....	June 1	500,000
Ionia county:				
Hahn's Pond.....	Boston.....	J. Wallington.....	May 21	100,000
Peck Lake.....	Berlin.....	J. Wallington.....	May 21	125,000
Walter's Pond.....	Boston.....	J. Wallington.....	May 21	100,000
Jordan Lake.....	Odesa and Woodland.....	Fay Diamond.....	May 29	240,000
Commonwealth Pond.....	Portland and Ionia.....	D. H. Hunt.....	May 29	240,000
Grand River.....	Danby.....	Albert Figg.....	May 29	300,000
Lookingglass River and Bayou.....	Portland.....	B. C. K. Jenkins.....	May 29	240,000
Glass Lake.....	Orleans.....	W. H. Angell.....	June 3	75,000
Long Lake.....	Orleans.....	W. F. Briker.....	June 3	75,000
Woodard Lake.....	Ronald.....	Daniel Briggs.....	June 3	50,000
Mud Lake.....	Orleans.....	E. E. Brown.....	June 3	75,000
Kiddville Pond.....	Orleans and Otisco.....	W. P. Heatherington.....	June 3	75,000
Morrison Lake.....	Boston and Campbell.....	E. A. Rising.....	June 3	100,000
Jenkins Lake.....	Ionia.....	H. J. Spaulding.....	June 3	50,000
Isabella county:				
Jimmywall Lake.....	Gilmore.....	Bert Putnam.....	May 28	125,000
Bass Lake.....	Lincoln.....	J. Cobb.....	May 29	125,000
Coldwater Lake.....	Nottawa.....	Robt. Hyslop.....	June 3	100,000
Lestrangle Lake.....	Lincoln.....	E. B. Rockwell.....	June 3	50,000
Hall's Lake.....	Broomfield.....	J. M. Swisher.....	June 3	75,000
Eldred Lake.....	Broomfield.....	J. M. Swisher.....	June 3	50,000
Jackson county:				
Wilbur Lake.....	Pulaski.....	C. S. Allen.....	May 26	100,000
Fay's Lake.....	Norvell.....	Dr. E. N. Pierce.....	May 26	200,000
Grass Lake.....	Grass Lake.....	C. R. Smith.....	May 26	200,000
Marker Lake.....	Hanover.....	W. P. Burdette.....	June 3	100,000
Kalamazoo county:				
Sherman Lake.....	Rose.....	A. M. Giddings.....	May 27	200,000
Paw Paw Lake.....	Texas.....	Gardner Jeffries.....	May 27	125,000
West Lake.....	Portage.....	Chas. G. Ames.....	May 22	100,000
Sugarloaf Lake.....	Schoolcraft.....	Geo. F. Harrison.....	May 22	75,000
Long Lake.....	Portage.....	Henry Waruf.....	May 22	75,000
Mud Lake.....	Pavillion.....	White Bros. & Co.....	May 22	100,000
Pickerel Lake.....	Pavillion.....	White Bros. & Co.....	May 22	100,000
Kalkaska county:				
Leon Lake.....	Arenac.....	John W. Anderson.....	May 20	125,000
Manistec Lake.....	Cold Springs.....	R. W. Douglas.....	May 22	100,000
Bass Lake.....	Orange.....	Paul Seiting.....	May 20	75,000
Torch Lake.....	Sevelal.....	J. C. Gray.....	May 27	125,000
Kent county:				
Allen Lake.....	Courtland.....	Geo. W. Brantner.....	May 20	75,000
Ware's Lake.....	Nelson.....	James W. Brayman.....	May 20	50,000
Crandell or Upper Lake.....	Solon.....	Earl Rasco.....	May 20	50,000
Middle Lake.....	Solon.....	Earl Rasco.....	May 20	75,000
Spring Lake.....	Solon.....	Earl Rasco.....	May 20	75,000
Sand Lake.....	Nelson and Pierson.....	F. E. Shattuck.....	May 20	50,000
Lower or Mabie Lake.....	Solon.....	Del Mabie.....	May 24	100,000
Reed's Lake.....	Grand Rapids.....	L. J. DeLamarter.....	May 26	125,000
Rogue River.....	Sparta.....	H. F. Walcott.....	May 26	50,000
Resford Lake.....	Tyrone.....	Geo. Rexford.....	May 26	100,000

Wall-eyed pike plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Kent county.—Continued:				
Grand River	Several	Mich. Fish Commission	May 29	500,000
Scram Lake	Oakfield	Freeman Addis	June 3	100,000
Round Lake	Oakfield	Freeman Addis	June 3	100,000
Pond's Lake	Oakfield	W. S. Lamberton	June 3	75,000
Wabasis Lake	Oakfield	W. S. Lamberton	June 3	100,000
Whippoorwill Lake	Grattan and Oakfield	J. E. Taylor	June 3	75,000
Davis Lake	Courtland	F. Thompson	June 3	100,000
Emmons Lake	Grattan	S. H. Wilson	June 3	100,000
Pine Island Lake	Plainfield	Mich. Fish Commission	June 9	100,000
Lake county:				
Elbow Lake	Elk	Jack Hartley	May 26	75,000
Lapeer county:				
Barnes Lake	Deerfield	J. A. Hagaman	May 28	125,000
Clear Lake	Arcadia	E. Ankleby	May 31	275,000
Bass Lake	Arcadia	G. M. Bowen	May 31	250,000
Long Lake	Attica	A. D. Conley	May 31	275,000
Leelanau county:				
Carp Lake	Leland, Centerville and Solon	Trav. City R. and G. Club	May 26	100,000
Cedar Lake	Elmwood	Trav. City R. and G. Club	May 26	100,000
Lenawee county:				
Devil's Lake	Rollin and Woodstock	W. J. Hampton and Son	May 26	300,000
Washington, Middle and Marr's Lakes	Cambridge	C. A. Morgan	May 26	240,000
Livingston county:				
Bass Lake	Hamburg	E. E. Gwinner	May 24	200,000
Strawberry Lake	Hamburg	E. E. Gwinner	May 24	200,000
Zukey Lake	Hamburg	E. E. Gwinner	May 24	200,000
Indian Lakes	Deerfield	C. E. Nichols	May 29	375,000
Lake Annpere	Genoa	A. J. Herrick	June 5	100,000
Manistee county:				
Round Lake	Stronach	A. R. Atherton	May 26	50,000
Grass Lake	Stronach	A. R. Atherton	May 26	50,000
Healy Lake	Springdale	F. E. Burke	May 26	50,000
Glover Lake	Pleasanton	F. L. Glover	May 26	50,000
Mason county:				
Little Black Lake	Sheridan	C. J. Leonard	May 24	100,000
Pleasant Lake	Sheridan	C. J. Leonard	May 24	100,000
Long Lake	Branch	C. M. Dodge	May 28	250,000
Crystal Lake	Amber	F. B. Dow	May 28	250,000
Twin Lake	Branch	Jas. Edmonson	May 28	125,000
Round Lake	Sheridan	Ernest Jaser	May 28	375,000
Tallman Lake	Branch	Ernest Jaser	May 28	250,000
Hamlin Lake	Hamlin and Victory	O. J. Wangen	May 28	500,000
Mecosta county:				
Buchanan Lake	Aetna	Chas. E. Hawley	May 20	75,000
Doyle Lake	Aetna	Chas. E. Hawley	May 20	75,000
Brady Lake	Aetna	J. D. McManus	May 20	75,000
Muskegon River	Green	Jay G. Reed	May 20	100,000
Chippewa River Power Pond	Fork	W. T. Lullin	June 3	75,000
Moules Lake	Sheridan	W. T. Lullin	June 3	75,000
Pretty Lake	Martiny	E. C. Lewis	June 3	75,000
Horseshoe Lake	Martiny	L. H. Percy	June 3	75,000
School Section Lake	Morton	J. M. Swisher	June 3	75,000
Lake 28	Sheridan	R. P. Swisher	June 3	75,000
Long Lake	Morton	P. J. Theisen	June 3	75,000
Diamond Lake	Sheridan	B. L. Thomas	June 3	75,000
Missaukee county:				
Sapphire Lake	Lake	Lem Proctor	May 20	75,000
Dyer Lake	Caldwell	Geo. W. Wood	May 20	75,000
Lake Missaukee	Lake	Geo. W. Wood	May 20	100,000
Montcalm county:				
Butternut Lake	Pierson	Alvin Brown	May 20	50,000
Whitefish Lake	Pierson	B. S. Davenport	May 20	75,000
Little Whitefish Lake	Pierson	B. J. King	May 20	75,000
Round Lake	Pierson	F. E. Shattuck	May 20	75,000
Hunter Lake	Pine	Fred D. Briggs	June 4	125,000
Fifth Lake	Belvidere	Mrs. B. F. Randall	June 4	75,000

Wall-eyed pike plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Montcalm county.—Continued:				
Mud Lake	Douglas	L. A. Russell	June 4	75,000
Big Horton Lake	Montcalm	R. M. Vanderlip	June 4	75,000
Mud Lake	Pine	C. W. Vining	June 4	75,000
School Section Lake	Montcalm	Ed. Vogel	June 4	100,000
Paulson Lake	Winfield	O. C. Waldo	June 4	200,000
Derby Lake	Sidney	E. O. Bellows	June 5	50,000
Long Lake	Douglas and Belvidere	F. E. Curtis	June 5	100,000
Horseshoe	Fairplains	H. H. Decker	June 5	75,000
Grass Lake	Fairplains	Albert Jenks	June 5	75,000
Horseshoe Lake	Fairplains	A. N. Shaw	June 5	50,000
Rock Lake	Richland	A. B. Stauffer	June 5	75,000
Grass Lake	Fairplains	Archie Sweers	June 5	75,000
Muskegon county:				
Half Moon Lake	Casnovia	Arthur Thomas	May 26	75,000
Trent Millpond	Casnovia	Arthur Thomas	May 26	50,000
Duck Lake	Fruitland	G. M. Duram	May 28	150,000
White Lake	Mortagne	Paul G. Kling	May 28	200,000
Big Blue Lake	Blue Lake	Hon. F. J. Russell	May 28	150,000
Clear Lake	Cedar Creek	H. A. O'Connor	June 4	100,000
Wallace Lake and Lakes Minnie, Eleanor and Antionette	Dalton	T. O. Wallace	June 4	300,000
Newaygo county:				
Cook and White Lake	Ensley and Solon	Frank Seigel	May 24	75,000
Taylor Lake	Ensley and Solon	J. J. Yost	May 24	75,000
Diamond Lake	Lincoln	Capt. W. H. Bigelow	May 26	75,000
Pickrel Lake	Garfield	A. L. Forman	May 28	75,000
Sylvan, Emerald, Pickrel and Kimball Lakes	Brooks, Everett, Garfield	H. W. Sawyer	May 28	100,000
Bill's Lake	Croton	O. H. Stray	May 28	50,000
Robinson's Lake	Sherman	Ed. Streichhirsch	May 28	75,000
Pickrel Lake	Home	H. Toneray	May 28	50,000
Sand Lake	Ashland	Arthur Thomas	May 28	75,000
Crystal Lake	Sherman	Frank Foster	June 4	100,000
Benton Lake	Beaver	Geo. R. Lyons	June 4	150,000
Bilfee Lake	Beaver	Geo. R. Lyons	June 4	150,000
Flanders Lake	Denver	Geo. m. Lyons	June 4	150,000
Duck Lake	Dayton	Chas. E. Miller	June 4	150,000
Oakland county:				
Pine Lake	West Bloomfield	Mark Harger	May 27	300,000
Green Lake	Independence	C. C. Craigie	May 28	150,000
Huntoon Lake	Waterford	C. C. Craigie	May 28	150,000
Lotus Lake	Waterford	C. C. Craigie	May 28	150,000
Maceday Lake	Waterford	C. C. Craigie	May 28	150,000
Waterford Lake	Independence, Waterford	C. C. Craigie	May 28	150,000
Huron or Big Lake	Springfield	F. A. Ely	May 28	375,000
Hunnwell Lake	Milford	F. B. Hatch	May 28	125,000
Pettibone Lake	Highland	F. B. Hatch	May 28	125,000
Long Lake	White Lake	F. B. Hatch	May 28	250,000
Scars Lake	Milford	F. B. Hatch	May 28	250,000
Van Norman Lake	Independence, Waterford	S. E. Thomas	May 29	375,000
Loon Lake	Waterford	Mich. Fish Commission	June 5	400,000
Moore Lake	Milford	R. S. Potts	June 5	240,000
Oceana county:				
Pa-baw-ma Lake	Colfax	O. W. Bunting	May 28	100,000
Pee-Dee Lake	Leavitt	O. W. Bunting	May 28	125,000
Stony Lake	Claybank and Benona	A. J. Rankin	May 28	175,000
Crystal Lake	Hart	Hon. F. J. Russell	May 28	150,000
Ogemaw county:				
Henderson Lake	Cumming and Hill	Burton J. Corwin	June 1	260,000
Clear Lake	Richland	Geo. Exmer	June 1	160,000
Cranberry Lake	Richland	Geo. Exmer	June 1	160,000
Hardwood Lake	Richland and Logan	Geo. Exmer	June 1	160,000
Mills Lake	Richland	Geo. Exmer	June 1	160,000
Town Line Lake	Klackring	A. L. Brown	June 4	200,000
Chatman Lake	Edwards	Herbert Stephens	June 4	200,000
Piper Lake	T. 23 R. 23, Sec. 1	John Tolfree	June 4	200,000
Oseola county:				
Hewitt Lake	Burdette	Hon. J. M. Perry	May 20	75,000
Rose Lake	Rose Lake	L. Van Meter	May 20	75,000
Wright and Glover Lakes	Evart	Wm. F. Ramsey	May 28	250,000
Strawberry Lake	Cedar	E. F. Shaw	May 28	125,000

Wall-eyed pike plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oscoda county:				
Flat Lake	Comins	Robt. S. Madden	June 1	160,000
McCollum Lake	Clinton	S. K. McCollum	June 1	160,000
Island Lake	Clinton	Enos Zook	June 1	160,000
Ottawa county:				
Crockery Lake	Chester	Dr. E. O. Cilley	May 28	125,000
Spring Lake	Spring Lake	Samuel Falls	May 28	100,000
Presque Isle county:				
Lake Ella	Belknap	H. Horwitz	June 2	200,000
Roscommon county:				
Higgins Lake	Gerrish	W. H. Lansing	June 4	400,000
St. Joseph county:				
E. N. King Millpond	Leonidas	J. S. Damon	May 24	200,000
Sturgeon Lake	Colon	J. K. Farrand and A. J. Born	May 24	200,000
Palmer Lake	Colon	J. K. Farrand and A. J. Born	May 24	200,000
Carlisle's Pond	Leonidas	C. H. Robinson	May 24	20,000
Bear Creek	Leonidas	Nat Turner	May 24	200,000
Hog Creek Lake	Burr Oak	Wm. W. Bordner	June 4	100,000
Eberhard Lake	Burr Oak	F. H. Camburn	June 4	75,000
St. Joseph River	Constantine and Fabius	W. N. Harvey	June 8	100,000
Lewis Lake	Flowerfield	S. J. Andrus	June 8	75,000
Tuscola county:				
North Lake	Watertown	B. T. Bearss	May 27	200,000
Cass River	Vassar and Indian Field	Hon. F. C. Hogle	May 29	750,000
Van Buren county:				
Moon Lake	Geneva	J. A. Gibson	May 24	100,000
Clear Lake	Pine Grove	Chester Wesler	May 24	200,000
Mud, Cedar and Lime Lakes	Almena	C. P. Ziehl	May 27	200,000
Lake Fountain	Columbia	J. C. Bair	June 2	75,000
Deer Lake	Columbia	W. A. Beal	June 2	75,000
Three Mile Lake	Paw Paw	Wm. M. Kirkwood	June 2	100,000
Maple Lake	Paw Paw and Antwerp	R. D. Loveland	June 2	100,000
Nyman's Millpond	Bangor and Arlington	A. V. McKee	June 2	75,000
Prospect Lake	Lawrence	C. R. Miller	June 2	75,000
Lake George	Lawrence	Carlton Vanderveer	June 2	50,000
Van Auken Lake	Bangor	Jeremiah Welker	June 2	100,000
Washtenaw county:				
Crooked Lake	Sylvan	J. Geo. Webster	May 26	300,000
Whitmore Lake	Northfield	E. E. Gwinner	May 29	350,000
Horseshoe Lake	Northfield	E. E. Gwinner	May 29	250,000
Tobin's Lake	Northfield	E. E. Gwinner	May 29	150,000
Independence Lake	Webster	E. E. Gwinner	May 29	150,000
Wayne county:				
Huron River	Van Buren	A. E. Smith	May 24	300,000
Coomer Lake	Van Buren	A. E. Smith	May 24	200,000
Wexford county:				
Lake Mitchell	Cherry Grove	N. V. Gerrish	May 20	100,000
Cadillac Lake	Clam Lake	N. V. Gerrish	May 20	100,000
Total				47,675,000

NINETEENTH REPORT—STATE FISHERIES.

SMALL MOUTH BLACK BASS PLANTS.

ADVANCED FRY.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Allegan county:				
Miner Lake	Allegan	H. V. Streeter	June 8	6,000
Baker Lake	Hopkins	Wm. F. Tiefenthal	June 8	4,000
East Lake	Hopkins	Wm. F. Tiefenthal	June 8	4,000
Harland Lake	Hopkins	Wm. F. Tiefenthal	June 8	4,000
Antrim county:				
Intermediate Lake	Central Lake, Forest Home and Kearney	W. S. Richardson	June 3	8,000
Barry county:				
Wall Lake	Hope	J. C. Andrus	June 2	8,000
Kurtz Lake	Rutland	C. Feldpausch	June 2	4,000
Blue Lake	Orangeville	S. C. Greusel	June 2	4,000
Holcomb Lake	Prairieville	S. C. Greusel	June 2	4,000
Shallow Lake	Hope	W. D. Hayes	June 2	8,000
Carter Lake	Hastings	Drs. Mixer	June 2	6,000
Clear Lake	Baltimore	Drs. Mixer	June 2	6,000
Robinson Lake	Hastings	Drs. Mixer	June 2	2,000
Fine Lake	Johnston	E. A. Turner	June 5	6,000
Ashby Lake	Hope	John M. Payne	June 8	4,000
Pine Lake	Prairieville	A. J. Shelp	June 8	6,000
Benzie county:				
Cypress Lake	Almira	Ladew Berry	June 3	6,000
Otter Lake	Lake	John W. Cruse	June 3	6,000
Berry Lake	Almira and Platte	E. R. Daily	June 3	4,000
Pearl Lake	Almira	E. R. Daily	June 3	6,000
Lake Ann	Almira	L. E. Knodel	June 3	6,000
Lake View	Almira	L. E. Knodel	June 3	4,000
Ransom Lake	Almira	L. E. Knodel	June 3	4,000
Branch county:				
Lavine Lake	Kinderhook	Leigh Kanouse	June 5	6,000
Blossom Lake	Sherwood	Henry Runyan	June 7	4,000
Vincent Lake	Girard	H. C. Spring	June 7	6,000
Blossom Lake	Sherwood	Frank Swain	June 7	4,000
North, South, Messenger, Craig and Morrison Lakes	Coldwater	F. T. Tappan	June 5	6,000
Calhoun county:				
Duck Lake	Clarence	L. J. Devering	June 5	4,000
St. Mary's Lake	Bedford and Penfield	J. O. Gallup	June 5	4,000
Kalamazoo River	Severall	J. H. Grant	June 5	4,000
Kalamazoo River, Millpond above dam	Marshall and Marengo	E. L. Holmes	June 5	4,000
Turtle Lake	Burlington	C. H. Lowell	June 7	4,000
Warner's Lake	Tekonsha	A. Lundseigen	June 7	4,000
Lee Lake	Newton	W. L. Robinson	June 7	4,000
Shedd Lake East	Tekonsha	E. Sinclair	June 7	6,000
Graham Lake	Battle Creek	Arthur D. Smith	June 7	4,000
Cass county:				
Kirks Lake	Penn and Newberry	H. H. Roth	June 5	4,000
Mud Lake	Calvin	Chester H. Bonine	June 7	6,000
Mulford Lake	Volivia	Dell Jacquays	June 7	4,000
Kirks and Bellas Lakes	Penn	Delos O'Dell	June 7	6,000
Shavehead Lake	Porter	P. O. Storey	June 7	4,000
Eaton county:				
Thornapple River	Vermontville	E. D. Barber	June 2	4,000
Grand River	Oneda	Fred L. Berry	June 5	6,000
Sobby Lake	Sunfield	Albert Figg	June 5	4,000
Narrow Lake	Brookfield	W. F. Hahn	June 5	6,000
Bennett Park Pond	Charlotte City	R. S. Spencer	June 5	4,000
Grand Traverse county:				
Duck Lake	Green Lake	G. A. Brigham	June 3	6,000
Fish Lake	Mayfield	G. A. Brigham	June 3	4,000
Silver Lake	Garfield	Trav. City F. Casting Club	June 3	6,000

Small mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Ingham county: Fine Lake.....	Meridian.....	Chas. P. Downey.....	June 5	6,000
Ionia county: Jordan Lake.....	Odessa and Woodland.....	Fay Diamond.....	June 5	6,000
Jackson county: Swain's Lake.....	Pulaski.....	Frank W. McKenzie.....	June 7	6,000
Grand River.....	Several.....	Wm. M. Carroll.....	June 7	4,000
Kalamazoo county: Gourdneck Lake.....	Schoolcraft and Portage.....	Jay Clark.....	June 5	4,000
Rawson Lake.....	Schoolcraft.....	Thos. Hewitt.....	June 5	8,000
Stanley Lake.....	Portage.....	Oliver Heiney.....	June 5	4,000
Sugarloaf Lake.....	Schoolcraft.....	G. C. Phillips.....	June 5	4,000
Butterfield Lake.....	Richland and Rose.....	H. D. Streator.....	June 5	4,000
Mecosta county: Rogers Pond.....	Mecosta, Big Rapids and Austin.....	M. E. Darrah.....	June 9	4,000
Montcalm county: Whitefish Lake.....	Pierson.....	B. S. Davenport.....	June 9	4,000
Oskland county: Big Lake.....	Springfield.....	Jas. I. Hubbard.....	June 8	6,000
St. Joseph county: St. Joseph River.....	Constantine, Fabius and Lockport.....	W. N. Harvey.....	June 8	6,000
Total.....				314,000

NINETEENTH REPORT—STATE FISHERIES.

SMALL MOUTH BLACK BASS PLANTS.

FINGERLINGS No. 1 AND 2.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alger county:				
Perch Lake.....		H. A. St. John.....	July 14	800
16 Mile Lake.....		H. A. St. John.....	July 14	800
Barry county:				
Pine Lake.....	Johnstone.....	E. A. Turner.....	July 10	750
Long Lake.....	Hope.....	B. Dickinson.....	July 10	1,000
Wall Lake.....	Hope.....	Dr. J. C. Andrus.....	July 18	600
Crooked Lake.....	Barry.....	Thos. L. Williams.....	June 18	3,000
Berrien county:				
Paw Paw Lake.....	Watervliet.....	E. E. Rowland.....	July 10	1,000
Calhoun county:				
Lee Lake.....	Newton.....	I. N. Smalley.....	July 18	600
Cass county:				
Stone Lake.....	LaGrange.....	Fred Marsh.....	July 9	3,000
Charlevoix county:				
Walloon Lake.....	Melrose and Evangeline.....	J. W. Hunter.....	July 8	1,000
Walloon Lake.....	Melrose and Evangeline.....	J. W. Hunter, Div. Sup.....	June 26	4,000
Deer Lake.....	Wilson.....	Wm. J. Pearson.....	June 26	4,000
South Arm Lake.....	South Arm.....	Carl Stroebel.....	June 29	3,000
Clinton county:				
Looking Glass River.....		J. E. Hinkson.....	July 18	600
Cheboygan county:				
Cheboygan River.....	Inverness.....	Wm. F. Shoemaker.....	July 8	1,000
Long Lake.....	Grant and Benton.....	Fred S. Burgess.....	July 8	1,000
Crawford county:				
Twin Lake.....		F. B. Dickerson.....	Aug. 7	550
Portage Lake.....	26 N. R. 4 W.....	Hon. Chas. C. Blair.....	Aug. 28	600
Eaton county:				
Grand River.....	Delta.....	Crane & McGee.....	July 21	1,000
Emmet county:				
Round Lake.....	Bear Creek.....	Henry Lindig.....	July 17	1,000
Crooked and Pickerel Lakes.....	Littlefield.....	John Carpenter.....	June 26	3,000
Carp Lake.....	Carp Lake and Hebron.....	O. C. Cope.....	June 26	3,000
Round Lake.....	Bear Creek.....	Henry Lindig.....	June 26	3,000
Round Lake.....	Center.....	Tindle & Jackson.....	June 26	4,000
Grand Traverse county:				
Fife Lake.....	Fife Lake.....	Fred Bechstein.....	June 26	3,000
Houghton county:				
Otter Lake.....	Portage.....	J. Abner Sherman.....	July 14	1,000
Isabella county:				
Coldwater Lake.....	Nottawa.....	Robt. Hyslop.....	July 20	1,000
Ingham county:				
Cedar River near Lansing.....	Ingham.....	Wm. L. Brush.....	June 21	2,000
Ionia county:				
Grand River.....	Portland and Lyons.....	J. C. Schultz.....	June 21	2,000
Kent county:				
Brower Lake.....	Courtland.....	Geo. W. Brantner.....	June 21	2,000
Bass Lake.....	Spencer.....	Fred Holland.....	July 11	750

Small mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Lake county:				
Lincoln Lake.....	Elk.....	Wm. Clark.....	June 29	2,000
Long Lake.....	Elk.....	Wm. Utter.....	June 29	3,000
North Lake.....	Elk.....	Wm. Utter.....	June 29	3,000
Sable Lakes.....	Elk.....	Wm. Utter.....	June 29	3,000
Leelanau county:				
Bass Lake.....	Leelanau.....	Henry VonHolt.....	June 29	2,000
Leg Lake.....	Northport.....	H. F. Ashelby.....	June 26	3,000
Glen Lake.....	Glen Arbor.....	D. H. Day.....	Sept. 18	400
Marquette county:				
Silver Lake.....	Champion.....	Geo. Voelker.....	July 14	1,000
Walton Lake.....	Forsyth and West Branch.....	T. G. Yates.....	July 14	1,000
Lake Independence.....	Powell.....	H. A. St. John.....	July 14	800
Bear Lake.....	Powell.....	H. A. St. John.....	July 14	600
Mason county:				
Lincoln Lake.....	Pere Marquette.....	R. C. Bridge.....	June 29	3,000
Bass Lake.....	Summit.....	Geo. McKee.....	June 29	2,000
Mecosta county:				
Mill Brook Pond.....	Mill Brook.....	T. O. Pattison.....	July 20	1,000
Blue Lake.....	Morton and Martiny.....	P. J. Theison.....	Aug. 1	750
Round and Long Lakes.....	Morton.....	Geo. R. Sapp.....	Aug. 1	1,000
Big Rapids Pond.....	Big Rapids.....	S. A. Crandell.....	June 26	3,000
Big Muskegon.....	Several.....	W. C. Maxim.....	June 26	3,000
Muskegon River.....	Green.....	Jay G. Reed.....	June 26	3,000
Missaukee county:				
Lake Missaukee.....	Lake.....	Warren Jones.....	June 26	3,000
Montcalm county:				
Round Lake.....	Pierson.....	F. E. Shattuck.....	June 21	2,000
Butternut Lake.....	Pierson.....	B. S. Davenport.....	June 26	2,000
Benger's Lake.....	Eureka.....	M. G. Hillman.....	July 28	750
Monroe county:				
River Raisin.....	Monroe.....	T. R. Navarre.....	July 24	300
River Raisin.....	Monroe.....	T. R. Navarre.....	Aug. 4	1,100
Muskegon county:				
Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell.....	Aug. 4	600
Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell.....	June 24	6,000
Newaygo county:				
Sylvan, Emerald, Pickerel and Kimball Lakes.....	Brooks, Everett and Garfield.....	H. W. Sawyer.....	June 17	2,000
Bills Lake.....	Croton.....	O. H. Stray.....	June 17	2,000
Blanch Lake.....	Ashland.....	A. J. Titus.....	June 17	2,000
Conover Lake.....	Ensley.....	F. E. Shattuck.....	June 21	3,000
Long Lake.....	Sherman.....	Fred Storman.....	June 22	2,000
Oakland county:				
Cooley Lake.....	White Lake.....	E. K. Symonds.....	Aug. 19	500
Oceania county:				
Pentwater Lake.....	Pentwater.....	Hon. R. M. Montgomery.....	Aug. 19	750
Silver Lake.....	Golden.....	F. A. Gushki.....	June 24	2,000
Pentwater Lake.....	Pentwater.....	Hon. M. D. Girard.....	June 24	3,000
Pentwater Lake.....	Pentwater.....	C. F. Lewis.....	June 24	3,000
Homer Lake.....	Benona.....	C. E. Merchant.....	June 24	2,000
Crystal Lake.....	Hart and Shelby.....	Wm. R. Roach.....	June 24	2,000
Stony Lake.....	Benona and Claybank.....	Shelby Fish & Game Association.....	June 24	3,000
Oscoda county:				
Reed City Millpond.....	Richmond.....	A. J. Auer.....	June 26	3,000
Hewitt Lake.....	Burdette.....	Hon. J. M. Perry.....	June 26	2,000
Ottawa county:				
Spring Lake.....	Spring Lake.....	Sam'l Falls.....	July 10	1,000
Cove Lake.....	Robinson.....	W. T. G. Penny.....	Aug. 5	600
St. Joseph county:				
St. Joseph River.....	Constantine and others.....	Wallace N. Harvey.....	July 10	750
Sand Lake.....	Nottawa.....	C. E. Fousel.....	July 17	750

NINETEENTH REPORT—STATE FISHERIES.

Small mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
VanBuren county:				
Eagle Lake.....	Paw Paw.....	Ben Desenberg.....	June 24	2,000
North Lake.....	Almena.....	B. C. Chambers.....	July 18	600
Crooked and Round Lakes.....	Keefer.....	Wm. O. Pratt.....	July 18	600
Wexford county:				
Stoneleigh Lake.....	Clam Lake.....	John Eggle.....	June 26	3,000
Cudillie Lake.....	Clam Lake.....	N. V. Gerrish.....	June 26	3,000
Lake Mitchell.....	Cherry Grove.....	N. V. Gerrish.....	June 26	3,000
Total.....				153,900

LARGE MOUTH BLACK BASS PLANTS.

ADVANCED FRY.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Alcona county:				
Mainard, Mud and Springclear Lakes.	Mainard, Hawes and Miller.	D. Lavier.	June 14	8,000
Twin Lakes.	Gustin.	D. Lavier.	June 14	6,000
Hubbard Lake.	28 N. of R. 7 E.	W. S. Linton.	June 14	10,000
Clear Lake.	Hawes.	C. H. Schram.	June 14	6,000
Crooked Lake.	Mitchell.	A. R. Code, G. P. A.	June 18	10,000
Sand Lake.	Mitchell.	A. R. Code, G. P. A.	June 18	8,000
North Lake.	Curtis.	J. H. Hayes.	June 18	10,000
Allegan county:				
No Name.	Leighton.	Alfred S. Nelson.	June 15	4,000
Crooked Lake.	Watson.	F. P. Heath.	June 15	4,000
Alpena county:				
Beaver Lake.	Green and Ossineke.	R. H. Rayburn.	June 15	10,000
Barry county:				
Barber Lake.	Carleton.	Drs. Mixer.	June 14	2,000
Bates Lake.	Rutland.	Drs. Mixer.	June 14	2,000
Dowd Lake.	Rutland.	Drs. Mixer.	June 14	2,000
East Lake.	Baltimore.	Drs. Mixer.	June 14	2,000
Gregory Lake.	Hastings.	Drs. Mixer.	June 14	2,000
Leach Lake.	Rutland.	Drs. Mixer.	June 14	2,000
Long Lake.	Hastings.	Drs. Mixer.	June 14	2,000
McParlin Lake.	Rutland.	Drs. Mixer.	June 14	2,000
Middle Lake.	Carleton.	Drs. Mixer.	June 14	4,000
Middle Lake.	Baltimore.	Drs. Mixer.	June 14	2,000
Mixer Lake.	Baltimore.	Drs. Mixer.	June 14	2,000
Otis Lake.	Rutland.	Drs. Mixer.	June 14	4,000
Podunk Lake.	Rutland.	Drs. Mixer.	June 14	2,000
Pondlily Lake.	Hastings.	Drs. Mixer.	June 14	2,000
Tanner Lake.	Rutland.	Drs. Mixer.	June 14	2,000
Tilson Lake.	Hope.	Drs. Mixer.	June 14	2,000
Gun Lake.	Yankee Springs and Orangeville.	E. J. Anderson.	June 15	6,000
Warner's Lake.	Prairieville.	Dr. G. H. Copp.	June 15	4,000
Silver Lake.	Prairieville.	R. L. Soule.	June 15	4,000
Mud Lake.	Hope.	Ovid Chamberlain.	June 18	4,000
Head Lake.	Hope.	Grant Dickerson.	June 18	4,000
Gurnsey Lake.	Yankee Springs.	S. C. Greusel.	June 18	6,000
Wall Lake.	Hope.	S. C. Greusel.	June 18	6,000
Horseshoe Lake.	Hope.	Hiram Gibson.	June 18	4,000
Little Long Lake.	Prairieville.	S. C. Greusel.	June 18	6,000
Fair Lake.	Barry.	William Kelley.	June 18	4,000
Twenty-one Lake.	Hope.	P. Kingsbury.	June 18	4,000
Wilson and Lawrence Lakes.	Barry.	Geo. Lawrence.	June 18	4,000
Perch Lake.	Hope.	Frank Maynard.	June 18	4,000
Mud Lake.	Barry.	Add Pennoek.	June 18	4,000
Pleasant Lake.	Barry.	J. Frank Norwood.	June 18	4,000
Iosco county:				
Bass Lake.	Plainfield.	C. W. Luce.	June 14	6,000
Indian Lake.	Plainfield.	C. W. Luce.	June 14	10,000
VanEtten Lake.	Oseoda.	F. H. Loud.	June 14	10,000
Jackson county:				
Big Portage Lake.	Henrietta and Waterloo.	Geo. E. Beebe.	June 21	10,000
Brill's Lake.	Leoni.	Geo. E. Beebe.	June 21	6,000
Brown's Lake.	Summit.	Geo. E. Beebe.	June 21	8,000
Cranberry Lake.	Napoleon.	Geo. E. Beebe.	June 21	8,000
Grass Lake.	Grass Lake.	Geo. E. Beebe.	June 21	8,000
Michigan Center Pond.	Leoni and Napoleon.	Geo. E. Beebe.	June 21	8,000
Vandercook's Lake.	Summit.	Geo. E. Beebe.	June 21	6,000
Wolf Lake.	Napoleon, Leoni and Grass Lake.	Geo. E. Beebe.	June 21	10,000
Kalamazoo county:				
Indian Lake.	Brady and Pavilion.	E. O. Goldsmith.	June 15	6,000
Thrawl Lake.	Brady.	E. O. Goldsmith.	June 15	4,000
Dustin Lake.	Ostemo.	A. Rienstra.	June 15	4,000

Large mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Kent county:				
Round Lake.....	Solon.....	C. S. Parks.....	June 17	4,000
Rexford Lake.....	Tyrone.....	Geo. Rexford.....	June 23	4,000
Reed's Lake.....	Grand Rapids.....	L. J. DeLamarter.....	June 23	10,000
Montmorency county:				
Long Lake.....	31 and 32 N. R. 4 E.....	J. F. Hubert.....	June 15	14,000
Muskegon county:				
Duck Lake.....	Fruitland.....	G. M. Duram.....	June 19	4,000
Newaygo county:				
Warmelink Lake.....	Sherman.....	H. C. Buck.....	June 16	4,000
Bass Lake.....	Sherman.....	John R. Grant.....	June 16	4,000
John Ford's Lake.....	Sherman.....	Frank Hindes.....	June 16	4,000
Peck's Lake.....	Sherman.....	Frank Hindes.....	June 16	4,000
Roottown Lake.....	Garfield.....	Wm. Lubke.....	June 16	4,000
Billhead and Marl Lake.....	Denver and Beaver.....	Geo. Lyons.....	June 16	4,000
Wildcat Lake.....	Beaver.....	Geo. Lyons.....	June 16	4,000
Blue Waters Lake.....	Dayton.....	Martin Mohrhardt.....	June 16	4,000
First Lake.....	Dayton.....	W. F. Reber.....	June 16	4,000
Martin Lake.....	Dayton.....	Richard Ryerson.....	June 16	4,000
Joslin Lake.....	Dayton.....	Ned A. Skinner.....	June 16	4,000
Martin Lake.....	Dayton.....	Madison Smith.....	June 16	4,000
Second Lake.....	Dayton.....	Jas. Stannard.....	June 16	4,000
Milpond.....	Wilcox.....	Branch Bros.....	June 17	4,000
Pickeral Lake.....	Garfield.....	A. I. Forman.....	June 17	6,000
Coon Lake.....	Garfield.....	M. C. Mahaffis.....	June 17	4,000
Robinson's Lake.....	Sherman.....	Ed. Streichhirsch.....	June 17	10,000
Hess Lake.....	Brooka.....	H. S. Thompson.....	June 17	6,000
Sand Lake.....	Ashland.....	A. J. Titus.....	June 17	10,000
Oakland county:				
Steeplehill Lake.....	Commerce.....	T. G. Forbes.....	June 22	8,000
Hunnell Lake.....	Milford.....	F. B. Hatch.....	June 22	4,000
Long Lake.....	White Lake.....	F. B. Hatch.....	June 22	10,000
Pettibone Lake.....	Highland.....	F. B. Hatch.....	June 22	4,000
Sears Lake.....	Milford.....	F. B. Hatch.....	June 22	8,000
Huron River.....	Milford.....	T. H. Padley.....	June 22	14,000
Kent Lake.....	Milford and Lyon.....	T. H. Padley.....	June 22	8,000
Moore's Lake.....	Milford.....	R. S. Potts.....	June 22	6,000
Sylvan Lake.....	Waterford.....	Fisher Brothers.....	June 23	10,000
Park Lake.....	Independence.....	J. D. Ogden.....	June 23	8,000
Oceana county:				
Pec-Dee Lake.....	Leavitt.....	O. W. Bunting.....	June 19	6,000
Little Pa-law-na Lake.....	Colfax.....	O. W. Bunting.....	June 19	4,000
Lake Sixteen.....	Grant.....	J. B. Conger.....	June 19	4,000
Morris Lake.....	Golden.....	C. L. Gold.....	June 19	4,000
Homer Lake.....	Benona.....	C. F. Merchant.....	June 19	4,000
Hart Lake.....	Hart.....	H. S. Newton.....	June 19	4,000
Crystal Lake.....	Hart and Shelby.....	E. A. Post.....	June 19	6,000
Wolf Lake.....	Golden.....	E. A. Post.....	June 19	4,000
Barnhart Lake.....	Golden.....	Peter Richter.....	June 19	6,000
Round Lake.....	Ferry.....	Shelby Fish & Game Protective Association.....	June 19	10,000
Gurney Pond and Round Lake.....	Hart and Golden.....	Rufus F. Skeels.....	June 19	4,000
Oscoda county:				
Smith Lake.....	Comins.....	Menno Esch.....	June 18	6,000
Toteroad Lake.....	Clinton.....	Geo. Imlay.....	June 18	8,000
Flat Lake.....	Comins.....	Robt. S. Madden.....	June 18	8,000
McCullum Lake.....	Clinton.....	S. K. McCollum.....	June 18	8,000
Presque Isle county:				
Barnard Lake.....	Case.....	Chas. Atkins.....	June 15	6,000
Grand Lake.....	Crawford and Presque Isle.....	Dr. F. W. Blake.....	June 15	14,000
Little Lake.....	Rogers and Pulaski.....	Hon. F. D. Larke.....	June 15	8,000
Swan Lake.....	Pulaski.....	Hon. F. D. Larke.....	June 15	8,000
St. Joseph county:				
Sand Lake.....	Nottawa.....	M. Bowersox.....	June 15	4,000
Total.....				618,000

LARGE MOUTH BLACK BASS PLANTS.

FINGERLINGS NOS. 1, 2, 3 AND 4.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Antrim county:				
Benway Lake.....	Central Lake.....	W. F. Carpenter.....	June 29	3,000
Buchanan Lake.....	Central Lake.....	F. M. Fisk.....	June 29	3,000
Central Lake.....	Central Lake.....	F. M. Fisk.....	June 29	5,000
Schrader's Lake.....	Echo.....	R. E. Pearsall.....	June 29	2,000
Birch Lake.....	Milton and Elk Rapids.....	L. N. Spring.....	June 29	3,000
Elk Lake.....	Elk Lake.....	L. N. Spring.....	June 29	4,000
Round Lake.....	Severel.....	L. N. Spring.....	June 29	3,000
Grass Lake.....	Forest, Home, Kearney and others.....	A. B. Wooton.....	June 29	4,000
Allegan county:				
Upper Scott Lake.....	Lee.....	S. E. Phillips.....	1908. July 29	750
Lower Scott Lake.....	Lee.....	S. E. Phillips.....	July 29	750
Barry county:				
Fine Lake.....	Johnston.....	J. O. Galbup.....	1909. June 25	3,000
Berrien county:				
Madden Lake.....	Buchanan.....	Chas. J. McCracken.....	1908. Sept. 3	375
Coalney Lake.....	Buchanan.....	Chas. J. McCracken.....	Sept. 3	375
Colvin Lake.....	Buchanan.....	Elmer D. Clark.....	1909. June 24	2,000
Section Nine Lake.....	Buchanan.....	Elmer D. Clark.....	June 24	2,000
Clear Lake.....	Buchanan.....	A. A. Worthington.....	June 24	2,000
Branch county:				
Vincent Lake.....	Girard.....	Henry Phelps.....	1908. July 9	1,500
Calhoun county:				
Whitcomb Lake.....	Homer.....	C. Riblet.....	July 18	600
Sheeld Lake West.....	Tekonsha.....	E. Sinclair.....	July 9	1,500
Fish Lake.....	Fredonia.....	Wm. Clayborne.....	1909. June 25	2,000
Clark's Lake.....	Clarence.....	L. J. Deving.....	June 25	2,000
Duck Lake.....	Clarence.....	L. J. Deving.....	June 25	2,000
Winnepeg Lake.....	Sheridan.....	L. J. Deving.....	June 25	2,000
Hart's Lake.....	Battle Creek.....	W. N. Dibble.....	June 25	3,000
Lake Goguse.....	Battle Creek.....	R. J. Flager.....	June 25	3,000
Beadle Lake.....	Emmet.....	Chas. E. Kistler.....	June 25	3,000
Pardee Lake.....	Lee.....	Frank Stultz.....	June 25	2,000
St. Mary's Lake.....	Penfield.....	Frank VanNocker.....	June 25	3,000
Kalamazoo River.....	Mars'hill.....	John L. Bean.....	June 26	2,000
Lake of the Woods.....	Lee.....	H. C. Faulker.....	June 26	3,000
Doberdeen Lake.....	Convis.....	F. M. Foote.....	June 26	2,000
Brace Lake.....	Mars'hill.....	C. E. Guss.....	June 26	3,000
Chapin's Lake.....	Marengo.....	H. G. Hills.....	June 26	2,000
Lyon Lake.....	Fredonia.....	E. L. Holmes.....	June 25	3,000
Tamarack Lake.....	Fredonia.....	F. J. Hutchins.....	June 26	2,000
Maynard Lake.....	Eckford.....	F. A. Stuart.....	June 26	2,000
Lane's Lake.....	Convis.....	Wm. B. Wade.....	June 26	2,000
Pine Lake.....	Fredonia.....	A. E. Wright.....	June 26	2,000
Cass county:				
Gray Lake.....	Jefferson.....	F. C. Gardner.....	1908. July 17	750
Pine Lake.....	Jefferson and Harvard.....	C. H. Kimrel.....	1909. June 22	2,000
Bear Lake.....	Newburg and Porter.....	Fred Marsh.....	June 22	2,000
Driscoll Lake.....	Newburg.....	Fred Marsh.....	June 22	2,000
Hutching's Lake.....	Newburg.....	Fred Marsh.....	June 22	2,000
Lily Lake.....	Newburg.....	Fred Marsh.....	June 22	2,000
Lime Lake.....	Newburg.....	Fred Marsh.....	June 22	2,000
Weatherbee Lake.....	Newburg.....	Fred Marsh.....	June 22	2,000
Dewey Lake.....	Silver Creek.....	Downagie Sportsmen's Ass'n.....	June 24	2,000
Indian Lake.....	Silver Creek.....	Downagie Sportsmen's Ass'n.....	June 24	4,000
Sister Lakes.....	Silver Creek and Keeler.....	Downagie Sportsmen's Ass'n.....	June 24	2,000
Trucked Lake.....	Keeler and Silver Creek.....	O. A. Gould.....	June 24	2,000
Simpson Lake.....	LaGrange.....	J. A. Shull.....	June 24	2,000

Large mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Cass county.—Continued:				
South part Goose Lake.....	Jefferson.....	Thos. T. Higgins.....	July 9	1,500
Bear Lake.....	Newburg and Porter.....	Fred Marsh.....	July 9	1,500
Driscoll Lake.....	Newburg.....	Fred Marsh.....	July 9	1,500
Charlevoix county:				
Walloon Lake.....	Melrose and Evangeline.....	J. W. Hunter.....	July 8	2,000
Walloon Lake.....	Melrose and Evangeline.....	J. W. Hunter.....	July 26	4,000
Lake Twenty-six.....	Marion.....	Dick O'Neill.....	June 29	3,000
South Arm Lake.....	South Arm.....	Carl Stroebel.....	June 29	7,000
Eaton county:				
Pine Lake.....	Walton.....	John A. Downer.....	July 21	750
Heart Lake.....	Sunfield.....	John Vieb.....	June 21	2,000
Lacey's Lake.....	Kalamo.....	E. R. Boyles.....	June 22	3,000
Narrow or Long Lake.....	Brookfield.....	Garry C. Fox.....	June 22	2,000
Tamarack Lake.....	Sunfield.....	Peter Chatfield.....	June 29	2,000
Emmet county:				
Arnitt's Lake.....	McKinley.....	G. H. Delsworth.....	June 26	2,000
Round Lake.....	Bear Creek.....	Henry Lindig.....	June 26	3,000
Genesee county:				
Long Lake.....	Fenton.....	Clifford A. Bishop.....	July 27	800
Long Lake.....	Fenton.....	Geo. F. Brown.....	July 27	1,000
Grand Traverse county:				
Barter Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Bass Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Blue Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Brewster Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Brewster Lake.....	Mayfield.....	Kingsley Sportsmen's Club.....	June 26	2,000
Bumfrey Lake.....	Mayfield.....	Kingsley Sportsmen's Club.....	June 26	2,000
Bumfrey Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Cedar Lake.....	Mayfield.....	Kingsley Sportsmen's Club.....	June 26	2,000
Eagle Lake.....	East Bay.....	Kingsley Sportsmen's Club.....	June 26	2,000
Hogslack Lake.....	Paradise.....	Kingsley Sportsmen's Club.....	June 26	2,000
Porter Lake.....	Mayfield.....	Kingsley Sportsmen's Club.....	June 26	2,000
Rennie Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Round Lake.....	Union.....	Kingsley Sportsmen's Club.....	June 26	2,000
Green Lake.....	Green Lake.....	W. Pennington.....	June 29	4,000
Silver Lake.....	Garfield and Blair.....	Wm. Saunders.....	June 29	4,000
Crooked Lake.....	Mayfield.....	Traverse City Rod & Gun Club.....	June 29	3,000
Spider Lake.....	East Bay.....	Traverse City Rod & Gun Club.....	June 29	6,000
Hillsdale county:				
Baw Beese Lake.....	Cambria.....	W. C. Kemp.....	July 8	1,000
Sand Lake.....	Hillsdale.....	W. C. Kemp.....	July 8	1,000
Hemlock Lake.....	Reading.....	H. E. Warner.....	July 8	750
Hamlen's Lake.....	Hillsdale.....	M. F. Morgan.....	July 8	750
Mallory Lake.....	Pittsford.....	L. J. Niblack.....	July 22	400
Laine Lake.....	Wright.....	L. W. Palmer.....	July 22	600
Ingham county:				
Pine Lake.....	Meridian.....	E. V. Chilson.....	July 10	750
Cedar River.....	Ingham.....	Wm. J. Brush.....	June 21	2,000
Jones Lake.....	Lansing.....	I. F. Hollister.....	June 21	4,000
Pine Lake.....	Meridian.....	E. V. Chilson.....	June 21	7,000
Ionia county:				
Long Lake.....	Orleans.....	W. F. Bricker.....	July 28	750
Jordan Lake.....	Odessa and Woodland.....	Fay Diamond.....	June 21	3,000
Church Lake.....	Campbell.....	E. A. Rising.....	June 21	2,000
Pedler Lake.....	Campbell.....	E. A. Rising.....	June 21	2,000
Huhn's Lake.....	Boston.....	John Wallington.....	June 25	2,000
Morrison Lake.....	Boston.....	John Wallington.....	June 25	2,000
Peck Lake.....	Berlin.....	John Wallington.....	June 25	2,000
Walter's Pond.....	Boston.....	John Wallington.....	June 25	2,000
Isabella county:				
Riley Lake.....	Nottawa.....	Robt. Hyslop.....	July 20	750
Seutt Lake.....	Nottawa.....	Robt. Hyslop.....	July 20	750
Hall's Lake.....	Broomfield.....	J. M. Swisher.....	Aug. 1	750

Large mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Jackson county:				
Tamarack Lake	Norvell	Chester R. Smith	1909. June 22	2,000
1908.				
Pleasant Lake	Henrietta	Chas. M. Norton	Aug. 18	800
Batteese Lake	Henrietta	M. L. Campbell	Aug. 18	600
Berry Lake	Henrietta	M. L. Campbell	Aug. 18	600
Peterson Lake	Summit	C. M. Brown	Aug. 18	800
Reynolds Lake	Concord	Max Grover	Aug. 18	1,000
Wolf Lake	Napoleon	H. B. Crozier	July 7	1,000
Stoney Lake	Napoleon	M. E. Russell	July 7	500
Fay Lake	Norvell	Wm. F. Walker	July 7	750
Sweezy Lake	Norvell	F. W. Schofield	July 7	750
Sutfin Lake	Liberty	Clifford Patch	July 8	750
Grand Lake	Liberty	George Daniels	July 8	500
Fox Lake	Hanover	A. B. Sanderson	July 10	500
Horsehoe Lake	Hanover	F. M. Kennedy	July 10	500
Mud Lake	Hanover	C. J. VanSchoick	July 10	750
Round Lake	Liberty	C. J. VanSchoick	July 10	750
Swan's Lake	Pulaski	Frank W. McKenzie	July 18	600
Artificial Lake	Jackson	Hon. W. W. Todd	July 18	400
Deep Lake	Waterloo	C. R. Smith	July 18	600
Kalamazoo county:				
Stoney Lake	Armenia	Conrad Hoffman	1909. June 25	3,000
Loeer Lake	Richland	Wm. Caywood	June 26	2,000
Middle Lake	Richland	Wm. Caywood	June 26	2,000
Sherman Lake	Ross	Wm. Caywood	June 26	2,000
Upper Three Lakes	Richland	Wm. Caywood	June 26	2,000
Kalkaska county:				
Perch Lake	Boardman	Geo. B. Wansey	June 26	2,000
Kent county:				
House's Lake	Plainfield	Chas. House	1908. Aug. 20	200
Pine Island Lake	Plainfield	C. H. Bissonette	July 19	600
Wabasis Lake	Oakfield	Geo. G. Crawford	July 28	500
Cranmore's Long Lake	Oakfield	Geo. G. Crawford	July 28	500
Pine Island Lake	Plainfield	F. E. Snyder	July 28	800
Thornapple River	Ada	Theo. Lanpert	July 2	2,000
1909.				
Truax Lake	Bowne	F. G. Hunt	June 21	2,000
Blue Lake	Oakfield	Wm. Chase	June 23	2,000
Pratt Lake	Lowell	M. E. Simpson	June 23	3,000
Nagle Lake	Vergennes	M. E. Simpson	June 23	3,000
Bostwick Lake	Canon	Bert Ramsdell	June 26	2,000
Pine Island Lake	Plainfield	Grand River Benefit Club	June 27	3,000
Indian Lake	Sparta and Algoma	A. J. Booram	June 29	2,000
Long Lake	Solon	C. S. Parks	June 29	3,000
Lake county:				
Cool Lake	Elk and North Range	Earl Fairbanks, M. D.	1908. Aug. 20	500
1909.				
Wolf Lake	Webber	Harley Bartlett	June 24	4,000
Jinks Lake	Pleasant Plains	J. J. Alderson	June 29	2,000
Lincoln Lake	Lake	Geo. M. Brown	June 29	3,000
Hammond Lake	Pleasant Plains	Wm. Clark	June 29	2,000
Crandle Lake	Pleasant Plains	H. W. Davis	June 29	2,000
Twin Lakes	Pleasant Plains	H. W. Davis	June 29	2,000
Cool Lake	Elk and North Range	Dr. Earl Fairbanks	June 29	3,000
Elbow Lake	Elk	Robert Fuchs	June 29	2,000
Harbor Lake	Elk	Robert Fuchs	June 29	3,000
Sable Lakes	Elk	Wm. Utter	June 29	4,000
Lapeer county:				
1908.				
Davison Lake	Hadley	Alonzo Baldwin	Aug. 4	600
Big Fish Lake	Hadley	Alonzo Baldwin	Aug. 4	600
Hemingway's Lake	Hadley	Pearl Green	Aug. 4	450
Hart's Lake	Marathon	J. C. Mason	Aug. 4	300
Peck's Lake	Attica	Mel Edwards	Aug. 13	800
Bass Lake	Arcadia	George M. Bowen	Aug. 13	800
Rose Lake	Arcadia	A. D. Conley	Aug. 13	400
Goodrich Lake	Arcadia	A. D. Conley	Aug. 13	800
Elk Lake	Attica	John H. Brewer	Aug. 13	800
Leelanau county:				
North and South Bar Lakes	Empire	E. R. Dailey	Sept. 18	200
Wells Lake	Kasson	E. R. Dailey	Sept. 18	500
Glen Lake	Glen Arbor	D. H. Dav.	Sept. 18	600
South and North Bar Lakes	Empire	E. R. Dailey	Sept. 18	300

Large mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Lenawee county:				
Evans Lake.....	Franklin.....	Geo. DePuy.....	July 7	750
Allen's Lake.....	Cambridge.....	E. D. Kerr.....	July 10	500
Wolf Lake.....	Cambridge and Norvell.....	E. D. Kerr.....	July 10	750
Wampler's Lake.....	Cambridge.....	W. W. Crabbs.....	July 10	1,250
Sand Lake.....	Franklin.....	C. L. Gates.....	July 10	1,000
Dewey Lake.....	Medina.....	Jas. B. Thorn.....	July 22	400
Poesy Lake.....	Hudson and Rollin.....	H. W. Hoban.....	July 22	400
Horseshoe Lake.....	Rollin.....	Wm. Pomeroy.....	July 22	400
Silver Lake.....	Woodstock.....	W. H. Harris.....	July 22	600
Round Lake.....	Rollin.....	W. E. Alchin.....	July 22	600
Devil's Lake.....	Rollin and Woodstock.....	W. J. Hampton & Son.....	July 22	1,000
Brownell's Lake.....	Rollin.....	Fred A. Binns.....	July 22	400
Ames Millpond.....	Hudson.....	E. W. Ames.....	June 28	6,000
Brownell's Lake.....	Rollin.....	Fred A. Binns.....	June 28	6,000
Bowen's Millpond.....	Rollin.....	F. W. Bowen.....	June 28	6,000
Poesy Lake.....	Hudson and Rollin.....	Simon Bettinger.....	June 28	7,500
Bear Lake.....	Hudson.....	James B. Thorn.....	June 28	6,000
Jewell's Lake.....	Medina.....	James B. Thorn.....	June 28	6,000
Livingston county:				
Sharp Lake.....	Genoa.....	A. Sharp & Sons.....	1908. Aug. 7	800
Crooked or Wingar Lake.....	Genoa.....	A. Sharp & Sons.....	Aug. 7	800
Macomb county:				
East's Pond.....	Bruce.....	H. W. Bradley.....	1909. June 29	6,000
Knowland's Pond.....	Bruce.....	H. W. Bradley.....	June 29	6,000
Cusie Lake.....	Washington.....	H. W. Bradley.....	1908. Aug. 6	600
Manistee county:				
Grass Lake.....	Stronach.....	A. R. Atherton.....	1909. June 29	2,000
Crystal Lake.....	Stronach.....	A. R. Atherton.....	June 29	2,000
Elhora Lake.....	Dickson.....	J. A. Dunsen.....	June 29	2,000
Lumley Pond.....	Pleasanton.....	Wm. Lumley.....	June 29	2,000
Mason county:				
Bass Lake.....	Summit.....	Geo. McKee.....	1909. June 28	2,000
North Ore Bow Lake.....	Riverton.....	D. S. Botka.....	June 29	2,000
Lost Lake.....	Eden.....	Jeff Grihn.....	June 29	2,000
Crystal Lake.....	Amherst.....	H. Sundberg.....	June 29	3,000
Havlin Lake.....	Hamlin and Victory.....	O. J. Wangen.....	June 29	4,000
Meosco county:				
Town Line Lake.....	Calfax.....	W. T. Dodge.....	June 26	2,000
Mud Lake.....	Calfax.....	E. D. Nudrott.....	June 26	2,000
Doyle's Lake.....	Actna.....	Lewis Reames.....	June 26	2,000
Bissell's Lake.....	Hinton.....	C. W. Vining.....	1908. July 27	750
Pretty Lake.....	Martiny.....	E. C. Lewis.....	July 30	400
Horseshoe Lake.....	Martiny.....	L. H. Porev.....	Aug. 1	1,000
School Section Lake.....	Morton.....	Frank Shaler.....	Aug. 1	1,000
Pine Lake.....	Wheatland.....	P. J. Theison.....	Aug. 1	750
Misaukeee county:				
Misaukeee Lake.....	Lake and Reeder.....	F. D. McGregor.....	1909. June 26	3,000
Sapphire Lake.....	Lake.....	Lem Proctor.....	June 26	3,000
Dyer Lake.....	Caldwell.....	Geo. W. Wood.....	June 26	2,000
Monroe county:				
River Basin.....	Monroe.....	T. R. Navarre.....	1908. July 27	1,000
Montcalm county:				
Bass Lake.....	Bellevue.....	C. W. Vining.....	1908. July 27	750
Baldwin Lake.....	Eureka.....	Chas. B. Rarden.....	July 28	750
Turk Lake.....	Montcalm.....	E. A. Kemp.....	July 27	900
Blind Lake.....	Pierson.....	J. A. Collins.....	1909. June 21	3,000
Eddy Lake.....	Pierson.....	W. H. Collins.....	June 21	3,000
Town Line Lake.....	Winfield and Maple Valley.....	A. M. Cook.....	June 21	4,000
Bass Lake.....	Pierson.....	W. H. Lovely.....	June 21	2,000
Little Whitefish Lake.....	Pierson.....	J. Odell Nelson.....	June 21	2,000
Burley Lake.....	Reynolds.....	Dr. H. N. VanDenbergh.....	June 21	3,000
Derby Lake.....	Sibley.....	E. O. Bellows.....	June 23	2,000
Hunts Lake.....	Pine.....	Geo. C. Bower.....	June 23	3,000
Cedar Lake.....	Home.....	F. E. Curtis.....	June 23	2,000

NINETEENTH REPORT—STATE FISHERIES.

Large mouth black bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Montcalm county.—Continued:				
Long Lake.....	Douglas and Belvedere.	F. E. Curtis.....	June 23	3,000
Marl Lake.....	Richland.	F. E. Curtis.....	June 23	2,000
Rock Lake.....	Richland.	F. E. Curtis.....	June 23	2,000
Bass Lake.....	Richland.	Henry C. Curtis.....	June 23	3,000
Turk Lake.....	Montcalm.	E. A. Mason.....	June 23	3,000
Perch Lake.....	Montcalm.	Byron C. Tower.....	June 23	2,000
Muskegon county:				
East Twin Lake.....	Dalton.	Robt. Furman.....	June 22	2,000
Fax Lake.....	Blue Lake.	S. P. Murphy.....	June 22	2,000
Little Blue Lake.....	Blue Lake.	S. P. Murphy.....	June 22	2,000
Clear Lake.....	Cedar Creek.	Herman O'Connor.....	June 22	2,000
Duck Lake.....	Cedar Creek.	H. A. O'Connor.....	1909.	
Mud Lake.....	Cedar Creek.	H. A. O'Connor.....	June 22	2,000
Round Lake.....	Blue Lake.	H. O'Connor.....	June 22	2,000
Goose Egg Lake.....	Dalton.	C. H. Watkins.....	June 22	2,000
Wallace Lake, Lakes Minne, Eleanor and Antoinette.....	Dalton.	T. O. Wallace.....	June 22	4,000
Crawford Lake.....	Blue Lake.	Wm. Scovill.....	June 22	2,000
Deer Lake.....	Holton.	Edward Willard.....	June 22	2,000
Little Blue Lake and River.....	Blue Lake.	L. Kreutinger.....	June 28	3,000
Fox Lake.....	Dalton.	E. F. Weinemiller.....	June 28	2,000
Newaygo county:				
Lake Evans.....	Dayton.....	H. C. Buck.....	1908. July 16	750
Englelight Lake.....	Ensley.....	Fred A. Grigsby.....	1909. June 21	3,000
Conover Lake.....	Ensley.....	F. E. Shattuck.....	June 21	3,000
Blue Lake.....	Monroe.....	Paul VanAssen.....	June 26	3,000
Oakland county:				
Harris Lake.....	Springfield.	Geo. H. Harris.....	1908. Aug. 25	250
Cass Lake.....	Waterford and Oakland.	Mich. Fish Com'n.....	Oct. 28	1,200
Loon Lake.....	Waterford.	Mich. Fish Com'n.....	Oct. 28	1,000
Park Lake.....	Independence.	J. D. Ogden.....	July 18	1,000
Maceday Lake.....	Waterford.	H. O. Whitfield.....	July 21	800
Green Lake.....	West Bloomfield.	A. McCallum.....	July 23	800
Orchard Lake.....	West Bloomfield.	F. R. Campbell.....	July 23	800
Upper Straits Lake.....	West Bloomfield.	Chas. J. Crickmore.....	July 23	900
Lake Orion.....	Orion.	John Winter.....	Aug. 4	1,200
Loon Lake.....	Waterford.	R. G. Shaw.....	Aug. 4	4,000
Woodhill Lake.....	Independence.	Mich. Fish Com'n.....	Aug. 4	1,400
Watkins Lake.....	Waterford.	Mich. Fish Com'n.....	Aug. 13	600
Pine Lake.....	Independence.	Wm. F. Wild.....	Aug. 6	750
Big Crosby Lake.....	West Bloomfield.	R. E. Joeman.....	Aug. 7	500
Little Crosby Lake.....	Independence.	R. E. Joeman.....	Aug. 7	500
Pine Lake.....	West Bloomfield.	Geo. L. McGregor.....	Aug. 17	800
Green Lake.....	Independence.....	C. C. Craigie.....	June 23	10,000
Huntoon Lake.....	Waterford.....	C. C. Craigie.....	June 23	8,000
Lotus Lake.....	Waterford.....	C. C. Craigie.....	June 23	8,000
Maceday Lake.....	Waterford.....	C. C. Craigie.....	June 23	8,000
Waterford Lake.....	Independence and Waterford.	C. C. Craigie.....	June 23	8,000
Mountain View Lake.....	Oakland.....	A. McCullom.....	June 23	8,000
Watkins Lake.....	Waterford.....	R. F. Monroe.....	June 23	9,000
Orchard Lake.....	West Bloomfield.....	F. S. Campbell.....	June 29	9,000
Green Lake.....	Bloomfield.....	K. C. Lorman.....	June 29	6,000
Oceana county:				
Lost Lake.....	Greenwood.....	N. J. Knapp.....	June 22	2,000
Horseshoe Lake.....	Greenwood.....	Geo. Morrison.....	June 22	2,000
Osceola county:				
Diamond Lake.....	Burdette.....	Hon. J. M. Perry.....	June 26	2,000
Otsego county:				
Martin Lake.....	Elmira.....	Ernest Pettifor.....	June 26	3,000
Ottawa county:				
Black Lake or Mecatawa Bay.....	Holland.....	A. G. Tanner.....	1908. July 15	1,000
Crockery Lake.....	Chester.....	Dr. E. O. Cilley.....	1909. June 28	3,000

NINETEENTH REPORT—STATE FISHERIES.

Large mouth black bass plants, 1899.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
St. Joseph county:				
Long Lake.....	Colon.....	J. K. Farrand and A. J. Born	June 22	3,000
Palmer Lake.....	Colon.....	J. K. Farrand and A. J. Born	June 22	3,000
Sturgeon Lake.....	Colon.....	J. K. Farrand and A. J. Born	June 22	3,000
Saginaw county:				
Shiawassee River.....	Chesaning.....	A. V. Cantwell.....	1908. Aug. 11	1,000
Tuscola county:				
Frisbie's Millpond.....	Dayton.....	E. L. Shram.....	July 27	600
Phelps Lake.....	Dayton.....	J. W. Shermehorn.....	July 27	600
Phelps Lake.....	Dayton.....	W. W. Mitchell.....	July 27	600
Harmou Lake.....	Dayton.....	E. D. Cartwright.....	July 27	600
Cat Lake.....	Dayton.....	Wm. Leach.....	July 27	800
VanBuren county:				
Christie Lake.....	Lawrence.....	D. C. Gerow.....	1909. June 24	2,000
Bankson Lake.....	Porter.....	M. A. Quimlan.....	June 24	2,000
Pickrel Lake.....	Deatur.....	F. C. Stapleton.....	June 24	2,000
Knickerbocker Lake.....	Hamilton.....	Chas. Zimmerman.....	June 24	2,000
Poppendie Lake.....	Paw Paw.....	Chas. Zimmerman.....	June 24	2,000
1908.				
Saddle Lake.....	Columbia.....	A. B. Lyster.....	July 18	600
Moon Lake.....	Geneva.....	J. T. Tolles.....	July 18	750
Maple Lake.....	Paw Paw and Antwerp.....	H. T. McNeil.....	July 29	750
Chrisler Lake.....	Lawrence.....	Chas. Dane.....	Sept. 3	375
Taylor's Lake.....	Lawrence.....	Chas. Dane.....	Sept. 3	375
Halls Lake.....	Lawrence.....	Jas. L. Welch.....	Sept. 3	375
Carroll's Lake.....	Arlington.....	Jas. L. Welch.....	Sept. 3	375
Brandywine Lake.....	Line Grove.....	Carl Reise.....	Sept. 3	500
Washtenaw county:				
Arnold's Lake.....	Lodi.....	Geo. Barkhart.....	July 8	750
Little Portage Lake.....	Dexter.....	Hon. C. W. Newkirk.....	July 18	800
Silver Lake.....	Dexter.....	B. E. Reynolds.....	July 18	600
Wayne county:				
Pond, no name.....	Springwells.....	Chas. Daniel.....	Aug. 1	1,000
Coomer Lake.....	VanBuren.....	A. E. Smith.....	Aug. 7	1,000
Huron River.....	VanBuren.....	A. E. Smith.....	Aug. 7	1,000
Total.....				61,550

WARMOUTH BASS PLANTS.

YEARLINGS.

For the fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Allegan county:				
Salem Millpond.....	Salem.....	Philip Lenard.....	1908. July 10	750
Spring Beach Lake.....	Lee.....	S. E. Phillips.....	July 29	600
Barry county:				
Saddlebag Lake.....	Woodland and Sunfield.....	S. C. McIntyre.....	July 1	900
Lake Twenty-one.....	Hope.....	W. J. Kealey.....	July 1	750
Mud Lake.....	Barry.....	W. J. Kealey.....	July 1	1,050
Lower Crooked Lake.....	Prairieville.....	W. J. Kealey.....	July 1	1,200
Ellis Lake.....	Assyria.....	F. M. Quick.....	July 6	750
Mud Lake.....	Johnstown.....	Thos. Thorne.....	July 10	750
Berrien county:				
Little Indian Lake.....	Berrien.....	Otto Radewald.....	July 17	750
Dayton Lake.....	Bertrand.....	Leo R. Arnold.....	July 18	750
Harris Lake.....	Hagar.....	E. A. Lyon.....	July 18	750
Hibbard Lake.....	Hagar.....	E. A. Lyon.....	July 29	600
Calhoun county:				
Shedd South Lake.....	Tekonsha.....	Henry Phelps.....	July 9	600
Bear Lake.....	Marshall.....	M. N. Ryder.....	July 18	750
Cass county:				
South Part of Goose Lake.....	Jefferson.....	Thos. T. Higgins.....	July 6	750
Wetherbee Lake.....	Newberg.....	Fred Marsh.....	July 9	750
Golf Lake.....	Marcellus.....	Bryce J. Bailey.....	July 31	900
Eaton county:				
Sobby Lake.....	Sunfield.....	C. M. Putnam.....	July 6	750
Ingham county:				
Pine Lake.....	Meridian.....	Chas. P. Downey.....	July 10	750
Ionia county:				
Kindelville Pond.....	Otisco.....	Chas. Madden.....	July 28	600
Long Lake.....	Orleans.....	Frank J. Hall.....	July 30	750
Electric Light Pond.....	Portland.....	C. A. Moore.....	Aug. 5	600
Woodland lake.....	Ronald.....	Fank Allen.....	Aug. 6	900
Huhn's pond.....	Boston.....	John Wallington.....	Aug. 6	750
Hull's lake.....	Keene.....	John Wallington.....	Aug. 6	750
Crane's pond.....	Berlin.....	John Wallington.....	Aug. 6	750
Peck lake.....	Berlin.....	John Wallington.....	Aug. 6	750
Morrison Lake.....	Boston.....	John Wallington.....	Aug. 7	750
Walter's Pond.....	Boston.....	John Wallington.....	Aug. 7	750
Tucker's Lake.....	Boston.....	John Wallington.....	Aug. 7	750
Mud or Young's Lake.....	Berlin.....	John Wallington.....	Aug. 7	750
Isabella county:				
Weidman Millpond.....	Sherman.....	F. Clark.....	Aug. 1	750
Eldred Lake.....	Broomfield.....	J. M. Swisher.....	Aug. 1	600
Jackson county:				
Brill's Lake.....	Leoni.....	Geo. E. Beebe.....	July 7	750
Wolf Lake.....	Napoleon.....	Geo. E. Beebe.....	July 7	750
Ackerson Lake.....	Napoleon.....	Geo. E. Beebe.....	July 7	750
Mich. Center Millpond.....	Leoni.....	Geo. E. Beebe.....	July 7	750
Portage Lake.....	Leoni and Waterloo.....	Geo. E. Beebe.....	July 7	750
Tompkins Millpond.....	Tompkins.....	Harry L. Woodard.....	July 7	750
Kalamazoo county:				
Rawson Lake.....	Schoderaft.....	Thos. Hewitt.....	July 6	750
Tub or North Grove Lake.....	Schoderaft.....	M. N. Grimes.....	July 6	750
Black and Tub Lakes.....	Schoderaft.....	M. N. Grimes.....	July 21	900
Howard Lake.....	Schoderaft.....	Perry W. Ballinger.....	July 21	900
Kalkaska county:				
Crawford Lake.....	Excelsior.....	Thomas Rice.....	July 8	750
Buss Lake.....	Orange.....	Paul Seiting.....	July 8	750

Warmouth bass plants, 1909.—Continued.

County and name of waters.	Township.	Applicant.	Date.	Number.
Kent county:				
Black Lake.....	Solon.....	Elliott Stone.....	July 2	750
Mud Lake.....	Solon.....	Elliott Stone.....	July 2	750
Reed's and Fisk Lakes.....	Grand Rapids.....	L. J. DeLamarter.....	July 2	1,600
Ziegenfuss Lake.....	Oakfield.....	C. G. Keeler.....	July 11	750
Crandall's Lake.....	Solon.....	Earl Rasco.....	July 11	750
Bass Lake.....	Spencer.....	Ellwood Madsen.....	July 11	750
Scram Lake.....	Oakfield.....	Freeman Addis.....	July 11	750
Haakius Lake.....	Algoma.....	E. W. Pratt.....	July 11	750
Horton Lake.....	Spencer and Montcalm.....	R. M. Vanderlip.....	July 27	450
Emmons Lake.....	Grattan.....	Sumner H. Wilson.....	July 28	600
Pond's Lake.....	Oakfield.....	Geo. C. Crawford.....	July 28	600
Bostwick Lake.....	Cannon.....	Bert Ramsdell.....	Aug. 19	750
Lake county:				
Big Bass Lake.....	Elk.....	William P. Jones.....	July 6	750
Mecosta county:				
Millbrook Pond.....	Millbrook.....	T. O. Pattison.....	July 20	1,200
Evans Lake.....	Chippewa and Martiny.....	E. N. Sweet.....	July 20	750
Long Lake.....	Chippewa.....	Albert Osser.....	July 30	600
Pretty Lake.....	Martiny.....	E. C. Lewis.....	July 30	600
Lake Twenty-eight.....	Sheridan.....	R. P. Swisher.....	July 30	600
Montcalm county:				
Whitefish Lake.....	Pierson.....	B. S. Davenport.....	July 2	750
Horseshoe Lake.....	Belvidere.....	Jos. Kimmell.....	July 27	450
Fifth Lake.....	Belvidere.....	Mrs. B. F. Randall.....	July 26	450
Little Brimmer Lake.....	Cato.....	C. W. Vining.....	July 27	750
Big Brimmer Lake.....	Cato.....	C. W. Vining.....	July 27	750
Gilmore Lake.....	Fairplains.....	J. E. Wilson.....	July 28	600
Snow's Lake.....	Bushnell.....	R. E. Steiner.....	Aug. 5	600
Derby Lake.....	Sidney.....	E. O. Bellows.....	Aug. 5	600
Clear Lake.....	Fairplains.....	Benj. Hall.....	Aug. 5	600
Horseshoe Lake.....	Fairplains.....	E. E. Brown.....	Aug. 5	900
Muskegon county:				
Deer Lake.....	Holton.....	Edward Willard.....	July 25	1,500
Big Blue Lake.....	Blue Lake.....	Hon. Fred Russell.....	Aug. 5 1909	1,500
Fox Lake.....	Dalton.....	E. F. Winemiller.....	June 28	750
Newaygo county:				
Lost Lake.....	Monroe.....	A. S. Carpenter.....	July 15	600
McClaren Lake.....	Newfield.....	Frank Utley.....	July 16	600
Keims Lake.....	Denver.....	Frank Utley.....	July 16	600
Mountain Hill Lake.....	Denver.....	Frank Utley.....	July 16	600
Blanch Lake.....	Ashland.....	Allen J. Titus.....	July 21	900
Ottawa county:				
Black Lake or Mecatawa Bay.....	Holland.....	A. G. Tanner.....	July 15	600
St. Joseph county:				
Mud Lake.....	Fabius.....	Frank A. Stearns.....	July 17	750
Little Pleasant Lake.....	Fabius.....	Frank A. Stearns.....	July 17	600
VanBuren county:				
North Lake.....	Columbia.....	Chas. Jensch and W. F. Everest.....	July 29	600
Mensen Lake.....	Columbia.....	Chas. Jensch and W. F. Everest.....	July 29	600
Maple Lake.....	Paw Paw and Antwerp.....	H. L. McNeil.....	July 29	600
Total.....				65,350

PERCH PLANTS.

FRY.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Antrim county: Central or Intermediate Lake.....	Central Lake and Forest Home.....	O. P. Barber.....	May 27	240,000
Barry county: Carter Lake.....	Hastings.....	Drs. Mixer.....	May 25	80,000
Dowd Lake.....	Rutland.....	Drs. Mixer.....	May 25	80,000
Leach Lake.....	Carlton.....	Drs. Mixer.....	May 25	80,000
Middle Lake.....	Carlton.....	Drs. Mixer.....	May 25	80,000
Otis Lake.....	Rutland.....	Drs. Mixer.....	May 25	80,000
Podunk Lake.....	Rutland.....	Drs. Mixer.....	May 25	80,000
Kilpatrick Lake.....	Woodland.....	C. M. Putnam.....	May 29	80,000
Ellis Lake.....	Assyria.....	F. M. Quick.....	May 29	80,000
Thornapple River.....	Castleton.....	Thomas Teeple.....	May 29	120,000
Eaton county: Saubby Lake.....	Sunfield.....	C. M. Putnam.....	May 29	80,000
Grand River.....	Hamlin.....	C. A. Sprinkle.....	May 29	80,000
Grand River Pond.....	Eaton Rapids.....	G. E. LaFever.....	May 29	120,000
Grand River.....	Eaton Rapids.....	G. E. LaFever.....	May 29	120,000
Emmet county: Round Lake.....	Bear Creek.....	Henry Lindig.....	May 27	120,000
Kent county: Reeds and Fisk Lakes.....	Grand Rapids.....	L. J. DeLamarter.....	May 29	240,000
Lake county: Putnam and Little Star Lakes.....	Webber.....	H. W. Davis.....	May 26	120,000
Newaygo county: Hess Lake.....	Brooks.....	H. S. Thompson.....	May 26	120,000
Oceana county: Round Lake.....	Golden.....	F. A. Gasahl.....	May 28	120,000
Silver Lake.....	Golden.....	F. A. Gasahl.....	May 28	160,000
Morris Lake.....	Golden.....	C. L. Gold.....	May 28	120,000
Homer Lake.....	Benona.....	C. E. Merchant.....	May 28	120,000
Oceola county: Diamond Lake.....	Burdette.....	Hon. J. M. Perry.....	May 24	120,000
Ottawa county: Spring Lake.....	Spring Lake.....	Samuel Falls.....	May 28	80,000
Total.....				2,720,000

NINETEENTH REPORT—STATE FISHERIES.

PERCH PLANTS.

FINGERLINGS NOS. 1, 2 AND 3.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Cass county: Slab Lake.....	Jefferson.....	F. C. Gardner.....	1908. July 17	750
Genesee county: Pine Lake.....	Fenton.....	H. R. VanWagoner.....	July 9	675
Ingham county: No Name.....		C. M. Norton.....	Aug. 18	300
Ionia county: Long Lake.....	Orleans.....	Frank J. Hall.....	July 30	200
Lake county: Lincoln Lake.....	Elk.....	Geo. M. Brown.....	July 17	1,250
Lenawee county: Devil's Lake.....	Rollin and Woodstock.....	W. J. Hampton.....	July 22	1,000
Livingston county: Coon Lake.....	Marion.....	A. Sharp & Sons.....	Aug. 7	500
Muskegon county: Wolf Lake.....	Eggleston.....	W. W. Hilton.....	Aug. 19	500
Newaygo county: Blanch Lake.....	Ashland.....	Allen J. Titus.....	July 21	400
Oakland county: Lake Orion.....	Orion.....	Delbert C. James.....	Aug. 4	600
Loon Lake.....	Waterford.....	Michigan Fish Com'n.....	Oct. 28	1,000
St. Joseph county: St. Joseph River.....	Constantine and others.....	Wallace N. Harvey.....	July 20	1,000
Total.....				8,175

PERCH PLANTS.

ADULTS.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oakland county: Big Lake, head of Huron River.....	Springfield.....	James Hubbard.....	1908, July 22	100

BLUEGILL PLANTS.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Ingham county: No Name.....		C. M. Norton.....	1908, Aug. 18	400
Oakland county: Loon Lake.....	Waterford.....	Mich. Fish Commission.....	Oct. 28	300
Total.....				700

SUNFISH PLANTS.

YEARLINGS AND FINGERLINGS.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Ingham county: No Name.....		C. M. Norton.....	1908, Aug. 18	300

GRASS PIKE PLANTS.

Fiscal year ending June 30, 1909.

County and name of waters.	Township.	Applicant.	Date.	Number.
Oakland county: Loon Lake.....	Waterford.....	Michigan Fish Commission.....	1908, Oct. 28	600

BROOK TROUT PLANTS.

FRY.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alcona county:			1910	
Black River	Alcona	C. W. Luce, East Tawas	April 12	10,000
Black River	Harrisville, Haynes and Alcona	F. J. Elmer, Harrisville	April 12	6,000
Little South Branch of Black River	Harrisville, Alcona and Haynes	George Burr, Harrisville	April 12	6,000
Little North Branch	Sevel	W. A. Blackburn, Alpena	April 12	3,000
Mill Creek	Harrisville	A. L. Noyes, Harrisville	April 12	1,000
McKnight Creek	Saveras	Edward R. Wyman, Alpena	April 12	2,000
Mitchell Creek	Mitchell	Chase Benjamin Club, Alpena	April 12	2,000
Muskat Creek	Milten	Richard Collins, Alpena	April 12	4,500
Silver Creek	Caledonia	D. D. Hancock, Alpena	April 12	4,000
Buff Creek	Hawes	D. Lavier, Lincoln	April 12	4,000
Pine River	Hawes	D. Lavier, Lincoln	April 12	4,000
Sucker Creek	Milten and Hawes	D. Lavier, Lincoln	April 12	4,000
Sucker Creek	27 N. R. 8 E.	W. S. Linton, Saginaw	April 12	10,000
West Branch	27 N. R. 6 and 7 E.	W. S. Linton, Saginaw	April 12	8,000
West Branch	Hawes	John Macgregor, Harrisville	April 12	4,000
Venetien Creek	Mikado	C. E. Lovelace, Mikado	April 12	8,000
Wildcat Creek	Caledonia	J. Briggs, Alpena	April 12	2,000
Newton Creek	Curtis	W. W. Edwards, Alpena	April 12	2,000
Barnfield or Nine-Mile Creek	Clinton and Mitchell	Wm. Ellis, Au Sable	April 13	4,500
Lower South Branch of Pine River	Mitchell	Wm. Ellis, Au Sable	April 13	2,000
McGinn Creek	Mitchell	S. K. McCallum, Comins	April 13	2,000
Silver Creek	Mitchell	John A. Fattée, Curran	April 13	2,000
The Little Wolf	Mitchell	F. H. Loud, Au Sable	April 13	2,000
Spring Brook				
Alger county:				
Dexter Creek	Mathias	G. M. Mills, Trenary	April 22	3,000
Scott Creek	Mathias	G. M. Mills, Trenary	April 22	4,500
Stony Creek	Mathias and West Limestone	G. M. Mills, Trenary	April 22	1,500
Au Train River	Rock River	H. R. Harris, Marquette	May 3	6,500
Slapneck Creek	Rock River	H. R. Harris, Marquette	May 3	4,500
Anna River	Munising	H. A. St. John, Marquette	May 3	3,000
Bohemian Creek	Munising	H. A. St. John, Marquette	May 3	1,500
Branches of North Manistique River	Sevel	H. A. St. John, Marquette	May 3	4,500
Buck Creek	Munising	H. A. St. John, Marquette	May 3	1,500
Furnace Creek	Munising	H. A. St. John, Marquette	May 3	3,000
Miner's River	Munising	H. A. St. John, Marquette	May 3	3,000
Stout's Creek	Munising	H. A. St. John, Marquette	May 3	3,000
Cold Spring and Creek	Au Train	W. F. Cox, Wetmore	May 11	4,000
Big Indian Creek and tributaries	Au Train	F. S. Case, Wetmore	May 11	12,000
Robinson's Creek	Munising	F. S. Case, Wetmore	May 11	6,000
Squaw Creek	Munising	F. S. Case, Wetmore	May 11	6,000

Inlet to Grand Marais Lake	Burt	L. W. Nettleton, Grand Marais	May 11	4,000
Sucker River	Burt	T. J. McGinn, Grand Marais	May 11	12,000
West Branch of Sucker River	Burt	L. Williams, Grand Marais	May 11	10,000
Allegan county:				
Mann's Creek	Manlius	C. L. Fostick, Fennville	Mar. 7	3,000
Chart, Abrams, Delano and Neeley Creeks	Gun Plains	Ed. J. Anderson, Plainwell	Mar. 17	4,000
Bear Creek	Heath and Monterey	C. P. Stron, Allegan	Mar. 17	5,000
Dowd's Creek	Heath and Monterey	C. E. Bond, Allegan	Mar. 17	4,000
Silver Creek	Silver Creek	O. C. Rice, Kalamazoo	Mar. 17	3,000
Silver Creek	Gun Plains	Wm. Crisp, Plainwell	Mar. 17	2,000
Webster Creek	Gun Plains	R. L. Soule, Plainwell	Mar. 17	1,000
Branch of Black River	Casco	A. C. Hunt, South Haven	April 7	1,000
Alpena county:				
Beurlinski Creek	Sanborn and Ossineke	R. E. Ellsworth, Alpena	April 12	3,000
Beaver Creek	Ossineke	C. W. Jure, East Tawas	April 12	10,500
Bean Creek	Green	Fred Ward, Spratt	April 12	6,000
Devil River	Sanborn	J. E. Sanborn, Ossineke	April 12	8,000
Upper South Branch	Several	Dr. W. E. Carr, Alpena	April 12	9,000
Scott Creek	Ossineke	Chase Benjamin Gum Club, Alpena	April 12	2,000
North Branch Thunder Bay River	Maple Ridge	Frank DeLong, Cathro	April 12	6,000
Trout Creek	Alpena	W. E. Rogers, Alpena	April 12	1,000
Antrim county:				
Cascade Creek, Racket River, tributaries, Jordan River	Chestonia	R. C. Bennett, Alba	Mar. 29	4,000
Jordan River	Chestonia	F. M. Parker, Alba	Mar. 29	4,000
Landslide Creek	Chestonia	A. A. Strickland, Alba	Mar. 29	2,000
Racket River	Chestonia	D. H. Meeker, Alba	Mar. 29	2,000
Finch and Saloon Creeks	Custer and Helena	C. L. Bailey, Mancelona	Mar. 31	4,000
Cold Creek	Custer	A. C. Fenn, Mancelona	Mar. 31	2,000
Jordan River	Chestonia and Jordan	A. C. Fenn, Mancelona	Mar. 31	6,000
Bartholomew Creek	Echo	Carl Stroebel, E. Jordan	April 2	2,000
Jordan River	Several	Carl Stroebel, E. Jordan	April 2	6,000
Gould Creek	Jordan	H. S. Pinney, E. Jordan	April 2	2,000
Tributary of Intermediate River	Echo	A. La Valley, E. Jordan	April 2	2,000
Bosses Creek	Banks	H. Struick, Ellsworth	April 2	2,000
Noyes Creek	Banks	W. A. Boss, Ellsworth	April 2	1,000
Orr Creek	Banks and Marion	L. Van Skiver, Ellsworth	April 2	3,000
St. Clair Creek	Banks	L. Van Skiver, Ellsworth	April 2	2,000
Mitchell Creek	Milton	L. N. Spring, Elk Rapids	April 2	2,000
Petobago Creek	Whitewater	L. N. Spring, Elk Rapids	April 2	1,000
Paradise Creek	Milton	L. N. Spring, Elk Rapids	April 2	1,000
Burdick Creek	Central Lake	L. N. Spring, Elk Rapids	April 2	2,000
Morlman Creek	Central Lake	O. P. Barber, Central Lake	April 2	1,000
Town Line Creek	Central Lake	O. P. Barber, Central Lake	April 2	2,000
Ogletree Creek	Banks and Central Lake	Dr. L. M. Newman, Central Lake	April 2	2,000
Wilkinson Creek	Banks and Central Lake	W. F. Carpenter, Central Lake	April 2	2,000
Cedar River	Banks and Central Lake	W. S. Richardson, Central Lake	April 2	2,000
Cold Creek	Kearney and Chestonia	A. B. Wooton, Bellaire	April 2	5,000
Shanty Creek	Custer	A. B. Wooton, Bellaire	April 2	2,000
No Name	Forest Home	A. B. Wooton, Bellaire	April 2	1,000
Spencer Creek	Helena	Chas. H. Coy, Alden	April 2	3,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Arenac county:			1910.	
Big Creek	Mason, Arenac and Au Gres	C. D. Brooks, Omer	April 12	7,000
Dead Branch	Deep River and Arenac	C. D. Brooks, Omer	April 12	7,000
Town Line Creek	Clayton and Mason	C. D. Brooks, Omer	April 12	5,000
Hopie's Creek	Adams	Jas. R. Adams, Sterling	April 15	2,000
Pine River	Deep River and Arenac	Jas. R. Adams, Sterling	April 15	4,500
Steer's Creek	Deep River	Jas. R. Adams, Sterling	April 15	2,000
Omer, Cedar and Willis Creeks	Standish	F. Avery, Standish	April 15	6,000
Baraga county:				
Catal Creek	Spurr	P. Trudel, Jr., Negaunee	May 6	1,500
Cliff Creek	Spurr	P. Trudel, Jr., Negaunee	May 6	1,500
McDonald Creek	Spurr	P. Trudel, Jr., Negaunee	May 6	1,500
Ne-Sonia Creek	Spurr	P. Trudel, Jr., Negaunee	May 6	3,000
Outlet Three Lakes	Spurr	P. Trudel, Jr., Negaunee	May 6	1,500
Outlet Trout Lake	T. 48—34	E. W. MacPherran, Marquette	May 6	1,500
Branch Shurkoon River	T. 48—25	E. W. MacPherran, Marquette	May 6	4,500
Porch Creek	T. 48—34	E. W. MacPherran, Marquette	May 6	4,500
Streams about 247 1/2 Mile Post	T. 48—32	E. W. MacPherran, Marquette	May 6	15,000
Sidnaw Creek	Spurr	F. Percy, Michigamme	May 6	1,500
Clear Creek	Covington	Sidnaw H. and F. Club, Sidnaw	May 6	1,500
Kelsey Creek	Baraga	A. B. Cosgrove, Baraga	May 12	10,000
Cosgrove Creek	Baraga	J. Robillard, Baraga	May 12	2,000
Clear Creek	Baraga	Robt. F. Kent, Baraga	May 12	4,000
Carp River	Baraga	J. A. Cochran, Baraga	May 12	4,000
Gallagher Creek	Baraga	J. A. Cochran, Baraga	May 12	4,000
Pine Creek	Baraga	J. A. Cochran, Baraga	May 12	4,000
Hershey Creek	Baraga	Jos. Getzen, Baraga	May 12	2,000
Six Mile Creek	Baraga	Jos. Getzen, Baraga	May 12	4,000
Plumbago Creek	Baraga	Sol Lajvek, Baraga	May 12	2,000
West Branch	Baraga	Wm. C. Birk, Baraga	May 12	4,000
Barry county:				
Crookson Creek	Yankee Springs	C. D. Bauer, Hastings	Mar. 11	2,000
Tributary to Glass Creek	Hope and Rutland	C. D. Bauer, Hastings	Mar. 11	3,000
Fall Creek	Several	F. H. Barlow, Hastings	Mar. 11	4,000
Hill Creek	Yankee Springs	J. H. Neils, Hastings	Mar. 11	2,000
Tributary to Cedar Creek	Hope and Baltimore	J. H. Neils, Hastings	Mar. 11	4,000
Cedar Creek	Barry, Cedar Creek, Baltimore and Hastings	W. J. Michael, Hastings	Mar. 11	7,000
Last Chance Creek	Yankee Springs and Thornapple	W. J. Michael, Hastings	Mar. 11	3,000
Mitchell Brook	Irving and Rutland	W. J. Michael, Hastings	Mar. 11	2,000
Smith or Irving Brook and Travis Brook	Travis	W. J. Michael, Hastings	Mar. 11	2,000
Kelly Creek	Baltimore	C. W. Miner, Hastings	Mar. 11	2,000
McCollum Creek	Hope	C. W. Miner, Hastings	Mar. 11	2,000
Tamarac Creek	Baltimore	C. W. Miner, Hastings	Mar. 11	2,000

Upper Cedar Creek	Baltimore	Hope, Rutland, Yankee Springs and Thornapple	C. W. Mixer, Hastings	Mar. 11	4,000
West Creek	Rutledge and Hastings		C. W. Mixer, Hastings	Mar. 11	2,000
Power's Creek	Irving		C. H. Osborn, Hastings	Mar. 11	1,000
Murry Creek	Baltimore		C. H. Osborn, Hastings	Mar. 11	1,000
Glass Creek	Hope		Dougal Campbell, Cloverdale	Mar. 15	3,000
Tributary of Gull Lake	Prairieville		Otto Natzal, Shultz	Mar. 15	2,000
Crooked Creek	Assyria		Arch Sootman, Cressy Creek	Mar. 15	1,000
Hamilton Brook	Assyria		F. H. Skinner, Battle Creek	Mar. 15	2,000
Ellis Creek	Assyria		L. H. Sabin, Battle Creek	Mar. 15	1,000
No Name	Prairieville		V. E. Bush, Battle Creek	Mar. 15	1,000
Gull Creek	Prairieville		G. Van Bochove, Kalamazoo	Mar. 15	1,000
No Name	Prairieville		Dr. A. W. Crane, Kalamazoo	Mar. 17	3,000
Draper Creek	Orangeville		Dr. A. W. Crane, Kalamazoo	Mar. 17	3,000
Hough Creek	Orangeville		Frank E. Harper, Orangeville	Mar. 17	1,000
Shepherd Creek	Orangeville		Frank E. Harper, Orangeville	Mar. 17	1,000
Bagley Creek	Orangeville		Frank E. Harper, Orangeville	Mar. 17	1,000
High Bank Creek	Johnstown, Baltimore, Castleton and Cleveland		A. J. Shelp, Doster	Mar. 17	1,000
			A. J. Houghtalin, Morgan	April 13	4,000
Benzie county:					
Brundage Creek	Inland		I. P. Covey, Honor	Mar. 31	5,000
Collton Creek	Homestead		I. P. Covey, Honor	Mar. 31	5,000
North Branch of Platte River	Homestead		I. P. Covey, Honor	Mar. 31	10,000
Betsy River	Several		F. A. Mitchell, Manistee	April 5	20,000
Platte River	Inland, Homestead and Benzonia		F. A. Mitchell, Manistee	April 5	20,000
South Branch of Platte River	Homestead		Frank Conklin, Honor	April 6	10,000
North Branch of Platte River	Homestead		Frank Conklin, Honor	April 6	10,000
Gilmour Creek	Platte		E. R. Dailey, Empire	April 6	10,000
Herring Creek	Lake		Nessen Brothers, Empire	April 6	1,000
Rosa Creek	Blaine		Ben Little, Frankfort	April 18	2,000
	Almira		D. S. Willard, Lake Ann	April 29	2,000
Berrien county:					
Branch of Mill Creek, South Creek	Bainbridge		Albert Buiack, Watervliet	Mar. 7	1,500
Branch of Hickory Creek	St. Joseph		F. A. Gust, St. Joseph	Mar. 7	1,500
Branch of Hickory Creek	St. Joseph		W. J. Lucker, St. Joseph	Mar. 7	4,500
Eddison Creek	Oronoko		W. J. Lucker, St. Joseph	Mar. 7	3,000
Lemon Creek	Buchanan		W. J. Lucker, St. Joseph	Mar. 7	3,000
Peter Ester Creek	Buchanan		W. J. Lucker, St. Joseph	Mar. 7	1,500
Smith or Price Creek	Watervliet		F. E. Rowland, Watervliet	Mar. 7	4,500
Spring-fed brooks near Watervliet	St. Joseph		Chas. E. Slater, St. Joseph	Mar. 7	1,500
Ox Creek	Berrien		Chas. E. Slater, St. Joseph	Mar. 7	2,000
Townsend Creek	Niles		A. F. Herring, St. Joseph	April 7	3,000
Walton Creek	Niles		A. F. Herring, St. Joseph	April 7	3,000
Branch county:					
Stanton's Creek	Sherwood		W. H. Hubbard, Union City	Mar. 8	3,000
Spencer's Brook	Sherwood and Athens		Leo E. Wood, Athens	Mar. 17	2,000
Haines Creek	Batavia		Clinton Smead, Batavia	Mar. 17	2,000
Shinneman, Motts, Hog, Allen and Branch Creeks	Coldwater		F. T. Tappan, Coldwater	Mar. 17	16,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Calhoun county:			1910.	
Lava Creek.....	Barryton.....	D. D. Buell, Union City	Mar. 8	1,500
Louis Creek.....	Newton.....	A. E. Carpenter, Union City	Mar. 8	1,500
Hazelnut Creek.....	Newton.....	A. E. Carpenter, Union City	Mar. 8	3,000
Warsop Creek.....	Newton.....	H. T. Carpenter, Union City	Mar. 8	1,500
Wrightson Creek.....	Leroy.....	C. M. Hall, Union City	Mar. 8	3,000
Thompson Creek.....	Newton and Leroy.....	Burt P. Long, Union City	Mar. 8	1,500
Hebble Creek.....	Burlington and Athens.....	C. H. Lowell, Union City	Mar. 8	1,500
Marble Creek.....	Burlington.....	C. H. Lowell, Union City	Mar. 8	1,500
Woods Creek.....	Newton and Leroy.....	C. H. Lowell, Union City	Mar. 8	1,500
Chain-Belair Drain.....	Homer.....	C. Riblet, Litchfield	Mar. 8	1,500
Barber Creek.....	Athens.....	J. C. Gaw, Athens	Mar. 11	2,000
Phoebe Creek.....	Bethford.....	John Palmer, Athens	Mar. 11	1,000
Basson Creek.....	Emmet.....	D. H. Frazier, Battle Creek	Mar. 15	2,000
Mincks Brook.....	Bethford.....	Smith Bramble, Battle Creek	Mar. 15	2,000
Hunter Brook.....	Battle Creek.....	Henry Champion, Battle Creek	Mar. 15	2,000
Mill Creek.....	Battle Creek.....	John Fisher, Battle Creek	Mar. 15	2,000
Dickinson Creek.....	Emmet.....	Chas. J. Phillips, Battle Creek	Mar. 15	1,000
Hooker Brook.....	Assyria.....	W. H. Skinner, Battle Creek	Mar. 15	2,000
Eagle Brook.....	Bethford.....	John M. Wilder, Battle Creek	Mar. 15	3,000
Seven Mile Creek.....	Battle Creek and Newton.....	Geo. H. Williams, Battle Creek	Mar. 15	2,000
Kessler Brook.....	Marshall and Fredonia.....	Geo. H. Williams, Battle Creek	Mar. 15	3,000
Talmadge Brook.....	Marshall and Fredonia.....	Glenn Wyman, Kalamazoo	Mar. 15	4,000
		H. H. Taylor, Marshall	Mar. 15	2,000
Cass county:				
Milner Creek.....	Pokagon.....	John Wyatt, Berrien Center	Mar. 7	1,500
Pierson Creek.....	Pokagon.....	John Wyatt, Berrien Center	Mar. 7	1,500
Van Rippe Creek.....	Pokagon.....	John Wyatt, Berrien Center	Mar. 7	1,500
Williams Brook.....	LaGrange and Howard.....	R. W. Hain, Elkhart, Ind.	Mar. 8	3,000
No Name.....	Jefferson.....	G. E. Harmon, Cassopolis	Mar. 8	1,500
Thorp Creek.....	Jefferson.....	James H. Kelsey, Cassopolis	Mar. 8	3,000
Kegan S. Creek.....	LaGrange and Howard.....	C. H. Kimmerle, Cassopolis	Mar. 8	3,000
Centennial Mill Creek.....	Wayne.....	C. H. Kimmerle, Cassopolis	Mar. 8	4,700
Shaw's Creek.....	Wayne.....	Fred Phillips, Dowagiac	Mar. 8	3,000
Shenwood Creek.....	LaGrange and Penn.....	Fred Phillips, Dowagiac	Mar. 8	1,500
Hampton Creek.....	Marcellus.....	J. E. Underwood, Cassopolis	Mar. 8	3,000
Ridgeley Creek.....	Vollma.....	S. J. Andrus, Marcellus	Mar. 17	2,000
Tributary Dowagiac Creek.....	Marcellus.....	Floyd Brown, Marcellus	Mar. 17	1,000
Rocky River.....	Marcellus.....	C. S. Jones, Marcellus	Mar. 17	3,000
Charlevoix county:				
Collins Creek.....	Boyer Valley.....	Terry S. Barber, Boyne City	Mar. 28	3,000
Deerick Creek.....	Boyer Valley.....	Terry S. Barber, Boyne City	Mar. 28	3,000
Warner Creek.....	Wilson and Warner.....	Terry S. Barber, Boyne City	Mar. 28	3,000

Boyne River.....	Boyne Valley.....	Chas. Galster, Boyne Falls.....	Mar. 28	7,000
Deer Creek.....	Boyne Valley.....	Jno. J. A. Galster, Boyne Falls.....	Mar. 28	5,000
Findley Creek.....	Boyne Valley.....	Jno. J. A. Galster, Boyne Falls.....	Mar. 28	2,000
Electric Lake on Bayne River.....	Boyne Valley.....	W. W. Swift, Boyne City.....	Mar. 28	5,000
Brown Creek.....	Waltham Arm.....	Carl Stroebel, East Jordan.....	April 2	5,000
Deer's Creek.....	Wilson.....	Carl Stroebel, East Jordan.....	April 2	4,000
Murray Creek.....	South Arm.....	W. A. Stroebel, East Jordan.....	April 2	2,000
Todd Creek.....	Waltham Arm.....	W. A. Stroebel, East Jordan.....	April 2	2,000
Healy Creek.....	Wilson.....	W. F. Empey, East Jordan.....	April 2	2,000
Porter Creek.....	Wilson and South Arm.....	W. F. Empey, East Jordan.....	April 2	4,000
Manney, Cooper and Liskum Creeks.....	South Arm.....	W. F. Empey, East Jordan.....	April 2	3,000
West Branch of Sturgeon River.....	Hudson.....	Lon. F. Jannoin, Ellsworth.....	April 5	10,000
Cheboygan county:				
Hinnel's Creek.....	Several.....	Chas. F. Davis, Burt Lake.....	Mar. 31	1,000
Mill Creek.....	Mackinaw.....	F. R. Pierce, Mackinaw.....	Mar. 31	3,000
Pigeon River.....	Ellis and Koehler.....	C. C. Campbell, Alton.....	April 2	18,000
Sturgeon River.....	Munda.....	C. E. Comwell, Wolverine.....	April 2	4,000
East Branch Little Sturgeon River.....	Koehler.....	Clyde King, Indian River.....	April 2	8,000
West Branch of Little Sturgeon River.....	Ellis, Koehler and Tuscarora.....	Clyde King, Indian River.....	April 2	8,000
East Branch Big Pigeon River.....	Koehler and Walker.....	J. W. Lester, Indian River.....	April 2	10,000
Lower Little Pigeon River.....	Koehler and Walker.....	J. W. Lester, Indian River.....	April 2	1,000
Elliott Creek.....	Benton.....	W. M. E. Shoemaker, Cheboygan.....	April 5	2,000
Grass Bay Creek.....	Benton.....	W. M. E. Shoemaker, Cheboygan.....	April 5	2,000
Green's Creek.....	Benton.....	W. M. E. Shoemaker, Cheboygan.....	April 5	2,000
Laparell Creek.....	Inverness.....	W. M. E. Shoemaker, Cheboygan.....	April 5	6,000
Little Black River.....	Beaugrand.....	W. M. E. Shoemaker, Cheboygan.....	April 5	10,000
Nigger Creek.....	Burt and Monroe.....	W. M. E. Shoemaker, Cheboygan.....	April 5	8,000
Front Creek.....	Burt and Monroe.....	W. M. E. Shoemaker, Cheboygan.....	April 5	2,000
Nigger Creek.....	Burt and Monroe.....	W. M. E. Shoemaker, Cheboygan.....	April 5	6,000
Bowen Creek.....	Forest.....	E. A. Ridges, Toptinbabe.....	April 5	2,000
Davis Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	3,000
Gillier Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	1,000
Gregg Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	2,000
McMaster Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	3,000
Milligan Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	2,000
Stewart's Creek.....	Waverly.....	J. M. Clark, Onaway.....	April 12	6,000
Silver Creek.....	Forest.....	J. M. Clark, Onaway.....	April 12	1,000
Welcher Creek.....	Forest and Waverly.....	J. M. Clark, Onaway.....	April 12	2,000
Chippewa county:				
Bear Creek.....	Rudyard.....	J. C. Suss, Rudyard.....	April 21	6,000
Biscuit Creek.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April 21	7,500
Chub Creek.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April 21	6,000
Pine River.....	Rudyard.....	J. C. Suss, Rudyard.....	April 21	7,500
Trout Brook.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April 21	6,000
Trapper's Creek.....	Trout Lake.....	Hon. C. S. Osborn, Sault Ste. Marie.....	May 11	14,000
Sweetbrier Creek.....	Rudyard.....	Hon. C. S. Osborn, Sault Ste. Marie.....	May 11	16,000
Albany Island Trout Stream.....	DeTour.....	Spencer M. Hill, DeTour.....	May 13	6,000
Spring Creek.....	Pickford.....	A. Desormeau, Kelden.....	May 14	4,000
Desmeaux Creek.....	Pickford.....	Dr. J. A. Cameron, Pickford.....	May 19	6,000
Grant's Creek.....	Superior.....	R. P. Hudson, Sault Ste. Marie.....	May 21	4,000
St. Mary's River.....	Several.....	Michigan Fish Commission, Detroit.....	May 21	50,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Clare county:			1910.	
Hemlock Creek	Lincoln	F. M. Dennis, Saginaw	Mar. 28	1,000
Tobacco River and Clear and Bremen Creek	Arthur and Hatton	W. C. Cornwell, Saginaw	Mar. 28	8,000
Middle Branch Tobacco River	Hatton	W. C. Cornwell, Saginaw	Mar. 28	10,000
Tobacco River	Hayes	J. A. Hawkins, Saginaw	Mar. 28	6,000
North Branch Tobacco River	Greenwood	G. J. Cummins, Harrison	Mar. 29	9,000
Smith Creek	Franklin	G. J. Cummins, Harrison	Mar. 29	3,000
Cladar Creek	Summerfield	W. E. Green, Harrison	Mar. 29	3,000
Flooded Creek	Hamilton	Andrew Hagen, Harrison	Mar. 29	1,000
Town Line Creek	Redding	Wm. Blue, Temple	Mar. 29	18,000
Green, Norway and Gishwash Creeks	Surray	Fuller & Harris, Farwell	Mar. 29	2,000
South Branch Tobacco River				
Clinton county:				
Fenimore Creek	Faale	Fred L. Berry, Grand Ledge	Mar. 19	2,000
Fuller Creek	Dallas	J. B. Miller, Fewamo	April 15	2,000
Lost Creek	Dallas	J. B. Miller, Fewamo	April 15	1,000
Crawford county:				
Au Sable River	Graying	J. C. Burton, Graying	April 5	20,000
East Branch Au Sable River	Graying	J. C. Burton, Graying	April 5	16,000
South Branch Au Sable and tributaries	Several	O. F. Barnes, Roscommon	April 5	40,000
Big Creek	Maple Forest	T. E. Douglas, Judge	April 6	4,000
Big Creek	Maple Forest	P. J. Welch, Lewiston	April 6	6,000
North Branch Au Sable River	Chester, Maple and Forest	W. B. Mershon, Saginaw	April 6	16,000
Au Sable River	Several	Rasmus Hanson, Graying	April 28	30,000
Delta county:				
Ogontz River	Mason	W. R. Calloway, Minneapolis	April 22	7,500
Scott's Creek	Several	W. R. Calloway, Minneapolis	April 22	7,500
Thompson River	Several	W. R. Calloway, Minneapolis	April 22	7,500
Little Black Creek	Nahma	F. W. Good, Nahma	April 22	3,000
Waltman Creek	Nahma	F. W. Good, Nahma	April 22	3,000
West Branch Fish Dam River	Nahma	F. W. Good, Nahma	April 22	3,000
Bark River	Bark River	T. Killian, Escanaba	April 22	6,000
Day's River	Brampton and Masonville	T. Killian, Escanaba	April 22	7,500
Escanaba River	Escanaba, Wells and Connell	T. Killian, Escanaba	April 22	9,000
Fish Dam River	Nahma	T. Killian, Escanaba	April 22	6,000
Ford River	Ford River	T. Killian, Escanaba	April 22	9,000
Garden Creek	Garden	T. Killian, Escanaba	April 22	9,000
Inman Brook	Masonville and Rapid River	T. Killian, Escanaba	April 22	4,500
Reno Creek	Escanaba	T. Killian, Escanaba	April 22	4,500
Squaw Brook	Bay de Noc	T. Killian, Escanaba	April 22	4,500
Sturgeon River	Nahma	T. Killian, Escanaba	April 22	7,500
Tacoon River	Redwin and Maple Ridge	T. Killian, Escanaba	April 22	9,000
Ten Mile Creek	Bark River	T. Killian, Escanaba	April 22	6,000
Whitefish and Rapid Rivers	Rapid River and Maple Ridge	T. Killian, Escanaba	April 22	12,000
Bark River	Several	J. H. Boyle, Bark River	April 29	4,500

East Branch of Bark River.....	Several.....	J. H. Boyle, Bark River.....	April 20	3,000
West Branch of Bark River.....	Several.....	J. H. Boyle, Bark River.....	April 29	4,500
Dickinson county:				
Albert's Creek.....	Norway.....	J. E. Quarlstrom, Iron Mount, In.	April 29	3,000
Badwater Creek.....	Breitung.....	J. E. Quarlstrom, Iron Mount.....	April 29	1,500
Black Creek.....	Norway.....	J. E. Quarlstrom, Iron Mount.....	April 29	3,000
Blueberry Creek.....	Sagola.....	H. M. Boll, Channing.....	April 29	1,500
Headwaters Ford River.....	Waucedah.....	Dan Vanitvet, Waucedah.....	April 29	3,000
Beaver Creek.....	Waucedah.....	Dan Vanitvet, Waucedah.....	April 29	3,000
Casty Creek.....	Waucedah.....	W. J. Turner, Vulcan.....	April 29	3,000
Red Dam Creek.....	Waucedah.....			
Emmet county:				
Cedar Creek.....	Tuscarora and Springvale.....	J. W. Lester, Indian River.....	April 5	6,000
Bear Creek.....	Bear Creek.....	Geo. C. Braun, Petoskey.....	Mar. 29	8,000
Tannery Creek.....	Carp Lake.....	Geo. C. Braun, Petoskey.....	Mar. 29	2,000
Carp River.....	Several.....	O. C. Cope, Carp Lake.....	Mar. 31	12,000
Maple River and tributaries.....	Carp Lake.....	W. B. Stimson, Grand Rapids.....	Mar. 31	50,000
Carp River.....	Littlefield.....	E. R. Pierce, Mackinaw.....	Mar. 31	4,000
Curtis Creek.....	Littlefield.....	W. M. L. Curtis, Petoskey.....	Mar. 31	3,000
Heber Creek.....	Friendship.....	W. M. L. Curtis, Petoskey.....	Mar. 31	3,000
No Name.....	Several.....	Benj. Whittaker, Jr., Harbor Springs.....	April 9	2,000
Maple River and branches.....		W. B. Stimson, Grand Rapids.....	April 30	50,000
Cenesee county:				
Thread River.....	Burton, Grand Blanc and Atlas.....	A. D. Banker, Grand Blanc.....	Mar. 28	6,000
Gladwin county:				
Cedar River.....	Sherman.....	James E. Tobin, Gladwin.....	April 5	10,000
Gogebic county:				
Clover Creek.....	Marenisco.....	Harry Barr, Ironwood.....	April 26	3,000
Slippery Elm Brook.....	Marenisco.....	Eugene V. Brady, Ironwood.....	April 26	3,000
Flick's Creek.....	Marenisco.....	James Campbell, Ironwood.....	April 28	1,500
Fox Creek.....	Marenisco.....	F. A. Douglas, Ironwood.....	April 28	3,000
Jones Brook.....	Erwin.....	M. A. Fitzsimmons, Ironwood.....	April 28	1,500
McKinney Creek.....	Ironwood.....	M. A. Fitzsimmons, Ironwood.....	April 28	1,500
Brush Creek.....	Ironwood.....	B. E. Jussen, Ironwood.....	April 28	1,500
Johnson's Creek.....	Marenisco.....	B. E. Jussen, Ironwood.....	April 28	1,500
Mays Brook.....	Ironwood.....	Howard McDuffy, Ironwood.....	April 28	3,000
Morrison Creek.....	Ironwood.....	G. H. Mathews, Ironwood.....	April 28	1,500
Fisher Creek.....	Ironwood.....	E. W. Murley, Ironwood.....	April 28	1,500
Ryan's Creek.....	Ironwood.....	E. W. Murley, Ironwood.....	April 28	1,500
Weazel Creek.....	Marenisco.....	Pal. Mullen, Ironwood.....	April 28	1,500
Beck's Creek.....	Ironwood.....	J. B. Patrick, Ironwood.....	April 28	1,500
Little Spring Creek.....	Ironwood.....	J. B. Patrick, Ironwood.....	April 28	1,500
Sutherland Creek.....	Ironwood.....	J. B. Patrick, Ironwood.....	April 28	1,500
Mullen Creek.....	Ironwood.....	J. B. Patrick, Ironwood.....	April 28	1,500
Alder Creek.....	Marenisco.....	Jas. Sampson, Ironwood.....	April 28	1,500
Hazel Creek.....	Ironwood.....	D. E. Sutherland, Ironwood.....	April 28	3,000
Big Coon Creek.....	Ironwood.....	O. E. Staebler, Ironwood.....	April 28	3,000
Douglas Creek.....	Ironwood.....	O. E. Staebler, Ironwood.....	April 28	3,000
Honey Creek.....	Ironwood.....	O. E. Staebler, Ironwood.....	April 28	1,500

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Gogebic county—Continued:			1910.	
Jimmer Thomas Creek	Marenisco	O. F. Staebler, Ironwood	April 26	1,500
Lemon Creek	Marenisco	O. F. Staebler, Ironwood	April 26	1,500
Shawmell's Creek	Ironwood	O. F. Staebler, Ironwood	April 26	1,500
Willow Creek	Ironwood	O. F. Staebler, Ironwood	April 26	1,500
Monroe Creek	Ironwood	F. F. Thalner, Ironwood	April 26	1,500
Triplet Creek	Ironwood	F. F. Thalner, Ironwood	April 26	1,500
South Fork of Mud Creek	Bessemer	W. H. Cleney, Bessemer	April 26	3,000
No Name	Sec. 18, 40 and 49 W	Dan'l P. Green, Bessemer	April 26	3,000
Powder Mill Creek	Bessemer	Hiram E. Olson, Bessemer	April 26	1,500
Judge's Creek	Bessemer	Chas. H. Warner, Bessemer	April 26	3,000
Johnston Springs	Watersmeet	A. D. Johnston, Bessemer	April 26	3,000
Langford Creek	Watersmeet	A. D. Johnston, Bessemer	April 26	1,500
Little Presque Isle River	Marenisco	A. D. Johnston, Bessemer	April 26	4,500
Longfellow Creek	Watersmeet	A. D. Johnston, Bessemer	April 26	3,000
Slate River	Marenisco	A. D. Johnston, Bessemer	April 26	3,000
Tenderfoot Creek	Watersmeet	A. D. Johnston, Bessemer	April 26	4,500
Thousand Island Creek	Watersmeet	A. D. Johnston, Bessemer	April 26	1,500
Wellington Branch	Marenisco	A. D. Johnston, Bessemer	April 26	4,500
Howard Creek	Bessemer	Harry E. Patterson, Bessemer	April 26	1,500
Markstrum's Creek	Bessemer	Harry E. Patterson, Bessemer	April 26	1,500
Clear Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Eight Mile Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Gage's Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Hill Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	4,500
North Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	4,500
Rock Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Spring Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Vogtlin's Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
Water Works Creek	Bessemer	J. A. Vogtlin, Bessemer	April 26	3,000
No Name	Marenisco	Walter Mazoni, Marenisco	April 26	1,500
Little Black River	Marenisco	A. E. Orme, Marenisco	April 26	1,500
Jackson's Creek	Wakefield	Harry Harper, Ramsey	April 26	6,000
Black River	Wakefield	Harry Harper, Ramsey	April 26	4,500
Middle Branch of Ontonagon River	Wakefield, Bessemer and Ironwood	J. S. Runnauze, Ramsey	April 26	7,500
Two Mile Creek	Watersmeet	C. M. McDonald, Watersmeet	April 26	6,000
Camp Two Creek	Watersmeet	C. M. McDonald, Watersmeet	April 26	6,000
Duck Creek	Watersmeet	A. D. Johnston, Bessemer	April 26	1,500
Trout Creek	Watersmeet	A. D. Johnston, Bessemer	April 29	3,000
Spring Brook	Watersmeet	A. D. Johnston, Bessemer	April 29	1,500
East Branch of Spring Creek	Watersmeet	A. D. Johnston, Bessemer	April 29	1,500
Taylor Lake Creek	Watersmeet	A. D. Johnston, Bessemer	April 29	1,500
Tamarack River	Watersmeet	J. R. Moore, Ironwood	April 29	1,500
East Branch Ontonagon River	Watersmeet	J. R. Moore, Ironwood	April 29	3,000
Tributary to Bass Lake	Watersmeet	Belmont Wapler, Ironwood	April 29	3,000
Henderson Creek	Watersmeet	Wm. Bonifas, Watersmeet	April 29	3,000
Deilles Creek	Watersmeet	A. C. Brownell, Watersmeet	April 29	1,500

Morrison Creek	Watersmeet	B. H. Darling, Watersmeet	April 29	3,000
Wolf Lake Creek	Watersmeet	Fred Johnstone, Watersmeet	April 29	1,500
Bass Lake Creek	Watersmeet	J. F. Johnston, Watersmeet	April 29	1,500
Beaver Station Creek	Watersmeet	J. F. Johnston, Watersmeet	April 29	3,000
Crooked Lake Creek	Watersmeet	N. D. Murphy, Watersmeet	April 29	1,500
Lake Marian Creek	Watersmeet	F. W. Singler, Watersmeet	April 29	1,500
Sargent's Creek	T. 48—14	E. W. MacPherran, Marquette	May 6	3,000
Branch Presque Isle River	T. 48—45	E. W. MacPherran, Marquette	May 6	3,000
Tributary to Lake Ruth				
Grand Traverse county:				
Tributaries to Duck Lake	Green Lake	G. A. Brigham, Buckley	Mar. 25	2,000
Beaver Meadow Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	4,000
Biddlecomb Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Brownson Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	1,000
Clark Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	2,000
East Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	5,000
Gray's Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Harrison Brook	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Hills Brook	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Mayfield Brook	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	1,000
Malcom Keeffer Spring Brook	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	1,000
Newmarsh Spring Brook	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	3,000
Parker Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	3,000
Tabler Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	3,000
Slaughter House Creek	Paradise	Kingsley Sportsmen Club, Kingsley	April 2	1,000
Battle Creek	Acme	L. N. Spring, Elk Rapids	April 2	3,000
Folette Creek	Acme	L. N. Spring, Elk Rapids	April 2	2,000
Yonba Creek	Acme	L. N. Spring, Elk Rapids	April 2	5,000
Mitchell, Acme and Williamsburg Creeks.	East Bay, Acme and Whitewater	Traverse City R. and G. C., Trav. City	April 2	13,000
Boardman River	Garfield, Paradise, Union, East Bay.	Traverse City R. and G. C., Trav. City	April 2	20,000
Parker Creek	Union	Fred E. Mills, Fife Lake	April 20	4,000
Twenty-two Creek	Union	Fred E. Mills, Fife Lake	April 20	4,000
East Branch Anderson Creek	Mayfield	G. A. Brigham, Buckley	April 27	2,000
West Branch Anderson Creek	Mayfield	G. A. Brigham, Buckley	April 27	2,000
Hillsdale county:				
No Name	Cambria	W. J. French, Hillsdale	Mar. 11	1,000
Silver Creek	Cambria	W. J. French, Hillsdale	Mar. 11	2,000
Lake Pleasant Brook	Hillsdale and Jefferson	W. C. Kemp, Hillsdale	Mar. 11	2,000
McEnelly Ditch	Litchfield and Scipio	L. C. Feighner, Litchfield	Mar. 11	2,000
Soap Creek	Litchfield, Allen and Butler	L. C. Feighner, Litchfield	Mar. 11	2,000
Headwaters Grand River	Somerset	Mrs. F. McMan, Somerset Centre	Mar. 11	2,000
No Name	Somerset and Rollin	A. W. Wood, Addison	Mar. 11	2,000
Houghton county:				
Beaver Creek	Duncan and Iron River	Wm. Kroll, Kenton	May 6	6,000
Jumbo Creek and branches	Duncan	Wm. Kroll, Kenton	May 6	7,500
Fox Creek	Duncan	Wm. Kroll, Kenton	May 6	3,000
Hope Creek	Duncan and Iron River	Wm. Kroll, Kenton	May 6	3,000
Jees Creek	Duncan and Inierrot	Wm. Kroll, Kenton	May 6	1,500
Smith Creek	Duncan	Wm. Kroll, Kenton	May 6	1,500
Shane Creek	Duncan	Wm. Kroll, Kenton	May 6	3,000
Spargo Creek	Duncan and Iron River	Wm. Kroll, Kenton	May 6	1,500

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Houghton county.—Continued:			1910.	
Spring Creek	Duncan and Iron River	Wm. Kroll, Kenton	May	3,000
Stoney Creek	Duncan and Iron River	Wm. Kroll, Kenton	May	4,500
White Creek	Duncan	Wm. Kroll, Kenton	May	1,500
Dead Stream	Duncan and Covington	Sidnaw H. and F. Club, Sidnaw	May	3,000
East Branch Ontonagon River	Duncan, Bates and Interior	Sidnaw H. and F. Club, Sidnaw	May	4,500
Hill Creek	Duncan	Sidnaw H. and F. Club, Sidnaw	May	4,500
Johnston's Creek	Duncan	Sidnaw H. and F. Club, Sidnaw	May	1,500
Little Beaver Creek	Duncan and Covington	Sidnaw H. and F. Club, Sidnaw	May	4,500
Roycroft Creek	Duncan	Sidnaw H. and F. Club, Sidnaw	May	1,500
Sturgeon River	Duncan	Sidnaw H. and F. Club, Sidnaw	May	1,500
Southeast Branch Ontonagon River	Duncan and Covington	Sidnaw H. and F. Club, Sidnaw	May	4,500
Leveque's Creek	Laird	C. W. Starned, Rocks and	May	1,500
Seven Mile Creek	Calumet	Albert Barrett, Calumet	May	3,000
McGunn's Creek	Calumet	Dr. H. F. Salster, Laurium	May	4,000
Hills' Creek	Calumet	M. D. Train, Laurium	May	2,000
Stock Creek	Hancock	A. D. Edwards, Houghton	May	4,000
Peepscock Creek	Portage	Henry W. Grims, Houghton	May	2,000
Pilgrim River	Portage and Adams	Carl J. Hoar, Houghton	May	6,000
East Branch of Otter River	Schoolcraft	Carl J. Hoar, Houghton	May	6,000
East Branch Salmon Trout River	Portage and Adams	H. M. Keevers, Houghton	May	2,000
Six Mile Creek	Portage	F. W. Kroll, Houghton	May	2,000
Stott's Creek	Adams	F. W. Kroll, Houghton	May	2,000
Peepsock Creek	Portage	H. G. Major, Houghton	May	4,000
North Branch of Pilgrim River	Portage and Adams	Chas. A. Mayvorn, Houghton	May	4,000
Four Mile Creek	Portage	John J. Morfels, Houghton	May	2,000
Arcadian Mill Creek	Torch Lake	John M. Nelson, Houghton	May	2,000
East Pike River	Portage	John M. Nelson, Houghton	May	4,000
Middle Branch Firesteel River	Elm River	Louis H. Richardson, Houghton	May	4,000
Cole's Creek	Adams	John H. Rice, Houghton	May	4,000
Shawmut Creek	Elm River	Louis La Roche, Houghton	May	8,000
South Branch of Pilgrim River	Portage	Henry T. Shields, Houghton	May	2,000
Huron Creek	Portage	Robert H. Shields, Houghton	May	2,000
Hennes Creek	Portage	Charles Smith, Houghton	May	6,000
Burt Creek	Elm River	George Williams, Houghton	May	4,000
West Branch Pilgrim River	Portage	George Williams, Houghton	May	2,000
West Branch Little Travis	Schoolcraft	T. W. Armtroub, Hubbell	May	5,000
Bavine Creek	Torch Lake	Geo. Bark, Hubbell	May	2,000
Hallies Creek	Torch Lake	Geo. Bark, Hubbell	May	2,000
Hungoman Creek	Oscola	Oscar Chyler, Hubbell	May	2,000
Little Traverse River	Schoolcraft	M. J. Harrington, Hubbell	May	2,000
Armstrong Creek	Schoolcraft	Marvin J. Bridges, Hubbell	May	2,000
Big Traverse River	Schoolcraft	Sam James, Hubbell	May	2,000
Trap Rock River	Schoolcraft	Carl Krug, Hubbell	May	4,000
Quinze Creek	Schoolcraft	A. G. Kaufman, Hubbell	May	4,000
	Oscola	Edward Marcotte, Hubbell	May	2,000

Little Rabbit River.	Torch Lake.	Ernest Peck, Hubbell.	May	4,000
East Branch Trap Rock River.	Schoolcraft.	Dr. Chas. Rowe, Hubbell.	May	2,000
Vine's Creek.	Torch Lake.	A. J. Vine, Hubbell.	May	4,000
McCollum Creek.	Torch Lake.	Joseph Wise, Hubbell.	May	4,000
Oakar Stream.	Stanton.	P. L. Burkman, Oscar	May	2,000
Thirteen Mile Creek.	Adams.	Herman Dahl, Painesdale.	May	4,000
Sawmill Creek.	Adams.	William J. Richards, Painesdale.	May	2,000
Santee Creek.	Adams and Portage.	Gottlieb Wurster, Painesdale.	May	4,000
Pump Station Creek.	Adams.	Chas. F. Fisher, Tri-Mountain.	May	4,000
Elm River.	Adams, Elm and Stanton.	Joe Paul, Tri-Mountain.	May	10,000
Gravrat Creek.	Stanton.	J. Albert Smith, Tri-Mountain.	May	6,000
Salmon Trout River.	Adams.	James M. Taylor, Tri-Mountain.	May	10,000
West Branch Sleeping River.	Elm River.	M. J. Finnegan, Winona.	May	8,000
Misery River.	Elm River.	F. G. Lukey, Winona.	May	4,000
East Branch Sleeping River.	Elm River.	John McCarthy, Winona.	May	8,000
West Branch Sleeping River.	Elm River.	R. R. Seeber, Winona.	May	4,000
Pike River.	Chassell.	Joseph Vairo, Alston.	May 12	2,000
West Branch Sturgeon.	Chassell.	C. W. Danielson, Chassell.	May 12	6,000
Alston Creek.	Laird.	Dr. P. H. Willson, Chassell.	May 12	2,000
Coach's Creek.	Laird.	J. C. Weissmiller, Hancock.	May 12	4,000
Upper Sturgeon River.	Laird.	L. H. Atkin, Houghton.	May 12	4,000
West Branch of Otter River.	Several.	J. M. Cahoon, Houghton.	May 12	8,000
Murphy's Creek.	Laird and Duncan.	W. G. Bertrand, Houghton.	May 12	6,000
Branch of Sturgeon River.	Laird and Chassell.	William D. Caernly, Houghton.	May 12	4,000
Other Creek.	Laird.	H. W. Fesnig, Houghton.	May 12	6,000
Brunneau Creek.	Laird and Chassell.	James T. Healy, Houghton.	May 12	8,000
North Branch Otter River.	Laird.	John C. Pryor, Houghton.	May 12	2,000
Small branch Sturgeon River.	Laird and Adams.	Fred L. Reedham, Houghton.	May 12	4,000
	Laird.	R. Skiff Sheldon, Houghton.	May 12	12,000
	Laird.	H. L. Swift, Houghton.	May 12	2,000
	Laird.	Paul D. Swift, Houghton.	May 12	2,000
Ingham county:	Onondaga.	William M. Carroll, Onondaga.	Mar.	2,000
Baldwin Creek.	Aurelius.	W. T. Holcomb, Mason.	Mar.	2,000
Columbia Creek.	Aurelius.	W. T. Holcomb, Mason.	Mar.	2,000
Willow Creek.	Stockbridge.	Walter Hayner, Stockbridge.	Mar.	2,000
Low Lake Inlet.				
Ionian county:	North Plains and Ronald.	H. M. Brown, Muir.	Mar.	2,000
Brown Brook.	North Plains.	C. A. Dalzell, Ionia.	Mar.	2,000
Ely Creek.	Ronald.	Newel Holden, Ionia.	Mar.	1,000
Holden Brook.	Ronald.	Theodore A. Huss, Muir.	Mar.	2,000
Ludwick Creek.	Easton.	John Wallington, Saranac.	Mar.	1,000
Arnold's Creek.	Easton.	John Wallington, Saranac.	Mar.	1,000
Hunt's Creek.	Boston.	John Wallington, Saranac.	Mar.	1,000
Hunt's Creek.	Boston and Berlin.	John Wallington, Saranac.	Mar.	1,000
Pearshall Creek.	Boston and Keene.	John Wallington, Saranac.	Mar.	1,000
Stevens Creek.	Easton and Keene.	John Wallington, Saranac.	Mar.	1,000
Campbell Creek.	Campbell.	F. A. Rising, Clarksville.	Mar.	1,000
Dillie Creek.	Easton.	Milo Van Slyke, Ionia.	Mar.	2,000
Prairie Creek.	Ronald.	John Galloway, Palo.	Mar.	5,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Ionian county.—Continued:				
Tibbets Creek.....	Berlin.....	A. J. Kling, Ionia.....	Mar. 23.....	2,000.....
White's Creek.....	Orleans.....	Archie Sowers, Shiloh.....	Mar. 23.....	1,000.....
Faxon Creek.....	Lyons.....	J. B. Miller, Pewamo.....	April 15.....	1,000.....
Iosco county:				
Hale Creek.....	Plainfield.....	R. D. Brown, Hale.....	April 12.....	6,000.....
Smith Creek.....	Plainfield.....	R. D. Brown, Hale.....	April 12.....	6,000.....
Meadow Brook.....	Oscoda.....	William Elliott, Oscoda.....	April 12.....	2,000.....
Cold Creek.....	Tawas.....	C. W. Luce, East Tawas.....	April 12.....	5,000.....
Gates Creek.....	Tawas and Baldwin.....	C. W. Luce, East Tawas.....	April 12.....	4,000.....
Grinley Creek.....	Graft.....	C. W. Luce, East Tawas.....	April 12.....	5,000.....
Pickett Creek.....	Plainfield.....	C. W. Luce, East Tawas.....	April 12.....	4,000.....
Silver Creek.....	Willour and Baldwin.....	C. W. Luce, East Tawas.....	April 12.....	10,000.....
Vaughan Creek.....	Plainfield.....	C. W. Luce, East Tawas.....	April 12.....	6,000.....
Iron county:				
Dew River.....	Crystal Falls.....	Arvid Bjork, Crystal Falls.....	April 29.....	6,000.....
Raymon Creek.....	Mansfield.....	R. E. Roll, Channing.....	April 29.....	1,500.....
Nash's Creek.....	Iron River.....	L. W. Byers, Iron River.....	April 29.....	1,500.....
Sunset Lake Creek.....	Iron River.....	L. W. Byers, Iron River.....	April 29.....	1,500.....
Cook's Run.....	Iron River.....	Mrs. J. A. Carmichael, Beechwood.....	April 29.....	4,500.....
Hemlock River.....	Hematite.....	Chas. E. Lawrence, Iron Mountain.....	April 29.....	4,500.....
East Branch of Ontonagon River.....	Stambaugh.....	G. M. Cornell, Ironwood.....	April 29.....	3,000.....
West Branch of Paint River.....	Stambaugh.....	G. M. Cornell, Ironwood.....	April 29.....	3,000.....
Section Thirty-three Creek.....	Stambaugh.....	Herman F. Jalun, Ironwood.....	April 29.....	1,500.....
Paint River.....	Stambaugh.....	Eric Swanson, Ironwood.....	April 29.....	4,500.....
Holmes Creek.....	Crystal Falls.....	Geo. Premo, Amasa.....	April 29.....	3,000.....
Little Hemlock Creek.....	Hematite.....	Geo. Premo, Amasa.....	April 29.....	3,000.....
New York Creek.....	Hematite.....	Geo. Premo, Amasa.....	April 29.....	3,000.....
Net River.....	Hematite.....	Geo. Premo, Amasa.....	April 29.....	4,500.....
Paint River.....	Crystal Falls and others.....	Geo. Premo, Amasa.....	April 29.....	4,500.....
Chicazoan Creek.....	Stambaugh.....	R. F. Gibbs & Son, Pentoga.....	April 29.....	3,000.....
Isabella county:				
Cambau Creek.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Comer Brook.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Figg and Parcher Drain.....	Lincoln.....	M. B. Castel, Shepherd.....	Mar. 24.....	3,000.....
Foxspan Creek.....	Notawa.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Hudson Creek.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Huber Creek.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Lubin Creek.....	Notawa.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Parry Creek.....	Gillmore.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Phillips Brook.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Seymour Creek.....	Gillmore.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Stimons Creek.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....
Stony Creek.....	Deerfield.....	Geo. L. Grainger, Mt. Pleasant.....	Mar. 24.....	2,000.....

NINETEENTH REPORT—STATE FISHERIES.

Thelsen Creek.....	Notawa.....	Geo. L. Granger, Mt. Pleasant.....	Mar. 24	2,000
Tupman Creek.....	Notawa.....	Geo. L. Granger, Mt. Pleasant.....	Mar. 24	2,000
Wood's Creek.....	Gilmore.....	Geo. L. Granger, Mt. Pleasant.....	Mar. 24	2,000
Zucker Creek.....	Deerfield.....	Geo. L. Granger, Mt. Pleasant.....	Mar. 25	6,000
Headwaters Coldwater River.....	Notawa.....	Robt. Hyslop, Weidman.....	Mar. 25	1,000
Badcock Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	1,000
DerMott Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	1,000
Logue Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	1,000
Pumphrey Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	1,000
Rogers Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	2,000
Sawdy Creek.....	Rolland.....	Roger Scott, Blanchard.....	Mar. 25	1,000
Skunk Creek and tributary.....	Rolland.....	Andel Moody, Blanchard.....	Mar. 25	2,000
Spring Brook.....	Fremont.....	John Underwood, Winn.....	April 18	1,000
Jackson county:				
Branch of North Branch of Kalamazoo River.....	Hanover.....	F. W. McKenzie, Concord.....	Mar. 8	6,000
Tributary of Michigan Centre Millpond.....	Napoleon.....	L. B. Benton, Napoleon.....	Mar. 11	2,000
Carpeton Creek.....	Columbia.....	Geo. S. Cook, Brooklyn.....	Mar. 11	1,000
Wheaton and Cooper Creeks.....	Hanover.....	Roland Thorn, Horton.....	Mar. 11	2,000
Zimmerman Brook.....	Norvell.....	Wm. F. Walker, Norvell.....	Mar. 15	1,000
Wilcox Creek.....	Parma.....	H. D. Abbott, Parma.....	Mar. 15	1,000
Johnson Creek.....	Parma.....	F. D. Bailey, Parma.....	Mar. 15	1,000
Mackey Creek.....	Parma.....	S. H. Barsdale, Parma.....	Mar. 15	2,000
Indian Springs.....	Parma.....	S. H. Barsdale, Parma.....	Mar. 15	1,000
Tributary to Sandstone Creek.....	Parma.....	S. H. Barsdale, Parma.....	Mar. 15	2,000
Dearing Creek.....	Concord.....	B. W. Dicer, Jackson.....	Mar. 15	1,000
Winegar Creek.....	Blackman and Summit.....	B. W. Dicer, Jackson.....	Mar. 15	1,000
Cutler Creek.....	Sandstone and Parma.....	M. B. Hawes, Parma.....	Mar. 15	2,000
Knowles Creek.....	Concord.....	M. B. Hawes, Parma.....	Mar. 15	2,000
Showerman Creek.....	Concord.....	D. F. Moe, Parma.....	Mar. 15	1,000
Crouch Creek.....	Concord and Parma.....	Jay King, Parma.....	Mar. 15	2,000
Four Mile Creek.....	Summit.....	Joe Needham, Parma.....	Mar. 15	3,000
Headwaters of Grand River.....	Horton.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Headwaters of Kalamazoo River.....	Blackman.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Rice Creek.....	Liberty.....	Geo. F. Beebe, Jackson.....	Mar. 15	4,000
Headwaters Junction Creek.....	Parma.....	Geo. F. Beebe, Jackson.....	Mar. 15	5,000
Sandstone Creek.....	Hanover.....	Geo. F. Beebe, Jackson.....	Mar. 15	1,500
Snyder's Creek.....	Parma.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Wade Creek.....	Rives.....	Geo. E. Beebe, Jackson.....	Mar. 15	5,000
West Branch Kalamazoo River.....	Sandstone and Blackman.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Willow Creek.....	Spring Arbor.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Willow Creek.....	Tompkins.....	Geo. E. Beebe, Jackson.....	Mar. 15	3,000
Willow Creek.....	Hillsdale.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
Grass Lake Creek.....	Hanover.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
	Rives.....	Geo. E. Beebe, Jackson.....	Mar. 15	2,000
	Grass Lake and Waterloo.....	Geo. E. Beebe, Jackson.....	Mar. 15	3,000
	Grass Lake.....	Chester R. Smith, Grass Lake.....	Mar. 15	2,000
Kalamazoo county:				
Payne Creek.....	Texas and Antwerp.....	Geo. H. Murch, Mattawan.....	Mar. 8	3,000
Teller's Creek.....	Richland.....	R. R. Teller, Richland.....	Mar. 15	1,000
Eagle Creek.....	Charleston.....	Henry F. Beckman, Battle Creek.....	Mar. 15	2,000
Hinton Brook.....	Charleston.....	D. H. Frazer, Battle Creek.....	Mar. 15	1,000
Lawler's Brook.....	Charleston.....	H. R. Kingman, Battle Creek.....	Mar. 15	1,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Kalamazoo county.—Continued:				
Portage Creek	Pavilion.	Robt. B. Cook, Galesburg	Mar. 17	2,000
Spring Brook	Richland.	Albert Doll, Kalamazoo	Mar. 17	3,000
Campbell Creek	Alamo	N. B. Hall, Kalamazoo	Mar. 17	3,000
Davis Creek	Pavilion and Kalamazoo.	Henry Hobbs, Kalamazoo	Mar. 17	4,000
Portage Creek	Texas and Portage	Henry Hobbs, Kalamazoo	Mar. 17	2,000
Axel Creek	Kalamazoo.	Edward H. Kaszard, Kalamazoo	Mar. 17	1,000
Arcaula Creek	Kalamazoo.	Geo. W. Locke, Kalamazoo	Mar. 17	1,000
Cooper Stream	Cooper	D. W. Osborne, Kalamazoo	Mar. 17	1,000
Starley Creek	Kalamazoo	John Ott, Kalamazoo	Mar. 17	1,000
Stanley Creek	Portage	John Ott, Kalamazoo	Mar. 17	1,000
Summer Creek	Comstock	R. R. Smith, Kalamazoo	Mar. 17	3,000
Spring Brook	Cooper	Dr. C. M. Spencer, Kalamazoo	Mar. 17	4,000
Stewart Creek	Alamo	Dr. C. M. Wise, Kalamazoo	Mar. 17	2,000
Hampton Brook	Climax and Portage	Dr. C. A. Wise, Kalamazoo	Mar. 17	3,000
Hall's Spring Brook	Alamo	Jay Clark, Schoolcraft	Mar. 17	2,000
Yettes Creek	Prairie Ronde	P. C. Pursel, Schoolcraft	Mar. 17	1,000
Harrison Creek	Prairie Ronde	C. L. Davis, Schoolcraft	Mar. 17	2,000
Boles Creek	Portage	Wm. Chispe, Plainwell	Mar. 17	1,000
Abram Creek	Alamo and Otsego.	Wm. Chispe, Plainwell	Mar. 17	2,000
Brown's Creek	Alamo	E. J. Anderson, Plainwell	Mar. 17	2,000
Chart Creek	Alamo	E. O. Goldsmith, Vicksburg	Mar. 17	2,000
Spring Run	Schoolcraft	Geo. A. Allen, Kalamazoo	Mar. 17	2,000
Travis Creek	Cooper	Geo. W. Smith, Schoolcraft	April 8	2,000
Smith's Creek	Schoolcraft		May 8	2,000
Kalkaska county:				
Headwaters Manistee River	Rapid River	C. L. Bailey, Mancelona	Mar. 31	35,000
Rapid River	Several	W. W. Morse, Rapid City	April 2	10,000
Rapid River	Several	L. N. Spring, Elk Rapids,	April 2	10,000
Twenty-two Creek	Union	Kingsley Sportsmen's Club, Kingsley.	April 2	5,000
Kent county:				
Harding Creek	Algoma.	E. W. Bratt, Edgerton	Mar. 15	2,000
Munn Creek	Algoma.	E. W. Bratt, Edgerton	Mar. 15	1,000
Porter's Creek	Courtland	E. W. Bratt, Edgerton	Mar. 15	1,000
Green Creek	Nelson and Solon	D. M. Ross, Sand Lake	Mar. 15	1,000
Turner Creek	Algoma.	E. W. Bratt, Edgerton	Mar. 15	2,000
Spring Creek	Solon.	David Curtis, Sand Lake	Mar. 15	4,000
Black Creek	Nelson and Spencer	G. B. McDonald, Sand Lake	Mar. 15	1,000
Duke Creek	Nelson and Solon	F. E. Shattuck, Sand Lake	Mar. 15	3,000
Spring Creek	Solon	Jake Yost, Sand Lake	Mar. 15	2,000
Walters Creek and branches	Vergennes	John Miller, Lowell	Mar. 16	1,000
No Name	Vergennes and Lowell	John Miller, Lowell	Mar. 16	1,000
Baird Creek	Vergennes	U. B. Williams, Lowell	Mar. 16	2,000
Kinyon Creek	Lowell	U. B. Williams, Lowell	Mar. 16	2,000
Koph Creek	Lowell	U. B. Williams, Lowell	Mar. 16	2,000

Spring Brook	Lowell	U. B. Williams, Lowell	Mar. 16	1,000
Cedar Creek	Solon and Nelson	Mrs. Josephine Hall, Cedar Springs	Mar. 16	4,000
Austin Brook	Courtland	W. H. Wheeler, Cedar Springs	Mar. 16	2,000
Becker Creek	Nelson, Solon and Algoma	W. H. Wheeler, Cedar Springs	Mar. 16	4,000
Big Cedar Creek	Solon	W. H. Wheeler, Cedar Springs	Mar. 16	3,000
Dop Creek	Nelson and Nelson	W. H. Wheeler, Cedar Springs	Mar. 16	6,000
Duke Cedar Creek	Nelson, Algoma and Courtland	W. H. Wheeler, Cedar Springs	Mar. 16	3,000
Spring Creek	Courtland	W. H. Wheeler, Cedar Springs	Mar. 16	4,000
Rum Creek	Courtland and Algoma	Geo. W. Brantner, Rockford	Mar. 17	1,000
Shaw Creek	Courtland and Algoma	Geo. W. Brantner, Rockford	Mar. 17	1,000
Little Cedar Creek	Algoma	Alex. Dargie, Rockford	Mar. 17	4,000
Cedar Creek	Walker	B. E. Hill, Rockford	Mar. 17	1,000
Hogadone Creek	Grand Rapids	Geo. C. Bratt, Grand Rapids	Mar. 17	10,000
Lambertson Creek and tributary	Byron	L. N. Lauro, Grand Rapids	Mar. 17	3,000
Rush Creek	Oakfield	Fred J. Cole, Greenville	Mar. 17	2,000
Hutchins Stream	No Name	R. M. Vanderlip, Gowan	Mar. 23	2,000
English Creek	Sparta	Leslie Watson, Sparta	Mar. 25	1,000
Crinton Creek	Mostly Oakfield	Freeman Addis, Harvard	April 7	3,000
Buttermut Creek	Spencer	Alonzo Griswold, Cedar Springs	April 7	4,000
Buttermut Creek	Spencer	C. W. LaDuc, Crystal	April 7	5,000
Tributary to Bear Creek	Cannon	Chas. Armstrong, Cannonsburg	April 8	2,000
Bear Creek and tributaries	Wyoming and Byron	Dr. C. M. Willis, Cannonsburg	April 8	6,000
Buck Creek	Courtland and Algoma	W. H. Zylstra, Grand Rapids	April 8	9,000
Qualmers Creek	Courtland and Algoma	Geo. E. Rector, Edgerton	April 8	2,000
Rector Creek	Courtland and Algoma	Geo. E. Rector, Edgerton	April 8	2,000
Keweenaw county:				
Gratiot River	No. 2 Eagle Harbor	Edward Bost, Laurium	May	4,000
Eagle River	Allouez and Houghton	I. T. Daniel, Laurium	May	6,000
Seward Creek	Allouez	Harry Bernan, Laurium	May	2,000
Montreal River	Sherman	M. D. Train, Laurium	May	6,000
Buffalo Creek	Houghton	Chas. J. Webb, Laurium	May	2,000
Mosquito Creek	Grant	W. C. Vian, Laurium	May	4,000
Upper Waters Montreal River	Grant	W. R. Vian, Laurium	May	9,000
Gratiot River	Houghton and Allouez	J. G. McCollum, Calumet	May	8,000
Silver Creek	Grant	A. Jackson & J. A. Johnson, Gay	May	6,000
DeSey and Tobacco Rivers	Sherman	A. H. Sawyer, Mandan	May	4,000
Montreal River	Houghton and Allouez	Nickolas Linton, Pheonix	May	9,000
Number Two Creek	Allouez	J. W. Selkman, Pheonix	May	4,000
North American Creek	Eagle Harbor	Wm. Jackson, Eagle River	May	9,000
Jacobs Creek	Allouez and Houghton	T. W. Kaiser, Eagle River	May	4,000
Old Phoenix Creek	Houghton	Wm. Long, Eagle River	May	4,000
Gatiss Creek	Houghton and Sherman	Thomas Uren, Nollawak	May	2,000
Trap Rock River	Houghton and Sherman	Thomas Uren, Nollawak	May	10,000
Lake county:				
Little Manistee River	Webber and Elk	Hon. H. D. Jewell, Grand Rapids	Mar. 25	30,000
Bloody Run Creek	Elk	Wm. Utter, Peacock	Mar. 25	2,000
Fine and Little Manistee Rivers	New Kirk, Dover and Ellsworth	H. W. Marsh, Manistee	Mar. 26	30,000
Sauble River	Elk, Freesoil and Sheridan	H. W. Marsh, Manistee	Mar. 26	20,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Lake county.—Continued:				
Pine and Little Manistee Rivers.....	Several.	Geo. Cutler, Luther.	Mar. 26	30,000
Pine River.....	Dover.	Geo. B. Sawrey, Luther.	Mar. 26	12,000
Middle Branch Pere Marquette River.	Cherry Valley.	G. M. Bayliss, Mt. Pleasant	Mar. 30	10,000
Baldwin Creek.....	18—12 and 13, 17—13	C. Hagerman, Ludington	Mar. 30	7,000
Blood's Creek.....	Pleasant Plains	C. Hagerman, Ludington	Mar. 30	1,000
Sauble River.....	Elk, Free-soil and Sheridan.	C. Hagerman, Ludington	Mar. 30	10,000
Sauhorri Creek.....	17—13	C. Hagerman, Ludington	Mar. 30	5,000
North Branch Pere Marquette River.	Pleasant Plains	H. W. Davis, Baldwin	Mar. 30	10,000
Farnsworth Creek.....	Pleasant Plains	H. W. Davis, Baldwin	Mar. 30	5,000
Damaker Creek and branches	Pleasant Plains	Geo. Grant, Saginaw	Mar. 30	4,000
Tank Creek.....	Elk.	Watts R. Humphrey, Saginaw	Mar. 30	1,000
Sweetwater Creek.....	Pleasant Plains	Watts R. Humphrey, Saginaw	Mar. 30	4,000
Pere Marquette River.....	Pleasant Plains	W. B. Mershon, Saginaw	Mar. 30	15,000
Boyman Creek.....	Pleasant Plains	W. B. Mershon, Saginaw	Mar. 30	3,000
Erkson and Peas Creek.....	Cherry Valley.	J. H. Booth, Reed City.	Mar. 30	4,000
Tributaries of Pere Marquette	Chase and Cherry Valley.	Wm. Horner, Reed City.	April 2	3,000
Baker Creek.....	Cherry Valley.	Pere Marquette Trout Club, Mt. Pleasant	April 2	10,000
Lorce Creek.....	Cherry Valley.	Pere Marquette Trout Club, Mt. Pleasant	April 16	5,000
Little Manistee River.....	Webber and Elk.	Hon. H. D. Jewell, Grand Rapids.	April 16	3,000
			May 3	5,000
Lapeer county:				
North Branch of Clinton River.....	Almont and Bruce	Dr. D. H. Burley, Almont	Mar. 29	8,000
Carpenter Creek.....	Mayfield	E. J. Thresher, Lapeer	Mar. 29	3,000
Headwaters of Mill Creek.....	Attica, Arcadia and Goodland	E. J. Thresher, Lapeer	Mar. 29	6,000
Hough Creek.....	Goodland and Burnside	E. J. Thresher, Lapeer	Mar. 29	5,000
Miller Creek.....	Deerfield and Rich	E. J. Thresher, Lapeer	Mar. 29	4,000
Hunter's Creek.....	Lapeer and Metamora	Matthias Caley, Lapeer	Mar. 29	4,000
Leelanau county:				
Victoria Creek.....	Solon.	Elmer Billman, Cedar City	April 28	5,000
Lenawee county:				
North Branch of Evans Creek.....	Franklin.	A. B. Wisner, Chicago.	Mar. 11	2,000
Livingston county:				
Denton Creek.....	Tyrone.	J. Max Davis, Fenton	Mar. 17	2,000
Bishop Creek.....	Green Oak	B. T. O. Clark, Brighton	Mar. 19	1,000
Burnham Creek.....	Brighton	B. T. O. Clark, Brighton	Mar. 19	1,000
McDonnell Creek.....	Brighton	B. T. O. Clark, Brighton	Mar. 19	2,000
Ore Creek.....	Brighton, Hartland and Hamburg	B. T. O. Clark, Brighton	Mar. 19	3,000
Peach Creek.....	Green Oak	B. T. O. Clark, Brighton	Mar. 19	1,000
Stewart Creek.....	Hamburg	B. T. O. Clark, Brighton	Mar. 19	1,000
Walker Creek.....	Hamburg and Genoa	B. T. O. Clark, Brighton	Mar. 19	3,000
Weichert Creek.....	Hamburg and Genoa	B. T. O. Clark, Brighton	Mar. 19	2,000
Woodruff Creek.....	Hartland	B. T. O. Clark, Brighton	Mar. 19	3,000
Branch of Ore Creek.....	Hartland and Osceola.	G. B. Merrill, Oak Grove	Mar. 19	2,000

Beach Creek.....	Hartland.....	A. C. Prentiss, Milford.....	Mar. 28	2,000
Andrus Creek.....	Hartland.....	A. C. Prentiss, Milford.....	Mar. 28	2,000
Luce county:				
West Branch of Sage River.....	Pentland.....	N. J. Hansen, Rexton.....	April 21	3,000
Headwaters Tahquamenon River.....	Columbus.....	Luce County R. and G. Club, Newberry.....	May 11	10,000
Two Heart Creek.....	Columbus.....	R. C. Bradley, Newberry.....	May 11	20,000
Linton Creek.....	48 N. R. 8 W.....	W. S. Linton, Saginaw.....	May 11	12,000
Murphy Creek.....	47 N. R. 8-10 W.....	W. S. Linton, Saginaw.....	May 11	12,000
Mackinac county:				
Headwaters Millicoquin River.....	44 N. R. 10.....	Luce County R. and G. Club, Newberry.....	May 11	6,000
Headwaters of Sage River.....	Hendricks.....	Wm. Hansen, Rexton.....	May 11	7,500
Macomb county:				
Benjamin Creek.....	Washington.....	H. W. Bradley, Romeo.....	Mar. 17	1,000
Hilton's Creek.....	Washington.....	H. W. Bradley, Romeo.....	Mar. 17	1,000
Hosner's Brook.....	Bruce.....	H. W. Bradley, Romeo.....	Mar. 17	1,000
Troop's Creek.....	Bruce.....	F. Gillespie, Romeo.....	Mar. 17	2,000
Silver Creek.....	Several.....	F. Gillespie, Romeo.....	Mar. 17	2,000
Smith's Creek.....	Avon.....	F. Gillespie, Romeo.....	Mar. 17	3,000
Stony Creek.....	Avon.....	F. Gillespie, Romeo.....	Mar. 17	3,000
Manistee county:				
Hatch's Creek.....	Cleon and Springfield.....	F. A. Mitchell, Manistee.....	April 5	8,000
Bear Creek.....	Springdale, Maple Grove and Brown.....	F. A. Mitchell, Manistee.....	April 7	20,000
Claybank Creek.....	Several.....	T. A. Brown, Eastlake.....	April 23	5,000
Beaver Creek.....	Maple Grove.....	T. G. Trimble, Manistee.....	April 23	3,000
Cedar Creek.....	Marilla, Maple Grove and Brown.....	T. G. Trimble, Manistee.....	April 23	5,000
Kaiser Creek.....	Bear Lake and Maple Grove.....	T. G. Trimble, Manistee.....	April 23	2,000
Pine Creek.....	Sironach and Brown.....	T. G. Trimble, Manistee.....	April 23	5,000
Carlton Creek.....	Onekama.....	Hans A. Wendel, Onekama.....	April 23	1,000
Hanson's Creek.....	Onekama.....	Hans A. Wendel, Onekama.....	April 23	1,000
Leonard's Creek.....	Onekama.....	Hans A. Wendel, Onekama.....	April 23	1,000
Schroeder's Creek.....	Onekama.....	Hans A. Wendel, Onekama.....	April 23	1,000
Wendt's Creek.....	Onekama.....	Hans A. Wendel, Onekama.....	April 23	1,000
Green Creek.....	Springdale.....	James P. Maise, Bear Lake.....	April 26	2,000
Little Bear Creek.....	Springdale and Pleasanton.....	Hans Peterson, Bear Lake.....	April 26	2,000
Wells Creek.....	Springdale.....	Hans Peterson, Bear Lake.....	April 26	1,000
Chief Creek.....	Brown.....	C. Fleissner, Manistee.....	April 27	2,000
Wilson Creek.....	Brown.....	Peter Schneider, Chief.....	April 27	2,000
Mason county:				
Swan Creek.....	Eden and Riverton.....	D. S. Betka, Scottville.....	Mar. 30	5,000
South Lincoln River.....	Victory and Sherman.....	D. S. Betka, Scottville.....	Mar. 30	4,000
Bennett Creek.....	Logan and Lake.....	W. M. Buffenbarger, Branch.....	Mar. 30	2,000
Ingralls Creek.....	Logan and Lake.....	W. M. Buffenbarger, Branch.....	Mar. 30	2,000
No One Creek.....	Eden and Custer.....	Jerry M. Cable, Custer.....	Mar. 30	2,000
Walden Creek.....	Branch.....	C. M. Dodge, Walhalla.....	Mar. 30	4,000
Lincoln River.....	Sherman.....	Henry Eoff, Fountain.....	Mar. 30	8,000
Freeman and Toles Creeks.....	Grant.....	L. P. Hansen, Freesoil.....	Mar. 30	4,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Marquette county:				
Headwaters of Garlic River.	Marquette	J. E. Boli, Marquette	May	4,500
Grang's Creek	Sands	Fred H. Pekoe, Marquette	May	1,500
Tributary of Chocolay River.	Chocolay	C. E. Carr, Marquette	May	3,000
Gedar Creek	Chocolay	E. C. Giesregen, Marquette	May	7,500
Foster's Creek	Chocolay	E. C. Giesregen, Marquette	May	7,500
Nelson Creek	Powell	H. R. Harris, Marquette	May	4,500
Alder Creek	West Branch	H. R. Harris, Marquette	May	3,000
Chocolay River and branches	Powell	H. R. Harris, Marquette	May	9,000
Garlic River	Powell	H. R. Harris, Marquette	May	4,500
Wilson Creek	Powell	H. R. Harris, Marquette	May	4,500
The Pip	Powell	H. R. Harris, Marquette	May	3,000
Bear Creek	Powell	H. A. St. John, Marquette	May	3,000
Bag Creek	Marquette	H. A. St. John, Marquette	May	3,000
Branches of Dead River	Marquette	H. A. St. John, Marquette	May	3,000
Cherry Creek	Marquette	H. A. St. John, Marquette	May	3,000
Little Dead River	Ispheming and Eby	H. A. St. John, Marquette	May	3,000
Pickered Lake Creek	Marquette	H. A. St. John, Marquette	May	3,000
Reany Creek	Marquette	H. A. St. John, Marquette	May	3,000
Silver Creek	Marquette	H. A. St. John, Marquette	May	4,500
South Branch of Wilson Creek	Marquette	H. A. St. John, Marquette	May	3,000
Whitefish River	Skandia	H. A. St. John, Marquette	May	3,000
West Branch of Laughing Whitefish River.	Several	H. A. St. John, Marquette	May	9,000
Yellow Dog Creek and branches	Marquette	H. A. St. John, Marquette	May	1,500
Campo Creek	Marquette	John W. Spear, Marquette	May	3,000
Little Carp Creek	Marquette	John W. Spear, Marquette	May	3,000
Harlow's Creek	Marquette	Frank G. Jenks, Marquette	May	3,000
Bear Creek	Forsyth	G. R. Jackson, Princeton	May	3,000
East Branch and Tributaries of Escanaba River.	Forsyth, Tilden and Richmond	G. R. Jackson, Princeton	May	6,000
Green Creek	Forsyth	G. R. Jackson, Princeton	May	3,000
Escanaba River	Forsyth	G. R. Jackson, Princeton	May	3,000
Halfway Creek	Forsyth	J. I. Kelson, Princeton	May	6,000
Links Creek	Forsyth	J. I. Kelson, Princeton	May	3,000
Dyer Creek	Forsyth	J. I. Kelson, Princeton	May	3,000
Escanaba River	Ispheming, Eby and Humboldt	Geo. A. Newitt, Ispheming	May	4,500
Mullins Creek	Ispheming	Geo. A. Newitt, Ispheming	May	6,000
Ropes Creek	Ispheming and Eby	Geo. A. Newitt, Ispheming	May	7,500
Wableman's Creek	Ispheming and Negaunee	Geo. A. Newitt, Ispheming	May	7,500
Carp River	Ispheming and Marquette	Geo. A. Newitt, Ispheming	May	4,500
Dead River	Negaunee	Negaunee R. and G. Club, Negaunee	May	6,000
Morgan Creek	Negaunee	Negaunee R. and G. Club, Negaunee	May	7,500
Outlet of Goose Lake	Negaunee	Negaunee R. and G. Club, Negaunee	May	3,000
Tributaries to Horse-shoe Lake	Negaunee	Negaunee R. and G. Club, Negaunee	May	3,000
Tributaries to Section 21 Lake	Negaunee	Negaunee R. and G. Club, Negaunee	May	1,500
Schwartzler Creek	Negaunee	Negaunee R. and G. Club, Negaunee	May	1,500
Escanaba River	Humboldt	Negaunee R. and G. Club, Negaunee	May	7,500
Spruce River	Michigamme	J. T. Pasco, Humboldt	May	7,500
		Peter Dolf, Michigamme	May	3,000

Bear Creek.....	Republic	C. W. Munson, Republic	May 6	3,000
Beaver Creek.....	Republic	C. W. Munson, Republic	May 6	3,500
Brush Creek.....	Republic	C. W. Munson, Republic	May 6	3,000
Spruce River.....	Republic	C. W. Munson, Republic	May 6	4,500
Trout Falls Creek.....	Republic	C. W. Munson, Republic	May 6	4,800
Captains Creek.....	Republic	H. R. Gamble, Republic	May 6	4,500
West Branch Escanaba River.....	Republic and Humboldt.	H. R. Gamble, Republic	May 6	9,000
Dishno Creek.....	Michigan	Osway F. Wood, Michigan	May 6	3,000
Michigamme Rivet.....	Republic	H. R. Gamble, Republic	May 6	7,500
Mecosta county.				
Hevrie Creek.....	Mecosta	Fred I. Ladner, Big Rapids	Mar. 14	2,000
Mitchell Creek.....	Aetna	Wm. Cook, Miley	Mar. 14	2,000
East Branch of Big Creek.....	Aetna and Deerfield	Ceo. F. Haist, Moley	Mar. 14	3,000
Rosey Run.....	Deerfield	Chas. A. Houghtalin, Morley	Mar. 14	2,000
No Name.....	Deerfield	Isaac Laird, Morley	Mar. 14	5,000
Quigley Creek.....	Deerfield and Aetna	J. McManus, Morley	Mar. 14	1,000
Big Creek.....	Austin and Mecosta	F. W. Chisum, Stanwood	Mar. 14	5,000
Trick's Creek.....	Austin and Horton	A. M. Cook, Howard City	Mar. 14	2,000
Tributary to Little Muskegon.....	Hinton	Arthur Royce, Altona	Mar. 15	4,000
Shingle Roll Creek.....	Millbrook and Rolland	H. D. Long, Altona	Mar. 23	2,000
Horner Creek.....	Millbrook	Roger Scott, Blanchard	Mar. 23	4,000
Decker Creek.....	Hinton	Alex. Tompkins, Lakeview	Mar. 23	5,000
Sylvester Creek.....	Hinton	John Wright, Lakeview	Mar. 23	2,000
Seaton's Creek.....	Hinton	John Wright, Lakeview	Mar. 23	2,000
Tompkins Creek.....	Mertoy	Ray Carmen, Mecosta	Mar. 23	3,000
Gilbert Creek.....	Mertoy and Wheatland	Ray Carmen, Mecosta	Mar. 23	3,000
Pointer Creek.....	Wheatland	B. S. Henry, Mecosta	Mar. 23	2,000
Benjamin Creek.....	Morton	John O'Brien, Mecosta	Mar. 23	5,000
Cold Creek.....	Morton	F. O. Redick, Mecosta	Mar. 23	5,000
Little Muskegon River.....	Morton	D. O. Redick, Mecosta	Mar. 23	1,000
Dead Stream.....	Millbrook	T. O. Rattison, Millbrook	Mar. 23	5,000
Pine River.....	Wheatland and Sherman	J. M. Swisher, Remus	Mar. 23	2,000
Pine River.....	Wheatland	J. M. Swisher, Remus	Mar. 23	1,000
West Branch of Pine River.....	Wheatland	J. M. Swisher, Remus	Mar. 23	1,000
Bingen Creek.....	Wheatland	P. J. Thelsen, Remus	Mar. 23	2,000
Little Muskegon River.....	Wheatland and Morton	P. J. Thelsen, Remus	Mar. 23	2,000
Poney Creek.....	Wheatland and Bloomfield	P. J. Thelsen, Remus	Mar. 23	4,000
Benjamin Creek.....	Fork	P. J. Thelsen, Remus	Mar. 23	5,000
Butts Creek.....	Fork	Adelbert Myers, Barryton	Mar. 25	2,000
Rattall Creek.....	Fork	Adelbert Myers, Barryton	Mar. 25	2,000
Brown Creek.....	Fork	W. T. Lashin, Barryton	Mar. 25	2,000
Isanhar Creek.....	Fork	W. T. Lashin, Barryton	Mar. 25	1,000
Tanner Creek.....	Sheridan	W. T. Lashin, Barryton	Mar. 25	4,500
Bamber Creek.....	Sheridan	W. B. Martin, Remus	Mar. 25	2,000
Quigley Creek.....	Deerfield	Ira H. Remus, Morley	April 8	6,000
RYAN Creek.....	Colfax	W. H. Redman, Big Rapids	April 16	6,000
Little and Big Buckhorn Creeks.....	Mecosta	Michigan Fish Commission, Detroit	April 30	50,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Menominee county:				
Holmes Creek.....	Holmes.....	Martin Farrell, Faithorn.....	April 21	3,000
No Name.....	Meyer.....	Martin Farrell, Faithorn.....	April 21	3,000
Hay Creek.....	Meyer.....	J. Clifford, Hermansville.....	April 29	1,500
Brusche Creek.....	Meyer and Spalding.....	J. D. Hayes, Hermansville.....	April 29	1,500
Cunard's and Vesper Creeks.....	Meyer.....	J. D. Hayes, A. J. Kremer, Herman's Hill.....	April 29	3,000
Little Cedar River.....	Meyer.....	J. D. Hayes, Hermansville.....	April 29	1,500
Camp 13 Creek.....	Meyer and Holmes.....	J. D. Hayes, Hermansville.....	April 29	1,500
Camp 25 Creek.....	Meyer.....	J. D. Hayes, Hermansville.....	April 29	3,000
Inlets to Hermansville Pond.....	Meyer.....	J. D. Hayes, Hermansville.....	April 29	3,000
Camp 7 Creek.....	Meyer.....	F. R. Radford, Hermansville.....	April 29	1,500
Camp 2 Creek.....	Meyer.....	Geo. Krothnke, Vulcan.....	April 29	3,000
Black Creek.....	Holmes.....	John Archibald, Powers.....	April 29	3,000
Dirkman Creek.....	Spalding.....	John Archibald, Powers.....	April 29	1,500
Wheeler Creek.....	Spalding.....	Antoine Gierneri, Powers.....	April 29	15,000
North Branch Cedar River.....	Spalding.....	Chas. J. Quade, Powers.....	April 29	3,000
Quade Creek.....	Spalding.....	C. B. Wheeler, Powers.....	April 29	3,000
Ten Mile Creek.....	Spalding.....	Nicholas Peterson, Spalding.....	April 29	3,000
Cedar River and tributaries.....	Spalding and Harris.....	Wm. Maas, Wilson.....	April 29	3,000
Wilson Creek.....	Spalding and Harris.....	Wm. Maas, Wilson.....	April 29	3,000
Missaukee county:				
Eler Creek.....	Pioneer and Bloomfield.....	F. H. Reeder, Lake City.....	Mar. 29	4,000
Taylor Creek.....	Butterfield.....	F. M. Nye, Lake City.....	Mar. 29	2,000
Mosquito Creek.....	Reeder, Eina and Forest.....	W. E. Nye, Lake City.....	Mar. 29	2,000
Butterfield Creek.....	Reeder, Eina and Butterfield.....	W. E. Nye, Lake City.....	Mar. 29	7,000
West Branch of Muskegon River.....	West Branch.....	J. F. Stevens, Lake City.....	Mar. 29	7,000
Chuse Creek.....	Liberty and Caldwell.....	Chas. H. Bostick, Manton.....	April 2	3,000
Flower Creek.....	Bloomfield.....	Chas. H. Bostick, Manton.....	April 2	2,000
Golden Creek.....	Caldwell.....	Chas. H. Bostick, Manton.....	April 2	2,000
Hopkins Creek.....	Caldwell and Bloomfield.....	Chas. H. Bostick, Manton.....	April 2	8,000
Morse Creek.....	Caldwell.....	Chas. H. Bostick, Manton.....	April 2	3,000
Montcalm county:				
Chas. Barton Creek.....	Pierson and Winfield.....	Chas. Barton, Howard City.....	Mar. 15	3,000
Whitefish Creek.....	Reynolds.....	J. G. Collins, Howard City.....	Mar. 15	2,000
Church Creek.....	Winfield.....	J. A. Collins, Howard City.....	Mar. 15	2,000
Indian Creek.....	Reynolds.....	Wm. H. Collins, Howard City.....	Mar. 15	2,000
Bruch Creek.....	Winfield.....	G. V. Fulms, Howard City.....	Mar. 15	4,000
Hatch and Fosal Creeks.....	Winfield.....	W. H. Lovely, Howard City.....	Mar. 15	6,000
Little Muskegon River.....	Reynolds.....	W. H. Lovely, Howard City.....	Mar. 15	8,000
Rice Creek.....	Reynolds and Pierson.....	W. H. Lovely, Howard City.....	Mar. 15	3,000
Ryan Creek.....	Reynolds.....	W. H. Lovely, Howard City.....	Mar. 15	2,000
Tamarack Creek.....	Winfield and Reynolds.....	H. N. VanDemberg, Howard City.....	Mar. 15	5,000
Grant Creek.....	Pierson.....	W. H. VanDemberg, Howard City.....	Mar. 15	1,000
Carpenter Creek.....	Pierson.....	W. Carpenter, Sand Lake.....	Mar. 15	2,000

Black Creek.....	Pierson and Maple Valley, Spencer Lincoln.....	F. Shattuck, Sand Lake.....	Mar. 15	6,000
Blanchard Creek.....	Pierson.....	L. O. Ellison, Alma.....	Mar. 23	1,000
Horton Creek.....	Montcalm.....	Geo. C. Bower, Greenville.....	Mar. 23	2,000
Sneaky Run.....	Montcalm.....	Fred J. Cole, Greenville.....	Mar. 23	2,000
Turk Lake Creek.....	Montcalm.....	E. A. Kemp, Greenville.....	Mar. 23	2,000
Wilcox Creek.....	Eureka.....	F. J. Cole, Greenville.....	Mar. 23	1,000
Castle's Creek.....	Bushnell.....	Herbert Edwards, Fenwick.....	Mar. 23	2,000
Bennett Creek.....	Bushnell.....	M. F. Perry, Fenwick.....	Mar. 23	5,000
Prarie Creek.....	Bushnell.....	F. Taylor, Sheridan.....	Mar. 23	2,000
Deer's Creek.....	Bushnell.....	Chester Faltinger, Lakeview.....	Mar. 23	2,000
Brimmer Creek.....	Cato and Belvidere.....	Fred Faltinger, Lakeview.....	Mar. 23	1,000
Buck Lake Creek.....	Cato.....	Fred Faltinger, Lakeview.....	Mar. 23	1,000
Richie Creek.....	Pine.....	F. D. Biggs, Langston.....	Mar. 23	1,000
Brodnick Creek.....	Pine.....	F. D. Biggs, Langston.....	Mar. 23	2,000
Kortes Creek.....	Pine.....	F. D. Biggs, Langston.....	Mar. 23	1,000
West Branch Creek.....	Pine.....	F. D. Biggs, Langston.....	Mar. 23	2,000
West Lake Creek.....	Pine.....	F. D. Biggs, Langston.....	Mar. 23	2,000
Dixon Creek.....	Fairplains.....	E. E. Brown, Shiloh.....	Mar. 23	6,000
Sackett's Creek.....	Home.....	F. E. Curtis, Edmore.....	Mar. 23	3,000
South Branch Pine River.....	Richland.....	F. E. Curtis, Edmore.....	Mar. 23	3,000
Wolf Creek.....	Highland and Home.....	F. E. Curtis, Edmore.....	Mar. 23	2,000
Bachman Creek.....	Douglas and Sidney.....	F. E. Curtis, Edmore.....	Mar. 23	2,000
Hemingway Creek.....	Douglas.....	T. S. Earle, Stanton.....	Mar. 23	2,000
Inlet to Muscalonge Lake.....	Maple Valley.....	Jensen Brothers, Truifant.....	Mar. 23	3,000
Little Penny or Cedar Creek.....	Belvidere, Douglas and Day.....	M. A. Drallette, Weidman.....	Mar. 23	2,000
Chapin Creek.....	Ferris.....	J. W. Johnson, Elmhall.....	April 18	2,000
Inlet to Mud Lake.....	Ferris.....	A. Johnson, Riverdale.....	April 18	2,000
Montmorency county:	Several.....	Gaylord Fishing Club, Gaylord.....	April 5	28,000
Big Black Creek.....	Albert and Rust.....	C. M. Dutcher, Lewiston.....	April 6	3,000
Hunt Creek.....	Albert, Elmer and Maple Forest.....	C. M. Dutcher, Lewiston.....	April 6	4,800
Middle Branch Au Sable River.....	29-1 E. and 28 and 27 1 W.....	C. M. Dutcher, Lewiston.....	April 6	4,000
Sherridan Creek.....	Albert.....	C. M. Dutcher, Lewiston.....	April 6	4,000
North Branch Thunder Bay River.....	Montmorency and Long Rapids.....	W. H. Farrer, Hillman.....	April 12	10,800
Anchor Creek.....	Hillman.....	T. B. Johnson, Hillman.....	April 12	3,000
Brush Creek.....	Hillman.....	W. E. Lake, Hillman.....	April 12	4,800
Miller Creek.....	Hillman and Rust.....	G. A. Murphy, Hillman.....	April 12	4,800
Gilchrist Creek.....	Rust.....	Austin Rea, Hillman.....	April 12	4,500
East Branch.....	Several.....	J. M. Clark, Onaway.....	April 12	4,500
Muskegon county:	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 21	5,000
Big Black Creek.....	Holtan and Cedar Creek.....	F. D. Magoon, Muskegon.....	Mar. 21	5,000
Cedar Creek.....	Blue Lake.....	F. D. Magoon, Muskegon.....	Mar. 21	4,000
Cleveland Creek.....	Dalton and Fruitland.....	F. D. Magoon, Muskegon.....	Mar. 21	4,000
Duck Creek.....	Dalton and Fruitland.....	E. D. Magoon, Muskegon.....	Mar. 21	2,000
Green's Creek.....	Muskegon and Fruitland.....	E. D. Magoon, Muskegon.....	Mar. 21	2,000
Little Black Creek.....	Muskegon, Dalton and Laketon.....	E. D. Magoon, Muskegon.....	Mar. 21	2,000
Little Bear Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 21	2,000
Mosquito Creek.....	Exgaston.....	E. D. Magoon, Muskegon.....	Mar. 21	4,000
Morris Creek.....	Ravenna, Sullivan and Fruitland.....	E. D. Magoon, Muskegon.....	Mar. 21	4,000
Ryerson Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 21	5,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Muskegon county—Continued:				
Silver Creek	Blue Lake and Whitehall.	E. D. Maroon, Muskegon.	Mar. 21	2,000
Little Carleton Creek	Blue Lake, Grant and Otto.	S. A. Cullin, Montague.	Mar. 21	3,000
Langford Creek	Montague	V. Cor DeRose, Montague.	Mar. 21	1,000
Mill Creek	Montague	P. Gerber, Montague.	Mar. 21	1,000
Carleton Creek	Montague	Paul G. Kling, Montague.	Mar. 21	2,000
Smith Creek	Montague	Paul G. Olsen, Montague.	Mar. 21	4,000
Big Flower Creek	White River.	Prof. A. Sedony, Montague.	Mar. 21	1,000
Little Flower Creek	Montague and Claybank.	J. D. Storms, Montague.	Mar. 21	6,000
Carlton Creek	White River.	J. D. Storms, Montague.	Mar. 21	2,000
Blitch Brook	Grant.	Mammy Wilkison, Montague.	Mar. 21	4,000
Streams on Sections 4 and 5.	Fruitland	Alfred Burtland, Whitehall.	Mar. 21	1,000
The Millpond	Fruitland.	Alfred Burtland, Whitehall.	Mar. 21	1,000
Lake Creek	Whitehall	Alfred Burtland, Whitehall.	Mar. 21	2,000
Barnes Creek	Casnovia.	A. H. Armstrong, Bailey.	Mar. 25	2,000
Bateman Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	2,000
Bearss Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	1,000
Firman's Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	2,000
Gilbert Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	2,000
Herald's Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	1,000
Merkes Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	2,000
Moore's Creek	Casnovia.	J. O. Faleigh, Casnovia.	Mar. 25	1,000
Skeel's Creek	Holtton and Greenwood.	J. A. Gerber, Fremont.	Mar. 25	2,000
Big Marsh Creek	Blue Lake	S. P. Murphy, Holtton.	Mar. 25	2,000
Wolf Creek	Ravenna.	H. A. Muzzall, Coopersville.	Mar. 25	2,000
Newaygo county:				
Rossey Run	Several.	H. M. Gibbs, Howard City.	Mar. 15	3,000
Ryan Creek	Croton.	J. O. Nelson, Howard City.	Mar. 15	2,000
Reynolds Creek	Enley.	David Curtis, Sand Lake.	Mar. 15	1,000
Simpson Creek	Enley and Pierson.	Jas. Simpson, Sand Lake.	Mar. 15	2,000
Indian Creek	Casnovia and Ashland.	A. H. Armitage, Bailey.	Mar. 25	2,000
Pennoyer Creek	Casnovia.	S. D. Bonner, Newaygo.	Mar. 25	2,000
Biglow, Coolbrough and Cole Creeks	Brooks and East Townships	S. D. Thompson, Newaygo.	Mar. 25	8,000
Little South Branch	Home	P. Christensen, Bately.	Mar. 25	5,000
Tank Creek	Home.	P. Christensen, Bately.	Mar. 25	2,000
Cedar Creek	Troy.	P. Christensen, Bately.	Mar. 25	3,000
White River	Wilcox.	W. D. Hopkinson, Big Rapids.	Mar. 25	10,000
Cushman Creek	Greenwood.	J. A. Gerber, Fremont.	Mar. 25	3,000
Minnie Creek	Bridgeton.	J. A. Gerber, Fremont.	Mar. 25	2,000
Williams Creek	Ashland and Garfield	J. A. Gerber, Fremont.	Mar. 25	3,000
Dowling Creek	Lincoln	W. D. Sargent, Fremont.	Mar. 25	3,000
Martin's Creek	Denver.	W. D. Sargent, Fremont.	Mar. 25	3,000
Flanders Creek	Denver.	Geo. R. Lyons, Hesperia.	Mar. 25	1,000
West Branch, Martin Creek.	Denver.	Geo. R. Lyons, Hesperia.	Mar. 25	3,000
Post's, Barnum, Barnman and Isanhart Creeks.	Grant and Ashland.	Allen J. Titus, Grant.	Mar. 25	4,000

Jennings Creek	Wilcox and Lincoln	M. D. Hayward, White Cloud	Mar. 25	1,000
Marchip Creek	Monroe	Jas. C. Russell, Woodville	Mar. 25	2,000
Town's Creek	Monroe and Wilcox	Jas. C. Russell, Woodville	Mar. 25	8,000
White River	Wilcox	Branch Brothers, White Cloud	Mar. 30	8,000
Little South Creek	T. 16, 12 and 13, 17-13	Ludington Fishing Club, Ludington	Mar. 30	20,000
Pear Creek	Norwich, Barton and Home	Michigan Fish Commission	April 16	2,000
Key Creek	Monroe	Dan Matheson, White Cloud	April 16	2,000
Miller Creek	Wilcox	Geo. Whitman, White Cloud	April 16	2,000
Mattison Creek	Monroe	Geo. Whitman, White Cloud	April 16	1,000
Upper Coal Creek	Lincoln	M. D. Hayward, White Cloud	April 16	1,000
Oakland county:				
Shiawassee Creek	Springfield	F. C. Ely, Davisburg	Mar. 17	1,000
Weatherwax Creek	Springfield	F. C. Ely, Davisburg	Mar. 17	2,000
Waters of the Thread	Groveland	Chas. F. Green, Davisburg	Mar. 17	1,000
Eastern Branch Huron River	Springfield	E. C. Jagerdene, Clarkson	Mar. 17	2,000
Pettibone Creek	Springfield	F. H. Hatch, Milford	Mar. 28	2,000
Sands Creek	Milford and Brighton	T. H. Fady, Milford	Mar. 28	2,000
Sands Creek	Milford and Brighton	A. C. Prentis, Milford	Mar. 28	2,000
Pettibone Creek	Highland	A. C. Prentis, Milford	Mar. 28	2,000
Harris Brook	Cleveland	A. P. Button, Ortonville	Mar. 29	2,000
Duck Creek	Brandon	A. P. Button, Ortonville	Mar. 29	2,000
Dunlap Creek	Oxford	M. L. Miller, Oxford	Mar. 29	1,000
Stony Creek	Avon	Dr. E. M. Houghton, Detroit	Mar. 29	4,000
Oceana county:				
Pentwater River	Pentwater and others	S. D. Montgomery, Grand Rapids	Mar. 19	6,000
Pentwater River	Elbridge	Monroe G. Hall, Hart	Mar. 19	6,000
Tributary to Pentwater River	Elbridge	J. E. Plass, Hart	Mar. 19	1,000
Gene Rouse Creek	Hart	L. B. Mitchell, Hart	Mar. 19	1,000
Runtion Creek	Elbridge	G. K. Platt, Hart	Mar. 19	2,000
North Branch of South Branch of Pentwater River	Elbridge and Terry	Ray Thompson, Hart	Mar. 19	4,000
Caboose Creek	Otto	Otto Weirich, Hart	Mar. 19	5,000
Bear Creek	Otto	Henry Braun, Hesperia	Mar. 19	2,000
Wiswell Creek	Otto and Terry	Henry Braun, Hesperia	Mar. 19	2,000
North Branch of White River	Otto, Greenwood and Newfield	Geo. Williamson, Hesperia	Mar. 19	4,000
Williamson Creek	Terry and Otto	G. A. Kantz, Hesperia	Mar. 19	2,000
Halberg Creek	Golden	Geo. Williamson, Hesperia	Mar. 19	2,000
Lambert Creek	Golden and Benona	F. A. Gasahl, Mears	Mar. 19	1,000
Richter Creek	Golden	F. A. Gasahl, Mears	Mar. 19	1,000
Stafford Creek	Golden and Hart	F. A. Gasahl, Mears	Mar. 19	2,000
Swears Creek	Weare and Hart	F. A. Gasahl, Mears	Mar. 19	2,000
Webb Creek	Weare and Holden	F. A. Gasahl, Mears	Mar. 19	1,000
Harris Creek	Golden	C. L. Gold, Mears	Mar. 19	1,000
Hunter Creek	Golden	C. L. Gold, Mears	Mar. 19	1,000
Silver Lake Creek	Golden	C. L. Gold, Mears	Mar. 19	2,000
Carlson Creek	Golden	J. W. Krause, Mears	Mar. 19	1,000
DeKay Creek	Golden	J. W. Krause, Mears	Mar. 19	1,000
Nelson Creek	Golden	C. E. Merchant, Mears	Mar. 19	1,000
Knapp Creek	Golden	E. A. Post, Mears	Mar. 19	1,000
Miles Creek	Golden and Benona	E. A. Post, Mears	Mar. 19	2,000
Myers Creek	Golden	E. A. Post, Mears	Mar. 19	1,000

NINETEENTH REPORT—STATE FISHERIES.

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
<i>Oceana county.—Continued:</i>				
Park Creek.....	Golden.....	E. A. Post, Mears.....	Mar. 19	1,000
Weaver Creek.....	Golden.....	E. A. Post, Mears.....	Mar. 19	1,000
Graff Creek.....	Golden.....	E. A. Post, Mears.....	Mar. 19	1,000
Webb Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar. 19	2,000
Wright Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar. 19	2,000
Craig Creek.....	Golden.....	Scott Vanett, Mears.....	Mar. 19	4,000
Bear Creek.....	Otto.....	Adam Born, Montague.....	Mar. 19	3,000
Flower Creek.....	Grant, Montague and Claybank.....	William Brocker, Montague.....	Mar. 19	3,000
Little Carlton Creek.....	Blue Lake, Grant and Otto.....	J. B. Conger, New Era.....	Mar. 19	4,000
Sand Creek.....	Otto.....	Chas. Smith, Rothbury.....	Mar. 19	4,000
Hobby Creek.....	Shelby and Benona.....	Shelby F. and G. P. Asso, Shelby.....	Mar. 19	2,000
Piper Creek.....	Shelby and Benona.....	Shelby F. and G. P. Asso, Shelby.....	Mar. 19	3,000
Robinson Creek.....	Shelby and Ferry.....	Shelby F. and G. P. Asso, Shelby.....	Mar. 19	3,000
Stony Creek.....	Shelby and Benona.....	Shelby F. and G. P. Asso, Shelby.....	Mar. 19	5,000
Rackliffe Creek.....	Elbridge.....	W. Barker, Walkerville.....	Mar. 19	1,000
North Branch of Beaver Creek.....	Leavit.....	O. W. Bunting, Walkerville.....	Mar. 19	2,000
Bolene Creek and others.....	Elbridge.....	Geo. O. Letson, Walkerville.....	Mar. 19	3,000
Crystal Creek.....	Crystal, Weare and Pentwater.....	Ira C. Ford, Walkerville.....	Mar. 19	4,000
Seman Creek.....	Crystal.....	O. E. Vine, Walkerville.....	Mar. 19	1,000
Carlton Creek.....	Rothbury.....	G. Tallent, Montague.....	Mar. 29	3,000
Sand Creek.....	Blue Lake.....	G. Tallent, Montague.....	Mar. 29	4,000
Shigley Creek.....	Hart.....	Wm. R. Roach, Hart.....	April 19	7,000
<i>Ogemaw county:</i>				
Klacking Creek.....	Churchill and West Branch.....	Carscallen Bros., Selkirk.....	April 5	4,000
Tributaries to Rifle River.....	Churchill.....	Carscallen Bros., Selkirk.....	April 5	12,000
Crapo Creek.....	West Branch.....	John Tolfree, West Branch.....	April 5	2,000
East Branch Tittabawassee.....	Horton.....	John Tolfree, West Branch.....	April 5	3,000
Klacking Creek.....	Klacking, West Branch and Churchill.....	John Tolfree, West Branch.....	April 5	4,000
Mansfield Creek.....	Edwards.....	John Tolfree, West Branch.....	April 5	3,000
Pneur Creek.....	Klacking and Cumming.....	John Tolfree, West Branch.....	April 5	4,500
West Branch Rulle River.....	West Branch.....	John Tolfree, West Branch.....	April 5	10,000
Weidman Creek.....	West Branch.....	John Tolfree, West Branch.....	April 5	3,000
Wood's Creek.....	West Branch.....	John Tolfree, West Branch.....	April 5	3,000
Cramer Creek.....	Richland.....	Geo. Eymier, Prescott.....	April 5	4,000
Tributaries to Rifle River.....	Richland.....	Geo. Eymier, Prescott.....	April 12	24,000
Whitney Creek.....	Richland.....	Geo. Eymier, Prescott.....	April 12	6,000
Houghton Creek and branches.....	Rose and Cumming.....	Geo. Eymier, Prescott.....	April 12	10,000
Tributaries to Rifle River.....	Klacking.....	Jos. Schneider, Rose City.....	April 12	8,000
<i>Ontonagon county:</i>				
Bluff, One Mile and Paulding Creeks.....	Haight.....	A. B. Paine, Bruce's Crossing.....	May 6	6,000
Creer Creek and tributaries.....	Stannard.....	Alex. Turner, Bruce's Crossing.....	May 6	4,500
Branch of Trout Creek.....	T. 47—37.....	E. W. MacPherran, Marquette.....	May 6	3,000
Branch of Ontonagon River.....	T. 47—38.....	E. W. MacPherran, Marquette.....	May 6	3,000

Branch of Michigamme River.....	T. 48—39.....	E. W. MacPherran, Marquette.....	May 6.....	3,000
Merryweather Creek.....	T. 48—41.....	E. W. MacPherran, Marquette.....	May 6.....	4,500
Davy's Creek.....	Rockland.....	John Kinn, Rockland.....	May 6.....	4,800
Rockland Creek.....	Rockland.....	W. G. Richards, Rockland.....	May 6.....	1,800
Rockland Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	May 6.....	3,000
Clear Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	May 6.....	6,000
Landing Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	May 6.....	6,000
Sucker Creek.....	Inferior and Stannard.....	Arbutus R. and G. Club, Trout Creek.....	May 6.....	7,500
Middle Branch of Ontonagon River.....	Inferior.....	Arbutus R. and G. Club, Trout Creek.....	May 6.....	3,000
McAlpine Creek.....	Inferior.....	Arbutus R. and G. Club, Trout Creek.....	May 6.....	6,000
Tributary of Trout Creek.....	Bohemia.....	Wm. Brown, Winona.....	May 9.....	4,000
Tributary Sleeping River.....				
Osceola county:				
Ghost Creek.....	Marion.....	Patrick White, Marion.....	Mar. 26.....	2,000
Highland Creek.....	Highland.....	Patrick White, Marion.....	Mar. 25.....	3,000
Middle Branch of Muskegon River.....	Severall.....	Patrick White, Marion.....	Mar. 25.....	12,000
Seazer Creek.....	Marion.....	Patrick White, Marion.....	Mar. 25.....	2,000
Frantz Creek.....	Highland.....	C. W. Graves, Dighton.....	Mar. 25.....	4,000
Highland Creek.....	Highland.....	C. W. Graves, Dighton.....	Mar. 26.....	10,000
Middle Branch of Ontonagon River.....	Highland.....	C. W. Graves, Dighton.....	Mar. 26.....	4,000
North Branch Chippewa River and Edson Creek.....	Orient.....	Benj. C. Grant, Chippewa Station.....	Mar. 28.....	4,000
Cat Creek.....	Hersey.....	L. A. Moody, Ewart.....	Mar. 28.....	4,000
Upper Part of Big Creek.....	Ewart.....	Joel Perry, Ewart.....	Mar. 28.....	2,000
Grindstone Creek.....	Hartwick and Sylvan.....	Wm. Ramsey, Ewart.....	Mar. 28.....	5,000
Twin Creek.....	Ewart, Osceola and Cedar.....	Wm. Ramsey, Ewart.....	Mar. 28.....	5,000
Beaver Creek.....	Leroy.....	Geo. W. Kellogg, LeRoy.....	April 2.....	5,000
Swain, Johnson and tributary branches to Hersey Creek.....				
McDonald's Creek.....	Lincoln.....	L. W. Purliaise, Orono.....	April 2.....	5,000
The Johnson Stream.....	Lincoln and Richmond.....	A. J. Auer, Reed City.....	April 2.....	1,000
	Richmond.....	H. E. McInnis, Reed City.....	April 2.....	2,000
Oscoda county:				
East Branch.....	Elmerton.....	C. M. Dutcher, Lewiston.....	April 6.....	8,000
East Branch, Au Sable River.....	Elmer and Maple Forest.....	C. M. Dutcher, Lewiston.....	April 6.....	3,000
Upper South Branch of Thunder Bay River.....	Severall.....	J. D. Hawks, Detroit.....	April 12.....	51,000
Moffet Creek.....	Severall.....	Andrew M. McLean, Alpena.....	April 12.....	2,000
Blockhouse Creek.....	Mentor.....	Wm. Ellis, Au Sable.....	April 13.....	3,000
Gilchrist, Creek.....	Clinton and Rust.....	Geo. Imlay, Comins.....	April 13.....	10,500
Osego county:				
Pigeon River.....	T. 31 to 34, 1 and 2 W.....	D. M. Sly, Vanderbilt.....	April 5.....	20,000
Sturgeon River.....	T. 32 N. R. 2 W.....	D. M. Sly, Vanderbilt.....	April 5.....	20,000
Sturgeon River.....	Severall.....	J. W. Lester, Indian River.....	April 5.....	20,000
North Branch, Au Sable (Upper waters).....	Chester.....	A. Boutill, Saginaw.....	April 6.....	10,000
Headwaters of Pigeon River.....	Severall.....	R. H. L'Hommiedieu, Detroit.....	April 28.....	30,000
Headwaters of Sturgeon River.....	Severall.....	R. H. L'Hommiedieu, Detroit.....	April 28.....	20,000
Pigeon River.....	Olive.....	C. McKinley, West Olive.....	April 14.....	3,000

Brook trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Presque Isle county:				
Black River.....	Several.....	J. M. Clark, Onaway.....	April 12.....	15,000.....
Glasier's Creek.....	Allis.....	J. M. Clark, Onaway.....	April 12.....	1,000.....
Tonawaw Creek.....	Metz, Belknap and Forest.....	J. M. Clark, Onaway.....	April 12.....	3,000.....
Green Creek.....	Bismark, Belknap and Metz.....	John Dunbert, Hawks.....	April 12.....	4,500.....
tributary to Oqueoc River.....	Metz.....	H. Horwitz, Hawks.....	April 12.....	2,000.....
Indiana Creek.....	Oqueoc and Case.....	N. C. Monroe, Millersburg.....	April 12.....	3,000.....
Little Oqueoc River.....	Oqueoc, Molve and Bismark.....	W. H. Friers, Millersburg.....	April 12.....	4,500.....
Oqueoc River.....	Oqueoc and Case.....	W. H. Friers, Millersburg.....	April 12.....	9,000.....
Roscommon county:				
Siber Creek.....	Richfield.....	D. Procunier, St. Helens.....	April 5.....	2,000.....
South Branch Au Sable River.....	Penfield and South Branch.....	Wm. F. Johnston, Roscommon.....	April 28.....	12,000.....
Schoelcraft county:				
Thompson Creek.....	Thompson.....	Benj. Gero, Manistique.....	April 21.....	3,000.....
Silver Creek.....	Thompson.....	Benj. Gero, Manistique.....	April 21.....	4,500.....
East Branch of Manistique River.....	Seney and Germfask.....	Angus McDougall, Germfask.....	May 11.....	12,000.....
St. Joseph county:				
James O'Brien Creek.....	Flowerfield.....	S. J. Andrus, Marcellus.....	Mar. 17.....	1,000.....
Parker's Creek.....	Flowerfield.....	S. J. Andrus, Marcellus.....	Mar. 17.....	1,000.....
Spring Creek.....	Lockport.....	Amon Ives, Three Rivers.....	Mar. 17.....	1,500.....
Coon Hollow Creek.....	Faber.....	C. R. Jackson, Three Rivers.....	Mar. 17.....	3,000.....
No Name.....	Lockport.....	C. R. Jackson, Three Rivers.....	Mar. 17.....	1,500.....
Sherman Creek.....	Lockport.....	C. R. Jackson, Three Rivers.....	Mar. 17.....	1,500.....
Gemberling Creek.....	Fabus.....	Warren Klocke, Three Rivers.....	Mar. 17.....	1,500.....
Tuscola county:				
Goodell Creek.....	Dayton.....	E. D. Cartwright, Mayville.....	Mar. 29.....	1,000.....
No Name.....	Fremont.....	Arthur Haines, Mayville.....	Mar. 29.....	1,000.....
Sucker Creek.....	Dayton.....	Arthur Haines, Mayville.....	Mar. 29.....	4,000.....
Silver Creek.....	Dayton and Rich.....	Wm. Leach, Mayville.....	Mar. 29.....	2,000.....
Herb's Creek.....	Fremont.....	J. W. Schermerhorn, Mayville.....	Mar. 29.....	2,000.....
Goodfellow's Creek.....	Dayton and Rich.....	C. L. Schram, Mayville.....	Mar. 29.....	2,000.....
Chapel Creek.....	Juniata.....	Wm. Vandecar, Caro.....	Mar. 29.....	3,000.....
Van Buren county:				
West Branch of Paw Paw River.....	Paw Paw and Decatur.....	H. Emery Ball, Paw Paw.....	Mar. 7.....	7,500.....
East Branch of Paw Paw River.....	Antwerp and Portier.....	R. D. Loveland, Paw Paw.....	Mar. 7.....	7,500.....
Foster's Creek.....	Keeler.....	W. A. Palmer, Hartford.....	Mar. 7.....	4,500.....
Two branches of Hoig Creek.....	Hartford.....	W. A. Palmer, Hartford.....	Mar. 7.....	3,000.....
Hart and Brooks Creeks.....	Hartford.....	W. A. Palmer, Hartford.....	Mar. 7.....	3,000.....
Corwin Brook.....	Hamilton.....	James L. Welch, Lawrence.....	Mar. 7.....	1,500.....
Bacon Brook.....	Lawrence.....	James L. Welch, Lawrence.....	Mar. 7.....	1,500.....
Carter Brook.....	Paw Paw.....	James L. Welch, Lawrence.....	Mar. 7.....	1,500.....
Christler's Brook.....	Lawrence.....	James L. Welch, Lawrence.....	Mar. 7.....	1,500.....

Bloomingsdale Creek	Bloomingsdale	L. C. Coulter, Bloomingsdale	Mar. 7	2,000
No Name	Decatur	Levi Lyle, Decatur	Mar. 8	3,000
Rix Creek	Antwerp	H. E. Oswald, Kalamazoo	Mar. 8	6,000
Spicebush Creek	Geneva, Lee and Casco	J. A. Gibson, Lacota	Mar. 17	3,000
Newberry Brook	Antwerp and Paw Paw	Dr. R. E. Balch, Kalamazoo	Mar. 17	4,000
South Branch of Paw Paw River	Antwerp, Paw Paw and Almena	Dr. R. E. Balch, Kalamazoo	Mar. 17	4,000
Mattawan Creek	Mattawan	Dr. C. A. Wise, Kalamazoo	Mar. 17	2,000
Haden Creek	Almena	Dr. C. A. Wise, Kalamazoo	Mar. 17	2,000
Mill Creek	Geneva	J. T. Tolles, South Haven	Mar. 17	2,000
Washtenaw county:				
Iron Creek	Manchester	A. J. Waters, Manchester	Mar. 11	3,000
Schable Creek	Manchester	A. J. Waters, Manchester	Mar. 11	2,000
South Branch of Paint Creek	Ypsilanti and Pittsfield	Willard A. Clawson, Ypsilanti	Mar. 15	2,000
Honey Creek	Lima and Scio	C. F. Staebler, Ann Arbor	Mar. 15	4,000
Schultz Creek	Dexter	Sam'l Schultz, Dexter	Mar. 15	2,000
Wexford county:				
Cedar Creek	Liberty and Cedar Creek	Chas. H. Bostick, Manton	April 2	4,000
Taylor Creek	Liberty and Cedar Creek	Chas. H. Bostick, Manton	April 2	1,000
Whitmore Creek	Liberty and Cedar Creek	Chas. H. Bostick, Manton	April 2	1,000
Harger Creek	Colfax and Greenwood	C. S. Guilbertson, Manton	April 2	2,000
Soper Creek	Colfax and Greenwood	C. S. Guilbertson, Manton	April 2	2,000
Buttermilk Creek	Greenwood	C. H. Tyler, Manton	April 2	2,000
Silver Creek	Greenwood	C. H. Tyler, Manton	April 2	3,000
Big Filer Creek	Greenwood	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Little Filer Creek	Greenwood	Kingsley Sportsmen Club, Kingsley	April 2	2,000
Adams Creek	Antioch	F. D. Winnie, Mesick	April 18	2,000
Fletcher Creek	Springville	F. D. Winnie, Mesick	April 18	1,000
Jewett Creek	Springville	F. D. Winnie, Mesick	April 18	2,000
Preston Creek	Springville	F. D. Winnie, Mesick	April 18	3,000
Usewick Creek	Antioch	F. D. Winnie, Mesick	April 18	3,000
Ster Creek	Cherry Grove	F. D. Winnie, Mesick	April 18	3,000
Wheeler Creek	Hanover	Henry C. Auer, Cadillac	April 21	6,000
Anderson Creek	Hanover	G. A. Brigham, Buckley	April 29	2,000
Dean Creek	Hanover	G. A. Brigham, Buckley	April 29	3,000
Fletcher Creek	Wexford	G. A. Brigham, Buckley	April 29	4,000
Hawley Creek	Hanover	G. A. Brigham, Buckley	April 29	2,000
Sands Creek	Slagle	Michigan Fish Commission	May 5	10,000
Clam River	Several	Michigan Fish Commission	May 5	5,000
Bear Creek	Slagle	Michigan Fish Commission	May 11	10,000

Total..... 4,937,000

BROOK TROUT PLANTS.
FINGERLINGS No. 3.
For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Crawford county: South Branch of Au Sable and tributaries.....	Several.....	Oriando F. Barnes, Roscommon.....	1909, Nov. 12	4,000

RAINBOW TROUT PLANTS.
FRY AND ADVANCED FRY.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alger county: Inlets to Seven Mile Lake..... East Bay..... Rhoda River.....	Burt..... Burt..... Burt.....	Chas. F. Hickok, Grand Marais..... Chas. F. Hickok, Grand Marais..... Chas. F. Hickok, Grand Marais.....	June 3 June 3 June 3	6,000 4,500 6,000
Allegan county: Tributary to Rabbit River..... Neely and Duncan Creeks.....	Leighton..... Gun Plains.....	Alfred S. Nelson, Wayland..... A. J. Shelp, Doster.....	May 6 May 6	2,000 4,000
Antrim county: Odetree Creek..... Town Line Lake.....	Central Lake and Banks..... Banks.....	O. P. Barber, Central Lake..... W. H. Uphiegrove, Central Lake.....	June 8 June 8	3,000 3,000
Barry county: Eight Mile Creek..... Glass Creek..... Fall Creek..... McCullum Creek..... Tributary to Glass Creek..... Bentley Creek..... Henry Creek..... Tamarack Creek..... Cedar Creek..... Glass Creek River..... High Bank River..... Little Thornapple River.....	Barry and Ross..... Rutland and Irving..... Several..... Yankee Springs..... Yankee Springs..... Hastings..... Hastings..... Baltimore..... Barry and Cedar Creek..... Hope and Pentland..... Johnson and others..... Woodland and Carlton.....	Geo. W. Lawrence, Delton..... Edgar Otis, Shuliz..... F. H. Barlow, Hastings..... C. D. Bauer, Hastings..... C. D. Bauer, Hastings..... Jay Blackney, Hastings..... Jay Blackney, Hastings..... John T. Jones, Hastings..... W. J. Michael, Hastings..... W. J. Michael, Hastings..... W. J. Michael, Hastings..... W. J. Michael, Hastings.....	May 6 May 6 May 19 May 19 May 19 May 19 May 19 May 19 May 19 May 19 May 19 May 19	4,000 4,000 2,000 2,000 2,000 2,000 2,000 12,000 6,000 6,000 6,000

Mud Creek River	Woodland and Carlton	W. J. Michael, Hastings	May 19	6,000
Kelly Creek	Baltimore	J. H. Neiss, Hastings	May 19	3,000
Murray Creek	Baltimore	C. H. Osborn, Hastings	May 19	2,000
Powers Creek	Irving	C. H. Osborn, Hastings	May 19	1,500
Horn Creek	Hope	Keop Sillsbee, Hastings	May 19	2,000
Tributaries to Thornapple River	Hastings and Irving	F. A. Stowell, Hastings	May 19	1,500
Kelly Creek	Baltimore	Fred Stowell, Hastings	May 19	4,500
Three Tributaries to Thornapple River	Thornapple	A. C. Hindman, Grand Rapids	May 19	6,000
Baraga county:				
Small Branch of Sturgeon River	Baraga	J. C. Pryor, Houghton	May 30	7,500
Small Branch of Sturgeon River	Baraga	I. N. Haas, Houghton	May 30	7,500
Sturgeon River	Laird	C. A. Mills, Houghton	May 30	12,000
Clear Creek	Baraga	H. L. Swift, Houghton	May 30	7,500
Benzie county:				
Crystal Lake Inlet	Benzonla	D. E. Burns, Beulah	June 10	7,500
Berrien county:				
Wilson and Gray Creeks	Oronoka	J. G. Murdock, Berrien Springs	May 3	4,000
McCoy's Creek	Buchanan and Bertrand	J. E. Scott, Buchanan	May 3	3,000
Hemlock Creek	Watervliet	A. H. Woodward, Coloma	May 3	2,000
Outlet of Little Paw Paw Lake	St. Joseph	A. H. Woodward, Coloma	May 3	2,000
Hickory Creek	Sodus and Pipestone	A. F. Herring, St. Joseph	May 3	8,000
Pipestone Creek	Several	A. F. Herring, St. Joseph	May 3	5,000
Tributaries of St. Joseph River	Benton	A. F. Herring, St. Joseph	May 3	8,000
Blue Creek	Oronoka	J. W. Isbell, St. Joseph	May 3	3,000
Lemon Creek	Several	J. W. Isbell, St. Joseph	May 3	3,000
Branch of St. Joseph River	Several	W. J. Lucker, St. Joseph	May 3	3,000
Branch county:				
Standford Brook	Sherwood	S. W. Lehr, Athens	May 6	1,000
Spencer Brook	Sherwood	Leo E. Wood, Athens	May 6	2,000
Mill Creek	Batavia and Bronson	C. D. Sneed, Batavia	May 6	2,000
Coldwater River	Quincy and others	J. B. Shipman, Coldwater	May 6	6,000
Shinneman's, Molts, Hog, Aijen and Branch Creeks	Coldwater and Girard	F. T. Tappan, Coldwater	May 6	8,000
Calhoun county:				
Pipe Creek	Athens	A. C. Gav, Athens	May 6	4,000
Northwa Creek	Athens and Newton	J. G. Woodruff, Athens	May 6	4,000
Flower Creek	Ennet	V. H. Bramble, Battle Creek	May 21	13,000
Miller Creek	Marshall	W. J. Claybourne, Marshall	May 21	7,500
Wildor Creek	Elford	S. W. Warren, Marshall	May 21	7,500
Mineral Springs Brook	City of Albion	M. O. Reed, Albion	May 21	1,000
Bascon Creek	Bedford	Dr. C. W. Ryan, Battle Creek	May 21	6,000
Cass county:				
Al Thorp Creek	Jefferson	G. E. Harmon, Cassopolis	May 4	2,000
Kegan Creek	Jefferson	Dr. J. H. Kelsey, Cassopolis	May 4	2,000
Big Dowagiac Creek	Decatur, Wayne and others	Fred Phillips, Dowagiac	May 4	12,000
Little Dowagiac Creek	LaGrange, Fokagon and Silver Creek	Fred Phillips, Dowagiac	May 4	12,000
Broadhurst Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Carmen Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000

NINETEENTH REPORT—STATE FISHERIES.

Rainbow trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
<i>Cass county.—Continued:</i>				
Gage Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Glennwood Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Hampton Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Hatch Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Ireland Creek	Silver Creek	Fred Phillips, Dowagiac	May 4	3,000
Kenny Creek	Wayne	Fred Phillips, Dowagiac	May 4	3,000
Kinzie Creek	Jefferson	Fred Phillips, Dowagiac	May 4	3,000
Lyle Creek	Silver Creek	Fred Phillips, Dowagiac	May 4	3,000
McMiller Creek	Pokagon	Fred Phillips, Dowagiac	May 4	3,000
Pine Lake Creek	Silver Creek	Fred Phillips, Dowagiac	May 4	3,000
Peavine Creek	Pokagon	Fred Phillips, Dowagiac	May 4	3,000
Pokagon Creek	Pokagon	Fred Phillips, Dowagiac	May 4	6,000
South Branch Dowagiac Creek	Pokagon	Fred Phillips, Dowagiac	May 4	4,500
Tyron Creek	Pokagon and Prairie Ronde	Fred Phillips, Dowagiac	May 4	12,000
Conklin Stream	Wayne and Silver Creek	Fred Phillips, Dowagiac	May 4	3,000
No Name	Marcellus mostly	B. F. Mikel, Marcellus	May 6	4,000
Yaw Brook	La Grange and Howard	R. W. Hain, Elkhart, Ind.	May 6	2,000
	Pokagon	John Wyant, Berrien Centre	May 6	
<i>Charlevoix county:</i>				
North Boyne River	Boyne Valley	Chas. Galster, Boyne Falls	April 30	15,000
West Branch of Sturgeon River	Hudson	C. F. Hoffman, Vanderbilt	June 15	18,000
Thumb Lake	T. 32 N. R. 4 W.	Jas. A. Wagner, Vanderbilt	June 15	3,000
<i>Clare county:</i>				
Tobacco River	Surray	W. C. Fuller, Farwell	June 13	4,500
Chord Creek	Grant	F. C. Sanford, Clare	June 13	3,000
Halstead Creek	Grant	F. C. Sanford, Clare	June 13	6,000
McKinley Creek	Sheridan	F. C. Sanford, Clare	June 13	6,000
<i>Chippewa county:</i>				
Little Muniskong River	Pickford	Dr. J. A. Cameron, Pickford	June 8	10,000
St. Mary's River at Falls	Severn	Michigan Fish Commission	June 8	40,000
St. Mary's River at East Neebish Rapids	Sugar Island	Chase S. Osborn, Sault Ste. Marie	June 8	10,000
<i>Delta county:</i>				
Portage Lake and Cedar Brook	Ford River and Wells	T. Killian, Escanaba	May 31	16,000
<i>Dickinson county:</i>				
Michigamme River	Sagola	J. T. Dunwoodie, Channing	June 1	16,000
Squaw Creek	Sagola	J. T. Dunwoodie, Channing	June 1	8,000
<i>Eaton County:</i>				
Silver Creek	Windsor	F. G. French, Dimondale	May 19	9,000
Battle Creek	Benton	M. E. Mills, Charlotte	May 19	9,000

Morris Creek.....	Eaton Rapids.....	G. E. LaFever, Eaton Rapids.....	May 19	3,000
Sandstone Creek.....	Oncida.....	F. L. Berry, Grand Rapids.....	May 31	9,000
Ennet county:				
Bear Creek.....	Littlefield.....	Geo. C. Braun, Petoskey.....	April 30	15,000
No Name.....	Littlefield.....	W. W. Fairbairn, Petoskey.....	April 30	6,000
Grand Traverse county:				
Boardman River.....	Green Lake and others.....	R. S. Hastings, Traverse City.....	June 6	37,500
No Name.....	Green Lake and Blair.....	Wm. Fall, Traverse City.....	June 8	3,000
Gratiot county:				
Cale Ayers Creek.....	Summer.....	W. J. Johnson, Elmhall.....	May 31	3,000
Gogebic county:				
Gage's Creek.....	46 and 49 W.....	D. P. Green, Bessemer.....	May 31	6,000
Inlets to Thousand Island Lake.....	Watersmeet.....	A. D. Johnson, Bessemer.....	May 31	10,000
Jackson Creek.....	Bessemer.....	H. E. Patterson, Bessemer.....	May 31	8,000
Swamp Creek.....	Bessemer.....	H. P. Rasmussen, Bessemer.....	May 31	8,000
Rainbow Trout.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	May 31	8,000
No Name.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	May 31	4,000
Sargent Creek.....	Watersmeet.....	Pat. Kelly, Watersmeet.....	May 31	4,000
Middle Branch Ontonagon River.....	Watersmeet.....	C. M. McDonald, Watersmeet.....	May 31	14,000
Outlet of Beaton's Lake.....	Watersmeet.....	C. M. McDonald, Watersmeet.....	May 31	6,000
Outlet of Tenderfoot Lake.....	Watersmeet.....	C. M. McDonald, Watersmeet.....	May 31	8,000
Hillsdale county:				
Sand Creek.....	Litchfield and Alle.....	Wm. D. Hounson, Litchfield.....	May 19	7,500
Branch of Raisin River.....	Somerset.....	Wm. Bickford, Jerome.....	May 19	6,500
No Name.....	Somerset and Wheatland.....	Frank Carney, Jerome.....	May 21	4,500
Silver Creek and Tributaries.....	Cambridia.....	W. J. French, Hillsdale.....	May 21	6,000
Emery Mills Creek.....	Hillsdale.....	W. C. Kemp, Hillsdale.....	May 21	4,500
No Name.....	Somerset and Rollin.....	A. W. Wood, Addison.....	May 21	3,000
Houghton county:				
Pike River.....	Chassell.....	Dr. P. H. Wilson, Chassell.....	May 30	6,000
Graverod Creek.....	Stanton.....	Frank Ruscie, Painesdale.....	May 30	7,500
Small Branch of Sturgeon River.....	Laird.....	Paul D. Swift, Houghton.....	May 30	7,500
Bob Lake.....	Laird.....	G. W. Stannard, Rockland.....	May 30	3,000
Leveque's Creek.....	Laird.....	G. W. Stannard, Rockland.....	May 30	15,000
Ingham county:				
Willow Creek.....	Vevay and Aurelius.....	C. T. Mickelson, Mason.....	May 21	6,000
Ionia county:				
Outlet of Long Lake.....	Orleans.....	W. H. Angell, Belding.....	May 31	3,000
Woodard Lake Outlet.....	Orleans.....	B. F. Hall, Belding.....	May 31	3,000
Wabasis Creek.....	Orisco.....	R. W. Benedict, Ionia.....	May 31	7,500
Perrett's and Libheart Creeks.....	Orange.....	Chas. Stein, Ionia.....	May 31	9,000
Prairie Creek.....	Ionia.....	Chas. Stein, Ionia.....	May 31	6,000

Rainbow trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Iron county: Paint River..... Paint River..... Section 33 Creek.....	Iron..... Crystal Falls and others..... Iron River.....	Mrs. L. A. Carmichael, Beechwood..... Arvid Bjork, Crystal Falls..... Belmont Waples, Ironwood.....	May 31..... June 1..... June 1.....	10,000..... 10,000..... 4,000.....
Isabella county: Shafer's Creek..... Upper Coldwater River..... Chippewa River.....	Sherman..... Notiawa..... Severell.....	Robt. Hyslop, Weidman..... Robt. Hyslop, Weidman..... Geo. A. Chatterton, Mt. Pleasant.....	June 4..... June 4..... June 10.....	3,000..... 6,000..... 12,000.....
Jackson county: Tributary to Kalamazoo River..... No Name..... Crouch Creek..... Concord Creek..... Cutler Creek..... Dew Creek..... Four Mile Creek..... Headwaters of Grand River..... Headwaters of Kalamazoo River.....	Hanover and Concord..... Springport..... Summit..... Concord..... Horton..... Blackman..... Liberty..... Liberty, Hanover, Spring Arbor and Concord..... Hillsdale..... Hanover..... Leon..... Parma..... Rives..... Sandstone and Blackman..... Spring Arbor..... Tompkins..... Hanover..... Waterloo and Grass Lake..... Norvell..... Hanover..... Hanover..... Pulaski..... Hanover.....	F. W. McKenzie, Concord..... Wm. M. Carroll, Onondaga..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... B. F. Burgess, Norvell..... G. T. Greenshaw, Hanover..... Dr. C. L. Hathaway, Hanover..... W. Hinkley, Hanover..... L. A. Strait, Hanover..... L. A. B. Sanderson, Hanover.....	May 4..... May 19..... May 21.....	3,000..... 1,500..... 6,000..... 6,000..... 4,500..... 4,500..... 4,500..... 6,000..... 7,500..... 9,000..... 4,500..... 9,000..... 2,000..... 9,000..... 2,000..... 3,000..... 3,000..... 3,000..... 3,000..... 3,000..... 1,000..... 3,000.....
Headwaters of Kalamazoo River..... West Branch of Kalamazoo River..... Tributaries of Kalamazoo River..... Leon Creek..... Rice Creek..... Rives Junction Creek..... Sandstone Creek..... Snyder's Creek..... Wide Creek..... Willow Creek..... Thayer's Creek..... Inlet to Farwell Lake..... Headwaters of Kalamazoo River..... Headwaters of North Branch of Kalamazoo River..... Unfield Creek..... East Branch of Kalamazoo River.....	Portage..... Comstock.....	Jay Clark, Schoolcraft..... H. D. Streator, Galesburg.....	May 6..... May 21.....	4,000..... 1,500.....
Kalamazoo county: Wells Creek..... Earl's Creek.....	Wyoming and Byron..... Oakfield..... Algoma..... Algoma..... Alpine.....	W. H. Zylstia, Grand Rapids..... W. S. Lamberton, Belding..... B. E. Hill, Rockford..... N. F. Heisel, Rockford..... D. Lydell, Comstock Park.....	May 6..... May 31..... June 6..... June 6..... June 6.....	6,000..... 4,500..... 4,500..... 4,500..... 7,500.....

Harding Creek.....	Algoma and Courtland.....	Geo. E. Rector, Edgerton.....	June 6	3,000
Munn Creek.....	Algoma and Courtland.....	Geo. E. Rector, Edgerton.....	June 6	3,000
Dop Creek.....	Solon.....	E. W. Wheeler, Cedar Springs.....	June 6	4,500
Duke Creek.....	Solon and Nelson.....	E. W. Wheeler, Cedar Springs.....	June 6	4,500
Cedar Creek.....	Algoma.....	E. W. Wheeler, Cedar Springs.....	June 6	4,500
Little Cedar Creek.....	Nelson, Courtland and Algoma.....	E. W. Wheeler, Cedar Springs.....	June 6	4,500
Stegman Creek.....	Courtland.....	E. W. Wheeler, Cedar Springs.....	June 6	3,000
Spring Creek.....	Solon.....	E. W. Wheeler, Cedar Springs.....	June 6	4,500
Upper Waters of Rogue River and tributaries.....	Several.....	H. C. Murry, Sparta.....	June 8	6,000
Tributaries of Rogue River.....	Tyrone.....	C. S. Parks, Kent City.....	June 8	7,500
Critlon Creek.....	Oakfield.....	Freeman Addis, Harvard.....	June 11	4,500
Lelanau county:				
Crystal River.....	Glen Arbor.....	Jas. Daly, Empire.....	April 22	7,500
Lake county:				
Headwaters of Middle Branch of Pere Marquette River.....	Chase.....	Chas. Nelson, Chase.....	June 10	12,000
Pere Marquette River.....	Several.....	Hon. G. M. Brown, Detroit.....	June 10	27,000
Pere Marquette River.....	Several.....	Hon. G. M. Brown, Detroit.....	June 10	37,500
Lapeer county:				
Borsig Creek.....	Metamora and Dryden.....	P. B. Glaspie, Oxford.....	June 14	4,500
Lenawee county:				
Evans Creek.....	Franklin.....	W. Mitchell, Tipton.....	May 6	6,000
Tiffin River.....	Seneca and Medina.....	Dr. C. M. Butler, Morenci.....	May 19	15,000
Luce county:				
Tahquamenon River.....	Columbus and others.....	W. S. Linton, Saginaw.....	June 3	18,000
Tahquamenon River.....	Columbus.....	F. H. Rickard, Laketon.....	June 3	6,000
South Branch of Tahquamenon River.....	Columbus.....	F. H. Rickard, Laketon.....	June 3	3,000
Mason county:				
Sabie River.....	Freesoil.....	T. L. Stephens, Freesoil.....	June 10	27,000
Pentwater River and Landis Creek.....	Several.....	John Grey, Scottville.....	June 10	18,000
Pere Marquette River.....	Amber.....	John Grey, Scottville.....	June 10	12,000
Lincoln River.....	Sherman.....	Fountain Ar and G. Club, Fountain.....	June 10	18,000
Mecosta county:				
Little Muskegon River.....	Mecosta.....	Ray B. Cameron, Mecosta.....	May 31	9,000
Tompkins Creek.....	Hinton.....	C. W. Wining, Lakeview.....	May 31	3,000
Sylvester Creek.....	Hinton.....	John Wright, Lakeview.....	May 31	6,000
Poney Creek.....	Wheatland and Broomfield.....	Wm. Theisen, Remus.....	May 31	9,000
North Branch of Chippewa River.....	Fork.....	W. T. Lanin, Barryton.....	May 31	12,000
Rattall Creek.....	Fork.....	A. Myers, Barryton.....	May 31	3,000
South Branch of Chippewa River.....	Fork.....	A. Myers, Barryton.....	May 31	3,000
Benjamin Creek.....	Fork.....	A. Myers, Barryton.....	May 31	3,000
Beacon Creek.....	Fork.....	W. F. Redick, Barryton.....	May 31	3,000
Biodegtt Creek.....	Grant.....	Edw. Dresser, Paris.....	June 6	10,000
Little Muskegon River.....	Aetna.....	Louis Reames, Morley.....	June 6	9,000

Rainbow trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Marquette county:				
Trout Falls Creek	Republic	G. Benston, Republic	May 30	6,000
Captain's Creek	Republic and Humboldt	H. B. Gamble, Republic	May 30	7,500
West Branch Escanaba River	Humboldt	H. B. Gamble, Republic	May 30	10,500
Nelson's Creek	Republic and Humboldt	D. F. Morgan, Republic	May 30	6,000
Bruce Creek	Republic	C. W. Munson, Republic	May 30	18,000
Michigamme River	Republic and Humboldt	C. W. Munson, Republic	May 30	12,000
Midway Creek	Republic	C. W. Munson, Republic	May 30	7,500
Spruce Creek	Michigamme	Peter Wolf, Michigamme	May 30	6,000
Spruce Creek	Champion	E. M. Stensrud, Michigamme	May 30	9,000
Dishro Creek	Michigamme	E. M. Stensrud, Michigamme	May 30	9,000
Peshekee River	Michigamme	Geo. A. Newett, Ishpeming	June 3	7,500
Peshekee River	Several	Geo. A. Newett, Ishpeming	June 3	7,500
Spruce River	Ely and Ishpeming	Geo. A. Newett, Ishpeming	June 3	15,000
Dead and Escanaba Rivers.	Marquette and others	Frank G. Jenks, Marquette	June 3	9,000
West Branch of Escanaba River	Negaunee and others	Negaunee R. and G. Club, Negaunee	June 3	9,000
Dead River	Negaunee	Negaunee R. and G. Club, Negaunee	June 3	9,000
Carp River	Negaunee	Negaunee R. and G. Club, Negaunee	June 3	9,000
Inlets to Teal Lake.	Negaunee	Negaunee R. and G. Club, Negaunee	June 3	9,000
Inlets to Mulvey's Pond	Negaunee	Negaunee R. and G. Club, Negaunee	June 3	9,000
Outlet of Horse-shoe Lake	Negaunee	Negaunee R. and G. Club, Negaunee	June 3	9,000
Schwartzler Creek	Forsythe, Richmond and Sands	Negaunee R. and G. Club, Negaunee	June 3	9,000
Montcalm county:				
Caskey Creek	Winfield	F. Ashby, Howard City	May 27	3,000
Whitefish Creek	Pierson and Reynolds	S. V. Billock, Howard City	May 27	4,500
Tributaries to Tamarack Creek	Pierson and Reynolds	Burt Collins, Howard City	May 27	12,000
Fossiloid Creek	Winfield	H. M. Gibbs, Howard City	May 27	3,000
Little Muskegon River	Reynolds	H. M. Gibbs, Howard City	May 27	15,000
Rossman Creek	Cato	J. B. Haskins, Howard City	May 27	4,500
Tamarack Creek	Reynolds	W. H. Lovely, Howard City	May 27	12,000
Brandy Creek	Winfield	Dr. J. O. Nelson, Howard City	May 27	4,500
Church Creek	Maple Valley and Reynolds	A. B. Potts, Howard City	May 27	3,000
Indian Creek	Reynolds and Pierson	Jas. Pemberton, Howard City	May 27	4,500
Rice Creek	Reynolds and Pierson	W. J. Smith, Howard City	May 27	3,000
Handy Creek	Reynolds	C. Wolfe, Howard City	May 27	4,500
Blanchard Creek	Richland	G. E. Brown, Riverdale	May 27	4,500
Broderick Creek	Pine	F. D. Briggs, Langston	May 31	3,000
Kortes Creek	Pine	F. D. Briggs, Langston	May 31	4,500
West Branch Creek	Pine	F. D. Briggs, Langston	May 31	3,000
West Lake Creek	Pine	F. D. Briggs, Langston	May 31	4,500
Wabasis Creek	Several	Brinton F. Hall, Belding	May 31	6,000
Outlet to Muscalonge Lake	Maple Valley and Spencer	Jensen Bros., Trufant	May 31	2,000
Corben Creek	Ferris	J. W. Johnson, Elmhall	May 31	2,000
Tamarack Creek	Winfield	Lynch & Winters, Amble	May 31	6,000
Brimmer Creek	Cato and Belvidere	Chesley Faling, Lakeview	May 31	3,000
Tamarack Creek	Cato and others	John E. Seat, Lakeview	May 31	6,000

NINETEENTH REPORT—STATE FISHERIES.

Fish Creek						6,000
Main Part of Fish Creek						6,000
Menominee County:						
Cedar River						16,000
Squaw Creek						6,000
West Branch of Cedar River						6,000
Quade Creek						14,000
Hay Creek						4,000
Hermansville Pond						4,000
Holmes Creek						4,000
Little Cedar River						8,000
Missaukee county:						
Hopkins Creek						15,000
Muskegon county:						
Big Cedar Creek						15,000
Newaygo county:						
Ryan Creek						3,000
Borden Creek						3,000
Cold Springs						4,500
South Branch of White River						22,500
White River						15,000
Martin Creek						4,500
White River						15,000
Williams Creek						4,500
Outlet of Robinson's Lake						3,000
Crockerly Creek						22,500
Pierson Creek						9,000
Post's Creek						12,000
Oakland county:						
Field Creek						3,000
Wallace Creek						3,000
Pettibone Creek						3,000
Frelon Creek						12,000
Huron River and tributaries						1,500
Small Spring Brook flowing into Ball Lake						3,000
Big Spring Creek and Round Lake						3,000
Sherwood Creek						6,000
Paint Creek						3,000
Thurston Creek						6,000
Hummer Creek						3,000
Lanning Creek						3,000
Paint Creek						4,500
Tanner's Creek						4,500
McIntyre Creek						4,500
Ferris, Day and Evergreen: Crystal and Bloomer.						
Crystal						
Spaulding, Meyers, Ingalston and Harris						
Spaulding						
Spaulding						
Spaulding						
Meyer and Holmes						
Meyer						
Meyer and Holmes						
Meyer						
Forest						
Forest						
Holton						
Holton						
Croton						
Croton						
T. 14 and 15						
Denver, Greenwood and Everett						
Several						
Denver						
Denver						
Sheridan						
Sherman						
Ashland and Grant						
Ashland						
Ashland						
Commerce and Highland						
Commerce						
White Lake and Commerce						
Milford and Highland						
Commerce						
Commerce and Milford						
Commerce						
Highland						
Milford						
Milford						
Orion						
Orion						
Oxford						
Oxford						
Oxford and Orion						
Brandon						
C. B. Rarden, Stanton						
O. D. White, Butternut						
John Archibald, Powers						
John Archibald, Powers						
John Archibald, Powers						
C. J. Quade, Powers						
J. D. Hayes, A. J. Kremer, Hermansville						
J. D. Hayes, A. J. Kremer, Hermansville						
J. D. Hayes, A. J. Kremer, Hermansville						
J. D. Hayes, A. J. Kremer, Hermansville						
A. W. Wilson, Lake City						
Wm. Pomeroy, Holton						
W. A. Brunner, Howard City						
H. N. Vandenberg, Howard City						
Geo. R. Lyons, Hesperia						
Geo. E. Walker, Hesperia						
Wm. Pomeroy, Holton						
W. D. Sargeant, Fremont						
W. D. Sargeant, Fremont						
W. D. Sargeant, Fremont						
C. Streichlirsh, White Cloud						
A. J. Titus, Grant						
A. J. Titus, Grant						
A. J. Titus, Grant						
T. G. Forbes, Milford						
T. G. Forbes, Milford						
F. B. Hatch, Milford						
T. H. Padley, Milford						
T. H. Padley, Milford						
R. S. Potts, Milford						
R. S. Potts, Milford						
C. S. Chapman, Rochester						
A. R. Bellaire, Oxford						
Philo Ensley, Oxford						
Robt. Marshall, Oxford						
Albert Marshall, Oxford						
C. L. Randall, Oxford						
Jas. Staples, Ortonville						

NINETEENTH REPORT—STATE FISHERIES.

Rainbow trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Oceola county: Cedar Creek.....	Elbridge.....	Ralph De Vries, Hart.....	May 28	7,500
South Branch of Pentwater River.....	Hart.....	Ralph De Vries, Hart.....	May 28	4,500
Coldwater River.....	Elbridge.....	Monroe Hall, Hart.....	May 28	12,000
Gene House Creek.....	Hart.....	J. B. Fitchell, Hart.....	May 28	2,000
Hunter Creek.....	Golden.....	Dr. L. P. Murrer, Hart.....	May 28	2,000
Pentwater River.....	Elbridge, Hart and Pentwater.....	Rufus Skeels, Hart.....	May 28	12,000
Runon Creek.....	Elbridge.....	J. K. Thompson, Hart.....	May 28	3,000
May Creek.....	Elbridge.....	Ray Thompson, Hart.....	May 28	4,500
North Branch of South Branch of Pentwater River.....	Elbridge.....	Ray Thompson, Hart.....	May 28	9,000
Read Creek.....	Elbridge and Ferry.....	Fred Wright, Hart.....	May 28	2,000
North Branch of White River.....	Mayfield, Ferry, Otto and Blue Lake.....	Earl Anderson, Hesperia.....	May 28	12,000
Pear Creek.....	Otto.....	Henry Baum, Hesperia.....	May 28	3,000
Wiswell Creek.....	Otto.....	Henry Baum, Hesperia.....	May 28	2,000
Kimson Creek.....	Otto, Greenwood and Newfield.....	Geo. Williams, Hesperia.....	May 28	4,500
Williamson Creek.....	Ferry and Otto.....	Geo. Williams, Hesperia.....	May 28	2,000
Otsego county: Sturgeon River.....	Livingston.....	A. M. Hilton, Gaylord.....	June 15	30,000
Headwaters of Sturgeon River.....	Several.....	R. H. L'Hommedieu, Detroit.....	June 15	46,000
Ottawa county: Pigeon River.....	Olive.....	C. McKinley, West Olive.....	June 8	6,000
Ontonagon county: Cascade River.....	Several.....	G. A. Bergland, Milwaukee.....	May 30	16,500
Osceola county: Hersy River.....	Lincoln, Richmond and Hersy.....	J. H. Crocker, Reed City.....	April 30	12,000
St. Joseph county: Bear Creek.....	Lincoln and Waukesha.....	T. E. Kline, Leonidas.....	May 6	5,000
Outlets of Fish and Hawkins Lakes.....	Burr Oak.....	J. R. Smith, Burr Oak.....	May 6	4,000
Inlet to Klinger Lake.....	White Pigeon.....	E. L. Turner, Ekhar, Ind.....	May 6	4,000
Portage Lake.....	Lockport.....	W. A. Wilson, Three Rivers.....	May 6	8,000
Schoolcraft county: Hughes Lake and Inlet.....	Harrison.....	A. Hughes, Steuben.....	May 31	8,000
Tuscola county: Fryer's Creek.....	Dayton.....	E. D. Cartwright, Mayville.....	June 14	10,500
Van Buren county: West Branch of Paw Paw River.....	Paw Paw and Decatur.....	H. E. Ball, Paw Paw.....	May 3	6,000
East Branch of Paw Paw River.....	Antwerp and Forter.....	R. D. Loveland, Paw Paw.....	May 3	8,000
North Branch of Big Dowagiac Creek.....	Decatur, Wayne, Hamilton, Silver Creek and Pokagon.....	Fred Phillips, Dowagiac.....	May 4	15,000

Washtenaw county:					
Huron River.....	Several	I. D. Alley, Dexter.....	May 19	12,000	
South Branch of Clawson Creek.....	Ypsilanti and Pittsford.....	W. A. Clawson, Ypsilanti.....	May 19	6,000	
Wayne county:					
Miller's Creek.....	Plymouth.....	D. W. Packard, Plymouth.....	May 31	4,500	
Wexford county:					
Buttermilk Creek.....	Greenwood.....	C. H. Tyler, Manton.....	April 30	4,500	
Total.....					2,190,500

RAINBOW TROUT PLANTS.
FINGERLINGS NO. 1, 2 AND 3.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alcona county: Mill Creek.....	Harrisville.....	A. L. Noyes, Harrisville.....	1909, 6 Aug., 1910.....	3, 000
Black River.....	Harrisville and Haynes.....	F. J. Elmer, Harrisville.....	June 17.....	7, 500
Mill Creek.....	Harrisville.....	A. L. Noyes, Harrisville.....	June 17.....	4, 500
Lower South Branch of Pine River.....	Curtis.....	Wm. Ellis, Okemo.....	June 22.....	13, 000
Spring Brook.....	Mitchell.....	F. H. Loud, Au Sable.....	June 22.....	6, 000
McGinn Creek.....	Mitchell and Clinton.....	S. K. McCollum, Comins.....	June 22.....	9, 000
Allegan county: New Salem Spring Brook.....	Salem.....	P. Leonard, Dorr.....	June 22.....	3, 000
Alpena county: Upper Branch of Thunder Bay River.....	Green.....	Dr. W. E. Carr, Alpena.....	June 17.....	10, 500
Arenac county: Big Town Line and Murphy Creeks.....	Mason, Arenac and Au Gres.....	Nelson De Ford, Sterling.....	June 17.....	15, 000
Berrien county: McCoy Creek.....	Buchanan.....	A. A. Worthington, Buchanan.....	1909, Aug., 3.....	4, 000
Spring Brook.....	New Buffalo.....	W. J. Shermak, New Buffalo.....	1910, June 24.....	4, 500
Branch County: Mill Creek.....	Batavia and Bronson.....	C. D. Smesad, Batavia.....	June 23.....	7, 500
Calhoun county: Lower Creek, branch of Cox Creek.....	Emmet.....	V. H. Bramble.....	1909, July 26.....	3, 000
Minges Brook.....	Battle Creek.....	Geo. H. Williams, Battle Creek.....	1910, June 24.....	4, 500
Helmer's Creek.....	Battle Creek and Newton.....	Geo. H. Williams, Battle Creek.....	June 24.....	6, 000
Cass county: Christian Creek.....	Penn. Calvin and Mason.....	H. H. Roth, Cassopolis.....	1909, Aug., 3.....	6, 000
Spring Run.....	Marcellus.....	A. L. Maxam, Marcellus.....	1910, June 22.....	3, 000
Cheboygan county: North Twin Lake.....	Kohler.....	H. R. Field, Indian River.....	1909, July 28.....	10, 000
Clare county: Budd Lake.....	Hayes.....	Geo. J. Cummins, Harrison.....	July 26.....	4, 000

NINETEENTH REPORT—STATE FISHERIES.

Crawford county: Inlets to Portage Lake.....	Grayling.....	E. Hansen, Grayling.....	July 28 1909.	10,000
Grand Traverse county: Boardman River.....	Garfield, Paradise and East Bay.....	R. S. Hastings, Traverse City.....	Nov. 11 1910.	7,500
Ingham county: Champ Creek.....	Onondaga.....	W. M. McCarroll, Onondaga.....	June 24	1,500
Ionia county: Strouble Creek.....	North Plains and Lyons.....	C. A. Dalzell, Ionia.....	June 18	4,500
Dexter Creek.....	Eastern.....	J. Wallington, Saranac.....	June 18	3,000
Morrison Lake Creek.....	Boston.....	J. Wallington, Saranac.....	June 18	3,000
Knapp Creek.....	Lyons.....	Dr. T. Weston, Muir.....	June 18	3,000
Speer's Creek.....	Lyons.....	Dr. T. Weston, Muir.....	June 18	3,000
Iosco county: Meadow Creek.....	Oscoda.....	Wm. Elliott, Oscoda.....	June 17	3,000
Kent county: Duke Creek.....	Nelson and Solon.....	E. W. Wheeler, Cedar Springs.....	1909. Nov. 13	3,000
Mill Creek.....	Plainfield.....	D. Lydell, Comstock Park.....	Nov. 13 1910.	3,000
Mill Creek.....	Plainfield.....	D. Lydell, Comstock Park.....	June 25	10,000
Lake county: Pere Marquette River.....	Several.....	Hon. G. M. Brown, Detroit.....	1909. July 23	20,000
Headwaters of Middle Branch of Pere Marquette River.....	Chass.....	Chas. Nelson, Chass.....	July 24	20,000
Pere Marquette River.....	Pleasant Plains, Webber, Sweetwater.....	Hon. G. M. Brown, Detroit.....	July 24	20,000
Pere Marquette River.....	Several.....	Hon. G. M. Brown, Detroit.....	Nov. 9	15,000
Lapeer county: North Branch of Clinton River.....	Addison, Bruce, Ray, Almont and Armad.....	F. Gillespie, Romeo.....	1910. June 18	15,000
Macomb county: Silver Creek.....	Bruce.....	F. Gillespie, Romeo.....	June 18	6,000
Mason county: Sable River.....	Freesoil.....	T. L. Stephens, Freesoil.....	1909. Nov. 10	5,000
Lincoln River.....	Sherman.....	Henry Soff, Fountain.....	Nov. 10	5,000
Macosta county: Big Buckhorni Creek.....	Green.....	Michigan Fish Commission, Detroit.....	Nov. 16 Nov. 16	2,000
Muskegon River.....	Green.....	Michigan Fish Commission, Detroit.....	Nov. 16 Nov. 16	2,000
Montmorency county: North Branch of Thunder Bay River.....	Montmorency and Long Rapids.....	Geo. P. Crowley, Hillman.....	1910. June 17	18,000
Thunder Bay River.....	Barry, Avery, Rust, Green, Wellman.....	Jno. M. Farrier, Hillman.....	June 17	27,000
Muskegon county: Inlet to Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell, Hart.....	1909. Aug. 4	5,000
Newaygo county: Pierson Creek.....	Ashland.....	A. J. Titus, Grant.....	July 26	7,000
Post's Creek.....	Ashland.....	A. J. Titus, Grant.....	July 26	10,500

Rainbow trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Oakland county: Long Lake.....	Orton.....	W. A. Benjamin, Orton.....	1909, Aug. 7 1910.	5,000
Headwaters of Huron River. Inlet to Deer Lake. Stony Creek.....	White Lake and Springfield. Springfield. Oakland, Washington and Shelby.....	B. T. Cooley, Clarkston..... O. N. Gardner, Detroit..... F. Gillespie, Romeo.....	June 18 June 18 June 18	7,500 3,000 12,000
Ogemaw county: C. K. Eddy Creek. Rifle River. Silver Creek. Rifle River.....	Richland..... Richland..... Richland..... Rose, Cumming and others.....	Geo. Eymier, Prescott..... Geo. Eymier, Prescott..... Geo. Eymier, Prescott..... D. A. Neal, Rose City.....	June 17 June 17 June 17 June 17	6,000 12,000 6,000 27,000
Presque Isle county: Oqueoc River. Little Oqueoc River. Svan River. Trout River.....	Case..... Oqueoc..... Belknap and Pultaski..... Belknap and Rogers.....	Chas. Atkins, Millersburg..... Chas. Atkins, Millersburg..... Basil G. Larke, Rogers City..... Basil G. Larke, Rogers City.....	June 17 June 17 June 17 June 17	18,000 6,000 9,000 6,000
Sanilac county: Tributaries to Black River.....	Lexington.....	C. J. Reynolds, Crosswell.....	1909, Aug. 5	5,000
St. Joseph county: Fawn Creek. Hog Creek or Prairie River. Mill Creek.....	Constantine..... Florence..... Constantine.....	W. N. Harvey, Constantine..... W. N. Harvey, Constantine..... W. N. Harvey, Constantine.....	1910, June 23 June 22 June 22	7,500 7,500 7,500
Shiawassee county: Hardy Creek. Maple River. Hardy River. Hardy Creek.....	Bennington..... Burns, Shiawassee, Vernon, Owosso..... Burns, Shiawassee, Vernon, Owosso..... Bennington.....	Jno. F. Salsbury, Owosso..... C. P. Bentley, Owosso..... C. P. Bentley, Owosso..... Jno. F. Salsbury, Owosso.....	1909, Aug. 3 Aug. 3 1910, June 18 June 18	4,000 6,000 12,000 4,500
Van Buren county: West Branch of Paw Paw River. Osborn Creek.....	Paw Paw and Decatur. Hamilton and Wayne.....	Horace E. Bell, Paw Paw. Chas. Stewart, Dowagiac.....	June 24 June 24	9,000 4,500
Wayne county: No Name.....	Northville.....	W. W. Thayer, Detroit.....	1909, Aug. 7	5,000
Total.....				547,000

RAINBOW TROUT PLANTS.
YEARLINGS.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Oakland county: Monroe Creek	Pontiac	Frank Monroe, Pontiac	1910, April 15	400

LAKE TROUT PLANTS.
Fry.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alpena county: Hubbard Lake Hubbard Lake North Lake McCollum Lake	Alpena 28 N. R. 7 E. Church Mitchell	R. E. Ellsworth, Alpena W. S. Linton, Saginaw J. H. Heyes, Glenue S. K. McCollum, Comins	1910, April 25 April 25 April 26 April 26	24,000 24,000 12,000 10,000
Alpena county: Long Lake	Alpena, Cracow and Presque Isle	James Bowden, Alpena	April 25	24,000
Antrim county: Lorch Lake Elk Lake Grass Lake	Several Milton and Traverse Kearney, Forest Home and Helena	Wm. Childs, Kalkaska L. N. Spring, Elk Rapids A. B. Wooten, Bellaire	April 19 April 19 April 19	37,500 37,500 15,000
Barry county: Fair Lake Tyrell Lake	Barry Baltimore	D. Collier, Delton E. M. Pritchard, Hastings	April 8 April 13	10,000 10,000
Benzie county: Lake Ann Woodback Twin Lakes Valaen Lake Big Platte Lake Heather Lake	Almira Almira Almira Benzonia Almira	Ladew Berry, Lake Ann G. F. Decker, Lake Ann M. L. Lake, Lake Ann W. A. Lear, Beulah Wm. E. McCowan, Cedar Run	April 22 April 22 April 22 April 22 April 22	15,000 7,500 7,500 22,500 6,000

NINETEENTH REPORT—STATE FISHERIES.

Lake trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Berrien county: Hess Lake..... Faw Paw Lake.....	Lake Watervliet.....	Frank Herring, Sr., St. Joseph. A. A. Woodward, Coloma.....	April 7 April 7	12 000 20,000
Branch county: Honey Lake..... Long Lake..... Marble Lake..... Lavine Lake..... Pleasant Lake..... Kenyon Lake.....	Noble..... Noble..... Quincy..... Kinderhook..... Kinderhook..... Sherwood.....	J. Frohriep & Sons, Burr Oak..... J. Frohriep & Sons, Burr Oak..... C. A. Bishop, Quincy..... Leigh Kanouse, Kinderhook..... Leigh Kanouse, Kinderhook..... Leo. E. Wood, Athens.....	April 9 April 9 April 9 April 9 April 9 April 9	8 000 8 000 20 000 16 000 10 000 10,000
Calhoun county: Nottawasseeppi Lake..... Duck Lake.....	Fredonia and Tekonsha..... Clarence.....	E. L. Holmes, Marshall..... L. J. Devring, Albion.....	Mar. 30 Mar. 30	30 000 30,000
Cass county: Dewey Lake..... Bunker Lake..... Birch Lake.....	Silver Creek..... Volinia..... Porter.....	F. E. Tarrent, Chicago..... Floyd Brown, Marcellus..... H. H. Roth, Cassopolis.....	April 7 April 8 April 8	16 000 2 000 10,000
Charlevoix county: South Arm of Pine Lake.....	South Arm.....	H. S. Pinney, East Jordan.....	April 19	30,000
Cheboygan county: Burt Lake..... Mullet Lake.....	Burt..... Burt.....	J. W. Lester, Indian River..... Michigan Fish Commission.....	April 28 April 28	100 000 100,000
Chippewa county: Whitefish Bay.....	Whitefish.....	E. E. Endress, Whitefish Point.....	May 26	1,195,000
Clare county: Budd Lake..... Big Long Lake..... Elbow Lake..... Crooked Lake.....	Harrison..... Frost..... Franklin..... Garfield.....	G. J. Cummings, Harrison..... W. E. Green, Harrison..... W. E. Green, Harrison..... M. G. Robinson, Crooked Lake.....	April 22 April 22 April 22 April 22	15 000 15 000 7,500 15,000
Delts county: Mass Lake..... Round Lake.....	Nahma..... Masonville.....	W. R. Callaway, Minneapolis..... W. R. Callaway, Minneapolis.....	May 26 May 26	21 000 21,000
Dickinson county: Long Lake..... Sawyer Lake..... Mary, Louis and Hamilton Lakes.....	Sagola..... Sagola..... Waucesah.....	R. E. Boli, Channing..... R. E. Boli, Channing..... W. J. Turner, Vulcan.....	May 27 May 27 May 27	21 000 21 000 21,000

NINETEENTH REPORT—STATE FISHERIES.

Genesee county: Long Lake.....	Fenton.....	E. L. Bray, Flint.....	April 15	30,000
Grand Traverse county: Green Lake..... Black Lake..... Fife Lake..... Blue Lake..... Crooked Lake..... Hogback Lake..... Long Lake..... Rennie Lake..... Round Lake..... Spider Lake..... Fife Lake.....	Green Lake..... Union..... Fife Lake..... Union..... Paradise..... Union..... Union..... Union..... Union..... Fife Lake.....	H. H. Olds, Bendon..... Kingsley Sportsmen's Club, Kingsley..... F. Bechstein, Fife Lake..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Fred Bechstein, Fife Lake.....	April 16 April 20 April 20 April 27 April 20 April 20 April 20 April 20 April 20 April 20 April 30	30,000 19,000 19,000 19,000 19,000 19,000 19,000 19,000 19,000 19,000 19,000 10,000
Gogebic county: Thousand Island Lake..... Clark Lake..... Whitefish Lake..... Duck Lake..... Beatson's Lake.....	Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet.....	M. Hughtitt, Jr., Chicago..... A. D. Johnston, Bessemer..... A. D. Johnston, Bessemer..... Pat Kelly, Watersmeet..... C. M. McDonald, Watersmeet.....	May 27 May 27 May 27 May 27 May 27	21,000 21,000 21,000 12,000 12,000
Hillsdale county: Lake Battie.....	Adams.....	Wm. F. Savage, Frontier.....	April 14	20,000
Houghton county: Lake Roland..... Lake Roland..... Kratz's Lake..... Long Lake..... Bob Lake..... Lake Eva..... Otter Lake..... Twin Lakes..... Twelve-Mile Lake.....	Elm River..... Elm River..... Winona..... Elm River..... Laird..... Stanton..... Chassel..... Winona and Elm..... Adams.....	A. L. Heibel, Houghton..... Frank Purnerville, Houghton..... E. H. Wright, Houghton..... E. H. Wright, Houghton..... Fred Nelson, Rubicon..... Geo. Williams, Calumet..... Geo. Williams, Calumet..... Geo. Williams, Calumet..... W. E. Parnell, Calumet.....	May 25 May 25 May 25 May 25 May 25 May 25 May 25 May 25 May 25	9,000 9,000 6,000 6,000 21,000 15,000 15,000 15,000 15,000
Ionia county: Jordan Lake.....	Odessa and Woodland.....	E. Shellhorn, Lake Odessa.....	April 15	20,000
Iosco county: Long Lake.....	Plainfield.....	M. N. Cray, Ellake.....	April 25	20,000
Iron county: Holmes Lake..... Armstrong Lake..... Buck Lake..... Mud Lake..... Fortune Lake..... Dollar Lake..... Sunset Lake.....	Crystal Falls..... Mastodon..... Mastodon..... Crystal Falls..... Crystal Falls..... Crystal Falls..... Bates.....	A. Bjork, Crystal Falls..... J. Erikson, Crystal Falls..... J. Erikson, Crystal Falls..... E. J. Oswald, Crystal Falls..... W. J. Richards, Crystal Falls..... Jas. D. Vivian, Crystal Falls..... I. W. Byers, Iron River.....	May 27 May 27 May 27 May 27 May 27 May 27 May 27	21,000 15,000 15,000 21,000 21,000 15,000 30,000

NINETEENTH REPORT—STATE FISHERIES.

Lake trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Jackson county:				
Ackerson Lake	Napoleon.	G. E. Beebe, Jackson.	Mar. 30	10,000
Big Portage Lake	Henrietta and Waterloo	G. E. Beebe, Jackson	Mar. 30	20,000
Brillis Lake	Leoni	G. E. Beebe, Jackson	Mar. 30	10,000
Brown's Lake	Summit	G. E. Beebe, Jackson	Mar. 30	20,000
Gillett's Lake	Leoni	G. E. Beebe, Jackson	Mar. 30	10,000
Spring Arbor Lake	Spring Arbor	G. E. Beebe, Jackson	Mar. 30	10,000
Vandercook's Lake	Summit	G. E. Beebe, Jackson	Mar. 30	10,000
Wolf Lake	Leoni, Grass Lake and Napoleon.	G. E. Beebe, Jackson.	Mar. 30	20,000
Kalamazoo county:				
Howard Lake	Schoolcraft.	P. W. Ballinger, Schoolcraft.	April 8	10,000
Rawson's Lake	Schoolcraft.	Chas. Male, Schoolcraft.	April 8	10,000
Indian Lake	Pavilion	White Bros., Scotts.	April 8	20,000
Gull Lake	Ross and Richland.	Landlord Chipman, Yorkville	April 9	20,000
Kent county:				
Schram and Round Lakes.	Oakfield.	F. Addis, Harvard	April 7	12,000
Clear Lake	Solon.	E. W. Wheeler, Cedar Springs.	April 13	10,000
Spring Lake	Solon.	E. W. Wheeler, Cedar Springs.	April 13	10,000
Lake county:				
Sand Lake.	Elk and Stronach.	Dr. E. Fairbanks, Luther.	April 16	15,000
Sable Lakes.	ELK.	H. O. Thompson, Peacock.	April 16	30,000
Leelanau county:				
Glen Lake	Empire and Glen Arbor.	James Daly, Empire	April 22	15,000
Glen Lake	Empire and Glen Arbor.	D. H. Day, Glen Haven	April 22	15,000
Lenawee county:				
Evans Lake	Franklin.	W. Mitchell, Tipton	April 9	16,000
Round Lake	Rollin	W. E. Alchin, Townley	April 14	20,000
Devil's Lake	Rollin and Woodstock	W. J. Hampton & Son, Manitou Beach.	April 14	24,000
Devil's Lake	Woodstock.	H. E. Hand, Tecumseh.	April 14	24,000
Livingston county:				
Fonda Lake	Green Oak and Brighton	B. T. O. Clark, Brighton.	April 15	10,000
Island Lake	Green Oak	B. T. O. Clark, Brighton.	April 15	20,000
Mont Lake	Brighton.	B. T. O. Clark, Brighton.	April 15	10,000
Manistee county:				
Long Lake	Stronach.	A. R. Atherton, Wellston.	April 16	7,500
Crystal Lake	Stronach.	A. R. Atherton, Wellston.	April 16	7,500
Marquette county:				
Bass Lake	Forsythe.	A. C. Seass, Negaunee	May 25	21,000
Little Lake	Forsythe.	A. C. Seass, Negaunee	May 25	21,000

Me Lake.....	Forsythe.....	A. C. Seass, Negaunee.....	May 25	21,000
Allen's Lake.....	Republic.....	C. W. Munson, Republic.....	May 25	21,000
K. C. Lake.....	Humboldt.....	C. W. Munson, Republic.....	May 25	21,000
Perch Lake.....	Republic.....	C. W. Munson, Republic.....	May 25	21,000
Skinner's Lake.....	Republic.....	Emil Wohlstrom, Republic.....	May 25	21,000
Lake on Section 24 T. 45 R. 30.....	Republic.....	Emil Wohlstrom, Republic.....	May 25	21,000
Sineson Lake.....	Republic.....	Emil Wohlstrom, Republic.....	May 25	21,000
St. Johns Lake.....	Republic.....	B. Beigston, Republic.....	May 25	21,000
Three Lakes.....	Republic.....	C. E. Hagerston, Republic.....	May 25	21,000
Dewey, Charboneau Island and Johnston Lakes.....	Tilden and Republic.....	G. A. Newett, Ishpeming.....	May 25	21,000
No Name.....	Ishpeming.....	W. Tellefson, Ishpeming.....	May 25	21,000
Michigamme Lake.....	Marquette.....	C. F. Sundstrom, Michigamme.....	May 25	21,000
Montcalm county:				
Crystal Lake.....	Crystal.....	C. W. LaDu, Crystal.....	April 7	20,000
Montmorency county:				
South Wolf Lake.....	Albert.....	P. J. Welch, Lewiston.....	April 6	20,000
Long Lake.....	Hillman.....	E. W. Cooper, Hillman.....	April 25	10,000
Muskegon county:				
Wolf Lake.....	Eggleston.....	E. D. Magoon, Muskegon.....	April 14	16,000
Big Blue Lake.....	Blue Lake.....	E. D. Magoon, Muskegon.....	April 14	16,000
Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell, Hart.....	April 14	16,000
Newaygo county:				
Diamond Lake.....	Lincoln.....	Capt. W. H. Biglow, Chicago.....	April 16	15,000
Long Lake.....	Sherman.....	J. Kemperman, Fremont.....	April 16	15,000
Robinson's Lake.....	Sherman.....	C. Streichhirsch, White Cloud.....	April 16	15,000
Oakland county:				
Madeday Lake.....	Waterford.....	C. C. Craigie, Waterford.....	April 15	20,000
Pine Lake.....	West Bloomfield.....	Mark Harger, Pontiac.....	April 15	20,000
Loon Lake.....	Waterford.....	Michigan Fish Commission.....	April 15	30,000
Van Norman Lake.....	Waterford and Independence.....	S. E. Thomas, Detroit.....	April 15	30,000
Ogemaw county:				
Henderson Lake.....	Cumming and Hill.....	B. J. Corwin, Sage.....	April 25	20,000
Oscoda county:				
Bass Lake.....	Clinton.....	Geo. Inlay, Comins.....	April 26	24,000
Toteroad Lake.....	Clinton.....	Geo. Inlay, Comins.....	April 26	16,000
McCollum Lake.....	Clinton.....	S. K. McCollum, Comins.....	April 26	16,000
Ontonagon county:				
Lake Gogebic.....	Matchwood.....	Alex. Martin, Bergland.....	May 25	21,000
Oshtemo county:				
Chub Lakes.....	Ossego.....	J. Soderberg, Ossego Lake.....	April 28	40,000
Big Lake.....	Elmira.....	Ernest Pettifor, Gaylord.....	April 29	20,000

Lake trout plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Ottawa county: Spring Lake Crockery Creek Lake	Spring Lake Chester	S Falls, Spring Lake Dr. E. O. Cilley, Conklin	April 13 April 14	30,000 20,000
Roscommon county: Clear Lake	Nester	R. J. McMillen, Nolan	April 28	12,000
St. Joseph county: Palmer Lake Nitzeeon Lake Portage Lake Long Lake	Colon Colon Mendon Colon	J. K. Farrand & A. J. Born, Colon J. K. Farrand & A. J. Born, Colon J. L. Potter, Mendon Fred Camp, Burr Oak	April 8 April 8 April 8 April 9	20,000 14,000 20,000 20,000
Van Buren county: Christy Lake Lake Cora Lake George Wolf Lake North Lake	Lawrence Paw Paw Lawrence Almena Pine Grove and Almena	G. L. A. Brown, Decatur C. E. Fox, Lake Cora C. Vandever, Lawrence Albert Doll, Kalamazoo F. W. Schoolcraft, Kendall	April 7 April 7 April 7 April 8 April 8	16,000 14,000 10,000 20,000 20,000
Washtenaw county: Little Portage Lake Iron Lake	Dexter Manchester	Hon. H. W. Newkirk, Ann Arbor A. J. Gall, Manchester	Mar. 30 April 14	20,000 20,000
Total				4,003,600

BROWN TROUT PLANTS.
 FRY AND ADVANCED FRY.
 For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Charlevoix county: North Branch of Boyne River.....	Boyne Valley.....	J. L. A. Galster, Boyne Falls.....	1910. April 11.....	20,000
Cheboygan county: McFee Creek.....	Nunda.....	B. F. Stiffler, Wolverine.....	April 5.....	8,000
Mecosta county: Big Buckhorn Creek..... Paris Creek.....	Green..... Green.....	Michigan Fish Commission..... Michigan Fish Commission.....	Mar. 10..... Mar. 10.....	20,000 50,000
Newaygo county: Little South Branch of Pere Marquette River.....	Several.....	Michigan Fish Commission.....	Mar. 23.....	80,000
Total.....				178,000

STEELHEAD TROUT PLANTS.
 FINGERLINGS No. 2.
 For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Mecosta county: Muskegon River.....	Green.....	Michigan Fish Commission.....	1909. July 31.....	15,000

LAND LOCKED SALMON PLANTS.
FINGERLINGS NO. 2.
For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Crawford county: Inlets to Portage Lake.....	T. 26 N. R. 4 W.....	Hon. C. D. Joslyn, Detroit.....	1909. Aug. 6	12,500
Chippewa county: St. Mary's Rapids.....	Sault Ste. Marie.....	Michigan Fish Commission.....	Aug. 7	6,000
Total.....				18,500

WALL EYED PIKE PLANTS.
FRY.
For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alcona county: North Lake.....	Curtis.....	J. H. Hayes, Glennie.....	1910. May 26	160,000
Crooked Lake.....	Mitchell.....	Stephen Evens, Comins.....	May 26	160,000
Sand Lake.....	Mitchell.....	A. R. Code, Au Sable.....	May 26	160,000
Allegan county: Plainwell Millpond.....	Gun Plains.....	Wm. Crispe, Plainwell.....	May 7	100,000
Kalamazoo River.....	Saugatuck.....	Chas. E. Bird, Saugatuck.....	May 12	100,000
Kalamazoo River and Huston's Bayou.....	Manlius.....	B. K. Coff, New Richmond.....	May 12	100,000
Kalamazoo River.....	Saugatuck.....	H. W. Perry, Douglas.....	May 12	100,000
Dumont Lake.....	Allegan.....	E. L. Douglas, Allegan.....	June 3	80,000
Alpena county: Long Lake.....	Alpena, Kracow and Presque Isle.....	Jas. Bowden, Alpena.....	May 23	300,000
Antrim county: Intermedate Lake.....	Central Lake.....	Wm. Roberts, Central Lake.....	May 9	125,000
Bass Lake.....	Elk Rapids.....	L. N. Spring, Elk Rapids.....	May 9	75,000
Elk Lake.....	Milton.....	L. N. Spring, Elk Rapids.....	May 9	100,000

Thayer's Lake	Helena	O. P. Anderson, Bellaire	May 9	80,000
Grass Lake	Kearney, Forest Home, Custer and Helena	A. B. Wooten, Bellaire	May 9	100,000
Barry county:	Yankee Springs and Orangeville	E. J. Anderson, Plainwell	May 7	100,000
Gun Lake	Hope	John Becker, Cloverdale	May 12	100,000
Long Lake	Hope	E. A. Burton, Heslimes	May 12	100,000
Wall Lake	Baltimore	E. M. Pritchard, Hastings	May 12	80,000
Pierce Lake	Baltimore	Chas. Wood, Hastings	May 12	50,000
Pritchard Lake	Rutland	F. H. Beach, Charlotte	May 12	75,000
Podunk Lake	Castleton	D. G. Collins, Delton	May 12	100,000
Mud Lake	Fair Lake	D. F. Karns, Shultz	May 12	75,000
Fair Lake	Hope	Frank Maynard, Shultz	May 12	50,000
Pine Lake	Hope			
Perch Lake	Hope			
Benzie county:	Lake	E. R. Dailey, Empire	June 7	80,000
Piatte River	Lake			
Berrien county:	Watervliet	A. A. Woodward, Coloma	May 12	100,000
Faw Paw Lake	Several	Dudley Wallace, Benton Harbor	May 12	100,000
St. Joseph River				
Branch county:	Sherwood	S. W. Lehr, Athens	May 16	100,000
Lehr Lake	Sherwood	Dorr Waterman, Athens	May 16	200,000
Lower Lake				
Calhoun county:	Clarence	L. E. Landon, Springfield	May 16	200,000
Duck Lake	Marshall	H. C. Faulkner, Marshall	May 17	160,000
Brace Lake	Fredonia	H. C. Faulkner, Marshall	May 17	120,000
Lyon Lake	Tekonsha	Clyde Jacoby, Marshall	May 17	140,000
Nottawa Creek	Marengo	F. L. McWethly, Marshall	May 17	140,000
Rice Creek	Marengo	S. W. Warren, Marshall	May 17	180,000
Upper Kalamazoo River				
Cass county:	Marcellus	Elmer J. Davis, Marcellus	May 7	100,000
Hemlock Lake	LaGrange	J. L. Dillman, Dowagiac	May 16	125,000
Watson Lake	Silver Creek	F. E. Tarrant, Chicago	May 16	200,000
Dewey Lake	Newburg	Ed. Lamb, Jones	May 16	250,000
Lille and Hutcheson Lakes	Newburg and Porter	Claud Marsh, Jones	May 16	250,000
Wood and Lime Lakes	Newburg	C. F. Trattles, Jones	May 16	80,000
Driskell Lake	Marcellus	Chas. Decker, Marcellus	June 3	80,000
Pine Lake	Porter	L. Q. Hitchcox, Bristol, Ind.	June 3	80,000
Long Lake	Porter	L. Q. Hitchcox, Bristol, Ind.	June 3	80,000
Baldwin Lake	Marcellus	P. H. Savage, Marcellus	June 3	80,000
Huyck Lake	Marcellus			
Charlevoix county:	South Arm	C. Phillips, East Jordan	May 9	125,000
North Arm Pine Lake	Hudson	F. A. Hoffman, Vanderbilt	May 19	125,000
Hoffman Lake	Hudson	J. A. Waggoner, Vanderbilt	May 19	375,000
Thumb Lake	Hudson			

Wall-eyed pike plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Cheboygan county:				
Long Lake.....	Grant and Benton.....	F. S. Burgess, Detroit.....	May 19	300,000
Burt Lake.....	Tuscarora.....	J. M. Sager, Burt Lake.....	May 19	480,000
Black Lake.....	Grant.....	Henry Barber, Aloha.....	May 26	300,000
Mullet Lake.....	Grant, Inverness and Koehler.....	Henry Barber, Aloha.....	May 26	200,000
Devereaux Lake.....	Grant.....			
Clare county:				
Eight Point Lake.....	Garfield.....	S. F. Postal, Ewart.....	May 21	200,000
Bass Lake.....	Haiton.....	C. A. Klemm, Chicago.....	May 21	120,000
Fisher's Lake.....	Haiton.....	C. A. Klemm, Chicago.....	May 21	120,000
Ronnoc Lake.....	Haiton.....	C. A. Klemm, Chicago.....	May 21	120,000
Silver Lake.....	Lincoln.....	John Forwarda, Falmouth.....	May 21	120,000
Clinton county:				
Park Lake.....	Bath.....	Myles F. Gray, Lansing.....	May 24	300,000
Crawford county:				
Howe's Lake.....	Frederick.....	Marius J. Hanson, Grayling.....	May 19	200,000
Easton county:				
Pine Lake.....	Walton.....	L. Cook & Son, Olivet.....	May 7	75,000
Round Lake.....	Vermontville.....	W. L. Fremire, Vermontville.....	May 12	50,000
Grand River.....	Windsor.....	F. G. French, Diamonddale.....	May 12	250,000
Emmet county:				
Round Lake.....	Bear Creek.....	H. Lindig, Petoskey.....	May 14	100,000
Genesee county:				
Copnatic Lake.....	Grand Blanc, Fenton and Holly.....	A. D. Banker, Grand Blanc.....	May 14	200,000
Long Lake.....	Fenton.....	E. L. Bray, Flint.....	June 4	400,000
Gladwin county:				
Cedar Lake.....	Clement.....	Herbert Stephens, Alker.....	May 19	140,000
Indian Lake.....	Clement.....	Herbert Stephens, Alker.....	May 19	140,000
Grand Traverse county:				
Hogback or Crooked Lake.....	Mayfield and East Bay.....	R. S. Hastings, Traverse City.....	May 9	75,000
Boardman Lake.....	Traverse and Garfield.....	H. W. Pierce, Traverse City.....	May 9	75,000
Silver Lake.....	Garfield.....	Traverse City F. C. Club, Trav. City.....	May 9	100,000
Bellows Lake.....	Long Lake and Almira.....	J. M. Thomas, Traverse City.....	May 9	100,000
Cedar Hedge Lake.....	Green Lake.....	W. Pennington, Interlochen.....	May 9	75,000
Duck Lake.....	Green Lake.....	W. Pennington, Interlochen.....	May 9	100,000
Green Lake.....	Green Lake.....	W. Pennington, Interlochen.....	May 9	100,000
Fife Lake.....	Fife Lake.....	A. L. Maxam, Fife Lake.....	May 9	100,000
Black Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 14	60,000
Blue Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 14	60,000

Rennie Lake	Union	Kingsley Sportsmen's Club, Kingsley	May 14	60,000
Porter Lake	Mayfield	R. B. DeFrance, Kingsley	May 14	60,000
Cedar Lake	Mayfield	A. B. Stinson, Kingsley	May 14	60,000
Bass Lake	Green Lake	W. M. Fall, Traverse City	June 3	60,000
Ionia county:				
Huhn's Pond	Boston	J. Wallington, Saranac	May 7	75,000
Peck Lake	Berlin	J. Wallington, Saranac	May 7	75,000
Walter's Pond	Roston	J. Wallington, Saranac	May 7	75,000
Kidville Pond	Orleans and Otisco	W. P. Heathington, Belding	May 13	75,000
Long Lake	Orleans	Frank H. Totten, Belding	May 13	100,000
Woodard Lake	Ronald	Frank F. Pray, Shiloh	May 13	75,000
Grand River	Lyons and others	W. A. Grant, Lyons	May 13	300,000
Jordan Lake	Orleans and Woodland	Edwin Shellhorn, Lake Odessa	May 24	375,000
Grand River Millpond	Portland	Hugh Derby, Portland	May 24	375,000
Iosco county:				
Hale Lake	Plainfield	R. D. Brown, Hale	May 23	100,000
Loon Lake	Plainfield	R. D. Brown, Hale	May 23	200,000
Long Lake	Plainfield	M. N. Cray, Ellsle	May 23	200,000
Indian Lake	Plainfield	C. W. Luce, East Texas	May 23	400,000
Sand Lake	Grant	J. A. Jackson, McIvor	May 23	200,000
Isabella county:				
Hall's Lake	Broomfield	J. M. Swisher, Remus	May 13	60,000
Scout Lake	Notiawa	Robert Hyslop, Weidman	May 13	60,000
Coldwater Lake	Notiawa	Robert Hyslop, Weidman	May 13	60,000
Eldred Lake	Broomfield	J. M. Swisher, Remus	May 13	40,000
Chippewa River	Several	G. A. Chatterton, Mt. Pleasant	May 21	200,000
Bass Lake	Lincoln	J. Cobb, Shepherd	May 24	125,000
Jackson county:				
Baisin River Pond	Norvell	J. H. Frost, Norvell	May 16	250,000
Grass Lake	Grass Lake	C. R. Smith, Grass Lake	May 17	225,000
Kalamazoo county:				
Kalamazoo River	Cooper	J. A. Bussard, Plainwell	May 7	100,000
Sugarloaf Lake	Packeraft	F. Harrison, Schopcraft	May 7	100,000
Picketoat Lake	White Bros. & F. Fisher, Scotts	White Bros. & F. Fisher, Scotts	May 7	75,000
Gull Lake	Ross, Richland and Barry	J. O. Galoup, Battle Creek	May 17	600,000
Sherman Lake	Ross	A. M. Giddings, Ann Arbor	May 17	250,000
Kalkaska county:				
Manistee Lake	Cold Springs	R. W. Douglas, Darragh	May 14	80,000
Kent county:				
Ronde River	Sparta	H. E. Walcott, Sparta	May 9	50,000
Round Lake	Oakfield	Freeman Addis, Harvard	May 13	75,000
Scrub Lake	Oakfield	Freeman, Addis, Harvard	May 13	75,000
Pond's Lake	Oakfield	W. S. Lamberton, Belding	May 13	75,000
Wabasis Lake	Oakfield	W. S. Lamberton, Belding	May 13	100,000
Whippoorwill Lake	Oakfield	J. E. Taylor	May 13	75,000
Mud Lake	Nelson	Bert Bailey, Sand Lake	May 14	40,000

Wall-eyed pike plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Kent county.—Continued:				
Crandall Lake.....	Solon.....	Earl Rasco, Sand Lake.....	May 14.....	40,000
Sand Lake.....	Nelson and Pierson.....	F. E. Shattuck, Sand Lake.....	May 14.....	40,000
Thornapple River.....	Ada.....	Theodore Lampert, Ada.....	June 3.....	80,000
McKewen Lake.....	Lowell.....	Chas. E. Brown, Alto.....	June 3.....	200,000
Reed's Lake.....	Grand Rapids.....	L. J. DeLamarter, Grand Rapids.....	June 9.....	120,000
Lake county:				
Loon Lake.....	Elk.....	J. C. Hodgins, Peacock.....	May 9.....	75,000
Lapeer county:				
Miller Lake.....	Deerfield.....	K. M. Barbour, North Branch.....	June 2.....	200,000
Five Lakes.....	Arcadia.....	J. B. Hazaman, North Branch.....	June 2.....	200,000
Hall's Lake.....	Lapeer.....	E. J. Thresher, Lapeer.....	June 3.....	200,000
Leelanau county:				
Lime Lake.....	Cleveland.....	Frank Newman, Maple City.....	June 3.....	80,000
Carp Lake.....	Cleveland, Leland and Solon.....	Traverse City R. and G. C., Trav. City.....	June 3.....	80,000
Cedar Lake.....	Elmwood.....	Traverse City R. and G. C., Trav. City.....	June 3.....	60,000
Lenawee county:				
Raisin River.....	Blissfield.....	Geo. Stadleman, Blissfield.....	May 16.....	300,000
Devil's Lake.....	Woodstock.....	H. E. Hand, Tecumseh.....	May 17.....	300,000
Evans Lake.....	Franklin.....	Willard Mitchell, Tipton.....	May 17.....	160,000
Livingston county:				
Rice Lake.....	Hamburg.....	E. E. Gwinner, Ann Arbor.....	May 28.....	200,000
Strawberry Lake.....	Hamburg.....	E. E. Gwinner, Ann Arbor.....	May 28.....	200,000
Zukeley Lake.....	Hamburg.....	E. E. Gwinner, Ann Arbor.....	May 28.....	200,000
Manistee county:				
Bealy Lake.....	Springdale.....	Frank E. Burke, Henry.....	May 9.....	50,000
Ehora Lake.....	Dickson.....	J. A. Duncan, Brethren.....	May 9.....	50,000
Glover Lake.....	Pleasanton.....	F. L. Glover, Bear Lake.....	May 9.....	50,000
Mason county:				
Barton Lake.....	Eden.....	J. M. Cable, Custer.....	May 21.....	125,000
Round Lake.....	Sheridan.....	Ernest Jaser, Bachelor.....	May 21.....	250,000
Tallman Lake.....	Branch.....	Ernest Jaser, Bachelor.....	May 21.....	250,000
Turtle Lake.....	Sheridan.....	Phillip Weaver, Bachelor.....	May 21.....	125,000
Crystal Lake.....	Amber.....	F. B. Dow, Ludington.....	May 21.....	200,000
Hamlin Lake.....	Hamlin and Victory.....	O. J. Wangen, Ludington.....	May 21.....	375,000
Meecosta county:				
Moore's Lake.....	Hinton.....	C. W. Vining, Lakeview.....	May 13.....	75,000
School Section Lake.....	Morton.....	J. M. Swisher, Remus.....	May 13.....	75,000
Lake 28.....	Sheridan.....	R. P. Swisher, Remus.....	May 13.....	75,000

Blue Lake	Morton	P. J. Thelsen, Remus	May 13	75,000
Long Lake	Morton	P. J. Thelsen, Remus	May 13	75,000
Pine Lake	Wheatland	P. J. Thelsen, Remus	May 13	75,000
Mud and Grass Lakes	Morton	H. G. Coulson, Mecosta	May 13	50,000
Cook Lake	Colfax	Chas. Drager, Rodney	May 13	50,000
Muskegon River	Green	Thos. Bloxson, Paris	June	80,000
Missaukee county:				
Goose Lake	Colwell	Merritt Mattice, Lake City	May 14	80,000
Lake Misaukee	Reeder and Lake	F. D. McGregor, Lake City	May 14	80,000
Dyre Lake	Colwell	S. H. Reeder, Lake City	May 14	80,000
Sapphire Lake	Lake	Lem Proctor, Lake City	May 14	80,000
Montcalm county:				
Bass Lake	Richland	Wm. Carls, Vestaburg	May 13	75,000
Deaner Lake	Richland	Wm. Carls, Vestaburg	May 13	75,000
Grass Lake	Fairplains	Albert Jenks, Fenwick	May 13	75,000
Horseshoe Lake	Fairplains	Earl C. Jenks, Fenwick	May 13	75,000
Kindellville Lake	Pine	H. H. Decker, Shiloh	May 13	75,000
Farnsworth Lake	Pine	R. K. Boomer, Lakeview	May 13	75,000
Big Brimmer Lake	Cato	L. B. Farnsworth, Lakeview	May 13	75,000
Little Brimmer Lake	Cato	C. W. Vining, Lakeview	May 13	75,000
Tamarack Lake	Cato	C. W. Vining, Lakeview	May 13	75,000
Bass Lake	Belvidere	C. W. Vining, Lakeview	May 13	100,000
Town Line Lake	Belvidere and Cato	David Wortley, Lakeview	May 13	75,000
Duck Pond	Maple Valley	David Wortley, Lakeview	May 13	100,000
Horton Lake	Montcalm	John A. Freeman, Coral	May 13	75,000
Six Lakes	Belvidere	Walter Kitt, Gowen	May 13	100,000
Long Lake	Pine	J. W. Gafield, Six Lakes	May 13	100,000
Pickarel Lake	Bushnell	J. P. Poulson, Trufants	May 13	100,000
Paulson Lake	Winfield	Pert Goodsell, Vickseryville	May 13	100,000
Little Whitefish Lake	Pierson	O. C. Waldo, Ambie	May 13	125,000
Round Lake	Pierson	B. J. King, Pierson	May 13	80,000
Round Lake	Pierson	Frank Allen, Sand Lake	May 14	40,000
Montmorency county:				
Redore Lake	Montmorency	Wm. H. Farrier, Hillman	May 26	125,000
Rush Lake	Montmorency	Wm. H. Farrier, Hillman	May 26	250,000
Long Lake	Montmorency	Wm. W. Murphy, Hillman	May 26	375,000
Muskegon county:				
Wolf Lake	Eggleston	Bolen & Stewart, Muskegon	May 11	100,000
Canfield Lake	Blue Lake	J. J. Howden, Muskegon	May 11	75,000
White Lake	Montague	Paul G. Kiling, Montague	May 11	125,000
Bear Lake	Montague	E. D. Magoon, Muskegon	May 11	250,000
Big Blue Lake	Blue Lake	Hon. F. J. Russell, Hart	May 11	200,000
Wallace Lake and Lakes Minnie, Eleanor and Antoinette	Dalton	T. O. Wallace, Chicago	May 11	150,000
Crooked, Old Joe's and Van Antwerp Lakes	Holton	R. J. Patelski, Holton	June	80,000

Walleye pike plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Newaygo county: Power Pond on Muskegon River. Mill Lake. Pickerel Lake. Sylvan, Emerald, Pickerel and Kimball Lakes. Crystal Lake. Long Lake. Waters Lake. Robinson's Lake. Conover Lake.	Croton. Home. Garfield. Brooks, Everett and Garfield. Sherman. Dayton. Sherman. Ensey.	Geo. L. Erwin, Grand Rapids. Peter Christensen, Biely. A. I. Forman, Newago. H. W. Sawyer, Chicago. Frank Foster, Wooster. Jacob Kemperman, Fremont. Sidney Painter, Fremont. Chas. Streichhirsch, White Cloud. Alvin R. Brown, Sand Lake.	May 7 May 9 May 9 May 11 May 11 May 11 May 11 May 14	125,000 50,000 75,000 100,000 75,000 100,000 75,000 40,000
Oakland county: Hunnewell Lake. Long Lake. Pettibone Lake. Sears Lake. Huron Lake. Davisburg Millpond. Kirky Lake. Long Lake. Cass Lake. Lake Orion. Cranberry Lake. Huntoon Lake. Lotus Lake. Maceday Lake. Waterford Lake.	Millford. White Lake. Highland. Millford. Springfield. Springfield. Springfield. West Bloomfield. Orion. Brandon. Waterford. Waterford. Waterford. Waterford and Independence.	F. B. Hatch, Milford. F. B. Hatch, Milford. F. B. Hatch, Milford. F. G. Ely, Davisburg. Ira E. Kinney, Davisburg. Ira E. Kinney, Davisburg. Ira E. Kinney, Davisburg. H. J. C. Wagner, Detroit. J. E. Bolles, Detroit. J. J. Everett, Ortonville. C. C. Craigie, Waterford. C. C. Craigie, Waterford. C. C. Craigie, Waterford. C. C. Craigie, Waterford.	May 14 May 14 May 14 May 21 May 21 May 21 May 21 June 2 June 3 June 3 June 4 June 4 June 4 June 4	125,000 125,000 125,000 125,000 250,000 125,000 250,000 500,000 250,000 150,000 300,000 200,000 200,000
Oreana county: Pentwater Lake. Pee-Dee Lake. Stony Lake. Crystal Lake.	Pentwater. Leavitt. Claybank and Benona. Hart.	Hon. R. M. Montgomery, Lansing. O. W. Bunting, Walkerville. A. J. Rankin, Shelby. Wm. R. Roach, Hart.	May 11 May 11 May 11 May 11	100,000 100,000 75,000 100,000
Ogemaw county: Chatman Lake. Piper Lake. Henderson Lake.	Edwards. T. 23 R. 2 E. Cumming and Hill.	Herbert Stephens, Alger. John Tolfree, West Branch. B. J. Corwin, Sage.	May 19 May 19 May 23	200,000 250,000 250,000
Osceola county: Rose Lake. Wilson Lake. Wright and Grover Lakes.	Rose Lake. Ewart. Ewart.	L. Van Meter, Dighton. S. F. Postal, Ewart. Wm. F. Ramsey, Ewart.	May 14 May 21 May 21	75,000 125,000 375,000
Ottawa county: Cranberry Lake. Crockerly Lake.	Wright. Chester.	Dr. E. O. Gilley, Conklin. Dr. E. O. Gilley, Conklin.	May 11 May 11	75,000 75,000

NINETEENTH REPORT—STATE FISHERIES.

Spring Lake.....	Spring Lake.....	Sam'l Falls, Spring Lake.....	May 11	100,000
Deer Creek.....	Polkton.....	Sam Little, Coopersville.....	June 1	60,000
Presque Isle county:				
Lake Ella.....	Belknap.....	H. Horwitz, Hawks.....	May 26	150,000
St. Joseph county:				
Palmer Lake.....	Colon.....	J. K. Farrand and A. J. Born, Colon.....	May 16	250,000
Sturgeon Lake.....	Fabius.....	J. K. Farrand and A. J. Born, Colon.....	May 16	250,000
Wolf Lake.....	Colon.....	John G. Krull, Three Rivers.....	May 16	175,000
Long Lake.....	Constantine and Fabius.....	R. C. Himebaugh, Burr Oak.....	June 2	80,000
St. Joseph River.....		W. N. Harvey, Constantine.....	June 2	80,000
Van Buren county:				
Saddle Lake.....	Columbia.....	O. C. Egan, Grand Junction.....	May 12	100,000
Milison Lake.....	Columbia.....	H. A. Kinney, Grand Junction.....	May 12	100,000
Panther Millpond.....	Bangor and Arlington.....	A. V. McKee, Bangor.....	May 12	150,000
Lake Fourteen.....	Arlington.....	O. G. Moreland, Bangor.....	May 12	150,000
North Arden Lake.....	Bangor.....	J. Welker, Bangor.....	May 12	75,000
North Lake.....	Fine Grove and Almena.....	F. W. Schoolcraft, Kendall.....	May 16	250,000
Clear Lake.....	Fine Grove.....	Chester Westler, Allegan.....	May 16	250,000
Washtenaw county:				
Brain's Lake.....	Superior.....	J. G. West, Ypsilanti.....	May 17	125,000
Horseshoe Lake.....	Northfield.....	E. E. Gwinmer, Ann Arbor.....	May 24	250,000
Independence Lake.....	Webster.....	E. E. Gwinmer, Ann Arbor.....	May 24	125,000
Tobitt's Lake.....	Northfield.....	E. E. Gwinmer, Ann Arbor.....	May 24	125,000
Wiltmore Lake.....	Northfield.....	E. E. Gwinmer, Ann Arbor.....	May 24	250,000
Washtenaw county:				
Pleasant Lake.....	Selma.....	E. E. Bunyca, Bunyca.....	May 14	80,000
Cadillac Lake.....	Clam Lake.....	N. V. Gerrish, Cadillac.....	May 14	60,000
Lake Mitchell.....	Cherry Grove.....	N. V. Gerrish, Cadillac.....	May 14	60,000
Stoneledge Lake.....	Clam Lake.....	Fred Rock, Cadillac.....	May 14	40,000
Total.....				34,140,000

NINETEENTH REPORT—STATE FISHERIES.

SMALL MOUTH BASS PLANTS.
ADVANCED FRY.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Antrim county:			1910,	
Thayer's Lake.....	Helena.....	O. P. Anderson, Bellaire.....	June 22	6,000
Grass Lake.....	West Home, Kearney, Custer and Helena.....	A. B. Wooten, Bellaire.....	June 22	6,000
Bentley Lake.....	Banks.....	L. Van Skiver, Ellsworth.....	June 22	6,000
Lamo Lake.....	Banks.....	L. Van Skiver, Ellsworth.....	June 22	6,000
St. Clair Lake.....	Banks.....	L. Van Skiver, Ellsworth.....	June 22	6,000
Barry county:			June 2	4,000
Fine Lake.....	Johnston.....	E. A. Turner, Bedford.....	June 2	4,000
Benzie county:			June 7	6,000
Round Lake.....	Lake and Berzonia.....	John W. Cruze, Honor.....	June 7	8,000
Big Platte Lake.....	Lake and Platte.....	I. P. Covey, Honor.....	June 7	6,000
Little Platte Lake.....	Almena and Platte.....	E. R. Dailey, Empire.....	June 7	6,000
Berry Lake.....	Almena.....	E. R. Dailey, Empire.....	June 7	6,000
Pearl Lake.....	Almena.....	E. R. Dailey, Empire.....	June 7	6,000
Berrien county:			June 2	4,000
Pike Lake.....	Bertrand.....	James E. Scott, Buchanan.....	June 2	4,000
Clear Lake.....	Buchanan.....	A. A. Worthington, Buchanan.....	June 2	4,000
Weaver's Lake.....	Buchanan.....	A. A. Worthington, Buchanan.....	June 2	4,000
Branch county:			June 2	8,000
Coldwater River.....	Coldwater.....	F. T. Tappan, Coldwater.....	June 2	8,000
Coldwater Lake.....	Coldwater.....	F. T. Tappan, Coldwater.....	June 2	8,000
North, South, Messenger, Craig and Morrison Lakes.....	Coldwater.....	F. T. Tappan, Coldwater.....	June 2	8,000
Calhoun county:			June 2	6,000
Lake Cognac.....	Battle Creek.....	B. D. Brockett, Battle Creek.....	June 2	6,000
Lake Gagnac.....	Battle Creek.....	Chas. E. Kistler, Battle Creek.....	June 2	4,000
Peedle Lake.....	Emmett.....	W. J. Clayborne, Battle Creek.....	June 2	4,000
Kalamazoo River.....	Marshall.....	R. C. Fulkner, Marshall.....	June 2	4,000
Millcreek at Kalamazoo River.....	Marshall and Marengo.....	E. L. Holmes, Marshall.....	June 2	4,000
Northwest at Kalamazoo River.....	Marshall and Marengo.....	E. L. Holmes, Marshall.....	June 2	4,000
Notawa Creek.....	Tekosha.....	Clyde Jacoby, Marshall.....	June 2	4,000
Wilder Creek.....	Frankford.....	S. W. Warren, Marshall.....	June 2	4,000
Hall's Lake.....	Sheridan.....	L. J. Devring, Albion.....	June 2	6,000
Montcalm Lake.....	Sheridan.....	L. J. Devring, Albion.....	June 2	4,000
Winnipeg Lake.....	Sheridan.....	L. J. Devring, Albion.....	June 2	6,000
Cass county:			June 2	6,000
Maclean Lake.....	Silver Creek.....	Dr. F. H. Coddling, Dowagiac.....	June 2	6,000
Indian Lake.....	Silver Creek.....	F. Phillips, Dowagiac.....	June 2	6,000

NINETEENTH REPORT—STATE FISHERIES.

Clinton county: Park Lake.....	Bath.....	Hon. M. F. Gray, Lansing.....	June 2	6,000
Emmet county: Round Lake.....	Bear Creek.....	Henry Lindig, Petoskey.....	June 7	8,000
Cenesee county: Silver Lake.....	Fenton.....	G. E. Beadle, Fenton.....	June 11	6,000
Lee's Lake.....	Fenton.....	C. A. Damon, Fenton.....	June 11	6,000
Pine Lake.....	Fenton.....	J. Max Davis, Fenton.....	June 11	6,000
Day's Lake.....	Fenton.....	J. F. Morehas, Fenton.....	June 11	6,000
Long Lake.....	Fenton.....	E. L. Bray, Flint.....	June 11	6,000
Grand Traverse county: Cedar Hedge Lake.....	Green Lake.....	W. Pennington, Interlochen.....	June 16	4,000
Green Lake.....	Green Lake.....	W. Pennington, Interlochen.....	June 16	6,000
Ingham county: Dobie Lake.....	Alaeton.....	G. E. Sanders, Mason.....	June 2	6,000
Hughes Lake.....	Ingham.....	G. E. Sanders, Mason.....	June 2	6,000
Park Lake.....	Meridian.....	G. E. Sanders, Mason.....	June 2	6,000
Ionia county: Jordan Lake.....	Odessa and Woodland.....	Edwin Shellhorn, Lake Odessa.....	June 21	6,000
Jackson county: Sweezy Lake.....	Norvell.....	B. F. Burgess, Norvell.....	June 2	6,000
River Raisin Pond.....	Norvell.....	J. H. Frost, Norvell.....	June 2	6,000
Fay Lake.....	Norvell.....	W. F. Walker, Norvell.....	June 2	6,000
Kalamazoo county: Sherman Lake.....	Ross.....	Wm. Caywood, Galesburg.....	June 2	4,000
Pine Island Lake.....	Texas.....	J. W. Powers, Kalamazoo.....	June 2	4,000
Kent county: Thornapple River.....	Ada.....	Theo. Lampert, Ada.....	June 3	6,000
Sand Lake.....	Nelson and Pierson.....	F. E. Shattuck, Sand Lake.....	June 7	4,000
Lake county: Lincoln Lake.....	Elk.....	Wm. Clark, Wingleton.....	June 9	4,000
Loon Lake.....	Elk.....	H. H. Hodgins, Peacock.....	June 9	6,000
Sable Lakes (four).....	Elk.....	Wm. Utter, Peacock.....	June 16	6,000
Big Bass Lake.....	Elk.....	Wm. P. Jones, Peacock.....	June 16	6,000
Leelanau county: Glen Lake.....	Glen Arbor, Empire and Kasson.....	D. H. Day, Glen Haven.....	June 7	6,000
Lenawee county: Goose Lake.....	Woodstock.....	W. J. Bauer, Cement City.....	June 2	6,000
Manistee county: Bear Lake.....	Bear Lake and Pleasanton.....	J. P. Malse, Bear Lake.....	June 7	6,000
Portage Lake.....	Onekama.....	Hans A. Wendel, Onekama.....	June 7	6,000

NINETEENTH REPORT—STATE FISHERIES.

Small mouth bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Mason county:				
Long Lake.....	Sheridan.....	Fountain R. and G. Club, Fountain.....	June 9	4,000
Four Lake.....	Sheridan.....	Fountain R. and G. Club, Fountain.....	June 9	6,000
Barton Lake.....	Fawn.....	Ferry M. Cable, Custer.....	June 9	4,000
Gun Lake.....	Freesoil.....	Thos. L. Stephens, Custer.....	June 9	6,000
Mecosta county:				
Big Rapids Pond.....	Big Rapids.....	S. A. Crandell, Big Rapids.....	June 7	4,000
Rogers Pond.....	Mecosta, Austin, Coifax and Big Rapids.....	M. E. Darrah, Big Rapids.....	June 7	6,000
Clear Lake.....	Mecosta, Austin, Coifax and Big Rapids.....	Lakewood Asso., Big Rapids.....	June 7	6,000
Montracm county:				
Henkel Lake.....	Reynolds.....	W. H. Lovely, Howard City.....	June 7	4,000
Newaygo county:				
Petit Lake.....	Croton.....	J. A. Collins, Howard City.....	June 7	4,000
Rancie Lake.....	Croton.....	W. H. Lovely, Howard City.....	June 7	4,000
Bills Lake.....	Endley.....	James Simpson, Sand Lake.....	June 9	4,000
Bill Lake.....	Croton.....	Chas. E. Barton, Howard City.....	June 9	6,000
Crooked Lake.....	Monroe.....	M. B. Draper, Grand Rapids.....	June 9	6,000
Nichols Lake.....	Beaver and Troy.....	Wm. Revall, Bitely.....	June 9	4,000
Blanche Lake.....	Ashland.....	A. J. Titus, Grant.....	June 9	4,000
Ottawa county:				
Spring Lake.....	Spring Lake.....	Sam'l Falls, Spring Lake.....	June 13	8,000
St. Joseph county:				
Sand Lake.....	Nottawa.....	M. Bowersox, Nottawa.....	June 2	4,000
Long Lake.....	Colon.....	F. M. Howard, Burr Oak.....	June 2	6,000
Van Buren county:				
North Lake.....	Pine Grove and Alma.....	F. R. Schoolcraft, Kendall.....	June 2	6,000
Gravel Lake.....	Porter.....	F. R. Ward, Lawton.....	June 2	4,000
East Lake.....	Almena.....	John Willsea, Kendall.....	June 2	4,000
Faw Paw River.....	Hartford.....	I. J. Doly, Holland.....	June 23	6,000
Wexford county:				
Cadillac Lake.....	Clam Lake.....	N. V. Gerrish, Cadillac.....	June 7	4,000
Lake Mitchell.....	Cherry Grove.....	N. V. Gerrish, Cadillac.....	June 7	4,000
Total.....				442,000

SMALL MOUTH BLACK BASS PLANTS.

FINGERLINGS No. 1, 2 AND 3.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alger county: Mirror Lake..... Reddes Lake..... Section 4-45-22..... Joe's Lake.....	Au Train..... Au Train..... Au Train..... Au Train.....	Fred S. Case, Wetmore..... Fred S. Case, Wetmore..... H. A. St. John, Marquette..... E. Storrs, Munising.....	1909, July 13..... July 13..... July 13..... July 13.....	750 750 750 750
Allegan county: Kalamazoo River..... Millpond in Kalamazoo River.....	Gun Plains..... Gun Plains.....	E. J. Anderson, Plainwell..... William Crispe, Plainwell.....	July 1..... Sept. 24.....	3,000 3,300
Baraga county: Lake George..... Lake Ruth.....	Baraga..... Spurr.....	Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee.....	July 13..... July 13.....	1,500 1,750
Barry county: Fine Lake.....	Johnston.....	E. A. Turner, Bedford.....	Aug. 24.....	600
Benzie county: Woodback Twin Lakes..... Fuller Lake..... Lake Ann..... Round Lake..... Crystal Lake..... Bellows Lake.....	Elmira..... Elmira..... Elmira..... Lake..... Crystal Lake..... Almira and Long Lake.....	G. F. Decker, Lake Ann..... John Kiddler, Lake Ann..... J. G. Turck, Lake Ann..... S. B. Dunn, Chicago, Ill..... J. J. Kirby, Toledo, O..... S. S. Burnett, Lake Ann.....	Aug. 20..... Aug. 20..... Aug. 20..... Aug. 20..... July 27..... July 30.....	600 600 600 750 1,000 1,000
Branch county: Matterson Lake..... Coldwater Lake..... Morrison, Bennet, North and South Lakes.....	Matterson..... Kinderhook..... Coldwater.....	Werner & Bishop, Bronson..... F. T. Tappen, Coldwater..... F. T. Tappen, Coldwater.....	Sept. 24..... July 21..... July 21.....	300 750 2,000
Calhoun county: Duck Lake.....	Clarence.....	L. E. Landon, Springport.....	July 13.....	2,000
Cheboygan county: Cheboygan River.....	Inverness.....	Wm. E. Shoemaker, Cheboygan.....	July 20.....	1,000
Clare county: Eight Point Lake.....	Garfield.....	S. F. Postal, Ewart.....	1910, June 30.....	1,500
Crawford county: Portage Lake..... Portage Lake..... Twin Lake..... Shoepack Lake.....	26 N. R. 4. W..... Grayling..... Grayling..... Maple Forest.....	Hon. Chas. Blair, Grayling..... Eben Hansen, Grayling..... F. B. Dickerson, Detroit..... T. E. Douglas, Judge.....	1909, July 20..... July 20..... July 28..... Aug. 7.....	1,750 750 525 375

NINETEENTH REPORT—STATE FISHERIES.

Small mouth black bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Chippewa county: Duck Lake	Sugar Island	Chase S. Osborn, Sault Ste. Marie	July 3	2,000
Eaton county: Grand River	Delta	W. Lazell, Delta	Aug. 24	600
Grand River	Windsor	F. G. French, Dimondale	July 13	1,000
Genesee county: Fine Lake	Fenton	J. Max Davis, Fenton	July 23	750
Gogebic county: Amarack Lake	Watersmeet and Stambaugh	J. R. Moore, Ironwood	July 14	750
Silver Lake	Watersmeet	O. F. Stabler, Ironwood	July 14	750
Rowe Lake	Watersmeet	O. F. Stabler, Ironwood	July 14	750
Grand Traverse county: Duck Lake	Green Lake	G. A. Brigham, Buckley	Aug. 14	600
Hillsdale county: Bear Lake	Cambria	W. C. Kemp, Hillsdale	July 23	300
Bird Lake	Jefferson	C. M. Warner, Osseo	Aug. 7	750
Houghton county: Otter Lake	Portage	J. Abner Sherman, Houghton	July 13	750
Bob Lake	Baird	Fred Nelson, Rubicon	July 14	750
Lake Pearluit	Alma	W. J. Richards, Pinesdale	July 14	750
Lake Gerald	Elm River	Frank Fumerville, Houghton	July 14	750
Rager Lake	Duncan	Hunting and Fishing Club, Signaw	July 14	1,500
Pequet Lake	Duncan	Hunting and Fishing Club, Signaw	July 14	1,500
Ionia county: Grass Lake	Orleans	W. H. Angell, Pelding	July 3	2,000
Lowell Millpond	Keene	Lowell H. and F. Club, Lowell	July 13	1,000
Smyrna Dam	Otisco	Lowell H. and F. Club, Lowell	July 13	1,000
Iosco county: Long Lake	Plainfield	M. N. Crary, Ellike	Aug. 13	500
Iron county: Lake Mary	Crystal Falls	Arvid Bjork, Crystal Falls	July 14	750
Sargent Lake	Crystal Falls	Frank C. Deming, Amasa	July 14	750
Silbert Lake	Crystal Falls	J. F. Gibson, Amasa	July 14	750
Flue Lake	Crystal Falls	J. F. Gibson, Amasa	July 14	750
Chicagoan Lake	Mastodon and Stambaugh	Chas. E. Lawrence, Iron Mountain	July 14	750
Swan Lake	44 and 43, Range 33	George Premo, Amasa	July 14	750
Fortune Lake	Crystal Falls	W. Foyseor, Crystal Falls	July 14	750

NINETEENTH REPORT—STATE FISHERIES.

Isabella county:									
Stevenson Lake	Vernon	A. E. Maynard, Clare	1910. June 30	3,000					
Perch Lake	Sherman	Robt. Hyslop, Weldman	1909. Aug. 6	6000					
Jackson county:									
Wilbur Lake	Pulaski	George W. Lown, Pulaski	Sept. 24	300					
Goose Lake	Pulaski	L. C. Feighner, Litchfield	July 13	1,500					
Skiff Lake	Liberty	Bruce Kerr, Clark Lake	Aug. 7	760					
Montague Lake	Springport	L. E. Landon, Springport	July 13	1,600					
Pleasant Lake	Henrietta	Chas. M. Norton, Lansing	July 13	1,500					
Farwell Lake	Hanover	Irving E. Tenner, Hanover	July 21	1,000					
Kalamazoo county:									
Crooked Lake	Texas	L. Van Dam, Oshtemo	Sept. 6	600					
Kent county:									
Whippoorwill Lake	Grattan and Oakfield	J. E. Taylor, Belding	July 3	2,000					
Grand River	Plainfield	Michigan Fish Commission	Nov. 20	300					
Flat River Pond	Lowell	Lowell H. and F. Club, Lowell	Nov. 20	150					
Edison Dam	Vergennes	Lowell H. and F. Club, Lowell	July 13	1,000					
Thornapple	Sever	Geo. H. Richardson, Ada	July 23	750					
Scram Lake	Oakfield	Freeman Addis, Harvard	July 24	500					
Round Lake	Oakfield	Freeman Addis, Harvard	July 24	500					
Keweenaw county:									
Lac La Belle	Grant	Jos. W. Seidon, Calumet	July 14	1,000					
Lake county:									
Pickarel Lake	Elk and North Range	Dr. E. Fairbanks, Dublin	1910, June 29	2,000					
Pickarel Lake	Elk and North Range	Earl Fairbanks, M. D., Dublin	1909, July 17	2,000					
Big Bass Lake	Elk	Wm. P. Jones, Peacock	July 27	500					
Leelanau county:									
North Bar Lake	Empire	E. R. Daily, Empire	July 30	1,000					
Glen Lake	Glen Arbor, Empire and Hasson	D. H. Day, Glen Haven	July 30	1,250					
Carp Lake	Solon, Centerville, Leland, Brigham	John Nolan, Cedar City	July 30	1,250					
Lenawee county:									
Evans Lake	Franklin	Geo. DePuy, Clinton	July 21	750					
Livingston county:									
Mont Lake	Brighton	B. T. O. Clark, Brighton	Aug. 9	375					
Island Lake	Green Oak	B. T. O. Clark, Brighton	Aug. 9	500					
Ore Lake	Green Oak and Hamburg	Joseph Foster, Lansing	Aug. 9	625					
Mackinac county:									
Todd Lake	Bois Blanc	J. B. Craddock, Detroit	Sept. 25	1,000					
Manistique Lake	Portage	Dent Hurd, Curtis	July 13	1,000					
Brevort Lake	Brevort	Wm. Massey, Jr., Allenville	July 13	1,000					
South Manistique or Whitefish Lake	Portage	F. P. Bohn, Newberry	July 13	1,000					

Small mouth black bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Macomb county: Cusick Lake.....	Washington.....	H. W. Bradley, Romeo.....	Aug. 28	450
Manistee county: Portage Lake..... Manistee River.....	Onekama..... Sevela.....	H. W. Leonard, Manistee..... G. A. Brigham, Buckley.....	Aug. 20 Aug. 29	800 600
Marquette county: Loon Lake..... Little Michigamme Lake..... Lake near Mud Lake.....	Forythe..... Michigamme and Spur..... Marquette.....	J. H. Andrus, M. D., Negaunee..... L. L. Goodnow, M. D., Negaunee..... John W. Spear, Marquette.....	July 13 July 13 July 13	500 1,500 500
Mason county: Ford Lake.....	Sheridan.....	Henry Eoff, Fountain.....	Aug. 12	500
Mecosta county: Long Lake..... Clear Lake..... Lake 28.....	Chippewa..... Coifax..... Sheridan.....	J. C. Storey, Ewart..... R. H. Redmond, Big Rapids..... P. J. Theilson, Remus.....	July 22 July 7 July 7 1910	500 2,000 2,000
Chippewa River.....	Union.....	Palmer & Taggart, Mt. Pleasant.....	June 30	1,500
Menominee county: Lake connected with small chain of lakes to Cedar River.....	Spaulding.....	F. Gaedke, Powers.....	1909, July 14	750
Monroe county: River Rasin.....	Monroe.....	T. R. Navarre, Monroe.....	Aug. 9	625
Montcalm county: Crystal Lake..... Spring Lake..... Crystal Lake..... Mud Lake.....	Crystal..... Fairplains..... Crystal..... Crystal.....	G. N. Sowle, St. Johns..... E. A. Kemp, Greenville..... C. W. LaDu, Crystal..... C. W. LaDu, Crystal.....	Sept. 11 Sept. 18 July 24 July 24	450 400 750 750
Newaygo county: Long Lake.....	Sherman.....	Frank Foster, Wooster.....	1910, June 30 1909,	1,500
Crooked Lake.....	Monroe.....	M. B. Draper, Grand.....	July 17	1,500
Oakland county: Lake Orion..... Deer Lake..... Cooley Lake..... Walled Lake..... Huron River..... Morrison and Proud's Lake.....	Orion..... Independence..... White Lake..... Novi and Commerce..... Milford and Commerce..... Commerce.....	J. E. Bolles, Detroit..... Oliver N. Gardner, Detroit..... E. K. Stimings, Northville..... Dean F. Griswold, Northville..... F. B. Hatch, Milford..... F. B. Hatch, Milford.....	Nov. 9 Aug. 6 Aug. 7 Aug. 27 Aug. 27 Aug. 27	700 600 375 450 300 450

NINETEENTH REPORT—STATE FISHERIES.

Tracy Lake.....	Commerce.....	F. B. Hatch, Milford.....	Aug. 27	450
Park Lake.....	Independence.....	J. D. Orden, Clarkston.....	Aug. 27	450
Pine Lake.....	West Bloomfield.....	Geo. L. McGregor, Pontiac.....	Aug. 28	450
Ogemaw county:				
Sage Lake.....	Klacking.....	Albert L. Brown, West.....	Aug. 11	375
Ontonagon county:				
Lake Gogebic.....	Matchwood.....	A. C. Hargrave, Ballentine.....	July 14	1,000
Oscoda county:				
Big Lake.....	Orient.....	E. F. Birdsall, Ewart.....	July 22	750
Wright and Grover Lakes.....	Ewart.....	Wm. F. Ramsay, Ewart.....	1910	
Strawberry Lake.....	Cedar.....	Wm. F. Ramsay, Ewart.....	June 30	2,000
Otsego county:				
Otsego Lake.....	Bagley.....	Henry Shearer, Detroit.....	1909	
Ottawa county:				
Spring Lake.....	Spring Lake.....	Sam'l Falls, Springlake.....	July 6	3,000
Cove Lake.....	Robinson.....	W. T. G. Penny, Grand Haven.....	Sept. 6	600
Presque Isle county:				
Grand Lake.....	Presque Isle.....	Joseph Kaufman, Presque Isle.....	Sept. 3	400
St. Joseph county:				
Hog Creek Lake.....	Burr Oak.....	Van Husan & Spencer, Burr Oak.....	Sept. 24	300
Fish Lake.....	Burr Oak.....	Van Husan & Spencer, Burr Oak.....	July 21	500
Schoolcraft county:				
Indian Lake.....	Harrison.....	Chas. W. Adkins.....	July 13	1,750
Shiawassee county:				
Shiawassee River.....	Caledonia.....	C. D. Hunt, Corunna.....	July 23	500
Van Buren county:				
North Lake.....	Almena.....	E. A. VanAlstyne, Chicago.....	Sept. 7	600
Wayne county:				
Coomer Lake.....	Van Buren.....	A. E. Smith, Belleville.....	July 10	500
Wexford county:				
Brainard Lake.....	Selma.....	E. E. Bunyes, Bunyes.....	July 27	500
Total.....				116,425

LARGE MOUTH BASS PLANTS.
ADVANCED FRY.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Barry county: Mud Lake.....	Castleton.....	F. H. Beach, Charlotte.....	1910 June 18	8,000
Cass county: Watson Lake..... Indian Lake..... Narcisian Lake..... Sister Lakes..... Rewey Lakes.....	LaGrange..... Silver Creek..... Silver Creek and Van Puren..... Silver Creek and Keeler..... Silver Creek.....	J. L. Dillman, Dowagiac..... Fred Phillips, Dowagiac..... F. Phillips, Dowagiac..... F. Phillips, Dowagiac..... F. E. Tarrant, Chicago.....	June 30 June 30 June 30 June 30 June 20	4,000 4,000 4,000 4,000 6,000
Eaton county: Grand River..... Tamarack Lake..... Sobby Lake..... Lookmeacross Lake..... Hart Lake.....	Several..... Sunfield..... Sunfield..... Sunfield..... Sunfield.....	F. L. Berry, Grand Ledge..... Peter Chatfield, Vermontville..... John Vele, Vermontville..... A. D. Childs, Sunfield..... Ray Childs, Sunfield.....	June 21 June 21 June 21 June 21 June 21	4,000 4,000 4,000 4,000 4,000
Ingham county: East Park Lake..... Three Lakes.....	Lansing..... Williamston.....	Wm. Ferris, Lansing..... C. M. Rice, Williamston.....	June 21 June 21	6,000 6,000
Ionia county: Church Lake..... Jordan Lake..... Long Lake..... Ravell's Pond.....	Campbell..... Odessa and Woodland..... Orleans..... Orleans.....	E. A. Rising, Clarksville..... E. Shellhorn, Lake Odessa..... W. F. Bricker, Beiding..... Chas. Madden, Beiding.....	June 21 June 21 June 25 June 25	4,000 6,000 4,000 4,000
Jackson county: Ackerson Lake..... Brill's Lake..... Brown's Lake..... Cranberry Lake..... Gillett's Lake..... Grass Lake..... Michigan Centre Pond..... Portage Lake..... Vandercook's Lake..... Wolf Lake.....	Napoleon..... Leoni..... Summit..... Napoleon..... Leoni..... Leoni..... Summit..... Waterloo and Henrietta..... Summit..... Leoni, Grass Lake and Napoleon.....	Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson..... Geo. E. Beebe, Jackson.....	June 22 June 22 June 22 June 22 June 22 June 22 June 22 June 22 June 22 June 22	6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000 6,000
Kalamazoo county: Pretty Lake..... Crooked Lake..... Crooked Lake..... Eagle Lake.....	Texas..... Texas..... Texas..... Texas.....	W. A. Kinney, Kalamazoo..... J. W. Powers, Kalamazoo..... C. P. Zelle, Mattewan..... G. C. Harris, Oshtemo.....	June 20 June 20 June 20 June 20	4,000 6,000 6,000 4,000

Austin Lake.....	Portage.....	Clarence C. Briggs, Vicksburg.....	June 23	6,000
Kimball Lake.....	Schoolcraft.....	Harry Day, Vicksburg.....	June 23	4,000
Gourdneck Lake.....	Schoolcraft and Portage.....	H. S. Faust, Vicksburg.....	June 23	4,000
Indian Lake.....	Brady.....	C. G. Foster, Vicksburg.....	June 23	6,000
Pickereel Lake.....	Pavilion.....	E. O. Goldsmith, Vicksburg.....	June 23	4,000
Little Rawson Lake.....	Schoolcraft.....	O. W. Holmes, Vicksburg.....	June 23	4,000
Thrawl's Lake.....	Brady.....	C. H. Leginger, Vicksburg.....	June 23	4,000
Horseshoe Lake.....	Schoolcraft.....	B. R. Platt, Vicksburg.....	June 23	4,000
Sunset Lake.....	Schoolcraft.....	E. W. Pursel, Vicksburg.....	June 23	4,000
Uptigrove Lake.....	Brady.....	C. Z. Robinson, Vicksburg.....	June 23	4,000
Howard Lake.....	Schoolcraft.....	C. H. Slack, Vicksburg.....	June 23	6,000
Black Lake.....	Schoolcraft.....	W. W. Yates, Vicksburg.....	June 23	4,000
West Lake.....	Portage.....	J. F. Young, Vicksburg.....	June 23	4,000
Kent county:				
Bradley Pond.....	Courtland.....	Geo. E. Rector, Edgerton.....	June 21	4,000
Curtis Pond.....	Algoma.....	Geo. E. Rector, Edgerton.....	June 21	4,000
Munro Pond.....	Algoma.....	Geo. E. Rector, Edgerton.....	June 21	4,000
Pine Lake.....	Algoma.....	J. E. Beardslee, Cedar Springs.....	June 21	4,000
Black Lake.....	Solon.....	Cedar Springs R. and G. Club.....	June 21	6,000
Long Lake.....	Solon.....	Cedar Springs R. and G. Club.....	June 21	6,000
Round Lake.....	Solon and Algoma.....	Cedar Springs R. and G. Club.....	June 21	6,000
Big Wabasis Lake.....	Oakfield.....	W. S. Lamberton, Belding.....	June 25	6,000
Pond's Lake.....	Oakfield.....	W. S. Lamberton, Belding.....	June 25	4,000
Chapin Lake.....	Grattan.....	H. J. Leonard, Belding.....	June 25	4,000
Muskat Lake.....	Grattan.....	H. J. Leonard, Belding.....	June 25	6,000
Whippoorwill Lake.....	Grattan and Oakfield.....	J. E. Taylor, Belding.....	June 25	4,000
Lesstier and Long Lakes.....	Grattan.....	Dr. C. M. Wise, Belding.....	June 25	12,000
Lapeer county:				
Cool Lake.....	Elk and North Range.....	Dr. E. Fairbanks, Dublin.....	June 29	4,000
Bush Lake.....	Webber.....	R. J. Matthews, Baldwin.....	June 29	4,000
Twin Lake.....	Pleasant Plains.....	R. J. Matthews, Baldwin.....	June 29	4,000
Whalen Lake.....	Pleasant Plains.....	R. J. Matthews, Baldwin.....	June 29	4,000
Manistee county:				
Bass Lake.....	Arcadia.....	G. M. Bowen, Inlay City.....	June 29	6,000
Cranberry Lake.....	Arcadia.....	W. C. Cardwell, Inlay City.....	June 29	4,000
Rose Lake.....	Arcadia.....	A. D. Conley, Inlay City.....	June 29	4,000
Goodrich Lake.....	Arcadia.....	A. D. Conley, Inlay City.....	June 29	6,000
Clear Lake.....	Arcadia.....	B. I. Roberts, Kings Mills.....	June 29	6,000
Five Lakes.....	Arcadia.....	A. Wingert, North Branch.....	June 29	10,000
Manistee county:				
Healey Lake.....	Springdale.....	F. E. Burke, Henry.....	June 29	4,000
Montcalm county:				
Cady Lake.....	Maple Valley.....	J. A. Collins, Howard City.....	June 21	4,000
Olson Lake.....	Winfield.....	J. A. Collins, Howard City.....	June 21	4,000
Caskey Lake.....	Winfield.....	W. H. Collins, Howard City.....	June 21	6,000
Whitefish Lake.....	Pierson.....	B. S. Davenport, Pierson.....	June 21	6,000
Butternut Lake.....	Pierson.....	B. S. Davenport, Pierson.....	June 21	4,000

Large mouth bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Montcalm county.—Continued:				
Grass Lake.....	Fairplains	W. H. Angel, Belding	June 25	4,000
Hunter Lake.....	Pine	Geo. C. Bower, Greenville	June 25	6,000
Turk Lake.....	Montcalm	E. A. Mason, Greenville	June 25	6,000
Muskegon county:				
Clear Lake.....	Cedar Creek	H. A. O'Connor, Holton	June 20	4,000
Crooked, Old Joe's and Van Antwerp Lakes	Holton	R. J. Patelski, Holton	June 20	4,000
Heart of Round Lake	Holton	R. J. Patelski, Holton	June 20	4,000
Crooked and Crocker Lakes	Cedar Creek	S. L. Skeels, Holton	June 20	6,000
Pine Island Lake	Holton	O. Willard, Holton	June 20	4,000
Wolf Lake.....	Eggleston	E. D. Maaron, Muskegon	June 30	6,000
Pear Lake.....	Muskegon and Laketon	E. D. Maaron, Muskegon	June 30	6,000
Little Black Lake	Norton and Spring Lake	E. D. Maaron, Muskegon	June 30	6,000
Mons Lake.....	Norton	E. D. Maaron, Muskegon	June 30	6,000
Stewart Lake.....	Cedar Creek	E. D. Maaron, Muskegon	June 30	6,000
Pantatloon Lake	Cedar Creek	E. D. Maaron, Muskegon	June 30	6,000
Alpine Lake.....	Dalton	Robt. Furman, Twin Lake	June 30	4,000
Goose Egg Lake.....	Dalton	G. L. Putnam, Twin Lake	June 30	4,000
Wallace Lake and Lakes Minnie, Antoinette and Eleanor	Dalton	G. L. Putnam, Twin Lake	June 30	4,000
Newaygo county:				
Long Lake.....	Sherman	T. O. Wallace, Chicago		4,000
First Lake.....	Dayton	J. Kemperman, Fremont	June 20	6,000
Fourth Lake.....	Dayton	W. F. Reber, Fremont	June 20	4,000
Fremont Lake.....	Sheridan	W. F. Reber, Fremont	June 20	6,000
Half Moon Lake.....	Denver	Ross Schoecraft, Fremont	June 20	6,000
Keims Lake.....	Denver	F. Utley, Hesperia	June 20	4,000
Mountain Hill Lake	Denver	F. Utley, Hesperia	June 20	4,000
Bopstall Lake.....	Grove	B. S. Davenport, Pierson	June 20	4,000
Crystal Lake.....	Sherman	Frank Foster, Wooster	June 20	4,000
North Lake.....	Enslay	Frank Foster, Wooster	June 20	4,000
Sand Lake.....	Ashland	A. J. Tlus, Grant	June 30	4,000
Hess Lake.....	Brooks	A. J. Tlus, Grant	June 30	4,000
Little Brooks Lake	Brooks	H. S. Thompson, Newaygo	June 30	6,000
Gram Lake.....	Sherman	W. H. Thompson, Newaygo	June 30	6,000
Lost Lake.....	Sherman	M. D. Hayward, White Cloud	June 30	4,000
Robinson's Lake	Sherman	M. D. Hayward, White Cloud	June 30	4,000
Oakland county:				
Cass Lake.....	West Bloomfield	C. Stretchnrsch, White Cloud	June 30	4,000
Echo Lake.....	Addison			
Angelus Lake.....	Pontiac and Waterford	John Tyre, Pontiac	June 22	10,000
Oceana county:				
Bower's Lake.....	Newfield	G. W. Paton, Almont	June 29	8,000
McLaren Lake.....	Newfield	Geo. Stanley, Pontiac	June 30	12,000
		Wm. Bennett, Hesperia	June 30	4,000
		Wm. Bennett, Hesperia	June 30	6,000

St. Joseph county:	Brady	C. A. Morse, Vicksburg.	June 23	6,000
Portage Lake.....				
Van Buren county:	Lawrence	G. L. A. Brown, Decatur	June 20	6,000
Charity Lake.....	Hamilton	G. L. A. Brown, Decatur	June 20	4,000
Pond Lily Lake.....	Keeler	Wm. Hoffman, Hartford	June 20	4,000
Keeler Lake.....				
Total.....				588,000

LARGE MOUTH BLACK BASS PLANTS.

FINGERLINGS No. 1, 2 AND 3.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Allegan county: Kalamazoo Lake..... Ost-rhont Lake..... Clear Lake..... Hutchins Lake..... Silver Lake..... Upper Scott Lake..... Goshorn Lake..... Green Lake.....	Saugatuck..... Lee..... Lee..... Clyde and Ganges..... Saugatuck..... Lee..... Saugatuck and Laketon..... Leighton.....	Chas. E. Bird, Saugatuck..... S. Daves, Grand Junction..... W. H. Evans, Grand Junction..... C. L. Fosdick, Fenmville..... A. E. Hurlbut, East Saugatuck..... Oscar Meister, Pullman..... L. R. Wade, East Saugatuck..... Pryor Bros., Caledonia.....	1909. July 1 July 1 July 1 July 1 July 1 July 1 July 1	3,000 2,000 2,000 2,000 3,000 3,000 2,000 4,000
Alder county: Wiley Lake..... Field's Lake.....	Au Train..... Au Train.....	Victor E. Cox, Wetmore..... H. A. St. John, Marquette.....	July 13 July 13	500 500
Alpena county: Long Lake.....	Alpena.....	M. C. Bostwick, Alpena.....	Aug. 5	1,200
Barry county: Long Lake..... Sugarbush Lake.....	Hope..... Irving.....	B. Dickinson, Battle Creek..... S. A. Reigter, Freeport.....	July 8 Aug. 16	4,000 1,000
Berrien county: Little Paw Paw Lake..... Paw Paw River..... St. Joseph River..... Paw Paw Lake.....	Watervliet..... Several..... Several..... Watervliet.....	Stanley D. Guy, Coloma..... D. Wallace, Benton Harbor..... D. Wallace, Benton Harbor..... A. A. Woodward, Coloma.....	July 1 July 1 July 1 July 1	3,000 3,000 3,000 3,000
Cass county: Mascican Lake..... Finch Lake..... Fish Lake..... Little Fish Lake..... Stone Lake..... Rich Lake..... Miller Lake..... Shylhawk Lake..... Saddlebag Lake..... Otter Lake.....	Silver Creek..... Marcellus..... Marcellus..... LaGrange..... Porter..... Marcellus..... Marcellus..... Marcellus..... Marcellus.....	Dr. F. H. Coddling, Dowagiac..... C. S. Cosselman, Marcellus..... C. N. Goff, Marcellus..... Geo. Hayes, Marcellus..... Fred Marsh, Cassopolis..... H. H. Roth, Cassopolis..... C. S. Jones, Marcellus..... C. S. Jones, Marcellus..... Henry Kraus, Marcellus..... A. J. Smith, Marcellus.....	July 10 Aug. 13 Aug. 13 Aug. 13 Aug. 13 Aug. 13 Aug. 13 Aug. 13 Aug. 13 Aug. 13	2,000 750 750 500 500 750 500 750 500 750
Cheboygan county: Douglas Lake..... Lancaster Lake..... Munro Lake.....	Munro..... Munro..... Munro.....	Hon. H. F. Baker, Weadock..... Hon. H. F. Baker, Weadock..... Hon. H. F. Baker, Weadock.....	Aug. 5 Aug. 5 Aug. 5	1,200 600 1,000

NINETEENTH REPORT—STATE FISHERIES.

Clinton county: Alward Lake	Olive	A. St. Clair, De Witt	1909. Aug. 27	500
Clare county: Clare Millpond. Tobacco River and Pond. Black Lake. Arnold Lake. Budd Lake.	Grant. Grant. Garfield. Hayes.	J. Mason, Clare D. McPhail, Clare John Neeper, Crooked Lake F. Weatherhead, Harrison E. F. Wilson, Harrison.	July 9 July 9 July 9 July 9 1910.	1,000 1,250 750 1,000 1,000
Farm Lake. Millpond. Bear Lake. Millpond at Farwell. Long Lake.	Garfield. Surray Surray Surray	W. H. Chase, Crooked Lake Fuller & Harris, Farwell J. L. Littlefield, Farwell. Don W. Lydell, Farwell.	June 30 June 30 June 30 June 30	2,000 2,000 2,000 2,000
Genesee county: Grand Traverse county: Fish Lake.	Fenton. Mayfield.	W. A. Patterson, Flint. G. A. Brigham, Buckley.	1909. Aug. 27 Aug. 19	500 600
Hillsdale county: Tripp's Millpond Hastings' Lake Pleasant Lake.	Jefferson. Scipio. Jefferson.	Wm. H. Tripp, Osseo. Fred S. Sackett, Osseo Geo. Touse, Osseo.	July 7 July 7 July 7	750 1,000 1,000
Iosco county: Gullford Lake. Enola Lake.	Plainfield. Plainfield.	J. F. Gullford, South. Geo. W. Vroman.	Sept. 3 Sept. 3	450 600
Ionia county: Jenk's Lake Long Lake Woodward Lake Grass Lake Rayvalls Pond Kidville Pond Green's Creek.	Orleans. Orleans Rosald Orleans Orleans Orleans and Otisco.	H. J. Spaulding, Ionia E. E. Branch, Ionia Ira Conkey, Shiloh W. H. Angell, Belding Chas. W. Madden, Belding W. P. Heatherington, Belding. Lee Post, Belding.	July 3 July 3 July 3 July 3 July 3 July 3	2,000 3,000 2,000 2,000 2,000 4,000
Isabella county: Elchert Lake. Hall's Lake. Stevenson Lake.	Broomfield. Broomfield. Vernon.	J. M. Swisher, Remus. J. M. Swisher, Remus. A. E. Maynard, Clare.	July 3 July 3 1910. June 30	2,000 2,000 3,000
Jackson county: Vineyard Lake. Lagoon in Loomis Park.	Columbia. Jackson.	H. R. Blanchard, Brooklyn. Hon. W. W. Todd, Jackson.	1909. July 7 July 23	750 400
Kalkaska county: Manistee Lake.	Cold Springs.	R. W. Douglas, Darragh.	Aug. 21	1,000

NINETEENTH REPORT—STATE FISHERIES.

Large mouth black bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Kent county:				
Bear Creek Pond.....	Cannon.....	Michigan Fish Commission.....	1909.	200
Pond's Lake.....	Oakfield.....	W. S. Lambertson, Belding.....	Nov. 1	2,000
Webbs Lake.....	Oakfield.....	W. S. Lambertson, Belding.....	July 3	3,000
Whippoorwill Lake.....	Grattan and Oakfield.....	J. E. Taylor, Belding.....	July 3	2,000
Eminons Lake.....	Grattan.....	S. H. Wilson, Belding.....	July 3	2,000
Lake county:				
Mud Lake.....	Webber and Ellsworth.....	Geo. Cutler, Luther.....	Aug. 21	750
Lapeer county:				
Pleasant Lake.....	Attica.....	A. D. Conley, Imlay City.....	Oct. 4	600
Wolf Lake.....	Metamora.....	M. S. Corvelli, Metamora.....	July 17	780
Five Lakes.....	Arcadia.....	Adam Winert, North Branch.....	July 14	1,500
Barnes Lake.....	Deerfield.....	A. Schell, North Branch.....	July 14	750
Leavenworth county:				
Basin River.....	Deerfield.....	Chas. F. Greenfield.....	Sept. 30	800
Bad Green's Lake.....	Woodstock.....	Dr. E. N. Palmer, Brooklyn.....	July 7	750
Ward's Lake.....	Cambridge and Norvell.....	W. W. Crabbs, Morenci.....	July 23	1,200
Dean's Lake.....	Rollin and Woodstock.....	W. J. Hampton & Son, Manitow Beach.....	July 23	1,400
Sand Lake.....	Franklin.....	Elmer Putnam, Putnam.....	July 23	1,000
Washington, Middle and Marr's Lake.....	Cambridge.....	C. A. Morgan, Onsted.....	July 23	1,000
Livingston county:				
Parlee Lake.....	Genoa.....	R. E. Barron, Howell.....	Aug. 9	800
Zakey Lake.....	Green Oak.....	E. E. Gwinner, Ann Arbor.....	Sept. 10	375
Strawberry Lake.....	Hamburg.....	A. A. B. and F. C. Club, Ann Arbor.....	Sept. 3	500
Luce county:				
Hamilton Lake.....	Pentland.....	R. C. Bradley, Newberry.....	July 13	500
Wolf Lake.....	McMillan.....	Luce Co. R. and G. Club, Newberry.....	July 13	750
Manistee county:				
Manistee Riv. r.....	Several.....	G. A. Bringham, Buckley.....	Aug. 19	600
Mackinac county:				
Echo Lake.....	Bols Blanc.....	R. C. Loucks, Chicago, Ill.....	Aug. 5	1,200
Marquette county:				
Prince Lake.....	Forsythe.....	C. A. Lauffer, Marquette.....	July 13	500
Sank's Head Lake.....	Marquette.....	H. A. St. John, Marquette.....	July 13	750
Bass Lake.....	Forsythe.....	C. A. Sash, Negaunee.....	July 13	750
Forsythville Lakes.....	Marquette.....	John W. Spear, Marquette.....	July 13	500
Echo Lake.....	Forsythe.....	Chas. L. Sporney, Negaunee.....	July 13	500

NINETEENTH REPORT—STATE FISHERIES.

Mason county:			
Blue Lake	Henry Eoff, Fountain	Aug. 21	750
Ford Lake	Henry Eoff, Fountain	Aug. 21	750
Tallman Lake	E. Jaser, Bachelor	Aug. 21	750
Pickrel Lake	E. Jaser, Bachelor	Aug. 21	750
Gunn Lake	E. Manchester, Freesoll	Aug. 21	750
Mecosta county:	Thos. S. Stephens, Freesoll		2,000
Clear Lake	R. H. Redmond, Big Rapids	July 7	2,000
Bissell's Lake	C. W. Vining, Lakeview	July 3	2,000
Lake Twenty-eight	P. J. Theisen, Remus	July 3	2,000
Blue Lake	P. J. Theisen, Remus	July 3	2,000
Pine Lake	P. J. Theisen, Remus	July 3	2,000
Stony Lake	M. King, Remus	July 3	2,000
Perch Lake	Ray Carmen, Mecosta	July 3	4,000
Evans Lake	Ray Carmen, Mecosta	July 3	3,000
Millbrook Pond	E. N. Sweet, Chippewa Lake	July 3	3,000
Millbrook Pond	T. O. Fattison, Millbrook	July 3	3,000
School Section Lake	T. O. Fattison, Millbrook	July 3	3,000
Meeker Lake	J. M. Swisher, Remus	July 3	2,000
Gingrich Lake	J. M. Swisher, Remus	July 3	2,000
Molles Lake	J. M. Swisher, Remus	July 3	1,000
Winegar Creek	W. E. Redick, Barryton	Aug. 16	750
Diamond Lake	W. E. Redick, Barryton	Aug. 16	750
Midland county:	B. L. Thomas, Barryton		1,000
Tittabawassee River	A. Dickey, Midland	July 9	3,000
Montcalm county:	Jos. Bonsall, Fenwick	July 3	2,000
Snow's Lake	H. H. Decker, Shiloh	July 3	2,000
Horseshoe Lake	Benj. Hall, Belvidere	July 3	2,000
Clear Lake	C. G. McBride, Sheridan	July 3	2,000
Gilmore Lake	M. F. Perry, Fenwick	July 3	2,000
Mamel Lake	M. F. Perry, Fenwick	July 3	3,000
Pickrel Lake	Archie Sweets, Shiloh	July 3	3,000
Grass Lake	Fred D. Briggs, Langston	July 7	3,000
Beaver Dam Lakes	Fred D. Briggs, Langston	July 7	2,000
Clifford Lake	Chesley Faling, Lakeview	July 7	2,000
Buck Lake	George Faling, Lakeview	July 7	3,000
Brimmer Lake	Jos. Kimmel, Lakeview	July 7	2,000
Horseshoe Lake	Geo. H. Whitcomb, Lakeview	July 7	2,000
Town Line Lake	C. W. Vining, Lakeview	July 7	2,000
Bass Lake	C. W. Vining, Lakeview	July 7	2,000
Big Brimmer Lake	C. W. Vining, Lakeview	July 7	2,000
Little Brimmer Lake	C. W. Vining, Lakeview	July 7	2,000
Tamarack Lake	C. W. Vining, Lakeview	July 7	2,400
Twin Lake	C. W. Vining, Lakeview	July 7	400
West Lake	A. J. Williams, Riverdale	Aug. 24	300
Lady Lake	A. J. Williams, Riverdale	Aug. 24	300
Robbins Lake	Wm. A. Tateum and Robt. Woodbridge	Nov. 4	300
Whitefish Lake	Grand Rapids		

NINETEENTH REPORT—STATE FISHERIES.

Large mouth black bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Newaygo county:				
Pettibone Lake	Home	C. Higley, Bilety	1909.	2,000
Mountain Hill Lake	Denver	F. Utley, Hesperia	July 17	500
Fee Lake	Denver	Wm. Fee, Hesperia	Aug. 14	750
Spring Lake	Monroe	Chas. Stedman, Otis	Aug. 14	600
Oakland county:				
Pleasant Lake	Waterford	J. H. Thorpe, Pontiac	July 2	6,000
Union Lake	Waterford and Commerce	C. M. Van Buskirk, Pontiac	July 2	9,000
Silver Lake	Waterford	J. W. Stevens, Pontiac	Aug. 6	1,000
Long Lake	Springfield	J. H. Bush, Davidsburg	Aug. 27	300
Harris Lake	Springfield	G. H. Harris, Clarkston	Aug. 27	200
Van Norman Lake	West Bloomfield and Waterford	S. E. Thomas, Detroit	Aug. 27	400
Sylvan Lake	West Bloomfield and Waterford	Wm. J. O'Reilly, Pontiac	Aug. 28	750
Lake Elizabeth	Waterford	A. L. Moore, Pontiac	Aug. 28	900
Galloway Lake	Pontiac	T. D. Seelye, Pontiac	Aug. 28	1,000
Green Lake	Independen e	C. C. Craigie, Waterford	1910.	2,000
Huntton Lake	Waterford	C. C. Craigie, Waterford	June 29	2,000
Lotus Lake	Waterford	C. C. Craigie, Waterford	June 29	2,000
Macelay Lake	Waterford	C. C. Craigie, Waterford	June 29	2,000
Waterford Lake	Waterford and Independen e	C. C. Craigie, Waterford	June 29	4,000
Cass Lake	West Bloomfield	C. C. Craigie, Waterford	June 29	2,000
Stony Croft Pond	Bloomfield	T. Sawyer, Pontiac	June 29	2,000
		Chas. Stinchfield, Charlie Miller, Pontiac	June 30	2,000
Oceana county:				
McClaren Lake	Newfield	Frank Utley, Hesperia	1909.	600
Campbell's Lake	Lovett	E. Anderson, Hesperia	July 31	750
Newell Lake	Newfield	Frank Utley, Hesperia	Aug. 14	750
Ogemaw county:				
Henderson Lake	Rose	D. A. Neal, Rose City	Sept. 3	600
Tamarack Lake	Klackling	A. L. Brown, West Branch	Aug. 11	800
Horseshoe Lake	Beaver Lake	A. L. Brown, West Branch	Aug. 11	800
Huey Lake	Richland	Geo. Eyrner, Prescott	Aug. 13	1,000
Johnson Lake	Richland	Geo. Eyrner, Prescott	Aug. 13	800
Prescott Lake	Richland	Geo. Eyrner, Prescott	Aug. 13	600
Ottawa county:				
Spring Lake	Spring Lake	L. R. Patterson, Spring Lake	July 7	3,000
Oscoda county:				
Long Lake	Menton	R. M. Olin, Mio	Aug. 13	1,000
Otsego county:				
Otsego Lake	Bagley	Hon. E. B. Bolton, Gaylord	Aug. 7	1,000
Gee Lake	Chanton	P. J. Walsh, Lewiston	Aug. 7	800
Otsego Lake	Bagley	Henry Shearer, Detroit	Aug. 11	1,600

NINETEENTH REPORT—STATE FISHERIES.

Resomonon county:								
Higgins Lake.....	Garrish.....		W. H. Lansing, Roscomon.....	Aug. 7	1,000			
Marl Lake.....	Garrish.....		W. H. Lansing, Roscomon.....	Aug. 7	800			
Spring Lake.....	Nester.....		R. J. McMillan, Nolan.....	Aug. 11	800			
Wood's Lake.....	Nester.....		E. A. Coan, Nolan.....	Aug. 18	400			
Lake Athol.....	Nester.....		E. A. Coan, Nolan.....	Aug. 18	400			
Rolling Lake.....	Nester.....		E. A. Coan, Nolan.....	Aug. 18	1,000			
Twin Lake.....	Nester.....		E. A. Coan, Nolan.....	Aug. 18	1,000			
Tuscola county:								
Cass River.....	Cassar and Indian Fields.....		Hon. F. C. Hoyle, Vassar.....	July 17	1,500			
Cat Lake.....	Dayton.....		Arthur Heines, Mayville.....	July 17	750			
Harmon Lake.....	Dayton.....		Hon. J. H. Millikin, Caro.....	July 17	1,250			
Van Buren county:								
Bear Lake.....	Columbia.....		J. C. Bair, Grand Junction.....	July 1	2,000			
Big Mud Lake.....	Columbia.....		W. A. Beal, Grand Junction.....	July 1	2,000			
Peel Lake.....	Columbia.....		W. A. Beal, Grand Junction.....	July 1	2,000			
Keeler Lake.....	Keeler.....		E. D. Conklin, Hartford.....	July 1	2,000			
Reagan's Lake.....	Lawrence.....		Chas. Dane, Lawrence.....	July 1	2,000			
Lake Mine Lake.....	Geneva.....		W. E. Grimes, South Haven.....	July 1	3,000			
Saddle Lake.....	Columbia.....		W. E. Grimes, South Haven.....	July 1	3,000			
Silver Lake.....	Columbia.....		O. C. Egan, Grand Junction.....	July 1	3,000			
Munson Lake.....	Barry.....		O. C. Egan, Grand Junction.....	July 1	3,000			
Three Mile Lake.....	Columbia.....		H. A. Kinney, Grand Junction.....	July 1	3,000			
Maple Lake.....	Pay Paw.....		Wm. Kirkwood, Pay Paw.....	July 1	3,000			
Reynolds and Southern part of Lake George.....	Lawrence.....		S. T. Klautner, Chicago, Ill.....	July 1	3,000			
Maple Lake.....	Pay Paw and Antwerp.....		R. D. Loyeland, Pay Paw.....	July 1	6,000			
Nympha's Millpond.....	Keeler and Silver Creek.....		A. V. Palmer, Bangor.....	July 1	3,000			
Mackinac Lake.....	Bangor.....		W. A. McKee, Bangor.....	July 1	4,000			
Shelf Lake.....	Lawrence.....		Wm. Kirkwood, Pay Paw.....	July 1	3,000			
Shaffe Lake.....	Porter.....		Russell Sheldon, Lawrence.....	July 1	3,000			
Cedar Lake.....	Bangor.....		R. F. Shaver, Marcellus.....	Aug. 13	750			
Hanly or Delz Lake.....	Bangor.....		M. J. Smiley, Chicago, Ill.....	July 1	2,000			
Southeast Lake.....	Bangor.....		M. J. Smiley, Chicago, Ill.....	July 1	4,000			
Van Allen Lake.....	Bangor.....		M. J. Smiley, Chicago, Ill.....	July 1	4,000			
Conrwell's Lake.....	Bangor.....		M. J. Smiley, Chicago, Ill.....	July 1	2,000			
Dyer Lake.....	Arlington.....		Jas. L. Welch, Lawrence.....	July 1	2,000			
Lane's Lake.....	Lawrence.....		Jas. L. Welch, Lawrence.....	July 1	2,000			
Pitcher's Lake.....	Bangor.....		E. T. Westcott, McDonald.....	July 1	2,000			
School Section Lake.....	Porter.....		F. R. Ward, Lawton.....	July 1	4,000			
Gravel Lake.....	Porter.....		F. R. Ward, Lawton.....	July 10	2,000			
Washtenaw county:								
Manchester Pond.....	Manchester.....		Hon. A. J. Waters, Manchester.....	July 7	1,000			
Base Lake.....	Hamburg.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	375			
Horseshoe Lake.....	Northfield.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	250			
Independence Lake.....	Webster.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	250			
Strawberry Lake.....	Green Oak and Webster.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	375			
Toban's Lake.....	Northfield.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	375			
Whitmore Lake.....	Northfield.....		Ann Arbor B. and F. C., Ann Arbor.....	Sept. 10	250			
Whitmore Lake.....	Several.....		M. B. Lewis, Ypsilanti.....	Sept. 10	500			

Large mouth black bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Wayne county: County House Pond	Nankin	Dr. J. J. Marker, Eloise	1909, Nov. 2	500
Hazkerty's Pond	Springwells	Chas. Daniels, Detroit	Oct. 2	100
Coomer Lake	Van Buren	A. E. Smith, Belleville	July 10	1,250
Huron River	Van Buren	A. E. Smith, Belleville	July 10	1,750
Lake Honor	Van Buren	Dr. H. S. Kiskadden, Detroit	July 10	1,000
Ford's Pond	Dearborn	Chas. Daniels, Detroit	1910, June 30	3,000
Hazkerty's Pond	Springwells	Chas. Daniels, Detroit	June 30	2,000
Total				358,500

LARGE MOUTH BASS PLANTS,
YEARLINGS AND TWO-YEAR OLDS.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Wayne county: County House Pond	Nankin	Dr. J. J. Marker, Eloise	1909, Sept. 16	92
Hazkerty's Pond	Springwells	Chas. Daniels, Detroit	Oct. 2	60
Total				152

WARMOUTH BASS PLANTS.
YEARLINGS AND TWO-YEAR OLDS.
For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Antrim county: Central or Intermediate Lake.	Several.	O. P. Barber, Central Lake	1910, June 22	800
Barry county: Jones Lake.	Hope.	Aaron Chandler, Delton	1909, July 19	750
Mud Lake.	Hope.	Aaron Chandler, Delton	July 19	750
Wall Lake.	Hope.	D. E. Birdsal, Hastings	July 19	1,000
Lake 21.	Hope.	S. C. Greusel, Kalamazoo	July 19	1,000
Lower Crooked Lake.	Prairieville	S. C. Greusel, Kalamazoo	July 19	750
Mud Lake.	Barry.	Geo. Lawrence, Delton	July 19	1,000
Wilson and Lawrence Lake.	Barry.	J. Frank Norwood, Delton	July 19	750
Fuhr Lake.	Orangeville	C. H. Osborn, Hastings	July 19	750
Bowker Lake.	Hope.	Mrs. M. Jones, Cloverdale	Aug. 5	2,000
Horsehoe Lake.	Hope.	Mrs. L. E. Cole, Morgan	1910, June 18	250
Thornapple Lake.	Castleton.	F. H. Beach, Charlotte	June 19	350
Mud Lake.	Castleton.			
Benzie county: Crystal Lake	Crystal Lake.	Miss A. Van Deman, Beulah	1909, July 27	1,000
Turtle Lake.	Inland	N. J. Rovick, Thompsonville	1910, June 22	800
Branch county: Kenyon Lake.	Sherwood	D. Waterman, Athens	1909, Aug. 9	750
Lower Lake.	Sherwood.	L. E. Wood, Athens	Aug. 9	1,500
Merl Lake.	Several	L. E. Wood, Athens	Aug. 9	500
Calhoun county: Clear Lake.	Penfield	W. R. Skellinger	Aug. 10	1,000
Hart's Lake.	Battle Creek	V. C. Squire, Battle Creek	Aug. 9	750
Cass county: South Part of Goose or Parker Lake.	Jefferson	T. T. Higgins, Cassopolis	Aug. 24	1,200
Clare county: Bass, Breman and Beebe Lakes.	Arthur and Hatton	W. C. Cornwell, Saginaw	July 22	1,500
Millpond at Farwell.	Surray	Don W. Lydell, Farwell	July 22	1,500
Crooked Lake.	Garfield	Joseph Siemann, Saginaw	July 22	1,000
Clinton county: Tyler Lake.		Frank Tyler, Shaftsburg	Aug. 10	1,000

NINETEENTH REPORT—STATE FISHERIES.

Warmouth bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Eaton county: Looking Glass Lake	Sunfield	A. D. Childs, Sunfield	1909, July 31	1,000
Pine Lake	Walton	J. A. Dawner, Olivet	Aug. 10	1,000
Itound Lake	Vermontville	W. L. Freeman, Vermontville	Aug. 10 1910	1,000
Round Lake	Vermontville	W. L. Freeman, Vermontville	June 18	200
Gratiot county: Madison Lake	Seville	E. B. Rockwell, Ellwell	1909, July 23	750
Half Moon Lake	Seville	Wm. Stacey, Riverdale	July 29	1,000
Ingham county: Mud Lake	Delhi	E. A. Ribby, Holt	July 31	1,000
Ionis county: Hess Lake	Campbell	E. A. Rising, Clarksville	July 13	750
Madville Lake	Orleans and Otisco	W. B. Heatherington, Belding	July 23	1,500
Mud Lake	Orleans	F. E. Brown, Shiloh	July 24	750
Azate, Scheurer and Barker Ponds	Orleans	F. W. Benedict, Ionis	Aug. 7	750
Halls Pond	Berlin	John Wallington, Saranac	Aug. 7	750
Hull's Lake	Keene	John Wallington, Saranac	Aug. 7	750
Hull's Pond	Keene	John Wallington, Saranac	Aug. 7	750
Morrison Lake	Boston	John Wallington, Saranac	Aug. 7	750
Mud Young's Lake	Berlin	John Wallington, Saranac	Aug. 7	750
Peck Lake	Berlin	John Wallington, Saranac	Aug. 7	750
Tucker's Lake	Boston	John Wallington, Saranac	Aug. 7	750
Walter's Pond	Boston	John Wallington, Saranac	Aug. 7	750
Prairie Creek Pond	Ionis	Robert Beard, Ionis	1910	800
Crane's Pond	Berlin	John Wallington, Saranac	June 18	600
Hull's Lake	Keene	John Wallington, Saranac	June 18	600
Hull's Pond	Boston	John Wallington, Saranac	June 18	600
Morrison Lake	Berlin	John Wallington, Saranac	June 18	600
Mud Young's Lake	Berlin	John Wallington, Saranac	June 18	600
Peck Lake	Berlin	John Wallington, Saranac	June 18	600
Tucker's Lake	Boston	John Wallington, Saranac	June 18	600
Walter's Pond	Boston	John Wallington, Saranac	June 18	600
Isabella county: Lestrange Lake	Lincoln	E. B. Rockwell, Ellwell	1909, July 23	750
Ferch Lake	Sherman	Robt. Hyslop, Weldman	Aug. 6	750
Jackson county: Griffith Lake	Springport	J. Griffith, Springport	July 13	1,000
Swezey Lake	Norvell	F. Burgess, Norvell	Aug. 7	750
Kusintine Lake	Hanover	Wm. Folks, Hanover	Aug. 7	750

NINETEENTH REPORT—STATE FISHERIES.

Bessy's Lake.....	Norvell.....	H. H. Raby, Norvell.....	Aug. 7	750
Hindman Lake.....	Hanover.....	A. B. Sanderson, Hanover.....	Aug. 7	750
Spencer Lake.....	Hanover.....	C. L. Woodluff, Hanover.....	Aug. 7	750
Kalamazoo county:	Schoolcraft.....	C. L. Davis, Schoolcraft.....	Aug. 10	1,000
Lower Sugar Loaf Lake.....	Schoolcraft.....	M. M. Grimes, Schoolcraft.....	Aug. 10	1,000
Tub or Northgrave Lake.....	Paxillion.....	Robt. S. Cook, Galesburg.....	Aug. 10	750
Cook's Pond.....	Paxillion.....	White Bros. & H. Fisher, Scotts.....	Aug. 10	750
Mud Lake.....	Texas.....	W. A. Kinney, Kalamazoo.....	Aug. 27	750
Pretty Lake.....	Richland and Ross.....	Mrs. E. P. Webb, Yorkville.....	July 26	1,500
Gull Lake.....	Boardman.....	Wm. J. Butler, South Boardman.....	July 26	1,500
Kalkaska county:	Boardman.....	Geo. B. Wansey, South Boardman.....	July 13	1,000
Butler's Lake.....	Lowell.....	M. E. Simpson, Lowell.....	July 16	750
Perch Lake.....	Grand Rapids.....	L. J. DeLamar, Grand Rapids.....	July 16	750
Kent county:	Grand Rapids.....	L. J. DeLamar, Grand Rapids.....	July 17	750
Fish Lake.....	Tyrone.....	E. Cooper, Kent City.....	July 17	750
Reed's Lake.....	Tyrone.....	F. W. Noyes, Kent City.....	July 17	750
Bullhead Lake.....	Solon.....	F. W. Noyes, Kent City.....	July 23	1,500
Spring Lake.....	Grant.....	J. E. Taylor, Belding.....	Aug. 30	2,000
Clear Lake.....	Grand Rapids.....	Col. Rice, Soldier's Home.....	Sept. 17	1,800
Whippoorwill Lake.....	Courtland.....	Fremont Thompson, Rockford.....	Sept. 17	800
Home Pond and Creek.....	Lowell.....	U. B. Williams, Lowell.....	June 18	750
Davis Lake.....	Elk and North Range.....	Earl Fairbanks, M. D., Dublin.....	1909	750
Lowell Pond.....	Elk.....	Robert Fuchs, Dublin.....	July 17	500
Lake County:	Elk.....	Wm. P. Jones, Peacock.....	July 27	1,250
Bitter Lake.....	North Elk.....	F. P. Poff, Peacock.....	Aug. 11	750
Elbow Lake.....	Dickson.....	J. A. Duncan, Brethren.....	July 27	1,500
Blue Bass Lake.....	Eden.....	J. F. Pleiness, Custer.....	Aug. 11	800
No Name.....	Sheridan.....	Henry Eoff, Fountain.....	Aug. 12	750
Manistee county:	Hinton.....	C. W. Vining, Lakeview.....	Aug. 6	1,000
Dickson Lake.....	Martiny.....	E. C. Lewis, Mecosta.....	July 29	1,000
Mason county:	Morton.....	R. A. Patterson, Remus.....	July 29	1,000
Kline's Lake.....	Sheridan.....	R. P. Swisher, Remus.....	Sept. 28	1,500
Ford Lake.....	Greene.....	Thos. Bloxson.....	July 14	1,000
Mecosta county:	Spaulding.....	Frederick Gaedke, Powers.....	July 14	1,000
Bessell's or Moore's Lake.....				
Pretty Lake.....				
Lake No. 6.....				
Lake Twenty-eight.....				
Mud Lake.....				
Menominee county:				
Lake connected by Stream to Cedar Lake.....				

Warmouth bass plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Montreal county: Whitefish Lake.	Pierson.	B. S. Davenport, Pierson.	1909.	1,000
Grass Lake.	Fairplains.	Albert Jenks, Fenwick.	July 22	1,000
Gilmore Lake.	Fairplains.	C. Glen McBride, Sheridan.	July 24	750
Hammet Lake.	Bushnell.	M. F. Perry, Fenwick.	July 24	750
Pickrel Lake.	Bushnell.	E. O. Bellows, Stanton.	July 26	1,000
Duck Lake.	Sidney.	J. W. Johnson, Elmhall.	July 26	1,000
Deaner Lake.	Richland.	Chas. Wolfgang, Riverdale.	July 29	1,000
Bass Lake.	Belvidere.	C. W. Vining, Lakeview.	Aug. 6	750
Muskegon county: Goose Egg Lake.	Dall-on.	G. L. Putnam, Twin Lake.	July 28	750
Big Blue Lake.	Blue Lake.	Hon. F. J. Russell.	July 28	2,000
Newaygo county: Baptist or Horseshoe Lake.	Ensey.	R. H. Brownyard, Sand Lake.	July 22	750
North Lake.	Ensey.	Fred Osborn, Grant.	July 26	750
Branch Lake.	Ashland.	Allen J. Titus, Grant.	July 20	750
Spring Lake.	Monroe.	Chas. Stedman, Otia.	Aug. 11	750
Oceana county: Round Lake.	Golden.	F. A. Gasahl, Mears.	July 28	1,000
Pentwater Lake.	Pentwater.	S. D. Montgomery, Grand Rapids.	July 28	1,500
Crystal Lake.	Hart and Shelby.	E. A. Post, Mears.	July 28	1,000
Silver Lake.	Golden.	E. A. Post, Mears.	July 28	1,250
Newell Lake.	Newfield.	Frank Utley, Hesperia.	July 31	1,000
Otsego county: Martin Lake.	Elmira.	Ernest Pettifor, Gaylord.	July 26	1,500
Ottawa county: Black Lake.	Holland.	A. G. Tanner, Macatawa.	Aug. 3	1,000
St. Joseph county: Sturgeon Lake.	Colon.	J. K. Farrand and A. J. Born, Colon.	July 31	1,500
E. N. King Millpond.	Leonidas.	F. L. Miller, Leonidas.	Aug. 9	750
Notiawa Creek.	Leonidas.	C. H. Robinson, Leonidas.	Aug. 9	750
Carlisle Pond.	Leonidas.	Nat. Turner, Leonidas.	Aug. 9	1,500
Bear Creek.	Leonidas.	H. H. Tutewiter, Leonidas.	Aug. 9	500
Notiawa Creek.	Leonidas.		Aug. 9	500
Van Buren county: Big Mud Lake.	Columbia.	Walter A. Beal, Grand Junction.	Aug. 24	1,000

PERCH PLANTS.

Fry.

For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Alleghen county:				
Upper Scott Lake	Lee	S. E. Phillips, Pullman.	1910,	120,000
Goshorn Lake	Saugatuck and Laketon.	Mrs. G. C. Comstock, Holland.	May 25	240,000
Barry county:				
Elks Lake	Assyria	F. M. Quick, Nashville.	May 19	80,000
Gilkey Lake	Prattville	W. A. Spaulding, Milo.	May 19	80,000
Wilkens Lake	Barry	D. Collier, Delton.	May 19	80,000
Wilkinson Lake	Barry	H. Green & Son, Delton.	May 19	120,000
Gulkey Lake	Prattville	Add Pennock, Delton.	May 19	200,000
Crooked Lake	Barry	S. C. Grausel, Kalamazoo.	May 19	80,000
Pleasant Lake	Barry	S. C. Grausel, Kalamazoo.	May 19	120,000
Shallow Lake	Hope	W. D. Hayes, Hastings.	May 19	80,000
Horseshoe Lake	Hope	Mrs. M. Jones, Cloverdale.	May 19	80,000
Wall Lake	Barry	M. M. Manning, Delton.	May 19	80,000
Barrien county:				
Harris Lake	Hagar	E. A. Lyon, Riverside.	May 25	120,000
Hibbard Lake	Hagar	E. A. Lyon, Riverside.	May 25	120,000
Branch county:				
Coldwater Lake	Coldwater	F. T. Tappan, Coldwater.	June 2	120,000
Coldwater River	Coldwater	F. T. Tappan, Coldwater.	June 2	120,000
Zell Lake	Sherwood	S. W. Lehr, Athens.	June 2	80,000
Nottawa Creek	Sherwood	F. L. Miller, Athens.	June 2	80,000
Kenyon Lake	Sherwood	Chas. Waterman, Athens.	June 2	80,000
Kenyon Lake	Sherwood	L. E. Wood, Athens.	June 2	80,000
Lower Lake	Sherwood	L. E. Wood, Athens.	June 2	80,000
Calhoun county:				
Beadle Lake	Emmet	C. E. Kistler, Battle Creek.	May 21	120,000
Donque Lake	Battle Creek	F. M. Brockett, Battle Creek.	May 21	80,000
Duck Lake	Clarenc	I. J. Devins, Albion.	May 21	400,000
Brace Lake	Marshall	H. C. Faulkner, Marshall.	May 21	120,000
Upper Kalamazoo River	Marshall	H. C. Faulkner, Marshall.	May 21	80,000
Lee Lake	Newton	Oris Shaw, Ceresco.	May 21	80,000
Cass county:				
Magratic Lake	Silver Creek	Dr. F. H. Coddling, Dowagiac.	May 27	240,000
Watson Lake	La Grange	J. J. Hillman, Dowagiac.	May 27	160,000
Indian Lake	Silver Creek	F. Phillips, Dowagiac.	May 27	160,000
Sister Lakes	Silver Creek and Kreler.	F. Phillips, Dowagiac.	May 27	160,000

Clinton county: Park Lake	Bath	Myles F. Gray, Lansing	May 21	120,000
Eaton county: Saubby Lake	Sunfield	C. M. Putnam, Nashville	May 19	80,000
Genesee county: Flint River	Genesee	Wm. L. Mead, Rogersville	May 23	80,000
Long Lake	Fenton	Geo. F. Brown, Flint	May 26	160,000
Silver Lake	Fenton	G. E. Beadle, Fenton	May 26	120,000
Pine Lake	Fenton	J. Max Davis, Fenton	May 26	120,000
Lee's Lake	Fenton	C. A. Damon, Fenton	May 26	160,000
Day's Lake	Fenton	L. F. Morehouse, Fenton	May 26	160,000
Ingham county: East Park Lake	Lausling	Wm. Ferris, Lansing	May 21	120,000
Ionia county: Morrison Lake	Boston	J. Wallington, Saranac	May 26	160,000
Kalamazoo county: West Lake	Portage	J. E. Croos, Kalamazoo	May 21	80,000
Kent county: Reeds and Fish Lakes	Grand Rapids	L. J. DeLamar, Grand Rapids	May 20	240,000
Pickrel Lake	Plainfield	A. House, Belmont	May 21	160,000
Grand River	Plainfield	Michigan Fish Commission	May 21	160,000
Soft Water Lake	Grand Rapids	Michigan Fish Commission	May 21	240,000
Muskegon county: Little Blue Lake and Pond	Blue Lake	L. Kreutzinger, Chicago	May 24	160,000
Newaygo county: Crooked Lake	Monroe	M. B. Draper, Grand Rapids	May 24	160,000
Hess Lake	Brooks	H. S. Thompson, Newaygo	May 24	160,000
Oakland county: Pettibone and Bryan Millponds	Milford	T. G. Forbes, Milford	May 23	120,000
Steeplehill Lake	White Lake	T. G. Forbes, Milford	May 23	80,000
Moore's Lake	White Lake	R. S. Potts, Milford	May 23	80,000
Huron River and Peter's Dam	Milford and Commerce	T. H. Padley, Milford	May 23	120,000
Kent Lake	Milford and Lyon	T. H. Padley, Milford	May 23	80,000
Morrison Lake	Commerce	T. H. Padley, Milford	May 23	80,000
Sears Lake	Milford	T. H. Padley, Milford	May 23	80,000
Troy Lake	Commerce	T. H. Padley, Milford	May 23	80,000
Brock and Robson's Lakes	Milford	W. L. Robson, Milford	May 23	160,000
White Lake	Highland	Jas. Taylor, Milford	May 23	120,000
Round Lake	White Lake	L. H. Woodbridge, Milford	May 23	160,000
Long Lake	Springfield	J. H. Bush, Davisburg	May 25	160,000
Huron or Big Lake	Springfield	F. A. Ely, Davisburg	May 25	200,000
Davisburg Millpond	Springfield	F. A. Ely, Davisburg	May 25	120,000
Kirkby Lake	Springfield	Ira E. Kinney, Davisburg	May 25	120,000
Long Lake	Springfield	Ira E. Kinney, Davisburg	May 25	160,000

Perch plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
<i>Oakland county.—Continued:</i>				
Van Yornan Lake.....	Independence.....	S. E. Thomas, Detroit.....	May 23.....	160,000
Divine Lake.....	Holly.....	John Divine, Holly.....	May 26.....	120,000
Long Lake.....	Holly.....	Dr. W. C. McConnell, Fenton.....	May 26.....	160,000
Dixon Lake.....	Holly.....	C. E. Rolland, Fenton.....	May 26.....	120,000
<i>Oceana county:</i>				
Round Lake.....	Golden.....	E. A. Post, Mears.....	May 24.....	240,000
Hammar Lake.....	Golden.....	Peter Richter, Mears.....	May 24.....	240,000
Halberg Lake.....	Golden.....	Fred A. Tart, Mears.....	May 24.....	240,000
<i>Van Buren county:</i>				
Bear Lake.....	Columbia.....	E. B. Eddy, Grand Junction.....	May 25.....	160,000
<i>Wayne county:</i>				
Coomer Lake.....	Van Buren.....	A. E. Smith, Belleville.....	May 21.....	80,000
Huron River.....	Van Buren.....	A. E. Smith, Belleville.....	May 21.....	80,000
Total.....				10,000,000

PERCH PLANTS.
FINGERLINGS NO. 1, 2 AND 3.
For the fiscal year ending June 30, 1910.

County and name of water.	Township.	Applicant.	Date.	Number.
Barry county: Horseshoe Lake	Hope	Mrs. M. Jones, Cloverdale	1909. Aug. 5	600
Benzie county: Crystal Lake	Crystal Lake	Alice Van Deman, Beulah	July 27	500
Berrien county: Clear Lake	Buchanan	A. A. Worthington, Buchanan	July 10	750
Branch county: Coldwater River and chain of small lakes connected by this river	Coldwater	F. T. Tappan, Coldwater	July 21	2,000
Calhoun county: Rice Creek	Marengo and Marshall	Howard Grant, Marshall	July 5	600
Cass county: South part of Goose Lake Magician Lake	Jefferson Silver Creek	Thos. T. Higgins, Cassopolis. Dr. F. H. Coddling, Dowagiac	Aug. 24 July 10	100 1,000
Chippewa county: Straits of Mackinac	Several	Michigan Fish Commission	July 20	2,000
Genesee county: Pine Lake	Fenton	J. Max Davis, Fenton	July 23	1,500
Grand Traverse county: Fife Lake	Fife Lake	L. L. Maxam, Fife Lake	Aug. 4	600
Hillsdale county: Bird Lake	Jefferson	C. M. Warner, Osseo	Aug. 7	600
Ionia county: Woodard Lake Morrison Lake	Ronald Boston	Ira Conkey, Shiloh. John Wallington, Saranac	Aug. 6 Nov. 1	600 75
Lake county: Lincoln Lake Chain of Lakes	Elk Lake	G. M. Brown, Detroit G. M. Brown, Detroit	Aug. 11 Aug. 11	600 800
Lenawee county: Brownell's or Round Lake	Rollin	Fred A. Binns, Addison	Aug. 7	400

Perch plants, 1910.—Continued.

County and name of water.	Township.	Applicant.	Date.	Number.
Missaukee county: Lake Missaukee.....	Lake and Reeder.....	F. D. McGregor, Lake City.....	Aug. 4	800
Montcalm county: Whitefish Lake..... Bass Lake..... Tamarack Lake.....	Pierston..... Belvedere..... Cato.....	B. S. Davenport, Pierson..... C. W. Vining, Lakeview..... C. W. Vining, Lakeview.....	July 22 Aug. 6 Aug. 6	500 600 1,200
Newaygo county: Crooked Lake.....	Monroe.....	M. B. Draper, Grand Rapids.....	July 16	2,000
Oakland county: Green Lake.....	Bloomfield.....	Karl C. Lorman, Orchard Lake.....	Aug. 10	500
Otsego county: Martin Lake.....	Elmira.....	Ernest Pettifor, Gaylord.....	July 26	500
Van Buren county: Maple Lake..... Three Mile Lake.....	Paw Paw and Antwerp..... Paw Paw.....	R. D. Loveland, Paw Paw..... Wm. M. Kirkland, Paw Paw.....	Aug. 5 Aug. 5	600 600
Washtenaw county: Big and Little Portage Lakes.....	Dexter and Dent.....	R. H. Killian, Ypsilanti.....	Aug. 7	450
Wayne county: Lake Honor.....	Van Buren.....	Dr. H. S. Kiskadden, Detroit.....	Oct. 2	360
Wexford county: Brainard Lake.....	Selma.....	E. E. Bunyes, Bunyes.....	July 27	500
Total.....				21,335

REPORT OF STATISTICAL AGENT.

To the State Board of Fish Commissioners:

Gentlemen—Following is a condensed report of the fish taken in the great lakes bordering on the State of Michigan in the year 1908; the nets and all fishing outfits; the amount invested in nets, apparatus, lands and buildings, and the number of men employed.

Kind.	Pounds.	Value.
Whitefish.....	5,020,439	\$437,627 98
Lake trout.....	6,438,904	469,791 69
Pike perch.....	1,553,364	149,476 27
Herring.....	12,145,278	359,412 23
Sturgeon.....	75,677	10,394 89
Bass.....	43,058	2,257 30
Saugers.....	144,150	4,655 09
Perch.....	2,060,200	63,371 56
Suckers.....	3,994,422	79,519 72
Cat fish.....	102,725	4,707 71
Caviare.....	3,371	2,070 60
All other kinds.....	2,729,413	69,524 80
Total.....	34,311,001	\$1,642,809 84

NETS USED.

Kind.	Number.	Fathoms.
Gill nets.....	70,157	5,393,044
Pound nets.....	1,906	272,815
Seines.....	120	15,544
Fyke nets.....	295	.....
Gobbler nets.....	232	.....
Traps.....	347	.....
Dip nets.....	4	.....
Hooks.....	185,200	.....

BOATS USED.

Kind.	Number.
Steamers.....	65
Gasoline boats.....	512
Sail boats.....	257
Pound boats.....	343
Skiffs.....	759

AMOUNT INVESTED.

Value of nets.....	\$953,562 50
Value of boats.....	620,687 00
Value of lands and buildings.....	921,970 00
Total.....	\$2,496,219 50

Number of men employed.....	6,389
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C. H. MOORE,
Statistical Agent.

TABLES OF TOTAL CATCH.

Tables showing the total catch of the different kinds of fish taken in the great lakes bordering on the State of Michigan in the years from 1891 to 1908, both inclusive, with a grand total of all kinds for the years named; the kinds of nets used in each year and the total length of same; the value of fishing lands and buildings and all fishing apparatus, including nets and boats, and a table showing the number of men employed in each year:

WHITEFISH.

Year.	Total catch, lbs.	Total value.
1891.....	8,110,000	\$351,190 00
1892.....	6,347,000	258,011 00
1893.....	5,345,000	231,189 00
1894.....	4,470,000	163,813 00
1895.....	3,353,000	130,811 00
1896.....	3,783,000	141,750 00
1897.....	4,639,000	186,777 00
1898.....	4,102,000	170,245 00
1899.....	3,640,000	188,586 00
1900.....	3,460,000	185,010 00
1901.....	4,173,000	236,909 00
1902.....	5,371,000	307,860 00
1903.....	4,508,000	276,638 00
1904.....	4,197,000	270,262 00
1905.....	4,156,000	289,404 00
1906.....	5,995,000	348,824 00
1907.....	5,294,870	422,625 00
1908.....	5,020,439	427,627 98

LAKE TROUT.

Year.	Total catch, lbs.	Total value.
1891	9,132,000	\$375,200 00
1892	8,860,000	358,598 00
1893	8,948,000	366,489 00
1894	7,291,000	243,261 00
1895	6,293,000	234,311 00
1896	6,900,000	240,902 00
1897	6,580,000	246,121 00
1898	6,495,000	235,915 00
1899	6,505,000	292,852 00
1900	6,458,000	282,711 00
1901	7,388,000	337,872 00
1902	9,363,000	431,630 00
1903	9,635,000	463,630 00
1904	11,638,000	504,696 00
1905	10,515,000	505,140 00
1906	10,694,000	594,451 00
1907	9,926,390	536,198 60
1908	6,438,904	469,627 98

HERRING.

Year.	Total catch, lbs.	Total value.
1891	7,823,000	\$117,319 00
1892	5,564,000	71,979 00
1893	10,178,000	159,313 00
1894	8,825,000	112,046 00
1895	10,512,000	101,618 00
1896	12,115,000	92,012 00
1897	12,958,000	98,510 00
1898	14,937,000	143,439 00
1899	17,567,000	193,000 00
1900	13,068,000	172,250 00
1901	14,865,000	287,850 00
1902	19,112,000	285,875 00
1903	15,767,000	305,036 00
1904	19,927,000	332,831 00
1905	15,281,000	320,473 00
1906	18,870,000	446,907 00
1907	20,181,700	347,476 50
1908	12,145,278	359,412 23

NINETEENTH REPORT—STATE FISHERIES.

PIKE PERCH OR WALL-EYED PIKE.

Year.	Total catch, lbs.	Total value.
1891.....	2,791,000	\$92,623 00
1892.....	2,356,000	84,285 00
1893.....	1,861,000	76,717 00
1894.....	2,824,000	75,056 00
1895.....	2,134,000	59,845 00
1896.....	2,121,000	69,106 00
1897.....	2,432,000	82,982 00
1898.....	3,113,000	98,356 00
1899.....	2,816,000	115,176 00
1900.....	1,741,000	82,927 00
1901.....	1,713,000	87,412 00
1902.....	2,289,000	129,540 00
1903.....	2,904,000	174,609 00
1904.....	2,697,000	168,306 00
1905.....	2,346,000	156,746 00
1906.....	2,147,000	154,564 00
1907.....	2,073,000	162,250 50
1908.....	1,553,364	149,476 27

PERCH.

Year.	Total catch, lbs.	Total value.
1891.....	2,017,000	\$21,192 00
1892.....	2,560,000	28,758 00
1893.....	2,622,000	30,374 00
1894.....	2,785,000	27,435 00
1895.....	2,437,000	25,093 00
1896.....	2,010,000	19,393 00
1897.....	2,091,000	25,173 00
1898.....	2,772,000	34,192 00
1899.....	3,458,000	41,473 00
1900.....	4,031,000	48,202 00
1901.....	4,155,000	62,422 00
1902.....	3,300,000	63,622 00
1903.....	3,107,000	73,292 00
1904.....	2,474,000	59,421 00
1905.....	2,590,000	79,615 00
1906.....	2,752,000	85,607 00
1907.....	2,795,400	89,274 00
1908.....	2,060,200	63,371 56

SUCKERS.

Year.	Total catch, lbs.	Total value.
1891.....	1,392,000	\$17,132 00
1892.....	2,352,000	27,701 00
1893.....	3,144,000	32,670 00
1894.....	3,600,000	34,054 00
1895.....	3,900,000	35,035 00
1896.....	1,900,000	20,067 00
1897.....	2,162,000	24,428 00
1898.....	1,833,000	21,183 00
1899.....	2,017,000	27,075 00
1900.....	2,650,000	34,167 00
1901.....	2,751,000	47,665 00
1902.....	3,925,000	68,714 00
1903.....	5,432,000	99,061 00
1904.....	5,000,000	81,814 00
1905.....	5,339,800	123,169 00
1906.....	6,119,000	133,437 00
1907.....	5,431,000	145,245 00
1908.....	3,994,422	79,519 72

STURGEON.

Year.	Total catch, lbs.	Total value.
1891.....	831,000	\$47,571 00
1892.....	501,000	31,817 00
1893.....	468,000	28,758 00
1894.....	294,000	17,733 00
1895.....	225,000	16,712 00
1896.....	225,000	17,483 00
1897.....	185,000	19,303 00
1898.....	237,000	25,931 00
1899.....	217,000	33,492 00
1900.....	176,000	24,847 00
1901.....	132,000	20,697 00
1902.....	107,000	17,814 00
1903.....	110,000	18,360 00
1904.....	101,000	16,800 00
1905.....	107,000	9,932 00
1906.....	74,000	12,725 00
1907.....	97,644	15,733 40
1908.....	75,677	10,374 89

NINETEENTH REPORT—STATE FISHERIES.

ALL OTHER KINDS, PRINCIPALLY GERMAN CARP, MENOMINEE WHITEFISH, CATFISH, BULL-HEADS, SUNFISH, ROCK BASS, GRASS PIKE, SAUGERS, ETC.

Year.	Total catch, lbs.	Total value.
1891	1,557,000	\$35,790 00
1892	2,795,000	72,434 00
1893	1,482,000	38,265 00
1894	1,234,000	29,965 00
1895	1,277,000	24,165 00
1896	1,301,000	30,188 00
1897	1,510,000	26,536 00
1898	1,671,000	30,810 00
1899	2,081,000	44,795 00
1900	2,400,000	50,793 00
1901	3,061,000	53,005 00
1902	2,763,000	55,665 00
1903	2,384,000	56,202 00
1904	1,971,000	48,860 00
1905	3,990,000	102,536 00
1906	3,813,000	102,954 00
1907	3,755,810	97,924 60
1908	3,022,717	93,215 50

TOTALS OF ALL KINDS.

Year.	Total catch, lbs.	Total value.
1891	33,643,000	\$1,058,028 00
1892	31,345,000	933,586 00
1893	34,018,000	963,778 00
1894	31,323,000	703,365 00
1895	30,131,000	627,594 00
1896	30,355,000	630,902 00
1897	32,557,000	709,831 00
1898	35,194,000	760,079 00
1899	38,432,000	936,453 00
1900	34,011,000	881,002 00
1901	38,259,000	1,133,839 00
1902	46,242,000	1,461,724 00
1903	43,857,000	1,467,520 00
1904	47,992,000	1,482,990 00
1905	44,148,000	1,627,013 00
1906	50,464,000	1,879,459 00
1907	49,161,914	1,806,767 60
1908	34,311,001	1,642,809 84

POUND NETS.

	Total length of leader in fathoms.
1891.....	304,000
1892.....	245,000
1893.....	237,000
1894.....	242,000
1895.....	210,000
1896.....	213,000
1897.....	269,000
1898.....	268,000
1899.....	290,000
1900.....	305,000
1901.....	282,000
1902.....	305,000
1903.....	341,000
1904.....	345,000
1905.....	348,000
1906.....	296,000
1907.....	280,651
1908.....	272,815

(Includes trap-nets, fyke nets, gobblers, and all forms of nets that take fish by leading them into a trap or pound.)

GILL NETS.

	Fathoms in length.	Miles.
1891.....	2,363,000	2,685.2
1892.....	2,503,000	2,844.3
1893.....	2,815,000	3,198.8
1894.....	2,795,000	3,171.6
1895.....	2,616,000	2,972.7
1896.....	2,410,000	2,738.6
1897.....	2,456,000	2,790.9
1898.....	2,687,000	3,053.4
1899.....	2,802,000	3,184.0
1900.....	3,051,000	3,467.0
1901.....	3,652,000	4,147.7
1902.....	4,032,000	4,581.8
1903.....	4,213,000	4,787.5
1904.....	4,510,000	5,126.1
1905.....	4,994,000	5,693.5
1906.....	5,421,000	6,159.8
1907.....	7,188,753	8,169.0
1908.....	5,393,044	6,125.5

NINETEENTH REPORT—STATE FISHERIES.

SEINES.

	Fathoms in length.
1891.....	8,200
1892.....	19,800
1893.....	27,500
1894.....	35,800
1895.....	26,300
1896.....	22,000
1897.....	19,000
1898.....	4,800
1899.....	5,100
1900.....	3,700
1901.....	4,400
1902.....	4,500
1903.....	4,800
1904.....	6,200
1905.....	16,000
1906.....	12,000
1907.....	12,694
1908.....	15,544

TOTAL VALUE OF FISHERY LANDS AND BUILDINGS AND ALL FISHING APPARATUS, INCLUDING
NETS AND BOATS.

1891.....	\$1,105,000
1892.....	1,169,000
1893.....	1,315,000
1894.....	1,200,000
1895.....	1,078,000
1896.....	1,010,000
1897.....	1,022,000
1898.....	1,181,000
1899.....	1,253,000
1900.....	1,237,000
1901.....	1,467,000
1902.....	1,670,000
1903.....	1,946,000
1904.....	2,175,000
1905.....	2,403,000
1906.....	2,482,000
1907.....	2,698,403
1908.....	2,496,219

NUMBER OF MEN EMPLOYED.

1891	3,919
1892	3,212
1893	3,997
1894	4,242
1895	4,499
1896	4,879
1897	4,439
1898	4,576
1899	4,713
1900	5,170
1901	4,862
1902	5,889
1903	6,342
1904	6,948
1905	5,771
1906	6,860
1907	6,567
1908	6,389

INVENTORY, 1910.

PARIS STATION:

158 acres of land and meander of Cherry Creek	\$3,950 00
1 hatchery known as the "New Hatchery"	3,000 00
1 hatchery known as the "Old Hatchery"	1,000 00
1 ice and food house	300 00
1 ice house	125 00
1 storage house	50 00
1 food house	75 00
1 fish car house	150 00
4 outhouses—\$15.00	60 00
2 outhouses—\$10.00	20 00
1 wagon and storage shed	200 00
1 barn	400 00
1 overseer's residence	1,600 00
1 employee's residence	500 00
1 employee's residence	200 00
1 wind mill	75 00
1 water tank and pipe connections for fire protection	400 00
Ponds, raceways and pipe connections	8,000 00
1 distributing car	2,000 00
Apparatus, tools, camp outfits and office furniture and books	4,521 80

\$26,626 80

SAULT STATION:

1 hatchery building and permanent improvements	\$8,000 00
1 steam launch	700 00
Apparatus, tools, furniture, etc.	1,743 15

\$10,443 15

MILL CREEK STATION:

9 acres of land	\$900 00
1 hatchery house	500 00
1 dwelling	2,000 00
1 barn	400 00
1 wagon shed and store room	350 00
1 ice house	150 00
1 shanty at Duck Lake	100 00
Ponds, raceways and permanent improvements	12,500 00
Apparatus, tools, etc.	2,732 45

\$19,632 45

HARRIETTA STATION:	
100 acres of land and improvements	\$8,000 00
1 hatchery and equipment	1,200 00
1 dwelling for overseer	2,000 00
1 barn	400 00
Apparatus, tools, etc.....	898 95
	<hr/>
	\$12,498 95
DRAYTON PLAINS STATION:	
Land, buildings and permanent improvements, including ponds, dams, fences, office and storage building and barn	\$11,300 00
Apparatus, tools, etc.....	1,755 60
	<hr/>
	\$13,055 60
DETROIT STATION:	
Hatchery building including tanks and permanent improvements	\$7,000 00
2 fishery buildings on Belle Isle	600 00
945 hatching jars	1,181 25
1 boiler and pump	275 00
Apparatus, tools, etc.....	508 00
	<hr/>
	\$9,546 25
OFFICE:	
Furniture, pictures and mounted specimens	\$1,090 32
Library, books and stationery	310 15
	<hr/>
	\$1,400 47

SUMMARY, 1910.

Paris station	\$26,626 80
Sault station	10,443 15
Mill Creek station	19,632 45
Harrietta station	12,498 95
Drayton Plains station	13,055 60
Detroit station	9,564 25
Office	1,400 47
	<hr/>
	\$93,221 67

FINANCIAL STATEMENT.

CURRENT EXPENSES.

1908.				
July 1	Balance on hand	\$0 08		
	Received from State during quarter	8,268 75	\$7,890 15	
Sept. 30	Vouchers paid during quarter		378 68	
		<hr/>	<hr/>	
		\$8,268 83	\$8,268 83	
1908.				
Oct. 1	Balance on hand	\$378 68		
	Received from State during quarter	2,756 25		
	Loan from Peninsular Savings Bank	5,000 00		
	Vouchers paid during quarter		\$7,406 28	
	Returned to State, "unexpended balance ap- propriation for former year"			08
Dec. 31	Balance		728 57	
		<hr/>	<hr/>	
		\$8,134 93	\$8,134 93	
1909.				
Jan. 1	Balance on hand	\$728 57		
	Received from State during quarter	13,781 25		
	Received from Geo. M. Brown, refund	4 06		
	Vouchers paid during quarter		\$7,887 36	
	Paid loan to Peninsular Savings Bank		5,000 00	
Mar. 31	Balance		1,626 52	
		<hr/>	<hr/>	
		\$14,513 88	\$14,513 88	
1909.				
April 1	Balance on hand	\$1,626 52		
	Received from State during quarter	8,268 75		
	Received from Silas Dutton, refund	10		
	Vouchers paid during quarter		\$9,065 36	
June 30	Balance		830 01	
		<hr/>	<hr/>	
		\$9,895 37	\$9,895 37	
1909.				
July 1	Balance on hand, "former year"	\$830 01		
	Received from J. P. Marks, refund	32		
	Received from Dwight Lydell, refund	09		
	Vouchers paid during 6 months ending December 31, 1909		\$825 59	
	Returned to State "unexpended balance of appro- priation for former year ending June 30, 1909"		4 83	
		<hr/>	<hr/>	
		\$830 42	\$830 42	

YEAR ENDING JUNE 30, 1910.

July 27	Loan from Peninsular Savings Bank	\$3,000 00	
Aug. 30	Loan from Peninsular Savings Bank	3,000 00	
Sept. 27	Loan from Peninsular Savings Bank	3,000 00	
	Received from Thos. Bloxson, refund	16	
	Vouchers paid during quarter ending June 30, 1909		\$8,486 75
Sept. 30	Balance		513 41
		<hr/>	<hr/>
		\$9,000 16	\$9,000 16
1909.			
Oct. 1	Balance	\$513 41	
Oct. 28	Loan from Peninsular Savings Bank	2,500 00	
Nov. 27	Loan from Peninsular Savings Bank	3,000 00	
	Received from checks covered into treasury	10 78	
	Vouchers paid during quarter		\$6,730 28
	Overdrawn during quarter	706 09	
		<hr/>	<hr/>
		\$6,730 28	\$6,730 28
1910.			
Jan. 1	Overdraft		\$706 09
	Received from State during year ending March 31, 1910	\$26,249 94	
	Received from C. H. Moore, refund	16	
	Received from G. C. Dickerson, refund	45 00	
	Vouchers paid during quarter		9,117 33
	Loan paid Peninsular Savings Bank during quarter		14,500 00
Mar. 31	Balance		1,971 68
		<hr/>	<hr/>
		\$26,295 10	\$26,295 10
1910.			
April 1	Balance on hand	\$1,971 68	
	Received from H. H. Marks, refund	74 52	
	Received from State during quarter	8,750 06	
	Vouchers paid during quarter		10,795 19
June 30	Balance		1 07
		<hr/>	<hr/>
		\$10,796 26	\$10,796 26
	SPECIAL PURPOSES.		
1908.			
July 1	Balance on hand	\$1,713 07	
	Vouchers paid during quarter		\$936 46
Sept. 30	Balance		776 61
		<hr/>	<hr/>
		\$1,713 07	\$1,713 07
1908.			
Oct. 1	Balance on hand	\$776 61	
	Vouchers paid during quarter		\$753 57
Dec. 31	Balance		23 04
		<hr/>	<hr/>
		\$776 61	\$776 61
1909.			
Jan. 1	Balance on hand	\$23 04	
	Received from State March 19	1,100 00	
	Vouchers paid during quarter		\$34 44
Mar. 31	Balance		1,088 60
		<hr/>	<hr/>
		\$1,123 04	\$1,123 04

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1909.			
April 1	Balance on hand	\$1,088 60	
	Vouchers paid during quarter		\$82 25
June 1	Balance		1,006 35
		<hr/>	<hr/>
		\$1,088 60	\$1,088 60
1909.			
June 1	Balance on hand	\$1,006 35	
July 27	Loan from Peninsular Savings Bank	1,000 00	
Aug. 30	Loan from Peninsular Savings Bank	1,000 00	
Sept. 27	Loan from Peninsular Savings Bank	500 00	
	Vouchers paid during quarter		\$2,016 15
Sept. 30	Balance		1,490 20
		<hr/>	<hr/>
		\$3,506 35	\$3,506 35
1909.			
Oct. 1	Balance on hand	\$1,490 20	
Oct. 28	Loan from Peninsular Savings Bank	850 00	
	Vouchers paid during quarter		\$2,213 38
Dec. 31	Balance		126 82
		<hr/>	<hr/>
		\$2,340 20	\$2,340 20
1910.			
Jan. 1	Balance on hand	\$126 82	
Feb. 2	Received from State Treasurer	3,710 00	
Feb. 28	Paid loan to Peninsular Savings Bank		\$3,350 00
	Vouchers paid during quarter		8 10
Mar. 30	Balance		478 72
		<hr/>	<hr/>
		\$3,836 82	\$3,836 82
1910.			
April 1	Balance on hand	\$478 72	
	Vouchers paid during quarter		\$103 33
June 30	Balance		375 39
		<hr/>	<hr/>
		\$478 72	\$478 72

HISTORICAL.

COMMISSIONERS.

Under the Act of 1873 George Clark, of Ecorse, George H. Jerome, of Niles, and Governor John J. Bagley, of Detroit, ex officio, constituted the first Board of Fish Commissioners. They held their first meeting May 12th, 1873. George H. Jerome resigned June 15th, 1874, to become Secretary and Superintendent, and Andrew J. Kellogg, of Allegan, was appointed Commissioner to fill the vacancy. This board was done away with by the reorganization act of 1875. Under this act the Governor, on April 24th, 1875, appointed Eli R. Miller for two years, Andrew J. Kellogg for four years, and George Clark for six years.

Eli R. Miller was reappointed January 1st, 1877, and retired at the expiration of his term, January 1st, 1883, and John H. Bissell of Detroit, was appointed to succeed him. Mr. Bissell retired at the expiration of his term, January 1st, 1889, and Hoyt Post of Detroit, was appointed as his successor. Mr. Post retired at the expiration of his term, January 1st, 1895, and F. B. Dickerson, of Detroit, succeeded him. His first term expired January 1st, 1901, and he was reappointed for six years. He retired at the expiration of his second term, January 1st, 1907, and Mr. D. H. Power, of Suttons Bay, was appointed to succeed him. Mr. Power's term will expire January, 1913.

Andrew J. Kellogg's first term under the Act of 1875 expired January 1st, 1879, and he was reappointed for six years. He resigned June 1st, 1884, to become Secretary, and Herschel Whittaker, of Detroit, was appointed to fill the vacancy. In 1885 Mr. Whittaker was re-appointed for six years, his second term expiring January 1st, 1891, when he was reappointed for six years, his third term expiring January 1st, 1897. He was reappointed for six years, his fourth term to expire January 1st, 1903. He died May 5th, 1900, and Walter Schweikert, of Detroit was appointed to fill the vacancy until the next session of the legislature, when George M. Brown of Saginaw, was appointed to fill the remainder of Mr. Whittaker's term to January 1st, 1903. In 1903 he was reappointed for six years, his present term expiring January 1st, 1909. Fred Postal of Detroit was appointed to succeed Mr. Brown. Mr. Postal's term will expire January 1st, 1915.

George Clark died October 14th, 1877, and Dr. Joel C. Parker, of Grand Rapids, was appointed to fill the vacancy. His term expired January 1st, 1881, and he was reappointed for six years, and at the expiration of that term, in January, 1887, he was again reappointed for six years, the term expiring January 1st, 1893, when he retired. Horace W. Davis of Grand Rapids, was appointed to succeed him, his first term expiring January 1st, 1899, and he was reappointed for six years, the term expiring January 1st, 1905. In June, 1902, he resigned as Commissioner and was appointed Overseer of Drayton Plains station. Mr. C. D. Joslyn of Detroit, was appointed to fill the vacancy caused by Mr. Davis's resignation, the term expiring January 1st, 1905, when he was re-appointed for six years, his present term expiring January 1st, 1911.

SUPERINTENDENT.

George H. Jerome was acting superintendent from the first organization of the Commission, May 12th, 1873, until June 15th, 1874, when he resigned as Commissioner and was appointed superintendent, and served as such until September 15th, 1879, when his term expired and he refused a reappointment. James G. Portman of Watervliet, was appointed superintendent September 15th, 1879, to succeed Mr. Jerome and served as such until September, 1882, when he was succeeded by Oren M. Chase. Mr. Chase served until November 11th, 1883, when he was drowned in Little Traverse Bay while in the performance of his duties. Thereupon Walter D. Marks was made acting superintendent and served in that capacity until March 26th, 1884, when he was appointed superintendent and served until June 30th, 1893, when he was retired and Seymour Bower was appointed to succeed him and at this date, November 1st, 1910, is still serving in that capacity.

SECRETARY.

George H. Jerome was secretary from the first organization of the Board, May 12th, 1873, until September 15th, 1879, when he withdrew from the Commission and James G. Portman was appointed to succeed him. Mr. Portman acted as Secretary until September, 1882, when he was dismissed, and on February 19th, 1883, Herschel Whitaker was appointed secretary and served until June 1st, 1884, when he resigned and Andrew J. Kellogg was appointed to succeed him. Mr. Kellogg served as secretary until March 20th, 1888, when he resigned and George D. Mussey of Detroit, was appointed, and at this date, (November 1st, 1910) is still serving as secretary.

APPENDIX.

THE CULTIVATION OF FISHES IN SMALL PONDS.

BY DR. C. H. TOWNSEND, DIRECTOR OF AQUARIUM BATTERY PARK, NEW YORK CITY.

In presenting this paper to the Fisheries Society I do so less in the hope of affording instruction to professional fish culturists like yourselves, than of creating some discussion of the subject and profiting thereby myself. For several years I have been experimenting with small natural and artificial ponds on private estates in the vicinity of New York, with a view to ascertaining their possibilities for producing the commoner fishes. Requests for information on the subject of home fish ponds are being made constantly by the public. I have arranged the matter under the general headings of "Natural Ponds" and "Artificial Ponds" and have attempted to present brief and general instructions for their management. The raising of trout is not considered in this connection. Trout require special conditions of water supply and temperature, seldom found on the farm. For the ordinary run of ponds, it is necessary to restrict the list of available fishes to the perch, basses and sunfishes to which they are adapted.

Natural Ponds or Lakes.—It is assumed that the position of the natural pond is such that no arrangement can be made for drawing off the water. Its possibilities will therefore have to be considered separately. Its fish life moreover can never be brought under complete control. If the character and abundance of the fish life in the pond are not known it is desirable that it be ascertained as far as possible by fishing or netting. If the pond is without any fishes it should of course, be stocked at once, and the selection of fishes made with due regard to its natural conditions. The extreme depth, mid-summer temperature, plant life and character of the bottom of the pond should all be ascertained. The summer bottom temperature of deep ponds should be known. It can be taken by lowering the thermometer in a pail and allowing it to remain some time. If pulled up rapidly the temperature will not have time to raise materially. A series of bottom temperatures will serve to indicate the presence of bottom springs.

A wide area of shallow water in a pond not well supplied by springs or rivulets usually means great warmth in summer. If such a pond can be temporarily lowered and deepened in places, its conditions for fish life would be greatly improved as there is a decided difference in temperature between surface and bottom waters. Below six or eight feet the temperature decreases at the rate of about two degrees for each foot of depth. Increased depth would also give fishes an additional chance for life in winter when heavy ice diminishes their supply of air. A small pond, supplied chiefly by rainfall, may be increased somewhat in water supply by leading to it ditches from adjacent fields; while its

depth may admit of some increase by embankments. If water can be had by boring, an artesian well may make just the difference between a poor pond and good one. Fish ponds should have water plants to afford shelter for young fishes and harbor the various forms of aquatic life on which they feed. Several kinds of common pond weeds will serve for this purpose. The broad leaves of water lilies afford shelter in summer for the large fishes and should be introduced. If the pond be very small and unshaded, some floating boards will afford shelter. Too many large fishes in the pond are detrimental since they are consuming the food supply and are themselves going to waste. When such fishes cannot be taken with the hook as sometimes happens, they should be removed with a seine if it is possible to do so, and marketed. It is important that the mature fish crop of a pond be utilized and the young of the year be given a chance to develop. The accumulation of large fishes serves no useful purpose, but results in overstocking, exhaustion of the food supply, cannibalism and stunted growth.

If a natural lake or pond is already stocked with carp, which are not desired and cannot be entirely removed, their further increase may be checked by the introduction of black bass which feed freely on young carp. Black bass will also keep other species in check by devouring their young, and thrive amazingly in the process. If the waters contain black bass, or other fishes, which have become stunted from overcrowding and the exhaustion of the natural food supply, it is important to reduce their number by any methods of fish catching that will prove effective and to restore the food supply by introducing other species.

If numerous adult yellow perch are added their young will contribute to the food of the bass, and other large species. Experiments have shown that fishes stunted from overcrowding are not necessarily permanent dwarfs, but will attain a larger size if well fed or removed to more favorable waters. No fishes could be more stunted and worthless than those now swarming in the lakes of Central Park, yet we have succeeded in doubling the size of such fishes in two years. Stunted European rudd, transferred from Central Park to Prospect Park, began developing, and later when we seined them out for exhibition at the Aquarium, it was found that their size compared favorably with that which they attain in Europe.

All ponds, whether natural or artificial, containing food fishes should be stocked with brook minnows, shiners, chubs, fresh-water killfish or other small species to constitute a food supply. The killfish and other small species it may be noticed in passing are useful in small ornamental ponds in destroying the larvae of mosquitoes.

The full use of the fish crop of a large natural pond or lake can seldom be secured by ordinary fishing. It is necessary that seines and trap-nets be used. Experience has proved that such ponds usually contain many large fishes which will not take the hook. The introduction of new adult stock may be desirable in an old pond where there has been in-breeding, but overstocking is the main trouble, the remedies for which are thinning out and reestablishing the food supply.

Owing to the customary preference for "game fishes" many excellent pond species, such as rock bass, calico bass, yellow perch, white perch, long-eared and blue-gilled sunfish and catfish have been overlooked. Other kinds such as the warmouth or the white bass, inhabiting waters

of the south or middle west, are equally desirable. All of these fishes increase rapidly, take the hook readily and are good fishes. They will multiply in favorable waters with less care than probably any other native fishes. With the exception of the catfish, they will take the artificial fly and afford good sport. They are of considerable commercial importance since according to government statistics, the quantity annually sent to market exceeds twenty-eight million pounds. Nearly all of them are known to attain weights exceeding two pounds.

Ponds made by Damming Streams.—Ponds created in this way should on no account be completed without the placing of drain pipes and penstocks, so that the water can be lowered and the fish life controlled. There are marketable fishes going to waste in ponds everywhere for lack of simple facilities for getting at them. The deepest portion of the pond should be at the lower end, where the fish will gather when the water is drained down. Ditches dug in the bottom of the pond, leading to the deep hole, or "kettle," will greatly facilitate the concentration of the fishes at that time.

Two or three ponds will be found to be much more satisfactory than one, since they will permit of the sorting of fishes according to size. Angling or other fish catching would then naturally be confined to the pond containing the large fishes. If properly managed, a series of fish ponds will naturally yield a surplus for the market. It is dangerous to construct a fish pond in a narrow ravine as the dam is liable to be broken during the spring freshets or exceptionally heavy rains and the pond will gradually fill up with silt. Even if the embankment is not broken during highwater it is difficult to screen it so that the fishes will not escape. A safe plan is to make the pond at one side of the stream, by excavation and embankments, leading the water to it through a ditch, and damming the stream sufficiently at the ditch head to divert a portion of its flow. In case of freshets, the deep pool formed in the stream by the dam at the ditch-head, naturally receives the silt brought down stream: thus guarding against the filling up of the fish pond. The ditch itself should be screened at both ends to prevent the ascent of fishes to the stream, and keep floating drift out of the ditch.

If the pond can be excavated in marshy ground, so much the better. A layer of clay on the bottom will render it more watertight than it would be otherwise. The embankment should be broad, and before it is thrown up, all sod should be removed so that there will be no subsequent seepage caused by the decay of vegetable matter. The earth used for the embankment should also be free from sods or other matter liable to decay. The ground cleared for the embankment should have a ditch extending its full length into which the new earth will settle, thus increasing the stability of the dam.

The embankment of the dam if it is to be six feet high should be ten or twelve feet wide at the base and four feet broad on top. The earth used in its construction will naturally be derived from the bottom of the proposed pond, which will of course, serve to increase its depth. The overflow should be large enough to carry off the surplus, when the water is high, without danger to the dam, and the outlets in general should be screened with wire netting to prevent the escape of fishes. The drain for drawing off the water should, of course, be put in place before the dam is thrown up. Earthen drain pipes are risky, as no matter how

closely the joints may be set and cemented, plant roots will eventually find their way inside and clog them up. Iron pipe of not less than four inches diameter, with the joints well soldered is more reliable. A hollow log will serve the purpose of a drain pipe, and wear well. If the drain, or bottom outlet, is built of concrete and large enough to be conveniently cleared, it would be more effective in lowering a large area of water. The upper end of the drain should fit tightly into the foot of the upright penstock in the pond. The penstock itself is merely an upright drain or sluice of planks or concrete having about the same capacity as the drainpipe itself. It is fitted on one side with short "water boards" sliding in grooves, which can be removed one after another, to permit the escape of the water. A heavy plank should connect the head of the penstock with the top of the dam.

Before the new pond is filled, all roots, stumps, rocks and everything else that would prevent the free sweep of a net along the bottom should be removed. All ponds, whether natural or artificial, accumulate debris, of which they cannot be cleared, except when empty. A muddy pond will give the fish a muddy flavor. When a pond is being cleaned it is necessary to remove the fishes from the deep hole or kettle. Any attempt to remove decayed matter and sediment, while fishes still occupy the deeper portions of a pond, may be fatal to them, as dangerous gases are then liberated among the crowded fishes. If the pond is very foul, it should be only partially lowered at first and the fishes removed with a seine. With a reserve pond or two, it is possible, not only to thoroughly clean a pond, but to "winter" it: that is, leave the bottom exposed for a time to the action of the sun and frost. This destroys excessive plant growth and kills out destructive water beetles and other enemies of young fishes and is approved by most professional fish culturists. With a series of ponds constructed at different levels, the overflow of the upper ponds will serve to feed those below. The more fall there is to the water the better will be its aeration—a matter of great importance to small ponds. It is desirable that surface water caused by rainstorms be kept out of small ponds by banking up or ditching.

The following instances, among many which came under the writer's personal observation, will serve to show some of the difficulties in the way of successful management, where ponds are constructed without provision having been made for drawing down or seining:

A certain deep lake of about two acres in Connecticut, formed at great expense by damming a brook, is without any provision for drawing down. The conditions prevailing in it are unknown, and nothing but hook and line or some form of trap-net are available for ascertaining its contents, since its borders will not permit the use of a drag-net. In the meantime snapping turtles kill the young ducks on it each summer, and there is no way of getting rid of them.

Another pond which could not be lowered, was believed to be without fishes, until the use of a seine in one corner showed that the yellow perch fry introduced two years before had already attained good size. The presence of snags elsewhere in this lake prevented the use of the net. The management of this pond will always be difficult and unsatisfactory.

A lake in the Zoological Park stocked with yellow perch fry in 1903, was represented to be without fishes, until the use of a seine, sent from the Aquarium a year later, showed it to be well supplied. The full utili-

zation of this lake is however impossible, since its bottom has many scattered rocks which prevent effective seining. If the rocks had been removed originally, a good sized seine would sweep it from end to end.

Water Supply.—The water supply of the fish-pond is the most important thing to be considered. It must in fact be taken into consideration before the artificial pond is made. The flow of water should be abundant. About twice as much will usually be required as the beginner thinks is necessary. Ponds fed by strong springs are excellent and are not subject to the dangers to which stream-fed ponds are exposed. Their temperature is naturally more equable throughout the year and they are less liable to heavy freezing in winter. In warm weather and in the winter time, pond-fishes avoid extreme temperature by frequenting the vicinity of bottom springs. Spring water, however, contains less life available as fish food, and less air than that from brooks. Its value for pond supply will be improved, if it can be led some distance as a rivulet. Fish-life in small ponds with limited water supply will suffer from heavy ice in winter. The ice should be broken daily, and masses of brush and branches placed partly in the water will aid in keeping air holes open, especially if they are moved by the wind.

Extent and Depth of Ponds.—The extent and depth of ponds made by damming streams will be governed somewhat by the nature of the situation available. A pond of an acre or more in extent, and with eight or ten feet of water in the deepest part, will, if properly managed, give excellent results. It may be necessary to make it less than one-quarter of an acre in extent, but a small pond should have an extreme depth of not less than six feet, although it is quite possible with a strong water supply to raise fishes in very small and shallow ponds. This, however, means active cultivation, with daily feeding of the fishes, numerous ponds to permit of sorting and all the details of a fish cultural establishment. As a matter of fact, nearly all of the extensive fish breeding carried on by the national and state fish commissions has been done in ponds or rectangular shape, averaging perhaps less than 100 feet in length and 25 feet in width, having depths of only three or four feet. Such ponds are worked in series as nursery and rearing ponds, and there are generally two or more ponds of large size in which fishes of different growth can be held. Ponds to be used for black bass and in fact most other fishes, ought to be several acres in extent and quite deep. In general, fishes kept in small ponds do not attain the size of those in large ponds since their range and food supply are restricted.

Feeding.—If large numbers of young black bass, rock bass or calico bass are removed for safety to smaller ponds where they may exhaust the natural food supply it will be necessary to feed them. If they are put in small "nursery ponds" where they are crowded, feeding is imperative. The principal natural food of fishes is fish, which would be perfectly fresh. For young fishes it must be cut and boned, then rubbed through a fine wire screen. Adult fishes kept in restricted quarters will also require feeding. They may be fed largely on live minnows. Among the fish foods used at the New York aquarium, are live minnows, live shrimps, copped fish, beef liver and clams. It is a mistake to suppose that fishes do not require an abundance of food. They may live without it but cannot grow.

Water Plants.—About one-quarter of the ordinary pond should be as

shallow as ten or twelve inches and planted with pond weeds, such as potamogeton, parrots-feathers, (myriophyllum), water celery (vallisneria), hornwort, (ceratophyllum and cabomba. Suitable plants for the purpose may be found in most streams and ponds, and there are many others than those mentioned. Water plants that are satisfactory in some regions may, however, not be so in others farther north or south. Water plants are necessary as shelter for young fishes, and greatly increase the various forms of small aquatic life necessary for their food. They also to serve to aerate the water, which is most important in small and sluggish ponds. They may be planted by tying to stones and dropping them from a boat, or set in the ground after the water has been partially lowered. The slightly greater depths, from one to three feet may be planted with water lilies, while the more extensive and deeper portions should be kept clear of vegetation. If the vegetation becomes too thick it can usually be pulled out with a rake, but it is sometimes necessary to cut it with the scythe. Willow and other trees should be planted at some points to furnish shade. Aquatic insects, crustaceans and mollusks bred among pond weeds, constitute no small feature of the pond food supply. It is recorded in the "American Fish Culturist," that an electric light over a certain pond was found to attract insects which fell in the water in such numbers as to supply an important quantity of fish food. If the pond weeds, together with the brook minnows, frogs, crustaceans and other small fry which are to establish the natural supply of food, can be introduced a year before the stock fish are put in, the conditions for success will be greatly improved.

Spawning Places.—Fish-ponds should be supplied with spawning conditions suitable to the fishes occupying them. Small-mouthed black bass, which make their nests in gravel, will require gravelly bottom. Large-mouthed black bass, which nest among the roots of plants, will find the conditions they require among the weeds of the pond. Yellow perch which spawn among twigs under water, are easily accommodated—pieces of brush may be set firmly in the bottom where the water is shallow, in the branches of which they will deposit large whitish masses of spawn. If the brush tops extend several inches above the surface of the water, so that they will be swayed by the wind, and kept free of sediment, the hatching of masses of spawn will be greatly facilitated. Rock bass and the various species of sunfish which, like the small-mouthed black bass, make their nests in gravelly places, will absolutely require places of that character if they are expected to increase and a few cart-loads of gravel dumped around the lake in water about two feet in depth will furnish the necessary conditions.

Since ponds, to be successful, must have proper spawning conditions, some study of the habits of pond fishes is important and there are numerous helpful books available. It is now the custom with professional fish culturists to supply artificial spawning nests in ponds containing small-mouthed black bass. These are small shallow boxes about two feet square filled with mixed gravel and sand, which early in the spring are placed everywhere in shallow water around the pond. They are at once appropriated by pairs of basses seeking spawning places. The boxes have boards nailed on two sides at adjoining corners, which extend about a foot higher affording shelter for the basses similar to that which they naturally seek under the shelter of submerged logs. Basses

guard their nests for several days after the spawn has been deposited, and it is the custom at fish cultural establishments to place over the nest before the young fishes leave it, a light circular frame of iron covered with cheese cloth, one end of which protrudes above the water. This prevents the young fishes from wandering away from the nest and makes it possible for them to be removed with the dip net to nursery ponds, where they are safe from their enemies and the cannibalistic tendencies of their parents.

One of the numerous private ponds visited by the writer, a pond half a mile in length, was examined with great care and found to be totally lacking in gravel areas. Although it had been stocked several times with small-mouthed black bass there had been apparently no natural increase. With a mud bottom it afforded no spawning surface whatever for this species. The writer recommended the introduction of numerous artificial spawning nests, or the introduction of the large mouthed bass which would not require gravel beds, but could spawn among the abundant water plants. It is probably unnecessary to add that there should be no fishing allowed during the spawning season, which with most of the fishes mentioned is in the spring months.

Number of Fishes Required.—In stocking waters it is not necessary to have a large number of adult fishes. For a pond of about an acre in extent, twenty pairs of black bass will be sufficient, and perhaps fifty pairs of any of the other kind of fishes mentioned. These numbers will in fact suffice for still larger ponds and should be reduced for smaller ponds. When the conditions are right the progeny of the first year will usually stock the pond to the limit of its natural food supply. It should be borne in mind that heavy stocking serves no useful purpose, unless it is the intention to catch some of the adults the first year. It is just as well to stock with two or three kind of fishes and time will show which species are the best adapted to that particular body of water. With black bass the yellow perch may be placed with safety, not only on account of the food it supplies to the former, but also on account of its own value as a food fish. It is remarkably prolific, and with a good start can usually take care of itself. The same may be said of the catfish. It is harmless since the basses and sunfishes are active in guarding their own nests. The yellow perch and the catfish may also be introduced into ponds containing rock bass or calico bass. There is no reason why black bass, rock bass and calico bass should not be kept together if the pond is of considerable size.

FISH CULTURE ON THE FARM.

BY HON. J. J. STRANAHAN.

(A paper read before the American Fisheries Society.)

It is safe to presume that the members of the society will think that this subject has been selected because the writer is too lazy to prepare a paper along more scientific lines and if this be the case, the presumption will be well founded, although much of interest and value may be said on fish culture on the farm, a subject that has been too long neglected by this association, the United States and state fish commissions and by fish culturists generally.

With our public waters rapidly becoming depleted through excessive fishing, in spite of the good work being done by the hatcheries, where are we to look for the fish to fill the very rapidly growing demand, if not through water farming? Of course the output of ocean, lake and steam may be held in statu quo or possibly increased to some extent by reasonable restrictive laws and by the work of fish culturists, but with the rapid increase of our population and the further growth of consumption through improved transportation facilities, the limit has doubtless already been reached and any permanent increase of per capita supply must come through covering what is now unproductive land with water, thus adding to the output of fish beyond what natural waters would make it, and making many fins grow where none at all grew before.

There are vast areas in all of the States, probably equal in the aggregate to that of the Great Lakes, which now produce virtually nothing and much of which might be made to furnish abundance of fish, with comparatively little expense. Not only would the conversion of this waste land into water areas increase and equalize the rainfall to some extent, but it would measurably decrease the liability to disastrous floods and equalize the flow of streams. But this is only incidental to my text and not really germane to the subject.

Fish culture on the farm is nine times out of ten, a failure, and generally so because of three main causes, none of which owing to lack of space, can be fully treated here. We will take first in order the failure to properly construct the embankments which are to retain the water. Very briefly stated, the sods, brush, grass and other rubbish should be cleaned away down to the solid earth over the whole extent that is to be covered by the embankment. Then a trench say two feet wide and as deep should be plowed lengthwise throughout the whole extent that is to be covered by the embankment. The earth of the embankment settles into this preventing leaks which are almost sure to follow along the union of the old well packed earth and the new soil, if this is not done. No brush, sods, stumps or other rubbish should be permitted to enter the embankment. Use nothing but clear earth and if the soil be gravelly to the extent that it is likely to permit the water to filter through the inner face of the embankment, that is, the one next to the water, should be faced with a foot of clay or other impervious soil. The plow and scraper will be found the most economical, unless the lay of the ground

is such as to prevent, when wheelbarrows will be necessary, and the team should be kept on the embankment while going and coming as much as possible so that the earth will be packed as much as possible and prevent sloughing when the water is let on. If the embankment is made of proper width at the bottom and the correct slant given to the sides—observe the slant given by nature in your vicinity—you will have an embankment that will last for generations and give you no trouble.

All ponds should be provided with a sluice or outflow through which the ordinary discharge flows and through which also you may discharge the water when you wish to draw down your pond, a matter strictly indispensable to successful pond culture. The sluice may be most economically made of two-inch plank a foot wide and should be long enough to go clear through the embankment, the outflow, or perpendicular part being securely spiked to the horizontal part which runs through the embankment and is situated low enough to draw the water entirely out of the pond. The face of the upright, that is, the side opening towards the ponds, is, of course, let open, the box being closed on three sides, the open side being left for the discharge of the water. Two grooves should be provided by nailing three strips onto each side plank of the upright. Into the back groove boards an inch thick and three or four wide are slipped, these retaining the water at its proper height, the surplus, being discharged over the top board, and these being removed one at a time when you wish to lower or empty your pond. Into the front groove the frame of your screen is slipped from above. This should be covered with galvanized wire cloth with about one-half inch mesh. This should be used only when the pond is being emptied or lowered, for the few fry which will escape ordinarily amounts to nothing, in fact, you are sure to have too many after your first hatch in any event.

The second cause of failure is the selection of too high-toned fish and the introduction of too many species. Not over two or three species should be put into any pond of a few acres or less, and the most desirable ones from your vicinity are likely to prove the most successful. To introduce brook trout, unless you have a very large spring of cold water will lead to failure, and no matter how much water you have and how cold it is, you would better leave the trout alone unless you know something of their culture or wish to study their habits and make a pastime of their cultivation. The same is true of the black bass, unless you have a pond of several acres or wish to sacrifice a good supply of fish for your table for the sport of capturing a few bass with rod and line, which, after all can be best accomplished in some nearby public water, leaving your pond for the cultivation of those fish which will provide you the maximum of good food with the minimum of trouble and expense. If black bass is decided on, in nine cases out of ten, north or south—the small-mouth is not indigenous to the south of north Georgia—the large-mouthed species should be selected, the only exception being where the pond is supplied with an abundant supply of cold water and where the bottom of the pond is gravelly or rocky throughout a considerable portion of its area. If the bottom of the pond is soft, suitable for the growth of aquatic vegetation, then the large-mouth should be introduced by all means, if bass are to be selected at all.

The best all round fish for small ponds, north or south, is, in the

opinion of the writer, what is known as the marble or mottled catfish in the north and the speckled cat in the south, *Ameiurus nebulosis*, from nebulous, clouded, which is easily identified by its square tail, which is not forked in the slightest degree, and by its mottled skin north, while in the south it is covered with black specks on a light slate background. This is an excellent fish, making rapid growth for the first two years in particular, cleanly in its feeding habits, but in no sense a scavenger, almost omnivorous in its selection of food and growing to weigh two or three pounds, often attaining to one pound when a year old, when the range is ample and the food abundant. This fish does not interfere with other species in the pond, either through destroying the young or the eggs of the other. In fact, any nest-builder such as the rock bass, black bass, bream or sunfish will defend its nest and eggs against all comers, even if it be a mud turtle of many times the weight of the fish. Taking it all in all, the writer believes that this fish will produce a greater weight of good food from a given area of water than any other that swims.

Taking the country as a whole, the writer believes that what is known as the blue gill sunfish north and the beam south is the next best fish for small ponds, although he would possibly modify this statement to let in the rock bass where the water supply is especially good and the considerable gravel entering into the soil in the bottom of the pond, and it is possible that this fish may prove a desirable pond fish in the south, it having been acclimatized in Texas, where it is doing well in public waters. The bluegill or bream, *Lepomis pallidus*, is of excellent quality, dresses to waste but little is a rapid grower and is esteemed by many as next only to the speckled brook trout as a pan fish, while my good friend and enthusiastic angler, Mr. C. T. Hasbrook, of Cleveland, O., claims that when taken on a fly with light tackle, he offers sport as a game fish second only to the speckled beauty of the brooks. Probably Mr. Hasbrook is the best posted gentleman in the world today on this fish, and he considers it one of the most desirable for table as well as at the end of a line. While it sometimes attains a weight of three or four pounds, in the south, a pound will be found to be about the maximum for this fish in ordinary pond culture. Like the speckled cat, it is not predaceous to any appreciable extent, defending its own nest vigorously, and leaving others to do the same unmolested by him. It is omnivorous, eating almost anything that you give it, provided the food is clean and that decomposition has not set in, and finding much of its own food in the pond in the shape of small crustacea, larvae of insects, worms, etc. If rock bass are to be had in your vicinity and not the blue gill or bream, it would probably be best to introduce them.

In stocking your pond, half a dozen pairs of each species are a great plenty and even these will overstock your pond the first year if two or three pairs of each bring off broods. It is by far the better plan to collect adult fishes from nearby waters for stocking your pond. These will bring forth young two years earlier than the fry furnished by the United States or state hatcheries, besides, being acclimatized, they are likely to do better.

If black bass are to be introduced it is well to also put in brook minnows, such as chubs, shiners, suckers, etc., but care should be exercised that undesirable forms such as pickerel, etc., do not slip in with them

and lead to serious regrets later for it is easier to keep out undesirable fishes than to eradicate them when once established.

The third, and one of the most fruitful causes of failure in fish culture on the farm, is over production. The first year's hatch of the fishes above recommended with the numbers of adults suggested will overstock any ordinary pond of a few acres. Just as soon as the fish are large enough probably in the fall of the year when they are hatched, the owner should begin catching them for the table. They will not be very large but sufficiently so to make a nice little pan fish and their quality will be fine. The more you can get out and consume the better. At the end of the spawning season of the second year your pond should be drawn off and the surplus fish turned into the nearby stream or lake, thus paying back to nature the debt you owe her.

It is a hard matter to advise just how many fish of each species should be returned to the pond, the natural inclination being to make it too many. One hundred of your yearling black bass and twice the number of bream and catfish is plenty for each acre of water, and too many, unless you are pretty persistent in catching them out, and not over that number of fry should be retained to come on for the coming year's supply.

To recapitulate: make your embankment good and safe; don't try to breed too high-toned fish; look to it that your pond does not become overstocked and, other things being equal, you will succeed.

INCREASING AND INSURING THE NATURAL FOOD SUPPLY
AND OUTPUT OF SMALL MOUTH BLACK BASS FRY, AND
NOTES ON COMBINATION OF BREEDING AND
REARING PONDS.

(Paper read at fortieth annual meeting of the American Fisheries Society, New York City, September 27-29, 1910, by Dwight Lydell.)

In speaking of the habits of the small mouth black bass, I have often said before this society that I think it necessary for every fish culturist engaged in the propagation of small mouth black bass to work out his own salvation, according to the locality and surroundings in which his station is located.

I do not think any fixed set of rules can be laid down which will work out successfully in every latitude and location, therefore I think some of the following notes may be of interest to those engaged in the breeding of the small mouth black bass, and may apply to work farther north or south as the case may be.

The conditions at the Mill Creek station in Michigan are such that if the parent bass are placed in the ponds early in the Spring and left to spawn, we lose about one-half of the fry, and sometimes nearly the whole spawning is a failure; this is caused by the sudden changes in temperature which occur.

The stream from which we derive our water supply flows several miles through open country and is very shallow, therefore two or three warm days or even one will warm the water to a point where the male bass feels that he must prepare a nest for his mate; the result is he often gets this done and he and his mate cover their nest with eggs. Then a cold night or two and perhaps a couple of cloudy days follow and the temperature of the water falls from perhaps 65 to 45 degrees, and glimmering go all the eggs that have been deposited previous to the cold snap; then the fish desert their nests and all is confusion in the bass kingdom.

Previous to three years ago at the Mill Creek station we were never sure that all eggs deposited would produce fry, and all was due I am certain to the conditions which I have just described. This uncertainty in regard to results would sometimes drive me nearly frantic; then it occurred to me that possibly some way might be devised whereby the fish might be prevented from spawning until all danger of cold snaps had passed.

The plan finally adopted is to place all the breeding bass in the wintering ponds, which are deeper than the others; this is done in the late fall and plenty of minnows are introduced to feed them until the spawning season the following spring. In the spring when the weather commences to warm up a large supply of water is turned on and is kept as cool as possible by turning on what spring water is available at the station. In these ponds there are no nests or places for the fish to spawn, and they are too crowded to spawn even under more favorable conditions. They are held there until all danger of the spawn being destroyed by

cold weather has passed. In the meantime the spawning ponds have been prepared, nests placed, and everything put in readiness for the breeders. When spawning cannot be postponed any longer the fish are sorted and placed in the spawning ponds. The fish cover their nests with eggs within 24 hours after being transferred. During the three seasons just closed, this plan has worked so successfully that no poor nests have resulted. Every nest has been productive. I think possibly this plan could be carried further by separating the males from the females; then there would be no chance for them to spawn.

I know from an experiment carried on at the Mill Creek station that a female bass will hold her eggs until some time in July. One season, having about fifteen surplus females, they were placed in a pond by themselves. They were seined up and one of them opened about every ten days from the middle of May until the middle of July. The ova was found to be in good condition until the last seining which occurred on July 17th, when it was found to be sloughing away. The new eggs were all formed, and no apparent harm had been done to the fish. The male bass no doubt would not be in the pink of condition so late in the season but I think it possible to keep them back for at least ten days after the first lot has spawned. This can easily be done by placing some of them in a cold spring water pond earlier in the season.

At the Mill Creek station we have had two separate spawning of the small mouth bass for the past three seasons. Immediately after the first fry had risen from the nest and commenced feeding they were removed from the fry retainers and the latter were removed from the pond. Fresh males were then introduced and spawning occurred again to the extent that about one-quarter of the nest had eggs on, but not as many per nest as from the first spawning.

A female bass does not necessarily deposit all of her eggs at the first spawning; it all depends on the male. When he is through he drives her away regardless of her desire to stay longer. What eggs she has not deposited or most of them may be secured by introducing fresh males as previously described, or perhaps some other male that had his nest ready at the time the first male drove her away will mate with her and secure the balance of her eggs for his nest. What has been said of the female bass may also be said of the males to the extent that they will have two, and I have known of one instance where a male bass fathered and brought off three separate schools of fry in one season. In one pond during the past season five males out of seventeen brought off the second school, in another pond seven out of eighteen, and in another three out of nineteen. This occurs only where the first lot of fry is taken away immediately after it has risen and commenced feeding.

Experiments carried on along these lines at the Mill Creek station the past season leads me to believe that it will be possible to produce at least one-third more fry from the same area of water than we now do, simply by having a surplus or extra supply of male and female bass to draw upon; in a pond fed with cold spring water where possible, these extra bass to be introduced into the regular breeding ponds immediately after the first fry have been removed.

FOOD SUPPLY.

The food supply for the fry of the small mouth bass at the Mill Creek station is principally *Daphnia*, belonging to the family of water fleas. The supply is limited in the ponds that are left in their natural condition during the whole year, but almost unlimited in ponds that are drawn down and left nearly dry from the middle of September until the ground is frozen. In ponds so treated the past two seasons we reared to the number one fingerling stage six times as many bass as we did in another pond of the same area and not thus exposed. Great clouds of this food could be seen apparently rolling along, having the appearance of roily water. By taking a boat and going out on the pond and looking down into the water the bottom seemed to be carpeted to the depth of an inch with *Daphnia*. Later in the day if it was warm this food would rise up and distribute itself through the water. In one pond 150x364 feet, treated as above, we reared 30,900 number 1 fingerlings; 25,200 number 2 fingerlings and 3,000 number 3 small mouth bass, and in another pond of about the same area 100,000 large mouth were raised to the number 1 stage.

CONSTRUCTION OF PONDS.

A great deal of thought has been given to the construction of a pond that would better serve the purpose of both breeding and rearing bass. Of course we know that adult bass prey upon the young to a certain extent, especially when the adults do not receive a certain amount of food every day. The plan finally decided upon was to construct a pond with two terraces, the first one extending from the shore into the pond a distance of ten feet and having six or eight inches of water, the second terrace another ten feet with about two and one-half feet of water and from this gradually sloping to the kettle or deepest part of the pond. This experiment was tried on one side of one of our ponds, the opposite side being left in its natural shape, that is, starting with a feather edge and gradually sloping to the deepest part. This was done to decide whether we derived any benefit from our experiment. The result was that two very important difficulties were overcome: first, the nests being placed on the deeper terrace, the spawning bass were never disturbed by people strolling around the ponds, and second, the fry as soon as they left their nests, would seek the shallower terrace where the adult bass were hardly ever known to enter, thus giving the young almost perfect immunity from their cannibalistically inclined parents. When we commenced seining our number one fingerlings very few were found in any part of the pond, except on this shoal or inshore terrace.

THE RAINBOW TROUT IN MICHIGAN.

BY SEYMOUR BOWER, SUPERINTENDENT MICHIGAN FISH COMMISSION, DETROIT,
MICH.

The few points I desire to present in regard to rainbow trout cannot be considered as rising to the dignity of a formal paper, but are offered for what they are worth and mainly with a view to calling out discussion as to the relative value and comparative merits of one of the gamest of American fishes. In speaking of rainbow trout I wish to explain that I also include steelhead trout, which for practical purposes may be considered one and the same species. Indeed, so high an authority as Dr. David Starr Jordan told me within the past thirty days that he now considers the rainbow and steelhead as one species, although he was formerly in doubt and at one time regarded them as separate.

The introduction of rainbow trout into Michigan streams dates back to the early eighties, in fact, a small planting of rainbows was made in the Au Sable River in the middle seventies by the late N. W. Clark, of Clarkston, and the late Daniel Fitzhugh, of Bay City. Prior to that time the rainbow was a total stranger to Michigan waters and was entirely unknown throughout the east and middle west. For nearly twenty years after the first planting by the Michigan Fish Commission, the distribution was exceedingly limited in numbers and was confined to a few streams. The total number planted by the Michigan Fish Commission from 1880 to 1889, inclusive, was only 67,000 fry. During the next decade the total of the plants was 437,000, or an average of less than 50,000 per year. Beginning with the year 1900, however, the distribution of rainbows by the Michigan Board was made on a somewhat more generous scale. From 1900 to 1908, inclusive, a total of about 5,500,000 fry and nearly 100,000 fingerlings were deposited, or an average of over 600,000 per year. During the present year our total output will approximate two million fry and a quarter of a million fingerlings. From present indications our output of 1910 will total between three and four million. Thus it will be seen that the Board of Fish Commissioners of Michigan believe that the planting of rainbows is a valuable contribution to the fishery resources of the State.

Since the planting of these fish in Michigan was taken up by our State Board, distributions to some of the same waters have also been made by the United States Fish Commission and Bureau of Fisheries, but in much smaller numbers. It is safe to say that less than 10,000,000 rainbow trout all told have been distributed throughout Michigan during the thirty years in which the work has been carried on, or an average of less than 350,000 per year. Nearly ten times as many brook trout have been planted in Michigan during the same period by the State Board alone, yet in proportion to the number distributed the production of adult rainbows is much greater than of brook trout. Indeed the planting of rainbows in this State has been attended with more generous results and perhaps has proved more successful in every way than any fish cultural work attempted by our Board. Rainbows weighing

five pounds and upwards now inhabit many of our streams by the hundreds. In the St. Mary's, Pere Marquette, Pentwater, Boardman, Pine, Muskegon, and other rivers, 8, 10 and 12 pounders are not uncommon and specimens ranging from 14 to 16 pounds have been taken. Twenty pounders have also been reported as having been caught with nets, but it is difficult to verify these reports because net fishing for rainbows is illegal. There is, however, scarcely a doubt that rainbows of that size now inhabit some of the above waters. The Au Sable River, which with its numerous spring-fed tributaries constitutes one of the greatest brook trout systems in this country, if not in the world, is also one of the best rainbow trout streams in Michigan in the middle and lower reaches of the main river. Here as elsewhere the larger rainbows, or those of a spawning size, do not as a rule run into or invade brook trout territory proper, except during the spawning season, after which they drop down stream to their old haunts where food and temperature conditions are more congenial. In some cases large rainbows prefer to inhabit deep and moderately cool lakes, ascending tributary streams only during the spawning season.

There is scarcely a doubt that the rainbow in the course of time will rank as a commercial fish of considerable importance in Lakes Michigan, Superior and Huron, and in these waters they should not be regarded or treated as a game fish but rather as a commercial fish, subject only to the same restrictions as are applied to the other commercial varieties. Large rainbow trout lose their game qualities to a great extent anyway after inhabiting lakes for a time.

Regarding the food qualities of rainbows as compared with brook trout, it must be acknowledged that they are usually softer and less palatable than the latter when young or immature, that is to say, the flesh of a 7 or 8-inch rainbow is not so firm and sweet and rich as that of a brook trout of the same size. One reason is that an 8-inch rainbow is not nearly so far advanced toward maturity as an 8-inch brook trout. Rainbow trout do not spawn in Michigan waters until they are 3 and most of them until they are 4 years old, whereas brook trout spawn when about 20 to 22 months old. It is, however, the almost unanimous opinion of anglers and epicures that rainbows of two pounds and upwards are not in the least inferior to brook trout of a corresponding size or age. For this reason, the legal limit for rainbow trout should be considerably greater than for brook trout. It should be not less than 10 inches.

Although the rainbow trout has very many firm and even enthusiastic friends, and the list is constantly growing, yet there has been and still is considerable opposition to its further introduction into our streams. This opposition is not because it is not recognized as a high grade food and game fish but because it is considered inferior to brook trout and is driving the latter out. A careful investigation of the situation, however, will, I believe, show to a very great extent that this claim has little or no foundation in fact. It is true that a number of our larger streams, once suitable for brook trout from sources to mouth, are now occupied by rainbow trout in the middle and lower waters, almost to the exclusion of brook trout. The natural supposition is that the latter have been driven out, when as a matter of fact such waters would now be deserted by the brook trout if the rainbows had never been introduced. The clearing up of heavily timbered areas or sections has so changed the character and temperature of many streams that the

brook trout have retreated nearer and nearer the headwaters. I do not for one moment favor the planting of rainbow trout into any stream or stream system that is suitable for brook trout from sources to mouth, though the introduction of rainbows into such waters will not displace the brook trout to anything like the extent that is generally supposed. The truth is that while the young rainbows may mingle with the brook trout until they are one or two years old, they are certain sooner or later to drop down stream, seeking warmer and more congenial waters. Another good reason why rainbow fry should not be planted in cold brook trout waters is that they are to a great extent preyed upon and destroyed by the brook trout. The hatching season of the rainbow occurs in May and June, and if the young fish are turned out as fry they are just about the right size to serve as food for young brook trout whose hatching season is about six months earlier, as well as for the yearlings. Brook trout are more carnivorous, more destructive of their own kind and of fish life generally than are rainbows. In proportion to their size they have a much larger mouth, more teeth, are more ravenous and feed more during the months of May and June than at any time of the year. Although rainbows will spawn to some extent on the same grounds as brook trout, I believe that the fry should be planted farther downstream. But wherever planted, the separation of these two species will take care of itself in a great measure, because each is at its best under a different set of conditions, and will seek those conditions.

The game qualities of rainbows are so well understood by anglers generally that little need be said on this point. Of course I do not refer to the old and superannuated fellows who are passing the evening of their life in the quiet waters of lakes, but to the lusty and vigorous young stock of the pools and riffles and rapid waters of our larger rivers. Doubtless many of the members of this society have read the following from Jordan and Evermann's "American Food and Game Fishes." If any of those present have read it, I am sure you will be pleased to hear it again, and if any of you have not, you have missed something good:

In beauty of color, gracefulness of form and movement, sprightliness when in the water, reckless dash with which it springs from the water to meet the descending fly ere it strikes the surface, and the mad and repeated leaps from the water when hooked, the rainbow trout must ever hold a very high rank. The gamest fish we have ever seen was a 16-inch rainbow trout taken on a fly in a small branch tributary of Williamson River in Southern Oregon. It was in a broad and deep pool of exceedingly clear water. As the angler from behind a clump of bushes made the cast, the trout bounded from the water and met the fly in the air a foot or more above the surface; missing it he dropped upon the water only to turn about and strike viciously a second time at the fly as it touched the surface; though he again missed the fly, the hook caught him in the lower jaw from the outside, and then began a fight which would delight the heart of any angler. His first effort was to reach the bottom of the pool, then, doubling upon the line, he made three jumps from the water in quick succession, clearing the surface in each instance from one to four feet, and every time doing his utmost to free himself from the hook by shaking his head as vigorously as a dog shakes a rat. Then he would dash wildly about in the large pool, now trying the opposite direction, and often striving to hide under one or the other of the banks. It was easy to handle the fish when the dash was made up or down stream or for the opposite side, but when he turned about and made a rush for the protection of the overhanging bank upon which the angler stood, it was not easy to keep the line taut. Movements such as these were frequently repeated and two more leaps were made. But finally he was worn out after as honest a fight as trout ever made.

The rainbow takes the fly so readily that there is no reason for resorting to grasshoppers, salmon-eggs, or other bait. It is a fish whose gameness will satisfy the most exacting of expert anglers and whose readiness to take any proper lure will please the most impatient of inexperienced amateurs.

DISCUSSION.

DR. BARTON W. EVERMANN: The rainbow still stands as the banner game fish of those that I have ever caught. The Society may be interested in hearing a word in regard to an investigation that the Bureau is carrying on now with reference to the relationship of the rainbow, steelhead and cut-throat trouts of the Pacific Coast. Dr. Gilbert of Stanford University began more than a year ago to study this question seriously, and is still continuing it. Among other things he examined the stock of fish at all of the trout hatcheries in California, Washington and Oregon. He collected from various undefiled streams (so as to get if possible native fish) fish that had not been contaminated through fish cultural operations. He then took and fertilized eggs from what were regarded as undoubted rainbows; then the eggs of undoubted steelheads were likewise taken and fertilized. He is keeping the progeny separate and under observation until they reach a size that will enable him to know whether any differences develop. The experiments are being carried on chiefly at the Brookdale hatchery near Santa Cruz, California. The California Fish Commission is heartily co-operating with the Bureau of Fisheries in this work. Dr. Gilbert feels that when he gets through with the investigation he will know positively the taxonomic relationships of the steelhead and rainbow for the regions in which he experiments. He has already gone far enough to justify him in saying that the conclusions which will be reached from a study of the rainbow and steelhead of the Santa Cruz region, south of San Francisco, will not necessarily hold with regard to the rainbow or steelhead in Washington or Oregon, so that there are several local problems each of which must be solved on the ground.

It is regretted, I think by all of us, that the stocks of rainbows and steelheads and hybrid rainbows and steelheads in the hatcheries on the west coast are not safe for experimental purposes. You cannot be sure of the genealogy or ancestry of any of them; so wild stock has to be obtained in every case. But even considering the great care taken, in many cases doubts will arise. However, I think Dr. Gilbert is eliminating all individuals where there is any doubt as to the true stock; he is experimenting only with what he believes to be undoubted rainbows on the one hand and undoubted steelheads on the other. He has written a number of letters to the Bureau from time to time detailing his experiments and expressing in a tentative way some of his conclusions, but closing in every case by saying that all these conclusions are merely tentative.

PRESIDENT: I know I ought to keep my seat, but I cannot help breaking in. I have studied the rainbow trout to some extent and am very much interested in them. I suggest that before Dr. Gilbert finishes his studies he will necessarily have to go to Alaska and study the rainbow and steelhead there, because if I know anything about fish, I am sure that they do not represent the same species. Some years ago Dr. Jordan, after having declared that the rainbow and steelhead trout were identical, found what is now recognized as a steelhead and he set it up as a distinct species. Dr. Evermann I think even now is inclined to believe that this particular species must be set off from the common rainbow as well as from the steelhead.

I am too much engaged in trying to produce and distribute fish to have time to follow the details of the technical study of fishes, but we get eggs from a race of rainbows that cannot be distinguished by external marks from the original rainbow brought from the McCloud River in California. We take eggs as early as December and at some of our stations as late as April, or pretty close to the first of May.

Now, are there several races of the *irideus*? I suppose so—some early spawners and others spawning later. We certainly have them, and I think you will find by looking over the records of the early work of the New York Commission that the difference was noted as early as 1868 or 1869, long before eastern fish culturists had meddled with the relationships of the western fauna. It is an interesting point. I think I can tell the difference between a young rainbow and a young steelhead every time. I may be wrong, but I think the steelhead is always slimmer, that he has more white margin on his anal fin, and perhaps a white caudal tip which I do not find on the rainbow.

I am very glad that Dr. Gilbert is going into this subject with the wild fish, for the question will never be settled until a conclusion is reached on virgin ground. As it stands now we certainly have two races of rainbow trout, and neither one of them is the same as the steelhead, at least not what I call the steelhead.

MR. JOHN W. TITCOMB: Mr. Bower's paper has opened my eyes somewhat about the rainbows in Michigan. When I was engaged in fish culture in Vermont I supposed from what I had read that the introduction of the steelhead and rainbow into the waters which by deforestation had become warmer in the summer, would be a good plan. But there we encountered the obstacle which usually comes with the warmer water of summer, namely, the extremely cold water of winter. I discovered the rainbow was sensitive to

anchor ice, which not only would cause large mortality in hatching but also among the adult fish when little needles of ice were flowing through the water. The rainbows which have been introduced in New England and New York in large numbers for a good many years do not seem to have produced very favorable results. There are today but few streams which have been successfully stocked, and in few of those which have been stocked do the adult fish hold their own by natural reproduction.

Now, as to the identity of the steelhead and rainbow, I think you all understand that the rainbow of New Zealand is the steelhead of California. It has been thoroughly identified from the source of supply, and is what might be called a sea-run rainbow. I could not see the difference between the steelhead hatched in Vermont and the rainbow hatched in Vermont. If they got mixed I was unable to sort them, although I always imagined the steelhead was a little more gamy than the rainbow.

I remember calling on Commissioner Brice in Washington once, and saying to him that I could not see any difference between the two fish; that I thought they must be very closely related; and he said: "Well, I have given out word that the rainbow and steelhead are two distinct species, and that settles it!" (Laughter.)

Now, as to the spawning time to which you have referred: I find so far as my observations go, and what I learn from the different superintendents, that it is regulated very largely by water temperature. As you know, at Wytheville, Virginia, we have handled rainbows for a great many years, and the first hatch from the domesticated stock there was in the spring. As time went on the spawning season gradually turned backward until now we take eggs in November from descendants of the same stock of rainbows. In Vermont rainbows hatched and reared in very cold water where anchor ice flowed part of the time, did not spawn, as I remember it, until April or May. In Colorado where the rainbow is an introduced species it spawns just before the native trout in the same waters; in others at about the same time; but on the average in April and May, perhaps a month earlier than the native trout.

PRESIDENT: By native trout you mean the black-spotted?

MR. TITCOMB: Yes. We are taking black-spotted trout eggs now. I do not see how we can connect the spawning time with the species, for it will be found that fish of the same stock will spawn in one water even three months earlier than in another.

PRESIDENT: In Lake Cayuga last fall we took rainbow eggs in December, and again in the same lake as late as April. We also took a steelhead in Keuka Lake last fall. If it was not a steelhead I do not know what it was, for certainly it was not a rainbow.

MR. TITCOMB: My observations agree with those of Mr. Bower, that rainbow trout seek the lower waters. In Vermont they take the waters usually below those where brook trout are found, except an occasional straggler or a very large fish that goes farther down into the deeper pools. This water is rather warm for brook trout. In Colorado the native black-spotted trout occupies the head waters, the eastern brook trout the middle course, while rainbows are principally found in the lower and larger portions of a stream. There the rainbow is the most popular of the three species, I think, the eastern brook trout ranks second and the native third.

You may be interested in knowing that the Denver & Rio Grande passenger agent has a standing offer to any angler who lands with fly and rod and reel a rainbow trout weighing ten pounds or more. His reward is a \$20 gold piece for each fish, which he usually has to pay about twice a year. The largest rainbows are generally taken from the Gunnison River.

MR. W. E. MEEHAN: The matter raises a query as to what we have at Bellefonte. Some four or five years ago we received from the United States Bureau of Fisheries station at Wytheville, Virginia, what was stated to be a consignment of rainbow trout. They were fingerlings and as they grew up, apparently two species developed. They were so different that any person standing on the edge of a pond could distinguish them. In one case the fish were much darker on the head and back, with a square tail—just as square as the brook trout—and in the other case the fish were much lighter, and with a decidedly forked tail, with other marks such as you have mentioned as belonging to the steelhead. The former were supposed to be steelheads and the latter rainbows. Both fish spawn at the same time, from the latter part of November to about the first of January, the water temperature being about 54 degrees F. in the ponds.

As regards the spawning period of the rainbow trout, I have this experience to relate. Early in the 70's there was received from the United States Commission a shipment of rainbow trout eggs, presumably from the west. They were hatched and appeared to be all alike. They were divided into two lots, one being sent to the Allentown station and the other to the Corry station. The water at the Allentown station was 52 degrees F. and at Corry 48 degrees F. The Corry fish when they reached maturity spawned in April, towards May. The fish from the same lot of eggs spawned at Allentown about the first of November.

MR. TITCOMB: What is your experience with the rainbow in Pennsylvania waters? We have sent carloads of rainbow trout there, in response to the great demand for them, and then all of a sudden the anglers said they did not want rainbows.

MR. MEEHAN: I have made inquiries everywhere but I cannot find a single stream in Pennsylvania where the rainbow or steelhead seems to thrive naturally, or at least to any great extent. There were one or two places where it appeared as though they were spawning naturally in a stream, but investigation showed that people who were getting rainbow trout for certain other streams, instead of carrying them to those streams, were planting them in the stream in which we were finding evidently three-year-old rainbows, two-year-old rainbows, yearling rainbows and fingerlings. I do not know of a stream in Pennsylvania where rainbows seem to be spawning naturally.

At the Allentown station we also found a very large percentage of unfertile fish every year. Today at the Bellefonte station at least 50 per cent. of the males and females are barren. At the Corry hatchery the percentage of fertile males and females is better, but even there many of the fish are unfertile. There has been such a large percentage of unfertile rainbows at the Wayne station that their propagation has been discontinued at that place.

Going back to the fish at the Bellefonte station, the square-tailed fish that we have supposed to be steelheads, though much the same as the other fish which I presumed to be rainbows, the question is, what are they if not steelheads?

I have a mounted specimen of a fish caught in an Erie County stream, said to be a steelhead trout, that weighs ten pounds. The fish had a square tail and other alleged marks of a steelhead. There was also another specimen of the same species taken from Lake Giles in Pike County, but it was destroyed by fire last year.

MR. FRANK N. CLARK: Some of the members seem to consider it quite remarkable that rainbows should spawn in December and also in April. Why is it any more so with rainbow trout than with brook trout? There is even wider range in the case of the latter, for they spawn from September to February. We have a record at Northville of taking brook trout eggs from the same pond in October and February. Then what is there remarkable about the spawning season of the rainbow? We do not know but that it may be the same in their native waters. I do not think anyone will raise the question but what it might occur there; and certainly in transferring them here to new waters, we should not consider it unusual when the same thing occurs with our native brook trout; It is a matter of record that at Northville years ago I personally took brook trout eggs in February. I saw eggs taken from the same pond again in October.

MR. MEEHAN: That is all right, but I do not think it is a parallel case. It is true that at some of our hatcheries brook trout begin spawning the last week in September, as at Corry, and generally they have finished by the first of December. The spawning is continuous but if we transfer the fish to another station it occurs the first or second week in October, according to the temperature of the water. If we transfer rainbows from one station to another the spawning season is either mainly in the fall or spring.

MR. SEYMOUR BOWER: In regard to the rainbow and steelhead being one species, I would say that recently I had the honor of dining with Dr. Jordan in Detroit, when he stated that he had now made up his mind that they were one and the same species. He said that he had seen perfect young rainbows hatched from what were said to be steelhead trout, and perfect young steelheads from what were claimed to be rainbow trout. Now while he did not state that these results were what made him think they were one and the same species, I inferred that this had a great deal of weight with him. He illustrated his position by a little incident. Those of you who have met Dr. Jordan know that he always has a fund of dry humor on tap for every occasion. A few years ago he had a friendly argument or controversy with a certain gentleman and said to him: "What is your authority?" "Why," was the reply, "Appelton's Encyclopedia, and I consider that very good authority." "Well," said the doctor, "I wrote that article myself, and I have changed my mind since." (Laughter.)

PRESIDENT: The rainbow trout in New York is, I think, coming more into favor than formerly. The demand for them is greater now than it was five years ago. We find that it does best in lakes from which it can enter tributary streams suitable for spawning purposes. For instance, Keuka Lake is a great rainbow lake at present, and from there they run up to Pleasant Valley stream which flows through our hatchery grounds. We take them in large numbers at the mouth of the stream, usually in March or April, and sometimes we take good eggs in December, apparently from the same kind of fish.

There are a great many lakes in New York which are suitable for rainbow trout, and they cannot get away except to run up the tributary streams for spawning, which they do. We are told also that rainbows stay in some streams from which they could escape, but instead they remain and multiply and furnish good fishing. For example, rainbow trout were introduced in Great River, Long Island, by the Southside Sportsmen's Club

about as early as they were anywhere in the State of New York. The club tired of them and concluded to let them go to sea. They went, but kept coming back to the river during spawning season, even trying to spawn in the waters of the club, and now the members would not part with the rainbows for anything, for they have as fine rainbow trout fishing as could be desired.

MR. TITCOMB: Why should you choose rainbows in a certain lake in preference to the native trout? Is there something about the lake which makes it better fitted for the rainbow than for the native trout?

PRESIDENT: Keuka Lake is a great body of water for lake trout. It is not suitable for brook trout so far as I know.

MR. TITCOMB: You would not introduce rainbows in a lake where brook trout thrive?

PRESIDENT: I don't know. It has been done very successfully in some waters, in Adirondack lakes, for instance. Mr. Woodruff also has them in his private lake and he is very fond of them. He continues to introduce them along with the brook trout, raising them both in his hatchery.

DR. EVERMANN: It seems to me that there is some danger in reaching or drawing any positive conclusions from an observation on domestic rainbows and steelheads. I presume it is true that the domesticated rainbows in the various fish hatcheries of the country, or that have been planted in various streams in the east, have come from several sources; some are the descendants of fish that first came from the San Francisco region, the home of the original rainbow, while others are from up the Sacramento. The latter may have been either the Shasta or the Stonei species or sub-species. So it is quite probable that the domesticated rainbows of the country have come from at least three different sources, and are the descendants of at least three different species or sub-species. Now, the same is probably true of the steelheads. Steelhead eggs have been brought from the Columbia River and from Baker Lake in Washington, and perhaps other places. Whether or not it is the same steelhead throughout all of the west coast is still a question.

I quite agree with Dr. Bean that if you should look at the rainbows of Alaska and the steelheads of Alaska and had your eyes half open, you would be loath to admit that they were one and the same species; so that it goes back to the statement made a few moments ago regarding the line along which Dr. Gilbert is working. He does not propose to base his conclusion, or his only conclusion, upon an examination and comparison of the rainbows and steelheads of California in the Santa Cruz region, but will consider those of the Sacramento and farther up the coast. I think he is in the Puget Sound region now, and will eventually go to Alaska, which is one of the best fields for his work because there the strains are still pure. Fish culture has not come in and upset things as it almost always does. It mixes things inextricably, so that in many regions problems of geographic distribution will remain forever unsolved. For illustration, consider the Panama Canal. If a careful biological survey of the waters of the two coasts and of the fresh waters of the isthmus is not made before the canal is completed and water runs through, many important problems which ought to be solved will forever remain unsolved.

MR. TITCOMB: It is true that we get our rainbows from two or three sources in California, and our steelheads from California, Oregon, Washington and the Puget Sound region. Of course they have become more or less mixed. Some have gone to Colorado waters, where eggs have since been taken and shipped east. The stock at the Wytchville station was obtained from different sources, but a part of it came from Colorado.

While we are on the subject of acclimatized species, I want to announce that anglers are having great sport at Sunapee Lake, New Hampshire, with the chinook salmon which has been introduced there from the Pacific coast along with the silver salmon. This year I received a letter from Mr. W. M. Kiel, of the Tuxedo hatchery in New York, saying that many chinook salmon weighing from four to five pounds and up to eight pounds are being caught. It is rather difficult to get hold of specimens because people catch and eat them without letting us know about it until afterwards. We are anxious to learn whether this Pacific coast fish will adapt itself to our New England lakes and breed there. Certainly it is furnishing great sport, and the New Hampshire Fish Commission is very enthusiastic over it.

PRESIDENT: What species did you say?

MR. TITCOMB: Both the silver and the chinook salmon, but only the chinook has so far been taken and officially identified. I think the silver salmon may also be found, as we planted more silvers than chinooks.

PRESIDENT: Do you recall the experiments of the Trocadero Aquarium in Paris?

MR. TITCOMB: Yes. Chinook salmon actually breed there.

PRESIDENT: I saw them.

MR. TITCOMB: Yes, and I saw their progeny.

MR. MEEHAN: Mr. Titcomb's reference to the silver and chinook salmon reminds me of our experiment with silver salmon. Two years ago we received 100,000 eggs from the

Bureau of Fisheries and sent them to the Wayne hatchery. I retained 10,000 fry and endeavored to rear them. The rest have been planted in certain streams in Wayne County tributary to the Lackawaxen and Delaware Rivers. Several small specimens of silver salmon were caught by fly fishing before the close of the season. The fish were four or five inches long and were brought to the hatchery for identification. Meanwhile the 10,000 that we retained grew rapidly, took food and remained perfectly healthy. They are now about a year and a half old and will run from six to nine inches in length. They rise very freely to the flies that skim the water and take food eagerly and show every sign of being a fish that will thrive in confinement in fresh water. We may have to put fences around the pond to keep them from leaping out. They will jump two or three feet if anything is thrown to them, taking food as eagerly as brook trout. It looks as though the silver salmon is a fish that will thrive in our lakes. We feel very much encouraged in this work.

PRESIDENT: Going back to the origin of the rainbow trout in New York, I know from the records that the first eggs received at Caledonia came from J. B. Campbell, who was in the Shasta region. He was at one time an assistant of Mr. Livingston Stone on the McCloud River. That was the source of the first eggs hatched in New York and others came from the same region a little later. Since that time New York has received rainbows from the United States Bureau of Fisheries. But the original stock of fish, it appeared to me, showed at least two subspecies. Mr. Frank N. Clark was on the McCloud River in my company in 1876, I think it was. At that time the rainbow trout were very plentiful in the river, and it seemed to me at least—I don't know whether Mr. Clark will remember it or not—that there were two kinds of rainbows in the McCloud River, the common stubby rainbow and a slimmer fish. I presume one was a subspecies and the other was a true *irideus*.

MR. FRANK N. CLARK: It is true that in 1876 Dr. Bean and I made a trip to the Sacramento River with shad, then went on up to the McCloud River. In 1877 I went to the coast, Mr. Quinn accompanying me. In 1878 I made the same trip with shad again, and in going to San Francisco I arranged with the proprietor of a private hatchery for a supply of yearling rainbow trout, which we brought back to Northville. The first rainbow eggs ever taken in Michigan were from those fish, but they were not the first rainbow trout planted in Michigan. Previous to 1876 we had eggs; just where we got them I don't remember; but they produced the fry that Mr. Bower mentioned as being the first rainbows planted in the Au Sable River. The next lot of fry came from the yearlings that we brought across from the coast in 1878. We started with 125 yearlings from four to twelve inches long and reached Northville with some of the larger fish. We had a small take of eggs from those fish and the fry were planted in the Au Sable River by Mr. Fitzhugh.

TWENTIETH BIENNIAL REPORT

OF THE

STATE BOARD

OF

FISH COMMISSIONERS

FOR YEARS 1911 AND 1912, INCLUDING TABLES OF FISH
PLANTS FOR LAST HALF OF 1910



BY AUTHORITY

LANSING, MICHIGAN
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1913

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Office of the Board, 607 Stevens Building, Detroit.

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TWENTIETH BIENNIAL REPORT OF THE MICHIGAN STATE BOARD OF FISH COMMISSIONERS.

To His Excellency, the Governor:

The State Board of Fish Commissioners herewith submits its twentieth biennial report, covering the years 1911 and 1912, also including a separate list of fish plants for the last half of 1910, not concluded in time for our nineteenth report. Repairs under way in the latter part of 1910 and completed the following year are included in the regular biennial period.

REPAIRS AND IMPROVEMENTS.

MILL CREEK STATION.

Installed one new jar battery for hatching perch eggs, capacity, 56 jars.

Two fry tanks decayed beyond repair were replaced with new ones, 2x4x12 feet.

Laid a 5 inch pipe between Island pond and a new pond partly completed; also 200 feet of 12 inch sewer from pond No. 7 to creek, and 120 feet of 12 inch sewer along driveway to prevent washing it out.

Built 8x10 concrete dock in pond No. 1, for convenience in filling and washing cans, etc.

An efficient and economical plan of removing mud and sediment from ponds was put into practice. The equipment consists of a centrifugal pump and a 4-horse power gasoline engine, suitably framed and firmly mounted on heavy skids. Being permanently lined up and adjusted and attached to runners, the outfit is easily transferred from one point to another, ready for immediate action.

The following repairs and improvements were made to the barn: new concrete foundation, new sills, concrete floor except in the stable, concrete approaches to outside doors, harness room, windows in front of each stall, and two coats of paint on the outside.

The wagon shed and ice house were painted, also all boats, baggage trucks, flag-poles and bridges.

Built a small oil house and installed two 60 gallon tanks, one each for oil and gasoline.

A gasoline lighting plant has been installed in the residence.

The approaches to the wagon bridge were temporarily repaired, but they will have to be renewed within 2 or 3 years. Concrete is recommended. The foot bridge across the main creek, which had become dangerously weak, was made safe by stringing 7 inch "I" beam girders underneath.

Rebuilt and enlarged spring basin at head of springs, putting in concrete dam, side walls and bottom, with a 5 inch flushing pipe.

Completed pond No. 9 and graded around same, also drove the sheet piling and started the banks for a new pond, same to be finished when funds are available.

HARRIETTA STATION.

The spring water canal south of highway was deepened and gravelled from its head to the hatchery. A concrete sluiceway or side outlet for flushing same was also put in near the hatchery.

Most of the excavation has been made for extending the present spring water canal to a point near the northwestern part of the grounds, as a feeder for proposed new ponds north of the highway.

As a part of the construction of a large pond immediately north of the highway bridge, a concrete dam was built across the bed of Slagle Creek. Connecting with this dam and extending to the pond above, a dam of earth and sheet piling was put in, to turn the waste from this pond into the valley ponds to the north.

The outlet flume of the large or main pond, of wood construction, gave way and was replaced with concrete.

About 400 feet of concrete gully was laid along the highway hill near the hatchery, to divert flood water that formerly cut the banks and carried sand and mud into nearby ponds.

SOO STATION.

In 1894 this board considered itself fortunate in securing federal authority for the free use of an island in the Soo rapids for fish hatchery purposes. A hatchery was accordingly built thereon and fully equipped, and the development of a pond system was begun a year later. At that time no one dreamed that within a generation we would be driven out by the necessities of lake commerce. However a vast area of agricultural and mineral resources in the northwest was rapidly developing, and soon the wealth of an empire was crowding through the narrow throat at the Soo. The demands of a water commerce that marvels the world were imperative. We were thus forced to give way and either abandon our property or move it.

The latter course was decided on. Obviously the ponds must be abandoned but the buildings and equipment could be moved. The government very generously provided another location with ample dock frontage, at the northeast corner of the "Fort Brady" reservation. For hatching purposes and the delivery of young fish the new location is superior to the old, being easily accessible by both land and water.

In August, 1911, the hatchery was moved to the government wharf to the eastward. A few days later it was transferred on large scows loaned by the government to Fort Brady Pier, and was lowered to its new foundation Sept. 25th. All necessary repairs and changes incident to the new location were made, including connection with the city mains, drainage to the river, rebuilding chimneys, providing sub-basement for boiler and heating plant, repairs and changes in living and storage rooms in second story, changing driveway in front, etc.

In 1912 the hatchery was painted 2 coats outside, and an outside stairway was provided for the second story.

Installed four new aquaria and two new double Clark hatching troughs.

DRAYTON PLAINS STATION.

Completed two new ponds, including water connections, intakes and outlets. One pond is 20 by 96 feet, 2 feet deep; the other is 45 by 165 and 5½ feet deep in the kettle. Deepened pond No. 7, forming an island in the center, thus disposing of the dirt economically and making the pond more convenient for seining.

Built new concrete intake flumes for ponds 1 and 10, also connecting ponds 2 and 3. Made necessary repairs to the main dam, including new posts, cap and splashboards, with 20 inch walk and guard rail for convenience and safety in cleaning the racks.

Bought new gasoline engine, pump and hose connections, for pumping mud and silt from ponds, also for use in construction work and sprinkling lawns. This equipment is mainly for the same purpose as a similar outfit noted in connection with improvements at the Mill Creek station.

Other repairs and improvements were made and new equipment added as follows: One new flat-bottom boat, one new fyke net, two new fry seines, new pump and sink in main building, repaired pond banks damaged by muskrats, cleaned muck from ponds, graded and filled holes in the natural bottom of pond No. 2, provided a number of new wire screens, painted and repaired boats, cans and small equipment and enlarged the office room in main building.

DETROIT STATION.

As stated in our last report, this hatchery has been kept in excellent repair by the U. S. Bureau of Fisheries, in accordance with the terms of its lease from this board. During the past summer the building and permanent equipment was painted two coats. Since the Bureau's occupancy the floors have been replaced with concrete; practically all of the tank and jar equipment has likewise been renewed throughout, except the north jar battery, which is to be rebuilt the coming season. The option on the Bureau's lease expires in 1915.

PARIS STATION.

Built concrete foundation, in food house, for gas engine and pump recently transferred from the Soo hatchery, and laid and connected up the necessary piping for supplying the main water tank from the nearest pond; also provided equipment for running the food grinder by power. This little power plant, about 5-horse, has proved efficient and economical quite beyond expectations.

The proposed new pond in the gorge of Buckhorn Creek, referred to in our last report, has been completed. It has an area of about two acres and a maximum depth of 16 feet, created by running a concrete dam across a narrow opening in the converging banks of a natural gorge or basin, supported by a heavy railroad embankment immediately below. The basin was first cleared of timber and undergrowth, and drainage was provided by a few small ditches leading to the natural creek channel, but practically no excavation was required for the pond itself. In proportion to area and volume this pond is by far the least

expensive ever developed at this station, but it has not been in service long enough to demonstrate its relative value as compared with small ponds of strictly artificial construction.

Quite extensive repairs, mostly of an emergency nature, were made to the main hatchery. The old wood floor, joists and sills were decayed beyond further patching up. New sills and a floor were put in, all of concrete, with gutters of same material underneath. All decayed parts where the studding, siding and wainscoting joins the sills were replaced with sound material. A concrete gutter was laid around the hatchery, also a retaining wall along the bank on the west side. The receiving or screen tanks on the main floor were rotted beyond repair. Two new ones were made, of concrete, each 12 feet long by 3 wide and 3 deep; bottom 8 inches thick and side walls 4 inches. Replaced ten worn-out hatching troughs with new ones and repaired a number of others, also re-wired 85 fish trays and repaired the others. Re-shingled the roof with galvanized metal shingles. Painted inside of hatchery, 3 coats on ceiling and 2 on side walls, tanks, troughs and ceiling and side walls of office. Enlarged office and put in an outside entrance at north end, with storm door and concrete platform and steps, also re-floored the office with maple and built a new chimney. Installed a new gasoline lighting plant for hatchery and office. A concrete platform was placed along the east side of the hatchery, where cans of fish and empties are transferred to and from the wagons. Removed the old fireplace, which has not been used in years, and substituted 4 lockers for clothing, tools and small equipment. Built 6 by 20 coal bin on east side of hatchery.

Improvements to the overseer's residence include painting of rooms on first floor; an 8 by 10 bathroom and equipment, with cesspool drainage and connection with the water tank across the highway; new foundation for porch on south side; gasoline lighting plant; new floor in living room, and a concrete sidewalk from the south porch to the highway, including terrace steps.

Built new ice house near the car house, 12 by 16 and 10 feet high, on concrete foundation; also built a 9 by 24 coal house nearby and close to a sidetrack, for convenient filling direct from car. Concrete foundation and floors. Put a concrete foundation under the car house, made necessary repairs to the latter and built a concrete loading platform along the east side, 4 feet wide by 20 in length. Painted ice houses 2 coats and car house 3 coats.

The old approach to the car house in its present location led across side tracks that often were blocked by trains at loading time. A driveway avoiding the side tracks was necessary to insure getting our car loaded and away on its schedule. A new road to the car house was therefore opened up through a grove east of the railroad right-of-way. Considerable labor and team work was required in the way of gravelling and drainage, but mainly this was taken care of at odd times.

The distributing car "Fontinalis" is out of commission and dismantled. Its servicable equipment is stored at Paris, the body has been moved over into the grove and the trucks are off the track near the car house. A baggage car was rented and used in its place the past season.

The old storage shed near the ponds west of the highway was moved

a few feet and placed on a foundation and floor of concrete, close to and facing the driveway, for convenience in loading and unloading tools and materials. The roof was raised 6 feet, adding sufficient room for a second story paint and work shop. Re-shingled the roof and painted the building two coats.

Built 5 by 10 oil house south of the waste canal, for safe and convenient storage and use of oil, gasoline, coal tar, etc. Concrete foundation and concrete platform for tanks and barrels. Also moved a small out-building from the barnyard to the terrace west of highway and converted it into a hose house, with concrete foundation and floor.

The foundation of the water tank having rotted and settled unevenly, same was raised and levelled, and concrete foot piers provided for the uprights. The housing underneath the tank was ceiled inside.

Re-shingled the old hatchery with galvanized metal shingles. Enlarged the doorway and connection between this building and the food house, also the doorway between hatching room and work shop.

Minor repairs and improvements include painting and repairs to roof of 3 of the smaller buildings, repairs to employes' residence on Buckhorn Creek, re-shingling wing of barn, laying 100 feet of 6 inch tile drain from small field south of hatchery, painting 600 cans two coats, repairs to and painting all pond shades, cutting 500 cedar posts from hatchery lands, and repairs to screens, nets, wagons, tools and small equipment.

OUTPUT.

During the period covered by this report there was a substantial and satisfactory increase in the output of brook trout, rainbow trout, large mouth bass, small mouth bass and perch, but no wall-eyed pike were hatched the past season. For a number of years the Bureau of Fisheries has turned over a supply of pike eggs for hatching and distribution to inland waters of this state, but weather conditions were so unfavorable during the spawning season last spring that the work of collecting the eggs was practically a failure.

Our present hatching and tank equipment will enable us to still further increase production in the form of fry, more especially of perch or any species whose eggs may be developed in jars, but a marked increase in the output of young fish of a more advanced stage and of fingerling sizes is impossible without a corresponding increase in pond and rearing facilities.

RECOMMENDATIONS.

The main items in the way of improvements and increased facilities recommended for the next two years are set forth in the following letter which is submitted in full as a part of our report:

November 4th, 1912.

To His Excellency, The Governor, Executive Office, Lansing, Mich:

Dear Sir:—We are pleased to reply herewith to your recent inquiry as to the needs of this board, also to enclose estimates for the biennial period beginning June 30th, 1913.

Since 1898, when the propagation of commercial fish for the state's border waters was turned over to the United States Bureau of Fisheries, the work of this board has been confined to fishery interests of lakes and streams lying wholly within the state. As Michigan leads every other state in the number and combined area of its inland waters, the importance as well as magnitude of the work assigned to this board can hardly be overestimated.

A map of the state shows that seventy-seven of its eighty-three counties are dotted with lakes or threaded with streams, or both. As this multitude of water courses and basins cannot be displaced to any extent, in the sense that forests give way to agriculture, the state's title to these waters, or control thereof, is perhaps the most valuable and permanent public asset that remains from a vast array of vanished and vanishing natural resources. The state therefore is or should be deeply concerned in so conserving and utilizing its public waters as to insure and maintain the fullest measure of their present and potential value.

The use of this important feature of the public domain for power purposes and to meet the necessities of growing urban centers need not be detrimental to fishing interests. Indeed, if properly safeguarded as to purity, the creation of reserve or artificial storage areas tends rather to enlarge than to diminish fishery resources and fish-cultural opportunities.

Although specially interested in water life and in the multiplication thereof as a factor of great economic importance, this board realizes that water areas have other public interests to serve. We do not claim that fishery rights take precedence over all other water values, but we do insist that it should be a fixed policy of the state to surrender no part of its jurisdiction over present water holdings, to resist to the utmost all efforts to weaken its control thereof, to go to the limit of its constitutional powers in the prevention of impurities, and to render substantial aid in the protection and propagation of the more valuable forms of water life.

Fish culture as applied to the production of the young in suitable devices, or in protected or controlled ponds, has ceased to be an experiment. Under a given set of conditions hatching percentages may be forecast with a reasonable degree of certainty. Of course a high or fixed standard in this respect cannot prevent wide seasonal variations in the hatchery output of commercial fish, as this depends on the number of breeders netted from spawning grounds; but the situation is quite different and the element of uncertainty to a great extent is removed when adult stocks are held in controlled ponds solely for breeding purposes. Production is then fixed by and proportionate to the volume and character of the water supply, in connection with the area of protected ponds properly constructed as to size, depth, inflow and drainage, and this in turn resolves itself largely into a matter of dollars and cents.

For many years this board has realized that its producing facilities are strikingly disproportionate to the requirements, in fact are but little more than a "drop in the bucket." We have been and still are working on altogether too small a scale. Fish culture multiplies hatching re-

sults in a wonderful way, but it has its limitations, and however efficiently and economically managed, the few acres of ponds under our control are utterly inadequate to cope with the situation.

The demand for young fish is so far beyond our ability to supply them that we are forced to limit production to the kinds of fish best adapted to our present facilities, almost to the exclusion of other species of equal value and importance.

Our scientific work is neglected for want of funds, likewise educational work for the benefit of those who are favorably situated for the development and profitable cultivation of small water farms.

A larger percentage of our output should be advanced beyond the early hatching stage before shipping, but this rapidly doubles and re-doubles the cost.

After twenty-five years of hard service our distributing car is worn out beyond repair, condemned and permanently out of commission. Within the past year the Wisconsin Fish Commission put into service a new car that cost \$13,500. We are asking for only \$6,000 for this item, believing that this sum is sufficient to provide a plain but staunch and servicable car for all practical uses.

The hatchery building at Mill Creek is in bad repair and wholly inadequate for present needs. It is a small and cheap affair, put up years ago as a makeshift when the bass work was started on an experimental basis.

We are in urgent need of a new hatchery and rearing station in and for the upper peninsula, mainly for the production of lake fish that cannot be propagated at the Soo hatchery. Having no pond-culture plant above the straits, we find it practically impossible to deliver a fair proportion of our output to the many fine lakes of that section. The distance is too great for safe and economical transportation, more particularly of fingerling sizes. Hundreds of applications for bass and other varieties suitable for these waters have accumulated in our files, and the demand is continually increasing and growing more insistent.

Our estimates for improvements and developments at hatcheries already established contemplate an expansion of producing facilities all along the line. We also plan to largely increase the output of perch and to make a good start in turning out bluegills and other native varieties. The propagation of calico bass, white bass and catfish should also be taken up. Though native to Michigan and well adapted to most of our lakes and larger streams, these three kinds are found in but comparatively few public waters. Their range should be greatly extended. All of the natives referred to are excellent food fish, and with the exception perhaps of catfish all are universally popular with the great majority of anglers. The natural stock continues to decrease as population increases, particularly in waters within convenient distance of cities, villages and summer resorts. The growing fashion or custom among all classes of seeking the shores of lakes and streams for the summer outing, as shown by a continual rise in water frontage values, also tends inevitably to make angling more popular and widespread and to draw more and more on fishery resources. Already the natural supply in many waters is greatly depleted. Even such prolific breeders as

perch may be cleaned out of restricted waters by legitimate methods. Only by occasional contributions from hatcheries may the overdraft on natural or normal production be made up and good fishing established on a permanent basis.

In the character and area of its public waters Michigan far outclasses the state of Kansas, but Kansas now outclasses Michigan, not in fish-cultural skill but in waking up to a realization of the value and importance of fish culture as a public enterprise. Even more notable and encouraging is its appreciation of the proper balance or proportion between fish-cultural necessities and fish-cultural facilities. With water resources far inferior to those of Michigan, Kansas has recently completed a large pond-culture plant that represents an outlay of \$150,000, a sum 50% greater than the entire inventory value of Michigan's investment in fish-culture plants and equipment, 102% in excess of our total appropriation for the current biennial term and 27% more than the total of our estimates for the next two years. In comparison with Kansas, Wisconsin, New York, Pennsylvania, Massachusetts and perhaps other states, our troubles are fiscal rather than fish-cultural.

Making every effort to maintain and increase hatchery production, we have been unable for many years to increase salaries of experienced and deserving employes, which in view of the times is equivalent to a marked shrinkage in their compensation. Faithful and efficient service for the state is fairly entitled to the same recognition that obtains in private business. We hope that our next appropriation, or a revenue from license fees that in justice to all should be exacted from non-resident anglers, will put us in a position to show appreciation of merited service in behalf of state interests.

As the value of our work and the conservation of water resources depend in no small degree on a careful observance of protective laws, we cordially recommend a careful consideration of the needs of the warden service. This department should be liberally treated by the state and earnestly supported by every true conservationist. The protection of undersized fish and of the breeders while guarding their young, and the prevention of water pollution and of wholesale destruction by the use of nets and explosives in restricted waters, are of special and vital import to the maintenance of water life.

Very respectfully,
State Board of Fish Commissioners,
By SEYMOUR BOWER, Supt.

ESTIMATES.

A careful consideration of the estimates for the current and special work of the next two years is invited. With few exceptions appropriation bills from state boards and institutions go before the legislature under suspicion of being loaded. Requests from these sources are generally supposed to be stuffed and padded to allow for shrinkage and pruning and paring down on their way through the various committees. Our estimates are not on this basis nor in this class. We need every

dollar asked for and could use much more to excellent advantage. The members of this board serve without financial recompense and are opposed to grinding personal and political axes at state expense. We believe that our duty with respect to appropriations ends when we have presented our needs fairly and on a business basis. We have no fault to find, realizing that the committees and chief executive are held responsible for adjusting the state's outgo to its income; nevertheless, however careful and conscientious members may be, in the stress and rush of a legislative grind it is not to be expected that they can grasp and understand institutional needs as do the officials in charge.

LABOR.

The labor situation is growing to be more and more of a problem and we shall soon be forced to adopt a higher scale of wages. The general run of fish commission service is of necessity disagreeable and onerous, particularly during the rush of the season. At times the work is quite out of the ordinary, of an emergency nature that knows no fixed hours. Whether in the house or on the road young fish cannot be neglected at any stage. Men must be hired with a definite understanding that they are subject to duty at any time and for long periods of continuous service. Under present conditions capable and trustworthy men are not attracted to seasonal jobs of this kind that offer little opportunity for promotion to a permanent place with a living income. The natural result is that we are obliged to depend more and more on inexperienced and chance help when experienced help is needed the worst. During the past season we paid as high as \$2.50 per day for inexperienced labor and the supply was short at that, more particularly at the hatcheries near Grand Rapids and Detroit. With the exception of the superintendents we now have only 3 regular hatchery employes that have been with us more than 4 years.

DOGFISH.

Though widely distributed throughout the United States and quite abundant in this state, the dogfish is everywhere treated as an outcast and hence is seldom used for food. It is more than probable that a deep-seated prejudice rather than intrinsic unfitness is responsible for the fact that this species has no rank or standing as a food fish. Many investigators claim that all fishes and amphibians are not only wholesome but palatable if properly prepared. In this country, and not more than a generation ago, such fish as sheepshead, suckers, and lawyers or eel pout were considered nearly worthless and often were unsalable at any price; today they are a standard food fish and bring fair prices. Fifty years ago the highly esteemed sturgeon of today was on a par with dogfish, useful only as a fertilizer. Not much longer ago frogs and turtles were not considered edible; they rate now as a delicacy and command fancy prices. The lowly and long-despised dogfish may never be classed as a luxury, but there is no good reason to doubt that within a few years it will be treated on its merits and take its proper place among food fish.

We would not convey the meaning that dogfish are likely to rise above the rank and file of the lower grades nor that they and their kind should be encouraged or favored. Obviously the food value of all waters would be greatly increased if the more destructive species of this type could be rooted out and replaced with higher grades. The point we would make is that practically all fish commonly regarded as coarse or worthless are nutritious and fit for the table, but that shunning them as an article of food tends to conserve and protect rather than to drive out or displace. If used at their true edible value they at least would enjoy no special advantage over other food fish and to some extent would soon give way to the better grades that are or should be propagated and protected.

We publish elsewhere in this report a sound and practical paper on this subject, applying also to other discredited forms of water life, by the Hon. George W. Miles, Commissioner of Fisheries and Game for the State of Indiana. This paper was received with more than ordinary consideration and favorable comment at the last annual meeting of the American Fisheries Society.

RAINBOW TROUT.

With the exception perhaps of German carp no fish not native to Michigan have thrived and spread as have rainbow trout since they were first brought here from the far west about thirty years ago. Attaining a weight of 10 to 20 pounds and upwards, they have gradually worked up to a commanding position in some streams and parts of others. The natural habitat of these mammoth trout is mainly the lower and warmer waters that do not attract brook trout, but in early spring they head upstream and soon appear in droves on spawning shoals near or toward the headwaters.

As rainbow trout spawn in the spring and brook trout in the fall, their mating seasons do not conflict and there is no strife for the possession of breeding grounds. Recent investigations also show that the breeders take little or no food of any kind during the spring run, except perhaps while drifting back to their usual feeding range. True to salmon nature and instinct, their breeding period is mainly a season of fasting. Nevertheless the increasing number of big rainbows that continue to show up on spawning grounds is causing much alarm in some quarters. It is claimed that they prey on brook trout and take possession of their grounds, driving the latter upstream; and there is a growing sentiment in favor of checking this rainbow invasion by attacking and fighting the spring run with spears and nets. Doubtless the destruction alleged during the mating season is greatly exaggerated. On the other hand the smaller sizes and the young that mingle freely with brook trout the year round compete for the general food supply and thus make some inroads.

Viewing the situation as a whole and without bias or prejudice, it is impossible to determine to what extent rainbows forcibly displace brook trout. The natural home of brook trout is in waters that are cool. Their range is controlled by temperature. They retreat without contest in the face of uncongenial temperatures, retiring voluntarily from

ranges not sufficiently cooled by springs or the combined influence of springs and thickets and aquatic growth. As forests and swamps and lowlands give way to agriculture, so do brook trout give way and surrender territory to species less particular as to temperature. It is a common saying that brook trout drove out grayling and in turn are being driven out by rainbows. No doubt brook trout are responsible in some degree as charged, but the fact is that the only stream in Michigan where grayling are now found in considerable numbers is also the home of brook trout and has been for an indefinite period. Native trout also inhabit some of the grayling waters of Montana without gaining undue ascendancy.

Fortunately for the many who regard brook trout as the peer of all food and game fish, Michigan is rich in spring areas that insure their perpetuation and a good catch in the middle and upper waters of hundreds of streams where they are now established. Considering their nature however we cannot hope in the face of changed and changing conditions to maintain them indefinitely in all of their old haunts, whether driven back by a more powerful rival or not. Destined as they are to fall back to some extent anyway, what species is so well equipped to take their place as the rainbow, a true salmon in food excellence and unexcelled gameness?

If rainbows are overreaching or advancing unduly they should be checked, but an open season for spearing or netting in trout streams, however well intended, seems to be a poor way of protecting brook trout. Many believe that a much safer and a more effective plan of holding the rainbows within proper bounds is to extend the open season for hook and line fishing to October 15th or perhaps November 1st, for rainbow waters only. They spawn in the spring and hence are not at their best until August and during the fall. On the other hand brook trout spawn in the fall and grow more and more indifferent to lure of every kind as the breeding season advances. It is believed by many who have studied the situation from various angles that this plan would reduce the rainbow surplus and at the same time work less harm to brook trout than would result from the use of spears and nets in the spring; in short that it is the most rational and effective way yet proposed of establishing and maintaining a proper balance between these species.

PERCH.

The perch ranks among the best of freshwater food fish and is a universal favorite. Indeed, if table excellence and all-round merit were issues that could be put to the test of a popular vote, we believe that perch would win decisively. As a game fish it would hardly receive the support of expert anglers who have struggled and fought with salmon and muscullonge, nor as a food delicacy would it be given preference by those who have cultivated a taste for caviare—raw fish roe preserved or pickled in salt. Nevertheless everyone likes "fried perch" and no one tires of them. Their flesh is firm and sweet but not rich with oil nor strong with a "fishy" flavor that soon cloys.

Perch are popular for other reasons. They "bite" freely the year round,

through the ice or in open waters, and inexpensive tackle and lure are usually as effective as the most costly outfit. The small boy and the novice may and generally do go home with as big a string of perch as the veteran or expert. They are pre-eminently the fish of the masses.

Perhaps the most important point in favor of perch is the fact that no other fish worthy of its class are so universally adapted to the waters of this state. With the exception of the colder trout waters, they thrive everywhere and are or may be established in every lake and pond and larger river throughout the state.

Thus their wide distribution makes them accessible to thousands who cannot afford to travel very far for a day's fishing; and the high price of market fish and foodstuffs generally impels this class to draw more and more on the available supply of free food within convenient and profitable reach. Within 25 years the number of those who fish mainly for pleasure has increased wonderfully, far out of proportion to the increase in population. There is no doubt about it. The heavy summer outpouring from cities and towns does not, as formerly, center almost wholly at a few large and fashionable resorts. The campers and cottagers, the boarders and resorters are more and more turning to the shores of lakes and streams everywhere—and they all fish. In effect motoring is bringing many of the best fishing waters to the very door of increasing thousands. A comparison of the angling equipment of a generation or two ago with that of today also tells the story. At that time the fishing outfit on sale in country stores and in some cities consisted of a few boxes of hooks, a small assortment of lines and sinkers and a bundle of cane poles. Today we see everywhere, in hardware stores, drug stores, general stores, department stores and special stores for sportsmen's merchandise, elaborate window and showcase displays of angling goods in great variety, including many ingenious forms of barbed monstrosities that do not give a fish even a fighting chance. The inevitable result of all this is a heavy overdraft on the better class of fish. Natural production is unequal to the increasing demands upon it. Either fewer fish must be taken out or more young fish put in. Is it any wonder that even the hardy perch is giving way and growing more scarce, particularly near the cities and throughout the populous sections of the lower peninsula?

Quite recently a strong and growing demand for young perch has sprung up and is certain to increase as the natural supply continues to run down. We plan to hatch them in larger numbers, to the extent that our means and facilities will permit. Necessarily this work has been carried on in a limited way, but with excellent results, both in the hatching of eggs taken at commercial fisheries and from a small breeding stock held in the Mill Creek ponds. The advancement of the young to fingerling sizes was equally successful at Mill Creek, though but little room could be spared for this purpose without cutting down the production of bass. Until more pond room is provided the young perch must continue to be shipped within a few days after hatching.

In view of the number and vast acreage of waters throughout the state that are well suited to the production of perch, it is certain that the annual harvest may be increased to enormous proportions, on a basis of

food value alone. We believe that the state could make no more profitable outlay in the way of developing and utilizing its natural resources than to install and operate a large hatching plant specially equipped for perch alone. No public investment would yield such lavish returns, no benefits from the use of state funds would be more widely and impartially distributed to its inhabitants.

Respectfully submitted,
DELBERT H. POWER,
FRED POSTAL,
WALTER J. HUNSAKER,
Commissioners.

SEYMOUR BOWER,
Superintendent.

FISH PLANTS

LAST HALF OF 1910 AND YEARS 1911 AND 1912, FINANCIAL
STATEMENT, INVENTORY, ETC.

Deliveries of fish during last half of calendar year 1910. (Not included in our 19th biennial report.)

SMALL MOUTH BLACK BASS.
FINGERLINGS Nos. 1, 2, 3 AND 4.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alleghen county: Big Lake.....	Watson.....	E. J. Anderson, Plainwell.....	1910. July 2	1,500
Baraga county: Norway Lake..... Beaufort Lake.....	Covington..... Spurr.....	Sidnaw H. and F. Club, Sidnaw..... P. Trudell, Jr., Negaunee.....	July 16 July 16	500 1,000
Benzie county: Crystal Lake.....	Crystal Lake.....	J. J. Kirby, Toledo.....	July 23	1,000
Berrien county: Gallen River.....	New Buffalo.....	Wm. Sherwood, New Buffalo.....	Oct. 22	200
Branch county: North and South Lakes..... Coldwater Lake.....	Coldwater..... Coldwater.....	F. T. Tappan, Coldwater..... F. T. Tappan, Coldwater.....	July 30 July 30	1,500 1,000
Calhoun county: Duck Lake.....	Clarence.....	L. E. Landon, Springport.....	July 30	750
Charlevoix county: Walloon Lake..... Deer Lake.....	Melrose and Evangeline..... Wilson.....	J. W. Hunter Grand Rapids..... Wm. J. Pearson, Boyne Falls.....	July 2 July 2	2,000 2,000
Cheboygan county: Hurt Lake..... Long Lake.....	Tuscarora..... Grant, etc.....	J. W. Lester, Indian River..... Fred S. Burgess, Detroit.....	July 28 July 28	1,000 1,000
Chippewa county: Duck Lake.....	Sugar Island.....	Chase S. Osborn, Sault Ste. Marie.....	Aug. 2	3,000
Clare county: Fishers Lake..... Rounac Lake.....	Holton..... Holton.....	C. A. Killeman, Chiacgo, Ill..... C. A. Killeman, Chicago, Ill.....	July 30 July 30	750 750
Crawford county: Shoepack Lake..... Portage Lake..... Twin Lake.....	Maple Forest..... Crawford.....	T. E. Douglas, Lovells..... Hon. Chas. Blair, Lansing..... F. B. Dickerson, Detroit.....	Aug. 5 July 28 July 28	1,000 1,000 1,000
Delta county: Long Lake.....	Baldwin.....	T. Killian, Escanaba.....	July 15	750

Eaton county: Narrow of Grand Lake Bennett Park Pond	Brookfield Charlotte City	Garry C. Fox, Charlotte. R. S. Spencer, Charlotte.	July 25 July 23	1,000 500
Gogebic county: Lake Gogebic	Matchwood and Marenisco	G. A. Bergland, Milwaukee	July 16	1,000
Houghton county: Booth Lake Crystal Lake Elsner Lake Pequet Lake Lake Roland Eleven Mile Lake Lake Gerald Otter Lake Thirteen Mile Lake Rice Lake Lake Eva	Duncan Duncan Duncan Duncan Elm River Adams Elm River Portage Adams Schoolcraft Adams	Sidnaw H. and F. Club, Sidnaw Sidnaw H. and F. Club, Sidnaw Sidnaw H. and F. Club, Sidnaw Sidnaw H. and F. Club, Sidnaw A. L. Heibel, Houghton J. W. Haas, Houghton J. T. McCall, Houghton J. Abner Sherman, Houghton H. L. Swift, Houghton Jos. Wise, Hubbell, Houghton. Geo. Darstens, Painesdale.	July 16 July 16 July 16 July 16 July 16 July 16 July 16 July 16 July 16 July 16 July 16	500 500 500 500 500 500 1,000 750 500 1,000 1,500 500
Ionia county: Looking Glass River Commonwealth Pond Municipal Pond	Portland Portland Portland	W. F. Porter, Portland. F. E. Fines, Portland. Lee Havens, Portland.	July 2 July 2 July 2	1,500 1,500 1,500
Iron county: Norway Lake	Bates	Sidnaw H. and F. Club, Sidnaw.	July 16	500
Jackson county: Farwell Lake	Hanover	Irving E. Tenney, Hanover.	July 30	750
Kent county: Grand Lake	Plainfield	D. Lydell, Comstock Park.	Aug. 6	500
Keweenaw county: Lake Medora Gratiot Lake Mosquito Lake	Grant and Eagle Harbor Eagle Harbor Grant	Arno Jaehrig, Franklin. Wm. Long, Eagle River. H. S. Winter, Mohawk.	July 16 July 16 July 16	750 1,200 750
Lake county: Sable Lake Long Lake North Lake Quicks Lake Utter Lake Lincoln Lake	Elk Elk Elk Elk Elk Elk	Wm. Utter, Peacock. Wm. Utter, Peacock. Wm. Utter, Peacock. Wm. Utter, Peacock. Wm. Utter, Peacock. Geo. M. Brown, Detroit.	July 22 July 22 July 22 July 22 July 22 July 30	1,000 500 500 500 500 750
Leelanau county: Log Lake Log Lake	Leelanau Leelanau	G. M. Dame, Northport G. M. Dame, Northport	July 2 July 23	1,500 1,000

Small Mouth Black Bass, Last Half of 1910.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lenauee county: Sand Lake.....	Franklin.....	Elmer Putman, Putman.....	1910. Aug. 3	1,000
Livingston county: Zukoy Lake..... Bishop Lake.....	Hamburg..... Hamburg.....	E. E. Gwimmer, Ann Arbor..... Gilbert Thrasher, Brighton.....	Aug. 16 Oct. 18	450 200
Marquette county: Section 15 Lake..... Trot Lake..... Silver Lake.....	Marquette..... City of Negaunee..... Champion.....	Frank G. Jenks, Marquette..... Negaunee R. and G. Club, Negaunee..... Geo. Voelker, Ishpeming.....	July 15 July 15 July 15	750 730 1,000
Mecosta county: Muskegon River.....	Green.....	Thos. Blossom, Paris.....	July 15	1,500
Montcalm county: Clifford Lake.....	Douglas.....	John W. Campbell, Stanton.....	July 1	1,500
Muskegon county: Big Blue Lake.....	Big Blue.....	Hon. F. J. Russell, Hart.....	July 23	1,500
Oakland county: Leon Lake..... Pond Lake..... Deer Lake..... Cass Lake..... Pond Lake..... Leon Lake.....	Waterford..... Waterford..... Independence..... West Bloomfield..... Waterford..... Waterford.....	Michigan Fish Commission, Detroit..... H. W. Baer, Pontiac..... Oliver N. Gardner, Detroit..... Henry J. C. Wagner, Detroit..... N. H. Baer, Pontiac..... Mich. Fish Com., Drayton Plains.....	July 7 July 7 Aug. 11 Aug. 11 July 6 July 7	500 1,500 1,200 1,200 1,500 500
Oceana county: Crystal Lake..... Pentwater Lake.....	Hart, etc..... Pentwater.....	Wm. R. Roach, Hart..... M. T. Girard, Pentwater.....	July 23 July 23	1,000 1,750
Oscoda county: Hewitt Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	July 2	1,000
Otsego county: Otsego Lake.....	Bagley.....	Hon. E. B. Bolton, Gaylord.....	July 28	1,000
Ottawa county: Cranberry Lake.....	Wright.....	E. A. Alley, M. D., Conklin.....	Aug. 12	750
St. Joseph county: St. Joseph River.....	Constantine.....	Wallace N. Harvey, Constantine.....	July 30	750

Schoecraft county:					
Indian Lake.....	Thompson and Hiawatha.....	Benj. Gero, Manistique.....	July 15	1,000	
Van Buren county:					
Lake Cora.....	Paw Paw.....	Otto Ihling, Kalamazoo.....	Aug. 17	600	
Lake George.....	Lawrence.....	Carlton Vanterver, Lawrence.....	Aug. 17	450	
Washtenaw county:					
Strawberry Lake.....	Green Oak, etc.....	E. F. Cwimmer, Ann Arbor.....	Aug. 16	450	
Tabais Lake.....	Northfield.....	E. F. Cwimmer, Ann Arbor.....	Aug. 16	300	
Whitmore Lake.....	Northfield.....	E. F. Cwimmer, Ann Arbor.....	Aug. 16	450	
Horseshoe Lake.....	Webster.....	E. F. Cwimmer, Ann Arbor.....	Aug. 16	450	
Independence Lake.....	Lyndon.....	E. F. Cwimmer, Ann Arbor.....	Aug. 16	300	
Joshin Lake.....		F. C. Marshall, Stockbridge.....	Aug. 2	200	
Wexford county:					
Pleasant Lake.....	Selma.....	E. E. Bunyca, Bunyca.....	July 23	750	
Total.....				72,450	

LARGE MOUTH BLACK BASS, LAST HALF OF 1910.
ADVANCED FRY.

County and name of water.	Township.	Applicant or Depositor.	Date.	Number.
Alleean county: Plainwell Millpond Big Lake	Gun Plains Watson	Wm. Cripe, Plainwell. E. J. Anderson, Plainwell.	1910. July 2 July 2	6,000 6,000
Barry county: Silver Lake	Prairieville	R. L. Soule, Plainwell.	July 2	4,000
Charlevoix county: Waltoon Lake	Melrose and Evangeline	J. W. Hunter, Grand Rapids.	July 2	12,000
Emmet county: Round Lake Crooked Lake Carp Lake	Bear Creek Littlefield Carp Lake and Hebron	Henry Lindig, Petoskey. David Hastings, Conway. O. C. Cope, Carp Lake	July 2 July 2 July 2	10,000 10,000 12,000
Grand Traverse county: Brewster Lake Hogsback Lake Remie Lake Fife Lake Fuller Lake	Mayfield Paradise Union Fife Lake Fife Lake	A. B. Stinson, Kingsley. Kingsley Sportsmen's Club, Kingsley. Kingsley Sportsmen's Club, Kingsley. F. Beckstein, Fife Lake Dr. D. E. Hills, Fife Lake	July 2 July 2 July 2 July 2 July 2	6,000 8,000 12,000 10,000 6,000
Ionian county: Walters Pond Huhus Pond Morrison Lake Peck Lake Looking Glass Pond Lowell Electric Pond Smyrna Dam	Boston Boston Boston Berlin Portland Keene Otisco	J. Wallington, Saranac. J. Wallington, Saranac. J. Wallington, Saranac. J. Wallington, Saranac. J. W. Patterson, Portland. U. B. Williams, Lowell. U. B. Williams, Lowell.	July 2 July 2 July 2 July 2 July 2 July 2 July 2	6,000 6,000 6,000 6,000 4,000 6,000 8,000
Kalkaska county: Manistee Lake	Cold Springs	R. W. Douglas, Darragh.	July 2	10,000
Kalamazoo county: Lyons Lake Mud Lake West Lake	Comstock Oshtemo Portage	F. M. Breese, Kalamazoo. Fred Marshall, Kalamazoo. John E. Cross, Kalamazoo.	July 2 July 2 July 2	4,000 4,000 6,000
Kent county: Lincoln Lake Little Horton Lake Pine Lake Ware's Lake	Spencer Spencer Courtland Nelson and Pierson	S. W. Bigler, Lincoln Lake R. M. Vanderlip, Gowen. Cedar Springs P. and G. Club, Cedar Sp. J. Myers, Sand Lake	July 2 July 2 July 2 July 2	6,000 4,000 10,000 8,000

Edison Dam.....	Vergennes.....	U. B. Williams, Lowell.....	July.....	2	6,000
Nagle Lake.....	Vergennes.....	U. B. Williams, Lowell.....	July.....	2	8,000
Pratt Lake.....	Lowell.....	U. B. Williams, Lowell.....	July.....	2	8,000
Pine Island Lake.....	Painfield.....	Wm. Valentine, Grand Rapids.....	July.....	2	6,000
Leelanau county:					
School Lake.....	Cleveland.....	F. Atkinson, Maple City.....	July.....	2	6,000
Traverse Lake.....	Cleveland.....	F. Atkinson, Maple City.....	July.....	2	6,000
Lime Lake.....	Cleveland.....	Frank Newman, Maple City.....	July.....	2	6,000
Bright's Lake.....	Kasson.....	John Nolan, Cedar.....	July.....	2	6,000
Meosta county:					
Rogers Power Pond.....	Big Rapids.....	M. C. Maxam, Big Rapids.....	July.....	2	10,000
Mud Lake.....	Colfax.....	F. W. Hudnutt, Big Rapids.....	July.....	2	8,000
Missaukee county:					
Goose Lake.....	Colwell.....	M. Mattice, Lake City.....	July.....	2	10,000
Lake Missaukee.....	Reeder and Lake.....	F. D. McGregor, Lake City.....	July.....	2	10,000
Dyre Lake.....	Colwell.....	S. H. Reeder, Lake City.....	July.....	2	10,000
Montcalm county:					
Duck Pond.....	Maple Valley.....	J. A. Freeman, Coral.....	July.....	2	4,000
Kinderville Lake.....	Pine.....	R. K. Boomer, Lakeview.....	July.....	2	6,000
Muscallonge Lake.....	Maple Valley.....	Jensen Bros, Trufant.....	July.....	2	6,000
Long Lake.....	Pine.....	Oscar Hansen, Trufant.....	July.....	2	6,000
Long Lake.....	Pine.....	J. F. Faulson, Trufant.....	July.....	2	6,000
Oscola county:					
Reed City Mill Pond.....	Richmond.....	H. J. Crocker, Reed City.....	July.....	2	8,000
Oscola County Power Pond.....	Richmond.....	J. C. Golden, Reed City.....	July.....	2	6,000
Diamond Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	July.....	2	10,000
Van Buren county:					
Brandywine Lake.....	Pine Grove.....	C. Reese, Pine Grove Mills.....	July.....	2	10,000
Moon Lake.....	Geneva.....	J. A. Gibson, Lacota.....	July.....	2	4,000
Clear Lake.....	Pine Grove.....	Chester Westler, Gobleville.....	July.....	2	6,000
Wexford county:					
Stonededge Lake.....	Clam Lake.....	Fred Rock, Cadillac.....	July.....	2	6,000
Total.....					374,000

LARGE-MOUTH BLACK BASS, LAST HALF OF 1910.
FINGERLINGS Nos. 1, 2, 3 AND 4.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Algor county: Sable Lake..... Mud Lake.....	Burt.....	Chas. F. Hickok, Grand Marais. H. A. St. John, Marquette.....	1910. July 15 July 15	2,000 600
Allegan county: Kalamazoo Lake..... Kalamazoo river and Hanson's Bayou Osterhout Lake..... Silver Lake..... Kalamazoo River..... Hutchins Lake..... Lower Scott Lake..... Lee..... Upper Scott Lake.....	Saugatuck. Manlius..... Lee..... Saugatuck. Saugatuck. Clyde and Ganges Lee..... Lee.....	Chas. E. Bird, Saugatuck. B. K. Colf, New Richmond. Samuel Daws, Grand Junction. A. E. Hurlbut, East Saugatuck. H. W. Perry, Douglas. C. L. Fossdick, Fennville. S. E. Phillips, Pullman. S. E. Phillips, Pullman.....	July 11 July 11 July 11 July 11 July 11 July 11 July 11 July 11	3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000
Alpena county: Long Lake.....	Alpena, Kracow and Presque Isle....	Robt. E. Ellsworth, Alpena.....	July 6	6,000
Barry county: Mud Lake..... Horseshoe Lake..... Wilkinson Lake..... Fair Lake..... Wilson and Lawrence Lakes..... Wail Lake..... Long Lake..... Head Lake..... Ashby Lake..... Fine Lake..... Mill Lake..... Loon Lake..... Blue Lake..... Gurnsey Lake..... Holcomb Lake..... Little Long Lake..... Gilkey Lake..... Pine Lake..... Perch Lake.....	Hope..... Hope..... Hope..... Hope..... Barry..... Barry..... Barry..... Barry..... Barry..... Johnson..... Assyria..... Orangeville..... Yankee Springs..... Prairieville..... Prairieville..... Prairieville..... Prairieville..... Hope.....	O. Chamberlain, Cloverdale. Hiram Gibson, Cloverdale. H. Green & Son, Delton. D. Collister, Delton..... Geo. Lawrence, Delton..... E. A. Burton, Hastings..... B. Dickinson, Hastings..... H. Dickinson, Hastings..... John Payne, Hastings..... J. O. Galloup, Battle Creek. J. O. Galloup, Battle Creek. M. O. Tuckerman, Battle Creek. S. C. Grousel, Kalamazoo. S. C. Grousel, Kalamazoo. S. C. Grousel, Kalamazoo. S. C. Grousel, Kalamazoo. W. A. Spaulding, Mio..... D. P. Karns, Shultz..... F. Maynard, Shultz.....	July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8 July 8	3,000 3,000 2,000 3,000 6,000 3,000 5,000 4,000 3,000 4,000 2,000 4,000 3,000 5,000 3,000 3,000 3,000 3,000 2,000
Benzie county: Long Lake..... Upper and Lower Herring Lake..... Bass Lake.....	T. 27 R. 15 W. Blain..... Lake.....	H. A. Page, Chicago. Ben Little, Frankfort..... Wm. A. Carter, Honor.....	July 23 July 23 Aug. 6	1,000 1,000 400

Berrien county:					
Faw Paw Lake	Watervliet	E. Rowland, Watervliet	July	11	3,000
Harris Lake	Hagar	W. S. Hallman, Coloma	July	11	3,000
Hibbard Lake	Berrien	M. Martin, Coloma	July	11	3,000
Little Indian Lake	Berrien	Otto Radewal, Niles	Aug.	4	300
Calhoun county:					
Bear Lake	Penfield	G. I. Bowers, Battle Creek	July	8	4,000
Deep Lake	Penfield	A. W. Cronk, Battle Creek	July	8	2,000
Heart Lake	Battle Creek	Ernest Lapham, Battle Creek	July	8	2,000
St. Mary's Lake	Penfield	Frank Van Nocker, Battle Creek	July	8	4,000
Clark's Lake of the Gang Lakes	Clarence	L. J. Devering, Albion	July	8	4,000
Duck Lake	Clarence	L. J. Devering, Albion	July	8	3,000
Long Lake	Fredonia	J. W. Bush, Marshall	July	8	3,000
Fish Lake	Fredonia	Wm. Clayborne, Marshall	July	8	3,000
Kalamazoo River	Marshall	Wm. Clayborne, Marshall	July	8	3,000
Lake of the Woods	Lee	H. C. Faulkner, Marshall	July	8	3,000
Pardee Lake	Eckford	H. C. Faulkner, Marshall	July	8	2,000
Maynard Lake	Eckford	C. E. Gauss, Marshall	July	8	2,000
Prairie Lake	Sheridan	G. A. Freed, Marshall	July	8	2,000
Lyon Lake	Fredonia	F. L. Holmes, Marshall	July	8	2,000
Nottawa Lake	Tekonsha	Clyde Jacoby, Marshall	July	8	3,000
Crystal Lake	Fredonia	R. F. Moses, Marshall	July	8	3,000
Chapin Lake	Marengo	F. L. McWethly, Marshall	July	8	2,000
Rice Lake	Marengo	F. L. McWethly, Marshall	July	8	3,000
Brace Lake	Marshall	H. N. Taylor, Marshall	July	8	3,000
Pine Lake	Fredonia	A. E. Wright, Marshall	July	8	2,000
Cass county:					
Lillie and Hutcheson Lakes	Newburg	Ed. Lamb, Jones	July	8	3,000
Wood Lake	Porter	R. I. Marsh, Jones	July	8	3,000
Bogert Lake	Newburg	C. F. Trattles, Jones	July	8	3,000
Berrien Lake	Howard and Jefferson	E. C. Griffith, Niles	July	8	2,000
Birch Lake	Porter	W. C. Smith, F. Putnam, Constantine	July	8	2,000
Golf Lake	Marcellus	W. J. Arnold, Marcellus	July	8	3,000
Bunker Lake	Yolma	Evad Brown, Marcellus	July	9	2,000
Finch Lake	Marcellus	C. Cosselman, Marcellus	July	9	3,000
Fish Lake	Marcellus	C. N. Coff, Marcellus	July	9	3,000
Little Fish Lake	Marcellus	G. Hayes, Marcellus	July	9	2,000
Miller Lake	Marcellus	C. S. Jones, Marcellus	July	9	2,000
Skyhawk Lake	Marcellus	C. S. Jones, Marcellus	July	9	2,000
Saddlebag Lake	Marcellus	Henry Kraus, Marcellus	July	9	2,000
Hemlock Lake	Marcellus	A. J. Maxam, Marcellus	July	9	2,000
Otter Lake	Marcellus	A. J. Smith, Marcellus	July	9	2,000
Long Lake	Porter	L. J. Hitchcox, Bristol, Ind	Aug.	10	750
Baldwin Lake	Porter	L. J. Hitchcox, Bristol, Ind	Aug.	10	750
Charlevoix county:					
Huffman Lake	Hudson	E. Cartwright, Berryville	July	12	3,000
Cheboygan county:					
Silver Lake	Wilnot	C. E. Danner, Wolverine	July	12	4,000
Twin Lake	Kornier	F. E. Martin, Indian River	July	12	4,000

Large Mouth Black Bass, Last Half of 1910.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Clare county: Mill Pond.....	Surrey.....	Fuller Harris, Farwell.....	1910. July 30	600
Clinton county: Alward Lake.....	Olive.....	Arthur St. Clair, Alward Lake.....	Oct. 25	250
Crawford county: Portage Lake.....	Several.....	R. Hanson, Grayling.....	July 12	6,000
Genesee county: Flint River, McCormick, Sand, Beagal and Duck Lake.....	Richfield and Genesee Forest.....	L. Rogers, Rogersville..... J. H. McCormick, Otisville.....	July 28 July 29	1,250 750
Hillsdale county: Kefus Lake..... Mallory Lake..... Moon Lake.....	Pittsford..... Pittsford..... Pittsford.....	E. W. Kefus, Hudson..... J. Palmer, Hudson..... F. L. Cole, Hudson.....	July 20 July 20 July 20	1,000 750 750
Ionia county: Woodward Lake.....	Ronald.....	Ira Conkey, Shiloh.....	July 9	2,000
Iosco county: Long Lake..... Bass Lake..... Indian Lake.....	Plainfield..... Plainfield..... Plainfield.....	M. N. Crary, Ellake..... C. W. Luce, East Tawas..... C. W. Luce, East Tawas.....	July 15 July 15 July 15	3,500 4,000 4,000
Iron county: Dollar Lake..... Mud Lake..... Sunset Lake..... Fortune Lake..... Armstrong Lake..... Holmes Lake..... Lake Mary.....	Crystal Falls..... Crystal Falls..... Bates..... Crystal Falls..... Nasctodon..... Crystal Falls..... Crystal Falls.....	J. D. Vivian, Crystal Falls..... E. J. Oswald, Crystal Falls..... I. W. Byers, Iron River..... W. J. Richards, Crystal Falls..... J. Erickson, Crystal Falls..... A. Bjork, Crystal Falls..... G. E. Voos, Crystal Falls.....	July 15 July 15 July 16 July 16 July 16 July 16 July 16	1,000 1,000 2,000 2,000 1,500 1,500 1,500
Isabella county: Eldred Lake..... Hall's Lake..... Blanchard Millpond..... Dermott Lake..... Gully Lake..... Coldwater Lake..... Perch Lake..... Scutt Lake.....	Broomfield..... Broomfield..... Rolland..... Rolland..... Nottawa..... Sherman..... Nottawa.....	J. M. Swisher, Remus..... J. M. Swisher, Remus..... Roger Scott, Blanchard..... Roger Scott, Blanchard..... Roger Scott, Blanchard..... Robt. Hystop, Weidman..... Robt. Hystop, Weidman..... Robt. Hystop, Weidman.....	July 9 July 9 July 9 July 9 July 9 July 9 July 9	2,000 2,000 2,000 2,000 3,000 3,000 3,000

Jackson county:	Grass Lake.....	Grass Lake.....	C. R. Smith, Grass Lake.....	July 8	3,000
	Tamarack Lake.....	Norvell.....	C. R. Smith, Grass Lake.....	July 8	3,000
	Lagoon in Loomis Park.....	Jackson.....	Hon. W. W. Todd, Jackson.....	July 9	2,000
	Moulaque Lake.....	Springport.....	L. E. Landon, Springport.....	July 30	750
Kalamazoo county:	Fox Milldam.....	Prairie Ronde.....	S. D. Fox, Schoolcraft.....	July 9	3,000
	Black Lake.....	Schoolcraft.....	M. N. Grimes, Schoolcraft.....	July 9	2,000
	Rawson Lake.....	Schoolcraft.....	Thos. Hewitt, Schoolcraft.....	July 9	3,000
Kent county:	Reeds Lake.....	Grand Rapids.....	L. J. DeLamarter, Grand Rapids.....	July 30	1,000
Keewenaw county:	Lac LaBelle.....	Grant.....	J. W. Senden, Calumet.....	July 16	2,000
Lake county:	Lincoln Lake.....	Elk.....	Geo. M. Brown, Detroit.....	July 30	200
	Hammond Lake.....	Pleasant Plains.....	Wm. Clark, Wingleton.....	July 30	200
	Wolf or Round Lake.....	Webber.....	Harley Bartlett, Baldwin.....	July 22	750
	Indian Lake.....	Elk.....	W. P. Jones, Peacock.....	July 22	500
	Little Bass Lake.....	Elk.....	W. M. Uiter, Peacock.....	July 22	500
	East Lake.....	Elk.....	W. M. Uiter, Peacock.....	July 22	500
	Big Lake.....	Elk.....	W. M. Uiter, Peacock.....	July 22	500
Lapeer county:	Mirror Lake.....	Lapeer.....	Mathias Caley, Lapeer.....	Aug. 16	1,000
	Vanderpool Lake.....	Rich.....	Ed. D. Cartright, Mayville.....	July 8	4,000
	Jenness Lake.....	Attica.....	F. Harrison, Attica.....	July 8	1,250
	Hall and Salmon Lake.....	Lapeer.....	B. Martin, Metamora.....	Aug. 16	800
	Kellogg Lake.....	Lapeer.....	M. F. Kellogg, Hunters Creek.....	Aug. 16	800
Leelanau county:	South Bar Lake.....	Empire.....	Jas. Dauley, Empire.....	Aug. 5	750
Lenaux county:	Ames Millpond.....	Hudson.....	E. W. Ames, Hudson.....	July 20	750
	Devil's Lake.....	Woodstock.....	H. E. Hand, Tecumseh.....	July 20	1,800
	Bear Lake.....	Hudson.....	Jas. B. Thorn, Hudson.....	July 20	750
	Jewell's Lake.....	Medina.....	Jas. B. Thorn, Hudson.....	July 20	750
	Devilla's Lake.....	Woodstock.....	H. F. Hand, Tecumseh.....	Aug. 3	300
	Raisin River.....	Deerfield.....	F. Greenfield, Deerfield.....	Oct. 5	800
Livingston county:	Walker Lake.....	Hamburg.....	Gilbert Thrasher, Brighton.....	Oct. 18	160
	Peterson Lake.....	Putnam.....	F. C. Marshall, Stockbridge.....	Aug. 2	800
	Bass Lake.....	Vandalia and Putnam.....	F. C. Marshall, Stockbridge.....	Aug. 2	500
	Big and Little Portage Lakes.....	Dexter.....	R. H. Killion, Ypsilanti.....	Oct. 8	500
	Travis Lake.....	Superior.....	Jerome N. West, Ypsilanti.....	Oct. 8	400
	Pardee Lake.....	Genoa.....	R. E. Barron, Howell.....	Oct. 14	800
Mackinac county:	Manistique Lake.....	Portage.....	Dent Hurd, Curtis.....	July 15	2,500

Large Mouth Black Bass, Last Half of 1910.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Marquette county:				
Allen's Lake.....	Humboldt	H. R. Gamble, Republic.	July 15	2,000
Granite Lake.....	Republic	H. R. Gamble, Republic.	July 15	1,500
Vere Lake.....	Republic	H. R. Gamble, Republic.	July 15	1,500
Yre Lake.....	Forsyth	H. R. Gamble, Republic.	July 15	1,500
Cleveland Lake of Lillie Pond	Forsyth	Hon. W. H. McCorkindale, Ishpeming.	July 15	1,000
Bear Lakes.....	Postal	H. A. St. John, Marquette.	July 15	1,000
Lake on Sec. 32 —, 49 —, 25	Marquette	H. A. St. John, Marquette.	July 15	1,000
Abraun Lake.....	Skandia	Chas. Wilson Yalmar.	July 15	1,000
Bear Lake.....	Powell	H. A. St. John, Marquette.	July 15	1,500
Independence Lake.....	Powell	H. A. St. John, Marquette.	July 15	600
Hills Jani Lake.....	Powell	H. A. St. John, Marquette.	July 15	450
Mauguin Lake.....	Marquette	H. A. St. John, Marquette.	July 15	450
Sec. 32-19-20 Lake	Marquette	H. A. St. John, Marquette.	July 15	300
Mecosta county:				
Moore's Lake.....	Hinton	C. W. Vining, Lakeview.	July	3,000
Wreck's Lake.....	Wheatland	J. M. Swisher, Remus.	July	2,000
Blue Lake.....	Wheatland	J. M. Swisher, Remus.	July	2,000
Rip Lake.....	Morton and Martiny	P. J. Theisen, Remus.	July	3,000
Lake 25.....	Sheridan	P. J. Theisen, Remus.	July	3,000
Long Lake.....	Morton	P. J. Theisen, Remus.	July	3,000
Lake Nabe.....	Bay Carman, Mecosta.	Bay Carman, Mecosta.	July	2,000
Perch Lake.....	Sheridan	Bay Carman, Mecosta.	July	2,000
Perch Lake.....	Martiny	E. C. Lewis, Mecosta.	July	2,000
Perch Lake.....	Morton	E. C. Lewis, Mecosta.	July	2,000
Millbrook Millpond	Millbrook	T. O. Patterson, Millbrook.	July	2,000
Keweenaw Lake.....	Millbrook	Roger Scott, Blanchard.	July	2,000
Muskegon River	Green.	Thos. Bloxson, Paris.	July 15	1,500
Montcalm county:				
Big Bear Lake.....	Cato	C. W. Vining, Lakeview.	July	3,000
Little Brainer Lake	Cato	C. W. Vining, Lakeview.	July	3,000
Tanawak Lake.....	Cato	C. W. Vining, Lakeview.	July	3,000
Bass Lake.....	Belvidere	David Wortley, Lakeview.	July	3,000
Clifton Lake.....	Belvidere and Cato	David Wortley, Lakeview.	July	3,000
Mud Lake.....	Douglas	John W. Campbell, Stanton.	July	2,000
Six Lakes.....	Belvidere	M. B. Cornell, Six Lakes.	July	4,000
Fourfield Lake	Belvidere	J. W. Gaffield, Six Lakes.	July	3,000
Central Lake.....	Belvidere	Joseph Kimmell, Six Lakes.	July	3,000
Clear Lake.....	Home	N. C. Merrifield, Six Lakes.	July	2,000
Maple Lake.....	Belvidere and Douglas	F. E. Curtis, Edmore.	July	2,000
Maple Lake.....	Richard	F. E. Curtis, Edmore.	July	3,000
Snow's Lake.....	Bushnell	F. E. Curtis, Edmore.	July	3,000
Hampel Lake.....	Bushnell	H. Edwards, Fenwick.	July	3,000
Pickett Lake.....	Bushnell	M. F. Perry, Fenwick.	July	2,000

Deaner Lake	Richland	Wm. Caris, Vestaburg	July 9	2,000
Bass Lake	Richland	F. H. McDole, Vestaburg	July 9	3,000
Lady Lake	Richland	A. J. Williams, Riverdale	July 9	2,000
Robbins Lake	Richland		July 9	2,000
Montmorency county:				
Round Lake	Hillman	A. J. Wilkinson, Hillman	Sept. 1	400
Sucker Lake	Hillman	Austin Rea, Hillman	Sept. 1	300
Brush Lake	Hillman	D. S. Johnson, Hillman	Sept. 1	400
Long Lake	Montmorency	Wm. Scott, Hillman	Sept. 1	500
Rush Lake	Montmorency	Eugene LaPoint, Hillman	Sept. 1	500
Grass Lake	Montmorency	Wm. Hunt, Hillman	Sept. 1	400
Oakland county:				
Clark Lake	Millford	F. D. Sands, Millford	July 2	3,000
Livermore Lake	Millford	F. D. Sands, Millford	July 2	2,000
Hunnewell Lake	Millford	F. B. Hatch, Millford	July 2	2,000
Long Lake	White Lake	F. B. Hatch, Millford	July 2	4,000
Pettibone Lake	Highland	F. B. Hatch, Millford	July 2	4,000
Sears Lake	Millford	F. B. Hatch, Millford	July 2	2,000
Kent Lake	Millford and Lyon	F. B. Hatch, Millford	July 2	2,000
Loon Lake	Commerce	T. H. Padley, Millford	July 2	2,000
Morrison and Proud's Lake	Commerce	T. H. Padley, Millford	July 2	2,000
Austin and Round Lakes	Millford and Highland	R. S. Potts, Millford	July 2	3,000
Porter Lake	Commerce	T. A. Forbes, Millford	July 2	3,000
Huron Lake	Springfield	F. G. Ely, Davisburg	July 2	4,000
Davisburg Millpond	Springfield	Ira E. Kinney, Davisburg	July 2	3,000
Kirkby Lake	Springfield	Ira E. Kinney, Davisburg	July 2	3,000
Long Lake	Springfield	Ira E. Kinney, Davisburg	July 2	4,000
Watkins Lake	Waterford	R. F. Monroe, Pontiac	July 2	8,000
Cass Lake	West Bloomfield	H. J. C. Wagner, Detroit	July 9	4,000
Pleasant Lake	Waterford	J. S. Eber, Pontiac	July 15	400
Schoolhouse Lake	Waterford	S. Bartlett, Pontiac	July 15	400
Lake Elizabeth	Waterford	A. L. Moore, Pontiac	July 15	1,800
Divine Lake	Holly	John Divine, Holly	July 15	500
Burns Lake	Holly	David Mackay, Holly	July 15	750
Orchard Lake	West Bloomfield	F. S. Campbell, Detroit	Aug. 18	800
Lake Orion	Orion	J. E. Bolles, Detroit	Aug. 18	200
Union Lake	West Bloomfield	C. M. Van Buskirk, Pontiac	Aug. 18	800
Pond Lake	Waterford	Marvin Hess, Drayton Plains	Aug. 18	800
Huron Lake	Springfield	F. G. Ely, Davisburg	Aug. 11	600
Ogemaw county:				
Big Au Sable Lake	Goodart	C. M. Stewart, Lupton	July 15	1,000
Black Lake	Hill	C. M. Stewart, Lupton	July 15	1,500
Devoe Lake	Cummings	P. M. Stewart, Lupton	July 15	1,500
Green Lake	Rose	P. M. Stewart, Lupton	July 15	1,000
North Lake	Cummings	P. M. Stewart, Lupton	July 15	1,500
Rifle Lake	Hill	P. M. Stewart, Lupton	July 15	1,500
Round Lake	Hill	P. M. Stewart, Lupton	July 15	1,000
Spring Lake	Hill	P. M. Stewart, Lupton	July 15	1,000
Cunning Lake	Cunning	H. Baiter, Rose City	July 15	1,500

Large Mouth Black Bass, 1910.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Ontonagon county: Buss Lake.....	Interior.....	Arbutus R. and G. Club, Trout Creek.....	1910, July 16	1,500
Ottawa county: Crockery Lake.....	Chester.....	E. O. Alley, M. D., Conklin.....	Aug. 12	300
Presque Isle county: Esau Lake..... Grand Lake.....	Presque Isle Crapo and Presque Isle.....	R. Collins, Alpena..... N. A. Eddy, Bay City.....	July 6 July 6	5,000 6,000
Saginaw county: Saginaw River.....	Several.....	W. S. Linton, Saginaw.....	July 9	4,000
St. Joseph county: Corey Lake..... Clear Lake.....	Fabius..... Fabius.....	W. Pulver, Three Rivers..... W. Pulver, Three Rivers.....	July 8 July 8	3,000 3,000
Tuscola county: Cat Lake..... Harmon Lake..... Phelps Lake..... Dollar Lake..... Grass Lake.....	Dayton..... Dayton..... Dayton..... Dayton..... Dayton.....	M. L. Bird, Mayville..... Hon. E. G. Fox, Mayville..... Hon. E. G. Fox, Mayville..... Geo. Hamilton, Mayville..... Geo. Hamilton, Mayville.....	July 8 July 8 July 8 July 8 July 8	4,000 4,000 4,000 2,000 4,000
Van Buren county: Saddle Lake..... Silver Lake..... Bear Lake..... Bangor Millpond..... Lake 14..... Duck Lake..... Base Line Lake..... Lake 14..... Maple Lake.....	Columbia..... Columbia..... Columbia..... Bangor..... Arlington..... Bangor..... Geneva..... Columbia..... Faw Paw.....	O. C. Egan, Grand Junction..... O. C. Egan, Grand Junction..... E. B. Eddy, Grand Junction..... A. V. McKee, Bangor..... A. G. Moreland, Bangor..... J. Welker, Bangor..... W. E. Grimes, South Haven..... W. E. Grimes, South Haven..... R. D. Loveland, Faw Paw.....	July 11 July 11 July 11 July 11 July 11 July 11 July 11 July 11 Aug. 17	4,000 3,000 4,000 3,000 3,000 3,000 3,000 3,000 1,000
Washtenaw county: Manchester Pond..... Bass Lake..... Blind Lake..... Lone Lake.....	Manchester..... Hamburg..... Lyndon..... Stockbridge.....	Hon. A. J. Waters, Manchester..... E. E. Gwimmer, Ann Arbor..... W. H. Taylor, Stockbridge..... Chas. H. Kitchen, Stockbridge.....	July 20 Aug. 16 Aug. 2 Aug. 2	1,000 450 400 600
Wayne county: Coomer Lake..... Huron River..... Lake Honor.....	Van Buren..... Van Buren..... Van Buren.....	A. E. Smith, Belleville..... A. E. Smith, Belleville..... Dr. H. S. Kiskadden, Detroit.....	July 13 July 13 July 13	3,000 3,000 3,000
Total.....	.....	.....	.....	555,810

LARGemouth BLACK BASS.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Kent county: Pickrel Lake.....	Plainfield.....	A. C. House, Belmont.....	1910, July 15	600

WARMOUTH BASS.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Baraga county: Carp Lake.....	Spurs.....	Peter Trudell, Jr., Negaunee.....	1910. July 15	300
Barry county: Pine Lake..... Fair Lake..... Lower Crooked Lake..... Twenty-one Lake.....	Rutland..... Barry..... Prairieville..... Hope.....	A. F. Burroughs, Hastings..... Dewitt Collister, Delton..... S. C. Greusel, Kalamazoo..... S. C. Greusel, Kalamazoo.....	Aug. 24 Sept. 3 Sept. 3 Sept. 3	450 600 600 450
Benzie county: Crystal Lake.....	Crystal Lake.....	Miss Alice Van Deman, Beulah.....	Sept. 24	400
Berrien county: Mirror Lake.....	New Buffalo.....	August Vetterly, New Buffalo.....	Sept. 21	300
Calhoun county: Halls Lake..... Capius Lake..... Bear Lake.....	Sheridan..... Marango..... Penfield.....	Floyd A. Anderson, Albion..... F. G. McWethy, Marshall..... Frank Poorman, Battle Creek.....	Sept. 3 Sept. 3 Sept. 3	450 600 600
Cass county: Bain Lake.....	Newburg.....	C. F. Prattles, Jones.....	Sept. 9	600
Clare county: Bass Lake..... Rounac Lake..... Fisher Lake..... Silver Lake.....	Hatton..... Hatton..... Hatton..... Lincoln.....	C. A. Kienan, Chicago..... C. A. Kienan, Chicago..... C. A. Kienan, Chicago..... John Ferwerda, Falmouth.....	Sept. 22 Sept. 22 Sept. 22 Sept. 24	300 300 300 400
Clinton county: Park Lake.....	Bath.....	Miles T. Grey, Lansing.....	Sept. 9	600
Eaton county: Laceys Lake.....	Kalamo.....	S. P. Wells, Charlotte.....	Aug. 24	450
Grafiot county: Half Moon Lake.....	Seville.....	Wm. Stacey, Riverdale.....	Aug. 26	450
Hillsdale county: Duck Lake..... Masher Lake.....	Allen..... Jefferson.....	H. G. Bishop, Allen..... M. G. Masher, Osseo.....	Sept. 10 Oct. 17	600 600
Houghton county: Parreault Lake.....	Adams.....	Jas. H. Lucas, Houghton.....	July 15	200

Ingham county: Seymore Creek.....	Vevay.....	L. C. Webb, Mason.....	Sept. 9	750
Ionia county: Hess Lake..... Long Lake.....	Campbell..... Orleans.....	E. A. Rising, Clarksville..... J. B. Arwina, Belding.....	Sept. 21 Sept. 26	300 600
Isabella county: Riley Lake..... Coldwater Lake..... Perch Lake.....	Nottawa..... Nottawa..... Sheridan.....	Robt. Hyslop, Weidman..... Robt. Hyslop, Weidman..... Robt. Hyslop, Weidman.....	Sept. 23 Sept. 23 Sept. 23	300 400 300
Jackson county: Goose Lake.....	Pulaski.....	G. W. Traverser, Mosherville.....	Sept. 9	450
Kalamazoo county: Howard Lake..... Barton Lake..... Upper Sugarloaf Lake..... Foxes Millpond..... Lower Sugarloaf Lake..... Black Lake..... Tub Lake.....	Schoolcraft..... Schoolcraft..... Schoolcraft..... Prairie Ronde..... Portage..... Schoolcraft..... Schoolcraft.....	Thos. Hewitt, Schoolcraft..... Thos. Hewitt, Schoolcraft..... P. C. Purcell, Schoolcraft..... Sherman D. Fox, Schoolcraft..... Jay Clark, Schoolcraft..... M. N. Grimes, Schoolcraft..... M. N. Grimes, Schoolcraft.....	Sept. 2 Sept. 2 Sept. 2 Sept. 2 Sept. 2 Sept. 2 Sept. 2	600 600 600 600 600 600 450
Kalkaska county: Manistee Lake.....	Cold Springs.....	R. W. Douglas, Darrah.....	Oct. 13	750
Kent county: Reeds Lake..... McKewen Lake..... Whipperwill Lake.....	Grand Rapids..... Lowell..... Gratton.....	L. J. De Lamar, Grand Rapids..... Chas. E. Brown, Alto..... J. E. Taylor, Belding.....	July 1 Aug. 26 Aug. 26	1,000 450 450
Keweenaw county: Thayer Lake.....	Sherman.....	H. S. Hinton, Mohawk.....	July 16	300
Lapeer county: Wolf Lake.....	Metamora.....	M. S. Caryell, Metamora.....	Aug. 24	450
Marquette county: Compton Pond.....	Marquette.....	J. F. Neidhart, Marquette.....	July 15	200
Montcalm county: Deaner Lake..... Bass Lake.....	Richland..... Richland.....	Wm. Caris, Vestaburg..... T. H. McDale, Vestaburg.....	Aug. 26 Aug. 26	450 600
Meecosta county: Lake 28.....	Sheridan.....	R. P. Swisher, Remus.....	Sept. 23	300
Muskegon county: Pine Island Lake..... Muskrat Lake..... Crooked Lake..... Big Blue Lake.....	Holton..... Cedar Creek..... Holton..... Blue Lake.....	H. A. O'Connor, Holton..... Fred Hanson, Holton..... Jacob Schmitt, Holton..... Hon. Fred Russell, Hart.....	Aug. 27 Aug. 27 Aug. 27 Aug. 29	450 450 450 600

Warmouth Bass, 1910.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Newaygo county:			1910.	
North Lake.....	Ensley.....	Fred Osborne, Grant.....	Aug. 27.....	450
Blanch Lake.....	Ashland.....	A. J. Titus, Grant.....	Aug. 27.....	450
Long Lake.....	Sheridan.....	Jacob Kemperman, Fremont.....	Aug. 27.....	600
Railway Lake.....	Denver.....	Geo. R. Lyons, Hesperia.....	Aug. 27.....	450
Stoney Lake.....	Denver.....	Geo. R. Lyons, Hesperia.....	Aug. 27.....	600
Bullhead Lake.....	Denver.....	Geo. R. Lyons, Hesperia.....	Aug. 27.....	600
Sand Lake.....	Ashland.....	A. J. Titus, Grant.....	July 15.....	800
Oakland county:				
Kellogg Lake.....	Oxford.....	Geo. Blood, Metamora.....	Aug. 24.....	900
Oceana county:				
Crystal Lake.....	Hart.....	Wm. R. Rosch, Hart.....	Aug. 29.....	600
No name.....	Grant.....	John Fisher, Rothbury.....	Aug. 29.....	450
Homer Lake.....	Benona.....	Fred A. Tart, Mears.....	Aug. 29.....	450
Round Lake.....	Golden.....	Edwin A. Post, Mears.....	Aug. 29.....	600
Junifus Beach Pond.....	Golden.....	Edwin A. Post, Mears.....	Aug. 29.....	600
Silver Lake.....	Golden.....	C. F. Muehler, Mears.....	Aug. 29.....	600
Pentwater Lake.....	Pentwater.....	S. D. Montgomery, Grand Rapids.....	Aug. 29.....	600
Oscoda county:				
Wilson Lake.....	Everett.....	S. F. Postal, Ewart.....	Sept. 22.....	500
Ottawa county:				
Crocker Lake.....	Chester.....	Dr. E. O. Cilley, Conklin.....	Sept. 21.....	400
Cranberry Lake.....	Wright.....	Dr. E. O. Cilley, Conklin.....	Sept. 21.....	400
Presque Isle county:				
Grand Lake.....	Crapo.....	N. A. Eddy, Bay City.....	Aug. 26.....	450
St. Joseph county:				
Mud Lake.....	Fabius.....	Ino. G. Krull, Three Rivers.....	Sept. 9.....	450
Long Lake.....	Colon.....	Dr. F. W. Clements, Burr Oak.....	Sept. 10.....	750
Van Buren county:				
East Lake.....	Almena.....	John Wiltses, Kendall.....	Aug. 30.....	450
Moon Lake.....	Geneva.....	Chas. Squires, Lacota.....	Aug. 30.....	300
Moon Lake.....	Geneva.....	J. A. Gibson, Lacota.....	Aug. 30.....	300
Lillie Lake.....	Hamilton.....	John Baker, Decatur.....	Aug. 30.....	600
Keeler Lake.....	Keeler.....	Thos. S. Hays, Hartford.....	Aug. 30.....	900
Mud Lake.....	Porter.....	J. B. Pitts, Marcellus.....	Sept. 3.....	450
Bangor Millpond.....	Bangor.....	Archie V. McKee, Bangor.....	Sept. 21.....	400
Bear Lake.....	Columbia.....	E. B. Eddy, Grand Junction.....	Sept. 21.....	400
Total.....				39,100

PERCH.
FINGERLINGS.

County and name of water.	Township.	Applicant of depositor.	Date.	Number.
Barry county: Sawmill Lake.....	Johnstown.....	E. A. Turner, Bedford.....	1910. July 8	4,000
Ionia county: Long Lake.....	Orleans.....	W. B. Connor, Shiloh.....	Aug. 19	1,000
Jackson county: Wolf Lake.....	Leoni.....	Geo. E. Beebe, Jackson.....	Oct. 21	1,000
Lena wee county: Devils Lake.....	Woodstock.....	H. E. Hand, Tecumseh.....	Aug. 3	500
Montmorency county: Long Lake.....	Montmorency.....	Wm. Scott, Hillman.....	Sept. 1	200
Sucker Lake.....	Hillman.....	Austin Rea, Hillman.....	Sept. 1	200
Oakland county: Lake Orion.....	Orion.....	J. E. Bolles, Detroit.....	Aug. 24	1,000
Presque Isle county: Grand Lake.....	Crapo, etc.....	N. A. Eddy, Bay City.....	Aug. 26	1,750
St. Joseph county: St. Joseph River.....	Constantine.....	Wallace N. Harvey, Constantine.....	July 30	500
Fish Lake.....	Burr Oak.....	Wm. H. Bodner, Burr Oak.....	Aug. 20	500
Burr Oak Millpond.....	Burr Oak.....	Jas. R. Smith, Burr Oak.....	Aug. 20	1,000
Total.....				11,450

SUNFISH AND BLUEGILLS.
FINGERLINGS AND YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Jackson county: Lagoon in Loomis Park Michigan Center Millpond	Jackson Leoni	W. W. Todd, Jackson. Geo. E. Beebe, Jackson.	1910. July 9 Oct. 21	150 450
Oakland county: Loon Lake Orchard Lake Union Lake	Waterford West Bloomfield West Bloomfield and Commerce	Mich. Fish Commission, Drayton Plains F. S. Campbell, Detroit. C. M. Van Buskirk, Pontiac.	Aug. 2 Aug. 16 Aug. 16	2,000 600 400
Wayne county: Lake Honor	Van Buren	H. S. Kiskadden, Detroit.	July 13	75
Total.....				3,675

GRASS PIKE.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Jackson county: Michigan Center Millpond	Leoni	Geo. E. Beebe, Jackson.	1910. Oct. 21	400

LANDLOCKED SALMON.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Chippewa county: Soo Rapids.....	Michigan Fish Commission, Detroit.....	1910. July 29	5,000

LAKE TROUT.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Charlevoix county: Thumb Lake.....	T. 32 N. R. W.....	Jas. O. Waggoner, Vanderbilt.....	1910. July 2	5,000

RAINBOW TROUT.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cass county: Magician Lake Christian Creek	Silver Creek, Penn etc.	F. H. Coddling, Dowagiac H. H. Roth, Cassopolis	1910. Oct. 17 Oct. 18	3,000 3,000
Clare county: Budd Lake	Hayes, etc.	G. J. C. Cummins, Harrison	Oct. 20	1,200
Genesee county: Long Lake	Fenton	Everett L. Bray, Flint	Oct. 19	1,200
Ingham county: Mud Creek	Alandon	C. P. Mickelson, Mason	Oct. 22	1,200
Ionia county: Nickle Plate Pond	Ronald	C. A. Dalzell, Ionia	Oct. 19	900
Kent county: Lambertson Lake	Grand Rapids	Dwight Lydell, Mill Creek	Oct. 22	1,500
Lake county: P. M. River	Pleasant Plains	Geo. M. Brown, Detroit	Oct. 20	7,200
Muskegon county: Inlet to Big Blue Lake	Blue Lake	Fred J. Russell, Hart	July 8	8,000
Newaygo county: Little South Branch P. M. River	Home	Mich. Fish Commission, Detroit	July 17	30,000
Oakland county: Austin and Round Lakes Indian Garden Lake Long Lake	Millford, Millford, Orion	R. S. Potts, Millford Tom A. Forbes, Millford W. A. Benjamin, Orion	Oct. 19 Oct. 19 Oct. 24	1,500 1,500 1,200
Oceana county: Gales Millpond	Eldridge	T. B. Mitchell, Hart	Nov. 14	1,000
Oscoda county: Clear Lake		H. D. Neal, Rose City	Oct. 19	1,500
Total				63,900

TOTALS OF PLANTS FOR LAST HALF OF CALENDAR YEAR 1910.

Small Mouth Black Bass, Fingerlings Nos. 1, 2, 3 and 4	72,450
Large Mouth Black Bass, Advanced Fry	374,000
Large Mouth Black Bass, Fingerlings Nos. 1, 2, 3 and 4	555,810
Large Mouth Black Bass, Yearlings	600
Warmouth Bass, Yearlings	39,100
Perch, Fingerlings	11,450
Sunfish and Bluegills, Fingerlings and Yearlings	3,675
Grass Pike, Yearlings	400
Landlocked Salmon, Fingerlings	5,000
Lake Trout, Fingerlings	5,000
Rainbow Trout, Fingerlings	63,900

BROOK TROUT PLANTS, 1911.
FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alpena county:			1911.	
West Branch of Black River.	Hawes	John Macgregor, Harrisville.	Mar. 13	4,500
Black River.	Harrisville, Haynes and Alpena.	Geo. Burt, Harrisville.	Mar. 13	6,000
Black River.	Harrisville, Haynes and Alpena.	F. J. Elmer, Harrisville.	Mar. 13	7,500
Venetien Creek.	Alpena	C. W. Luce, East Tawas.	Mar. 13	10,000
West Branch of Black River.	Mikado	C. E. Lovelace, Mikado.	Mar. 13	7,500
Sucker Creek.	T. 27 N. of R. 6 and 7 E.	W. S. Linton, Saginaw.	Mar. 13	9,000
Pine River.	Millen.	W. S. Linton, Saginaw.	Mar. 13	9,000
McKnight Creek.	Hawes	Daniel Lavier, Lincoln.	Mar. 13	6,000
W. Lake Creek.	Hawes	Daniel Lavier, Lincoln.	Mar. 13	4,500
Little North Branch of Black River.	Hawes	E. R. Wyman, Alpena.	Mar. 17	3,000
Mitchell Creek.	Caledonia.	Jas. Briseiden, Alpena.	Mar. 17	4,500
Newton Creek.	Mitchell.	W. A. Blackburn, Alpena.	Mar. 17	3,000
Little Gichrist Creek.	Caledonia.	C. W. Edwards, Alpena.	Mar. 17	4,000
Muskat Creek.	Caledonia.	C. W. Edwards, Alpena.	Mar. 17	4,000
Banfield of Nine Mile Creek.	Millen.	D. D. Hanover, Alpena.	Mar. 17	3,000
The Little Wolf.	Caledonia.	Richard Collins, Alpena.	Mar. 17	4,500
McGinn Creek.	Curtis.	Wm. Ellis, Au Sable.	Mar. 18	3,000
South Branch of Pine River.	Mitchell.	J. A. Patten, Curran.	Mar. 18	3,000
Spring Creek.	Mitchell.	J. A. Patten, Curran.	Mar. 18	3,000
Mill Creek.	Curtis.	S. C. McCollum, Collins.	Mar. 18	4,500
	Mitchell.	F. H. Loud, Au Sable.	Mar. 18	3,000
	Harrisville.	F. H. Loud, Au Sable.	Mar. 18	3,000
		A. L. Noyes, Harrisville.	Mar. 23	4,500
Alpena county:				
Plumner Creek.	Ganges	N. C. Nelson, Fennville.	Feb. 23	2,000
Wann's Creek.	Mantus	W. H. Whitbeck, Fennville.	Feb. 23	2,000
Swan Creek.	Valley	A. L. Whitbeck, Fennville.	Feb. 23	2,000
David's Creek.	Heath and Monterey.	Chas. E. Bond, Allegan.	Feb. 27	4,000
Bear Creek.	Heath and Monterey.	C. F. Symon, Allegan.	Feb. 27	5,000
Chart, Abrams, Delano and Neeley's Creeks.	Gun Plains	Wm. Crisp, Plainwell.	Mar. 3	4,500
Wabash Creek.	Gun Plains	E. J. Anderson, Plainwell.	Mar. 3	6,000
Silver Creek.	Gun Plains	R. L. Soule, Plainwell.	Mar. 3	6,000
Bailey March Creek.	Silver Creek.	O. C. Rice, Kalamazoo.	Mar. 3	3,000
	Cheshire and Valley.	Fitz. Hamilton, Kalamazoo.	Mar. 27	3,000
Alpena county:				
Trout Creek.	Alpena	W. E. Rogers, Alpena.	Mar. 17	1,500
Berinski Creek.	Sanborn and Ossineke.	R. E. Ellsworth, Alpena.	Mar. 17	4,500
Davis Creek.	Ossineke.	R. E. Ellsworth, Alpena.	Mar. 17	4,500
Upper South Branch of Black River.	Several.	Dr. W. E. Carr, Alpena.	Mar. 17	10,000
Scott Creek.	Ossineke.	C. W. Edwards, Alpena.	Mar. 17	4,000

North Branch.....	Maple Ridge.....	Frank DeLong, Cathro.....	Mar. 17	6,000
Beaver Creek.....	Ossineke.....	C. W. Luce, East Tawas.....	Mar. 17	7,500
Devil River.....	Sanborn.....	C. W. Luce, East Tawas.....	Mar. 25	7,500
Antrim county:				
Shanty Creek.....	Custer.....	A. B. Wooten, Bellaire.....	Mar. 16	3,000
Cold Creek.....	Kearney.....	A. B. Wooten, Bellaire.....	Mar. 16	2,000
Cedar River.....	Kearney and Chestonia.....	A. B. Wooten, Bellaire.....	Mar. 16	4,000
Town Line Creek.....	Banks.....	Dr. L. M. Newman, Central Lake.....	Mar. 16	2,000
Ogletree Creek.....	Banks and Central Lake.....	W. F. Carpenter, Central Lake.....	Mar. 16	2,000
Wilkinson Creek.....	Central Lake and Banks.....	W. S. Richardson, Central Lake.....	Mar. 16	2,000
Norman Creek.....	Central Lake.....	W. H. Uptegrove, Central Lake.....	Mar. 16	1,000
Bosses Creek.....	Banks.....	Henry Sfruk, Ellsworth.....	Mar. 16	2,000
Noyes Creek.....	Banks.....	W. A. Boss, Ellsworth.....	Mar. 16	1,000
St. Clair Creek.....	Banks.....	L. Van Skiver, Ellsworth.....	Mar. 16	2,000
Ore Creek.....	Banks and Marion.....	L. Van Skiver, Ellsworth.....	Mar. 16	3,000
Bartholomew Creek.....	Echo.....	Carl Stroebel, East Jordan.....	Mar. 16	4,000
Jordan River.....	Jordan.....	Carl Stroebel, East Jordan.....	Mar. 16	5,000
Gould Creek.....	Helena.....	H. S. Pinney, East Jordan.....	Mar. 16	2,000
Spencer Creek.....	Chestonia.....	Chas. H. Coy, Alden.....	Mar. 16	2,000
Jordan River.....	Chestonia.....	Wm. Weaver & Son, Elmira.....	Mar. 22	6,000
Jordan River.....	Chestonia.....	F. M. Parker, Alba.....	Mar. 22	7,500
Landlide Creek.....	Chestonia.....	A. A. Strickland, Alba.....	Mar. 22	1,000
Racket River.....	Chestonia.....	D. H. Wecker, Alba.....	Mar. 22	1,000
Cascade C'k and Racket River, Tribs. to Jordan River.....	Chestonia.....	R. C. Bennett, Alba.....	Mar. 22	5,000
Green River.....	Chestonia.....	R. C. Bennett, Alba.....	Mar. 22	4,000
Arenac county:				
Town Line Creek.....	Clayton and Mason.....	C. D. Brooks, Omer.....	Mar. 13	6,000
Dead Branch.....	Deep River and Arenac.....	C. D. Brooks, Omer.....	Mar. 13	7,000
Big Creek.....	Mason, Arenac and AU Gres.....	C. D. Brooks, Omer.....	Mar. 13	3,000
Stier's Creek.....	Deep River.....	J. R. Adams, Sterling.....	Mar. 23	3,000
Paramelee Creek.....	Deep River.....	J. R. Adams, Sterling.....	Mar. 23	3,000
Hopkisses Creek.....	Adams.....	J. R. Adams, Sterling.....	Mar. 23	2,000
Pine River.....	Adams, Deep River and Arenac.....	J. R. Adams, Sterling.....	Mar. 23	4,000
Deep River.....	Heads in Deep River.....	Francis Avery, Standish.....	Mar. 23	6,000
Lindy Creek.....	Arenac.....	Francis Avery, Standish.....	Mar. 23	4,000
North Branch of Deep River and South Omer.....	Gibson.....	Francis Avery, Standish.....	Mar. 23	3,000
Warner Creek.....	Deep River.....	Francis Avery, Standish.....	Mar. 23	3,000
Cooler Creek.....	Deep River.....	Francis Avery, Standish.....	Mar. 23	3,000
Miles Creek.....	Arenac.....	Francis Avery, Standish.....	Mar. 23	3,000
Denno Creek.....	Maple Ridge.....	Francis Avery, Standish.....	Mar. 23	3,000
Tributary of Deep River.....	Deep River.....	Francis Avery, Standish.....	Mar. 23	3,000
South Omer Creek.....	Standish.....	Francis Avery, Standish.....	Mar. 23	4,000
Omer, Cedar and Willis Creeks.....	Standish.....	Francis Avery, Standish.....	Mar. 23	4,000
Alger county:				
Anna River.....	Munising.....	H. A. St. John, Marquette.....	April 15	3,000
Furnace Creek.....	Munising.....	H. A. St. John, Marquette.....	April 15	3,000
Buck Creek.....	Munising.....	H. A. St. John, Marquette.....	April 15	1,500
Bohemian Creek.....	Munising.....	H. A. St. John, Marquette.....	April 15	1,500
Stutt's Creek.....	Munising.....	H. A. St. John, Marquette.....	April 15	3,000
Miner's River.....	Munising.....	H. A. St. John, Marquette.....	April 15	3,000

Brook trout plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alger county—Continued.				
Sisneck Creek	Rock River	H. R. Harris, Marquette	April 15	4,500
St. Paul River	Rock River	H. R. Harris, Marquette	April 15	6,000
Little Indian River		Geo. Wileys, Detroit	April 19	7,500
Bull Creek		Geo. Wileys, Detroit	April 19	3,000
Squaw Creek	Munising	Fred S. Case	April 19	3,000
Robinson's Creek	Au Train	Fred S. Case	April 19	9,000
Big Indian Creek and tributaries	Munising	Lewis Williams, Grand Marais	April 19	3,000
West Branch of the Sucker	Burt	Thos. J. McCann, Grand Marais	April 19	7,500
Sucker River	Burt	H. A. St. John, Marquette	April 15	4,500
Branches of North Manistique River.				
Barry county:				
Bagley Creek	Orangeville	A. J. Shelp, Doster	Feb. 27	1,500
Tributaries to Wanangogert Creek	Assyria	H. S. Jones, Bellevue	Feb. 27	2,000
Ellis or Spring Brook	Assyria	H. S. Jones, Bellevue	Feb. 27	1,500
Crooked Brook	Assyria	P. Jewell, Assyria	Feb. 27	1,500
Hamilton Brook		L. H. Sablin, Battle Creek	Feb. 27	1,500
Three tributaries to Thornapple River	Thornapple	A. C. Hindman, Grand Rapids	Mar. 1	3,000
Tributaries to Cedar Creek	Hope, Baltimore and Hastings	J. H. Neiss, Hastings	Mar. 1	3,000
Hill Creek	Yankee Springs	J. H. Neiss, Hastings	Mar. 1	1,500
Cedar Creek	Barry, Cedar Creek, Baltimore and Hastings	J. H. Neiss, Hastings	Mar. 1	1,500
Tamarc Creek	Baltimore	W. J. Michael, Hastings	Mar. 1	6,000
West Creek	Rutland and Hastings	Dr. C. W. Mixer, Hastings	Mar. 1	2,000
Upper Cedar Creek	Baltimore	Dr. C. W. Mixer, Hastings	Mar. 1	2,000
McCollum Creek	Hope	Dr. C. W. Mixer, Hastings	Mar. 1	4,000
Kelley's Creek	Baltimore	Dr. C. W. Mixer, Hastings	Mar. 1	1,500
Foley's Creek	Irving	Dr. C. W. Mixer, Hastings	Mar. 1	1,500
Pool Creek	Several	C. H. Osborn, Hastings	Mar. 1	1,500
High Bank Creek	Johnstown, Baltimore, Castleton and Cleveland	F. H. Barlow, Hastings	Mar. 1	4,000
Tributaries of Gull Lake	Prairieville	A. J. Houghtalin, Morgan	Mar. 1	4,000
Glass Creek	Hope, Rutland, Yankee Springs and Thornapple	Arch Sootsman, Cressy	Mar. 1	1,500
Gull Lake	Prairieville	D. Campbell, Cloverdale	Mar. 3	4,500
No name	Barry	A. W. Crane, M. D., Kalamazoo	Mar. 3	3,000
		A. W. Crane, M. D., Kalamazoo	Mar. 3	2,000
Baraga county:				
Peach Creek	48-25	E. W. MacPherran, Marquette	May 9	4,500
Branch of Sturgeon River	48-34	E. W. MacPherran, Marquette	May 9	1,500
Sidings Creek	48-32	E. W. MacPherran, Marquette	May 9	15,000
Streams about 274½ Mile Post	48-34	E. W. MacPherran, Marquette	May 9	4,500
Clear Creek	Covington	Sidman H. and F. Club, Sidnaw	April 19	1,500
Spurr Creek	Spurr	Frank Perry, Michigamme	April 21	6,000

Outlet of Three Lakes.	Spurr.	Peter Trudell, Negaunee.	April 21	3,000
McDonald Creek	Spurr.	Peter Trudell, Jr., Negaunee.	April 21	3,000
Cliff Creek	Spurr.	Peter Trudell, Jr., Negaunee.	April 21	3,000
Nestoria Creek.	Spurr.	Peter Trudell, Jr., Negaunee.	April 21	3,000
Canal Creek	Spurr.	Peter Trudell, Jr., Negaunee.	April 21	1,500
Outlet of Trout Lake	Spurr.	Peter Trudell, Jr., Negaunee.	April 21	12,500
Sturgeon River	L'Anse and others	Silver River R. and G. Club, L'Anse	April 26	7,500
Coles Creek.	L'Anse and Arvon.	Silver River R. and G. Club, L'Anse	April 26	9,000
Fall River	L'Anse.	Silver River R. and G. Club, L'Anse	April 26	6,000
Meadow Brook	L'Anse.	Silver River R. and G. Club, L'Anse	April 26	9,000
Steinbach Creek.	Baraga.	Silver River R. and G. Club, L'Anse	April 26	4,500
Gannache Creek	L'Anse.	Silver River R. and G. Club, L'Anse	April 26	3,000
Duck Creek.	Baraga.	Silver River R. and G. Club, L'Anse	April 26	3,000
Clear Creek.	Baraga.	Silver River R. and G. Club, L'Anse	April 26	3,000
West Branch	Baraga.	Wm. C. Birk, Baraga.	April 26	3,000
Kelsey Creek	Baraga.	A. B. Cosgrove, Baraga.	April 26	3,000
Cosgrove's Creek.	Baraga.	Louis Robillard, Baraga.	April 26	1,500
Slate River.	Arvon.	W. L. Mason, L'Anse.	April 26	9,000
Branch county:				
Stanton's Creek.	Sherwood.	H. H. Hubbard, Union City.	Feb. 24	1,500
Brewster's Brook	Girard	F. T. Tappan, Coldwater.	Mar. 3	3,000
Shinneman Brook, Mott's, Hog, Allen and Branch Creeks.	Coldwater.	F. T. Tappan, Coldwater.	Mar. 3	22,500
Benzie county:				
Platte River.	Homestead	Frank Conklin, Honor	Mar. 17	19,000
Silver Creek	Inland	L. H. Stacey, Honor	Mar. 17	2,000
Brundage Creek.	Homestead	L. H. Stacey, Honor	Mar. 17	2,000
Collison Creek	Homestead	L. H. Stacey, Honor	Mar. 17	2,000
South Branch	Platte.	L. H. Stacey, Honor	Mar. 17	2,000
North Branch and Platte River	Platte.	L. H. Stacey, Honor	Mar. 17	10,000
Brezofsky Creek	Benzonia	W. B. Covey, Honor	Mar. 17	2,000
Miner Creek	Benzonia	W. B. Covey, Honor	Mar. 17	2,000
Root's Creek and Platte River	Homestead and Platte	I. P. Corry, Honor	Mar. 17	14,000
Platte River	Homestead, Inland and Benzonia.	F. A. Mitchell, Manistee	Mar. 17	20,000
Betsy River	Blaine.	F. A. Mitchell, Manistee	Mar. 17	30,000
Herring Creek	Blaine.	Ben Little, Frankfort	Mar. 17	6,000
Berrien county:				
Branch of Hickory Creek	Watervliet.	Ed. A. Gast, St. Joseph	Feb. 23	1,500
Mill Creek	Sodus.	Ed. A. Gast, St. Joseph	Feb. 23	2,000
Farme Creek	Sodus and Berrien	Ed. A. Gast, St. Joseph	Feb. 23	3,000
Three Branches of Row Creek	Watervliet	F. K. George, St. Joseph	Feb. 23	5,000
Fisher Creek.	Balmbridge	F. K. George, St. Joseph	Feb. 23	3,000
Spring fed brooks near Watervliet	Benton.	E. E. Rowland, Watervliet	Feb. 23	3,000
Branch of Mill Creek, Smith Creek	Three Oaks.	Albert Bujack, Watervliet	Feb. 23	1,500
Blue Creek	Lake	John De Tampie, Benton Harbor	Feb. 23	3,000
Hog Creek		Fred Herring, St. Joseph	Feb. 23	3,000
Shedd Creek		Claude Herring, St. Joseph	Feb. 23	3,000
Shafter Creek		Mark Herring, St. Joseph	Feb. 23	3,000
Long Branch of Blue Lake		A. F. Herring, St. Joseph.	Feb. 23	2,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Berrien County.—Continued.				
Tabor Creek	Sodus	A. F. Herring, St. Joseph.	1911.	1,500
Graham Creek	Lincou	A. F. Herring, St. Joseph.	Feb. 23	2,000
Smith Creek	Pipestone	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Pearl Creek	Pipestone	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Hess Creek	Oronoko	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Mortlock Creek	Pipestone	J. W. Isbell, St. Joseph.	Feb. 23	3,000
Howard Creek	Benton	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Putnam Creek	Berrien	E. I. Backus, St. Joseph.	Feb. 23	1,500
Claypool Creek	Benton	E. I. Backus, St. Joseph.	Feb. 23	1,500
Eckert Creek	Benton	Chas. E. Shaefer, St. Joseph.	Feb. 23	1,500
Ox Creek	Watervliet	W. J. Lucker, St. Joseph.	Feb. 23	2,000
Jones Creek	New Buffalo	W. J. Lucker, St. Joseph.	Feb. 23	3,000
Spring Brook	Pipestone	W. J. Lucker, St. Joseph.	Feb. 23	3,000
Koone Creek	Pipestone	S. M. Clawson, Eau Claire.	Mar. 24	3,000
Collins Creek	Pipestone	S. M. Clawson, Eau Claire.	Mar. 24	3,000
Calhoun county:				
Wright Creek	Leroy	C. M. Hall, Union City.	Feb. 24	3,500
Oberhauser Creek	Newton	A. E. Carpenter, Union City.	Feb. 24	1,500
Love Creek	Newton	A. E. Carpenter, Union City.	Feb. 24	3,000
Warsop Creek	Newton	H. T. Carpenter, Union City.	Feb. 24	1,500
Katz Creek	Barryton	D. D. Buell, Union City.	Feb. 24	1,500
Thompson Creek	Newton and Leroy	Burt P. Long, Union City.	Feb. 24	3,000
Weed's Creek	Burlington and Athens	C. H. Lowell, Union City.	Feb. 24	1,500
Beadle Creek	Newton and Leroy	C. H. Lowell, Union City.	Feb. 24	1,500
Talmadge Brook	Marshall and Fredonia	H. H. Taylor, Marshall.	Feb. 27	3,000
Mingus Brook	Battle Creek	H. H. Taylor, Marshall.	Feb. 27	2,000
Pigeon Creek	Emmet	Henry Champion, Battle Creek.	Feb. 27	2,000
Dickinson Creek	Bedford	Smith Bramble, Battle Creek.	Feb. 27	3,000
Bascon Creek	Bedford	W. H. Skinner, Battle Creek.	Feb. 27	3,000
Adams Brook	Bedford	D. H. Frazier, Battle Creek.	Feb. 27	3,000
Seven Mile Creek	Bedford	W. H. Pulisifer, Battle Creek.	Feb. 27	2,000
Eagle Brook	Leroy	W. H. Pulisifer, Battle Creek.	Feb. 27	1,500
Newberry Creek	Leroy	Geo. H. Williams, Battle Creek.	Feb. 27	3,000
Sprague Creek	Leroy	E. R. Newman, Battle Creek.	Feb. 27	1,500
Shannon Creek	Leroy	M. S. Emmons, East Leroy.	Feb. 27	1,500
Putnam Creek	Athens	Ross E. Fuller, East Leroy.	Feb. 27	1,500
Barber Creek	Athens	Fred H. Hall, East Leroy.	Feb. 27	1,500
Pine Creek	Leroy	F. G. Woodruff, Athens.	Feb. 27	1,500
Pine Creek	Athens	J. C. Gaw, Athens.	Feb. 27	1,500
Kelsey Creek	Athens	Glenn R. Waterman, East Leroy.	Feb. 27	1,500
Silver Creek	Battle Creek	Dor Waterman, East Leroy.	Feb. 27	1,500
Tower Brook	Emmet	L. H. Tower, M. D., Battle Creek.	Mar. 25	7,500
		L. H. Tower, M. D., Battle Creek.	Mar. 25	7,500

Cass county:					
Miller Creek	Pokagon	John Wyant, Berrien Center	Feb. 23	1,500	
No name	La Grange and Howard	R. W. Hain, Elkhart, Ind.	Feb. 24	3,000	
Gleason Creek	La Grange and Penn	J. E. Underwood, Cassopolis	Feb. 24	4,500	
Keagan's Creek	Jefferson	J. H. Kelsey, Cassopolis	Feb. 24	3,000	
Silver Creek	Porter	Arthur Sears, Vandalia	Feb. 24	1,500	
McNab's or Jones Creek	La Grange and Penn	C. H. Kimmerle, Cassopolis	Feb. 24	3,000	
Thorp Creek	Jefferson and Harvard	C. H. Kimmerle, Cassopolis	Feb. 24	3,000	
Shaw's Creek	Jefferson and Harvard	C. H. Kimmerle, Cassopolis	Feb. 24	4,500	
Centennial Mill Creek	La Grange	C. H. Kimmerle, Cassopolis	Feb. 24	3,000	
Hadsell Creek	Jefferson	C. H. Kimmerle, Cassopolis	Feb. 24	6,000	
Glenwood Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	4,500	
Hampton Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	1,500	
Kennedy Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	1,500	
Clendenen Creek	Silver Creek	Fred Phillips, Dowagiac	Feb. 24	1,500	
McOmber Creek	Silver Creek	Fred Phillips, Dowagiac	Feb. 24	1,500	
Silver Creek	Silver Creek	Fred Phillips, Dowagiac	Feb. 24	3,000	
Miller Creek	Pokagon	Fred Phillips, Dowagiac	Feb. 24	1,500	
Yaw Creek	Silver Creek	Fred Phillips, Dowagiac	Feb. 24	1,500	
Starrett Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	1,500	
Anthony Creek	Silver Creek	Fred Phillips, Dowagiac	Feb. 24	1,500	
Broadhurst Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	1,500	
Carman Creek	Wayne	Fred Phillips, Dowagiac	Feb. 24	1,500	
Peavine Creek	Pokagon	Fred Phillips, Dowagiac	Feb. 24	3,000	
McKinney Creek	Pokagon	Fred Phillips, Dowagiac	Feb. 24	3,000	
Pokagon Creek	Pokagon	Fred Phillips, Dowagiac	Feb. 24	3,000	
Wilson Creek	Newberg	Hugh McKee, Marcellus	Mar. 3	1,500	
Rock River	Marcellus	C. S. Jones, Marcellus	Mar. 3	1,500	
Tributary of Dowagiac Creek	Volmia	Floyd Brown, Marcellus	Mar. 3	1,500	
Charlevoix county:					
Murray Creek	South Arm	W. A. Stroebel, East Jordan	Mar. 16	2,000	
Deer Creek	Wilson	Carl Stroebel, East Jordan	Mar. 16	4,000	
Brown's Creek	South Arm	Carl Stroebel, East Jordan	Mar. 16	3,000	
Todd Creek	South Arm	Abe. W. Carson, East Jordan	Mar. 16	2,000	
Healy Creek	Wilson	W. F. Empey, East Jordan	Mar. 16	2,000	
Porter Creek	Wilson and South Arm	W. F. Empey, East Jordan	Mar. 16	4,000	
Warner Creek	Wilson and Warner	Terry S. Barber, Boyne City	Mar. 25	4,500	
Collins Creek	Boyne Valley	Terry S. Barber, Boyne City	Mar. 25	3,000	
Deerlick Creek	Boyne Valley	Terry S. Barber, Boyne City	Mar. 25	2,000	
Deer Creek	Boyne Valley	John L. A. Galster, Boyne Falls	Mar. 25	6,000	
Findley Creek	Boyne Valley	John L. A. Galster, Boyne Falls	Mar. 25	2,000	
Boyne River	Boyne Valley	Chas. Galster, Boyne Falls	Mar. 25	7,500	
Boyne River	Boyne Valley	Wm. Weaver & Son, Elmira	Mar. 25	9,000	
W. Branch of Sturgeon River	Hudson	C. F. Hoffman, Vanderbilt	Mar. 25	8,000	
Cheboygan county:					
Big Pigeon River	Koehler and Walker	Clyde King, Indian River	Mar. 15	10,500	
West Branch of Lower Little Pigeon River	Koehler	Clyde King, Indian River	Mar. 15	10,500	
East Branch of Little Sturgeon River	Koehler	Clyde King, Indian River	Mar. 15	4,500	
West Branch of Little Sturgeon River	Ellis and Kochler	Clyde King, Indian River	Mar. 15	7,500	
Pigeon River	Munda	C. A. Campbell, Afton	Mar. 15	10,500	
Sturgeon River	Benton	C. E. Cornell, Wolverine	Mar. 15	16,000	
Elliott Creek	Benton	Geo. A. Barber, Cheboygan	Mar. 15	6,000	

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Chicoyan county.—Continued.				
Little Black Creek.....	Beauregard	W. H. Borrow, Cheboygan.....	1911.	3,000
Nigger Creek.....	Burt and Monroe	E. A. Riegs, Topinabee.....	Mar. 15	6,000
Carp Creek.....	Munro and Burt	E. A. Riegs, Topinabee.....	Mar. 15	4,500
Lower Little Pigeon River	Kochler	J. W. Lester, Indian River.....	Mar. 15	7,500
East Branch Big Pigeon River	Kochler and Walker	J. W. Lester, Indian River.....	Mar. 15	4,500
Cedar Creek.....	Tuscarora and Littlefield	J. W. Lester, Indian River.....	Mar. 15	6,000
Stony Creek.....	Walker and Kochler	J. W. Lester, Indian River.....	Mar. 15	2,000
McMaster Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	4,000
Gregg Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	2,000
Silver Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	1,500
Gallier Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	6,000
Davis Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	2,000
McPherson Creek.....	Forest	J. M. Clark, Onaway.....	Mar. 17	6,000
Wolcher Creek.....	Forest and Waverly	J. M. Clark, Onaway.....	Mar. 17	8,000
Miligan Creek.....	Waverly	J. M. Clark, Onaway.....	Mar. 17	8,000
Upman's Creek.....	Several	Chas. F. Davis, Burt Lake.....	Mar. 22	1,000
Mill Creek.....	Mackinaw	E. R. Pierce, Mackinaw.....	Mar. 22	4,500
Chippewa county:				
Trout Brook.....	Rudyard and Trout Lake	J. C. Sass, Rudyard.....	April 1	6,000
Chub Creek.....	Rudyard and Trout Lake	J. C. Sass, Rudyard.....	April 1	6,000
Bear Creek.....	Rudyard	J. C. Sass, Rudyard.....	April 1	7,500
Bisquit Creek.....	Rudyard and Trout Lake	J. C. Sass, Rudyard.....	April 1	7,500
Pine River.....	Rudyard	J. C. Sass, Rudyard.....	April 1	7,500
Trapper's Creek.....	Trout Lake	Chase S. Osborn, Sault Ste. Marie.....	May 15	10,500
Sweetbriar Creek.....	Superior	Robert P. Hulson, Sault Ste. Marie.....	May 15	9,000
Grant's Creek.....	Pickford	Adelher Desormeau, Kildan.....	May 20	7,500
Spring Creek.....	Pickford	Dr. John A. Cameron, Pickford.....	May 20	7,500
Desormeaux Creek.....	Pickford	Michigan Fish Commission, Detroit.....	May 20	33,000
St. Mary's River.....				
Clare county:				
North Branch of Tobacco River	Surrey	Fuller and Harris, Farwell.....	Mar. 10	3,000
South Branch of Tobacco River	Haves	F. A. Fowler, Clare.....	Mar. 20	7,500
North Branch of Tobacco River	Greenwood	Geo. J. Cummins, Harrison.....	Mar. 20	15,000
Smith Creek.....	Hamilton	Geo. J. Cummins, Harrison.....	Mar. 20	3,000
Town Line Creek.....	Summerfield	Andrew Hagan, Harrison.....	Mar. 20	3,500
Floodwood Creek.....	Franklin	W. F. Green, Harrison.....	Mar. 20	3,000
Cedar Creek.....	Franklin	W. F. Green, Harrison.....	Mar. 20	2,000
South Branch of Tobacco River	Clare, Grant and Hatton	A. R. Canfield, Clare.....	Mar. 21	7,500
Tobacco River, Clear Creek and other creeks	Arthur and Hatton	Wm. C. Cornell, Saginaw.....	Mar. 21	15,000
Green and Gishwash Creeks.....	Redding	Wm. Blue, Temple.....	Mar. 21	13,000

Clinton county:									
Lost Creek	Dallas	J. B. Miller, Pewanoo	Mar. 7	1,500					
Fuller Creek	Dallas	J. B. Miller, Pewanoo	Mar. 1	2,000					
Jenkinson Creek	Eagle	Fred L. Berry, Grand Ledge	Mar. 3						
Crawford county:									
Au Sable River	Several	F. B. Dickerson, Detroit	Mar. 21	45,000					
East Branch of Au Sable River	Grayling	J. C. Burton, Grayling	Mar. 21	18,000					
Big Creek	Maple Forest	T. E. Douglas, Lovells	Mar. 21	7,500					
North Branch of Au Sable River	Maple Forest	Paul F. H. Morley, Saginaw	Mar. 21	15,000					
Big Creek	Maple Forest	W. B. Mershon, Saginaw	Mar. 21	22,500					
South Branch of Au Sable River and tributaries	Several	P. J. Welsh, Lewiston	Mar. 21	7,500					
		Orlando F. Barnes, Roscommon	Mar. 23	42,000					
Delta county:									
Bark River	Bark River	T. Killian, Escanaba	Mar. 31	6,000					
Whitefish and Rapid River	Rapid River and Maple Ridge	T. Killian, Escanaba	Mar. 31	12,000					
Reno Creek or Brook	Masonville and Rapid River	T. Killian, Escanaba	Mar. 31	4,500					
Inman Brook	Bark River	T. Killian, Escanaba	Mar. 31	3,500					
Ten Mile Creek	Ford River	T. Killian, Escanaba	Mar. 31	6,000					
Ford River	Bark River	T. Killian, Escanaba	Mar. 31	9,000					
Escanaba River	Escanaba	T. Killian, Escanaba	Mar. 31	7,500					
Sturgeon River	Escanaba	T. Killian, Escanaba	Mar. 31	9,000					
Tacoosh River	Baldwin and Maple Ridge	T. Killian, Escanaba	Mar. 31	4,500					
Banks Brook	Wells	T. Killian, Escanaba	Mar. 31	6,000					
Walker Brook	Wells	T. Killian, Escanaba	Mar. 31	3,000					
East Branch of Bark River	Several	J. H. Boyle, Bark River	Mar. 31	3,000					
Bark River	Several	J. H. Boyle, Bark River	Mar. 31	4,500					
West Branch of Bark River	Several	J. H. Boyle, Bark River	Mar. 31	4,500					
Little Black Creek	Nahma	J. W. Good, Nahma	Mar. 31	3,000					
West Branch of Fish Dam River	Nahma	J. W. Good, Nahma	Mar. 31	3,000					
Mallman Creek	Nahma	F. W. Good, Nahma	April 3	3,000					
Ogontz River	Mason	W. R. Calloway, Minneapolis	April 3	3,000					
Garden Creek	Several	T. Killian, Escanaba	Mar. 31	7,500					
Scotts Creek	Several	R. C. Norway, Minneapolis	April 3	7,500					
Thompson River	Several	W. R. Calloway, Minneapolis	April 3	7,500					
Tributaries to Day's River	Brampton and Masonville	W. H. Welsted, Sr., Brampton	April 15	9,000					
Dickinson county:									
Ford River	Sagola	Win. F. Bartlett, Channing	Mar. 31	7,500					
Headwaters of Ford River	Sagola	H. M. Boll, Channing	Mar. 31	3,000					
Blue-berry Creek	Sagola	J. J. Legendre, Norway	Mar. 31	1,500					
No name	Waucedah	Dan Yamitvot, Waucedah	Mar. 31	3,000					
Beaver Creek	Waucedah	W. J. Turner, Vulcan	Mar. 31	3,000					
Cassidy Creek	Waucedah	W. J. Turner, Vulcan	Mar. 31	3,000					
Red Dam Creek	Waucedah	W. J. Turner, Vulcan	Mar. 31	1,500					
No name	Norway	R. C. Henderson, Norway	Mar. 31	3,000					
Black Creek	West Branch	T. Killian, Escanaba	Mar. 31	7,500					
Campbell Brook	Norway	F. Copeland, Vulcan	April 11	3,000					
Black Creek	Breitung	John E. Quarnstrom, Iron Mountain	May 9	1,500					
Badwater Creek	Norway	John E. Quarnstrom, Iron Mountain	May 9	3,000					
Albert's Creek	Norway	John E. Quarnstrom, Iron Mountain	May 9	3,000					
Black Creek	Norway	John E. Quarnstrom, Iron Mountain	May 9	3,000					

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Eaton county: No name.....	Delta.....	E. V. Chilison, Lansing.....	1911. April 13	6,000
Emmet County:				
Carp River.....	Carp Lake.....	O. C. Cope, Carp Lake.....	Mar. 22	12,000
Carp River and tributaries.....	Carp Lake.....	E. R. Pierre, Mackinaw.....	Mar. 22	6,000
Curtis Creek.....	Severel.....	W. B. Stinson, Grand Rapids.....	Mar. 22	69,000
Hickory Creek.....	Littlefield.....	Wm. L. Curtis, Petoskey.....	Mar. 22	4,500
No. Salm.....	Little France.....	Wm. L. Curtis, Petoskey.....	Mar. 22	3,000
Tannery Creek.....	Friendship.....	Benj. Whittaker, Jr., Harbor Springs.....	Mar. 22	3,000
Bear Creek.....	Bear Creek.....	Geo. C. Braun, Petoskey.....	Mar. 22	2,000
Bear Creek.....	Bear Creek.....	Geo. C. Braun, Petoskey.....	Mar. 22	12,000
Gladwin county:				
Cedar River.....	Sherman.....	James E. Tobin, Gladwin.....	Mar. 23	12,000
Gogebic county:				
Two Mile Creek or outlet of Beaton's Lake.....	Watersmeet.....	Cassius M. McDonald, Watersmeet.....	Mar. 31	3,000
Middle Branch of Ontonagon River.....	Watersmeet.....	Cassius M. McDonald, Watersmeet.....	Mar. 31	6,000
Tributaries to Bass Lake.....	Watersmeet.....	Wm. Bonifas, Watersmeet.....	Mar. 31	4,500
Bass Lake Creek.....	Watersmeet.....	J. F. Johnson, Watersmeet.....	Mar. 31	1,500
Beaver Station Creek.....	Watersmeet.....	J. F. Johnson, Watersmeet.....	Mar. 31	3,000
May's Brook.....	Marenisco.....	H. McDuffy, Ironwood.....	April 6	3,000
Little Presque Isle River.....	Marenisco.....	A. Emerson, Dunham.....	April 6	7,500
Gimlet Creek.....	Marenisco.....	John E. McNichols, Marenisco.....	April 6	1,500
Six Mile Creek.....	Marenisco.....	Frank Louisel, Marenisco.....	April 6	3,000
Spring Creek.....	Marenisco.....	Lewis Owens, Marenisco.....	April 6	1,500
Belton Creek.....	Marenisco.....	F. A. Ormes, Marenisco.....	April 6	3,000
Headwaters of Maple Creek.....	Marenisco.....	Gustaf H. Markstrum, Bessemer.....	April 6	4,500
South Fork of Mud Creek.....	Marenisco.....	W. H. Cheney, Bessemer.....	April 6	3,000
Nymen's Creek.....	Bessemer.....	W. F. Roberts, Bessemer.....	April 6	4,500
Black River.....	Ironwood.....	W. F. Cheney, Bessemer.....	April 6	4,500
Jackson's Creek.....	Wakfield.....	J. S. Rummage, Bessemer.....	April 6	7,500
East Branch of Powder Mill Pond.....	Wakfield.....	Harry Harper, Ramsey.....	April 6	4,500
Covey's Creek.....	Bessemer.....	Harry Harper, Ramsey.....	April 6	4,500
Flink's Creek.....	Bessemer.....	Wm. J. Weston, Bessemer.....	April 6	1,500
Clover Creek.....	Bessemer and Ironwood.....	Frank Winkowski, Bessemer.....	April 6	1,500
Clover Creek.....	Bessemer and Ironwood.....	Jas. Campbell, Ironwood.....	April 6	1,500
Clover Creek.....	Ironwood.....	Harry Barr, Ironwood.....	April 6	3,000
Fox Brook.....	Marenisco.....	Harry Barr, Ironwood.....	April 6	1,500
Fox Creek.....	Marenisco.....	Harry Barr, Ironwood.....	April 6	3,000
East Branch of Ontonagon River.....	Erwin.....	R. A. Douglas, Ironwood.....	April 6	3,000
Jones Brook.....	Watersmeet.....	Eulmont, Waples, Ironwood.....	April 6	3,000
McKinney Creek.....	Ironwood.....	Met Fitzsimmons, Ironwood.....	April 6	1,500
Foster's Brook.....	Marenisco.....	Met Fitzsimmons, Ironwood.....	April 6	1,500
Hazel Creek.....	Marenisco.....	D. E. Sutherland, Sherwood.....	April 6	3,000
Rowe's Creek.....	Ironwood.....	D. E. Sutherland, Sherwood.....	April 6	3,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Gogebic county.—Continued.				
Branch of Presque Isle River	4S-14	F. W. MacPherran, Marquette	1911.	3,000
Little Presque Isle River	Wakefield, Bessemer and Marquette	M. M. Riley, Milwaukee, Wis.	May 9	7,500
Cherry Creek	Wakefield	M. M. Riley, Milwaukee, Wis.	May 10	7,500
Mud Creek	Wakefield and Marquette	M. M. Riley, Milwaukee, Wis.	May 10	7,500
Lula Creek	Wakefield	M. M. Riley, Milwaukee, Wis.	May 10	7,500
Big Presque Isle River	Several	M. M. Riley, Milwaukee, Wis.	May 10	4,500
Headwaters of Ontonagon River	T. 44 R. 41 W	Marvin Hughitt, Jr., Chicago, Ill.	May 10	7,500
Clearwater Creek	T. 44 R. 41 W	Marvin Hughitt, Jr., Chicago, Ill.	May 10	4,500
Lanford Creek	T. 44 R. 41 W	Marvin Hughitt, Jr., Chicago, Ill.	May 10	4,500
Grand Traverse County:				
Sands Creek	Paradise	R. B. DeFrance, Kingsley	Mar. 16	1,500
Malcolm Koffer Spring Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
Hills Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
Clark Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Beaver Meadow Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Harrison Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Parker Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Brownson Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
East Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	6,000
Taber Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Newmarsh Spring Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Baldwin Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Mayfield Brook	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Slaughter House Creek	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Tributaries to Duck Lake	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
East Branch of Anderson Creek	Mayfield	G. A. Brigham, Buckley	Mar. 11	3,000
Boardman River and Williamsburg Creeks	Carthage, Paradise, Union and F. Bay	R. S. Bastian, Buckley	Mar. 18	3,000
Mitchell Arroyo and Williamsburg Creeks	East Bay, Acme and White-water	C. O. Carver, Traverse City	Mar. 18	22,500
West Branch of Anderson Creek	Mayfield	G. A. Brigham, Buckley	Mar. 18	9,000
Parker Creek	Union	F. E. Mills, Fife Lake	Mar. 22	3,000
Carver Creek	Union	F. E. Mills, Fife Lake	Mar. 22	4,000
Carpenter Creek	Fife Lake	F. E. Mills, Fife Lake	Mar. 22	3,000
Hillsdale County:				
Lake Pleasant Brook	Hillsdale and Jefferson	W. C. Kemp, Hillsdale	Mar. 1	3,000
No name	Cambria	W. J. French, Hillsdale	Mar. 1	1,500
Silver Creek	Cambria	W. J. French, Hillsdale	Mar. 1	3,000
Sony Creek	Allen, Littlefield and Butler	L. C. Feigener, Littlefield	Mar. 1	3,000
Headwaters of Kalamazoo River	Scipio	L. C. Feigener, Littlefield	Mar. 1	3,000
Sand Creek	Allen and Littlefield	L. C. Feigener, Littlefield	Mar. 1	4,500
McFadden Ditch	Littlefield and Scipio	L. C. Feigener, Littlefield	Mar. 1	1,500
Headwaters of Grand River	Somersett	Mrs. F. McMan, Somersett Center	Mar. 25	4,500
Douglas Creek	Wheatland	D. J. Douglas, Pitsford	Mar. 25	6,000

Houghton county:					
Fox Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	3,000	
Hope Creek	Duncan and Interior.	Wm. Kroll, Kenton.	April 18	3,000	
Lees Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	1,500	
Beaver Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	4,500	
Stoney Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	1,500	
White Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	3,000	
Spring Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	1,500	
Spargo Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	3,000	
Shane Creek	Duncan and Iron River	Wm. Kroll, Kenton.	April 18	4,500	
Jumbo Creek and branches	Duncan and Covington.	Wm. Kroll, Kenton.	April 18	1,500	
Smith Creek	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	3,000	
Sturgeon River	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
Johnston's Creek	Duncan and Covington	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
Roycroft's Creek	Duncan and Covington	Sidnaw F. and H. Club, Sidnaw	April 19	3,000	
Dead Stream	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
Perch Creek	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
Little Beaver Creek	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	3,000	
Hill Creek	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
Southeast Branch of Ontonagon River	Duncan, Bates and Interior.	Sidnaw F. and H. Club, Sidnaw	April 19	1,500	
East Branch of Ontonagon River	Laird	G. W. Stannard, Rockland.	April 19	3,000	
Leveque's Creek	Portage	F. W. Kroll, Houghton.	April 19	3,000	
Six Mile Creek	Laird	Jno. C. Pyroo, Houghton.	April 26	1,500	
Branch of Sturgeon River	48 to 52.	J. T. McCall, Houghton.	April 26	1,500	
Sturgeon River Branches	48 to 52.	Fred Stoyle, Houghton.	April 26	7,500	
Sturgeon River (small branches)	Laird	Jeff Alexander, Houghton.	April 26	7,500	
Sturgeon River (small branches)	Laird	Paul D. Swift, Houghton.	April 26	1,500	
Small branches of Sturgeon River	Portage and Adams	H. L. Swift, Houghton.	April 26	1,500	
Small branches of Sturgeon River	Portage and Adams	Henry W. Grams, Houghton.	April 26	1,500	
Peepsock Creek	Portage and Adams	H. W. Hart, Houghton.	April 26	4,500	
Pilgrim River	Portage and Adams	Chas. A. Mayworm, Houghton	April 26	3,000	
North Branch of Pilgrim River	Adams	J. J. Michels, Houghton	April 26	3,000	
Four Mile Creek	Portage	John H. Rice, Houghton	April 26	1,500	
Coles Creek	Portage	Henry J. Rompf, Houghton	April 26	3,000	
South Branch of Pilgrim River	Chassell	Dr. P. H. Willson, Chassell	April 26	1,500	
Pike River	Laird	Jas. T. Healey, Houghton	April 26	3,000	
West Branch of Pilgrim River	Laird	Jos. Vairo, Alston	April 26	1,500	
Murphy's Creek	Laird and Chassell	Abel Olson, Houghton	April 26	6,000	
Otter Creek	Laird and Chassell	Wm. D. Caemley, Houghton	April 26	4,500	
Silver Creek	Laird	Fred L. Reedham, Houghton.	April 26	3,000	
Bruneau Creek	Laird	J. C. Weissmiller, Hancock	April 26	4,500	
West Branch Little Sturgeon River	Laird	R. Skiff Sheldon, Houghton.	April 26	9,000	
North Branch of Little Otter River	Laird and Adams	J. G. Bertrand, Houghton	April 26	3,000	
Coach's Creek	Laird and Duncan	H. W. Pesing, Houghton	April 26	4,500	
West Branch of the Otter	Laird	J. M. Cahoon, Houghton	April 26	6,000	
Upper Sturgeon River	Laird	L. H. Atkin, Houghton	April 26	6,000	
Alston Creek	Reservoir or City Water	E. A. Bandin, Houghton	April 26	3,000	
Reservoir or City Water	Portage	H. G. Major, Houghton.	April 26	3,000	
East Branch of Pilgrim River	Altoncz	H. Hermann, Laurium	May	1,500	
Black Creek	Adams	Wm. J. Richards, Painesdale.	May	1,500	
Sawmill Creek			6		

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Huron county.—Continued.				
Sauzee Creek	Adams and Portage	Gotlieb Wurster, Houghton.	1911.	3,000
Elm River	Adams, Elm and Stanton	Joe Paul, Tri Mountain.	May 6	7,500
Cravenat Creek	Stanton	J. Albert Smith, Tri Mountain.	May 6	4,500
Salmon Trout River.	Adams	J. M. Taylor, Tri Mountain.	May 6	7,500
Shawmut Creek	Adams	Herman Dahl, Painesdale.	May 6	3,000
Shawmut River	Elm River	Louis La Rochelle, Houghton.	May 6	6,000
Water's Creek.	Schoolcraft	Ransom Pierce, Lake Linden.	May 6	3,000
Little Rabbit River	Torch Lake	Ernest Peck, Hubbell.	May 6	3,000
Big Traverse River	Schoolcraft	Sam Jones, Hubbell.	May 6	3,000
Armsfrong's Creek	Schoolcraft	A. G. Kauffman, Hubbell.	May 6	1,500
Trap Rock River.	Schoolcraft	M. J. Hedges, Hubbell.	May 6	1,500
Little Traverse River.	Schoolcraft	M. J. Harrington, Hubbell.	May 6	3,000
Hungarian Creek.	Oscoda	M. J. Harrington, Hubbell.	May 6	1,500
McAllum's Creek.	Torch Lake	Jos. Wise, P. M., Hubbell.	May 6	3,000
Vine's Creek.	Torch Lake	A. J. Vine, Hubbell.	May 6	1,500
East Branch Trap Rock River	Schoolcraft	Dr. Chas. Rowe, Hubbell.	May 6	1,500
Ravine Creek	Schoolcraft	Geo. Bark, Hubbell.	May 6	3,000
West Branch Pilgrim River	Portage	Geo. Williams, Houghton.	May 6	3,000
Byrt Creek.	Hancock	Geo. Williams, Houghton.	May 6	3,000
Stock Creek.	Torch Lake	A. D. Edwards, Houghton.	May 6	3,000
Arcadian Mill Creek	Portage	John C. Morrin, Houghton.	May 6	1,500
Huron Creek	Stanton	R. H. Shields, Houghton.	May 6	1,500
Oscar Stream.	Elm River	P. L. Barkman, Oscar.	May 6	1,500
Sleeping River.	Elm River	F. G. Lukey, Winona.	May 6	6,000
West Branch Sleeping River	Elm River	R. R. Seeber, Winona.	May 6	3,000
East Branch Sleeping River	Elm River	F. G. Lukey, Winona.	May 6	3,000
Misery River.	Portage	J. McCarthy, Winona.	May 6	6,000
Hennes Creek.	Elm River and Adams	Chas. Smith, Hubbell.	May 6	3,000
Middle Branch Firsteel River	Adams	L. H. Richardson, Houghton.	May 6	4,500
East Branch Salmon Trout River	Adams	H. M. Keever, Houghton.	May 6	1,500
Pump Station Creek.	Allouez	C. F. Fisher, Tri Mountain.	May 6	3,000
Hill's Creek	Schoolcraft	F. R. Claymowitz, Phoenix.	May 6	6,000
West Branch Little Travis	Oscoda	F. W. Armstrong, Hubbell.	May 6	1,500
Quinzie Creek	Torch Lake.	Edward Marcolite, Hubbell.	May 6	1,500
Hallie's Creek.	Torch Lake.	Oscar Cuyler, Hubbell.	May 6	1,500
Iron county.				
Isler River.	Crystal Falls	Arvid Bjork, Crystal Falls.	Mar. 31	6,000
Raymon Creek.	Mansfield	R. E. Boll, Channing.	Mar. 31	1,500
Paint River.	Crystal Falls and others.	Geo. Premo, Anasa.	Mar. 31	4,500
New York Creek	Hematite	Geo. Premo, Anasa.	Mar. 31	3,000
Net River.	Hematite	Geo. Premo, Anasa.	Mar. 31	7,500
Little Hemlock Creek.	Hematite	Geo. Premo, Anasa.	Mar. 31	3,000
Holmes Creek.	Crystal Falls	Geo. Premo, Anasa.	Mar. 31	3,000

Iron River.....	Iron	M. S. McDonough, Iron River.....	Mar. 31	6,000
Section 33 Creek.....	Iron River	M. S. McDonough, Iron River.....	Mar. 31	3,000
South Branch of Paint River.....	Stambaugh	M. S. McDonough, Iron River.....	Mar. 31	6,000
North Branch of Paint River.....	Iron River	M. S. McDonough, Iron River.....	Mar. 31	7,500
Nash's Pond.....	Iron River	I. W. Byers, Iron River.....	Mar. 31	1,500
Sunset Lake Creek.....	Iron River	I. W. Byers, Iron River.....	Mar. 31	6,000
Cook's Run.....	Iron River	Mrs. L. A. Charnichael.....	Mar. 31	6,000
Hemlock River.....	Hematite	Chas. E. Lawrence, Iron Mountain.....	April 6	6,000
East Branch of East Branch of Ontonagon River.....	Stambaugh	G. M. Cornell, Ironwood.....	April 6	3,000
West Branch of Paint River.....	Stambaugh	G. M. Cornell, Ironwood.....	April 6	4,500
Ingham county:				
Columbia Creek.....	Aurelius.	W. T. Halcomb, Mason.....	Mar.	2,000
Willow Creek.....	Aurelius.	W. T. Halcomb, Mason.....	Mar.	1,500
Baldwin Creek.....	Onondaga.	Wm. M. Carroll, Onondaga.....	Mar.	1,500
Low Lake Inlet.....	Stockbridge.	Walter Hayner, Stockbridge.....	Mar.	3,000
Ionia county:				
Pearshall Creek.....	Boston and Keene.	John Wallington, Saranac.....	Feb. 27	1,500
Arnold's Creek.....	Easton.	John Wallington, Saranac.....	Feb. 27	1,500
Hunts Creek.....	Boston and Berlin.	John Wallington, Saranac.....	Feb. 27	1,500
Dexter Creek.....	Easton.	John Wallington, Saranac.....	Feb. 27	1,500
Steven's Creek.....	Keene and Easton.	John Wallington, Saranac.....	Feb. 27	1,500
Hawn's Creek.....	Boston.	John Wallington, Saranac.....	Feb. 27	1,500
Holden Brook.....	Ronald.	Newel Holden, Ionia.....	Feb. 27	1,500
Brown Brook.....	Ronald and North Plains.	H. M. Brown, Muir.....	Feb. 27	2,000
Faxon Creek.....	Lyons.	J. B. Miller, Pewamo.....	Mar.	1,500
Spaulding Creek.....	Ionia.	E. T. Ammon, Ionia.....	Mar.	1,500
Tibbets Creek.....	Berlin.	A. J. Kling, Ionia.....	Mar.	2,000
Dildine Creek.....	Easton.	Milo Van Slyke.....	Mar.	2,000
Campbell Creek.....	Campbell.	F. A. Rising, Clarksville.....	Mar.	2,000
Prairie Creek.....	Ronald.	John Galloway, Palo.....	Mar.	6,000
No name.....	Easton.	Elliot A. MeLard, Ionia.....	Mar.	1,500
Timberland Creek.....	Easton.	Snyder and Wortman, Ionia.....	Mar. 22	3,000
Ely Creek.....	North Plains.	C. A. Dalzell, Ionia.....	Mar. 22	3,000
Iosco county:				
Hale Creek.....	Plainfield.	R. D. Brown, Hale.....	Mar. 13	6,000
Smith Creek.....	Plainfield.	R. D. Brown, Hale.....	Mar. 13	6,000
Van Etten Creek.....	Oscoda.	J. H. McGilivray, Oscoda.....	Mar. 13	1,500
Vaughan Creek.....	Plainfield.	C. W. Luce, East Tawas.....	Mar. 25	6,000
Pickett Creek.....	Plainfield.	C. W. Luce, East Tawas.....	Mar. 25	4,500
Cold Creek.....	Grant and Tawas.	C. W. Luce, East Tawas.....	Mar. 25	6,000
Silver Creek.....	Willow and Baldwin.	C. W. Luce, East Tawas.....	Mar. 25	9,000
Gates Creek.....	Tawas and Baldwin.	C. W. Luce, East Tawas.....	Mar. 25	6,000
Ginley Creek.....	Grant.	C. W. Luce, East Tawas.....	Mar. 25	7,500
Isabella county:				
Campau Creek.....	Deerfield.	Geo. L. Granger, Mt. Pleasant.....	Feb. 28	1,500
Fussman Creek.....	Notawa.	Geo. L. Granger, Mt. Pleasant.....	Feb. 28	1,500
Laboun Creek.....	Notawa.	Geo. L. Granger, Mt. Pleasant.....	Feb. 28	1,500
Hebron Creek.....	Deerfield.	Geo. L. Granger, Mt. Pleasant.....	Feb. 28	3,000

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Isabella county.—Continued.				
Zucker Creek	Deerfield	Geo. L. Granger, Mt. Pleasant.	1911. Feb. 28	3,000
Philips Brook	Deerfield	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Tupman Brook	Notrwa	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Thelmon Creek	Notrwa	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Simmons Creek	Deerfield	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Ingher Creek	Gilmore	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Perry Creek	Gilmore	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Wood's Creek	Gilmore	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Seymore Creek	Gilmore	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Stony Creek	Deerfield	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Coomer Brook	Deerfield	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Delo Creek	Fremont	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Fuller Creek	Fremont	John Underwood, Winn	Mar. 6	3,000
Spring Brook	Fremont	John Underwood, Winn	Mar. 6	3,000
Logie Creek	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Rogers Creek	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Sawdy Brook	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Babcock Creek	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Der Mott Creek	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Humphrey Creek	Rolland	Roger Scott, Blanchard	Mar. 8	1,500
Skunk Creek and tributaries	Rolland	Ansel Moody, Blanchard	Mar. 8	3,000
Walker Creek	Sherman and Coldwater	Miles A. Drallett, Weidman.	Mar. 8	4,000
Headwaters of Coldwater River	Notrwa	Robert Hystop, Weidman.	Mar. 8	4,000
Hershey Creek	Wise and Vernon	C. A. Allen, Loomis	Mar. 10	4,500
Willey Creek	Wise	C. A. Allen, Loomis	Mar. 10	4,500
Loomis Creek or Little Salt	Chippewa, Coc and Union	C. A. Allen, Loomis	Mar. 10	4,500
Potter Creek	Lincoln	J. E. Myers, Shepherd.	Mar. 21	7,500
Figg and Patcher Drain	Lincoln	M. P. Castel, Shepherd.	Mar. 21	4,500
Jackson county:				
Branch of North Branch of Kalamazoo River	Hanover	F. W. McKenzie, Concord	Feb. 24	3,000
Tributaries of Michigan Center Mill Pond	Napoleon	L. B. Benton, Napoleon	Feb. 27	2,000
Zimmerman Brook	Norvell	Wm. F. Walker, Norvell	Feb. 27	3,000
Thayer's Creek	Norvell	B. F. Burgess, Norvell	Feb. 27	1,500
Grass Lake Creek	Grass Lake	C. R. Smith, Grass Lake	Feb. 27	3,000
Johnson Creek	Parma	S. H. Bardsdale, Parma	Feb. 27	1,500
Mackey Brook	Parma	S. H. Bardsdale, Parma	Feb. 27	1,500
Showman Brook	Parma	S. H. Bardsdale, Parma	Feb. 27	1,500
Winegar Creek	Parma and Sandston	Mark B. Hawes, Parma	Feb. 27	3,000
Dearing Creek	Sandstone	Mark B. Hawes, Parma	Feb. 27	3,000
Cutter's Creek	Spring Arbor and Concord	Mark B. Hawes, Parma	Feb. 27	3,000
Wilcox Creek	Parma	D. F. Moe, Parma	Feb. 27	1,500
Tributaries to Rice Creek	Concord	H. D. Abbott, Parma	Feb. 27	3,000
Knowles Creek	Parma	F. D. Bailey, Parma	Feb. 27	1,500
Needham Creek	Parma	Jay King, Parma	Feb. 27	3,000
		Jos. Neidham, Parma	Feb. 27	3,000

Rives Junction Creek.....	Rives	Geo. E. Beebe, Jackson	Mar.	1,500
West Branch of Kalamazoo River.....	Hillsdale	Geo. E. Beebe, Jackson	Mar.	4,500
Dew Brook.....	Horton	Geo. E. Beebe, Jackson	Mar.	2,000
Wade Creek.....	Tompkins	Geo. E. Beebe, Jackson	Mar.	3,000
Four Mile Creek.....	Blackman	Geo. E. Beebe, Jackson	Mar.	4,500
Headwaters of Grand River.....	Sunmit	Geo. E. Beebe, Jackson	Mar.	3,000
Headwaters of Kalamazoo River.....	Liberty	Geo. E. Beebe, Jackson	Mar.	4,500
Snyder's Creek.....	Hanover	Geo. E. Beebe, Jackson	Mar.	3,000
Sandstone Creek.....	Spring Arbor	Geo. E. Beebe, Jackson	Mar.	6,000
Rice Creek.....	Farina	Geo. E. Beebe, Jackson	Mar.	6,000
Willow Creek.....	Rives	Geo. E. Beebe, Jackson	Mar.	6,000
Willow Creek.....	Grass Lake and Waterloo	Geo. E. Beebe, Jackson	Mar.	3,000
Inlet to Brill's Lake.....	Hanover	Geo. E. Beebe, Jackson	Mar.	4,500
Tributary to Sandstone Creek.....	Levin	P. B. Davis, Jackson	Mar.	1,500
Indian Springs Creek.....	Blackman, Sunmit and Spring Arbor	H. B. Dicer, Jackson	Mar.	1,500
Greenshaw and Kamsdel Creeks.....	Concord	B. W. Dicer, Jackson	Mar.	3,000
Wheaton and Cooper Creeks.....	Hanover	G. T. Greenshaw, Hanover	Mar.	1,500
		Roland Thorn, Horton	Mar.	9,000
Kalamazoo county:				
Payne Creek.....	Texas and Antwerp	Geo. H. Murch	Feb.	3,000
Hinton Brook.....	Charleston	D. H. Frazer, Battle Creek	Feb.	1,500
Eagle Creek.....	Prairie Ronde	Henry F. Beekman, Battle Creek	Feb.	2,000
Stoney Brook.....	Schoolcraft	Wm. H. Peet, Battle Creek	Feb.	2,000
Harrison Creek.....	Pavilion	P. C. Purcel, Schoolcraft	Mar.	3,000
Smith's Creek.....	Portage	Geo. W. Smith, Schoolcraft	Mar.	3,000
Boles Creek.....	Alamo	Robt. B. Cook, Galesburg	Mar.	3,000
Stewart Creek.....	Alamo	C. L. Davis, Schoolcraft	Mar.	1,500
Frank's Run.....	Schoolcraft	C. M. Spencer, Kalamazoo	Mar.	3,000
Spring Run.....	Schoolcraft	E. O. Goldsmith, Vicksburg	Mar.	3,000
Cooper Creek.....	Cooper	E. O. Goldsmith, Vicksburg	Mar.	1,500
Travis Creek.....	Cooper	Geo. W. Locke, Kalamazoo	Mar.	1,500
Hampton Brook.....	Climax and Portage	Geo. A. Allen, Kalamazoo	Mar.	2,000
Hall's Spring Brook.....	Alamo	Dr. Chas. A. Wise, Kalamazoo	Mar.	2,000
Hall's Spring Brook.....	Alamo	Dr. Chas. A. Wise, Kalamazoo	Mar.	2,000
Campbell Creek.....	Alamo	Dr. Chas. A. Wise, Kalamazoo	Mar.	2,000
Portage Creek.....	Texas, Portage and Kalamazoo	N. B. Hall, Kalamazoo	Mar.	2,000
Axtel Creek.....	Kalamazoo	Henry Hobbs, Kalamazoo	Mar.	4,000
Davis Creek.....	Kalamazoo and Pavilion	Henry Hobbs, Kalamazoo	Mar.	4,000
Spring Brook.....	Richland	Albert Doll, Kalamazoo	Mar.	3,000
Abram Creek.....	Alamo and Otsego	Wm. Crispe, Plainwell	Mar.	3,000
Spring Brook.....	Cooper	H. B. Smith, Kalamazoo	Mar.	3,000
Arcadia Creek.....	Alamo	Edward Kashhead, Kalamazoo	Mar.	1,500
Gull Creek.....	No name	J. W. Powers, Kalamazoo	Mar.	6,000
		A. W. Crane, M. D., Kalamazoo	Mar.	3,000
		A. W. Crane, M. D., Kalamazoo	Mar.	3,000
Kalkaska county:				
Rapid River.....	Several	L. N. Spring, Elk Rapids	Mar.	8,000
Rapid River.....	Several	W. W. Morse, Rapid City	Mar.	8,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Keweenaw county:			1911.	
Garden City Creek	Houghton	Maurice Bandettine, Calumet.	May 6	3,000
Buffalo Creek	Grant	Joe Hensley, Calumet.	May 6	1,500
Tobacco River	Schoolcraft	Johnson Vivian, Laurium.	May 6	3,000
Gratiot River	Alouez	J. C. Vivian, Laurium.	May 6	1,500
Mosquito Creek	Grant	W. R. Vivian, Laurium.	May 6	3,000
Upper waters Montreal River	Grant	Nickolas Linton, Pheonix	May 6	6,000
Number Two Creek	Houghton and Alouez	J. G. McCollum, Calumet.	May 6	3,000
Gratiot River	Houghton and Alouez	R. C. Blight, Eagle River.	May 6	4,500
Silver Creek	Grant	Charles Brown, Delaware Mine.	May 6	3,000
Eagle River	Alouez and Houghton	J. F. Daniel, Laurium.	May 6	3,000
Tobacco and Betsy rivers	Sherman	Andrew Jackson, J. A. Johnson, Gay.	May 6	3,000
Gatus Creek	Houghton	Wm. Long, Eagle River.	May 6	1,500
Butts Creek	Eagle Harbor	Wm. Jackson, Eagle River.	May 6	3,003
Old Phoenix Creek	Alouez and Houghton	T. W. Kaiser, Eagle River.	May 6	3,000
North American Creek	Alouez	J. W. Seighman, Pheonix.	May 6	1,500
Horseshoe Pond	Houghton	Henry Peterson, Pheonix.	May 6	3,000
Weaver Dam	Grant	John Hepting, Pheonix.	May 6	3,000
Montreal River	Alouez	Keweenaw R. and G. Club, Mokaw	May 6	9,000
Eagle River	Houghton	Keweenaw R. and G. Club, Mohawk.	May 6	7,500
Trap Rock River	Alouez	Keweenaw R. and G. Club, Mohawk.	May 6	6,000
The White Birch	Grant	Keweenaw R. and G. Club, Mohawk.	May 6	7,500
Beckey River	Grant and Sherman.	Frank Buschell, Lake Linden.	May 6	3,000
Traverse River	Schoolcraft	C. L. Webb, Laurium.	May 6	1,500
		Phil Furlong, Laurium.	May 6	3,000
Kent county:				
Spring Brook	Lowell	U. B. Williams, Lowell.	Feb. 27	1,500
Kinixon Creek	Lowell	U. B. Williams, Lowell.	Feb. 27	2,000
Kopli Creek	Lowell	U. B. Williams, Lowell.	Feb. 27	2,000
Baird Creek	Vergennes	U. B. Williams, Lowell.	Feb. 27	2,000
Wright Creek	Vergennes	U. B. Williams, Lowell.	Feb. 27	2,000
Cherry Creek	Vergennes and Lowell	U. B. Williams, Lowell.	Feb. 27	2,000
Walter's Creek and branches	Vergennes	John Miller, Lowell.	Feb. 27	2,000
Honey Creek	Ada	Harry G. Thompson	Feb. 27	2,000
Bear Creek and tributaries	Cannon	Chas. M. Wilson, M. D., Canonsburg.	Mar. 7	6,000
Duke Creek	Nelson, Solon, etc	F. E. Shattuck, Sand Lake.	Mar. 7	6,000
Maston Creek	Spencer	D. M. Boss, Silver Lake.	Mar. 7	3,000
Spring Creek	Solon	David Curtis, Sand Lake.	Mar. 7	3,000
Zoppa Creek	Nelson	Earl Rasco, Sand Lake.	Mar. 7	1,500
Little Cedar Creek	Nelson, Courtland and Algoma	R. P. Cawthorpe, Cedar Springs.	Mar. 7	3,000
Big Cedar Creek	Wilson and others	R. B. Cawthorpe, Cedar Springs.	Mar. 7	4,500
Stegman Creek	Courtland	R. C. Cawthorpe, Cedar Springs.	Mar. 7	1,500
Dop Creek	Solon	R. C. Cawthorpe, Cedar Springs.	Mar. 7	4,500
Spring Creek	Solon	R. C. Cawthorpe, Cedar Springs.	Mar. 7	4,500

Becker Creek	Courtland	R. C. Cawthorpe, Cedar Springs	Mar.	4,500
Austin Creek	Courtland	R. C. Cawthorpe, Cedar Springs	Mar.	3,000
Chalmers Creek	Courtland	Geo. E. Rector, Edgerton	Mar.	1,500
Becker Creek	Courtland and Algoma	Geo. E. Rector, Edgerton	Mar.	1,500
Peas Creek	Common	Chas. Armstrong, Cannonsburg	Mar.	3,000
English Creek	Tyrone	Arthur Miller, Bailey	Mar.	1,000
French Creek	Tyrone	Peter Richter, Bailey	Mar.	2,000
Clifton Creek	Oakfield	C. L. Gold, Bailey	Mar.	1,000
Butternut Creek	Spencer	Freeman Addis, Harvard	Mar.	3,000
Hutchins Creek	Oakfield	Alonzo Griswold, Cedar Springs	Mar.	3,000
Livingston county:				
Burham Creek	Brighton	B. T. O. Clark, Brighton	Mar.	1,500
Peach's Creek	Green Oak	B. T. O. Clark, Brighton	Mar.	1,500
Stewart Creek	Hamburg	B. T. O. Clark, Brighton	Mar.	1,500
Bishop's Creek	Green Oak	B. T. O. Clark, Brighton	Mar.	1,500
Deer Creek	Brighton	B. T. O. Clark, Brighton	Mar.	3,000
McDonnell's Creek	Hartland, Brighton and Hamburg	B. T. O. Clark, Brighton	Mar.	3,000
Walker's Creek	Brighton	B. T. O. Clark, Brighton	Mar.	2,000
Woodruff Creek	Genoa and Hamburg	B. T. O. Clark, Brighton	Mar.	3,000
Welchert Creek	Hartland and Brighton	B. T. O. Clark, Brighton	Mar.	4,000
Branch of Ore Creek	Genoa and Hamburg	B. T. O. Clark, Brighton	Mar.	2,000
Lapeer county:				
Miller's Creek	Lapeer and Metamora	Mathias Caley, Lapeer	Mar.	4,500
Miller Creek	Deerfield and Rich	E. J. Thresher, Lapeer	Mar.	4,500
Carpenter Creek	Mayfield	E. J. Thresher, Lapeer	Mar.	3,000
Headwaters of Mill Creek	Attica, Arcadia and Goodland	E. J. Thresher, Lapeer	Mar.	6,000
Lenawee county:				
North Branch of Evans Creek	Franklin	A. B. Wisner, Chicago	Feb.	3,000
Leelanau county:				
Victoria Creek	Solon	Filmer Billman, Cedar City	Mar.	9,000
Mosso's Creek	Suttons Bay	D. H. Power, Suttons Bay	May	10,000
Lake county:				
Isard Creek	Elk, Freesoil and Sheridan	Geo. M. Brown, Detroit	Mar.	15,000
Banahar Creek	Pleasant Plains	A. H. Morley, Saginaw	Mar.	7,500
Bowman Creek	Pleasant Plains and Lake	Geo. Grant, Saginaw	Mar.	3,000
Sable River	Elk	C. Hagerman, Ludington	Mar.	15,000
Blodt Creek	Elk	C. Hagerman, Ludington	Mar.	3,000
Pere Marquette River and tributaries	Cherry Valley	W. B. Mershon, Saginaw	Mar.	22,500
Park Creek	Cherry Valley	W. R. Humphrey, Saginaw	Mar.	3,000
Pere Marquette River	Cherry Valley	W. R. Humphrey, Saginaw	Mar.	3,000
Baker Creek	Cherry Valley	Pere Marquette Trout Club	Mar.	22,500
Lorae Creek	Cherry Valley	Pere Marquette Trout Club	Mar.	4,500
Snoworn or Farnsworth Creek	Cherry Valley	C. A. Kantz, Nirvana	Mar.	6,000
Middle branch Pere Marquette River	Cherry Valley	C. A. Kantz, Nirvana	Mar.	6,000
Sable River	Elk, Freesoil and Sheridan	H. W. Marsh, Manistee	Mar.	12,000
				20,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lake county.—Continued			1911.	
Five and Little Manistee Rivers	Ellsworth, Newkirk and Dover	H. W. Marsh, Manistee	Mar. 10	37,500
Five and Little Manistee Rivers	Ellsworth, Newkirk and Dover	Geo. Cutler, Ithaca	Mar. 10	37,500
Blood Run Creek and Big Stumble River	Elk	Wm. Lutz, Peacock	Mar. 11	15,000
Little Manistee River	Wabier and Elk	Hon. H. D. Jewell, Grand Rapids	Mar. 11	37,500
Ballwin Creek	Pleasant Plains	Geo. T. Duffing, Baldwin	Mar. 13	16,000
Ballwin Creek	Pleasant Plains	Geo. T. Duffing, Baldwin	Mar. 13	8,000
South Creek	Pleasant Plains and Cherry Valley	Geo. T. Duffing, Baldwin	Mar. 13	8,000
Erickson and Peas Creeks	Cherry Valley	J. H. Booth, Reed City	Mar. 18	6,000
Lite county:				
West Branch of Large River	Pentland	W. J. Hanson, Rexton	April 1	3,000
Headwaters of Tahquamenon River	Columbus	H. A. Hedbrecht, McMillan	May 15	6,000
Telephone Creek	Columbus	H. A. Hedbrecht, McMillan	May 15	3,000
Two Heart Creek	McMillan	H. A. Bradley, Newberry	May 15	10,500
Linton Creek	48 N. R. 8 W.	W. C. Linton, Saginaw	May 17	1,500
Murphy Creek	47 N. R. 8, 9, 10 W.	W. C. Linton, Saginaw	May 17	6,000
Headwaters of Tahquamenon River	Columbus and Lakefield	W. G. Fretz, Newberry	May 17	7,500
Laketon Creek	Columbus	H. A. Skinner, McMillan	May 19	3,000
East Creek	Columbus	H. K. Skinner, McMillan	May 19	3,000
Mackinac county:				
Headwaters of Sage River	Hendricks	Wm. Hensen, Rexton	April 1	7,500
Headwaters of Millicoquin River	44-10	W. G. Fretz, Newberry	May 17	4,500
Marquette county:				
Branches of Dead River	Marquette	H. A. St. John, Marquette	April 15	3,000
Whitefish River	Skandia	H. A. St. John, Marquette	April 15	3,000
Little Dead River	Ishpeming and Eby	H. A. St. John, Marquette	April 15	3,000
West Branch of Laughing Whitefish	Ishpeming and Eby	H. A. St. John, Marquette	April 15	3,000
South Branch of Wilson Creek	Ishpeming and Eby	H. A. St. John, Marquette	April 15	3,000
Silver Creek	Marquette	H. A. St. John, Marquette	April 15	3,000
Cherry Creek	Marquette	H. A. St. John, Marquette	April 15	3,000
Big Creek	Marquette	H. A. St. John, Marquette	April 15	3,000
Bear Creek	Powell	H. A. St. John, Marquette	May 15	3,000
Pickers Lake Creek	Powell	H. A. St. John, Marquette	May 15	3,000
Peany Creek	Marquette	H. A. St. John, Marquette	April 15	4,500
Yellow Dog Creek and branches	Marquette	H. A. St. John, Marquette	April 15	3,000
Alder Creek	Powell	H. R. Harris, Marquette	April 15	3,000
The Pup	Powell	H. R. Harris, Marquette	April 15	3,000
Wilson Creek	Powell	H. R. Harris, Marquette	April 15	4,500
Garlick River	Powell	H. R. Harris, Marquette	April 15	4,500
Chocoy River and branches	West Branch	H. R. Harris, Marquette	April 15	9,000
W. Branch of the Escanaba River	Humboldt and Ely	J. D. Spitzer, Ishpeming	April 15	7,500
Deer Creek	Ishpeming	Geo. A. Newett, Ishpeming	April 15	4,500
Wableman's Creek	Ishpeming and Negaunee	Geo. A. Newett, Ishpeming	April 15	4,500

Ropes Creek.....	Ishpeming and Ely.....	Geo. A. Newell, Ishpeming.....	April 15	7,500
Escanaba River.....	Ishpeming, Ely and Humboldt.....	Geo. A. Newell, Ishpeming.....	April 15	6,000
Mulip's Creek.....	Negaunee.....	Negaunee R. and G. Club, Negaunee.....	April 15	7,500
Dead Lake Inlets.....	Ishpeming and Marquette.....	Negaunee R. and G. Club, Negaunee.....	April 15	1,500
Carp River.....	Ishpeming and Negaunee.....	Negaunee R. and G. Club, Negaunee.....	April 15	6,000
Morgan Creek.....	Negaunee.....	Negaunee R. and G. Club, Negaunee.....	April 15	3,000
Tributaries to Horseshoe Lake.....	Negaunee.....	Negaunee R. and G. Club, Negaunee.....	April 15	1,500
Tributaries to Section Twenty-one Lake.....	Forsyth.....	G. R. Jackson, Princeton.....	April 15	1,500
East Branch and Tributaries of Escanaba River.....	Fulton, Richmond and Forsyth.....	G. R. Jackson, Princeton.....	April 15	6,000
Green Creek.....	Forsyth.....	J. L. Kilton, Princeton.....	April 15	3,000
Halfway Creek.....	Forsyth.....	J. L. Kilton, Princeton.....	April 15	3,000
Escanaba River.....	Republic.....	C. W. Munson, Republic.....	April 15	6,000
W. Branch Escanaba River.....	Ely.....	C. W. Munson, Republic.....	April 20	6,000
Michigan River.....	Republic.....	C. W. Munson, Republic.....	April 20	12,000
Beaver Creek.....	Republic.....	C. W. Munson, Republic.....	April 20	4,500
Midway Creek.....	Republic.....	C. W. Munson, Republic.....	April 20	6,000
Grammy Creek.....	Republic.....	C. W. Munson, Republic.....	April 20	4,500
Black River.....	Humboldt and Republic.....	C. W. Munson, Republic.....	April 20	4,500
Spruce River.....	Michigan.....	Peter Dolf, Michigan.....	April 21	6,000
Captain's Creek.....	Republic.....	H. R. Gamble, Republic.....	April 21	4,500
Olsen's Creek.....	Republic.....	B. Bengston, Republic.....	April 21	3,000
Camp Creek.....	Humboldt.....	B. Bengston, Republic.....	April 21	3,000
Trout Falls Creek.....	Republic.....	B. Bengston, Republic.....	April 21	6,000
Cass Creek.....	Republic.....	B. Bengston, Republic.....	April 21	3,000
Hunter's Brook.....	11-12 R. 24.....	E. S. Vaght, Escanaba.....	April 25	4,500
Spruce River.....	Michigan and Republic.....	E. F. Sundstrom, Michigan.....	April 26	7,500
Pease River.....	Michigan and Republic.....	E. F. Sundstrom, Michigan.....	April 26	7,500
Harlow's Creek.....	Marquette.....	F. G. Bell, Marquette.....	May 10	7,500
Headwaters of Charlie Creek.....	Marquette.....	F. G. Bell, Marquette.....	May 10	1,500
Crab's Creek.....	Saults.....	F. H. Besson, Marquette.....	May 10	6,000
Tributaries of Chocoday River.....	Marquette.....	J. W. Carr, Marquette.....	May 10	6,000
Camp Creek.....	Marquette.....	J. W. Spear, Marquette.....	May 10	6,000
Little Carp Creek.....	Chocoday.....	L. C. Giessegen, Marquette.....	May 10	7,500
Foster's Creek.....	Chocoday.....	L. C. Giessegen, Marquette.....	May 10	7,500
Nelson Creek.....	Chocoday.....	L. C. Giessegen, Marquette.....	May 10	7,500
Quar Creek.....	Chocoday and Saults.....	W. S. Fawing, Harvey.....	May 10	7,500
Silver Creek.....	Chocoday.....	W. S. Fawing, Harvey.....	May 10	9,000
Cherry Creek.....	Chocoday.....	W. S. Fawing, Harvey.....	May 10	9,000
Missaukee county:	West Branch Muskegon River.....	J. F. Stevens, Lake City.....	Mar. 18	6,000
West Branch Muskegon River.....	Pioneer and Bloomfield.....	F. H. Redler, Lake City.....	Mar. 18	4,500
Filer Creek.....	Cardwell and Bloomfield.....	C. H. Bostick, Nanton.....	Mar. 18	7,500
Hopkin Creek.....	Cardwell and Liberty.....	C. H. Bostick, Nanton.....	Mar. 18	3,000
Gardner Creek.....	Cardwell and Liberty.....	C. H. Bostick, Nanton.....	Mar. 18	3,000
Chase Creek.....	Cardwell and Liberty.....	C. H. Bostick, Nanton.....	Mar. 18	3,000
Hoze Creek.....	Forest and Bloomfield.....	W. B. Jones, Lake City.....	Mar. 18	6,000
Hopkins Creek.....	Butterfield, Etina and Redler.....	J. B. P. Jector, Lake City.....	Mar. 18	9,000
Butterfield Creek.....	Redler.....	C. W. Farmer, Lake City.....	Mar. 18	3,000
Mosquito Creek.....	Redler and Riverside.....	F. M. Nye, Lake City.....	Mar. 18	3,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Missaukee county.—Continued.				
Taylor Creek	Butterfield and Astrua.	F. M. Nye, Lake City.	1911.	3,000
West Branch of Muskegon River.	Forest and West Branch.	Henry Plummer, Lake City.	Mar. 18	6,000
Cain River.	Riverside and others.	Hon. C. A. Broff, South Boardman.	Mar. 21	12,000
No name.	Clam and Union.	Hiram Schepers, Vogel Center.	Mar. 21	3,000
Cranberry Creek.	Clam and Union.	Hiram Schepers, Vogel Center.	Mar. 21	3,000
Montmorency county:				
Brush Creek.	Hillman.	W. E. Lake, Hillman.	Mar. 13	6,000
Anchor Creek.	Hillman.	T. B. Johnson, Hillman.	Mar. 13	3,000
North Branch Thunder Bay River.	Montmorency and Long Lake.	W. H. Farrier, Hillman.	Mar. 13	10,500
Sucker Creek.	Hillman.	Austin Rea, Hillman.	Mar. 13	3,000
Chlorist Creek.	Rust.	Austin Rea, Hillman.	Mar. 13	4,500
Tributaries to Thunder Bay River.	Hillman.	Austin Rea, Hillman.	Mar. 13	6,000
Royston Creek.	Montmorency.	Wm. A. Cannon, Royston.	Mar. 13	6,000
Miller Creek.	Rust and Hillman.	G. A. Murphy, Hillman.	Mar. 13	7,500
Big Black River.	Several.	Gaylord Fishing Club, Gaylord.	Mar. 15	21,000
Middle Branch Au Sable River.	Albert, Elmer and Maple Grove.	Geo. Sachs, Lewiston.	Mar. 21	6,000
Sheridan Creek.	Albert.	Geo. Sachs, Lewiston.	Mar. 21	3,000
Hunt Creek.	Albert and Rust.	Geo. Sachs, Lewiston.	Mar. 21	6,000
Middle Branch of Big Creek.	29 1 E. and 27 and 28 1 W.	Geo. Sachs, Lewiston.	Mar. 21	6,000
Merominee county:				
East Branch Shaky River.	Holmes and Stephenson.	F. H. Schmidt, Swanson.	April 11	6,000
Holmes Creek.	Holmes.	Martin Farrell, Faithorn.	April 11	3,000
Black Creek.	Holmes.	Geo. Krochinke, Vulcan.	April 11	3,000
Hay Creek.	Holmes.	Geo. Krochinke, Vulcan.	April 11	3,000
Cedar River and tributaries.	Spaulding.	N. Peterson, Spaulding.	April 11	3,000
Quade Creek.	Spaulding.	Chas. J. Quade, Powers.	April 11	15,000
Dirkman Creek.	Spaulding.	J. Archibald, Powers.	April 11	3,000
Ten Mile Creek.	Spaulding.	C. B. Wheeler, Powers.	April 11	3,000
Wheeler Creek.	Spaulding.	C. B. Wheeler, Powers.	April 11	3,000
North Branch Cedar River.	Spaulding.	Antoine Gagner, Powers.	April 11	4,500
Hay Creek.	Spaulding.	Irving Brim, Powers.	April 11	1,500
Wilson Creek.	Wilson.	A. P. Gillis, Powers.	April 11	6,000
Reed's Creek.	Spaulding.	E. D. Ehlers, Powers.	April 11	6,000
Big Brook.	Stephenson.	P. Walton, P. M., Daggett.	April 11	6,000
Holmes Creek.	Stephenson.	E. Ferrigo, Daggett.	April 11	3,000
Big Brook.	Stephenson and Cedarville.	J. Thorpe Stephenson.	April 11	6,000
Camp Seven Creek.	Meyer.	J. H. Loomis, Hermansville.	April 11	3,000
Camp Twenty-five Creek.	Meyer.	J. D. Hayes, Hermansville.	April 11	1,500
Conard's and Vesper Creeks.	Meyer.	J. D. Hayes, A. J. Kremer, Hermansville.	April 11	1,500
Little Cedar River.	Meyer.	J. D. Hayes, A. J. Kremer, Hermansville.	April 11	3,000
Inlet to Hermansville Pond.	Meyer.	J. D. Hayes, Hermansville.	April 11	3,000
Camp Two Creek.	Meyer.	E. R. Radford, Hermansville.	April 11	1,500

Montcalm county:					
Chapin Creek.....	Ferris.....	J. W. Johnson, Elmhall.....	Mar.	6	3,000
Inlet to Mud Lake.....	Horne.....	Alfred Johnson, Riverdale.....	Mar.	6	1,500
Sackett's Creek.....	Home.....	F. E. Curtis, Edmore.....	Mar.	6	4,500
Wolf Creek.....	Highland and Home.....	F. E. Curtis, Edmore.....	Mar.	6	4,500
South Branch of Pine River.....	Richland.....	F. E. Curtis, Edmore.....	Mar.	6	4,500
Black Creek.....	Pierston, Maple Valley, Spencer and Lincoln Lake.....	F. E. Shattuck, Sand Lake.....	Mar.	7	7,500
Grant Creek.....	Pierston.....	Alvin R. Brown, Sand Lake.....	Mar.	7	1,500
Carper Creek.....	Winfield.....	Wayne Carpenter, Sand Lake.....	Mar.	7	1,500
Bruce Creek.....	Reynolds.....	Grant V. Fulms, Howard City.....	Mar.	7	4,500
Whitefish Creek.....	Winfield.....	J. G. Buck, Howard City.....	Mar.	7	3,000
Church Creek.....	Reynolds.....	J. A. Collins, Howard City.....	Mar.	7	3,000
Indian Creek.....	Reynolds.....	W. H. Collins, Howard City.....	Mar.	7	3,000
Ryan Creek.....	Reynolds.....	W. H. Lovely, Howard City.....	Mar.	7	3,000
Little Muskegon River.....	Winfield.....	W. H. Lovely, Howard City.....	Mar.	7	9,000
Handy and Fossil Creeks.....	Pierston and Reynolds.....	W. H. Lovely, Howard City.....	Mar.	7	9,000
Rice Creek.....	Pine.....	F. D. Briggs, Langston.....	Mar.	8	3,000
Broderick Creek.....	Pine.....	F. D. Briggs, Langston.....	Mar.	8	1,500
West Lake Creek.....	Pine.....	F. D. Briggs, Langston.....	Mar.	8	1,500
West Branch Creek.....	Pine.....	F. D. Briggs, Langston.....	Mar.	8	3,000
Kortez Creek.....	Pine.....	F. D. Briggs, Langston.....	Mar.	8	3,000
Inlet to Muscallonge Lake.....	Belvidere, Douglas and Day.....	Jensen Bros., Trufant.....	Mar.	8	1,500
Inlet to Cedar Creek.....	Fairbairns.....	M. A. Drallette, Weidman.....	Mar.	8	3,000
Dixon Creek.....	Bushnell.....	E. E. Brown, Shiloh.....	Mar.	8	7,500
Castle's Creek.....	Bushnell.....	Herbert Edwards, Fenwick.....	Mar.	8	1,500
Deer's Creek.....	Evergreen.....	Freeman Taylor, Sheridan.....	Mar.	8	3,000
Fish Creek.....	Bushnell.....	Robert Evans, Stanton.....	Mar.	8	7,500
Prairie Creek.....	Montcalm.....	B. L. Goodsell, Vickseryville.....	Mar.	16	4,000
Horton Creek.....	Montcalm.....	Geo. C. Bower, Greenville.....	Mar.	22	3,000
Horton Creek.....	Montcalm.....	Henry Paulsen, Gowen.....	Mar.	22	3,000
Wilcox Creek.....	Eureka.....	F. J. Cole, Greenville.....	Mar.	22	3,000
Snaky Run.....	Montcalm.....	F. J. Cole, Greenville.....	Mar.	22	3,000
Tunk Lake Creek.....	Eureka.....	E. A. Kemp, Greenville.....	April 13		3,000
Rocky River.....	Eureka.....	Fred J. Cole, Greenville.....	Mar.	22	3,000
Muskegon county:					
Skell's Creek.....	Holton and Greenwood.....	J. A. Gerber, Fremont.....	Mar.	6	3,000
Flower Creek.....	White River.....	J. B. Avaline, Montague.....	Mar.	6	4,000
Little Flower Creek.....	Montague.....	Wm. T. Kroil, Montague.....	Mar.	6	2,000
White River and creek.....	White River.....	Prof. J. A. Sadony, Montague.....	Mar.	6	1,000
Smith Creek.....	Montague.....	Otto J. Olsen, Montague.....	Mar.	6	2,000
Sand Creek.....	Grant and Montague.....	A. F. Casselman, Montague.....	Mar.	6	6,000
Carleton Creek.....	Grant and Montague.....	A. F. Casselman, Montague.....	Mar.	6	6,000
Stratus on Sections 4 and 5.....	Fruitland.....	Alfred Buriand, Whitehall.....	Mar.	6	1,500
Birch Brook.....	Fruitland.....	Alfred Buriand, Whitehall.....	Mar.	6	1,500
The Millpond Inlet.....	Whitehall.....	Alfred Buriand, Whitehall.....	Mar.	6	1,500
Duck Creek.....	Blue Lake and Whitehall.....	E. D. Magoon, Muskegon.....	Mar.	6	6,000
Silver Creek.....	Daiton and Fruitland.....	E. D. Magoon, Muskegon.....	Mar.	6	4,500
Little Bear Creek.....	Daiton, Laketon and Muskegon.....	E. D. Magoon, Muskegon.....	Mar.	6	3,000
Little Black Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar.	6	3,000
Green's Creek.....	Fruitland and Laketon.....	E. D. Magoon, Muskegon.....	Mar.	6	3,000

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county.—Continued				
Big Black Creek	Muskegon	F. D. Magoon, Muskegon.	1911.	8,000
Mosquito Creek	Elizabeth	F. D. Magoon, Muskegon.	Mar. 6	6
Cleveland Creek	Blue Lake	F. D. Magoon, Muskegon.	Mar. 6	4,500
Riverside Creek	Muskegon	F. D. Magoon, Muskegon.	Mar. 6	3,000
Norris Creek	Ravenna, Sullivan and Fruitland	F. D. Magoon, Muskegon.	Mar. 6	8,000
Lake Creek	Casnovia	Elijah Beers, St. Bailley.	Mar. 11	2,000
Crockerby Creek and tributaries	Moore's Creek	Elloth T. Stocum, Detroit	Mar. 11	6,000
Barnum's Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Heald's Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	2,000
McKays Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Gilbert's Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Rothman Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Conestack Creek	Casnovia	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Cedar Creek	Holtton and Cedar Creek	C. L. Gold, Bailley.	Mar. 11	1,000
Cedar Creek	Holtton	S. L. Skeels, Holtton	Mar. 23	7,500
Wolf Creek	Ravenna	Richard J. Patelski, Holtton.	Mar. 23	7,500
		H. A. Muzzall, Coopersville	Mar. 27	3,000
Merocosta county:				
Bayn Creek	Colfax	W. H. Redman, Big Rapids.	Mar.	6,000
Black Creek	Austin and Merocosta	F. W. Chilson, Stanwood	Mar.	6,000
Chapel Creek	Merocosta and Austin.	J. B. Campbell, Stanwood	Mar.	1,500
Chart Brook Creek	Merocosta	C. F. Barnard, Stanwood	Mar.	1,500
East Branch of Big Creek	Deerfield	Geo. F. Faust, Morley	Mar.	4,000
Quigley Creek	Deerfield	Isaac Laird, Morley	Mar.	3,000
Norain Creek	Actna	Isaac Laird, Morley	Mar.	1,500
Mitchell Creek	Actna	Win. Crook, Morley	Mar.	2,000
Horner Creek	Deerfield	Ira Helms, Morley	Mar.	7,000
Big Creek	Actna and Deerfield	J. D. McManus, Morley.	Mar.	2,000
Tributaries to Little Muskegon River	Hinton	A. M. Cook, Howard City.	Mar.	5,000
Tombkins Creek	Hinton	John Wright, Lakeview	Mar.	1,500
Seaton's Creek	Hinton	John Wright, Lakeview	Mar.	3,000
Swisher Creek	Hinton	John Wright, Lakeview	Mar.	3,000
Scott Creek	Millbrook	Alex. Tompkins	Mar.	4,500
Decker Creek	Millbrook and Rolland	Roger Scott, Blanchard	Mar.	3,000
Pine River	Millbrook	Roger Scott, Blanchard	Mar.	3,000
Pine River	Wheatland	T. O. Pattison, Millbrook	Mar.	4,500
West Branch of Pipe River	Wheatland	J. M. Swisher, Remus	Mar.	3,000
Pony Creek	Wheatland and Broomfield	P. J. Theisen, Remus	Mar.	7,500
Little Muskegon River	Wheatland and Morton	P. J. Theisen, Remus	Mar.	8,000
Bingen Creek	Wheatland	P. J. Theisen, Remus	Mar.	3,000
Indian Creek	Wheatland and Sherman	G. O. Colgrove, Remus	Mar.	3,000
Dead Stream	Morton	John Snyder, Merocosta.	Mar.	1,500
Little Muskegon River	Morton	Frank O. Redick, Merocosta	Mar.	7,500
Shingle Bolt Creek	Morton and Hinton	Arthur Royce, Altona	Mar.	3,000
Cold Creek	Morton	John O'Brien, Merocosta	Mar.	1,500

Gilbert Creek.....	Morton	Ray Carman, Mecosta.....	Mar. 8	4,500
Pointer Creek.....	Morton and Wheatland	Ray Carman, Mecosta.....	Mar. 8	3,000
Schroeder Creek.....	Hinton.....	Ray Carman, Mecosta.....	Mar. 8	4,500
Benjamin Creek.....	Fork.....	W. S. Lullin, Barryton.....	Mar. 8	2,000
Brown Creek.....	Fork.....	W. S. Lullin, Barryton.....	Mar. 8	2,000
Barner Creek.....	Sheridan.....	W. S. Lullin, Barryton.....	Mar. 8	2,000
Battis Creek.....	Fork.....	W. S. Lullin, Barryton.....	Mar. 8	4,000
Rahtall Creek.....	Fork.....	W. S. Lullin, Barryton.....	Mar. 8	2,000
Isanard Creek.....	Sheridan.....	W. S. Lullin, Barryton.....	Mar. 8	1,000
Paris, Sandberg, Hall's and Herrick Creeks.....	Green.....	Michigan Fish Commission.....	Mar. 22	14,500
Little and Big Buckhorn Creeks and Cherry Creek.....	Mecosta.....	Michigan Fish Commission.....	Mar. 23	30,000
Macomb county:				
Stony Creek.....	Avon.....	F. Gillespie, Romeo.....	Mar. 1	3,000
Silver Creek.....	Bruce.....	F. Gillespie, Romeo.....	Mar. 1	2,000
Smith's Creek.....	Severall.....	H. W. Bradley, Romeo.....	Mar. 1	1,500
Hulton's Creek.....	Washington.....	H. W. Bradley, Romeo.....	Mar. 1	1,500
Hosner's Creek.....	Bruce.....	H. W. Bradley, Romeo.....	Mar. 1	1,500
Troop's Creek.....	Bruce.....	H. W. Bradley, Romeo.....	Mar. 1	1,500
Benjamin's Creek.....	Washington.....	H. W. Bradley, Romeo.....	Mar. 1	1,500
Manistee county:				
Claybank Creek.....	Maple Grove.....	T. A. Brown, East Lake.....	Mar. 9	6,000
Beaver Creek.....	Stromach and Brown.....	T. G. Trimble, Manistee.....	Mar. 17	4,000
Pine Creek.....	Marilla, Maple Grove, and Brown.....	T. G. Trimble, Manistee.....	Mar. 17	8,000
Cedar Creek.....	Bear Lake and Maple Grove.....	T. G. Trimble, Manistee.....	Mar. 17	6,000
Kaiser Creek.....	Springdale and Maple Grove.....	Roy Market, Bear Lake.....	Mar. 17	3,000
Big Bear Creek.....	Springdale.....	Roy Market, Bear Lake.....	Mar. 17	15,000
Cedar Creek.....	Springdale.....	Roy Market, Bear Lake.....	Mar. 17	6,000
Wells Creek.....	Springdale.....	Roy Market, Bear Lake.....	Mar. 17	2,000
Little Bear Creek.....	Springdale.....	Roy Market, Bear Lake.....	Mar. 17	6,000
Green's Creek.....	Springdale.....	Roy Market, Bear Lake.....	Mar. 17	2,000
Green Creek.....	Springdale.....	Hans Peterson, Bear Lake.....	Mar. 17	2,000
Welch Creek.....	Cleon and Springdale.....	J. P. Maise, Bear Lake.....	Mar. 17	2,000
Hatch's Creek.....	Springdale, Maple Grove and Brown.....	F. A. Mitchell, Manistee.....	Mar. 17	16,000
Bear Creek.....	Brown.....	F. A. Mitchell, Manistee.....	Mar. 17	30,000
Wilson Creek.....	Onekama.....	Peter Schneider, Chief.....	Mar. 17	2,000
Chief Creek.....	Onekama.....	Peter Schneider, Chief.....	Mar. 17	2,000
Leonard's Creek.....	Onekama.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Schroeder's Creek.....	Onekama.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Wendt's Creek.....	Onekama.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Hanson's Creek.....	Onekama.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Carlton Creek.....	Onekama.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Schultz Creek.....	Onekama and Bear Lake.....	Hans A. Wendell, Onekama.....	Mar. 17	1,000
Mason county:				
Quinn Creek.....	Summit and Riverton.....	C. F. Lewis, Pentwater.....	Mar. 6	3,000
Dickson Creek.....	Summit and Riverton.....	C. F. Lewis, Pentwater.....	Mar. 6	3,000
Toal's Creek.....	Grant.....	Hugo Olson, Friesland.....	Mar. 6	1,000
No One Creek.....	Eden & Custer.....	Jerry M. Cable, Custer.....	Mar. 9	3,000
Swan Creek.....	Eden & Riverton.....	D. S. Betka, Scottville.....	Mar. 9	5,000
South Lincoln River.....	Victory & Sherman.....	D. S. Betka, Scottville.....	Mar. 9	6,000

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Newaygo county:			1911.	
Martin's Creek.....	Denver.....	W. D. Sargeant, Fremont.....	Mar. 7	4,500
Dowling Creek.....	Lincold.....	W. D. Sargeant, Fremont.....	Mar. 7	4,500
Cushman Creek.....	Greenwood.....	J. A. Gerber, Fremont.....	Mar. 7	4,500
Minnie Creek.....	Bridgton.....	J. A. Gerber, Fremont.....	Mar. 7	4,500
Williams Creek.....	Sherman and Garfield.....	J. A. Gerber, Fremont.....	Mar. 7	4,500
Flander's Creek.....	Denver.....	Geo. R. Lyons, Hesperia.....	Mar. 7	4,500
West Branch Martin Creek.....	Denver.....	David Curtis, Sand Lake.....	Mar. 7	3,000
Frey Creek.....	Esley.....	David Curtis, Sand Lake.....	Mar. 7	4,500
Roynolds Creek.....	Esley.....	H. M. Gibbs, Howard City.....	Mar. 7	1,500
Rosy Run.....	Esley.....	Jas. Simpson, Sand Lake.....	Mar. 7	1,500
Simpson Creek.....	Esley.....	J. Odell Nelson, Howard City.....	Mar. 7	3,000
Ryan Creek.....	Croton.....	S. D. Thompson, Newaygo.....	Mar. 11	12,000
Biglow, Coolbough and Pennoyer Creeks.....	Brooks and East.....	S. D. Thompson, Newaygo.....	Mar. 11	6,000
Post's, Barnum and Isenhart Creeks.....	Grant and Ashland.....	S. D. Thompson, Newaygo.....	Mar. 11	4,500
Penoyer Creek.....	Monroe.....	S. D. Bommer, Newaygo.....	Mar. 11	3,000
Kimby Creek.....	Monroe.....	D. Matheson, White Cloud.....	Mar. 11	3,000
Mattison Creek.....	Wilson.....	Geo. E. Whitman, White Cloud.....	Mar. 11	3,000
Miller Creek.....	Wilcox.....	Geo. E. Whitman, White Cloud.....	Mar. 11	3,000
Five Mile Creek.....	T. 16, 12 and 13, 17-13.....	W. S. Barton, White Cloud.....	Mar. 11	3,000
Little South Creek.....	Wilcox.....	C. Hagerman, Ludington.....	Mar. 11	9,000
White River.....	Home.....	Branch Bros., White Cloud.....	Mar. 11	9,000
Tank Creek.....	Home.....	P. Christensen, Bately.....	Mar. 11	3,000
Little South Branch.....	Troy.....	P. Christensen, Bately.....	Mar. 11	6,000
Cedar Creek.....	Wilcox.....	R. C. Esley, Fremont.....	Mar. 11	4,500
Mullin Creek.....	Sherman.....	Fred Daenzer, White Cloud.....	Mar. 11	3,000
Inlet of Little Robinson Lake.....	Wilcox.....	W. D. Hopkinson, Big Rapids.....	Mar. 11	1,500
White River.....	Ashland and Casnovia.....	C. L. Gold, Bailey.....	Mar. 11	9,000
Ashland Creek.....	Ashland.....	C. L. Gold, Bailey.....	Mar. 11	1,000
Isenhart Creek.....	Several.....	Wm. Pomeroy, Holton.....	Mar. 23	10,000
Cedar Creek.....	Monroe.....	Jas. C. Russell, Woodville.....	Mar. 23	3,000
Manchip Creek.....	Monroe and Wilcox.....	Jas. C. Russell, Woodville.....	Mar. 23	3,000
Townes Creek.....	Goodwell.....	John Bullman, Woodville.....	Mar. 23	3,000
Norton Creek.....	Monroe.....	John W. Orth, Woodville.....	Mar. 23	1,500
Foxville Creek.....	Norvell, Barton and Home.....	Michigan Fish Commission.....	Mar. 23	1,500
Peas Creek and Pere Marquette River tributaries.....			Mar. 25	50,000
Oakland county:				
Waters of the Thread.....	Groveland.....	Chas. P. Green, Davisburg.....	Mar. 1	2,500
Shiawassee Creek.....	Springfield.....	F. G. Ely, Davisburg.....	Mar. 1	1,500
Weatherose Creek.....	Springfield.....	F. G. Ely, Davisburg.....	Mar. 1	3,000
Pettibone Creek.....	Millford.....	F. B. Hatch, Millford.....	Mar. 10	3,000
Dunlap Creek.....	Oxford.....	M. L. Miller, Oxford.....	Mar. 14	1,000
Harris Creek.....	Cleveland.....	A. P. Button, Ortonville.....	Mar. 14	2,000
Duck Creek.....	Brandon.....	A. P. Button, Ortonville.....	Mar. 14	2,000
Paint Creek tributaries.....	Avon and Oakland.....	G. R. Chapman, Rochester.....	Mar. 14	6,000
No name.....	Springfield.....	J. W. Aurand, Davisburg.....	Mar. 14	3,000

Ogemaw county:	Golden.....	Frank T. Sloan, Mears.....	Mar.	1,500
Meyers Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar.	3,000
Wright Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar.	1,500
Webb Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar.	3,000
Craig Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar.	3,000
Knapp Creek.....	Golden.....	Frank T. Sloan, Mears.....	Mar.	1,500
Graft Creek.....	Golden and Benona.....	F. A. Post, Mears.....	Mar.	1,500
Miles Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	3,000
Silver Lake Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	1,500
Weaver Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	1,500
Park Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	1,500
Harris Creek.....	Golden.....	F. A. Post, Mears.....	Mra.	1,500
Hunter Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	3,000
Nelson Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	3,000
Morley Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	3,000
Carlson Creek.....	Golden.....	F. A. Post, Mears.....	Mar.	3,000
De Kay Creek.....	Golden.....	J. W. Krause, Mears.....	Mar.	1,000
Stoney Creek.....	Shelby and Benona.....	C. E. Ellis, Shelby.....	Mar.	3,500
Robinson Creek.....	Shelby and Ferry.....	C. E. Ellis, Shelby.....	Mar.	4,500
Piper Creek.....	Shelby and Benona.....	C. E. Ellis, Shelby.....	Mar.	3,000
Hobby Creek.....	Shelby and Benona.....	C. E. Ellis, Shelby.....	Mar.	4,500
Sand Creek.....	Otto.....	Chas. Smith, Rothburg.....	Mar.	3,000
Tributarities to Beaver Creek.....	Leavitt and Colfax.....	E. L. Bunting, Walkerville.....	Mar.	1,500
Clark's Lake.....	Leavitt.....	E. L. Bunting, Walkerville.....	Mar.	1,500
Freeman Creek.....	Colfax.....	E. L. Bunting, Walkerville.....	Mar.	1,500
Tributarities to Beaver Creek.....	Leavitt and Colfax.....	E. L. Bunting, Walkerville.....	Mar.	3,000
Tributarities to Beaver Creek.....	Leavitt.....	E. L. Bunting, Walkerville.....	Mar.	3,000
Rackliffe Creek.....	Elbridge.....	E. L. Bunting, Walkerville.....	Mar.	1,500
Crystal Creek.....	Crystal, Weare and Pentwater.....	Will Baker, Walkerville.....	Mar.	3,000
Seaman Creek.....	Crystal.....	Ira C. Ford, Walkerville.....	Mar.	1,500
Shigley or Donaldson Creek.....	Hart.....	O. E. Vine, Walkerville.....	Mar.	4,500
Swears Creek.....	Hart and Weare.....	Wm. R. Roach, Hart.....	Mar.	1,500
Halberg Creek.....	Golden.....	F. A. Casahl, Mears.....	Mar.	3,000
Lambert Creek.....	Golden and Benona.....	F. A. Casahl, Mears.....	Mar.	1,500
Richter Creek.....	Golden.....	F. A. Casahl, Mears.....	Mar.	1,500
Stafford Creek.....	Golden and Hart.....	F. A. Casahl, Mears.....	Mar.	3,000
Cedar Creek.....	Weare and Crystal.....	C. F. Lewis, Pentwater.....	Mar.	3,000
Annelly Creek.....	Weare.....	C. F. Lewis, Pentwater.....	Mar.	4,500
Dumaw Creek.....	Weare and Riverton.....	C. F. Lewis, Pentwater.....	Mar.	1,500
Mears Creek.....	Weare.....	C. F. Lewis, Pentwater.....	Mar.	3,000
South Branch of Cedar Creek.....	Weare and Crystal.....	C. F. Lewis, Pentwater.....	Mar.	1,500
Pentwater River.....	Pentwater and others.....	S. D. Montgomery, Grand Rapids.....	Mar.	3,000
Ogemaw county:	West Branch.....	John Tolfree, West Branch.....	Mar.	3,000
Weideman Creek.....	West Branch.....	John Tolfree, West Branch.....	Mar.	3,000
Wood's Creek.....	Edwards.....	John Tolfree, West Branch.....	Mar.	4,000
Mansfield Creek.....	West Branch.....	John Tolfree, West Branch.....	Mar.	4,000
Crapo Creek.....	Horton.....	John Tolfree, West Branch.....	Mar.	8,000
East Branch, Tittabawassee River.....	Klacking and Cumming.....	John Tolfree, West Branch.....	Mar.	4,000
Prieur Creek.....	West Branch.....	John Tolfree, West Branch.....	Mar.	10,000
West Branch Rifle River.....	Klacking, West Branch and Churchhill.....	John Tolfree, West Branch.....	Mar.	4,000
Klacking Creek.....	Churchhill.....	Cascallien Bros., Selkirk.....	Mar.	23
Tributarities to Rifle River.....			Mar.	23

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Ogemaw county.—Continued.				
Blacking Creek.....	Churchill and West Branch	Carscallen Bros., Selkirk.....	1911.	4,000
Johnson Creek.....	Richland	Carscallen Bros., Selkirk.....	Mar. 23	6,000
Oyster Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 25	3,000
Kindorf Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 25	3,000
Rose Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 25	3,000
Vaughn Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 25	3,000
Whitner Creek.....	Richland	Geo. Eymmer, Prescott.....	Mar. 25	3,000
Whitney Creek.....	Rose.....	Geo. Eymmer, Prescott.....	Mar. 25	6,000
Ontonagon county:				
Bluff, One Mile and Spaulding Creeks.....	Haight.....	A. B. Paine, Bruce's Crossing.....	April 18	3,000
Silver Creek.....	Stannard.....	Alex. Turner, Bruce's Crossing.....	April 18	3,000
Creer Creek and tributaries.....	Stannard.....	Alex. Turner, Bruce's Crossing.....	April 18	4,500
Middle Branch Ontonagon River.....	Interior and Stannard.....	M. J. Clossy, Trout Creek.....	April 18	4,500
McAlpine Creek.....	Interior.....	M. J. Clossy, Trout Creek.....	April 18	3,000
Trout Creek.....	Interior.....	M. J. Clossy, Trout Creek.....	April 18	3,000
Davy's Creek.....	Rockland.....	John Kohn, Rockland.....	April 19	3,000
Clear Creek.....	Rockland.....	John Kohn, Rockland.....	April 19	3,000
Rockland Creek.....	Rockland Creek.....	W. G. Richards, Rockland.....	April 19	1,500
Rockland Creek.....	Rockland.....	W. G. Richards, Rockland.....	April 19	1,500
Spring Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	April 19	3,000
Landing Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	April 19	3,000
Sucker Creek.....	Rockland.....	W. P. Vogtlin, Rockland.....	April 19	4,500
Firesteel River.....	51 and 52.....	Henry W. Grams, Houghton.....	April 19	7,500
Tributaries to Sleeping River.....	Bohemia.....	Wm. Brown, Winona.....	May 6	3,000
Two Hundred Fifty Mile Post, Br. of Michiganme.....	48-39.....	E. W. MacPherran, Marquette.....	May 6	3,000
Two Hundred Eighteen and One-half Mile Post.....	47-35.....	E. W. MacPherran, Marquette.....	May 6	3,000
Merryweather Creek.....	48-41.....	W. E. MacPherran, Marquette.....	May 9	4,500
Branch of Trout Creek.....	47-37.....	E. W. MacPherran, Marquette.....	May 9	3,000
Oscosola county:				
Upper Part of Big Stone Creek.....	Fvart.....	Joel Perry, Fvart.....	Mar. 10	3,000
Cat Creek.....	Hersey.....	L. A. Moody, Fvart.....	Mar. 10	4,500
Trout Creek.....	Fvart, Osceola and Cedar.....	Wm. Ramsey, Fvart.....	Mar. 10	4,500
Grindstone Creek.....	Hartwick and Sylvan.....	Wm. Ramsey, Fvart.....	Mar. 10	4,500
North Branch Chippewa River and Edison Creek.....	Orien.....	B. C. Grant, Chippewa Station.....	Mar. 10	6,000
Highland Creek.....	Highland.....	C. W. Graves, Dighton.....	Mar. 10	4,500
Frantz Creek.....	Highland.....	C. W. Graves, Dighton.....	Mar. 10	4,500
Middle Branch Muskegon River.....	Highland or Marion.....	C. W. Graves, Dighton.....	Mar. 10	4,500
Moffett Creek.....	Highland or Marion.....	C. W. Graves, Dighton.....	Mar. 10	10,500
East Branch of Hersey Creek.....	Lincoln.....	A. M. McLean, Alpena.....	Mar. 17	3,000
Hersey River.....	Lincoln, Hersey and Lincoln.....	J. W. Patterson, Reed City.....	Mar. 18	3,000
McDonald's Creek.....	Lincoln and Carrow, Reed City.....	Cornell and Carrow, Reed City.....	Mar. 18	6,000
Blockhouse Creek.....	Lincoln and Richmond.....	A. W. Auer, Reed City.....	Mar. 18	3,000
Swain, Johnson and Tributary Branches, also Hersey Stream.....	Menor.....	Wm. Ellis, Au Sable.....	Mar. 18	3,000
Swain, Johnson and Tributary Branches, also Hersey Stream.....	Lincoln.....	L. W. Purchase, Orono.....	Mar. 20	12,000

West Branch of Clam River	Richfield, Marion and Winterfield	Fred R. Price, Marion	Mar. 21	12,000
Middle Branch of Muskegon River	Several	Patrick White, Marion	Mar. 21	7,500
Highland Creek	Highland	Patrick White, Marion	Mar. 21	3,000
Sawyer Creek	Marion	Patrick White, Marion	Mar. 21	3,000
Ghost Creek	Elmorton	Geo. Sechs, Lewiston	Mar. 21	12,000
East Branch	Elmorton	J. D. Hawks, Detroit	Mar. 25	45,000
Upper South Branch of Thunder Bay River				
Osego county:				
Sturgeon River	Chester	J. W. Lester, Indian River	Mar. 15	24,000
North Branch of Au Sable River (upper waters)	31, 32, 33, 34, 1 and 2 W.	Arnold Routhill, Saginaw	Mar. 21	18,000
Pigeon River	32 N, 2 W	D. M. Sly, Vanderbilt	Mar. 23	16,000
Sturgeon River	Several	R. H. L'Honnemedieu, Detroit	Mar. 25	30,000
Headwaters of Pigeon River	Several	R. H. L'Honnemedieu, Detroit	Mar. 25	30,000
Headwaters of Sturgeon River	Several			
Ottawa county:				
Pigeon River	Olive	C. McKinley, West Olive	Mar. 7	4,500
Presque Isle county:				
Tributaries to Oqueoc River	Metz	H. Horwitz, Hawks	Mar. 17	3,000
Trout River	Belknap and Rogers	B. G. Lark, Rogers	Mar. 17	4,500
Black River	Oqueoc and Chase	J. M. Clark, Onaway	Mar. 17	16,000
Indian Creek	Oqueoc and Chase	N. C. Monroe, Millersburg	Mar. 17	3,000
Oqueoc River	Oqueoc and Chase	W. H. Freers, Millersburg	Mar. 25	9,000
Little Oqueoc	Oqueoc, Bismark and Oqueoc	W. H. Freers, Millersburg	Mar. 25	4,500
Roscommon county:				
Esburn Creek	Richfield	D. Procuiner, St. Helens	Mar. 23	3,000
South Branch of Au Sable River	Penfield and South Branch	Wm. F. Johnston, Roscommon	Mar. 23	12,000
Schoecraft county:				
Thompson Creek	Thompson	Benjamin Gerro, Manistique	April 1	3,000
Silver Creek	Thompson	Benjamin Gerro, Manistique	April 1	4,500
East Branch of Manistique River	Seney and Germfask	Angus McDougall, Germfask	May 17	9,000
St. Joseph county:				
No name	Lockport	C. R. Jackson, Three Rivers	Feb. 24	1,500
Sherman Creek	Lockport	C. R. Jackson, Three Rivers	Feb. 24	1,500
Gembling Creek	Fabus	Warren Klocke, Three Rivers	Feb. 24	1,500
Spring Creek	Lockport	Amos Ives, Three Rivers	Feb. 24	1,500
No name	Flowerfield	Perry L. Turner	Mar. 3	1,500
James O'Brien Creek	Flowerfield	S. J. Andrus, Marcellus	Mar. 3	1,500
Parker's Brook	Flowerfield	S. J. Andrus, Marcellus	Mar. 3	1,500
Tuscola county:				
Herb's Creek	Fremont	J. W. Schermerhorn, Mayville	Mar. 11	3,000
Goodfellow's Creek	Dayton and Rich	A. L. Schram, Mayville	Mar. 11	3,000
Mill Creek	Dayton	A. L. Schram, Mayville	Mar. 11	1,500
Hunt's Creek	Dayton	Ed. D. Cartwright, Mayville	Mar. 11	1,500

Brook Trout Plants, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Tuscola county.—Continued.			1911.	
Goodell Creek.	Dayton	Ed. D. Cartwright, Mayville	Mar. 11	1,500
Sucker Creek.	Dayton	Arthur Haines, Mayville	Mar. 11	4,500
No name.	Fremont	Arthur Haines, Mayville	Mar. 11	1,500
Chapel Creek	Junata	Wm. Vandever, Caro.	Mar. 14	3,000
Van Buren county:				
Foster's Brook.	Keeler	W. A. Palmer, Hartford	Feb. 23	3,000
Two Branches of Heg Creek	Hartford	W. A. Palmer, Hartford	Feb. 23	2,000
Hart and Johnson's Brook	Hartford	W. A. Palmer, Hartford	Feb. 23	2,000
East Branch of Paw Paw River.	Antwerp and Porter	R. D. Loveland, Paw Paw	Feb. 23	2,500
West Branch of Paw Paw River.	Paw Paw and Decatur	H. F. Emory, Hull, Paw Paw	Feb. 23	5,000
Rix Creek.	Antwerp	H. F. Oswald, Kalamazoo	Feb. 24	3,000
No name.	Madawan	David Ly Decker, Antwerp	Feb. 24	3,000
Halden Creek	Madawan	Dr. C. A. Wise, Kalamazoo	Mar. 3	3,000
South Branch of Paw Paw River.	Almena	Dr. C. A. Wise, Kalamazoo	Mar. 3	2,000
Newberry Brook.	Antwerp and Paw Paw	R. E. Balch, Kalamazoo	Mar. 3	4,000
Scott's Creek	Waverly	W. E. Balch, M. P., Kalamazoo	Mar. 3	4,000
Mill Creek.	Geneva	W. E. Balch, M. P., Kalamazoo	Mar. 3	1,500
Spice Bush Creek	Geneva, Lee and Casco	J. T. Tolles, South Haven	Mar. 3	3,000
		J. A. Gibson, Lacota	Mar. 3	4,500
Washtenaw county:				
Williams Creek	Manchester and Shannon	Wm. Stoneway, Manchester	Feb. 27	2,000
Schlabie Creek	Manchester	A. J. Waters, Manchester	Feb. 27	2,000
Iron Creek	Manchester	A. J. Waters, Manchester	Mar. 27	4,500
South Branch of Faint or Clawson's Creek	Ypsilanti and Pittsfield	W. A. Dawson, Ypsilanti	Feb. 27	3,000
Honey Creek	Alma and Scio	C. F. Stabler, Ann Arbor	Feb. 27	6,000
No name.	Lyndon	T. I. Clark, Jackson	Feb. 27	3,000
Clark's Creek	Lyndon	T. I. Clark, Jackson	Feb. 27	3,000
Young's Creek	Lyndon	T. I. Clark, Jackson	Feb. 27	1,500
Wayne county:				
Campbell Creek.	Van Buren and Ypsilanti	L. Svananis, Belleville	Feb. 27	6,000
Wexford county:				
Bear Creek.	Slagp.	Michigan Fish Commission.	Mar. 6	30,000
Little Filer Creek.	Greenwood	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
Big Filer Creek	Greenwood	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Buttermilk Creek	Greenwood	R. B. De France, Kingsley	Mar. 16	3,000
Silver Creek.	Greenwood	R. B. De France, Kingsley	Mar. 16	3,000
Anderson Creek.	Hanover	G. A. Brigham, Buckley	Mar. 18	2,000
Fletcher Creek.	Wexford	G. A. Brigham, Buckley	Mar. 18	4,000
Hawley Creek	Hanover	G. A. Brigham, Buckley	Mar. 18	2,000
Dean Creek	Hanover	G. A. Brigham, Buckley	Mar. 18	3,000
Washburn Creek.	Greenwood	G. A. Brigham, Buckley	Mar. 18	2,000
Cushion Creek	Greenwood	Herman Marvin, Baxter	Mar. 18	1,000

Gauge Creek	Greenwood	Herman Marvin, Baxter	Mar. 18	1,000
Soper Creek	Colfax and Greenwood	C. S. Guilbertson, Manton	Mar. 18	3,000
Harger Creek	Colfax and Greenwood	C. S. Guilbertson, Manton	Mar. 18	3,000
Whitmore Creek	Liberty	C. H. Bostwick, Manton	Mar. 18	1,500
Taylor Creek	Liberty	C. H. Bostwick, Manton	Mar. 18	4,500
Cedar Creek	Liberty and Cedar Creek	C. H. Bostwick, Manton	Mar. 18	3,000
Buttermilk Creek	Greenwood	C. H. Tyler, Manton	Mar. 18	4,500
Wheeler Creek	Greenwood	C. H. Tyler, Manton	Mar. 18	6,000
Jewett Creek	Cherry Grove	Henry C. Auer, Cadillac	Mar. 21	1,500
Fletcher Creek	Springville	F. D. Winnie, Mesick	Mar. 21	3,000
Adams Creek	Springville	F. D. Winnie, Mesick	Mar. 21	3,000
Ster Creek	Antioch	F. D. Winnie, Mesick	Mar. 21	3,000
Usewick Creek	Antioch	F. D. Winnie, Mesick	Mar. 21	1,500
Preston Creek	Springville	F. D. Winnie, Mesick	Mar. 21	1,500
Sands Creek	Slagle	F. D. Winnie, Mesick	May 5	10,000
		Michigan Fish Commission		
Total				5,665,000

BROOK TROUT PLANTS, 1911.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Leclanau county: Mosseau Creek.....	Suttons Bay.....	D. H. Power, Suttons Bay.....	1911. May 6	10,000

BROOK TROUT PLANTS, 1911.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Chippewa county: Deerfoot Creek.....		John Bell, Strongs.....	1911. Sept. 6	300

RAINBOW TROUT PLANTS, 1911.
ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county: Mill Creek.....	Harrisville.....	A. L. Noyes, Harrisville.....	1911, June 9.....	3,000
Spring Brook.....	Mitchell.....	Fred H. Joud, Au Sable.....	June 13.....	9,000
McGinn Creek.....	Clinton and Mitchell.....	S. K. McCollum, Comins.....	June 13.....	15,000
South Branch of Pine River.....	Curtis.....	Jos. Turcott, Oscoda.....	June 13.....	9,000
Allegan county: Neely and Duncan Creeks.....	Duncan.....	A. J. Shelp, Doster.....	May 24.....	3,000
Tributaries to Rabbit River.....	Leighton.....	Alfred S. Nelson, Wayland.....	May 27.....	1,500
Alpena county: Upper Branch of Thunder River.....	Green.....	W. E. Carr, D. D. S., Alpena.....	June 9.....	12,000
Trout Creek.....	Alpena.....	W. E. Rogers, Alpena.....	June 9.....	3,000
Antrim county: Ogletree Creek.....	Central Lake and Banks.....	O. P. Barber, Central Lake.....	May 8.....	4,500
Town Line Creek.....	Banks.....	W. H. Uptegrove, Central Lake.....	May 8.....	4,500
Arenac county: Demno Creek.....	Arenac.....	F. Avery, Standish.....	May 25.....	4,500
North Branch of Deep River.....	Gibson.....	F. Avery, Standish.....	May 25.....	18,000
South Omer Creek.....	Deep River.....	F. Avery, Standish.....	May 25.....	4,500
Cooler Creek.....	Deep River.....	F. Avery, Standish.....	May 25.....	4,500
Big Town Line and Murphy Creeks, Tribs. to Rifle River.....	Mason, Arenac and Au Grs.....	N. Deford, Sterling.....	June 9.....	15,000
Mansfield Creek.....	Clayton.....	H. Zeran, Prescott.....	June 9.....	3,000
Baraga county: Slerk's Creek.....	L'Anse.....	Silver River R. and G. Club, L'Anse.....	June 10.....	5,000
Clear Creek.....	Baraga.....	H. L. Swift, Houghton.....	June 12.....	9,000
Barry county: Thornapple River and tributaries.....	Prairieville.....	Luther B. Hills, Irving.....	May 23.....	6,000
Adams Lake Creek.....	Rutland and Irving.....	Fay Nichols, Doster.....	May 21.....	1,500
Glass Creek.....	Barry and Ross.....	Edgar Otis, Shultz.....	May 27.....	4,500
Eight Mile Creek.....	Hope, Pentland and Yankee Springs.....	Geo. W. Lawrence, Delton.....	May 27.....	3,000
Glass Creek River.....	Woodland and Carlton.....	W. J. Nichols, Hastings.....	June 12.....	9,000
Little Thornapple River.....	Barry, Cedar Creek, Baltimore and Hastings.....	W. J. Nichols, Hastings.....	June 12.....	9,000
Cedar Creek.....	Woodland and Castleton.....	W. J. Nichols, Hastings.....	June 12.....	15,000
Mud Creek River.....	Johnson, Baltimore, Castleton and Groveland.....	W. J. Nichols, Hastings.....	June 12.....	9,000
High Bank Creek River.....	Groveland.....	W. J. Nichols, Hastings.....	June 12.....	9,000

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number
Barry county.—Continued.				
Fall Creek	Several	F. H. Barlow, Hastings.	1911.	9,000
Kelly Creek	Baltimore	J. H. Neiss, Hastings.	June 12	4,500
Lachy's Creek	Baltimore	J. H. Neiss, Hastings.	June 12	3,000
Horn Creek	Holtz	K. D. Siscoe, Hastings.	June 12	3,000
Power's Creek	Irving	C. H. Osborne, Hastings.	June 12	3,000
Tributary to Glass Creek.	Yankoe Springs	C. D. Bauer, Hastings.	June 12	3,000
McCullum Creek	Hauke Springs	C. D. Bauer, Hastings.	June 12	3,000
Tributaries to Thornapple River	Hastings and Irving	F. A. Stowell, Hastings.	June 12	3,000
Benzie county:				
Crystal Lake Inlet	Benzieonia	David E. Burns, Beulah.	June 13	7,500
Berrien county:				
Branch of St. Joseph River.	Oronoko	W. J. Lueker, St. Louis	June 1	3,000
Wilson and Gray Creeks	Oronoko	J. G. Murdock, Berrien Springs	June 1	4,500
Leman Creek	Oronoko	J. W. Esbell, St. Joseph.	June 1	3,000
Pipestone Creek	Oronoko	J. W. Esbell, St. Joseph.	June 1	3,000
Lorice Creek	Oronoko	J. W. Esbell, St. Joseph.	June 1	3,000
Blue Creek	Benton	J. W. Esbell, St. Joseph.	June 1	3,000
Yellow Creek	Royalton	C. H. Crest, St. Joseph.	June 1	3,000
Edson Creek	Benton	C. H. Crest, St. Joseph.	June 1	1,500
Crystal Springs Creek	Benton	C. H. Crest, St. Joseph.	June 1	1,500
Tributaries of St. Joseph River	Sevral	A. F. Herring, St. Joseph.	June 1	1,500
Hickory Creek	St. Joseph	A. F. Herring, St. Joseph.	June 1	7,000
Spring Brook	New Buffalo	Win. J. Shermack, New Buffalo	June 1	4,500
Branch county:				
Stamford Brook	Sherwood	S. W. Lehr, Athens	May 24	1,500
Spencer Brook	Sherwood	Leo E. Wood, Athens	May 24	1,500
Coldwater River	Stoney and others.	Jno. B. Shipman, Coldwater	May 27	6,000
Mill Creek	Batavia and Bronson	C. D. Smead, Coldwater.	May 27	3,000
Hog Creek	Batavia and Bronson	C. D. Smead, Coldwater.	May 27	4,500
Shuneman's Brook, Motts, Hog, Allen and Branch Creeks	Girard	F. T. Tappan, Coldwater.	May 27	9,000
Smead's Creek	Coldwater and Girard	F. T. Tappan, Coldwater.	May 27	7,500
	Batavia	F. T. Tappan, Coldwater.	May 27	12,000
Calhoun county:				
Mingo's Brook	Battle Creek	Geo. H. Williams, Battle Creek.	May 24	4,500
Heiner's Creek	Battle Creek and Newton.	Geo. H. Williams, Battle Creek	May 24	4,500
Knights Creek	Emmet	L. H. Tower, Battle Creek	May 24	3,000
Flower Creek	Emmet	V. H. Beamble, Battle Creek	May 24	10,500
Wildier Creek	Emmet	N. W. Warren, Marshal	May 24	7,500
Rice Creek	Escondo	W. J. Claybourne, Marshal	May 24	6,000
Mineral Springs Brook	Albion	M. O. Reed, Albion.	May 24	1,500

Bacon Creek	Battle Creek and others	W. R. Skellenger, Battle Creek.	7,500
Nottawa Creek	Athens and Newton.	F. G. Woodruff, Athens.	3,000
Pine Creek	Athens	J. C. Gaw, Athens	3,000
Cass county:			
Spring Run	Marcellus	A. L. Maxam, Marcellus.	1,500
Bonkfin Stream	Mostly Marcellus	B. F. Mikel, Marcellus.	3,000
Broadhurst Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Lyon Creek	Wayne and Silver Creek	Fred Phillips, Dowagiac.	1,500
Batch Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Big Dowagiac Creek	Decatur, Wayne, Silver Creek and Pokagon	Fred Phillips, Dowagiac.	7,500
Gage Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Kenny Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Hampton Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Blenwood Creek	Wayne	Fred Phillips, Dowagiac.	1,500
Peavine Creek	Pokagon	Fred Phillips, Dowagiac.	3,000
Pokagon Creek	Pokagon	Fred Phillips, Dowagiac.	3,000
South Branch of Dowagiac Creek	Vollinia, La Grange, Pokagon and Prairie Ronde	Fred Phillips, Dowagiac.	4,500
Miller Creek	Pokagon.	Fred Phillips, Dowagiac.	7,500
Little Dowagiac Creek	Pokagon, La Grange and Silver Creek	Fred Phillips, Dowagiac.	1,500
Ireland Creek	Silver Creek	Fred Phillips, Dowagiac.	7,500
Lyle Creek	Silver Creek	Fred Phillips, Dowagiac.	1,500
McOmer Creek	Silver Creek	Fred Phillips, Dowagiac.	1,500
Silver Creek	Silver Creek	Fred Phillips, Dowagiac.	3,000
Kinzie Creek	Jefferson	Fred Phillips, Dowagiac.	3,000
Garmen Creek	Wayne	Fred Phillips, Dowagiac.	3,000
Yule Lake Creek	Wayne and Silver Creek	Fred Phillips, Dowagiac.	1,500
No name	La Grange and Howard	R. W. Ham, Elkhart, Ind.	3,000
Centennial Mill Pond	La Grange and Jefferson	C. H. Kimmeler, Cassopolis.	3,000
Shaw Creek	Jefferson and Howard	C. H. Kimmeler, Cassopolis.	4,500
Charlevoix county:			
West Branch of Sturgeon River	Hudson.	C. F. Hoffman, Vanderbilt.	15,000
North Boyne River	Boyne Valley	Chas. Galster, Boyne Falls.	15,000
Boyne River	Boyne Valley	Chas. Galster, Boyne Falls.	15,000
Cheboygan county:			
Big Sturgeon River	J. J. Jones, Indian River	J. J. Jones, Indian River	15,000
Chippewa county:			
Little Muniskong River	Pickford	Dr. J. A. Cameron, Pickford	10,000
St. Mary's River at East Neebish Rapids	Sugar Island.	Chase S. Osborn, Sault Ste. Marie.	10,000
St. Mary's River	Several.	Michigan Fish Commission, Detroit	40,000
Clare county:			
Chord Creek	Grant.	F. C. Sanford, Clare	3,000
McKinley Creek	Sheridan.	F. C. Sanford, Clare	10,500
Halstead Creek	Grant.	F. C. Sanford, Clare	6,000

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Clinton county: Little Maple River.....	Ovid and Victor.....	F. D. Cleveland, Shepardsville.....	1911. June 10	10, 500
Delta county: Portage Creek and Cedar Brook..... Ford River.....	Ford River and Wells.....	Timothy Killian, Escanaba..... E. C. Voght, Escanaba.....	May 30 May 30	7, 500 10, 000
Dickinson county: Water Works Creek..... Pine Creek..... Sturgeon River.....	Norway..... Waucedah..... Waucedah.....	Wm. H. Weber, Norway..... Herrnan Violmette, Loretto..... John Langdon, Loretto.....	May 30 May 30 May 30	5, 000 7, 500 7, 500
Eaton county: Silver Creek..... Sandstone Creek.....	Windsor..... Oneida.....	Fresman G. French, Dimondale..... Fred L. Berry, Grand Ledge.....	June 3 June 7	7, 500 9, 000
Emmet county: No name..... No name..... Bear Creek.....	Littlefield..... Littlefield..... Littlefield.....	W. W. Fairbairn, Alanson..... W. W. Fairbairn, Alanson..... Geo. C. Braun, Petoskey.....	May 24 May 24 May 24	3, 000 3, 000 18, 000
Grand Traverse county: Boardman River..... Boardman River..... Beitner Creek.....	Several..... Blair..... Blair.....	R. S. Hastings, Traverse City..... C. T. Cedersten, Traverse City..... C. T. Cedersten, Traverse City.....	May 26 May 26 May 26	15, 000 15, 000 4, 500
Gratiot county: Cale Ayers Creek.....	Sumner.....	J. W. Johnson, Elmhall.....	June 7	3, 000
Gogebic county: Outlet of Beaton's Lake..... Outlet of Tenderfoot Lake..... Thousand Island Lakes Inlets..... Wolf Lake Outlet..... Morrison Creek..... Sargant's Creek..... Henderson's Creek..... Middle Branch Ontonagon River..... Dellies Creek..... Duck Creek..... Camp Two Creek..... Maple Creek..... Rock Creek..... Hill Creek..... Pine Creek..... Rainbow Creek.....	Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet..... Bessemer..... Bessemer..... Bessemer..... Bessemer..... Bessemer.....	C. M. McDonald, Watersmeet..... C. M. McDonald, Watersmeet..... A. D. Johnson, Bessemer..... A. D. Johnson, Bessemer..... M. Hughtitt, Jr., Chicago, Ill..... M. Hughtitt, Jr., Chicago, Ill..... M. Hughtitt, Jr., Chicago, Ill..... M. Hughtitt, Jr., Chicago, Ill..... M. Hughtitt, Jr., Chicago, Ill..... M. Hughtitt, Jr., Chicago, Ill..... J. A. Vogtlin, Chicago, Ill..... J. A. Vogtlin, Chicago, Ill..... J. A. Vogtlin, Chicago, Ill..... J. A. Vogtlin, Chicago, Ill..... J. A. Vogtlin, Chicago, Ill.....	June 1 June 1 June 1 June 1 June 1 June 1 June 1 June 1 June 1 June 1 June 5 June 5 June 5 June 5 June 5	5, 000 5, 000 2, 500 2, 500 7, 500 7, 500 7, 500 7, 500 7, 500 7, 500 5, 000 5, 000 5, 000 5, 000 5, 000

Black River.....	Bessemer, Wakefield and Ironwood.....	H. E. Patterson, Chicago, Ill.....	June 5	5,000
Jackson Creek.....	Bessemer.....	H. F. Patterson, Chicago, Ill.....	June 5	5,000
No name.....	Wakefield.....	C. S. Barber, Chicago, Ill.....	June 5	5,000
Sand Island Creek.....	Wakefield and Bessemer.....	W. R. Kulaszurcz, Chicago, Ill.....	June 5	5,000
No name.....	48 N. 46 W.....	C. E. Holly, Chicago, Ill.....	June 5	5,000
Gage's Creek.....	36 and 49 W.....	Daniel P. Green, Bessemer.....	June 5	2,500
No name.....	48-46.....	Tony Trier, Bessemer.....	June 5	5,000
Swamp Creek.....	Bessemer.....	C. M. Fraser, Bessemer.....	June 5	5,000
Johnson Creek.....	Bessemer.....	H. P. Rasmussen, Bessemer.....	June 5	5,000
Learnane's Creek.....	Ironwood.....	Fred Becker, Bessemer.....	June 5	5,000
Hillsdale county:				
Branch of Raisin River.....	Somerset.....	Wm. Bickford, Jerome.....	May 24	1,500
Branch of Raisin River.....	Somerset.....	Wm. Bickford, Jerome.....	May 24	3,000
No name.....	Somerset and Wheatland.....	Frank Carney, Jerome.....	May 24	4,500
Emery Mills Creeks.....	Hillsdale.....	W. C. Kemp, Hillsdale.....	June 3	3,000
Silver Creek Tributaries.....	Cambria.....	W. J. French, Hillsdale.....	June 3	6,000
Houghton county:				
Seven Mile Creek.....	Calumet.....	Chas. Limbach, Calumet.....	June 10	5,000
Small Branch Sturgis-on River.....	Laird.....	Paul D. Swift, Houghton.....	June 10	10,000
Mud Lake Creek.....	Torch Lake.....	Fred Olson, Calumet.....	June 10	5,000
Ingham county:				
Willow Creek.....	Yevay and Aurelius.....	C. P. Mickelson, Mason.....	June 3	6,000
Sycamore River.....	Alairton.....	C. P. Mickelson, Mason.....	June 3	6,000
Mud Creek.....				
Ionia county:				
Dickinson Creek.....	Otisco.....	Brinton F. Hall, Belding.....	June 7	12,000
Perrett's Creek.....	Orange.....	R. W. Benedict, Ionia.....	June 7	7,500
Outlet of Woodward Lake.....	Ori-ans.....	W. H. Angell, Belding.....	June 7	6,000
Outlet of Long Lake.....	Ori-ans.....	W. H. Angell, Belding.....	June 7	6,000
Dexter Creek.....	Easton.....	J. Wallington, Saranac.....	June 10	3,000
Morrison Lake Creek.....	Boston.....	J. Wallington, Saranac.....	June 10	3,000
Arnold Creek.....	Ionia.....	Andrew Christensen, Ionia.....	June 10	1,500
Prairie Creek with pond.....	Ionia.....	Chas. Steinh, Ionia.....	June 10	6,000
Knapp Creek.....	Lyons.....	Dr. Weston, Muir.....	June 10	3,000
Speer's Creek.....	Lyons.....	Dr. Weston, Muir.....	June 10	3,000
Nickle Plate Pond.....	Ronald.....	C. A. Palziel, Muir.....	June 10	3,000
Iosco county:				
Van Ertan Creek.....	Oscoda.....	J. H. McGillivray, Oscoda.....	June 9	3,000
Meadow Creek.....	Oscoda.....	Wm. Elliott, Oscoda.....	June 9	3,000
Smith Creek.....	Plainfield.....	R. D. Brown, Hale.....	June 13	6,000
Vaughn Creek.....	Plainfield.....	R. D. Brown, Hale.....	June 13	6,000
No name.....		C. W. Luce, East-Tawas.....	June 9	9,000
Iron county:				
Lower Paint River.....	Crystal Falls.....	Arvid Bjork, Crystal Falls.....	June 1	5,000
Paint River.....	Crystal Falls and others.....	Arvid Bjork, Crystal Falls.....	June 1	7,500

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Isabella county:			1911.	
Chippewa River.	Mt. Pleasant.	Geo. A. Chatterton, Mt. Pleasant.	June 1	9,000
Upper Coldwater River.	Nottawa.	Robt. Hyslop, Weidman.	June 7	6,000
Shafer's Creek.	Sherman.	Robt. Hyslop, Weidman.	June 7	3,000
Jackson county:				
River Junction Creek.	Rives.	Geo. E. Beebe, Jackson.	May 23	1,500
West Branch Kalamazoo River.	Hillsdale.	Geo. E. Beebe, Jackson.	May 23	7,500
Headwaters of Kalamazoo River East Branch.	Liberty, Hanover, Spring Arbor and Concord.	Geo. E. Beebe, Jackson.	May 23	6,000
Willow Creek.	Hanover.	Geo. E. Beebe, Jackson.	May 23	3,000
Outler Creek.	Concord.	Geo. E. Beebe, Jackson.	May 23	4,500
Headquarters of Grand River.	Liberty.	Geo. E. Beebe, Jackson.	May 23	3,000
Dew Brook.	Horton.	Geo. E. Beebe, Jackson.	May 23	3,000
Leon Creek.	Leon.	Geo. E. Beebe, Jackson.	May 23	3,000
Tributaries of Kalamazoo River.	Hanover.	Geo. E. Beebe, Jackson.	May 23	7,500
Tributaries of Kalamazoo River.	Hanover.	Geo. E. Beebe, Jackson.	May 23	3,000
Snyder's Creek.	Spring Arbor.	Geo. E. Beebe, Jackson.	May 23	7,500
Sandstone Creek.	Sandstone and Blackman.	Geo. E. Beebe, Jackson.	May 23	7,500
Rice Creek.	Parma.	Geo. E. Beebe, Jackson.	May 23	4,500
Crouch Creek.	Summit.	Geo. E. Beebe, Jackson.	May 23	7,500
Willow Creek.	Waterloo and Grass Lake.	Geo. E. Beebe, Jackson.	June 23	6,000
Wade Creek.	Tompkins.	Geo. E. Beebe, Jackson.	June 23	1,500
Indian Springs Creek.	Concord.	B. W. Diver, Jackson.	May 24	3,000
Inlets of Farwell Lake.	Hanover.	Dr. C. L. Hathaway, Hanover.	June 3	3,000
Headwaters of Kalamazoo River.	Hanover.	Will Hinkley, Hanover.	June 3	3,000
Headwaters of North Branch of Kalamazoo River.	Hanover.	L. I. Strat, Hanover.	June 3	1,500
Unfield Creek.	Pulaaki.	F. W. McKenzie, Concord.	June 3	3,000
Tributary of Kalamazoo River.	Hanover and Concord.	B. F. Burgess, Norvell.	June 3	3,000
Thayer's Creek.	Norvell.	B. F. Burgess, Norvell.	June 3	3,000
Kalamazoo county:				
Kalamazoo county.	Comstock.	H. D. Strevator, Galesburg.	May 24	3,000
Earl's Creek.	Schoolcraft.	W. R. Skellinger, Battle Creek.	May 24	4,500
Stony Brook.	Portage.	A. M. Follows, Schoolcraft.	May 27	3,000
Frakes Creek.	Schoolcraft.	Jay Clark, Schoolcraft.	May 27	1,500
Wells Creek.	Portage.	Jay Clark, Schoolcraft.	May 27	1,500
Keweenaw county:				
Gratiot River.	Allouez and Houghton.	C. W. Thomason, Laurium.	June 10	10,000
Silver River.	Grant.	Albert A. Brockway, Lake Linden.	June 10	5,000
Phonix River.	Houghton.	N. Lenten, Phonix.	June 10	5,000
Montreal River Meadows.	Houghton.	John Illich, Calumet.	June 10	7,500
Silver River Meadows.	Grant, Eagle Harbor and Sherman.	Jos. Limbach, Red Jacket.	June 10	7,500
Silver River.	Grant, Eagle Harbor and Sherman.	Jos. Limbach, Red Jacket.	June 10	7,500
No name.	Grant, Eagle Harbor and Sherman.	Geo. Brill, Calumet.	June 10	7,500

Kent county:	Nelson, Courtland and Algoma.	R. B. Cawthrope, Cedar Springs.	May 26	3,000
Little Cedar Creek.	Solon.	R. B. Cawthrope, Cedar Springs.	May 26	3,000
Dop Creek.	Solon.	R. B. Cawthrope, Cedar Springs.	May 26	4,500
Spring Creek.	Algoma.	R. B. Cawthrope, Cedar Springs.	May 26	4,500
Cedar Creek.	Courtland.	R. B. Cawthrope, Cedar Springs.	May 26	3,000
Stegman Creek.	Nelson, Solon and Algoma.	R. B. Cawthrope, Cedar Springs.	May 26	12,000
Duke Creek.	Mostly Oakfield.	Freeman Addis, Harvard.	May 29	4,500
Crinion Creek.	Several.	H. C. Murray, Sparta.	June 5	6,000
Upper Waters of Rogie River and tributaries.	Tyrone.	C. S. Parks, Kent City.	June 5	6,000
Rogue River and tributaries.	Alpine.	Dwight Lydell, Comstock Park.	June 6	7,500
Strawberry Creek.	Algoma and Courtland.	Geo. E. Rector, Edgerton.	June 6	3,000
Harding Creek.	Algoma and Courtland.	Geo. E. Rector, Edgerton.	June 6	3,000
Munn Creek.	Oakfield.	W. S. Lamberton, Baldwin.	June 7	7,500
Beaverdam Creek.	Wyoming and Byron.	W. H. Zylstria, Grand Rapids.	June 12	9,000
Buck Creek.	Several.	Geo. M. Brown, Detroit.	June 6	18,000
Lake county:	Pere Marquette River.	Geo. M. Brown, Detroit.	June 6	27,000
Pere Marquette River.	Chase.	Chas. Nelson, Chase.	June 6	9,000
Headwaters of Mid. Br. of Pere Marquette River.	Pleasant Plains and Webber.	R. J. Matthews, Baldwin.	June 6	7,500
Sanborn Creek.	Pleasant Plains and Webber.	R. J. Matthews, Baldwin.	June 6	9,000
Baldwin Creek.	Almont, Addison, Bruce, Armada and Ray.	W. H. Bradley, Romeo.	June 10	9,000
Lapeer county:	Metamora and Dryden.	P. B. Glaspie, Oxford.	June 13	3,000
North Branch of Clinton River.	Empire.	James Daily, Empire.	May 13	1,500
Borsig Creek.	Glen Arbor.	James Daily, Empire.	May 13	6,000
Leelanau county:	Franklin.	Williard Mitchell, Tipton.	May 24	6,000
Knox Creek.	Bruce.	F. Gillespie, Romeo.	June 10	4,500
Crystal River.	Republic.	C. W. Munson, Republic.	June 9	10,000
Evans Creek.	Humboldt.	C. W. Munson, Republic.	June 9	10,000
Macomb county:	Republic.	C. W. Munson, Republic.	June 9	10,000
Silver Creek.	Republic.	C. W. Munson, Republic.	June 9	5,000
Marquette county:	Republic.	B. Bengston, Republic.	June 9	7,500
Michigan River.	Republic.	B. Bengston, Republic.	June 9	10,000
Midway Creek.	Republic.	C. W. Munson, Republic.	June 9	5,000
Bruce Creek.	Republic.	C. W. Munson, Republic.	June 9	10,000
West Branch Escanaba River.	Republic.	C. W. Munson, Republic.	June 9	10,000
Trout Falls River.	Republic.	C. W. Munson, Republic.	June 9	7,500
Spruce Falls Creek.	Republic.	C. W. Munson, Republic.	June 9	7,500
Trout Falls Creek.	Republic.	C. W. Munson, Republic.	June 9	7,500
Black River.	Republic.	C. W. Munson, Republic.	June 9	5,000
Nelson's Creek.	Humboldt.	D. T. Morgan, Republic.	June 9	10,000
Schwartz Creek.	Republic.	D. T. Morgan, Republic.	June 9	7,500
Carp River.	Forsyth, Richmond and Sands.	Negaunee R. and G. Club, Negaunee.	June 13	7,500
Connor's Creek.	Negaunee, Ishpeming and Richmond.	Negaunee R. and G. Club, Negaunee.	June 13	12,500
Dead and Escanaba Rivers.	Champion.	Lewis N. Toutloff, Ishpeming.	June 13	7,500
Spruce River.	Ely and Ishpeming.	Geo. A. Newett, Ishpeming.	June 13	15,000
	Several.	Geo. A. Newett, Ishpeming.	June 13	5,000

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Marquette county.—Continued.				
Peshekee River.....	Michiganme.	Geo. A. Newett, Ishpeming.	1911.	7,500
West Branch Escanaba River.....	Ely.....	Geo. A. Newett, Ishpeming.	June 13	15,000
Dishro Creek.....	Champion.....	E. M. Stensurd, Michiganame	June 13	5,000
Mason county.				
Pent water River and Landis Creek	Several.....	John Grey, Scottville	June 6	12,000
Pere Marquette River.....	Amber.....	John Grey, Scottville	June 6	9,000
Lincoln River.....	Sherman.....	Fountain R. and C. Club, Fountain.	June 6	15,000
Mecosta county.				
Rattall Creek.....	Fork.....	W. S. Laffin, Barryton	June 7	3,000
North Branch of Chippewa River.	Sheridan and Fork	W. S. Laffin, Barryton	June 7	6,000
South Branch of Chippewa River	Sheridan and Fork.	W. S. Laffin, Barryton	June 7	4,500
Botts Creek.....	Fork.....	W. S. Laffin, Barryton	June 7	4,500
Farmer Creek.....	Sheridan.....	W. S. Laffin, Barryton	June 7	3,000
Brown Creek.....	Fork.....	W. S. Laffin, Barryton	June 7	1,500
Benjamin Creek.....	Fork.....	W. S. Laffin, Barryton	June 7	3,000
Seaton Creek.....	Hinton.....	Arthur Royce, Altona	June 7	4,500
Poney Creek.....	Wheatland and Broomfield	P. J. Thielsen, Remus	June 7	7,500
Tompkins Creek.....	Hinton.....	C. W. Vining, Lakeview	June 7	3,000
Silverster Creek.....	Hinton.....	John Wright, Lakeview	June 7	6,000
Little Muskegon River.....	Aetna.....	Louis Reames, Morley	June 12	9,000
Menominee county.				
West Branch Little Cedar River.	Spalding.....	J. H. McKibbin, Powers	May 30	7,500
Quade Creek.....	Spalding.....	Chas. J. Quade, Powers	May 30	10,000
Squaw Creek.....	Spalding.....	John Archibald, Powers	May 30	2,500
Cedar River.....	Spalding, Myers, Ingauston and Harris	John Archibald, Powers	May 30	7,500
Ten Mile Creek.....	Spalding.....	Wm. Frazer, Powers	May 30	5,000
Hay Creek.....	Meyer and Holmes	J. D. Hayes, A. J. Kremer, Hermansville	May 30	2,500
Holmes Creek.....	Meyer and Holmes	J. D. Hayes, A. J. Kremer, Hermansville	May 30	2,500
Missaukee county.				
Mosquito Creek.....	Reeder.....	Geo. B. Farmer, Lake City	June 7	6,000
Hopkins Creek.....	Forest and Caldwell.	T. H. Reeder, Lake City.	June 7	9,000
Montcalm county.				
Tributaries to Tamarack Creek	Winfield.....	Dr. J. Odell Nelson, Howard City.	May 27	4,500
Fossilid Creek.....	Pierson and Reynolds.	Burt Collins, Howard City.	May 27	12,000
Whitefish Creek.....	Winfield.....	H. M. Gibbs, Howard City.	May 27	3,000
Indian Creek.....	Pierson and Reynolds.	S. V. Bullock, Howard City.	May 27	4,500
Tamarack Creek.....	Reynolds.....	A. B. Potts, Howard City.	May 27	3,000
Caskey Creek.....	Reynolds.....	W. H. Lovely, Howard City.	May 27	12,000
Main Part of Fish Creek	Winfield.....	F. Ashley, Howard City.	May 27	3,000
Tamarack Creek.....	Crystal.....	C. D. White, Butternut	May 29	6,000
	Cato and others.....	John E. Seat, Lakeview	June 7	6,000

Offnear Creek.....	Home.....	I. D. Curtis, Edmore.....	June 7	6,000
Brimmer Creek.....	Caro and Belvidere.....	Chealey Falmg, Lakeview.....	June 7	3,000
Tannack Creek.....	Winfield.....	Lynch and Winters, Ambie.....	June 7	6,000
Tornton Creek.....	Montcalm.....	R. Finch Gowen.....	June 7	6,000
Wabasis Creek.....	Richland.....	Brinton F. Hall, Belding.....	June 7	3,000
Inlets to Deatner Lake.....	Ferris.....	Wm. Carls, Vestaburg.....	June 7	6,000
Corben Creek.....	Richland.....	J. W. Johnson, Elm Dale.....	June 7	3,500
Bianchard Creek.....	North Plains.....	G. E. Brown, Riverdale.....	June 7	3,500
Fish Creek.....	Cato.....	A. E. Clark, Hubbardston.....	June 10	7,500
Rossman Creek.....	Pierson and Reynolds.....	J. B. Huskins, Howard City.....	June 12	3,500
Rice Creek.....	Pine.....	Walter J. Smith, Howard City.....	June 12	4,500
Broderick Creek.....	Pine.....	F. D. Briggs, Langston.....	June 17	3,000
West Branch Creek.....	Pine.....	F. D. Briggs, Langston.....	June 29	6,000
West Lake Creek.....	Maple Valley, Montcalm and Spencer.....	F. D. Briggs, Langston.....	June 29	6,000
Inlet of Muscalonge Lake.....	Pine.....	Jensen Bros., Trufant.....	June 29	6,000
Kortcs Creek.....	Barry, Avery, Rust, Williams, Green and Alpena.....	F. D. Briggs, Langston.....	June 29	6,000
Montmorency county: Thunder Bay River.....	Montmorency and Long Rapids.....	J. M. Farrier, Hillman.....	June 9	22,500
North Branch of Thunder Bay River.....	Ravenna.....	Geo. P. Crowley, Hillman.....	June 9	15,000
Muskegon county: Crockery Creek.....	Cashovia.....	C. A. Stauffer, Ravenna.....	May 29	9,000
Crockery Creek and tributaries.....	Sheridan.....	Elliott T. Slocum, Detroit.....	June 12	12,000
Newsygo county: Williams Creek.....	Several.....	W. D. Sargeant, Fremont.....	May 29	4,500
White River.....	Denver.....	W. D. Sargeant, Fremont.....	May 29	15,000
Martin Creek.....	Several.....	Wm. Pomeroy, Holton.....	May 29	4,500
Cedar Creek.....	Bridgeton and Sheridan.....	Floyd Matthews, Twin Lakes.....	June 5	12,000
Brookesser Creek.....	Casnovia and Muskegon.....	C. L. Cold, Bailey.....	June 5	6,000
Crockery Creek.....	Ashland and Grant.....	A. J. Titus, Grant.....	June 5	9,000
Crockery Creek.....	Wilcox.....	W. S. Barton, White Cloud.....	June 5	9,000
White River.....	Sherman.....	Chas. Streichhirsch, White Cloud.....	June 5	12,000
Robinson's Lake Outlet.....	15-14.....	Adelbert Branch, White Cloud.....	June 5	1,500
East Branch Cold Creek.....	Beaver and Monroe.....	Geo. R. Lyons, Hesperia.....	June 5	3,000
Cold Springs.....	Several.....	Geo. R. Lyons, Hesperia.....	June 5	6,000
Minepog Creek.....	White Lake and Springfield.....	W. A. Brunner, Howard City.....	June 12	3,000
Ryan Creek.....	Oakland, Washington and Shelby.....	H. N. Vandenberg, Howard City.....	June 12	3,000
Bordan Creek.....	Orion.....	Michigan Fish Commission, Detroit.....	June 18	30,000
Little South Branch of Pere Marquette River.....	Oxford.....	O. N. Gardner, Detroit.....	June 10	3,000
Oakland county: Inlet to Deer Lake.....	White Lake and Springfield.....	B. T. Cooley, Clarkston.....	June 10	6,000
Headwaters of Huron River.....	Oakland, Washington and Shelby.....	H. W. Bradley, Romeo.....	June 10	16,500
Stoney Creek.....	Oxford and Orion.....	C. L. Randall, Oxford.....	June 13	3,000
Tanner's Creek.....	Orion.....	Philo Ensley, Oxford.....	June 13	3,000
Hummer Creek.....	Orion.....	A. R. Bellaire, Oxford.....	June 13	3,000
Thirston Creek.....	Oxford.....	R. Marshall, Oxford.....	June 13	3,000
Lanning Creek.....	Oxford.....	R. Marshall, Oxford.....	June 13	3,000

TWENTIETH REPORT—STATE FISHERIES.

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Oakland county.—Continued.				
Paint Creek.....	Oxford.....	R. Marshall, Oxford.....	1911.	3,000
Paint Creek.....	.....	C. S. Chapman, Rochester.....	June 13	4,500
Field Creek and Huron River.....	Commerce.....	Tom Forbes, Milford.....	June 13	3,000
Huron River and tributaries.....	Commerce and Milford.....	T. H. Padley, Milford.....	June 13	9,000
Big Spring Creek and Round Lake.....	Highland.....	R. S. Potts, Milford.....	June 13	3,500
Pettibone Creek.....	Milford and Highland.....	R. S. Potts, Milford.....	June 13	3,000
MacIntyre Creek.....	Brandon.....	James Staples, Ortonville.....	June 13	3,000
Oceana county.				
Reed Creek.....	Perry and Elbridge.....	Fred Wright, Hart.....	May 20	4,500
North Branch of South Branch of Pentwater River.....	Elbridge.....	Ray Thompson, Hart.....	May 20	9,000
Coldwater River.....	Elbridge.....	Monroe Hall, Hart.....	May 29	9,000
Gene Rouse Creek.....	Hart.....	J. B. Mitchell, Hart.....	May 29	3,000
Cedar Creek.....	Elbridge.....	Ralph De Vries, Hart.....	May 29	6,000
Pentwater River.....	Pentwater and Wear.....	S. D. Montgomery, Grand Rapids.....	May 29	7,500
Pentwater River.....	Elbridge, Hart and Pentwater.....	Rufus Steels, Hart.....	June 29	9,000
Ogemaw county.				
Detrich Creek.....	Churchill.....	Ed. Struble, Selkirk.....	May 25	9,000
Klack and Perkins Creeks.....	Churchill.....	Carscallen Bros., Selkirk.....	May 25	6,000
Peach Lake Creek.....	West Branch.....	John Tollfree, West Branch.....	May 25	3,000
Wood's Creek.....	West Branch.....	John Tollfree, West Branch.....	May 25	3,000
Eddy Creek.....	21 W. R. 2 E. and 21 W. R. 3 E.....	John Tollfree, West Branch.....	May 25	6,000
East Branch of Tittabawassee River.....	Horton.....	John Tollfree, West Branch.....	May 25	6,000
Ripk River.....	Churchill.....	Geo. Peter, Selkirk.....	May 25	9,000
C. K. Eddy Creek.....	Richland.....	Geo. Eyrner, Prescott.....	June 9	4,500
Rifle River.....	Richland.....	Geo. Eyrner, Prescott.....	June 9	12,000
Eddy Creek.....	Richland.....	Henry Zeran, Prescott.....	June 9	3,000
Silver Creek.....	Richland.....	Henry Zeran, Prescott.....	June 9	3,000
Rifle River.....	Rose, Cumming and others.....	D. D. Neal, Rose City.....	June 13	16,500
Osego county.				
Headquarters of Sturgeon River.....	Several.....	R. H. L'Hommiedieu, Detroit.....	May 25	55,500
Norton Creek.....	Middle Branch.....	Geo. Baird, Marion.....	June 1	3,000
Aldrich Creek.....	Marion.....	Geo. Baird, Marion.....	June 1	3,000
Hershey River above and below Reed City.....	Lincoln, Richmond and Hershey.....	J. H. Crocker, Reed City.....	June 6	12,000
Middle Branch of the Muskegon River.....	Marion.....	C. W. Graves, Dighton.....	June 6	15,000
Ottawa county.				
Pigeon River.....	Olive.....	C. McKinley, West Olive.....	May 29	6,000
Rush Creek.....	Georgetown.....	A. T. Wallace, Jenison.....	June 1	9,000

Presque Isle county:									
Little Oqueoc River.....	Oqueoc.....				C. Atkins, Millersburg.....	June 9	6,000		
Oqueoc River.....	Case.....				C. Atkins, Millersburg.....	June 9	18,000		
Oqueoc River.....	Beiknap and Rogers.....				B. G. Lark, Rogers City.....	June 9	8,000		
Oqueoc River.....	Beiknap and Pulaski.....				B. G. Lark, Rogers.....	June 9	6,000		
Roscommon county:									
Chapman creek.....	T. 21 W. R. 1 W. & T. 21 W. R. 1 E.....				John Tolfree, West Branch.....	May 25	6,000		
Spring Creek.....					C. P. Mickelson, Mason.....	May 25	4,500		
Sanilac county:									
Leins or Burgess Creek.....	Sanilac.....				Geo. A. Burgess, Port Sanilac.....	June 14	6,000		
Shiawassee county:									
Big Maple River.....	Ovid.....				F. D. Cleveland, Shepardsville.....	June 10	7,500		
St. Joseph county:									
Klinger Lake Inlets.....	White Pigeon.....				Perry L. Turner, Elkhart.....	May 27	3,000		
Inlet to Klinger Lake.....					Perry L. Turner, Elkhart.....	May 27	3,000		
Fish Lake Outlet also Outlet to Hawkins Lake into Fish Lake.....	Burr Oak.....				Jas. R. Smith, Burr Oak.....	May 27	4,500		
Fawn River.....	Constantine.....				W. N. Harvey, Constantine.....	May 27	6,000		
Mill Creek.....	Constantine.....				W. N. Harvey, Constantine.....	May 27	6,000		
Hog Creek or Prairie River.....	Florence.....				W. N. Harvey, Constantine.....	May 27	7,500		
Bear Creek.....	Leonidas and Waukesha.....				T. E. Kline, Leonidas.....	May 24	4,500		
Hog Creek.....	Lockport.....				F. R. Jackson, Three Rivers.....	June 3	7,500		
Portgae River and tributaries.....	Lockport.....				F. R. Jackson, Three Rivers.....	June 3	7,500		
Keers Creek.....	Fabius.....				Amnon Ives, Three Rivers.....	June 3	1,500		
Tuscola county:									
Fryer's Creek.....	Dayton.....				Ed. D. Cartwright, Mayville.....	June 14	6,000		
Van Buren county:									
East Branch Paw Paw River.....	Antwerp and Porter.....				R. D. Loveland, Paw Paw.....	May 31	7,500		
Osborn Creek.....	Hamilton and Wayne.....				Chas. Stewart, Dowagiac.....	June 1	3,000		
North Branch Big Dowagiac Creek.....	Decatur, Wayne, Silver Creek and Pokagon.....				Fred Phillips, Dowagiac.....	June 1	9,000		
Washtenaw county:									
Huron River and Mill Creek.....	Ypsilanti and Pittsford.....				L. D. Alley, Dexter.....	May 24	12,000		
South Branch of Paint or Clawson's Creek.....	Ypsilanti and Clawson's Creek.....				Willard A. Clawson, Ypsilanti.....	May 24	6,000		
Total.....	Total.....						2,404,500		

TWENTIETH REPORT—STATE FISHERIES.

RAINBOW TROUT PLANTS, 1911.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cheboygan county: South Twin Lake	Kochler	J. J. Jones, Indian River	1911. July 6	7,500
Clare county: Tobacco River	Surrey	W. C. Fuller, Farwell	July 21	9,000
Crawford county: Portage Lake	Grayling	Esbern Hansen, Grayling	July 7	7,500
Eaton county: Thornapple River	Benton	F. J. Johnson, Potterville	July 8	9,000
Jackson county: Whitman Creek	Springport and Clarence	Guy N. Lininger, Springport	July 10	6,000
Kent County: Mill Creek		Dwight Lydell, Comstock Park	July 5	15,000
Lake county: Pere Marquette River	Pleasant Plains, Webber and Sweet-water	Hon. G. M. Brown, Detroit	July 1	30,000
Mason county: Saubie River	Branch	C. Hagerman, Ludington	July 1	37,500
Muskegon county: Tribute Creek	Ravenna	A. E. Young, Ravenna	July 5	6,000
North Branch Crockery Creek	Ravenna	S. L. Alberts, Ravenna	July 5	6,000
		C. A. Stauffer, Ravenna	July 5	7,500
St. Clair county: Belle River	China, Cass and others	H. C. Radtke, St. Clair	July 21	9,000
Washtenaw county: South Branch of Paint or Clawson's Creek		Willard A. Clawson, Ypsilanti	July 11	6,000
Total				156,000

BROWN TROUT PLANTS, 1911.

FRY AND ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Charlevoix county: North Boyne River.....	Boyne Valley.....	John L. A. Galster, Boyne Falls.....	1911. Mar. 22	20,000
Mecosta county: Little Muskegon River.....	Morton.....	Ray Carman, Mecosta.....	Mar. 9	20,000
Paris Creek.....	Green.....	Michigan Fish Commission, Detroit.....	Mar. 30	100,000
Muskegon River.....	Green.....	Michigan Fish Commission, Detroit.....	April 15	30,000
Newaygo county: Little South Branch of Pere Marquette River.....	Home.....	Michigan Fish Commission, Detroit.....	April 15	100,000
Cedar Creek.....	Several.....	Wm. Fomeroy, Holton.....	Mar. 23	10,000
Ogemaw county: Rifle River.....	Richland.....	Henry Zeron, Prescott.....	Mar. 25	20,000
Total.....				300,000

BLACK SPOTTED TROUT, 1911.

FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Newaygo county: Little South Branch Pere Marquette River.....	Home.....	Michigan Fish Commission, Detroit.....	1911. Aug. 31	20,000

LAKE TROUT PLANTS, 1911.
FRY AND ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county: Hubbard Lake Hubbard Lake	Alcona Alcona	W. S. Linton, Saginaw. R. E. Ellsworth, Alpena.	June 13 June 9	30,000 30,000
Antrim county: Elk Lake Torch Lake Grass Lake Torch Lake	Milton Several. Several. Several.	Dr. E. C. Long, Elk Rapids. Wm. Childs, Kalkaska. A. B. Frooten, Bellaire. Mich. Fish Com n.	May 8 May 8 May 8 June 15	80,000 100,000 40,000 200,000
Barry county: Tyrell Lake	Baltimore	Ed. M. Pritchard, Hastings	June 12	20,000
Benzie county: Lake Ann. Big Platte Lake	Almira Benzonia	L. Berry, Lake Ann. W. A. Lear, Beniah.	May 13 May 13	22,000 34,000
Branch county: Kenyon Lake Lower Lake	Sherwood Sherwood	Leo. E. Wood, Athens. J. C. Gaw, Athens	May 24 May 24	10,000 10,000
Calhoun county: Duck Lake Nottawassipee Lake	Clarence Fredonia and Tekonsha	L. J. Devering, Albion. E. L. Holmes, Marshall.	May 24 May 24	22,500 22,500
Cass county: Bunker Lake	Volinia	Floyd Brown, Marcellus	May 27	10,000
Charlevoix county: South Arm of Pine Lake	South Arm	H. S. Pinney, East Jordan.	May 8	40,000
Cheboygan county: Burt Lake Mullet Lake	Burt. Several.	J. W. Lester, Indian River. Clyde King, Indian River.	May 10 May 10	100,000 100,000
Chippewa county: Lake Superior Whitefish Bay	Whitefish Point Whitefish Point	C. W. Endress, Soo C. W. Endress, Soo	May 28 June 4	1,000,000 1,000,000
Clare county: Hidd Lake Elbow Lake Big Long Lake	Harrison Franklin Frost	Geo. J. Cummins, Harrison W. E. Green, Harrison W. E. Green, Harrison	May 27 May 27 May 27	12,000 7,500 12,000
Crawford county: Shoepack Lake	Maple Forest	T. E. Douglas, Lovells	May 11	30,000

Grand Traverse county:						
Green Lake.....	Green Lake.....	H. H. Olds, Bendon.....	May 8	40,000		
Long Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	20,000		
Black Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	16,000		
Round Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	16,000		
Crooked Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	20,000		
Spider Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	20,000		
Rennie Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	20,000		
Blue Lake.....	Paradise.....	Kingsley Sportsmen's Club, Kingsley.....	May 12	16,000		
Hogsback Lake.....	Fife Lake.....	Fred Bechstein, Fife Lake.....	May 12	14,000		
Fife Lake.....			May 24	45,000		
Ionian county:						
Jordan Lake.....	Odessa and Woodland.....	Edwin Shellhorn, Lake Odessa.....	May 31	30,000		
Jackson county:						
Spring Arbor Lake.....	Spring Arbor.....	Geo. E. Beebe, Jackson.....	May 23	7,500		
Gillett's Lake.....	Leoni.....	Geo. E. Beebe, Jackson.....	May 23	15,000		
Brill's Lake.....	Leoni.....	Geo. E. Beebe, Jackson.....	May 23	7,500		
Big Portage Lake.....	Henrietta and Waterloo.....	Geo. E. Beebe, Jackson.....	May 23	15,000		
Brown's Lake.....	Summit.....	Geo. E. Beebe, Jackson.....	May 23	7,500		
Ackerson Lake.....	Summit.....	Geo. E. Beebe, Jackson.....	May 23	7,500		
Wolf Lake.....	Napoleon.....	Geo. E. Beebe, Jackson.....	May 23	15,000		
Vandercook's Lake.....	Napoleon and Leoni.....	Geo. E. Beebe, Jackson.....	May 23	7,500		
Kent county:						
Schram and Round Lakes.....	Oakfield.....	Freeman Addis, Harvard.....	May 29	10,000		
Lake county:						
Crooked Lake.....	Cherry Valley.....	Andrew Loree, Nirmana.....	June 6	20,000		
Sand Lake.....	Elk and Stronach.....	Earl Fairbanks, Luther.....	June 6	20,000		
Sable Lakes, Four.....	Elk.....	H. O. Thompson, Peacock.....	June 6	30,000		
Leelanau county:						
Glen Lake.....	Several.....	D. H. Day, Glen Haven.....	June 13	40,000		
Glen Lake.....	Several.....	D. H. Day, Glen Haven.....	June 13	40,000		
Lenawee county:						
Round Lake.....	Rollin.....	W. E. Alchin, Townley.....	June 3	14,000		
Goose Lake.....	Woodstock.....	W. J. Bauer, Cement City.....	June 3	14,000		
Devil's Lake.....	Rollin and Woodstock.....	W. J. Hampton & Son, Manitou Beach.....	June 3	20,000		
Evans Lake.....	Franklin.....	Willard Mitchell, Tipton.....	May 24	14,000		
Montcalm county:						
Crystal Lake.....	Crystal.....	C. W. La Du, Crystal.....	May 29	30,000		
Montmorency county:						
Wolf Lake.....	Alburt.....	Geo. F. Sachs, Lewiston.....	May 11	20,000		
Long Lake.....	Hillman.....	E. W. Cooper, Hillman.....	June 9	20,000		

Lake Trout Plant, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county: Wolf Lake..... Big Blue Lake..... Big Blue Lake.....	Eggleston..... Blue Lake..... Blue Lake.....	E. D. Magoon, Muskegon..... E. D. Magoon, Muskegon..... Hon. Fred J. Russell, Hart.....	May 29..... May 29..... May 29.....	16,000..... 16,000..... 16,000.....
Newaygo county: Diamond Lake..... Long Lake..... Robinson's Lake.....	Lincoln..... Sherman..... Sherman.....	Capt. W. H. Bigelow, Chicago, Ill..... Jacob Kemperman, Fremont..... Chas. Streichhirsch, White Cloud.....	June 5..... May 29..... June 5.....	16,000..... 16,000..... 10,000.....
Oakland county: Maceday Lake..... Cass Lake.....	Waterford..... West Bloomfield.....	C. C. Craigie, Waterford..... E. E. Sweet, Detroit.....	June 10..... June 10.....	20,000..... 30,000.....
Otsego county: Chub Lakes.....	Otsego.....	J. Soderberg, Otsego Lake.....	May 10.....	40,000.....
Ogemaw county: Sage Lake.....	Hill.....	J. E. Ranger, Hale.....	June 13.....	20,000.....
Ottawa county: Cranberry Lake..... Spring Lake.....	Wright..... Spring Lake.....	Dr. E. O. Cilley, Conklin..... Samuel Falls, Spring Lake.....	May 29..... May 29.....	14,000..... 30,000.....
Roscommon county: Higgins Lake.....	Gerrish.....	W. H. Lansing, Roscommon.....	May 10.....	40,000.....
Van Buren county: Lake Cora.....	Paw Paw.....	C. E. Fox, Lake Cora.....	June 1.....	14,000.....
Washtenaw county: Big and Little Portage Lakes (connected).....	.....	R. H. Killian, Ypsilanti.....	June 1.....	30,000.....
Total.....	.....	.....	.....	3,932,000.....

LANDLOCKED SALMON, 1911.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Chippewa county: Soo Rapids.....		Mich. Fish Commission, Detroit.....	July 27	8,000
Crawford county: Portage Lake Inlets.....	26 N. R. 4 W.....	Hon. Chas. Blair, Lansing.....	Aug. 11	5,000
Total				13,000

SMALL MOUTH BLACK BASS PLANTS, 1911.

ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Allegan county: Fenner and Pratt Lakes.....	Martin.....	Wm. Mc Loud, Martin.....	May 25	6,000
Kalamazoo River.....	Allegan.....	Ed. J. Anderson, Plainwell.....	May 25	6,000
Kalamazoo River.....	Saugatuck.....	James Perry, Douglas.....	May 26	6,000
Kalamazoo River.....	Saugatuck.....	Chas. F. Bird, Saugatuck.....	May 26	6,000
Kalamazoo Lake.....	Saugatuck.....	C. L. Fosdick, Fennville.....	May 26	6,000
Barry county: Durham Lake.....	Assyria.....	Hugh S. Jones, Bellevue.....	May 24	4,000
Gun Lake.....	Orangeville.....	Winfield Matteson, Shelbyville.....	May 25	6,000
Hope.....	Hope.....	Aaron Chandler, Delton.....	May 26	6,000
Mud Lake.....	Hope.....	Orvid Chamberlin, Cloverdale.....	May 26	6,000
Twenty-one Lake.....	Hope.....	Pete Kigsbery, Cloverdale.....	May 26	6,000
Horseshoe Lake.....	Hope.....	Hiram Gibson, Cloverdale.....	May 26	6,000
Long Lake.....	Hope.....	R. Dickinson, Hastings.....	May 26	6,000
Head Lake.....	Hope.....	H. Dickinson, Hastings.....	May 26	6,000
Long Lake.....	Hastings.....	Scott McIntosh, Quincy.....	May 26	4,000
Belson Lake.....	Rutland.....	Harry Black, Hastings.....	May 26	4,000
Thornapple River.....	Rutland.....	John M. Perry, Irving.....	May 26	6,000

TWENTIETH REPORT—STATE FISHERIES.

Small Mouth Black Bass, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Berrien county:				
Singer Lake.	Oronoko.	G. O. Mc Omer, Berrien Springs.	May 25	4,000
St. Joseph River and Power Pond.	Oronoko.	G. O. Mc Omer, Berrien Springs.	May 25	6,000
Ch. F. Lake.	Buchanan.	A. A. Worthington, Buchanan.	May 25	4,000
Madron Lake.	Buchanan.	J. F. Scott, Buchanan.	May 25	4,000
Wilson Lake.	Bertrand.	J. E. Scott, Buchanan.	May 25	4,000
Pike Lake.	Bertrand.	J. E. Scott, Buchanan.	May 25	4,000
Branch county:				
Coldwater Lake.	Ovid.	The Branch County Rod & Gun Club, Coldwater.	May 25	6,000
North, South, Messenger, Craig and Morrison Lakes.	Coldwater.	F. T. Tappan, Coldwater.	May 25	8,000
Morrison, Bennet, North and South Lakes.	Coldwater.	F. T. Tappan, Coldwater.	May 25	6,000
Calhoun county:				
Nottawapipi Lake.	Fredonia and Tekonsha.	L. A. Harmon, Marshall.	May 24	6,000
Lyon Lake.	Fredonia and Tekonsha.	E. L. Holmes, Marshall.	May 24	4,000
Long and Pine Lakes.	Fredonia and Tekonsha.	W. J. Clayborne, Marshall.	May 24	6,000
May and Lakes.	Eckford.	F. J. Colgrove, Marshall.	May 24	4,000
Rice Creek.	Marengo.	C. E. Gauss, Marshall.	May 24	4,000
Knixon Lake.	Convis.	A. B. Osborne, Marshall.	May 24	4,000
Kalamazoo River below dam.	Marshall.	John L. Bean, Marshall.	May 24	6,000
Ceresco pond—Kalamazoo River.	Marshall.	H. K. Culver, Ceresco.	May 24	4,000
Lake Gorkue.	Battle Creek.	H. Lehman, Ceresco.	May 24	4,000
Lake C. Pond.	Marshall.	Ben D. Brockett, Battle Creek.	May 24	4,000
Kalamazoo River Millpond.	Marshall.	F. R. Moses, Marshall.	May 24	6,000
Cass county:				
Marian Lake.	Silver Creek.	F. H. Coddling, D. D. S., Dowagiac.	May 25	12,000
Miler Lake.	Marcellus.	C. S. Jones, Marcellus.	May 26	4,000
Shorehead Lake.	Porter.	H. Sears, Vandalia.	May 26	6,000
Fish Lake.	Marcellus.	C. N. Gott, Marcellus.	May 26	6,000
Hemlock Lake.	Marcellus.	A. L. Maxam, Marcellus.	May 26	6,000
Lewis Lake.	Marcellus.	W. S. Jones, Marcellus.	May 26	6,000
Grand Traverse county:				
Cedar Hedge Lake.	Green Lake.	W. Pennington, Interlochen.	May 29	6,000
Green Lake.	Green Lake.	W. Pennington, Interlochen.	May 29	8,000
Ionia county:				
Jordan Lake.	Odessa and Woodland.	Edwin Shellhorn, Lake Odessa.	May 27	6,000

Kalamazoo county:					
Long Lake.....	Portage.....	Henry Waruf, Kalamazoo.....	May 25	4,000	
Kimbal Lake.....	Schoolcraft.....	Harry M. Day, Vicksburg.....	May 25	4,000	
Howard's Lake.....	Schoolcraft.....	A. Hoffman, Kalamazoo.....	May 25	4,000	
Austin Lake.....	Portage.....	Chas. E. Lyon, Vicksburg.....	May 25	6,000	
Eagle Lake.....	Texas.....	Andrew Rienstra, Oshtemo.....	May 25	6,000	
White's Lake.....	Kalamazoo.....	County Club Realty Co., A. H. Snook, Secy., Kalamazoo.....	May 25	6,000	
Eagle Lake.....	Texas.....	Geo. Bolinger, Oshtemo.....	May 26	6,000	
Rawson or Barton's Lake.....	Schoolcraft.....	Thos. Hewitt, Schoolcraft.....	May 26	6,000	
Kent county:					
Mc Kewen Lake.....	Lowell.....	Chas. E. Brown, Alto.....	May 26	6,000	
Muskegon county:					
Half Moon Lake.....	Casnovia.....	C. I. Gold, Bailey.....	May 29	6,000	
Moore's Lake.....	Casnovia.....	Herbert Church, Bailey.....	May 29	6,000	
St. Joseph county:					
J. E. Nixon Pond.....	Leonidas.....	N. H. Turner, Leonidas.....	May 24	4,000	
Long Lake.....	Colon.....	Vance Livermore, Burr Oak.....	May 25	6,000	
E. N. King Pond.....	Leonidas.....	Edwin N. Ferris, Leonidas.....	May 24	4,000	
Bear Creek.....	Leonidas.....	C. H. Robinson, Leonidas.....	May 24	4,000	
Notaway Creek.....	Leonidas.....	J. L. Damon, Leonidas.....	May 24	4,000	
Sand Lake.....	Nottawa.....	M. Bowersox, Nottawa.....	May 25	6,000	
Hog Lake.....	Burr Oak.....	Jas. R. Smith, Burr Oak.....	May 25	6,000	
Portage River Pond.....	Lockport.....	E. P. Hart, Three Rivers.....	May 26	6,000	
Pleasant Lake.....	Fabius.....	E. P. Hart, Three Rivers.....	May 26	6,000	
Fisher's Lake.....	Lockport and Park.....	Claude Felker, Three Rivers.....	May 26	6,000	
Rock River Pond.....	Lockport and St. Joseph.....	C. L. Frey, Three Rivers.....	May 26	6,000	
Corey Lake.....	Fabius.....	W. Pulver, Three Rivers.....	May 26	6,000	
Van Buren county:					
Eagle Lake.....	Paw Paw.....	Ben Deschenbury, Lawton.....	May 25	6,000	
Three Mile Lake.....	Paw Paw.....	Wm. M. Kirkwood, Paw Paw.....	May 26	6,000	
Base Line Lake.....	Geneva.....	W. E. Grimes, South Haven.....	May 26	4,000	
Little Bear Lake.....	Columbia.....	E. B. Eddy, Grand Junction.....	May 26	6,000	
Lake Cora.....	Paw Paw.....	Otto Ihling, Kalamazoo.....	May 26	6,000	
Total.....				400,000	

SMALL MOUTH BASS PLANTS, 1911.

FINGERLINGS NOS. 1, 2, 3 AND 4.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alger county: Reddies Lake Half Moon Lake	Au Train Munising	Fred S. Case, Wetmore. H. Matott, Detroit.	July 12 July 12	600 600
Antrim county: Torch Lake	Extends through 3 Townships.	F. B. Dickerson, Detroit.	July 20	1,000
Baraga county: Beaufort Lake Lake Ruth Bella Lake	Spurr Spurr Spurr	Peter Trudell, Jr., Negaunee Peter Trudell, Jr., Negaunee Silver River Rod & Gun Club, I. Anse.	July 14 July 14 July 14	800 600 600
Benzie county: Big Platte Lake Little Platte Lake Platte Lake Bass Lake Otter Lake	Benzonia Lake and Platte Bingham and Lake Lake Lake	J. S. Thompson, Benlah R. A. Conklin, Honor L. H. Stacey, Honor W. B. Covey, Honor W. B. Covey, Honor.	July 6 July 6 July 6 July 6 July 6	750 750 750 750 750
Berrien county: Little Paw Paw Lake Paw Paw Lake	Watervliet Watervliet	George Lorenz, Coloma E. E. Rowland, Watervliet	June 30 June 30	1,500 1,500
Branch county: Coldwater River Coldwater Lake	Coldwater Coldwater	F. T. Tappan, Coldwater F. T. Tappan, Coldwater	July 3 July 3	1,500 1,000
Cass county: Dewey Lake	Silver Creek	J. W. Burke, Dowagiac.	Aug. 5	150
Calhoun county: Duck Lake	Clarence	L. J. Devering, Albion.	July 7	1,000
Charlevoix county: Walloon Lake Deer Lake	Melrose and Evangeline Boyne Valley	J. W. Hunter, Grand Rapids Wm. J. Pearson, Boyne Falls	June 10 June 30	4,000 1,500
Cheboygan county: Long Lake	Grant and Benton	Fred S. Burgess, Detroit.	June 24	4,000
Chippewa county: Duck Lake	Sugar Island	Chase S. Osborn, Sault Ste. Marie.	July 21	1,500
Clare county: Fisher's Lake	Hatton.	C. A. Kleman, Chicago, Ill.	July 3	1,500

Clinton county: Park Lake	Bath	Myles F. Gray, Lansing	June 23	1,500
Crawford county: Portage Lake	Graying	C. P. Mickelson, Mason	June 24	3,000
Twin Lakes	Maple Forest	Marius Hanson, Graying	June 24	3,000
K. P. Lake	Maple Forest	Geo. F. Owen, Lovells	July 7	800
Shoepack Lake	26 N. R. 4 W.	T. E. Douglas, Lovells	July 7	800
Portage Lake		Hon. Chas. Blair, Lansing	July 27	375
Emmet county: Round Lake	Bear Creek	Henry Lindig, Petoskey	June 10	4,000
Gladwin county: Pratt's Lake	Sage	Hon. Eugene Foster, Gladwin	July 7	1,000
Gratiot county: Pine River	Pine River	S. S. Dixom, St. Louis	June 13	4,000
Grand Traverse county: Duck Lake	Grant and Long Lake	R. B. De France, Kingsley	June 13	4,000
Big Umicic Lake	Union	R. B. De France, Kingsley	June 13	3,000
Little Umicic Lake	Union	R. B. De France, Kingsley	June 13	2,000
Silver Lake	Garfield	Wm. Saunders, Traverse City	June 13	4,000
Boardman Lake		Mich. Fish Commission, Detroit	June 27	4,000
Hillsdale county: Baw Bees Lake	Hillsdale and Cambria	W. C. Kemp, Hillsdale	June 28	1,500
Houghton county: Fales Lake	Elm River	Geo. Williams, Calumet	July 14	800
Ingham county: Pine Lake	Meridian	J. Edward Roe, Lansing	June 14	4,000
Pine Lake	Meridian	J. Edward Roe, Lansing	Aug. 24	1,500
Hughes Lake	Hughes	Hon. G. E. Sanders, Mason	June 23	1,500
Park Lake	Meridian	Hon. G. E. Sanders, Mason	June 23	1,500
Double Lake	Alaiedon	Hon. G. E. Sanders, Mason	June 23	1,500
Jackson county: Stony Lake	Napoleon	M. E. Russell, Napoleon	June 23	1,500
Pleasant Lake	Henrietta	C. M. Norton, Lansing	June 23	2,000
Fay Lake	Norvell	Hon. L. W. Watkins, Norvell	June 28	2,000
Keweenaw county: Lac la Belle	Grant	Jos. W. Selden, Calumet	July 14	800
Gratiot Lake	Grant	Wm. Lyon, Calumet	July 14	1,000
Lake county: Sable Lakes	Elk	Wm. Utter, Peacock	June 21	3,000
Big Star Lake		Elmer Smith, Baldwin	June 21	4,000

Small Mouth Black Bass, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Leclanau county:				
Glen Lake.....	Glen Arbor, Empire and Kasson.	D. H. Day, Glen Haven.....	July 6	1,000
North Bar Lake.....	Empire.....	James Valley, Empire.....	July 6	750
Carp Lake.....	Grand, Centerville and Solon	Albert Brasoy, Provement.....	July 6	1,000
Lime Lake.....	Cleveland.....	Blmer Billman, Cedar.....	July 6	1,000
Log Lake.....	Leclanau.....	Gilman M. Dame, Northport.	July 29	475
Lorawee county:				
Wampler's Lake.....	Cambridge and Norvell.....	Hon. L. W. Watkins, Manchester.	June 28	2,000
Silver Lake.....	Woodstock.....	W. H. Harris, Clement City.....	July 1	1,500
Round Lake.....	Rollin.....	W. E. Aichin, Townley.....	July 1	750
Mackinaw county:				
Brevort Lake.....	Brevort.....	Wm. Massey, Jr., Allenville.....	July 12	800
Marquette county:				
Prattiers Lake.....	Sands.....	Hon. W. S. Fwing, Harvey.....	July 12	800
Strawberry Lake.....	Sands.....	Hon. W. S. Fwing, Harvey.....	July 12	600
Lake Michigamme.....	Michigamme.....	Geo. A. Newell, Ishpenning.....	July 12	1,000
Gibson Lake.....	.....	Geo. A. Newell, Ishpenning.....	July 12	400
Sundstrom Lake.....	.....	Geo. A. Newell, Ishpenning.....	July 12	600
Fence Lake.....	.....	Geo. A. Newell, Ishpenning.....	July 12	400
Silver Lake.....	Champion.....	Geo. Voelker, Ishpenning.....	July 12	800
Mecosta county:				
Rogers Fond.....	Mecosta, Austin, Colfax and Big Rapids.	M. E. Darmah, Big Rapids.....	June 14	3,000
Chippewa Lake.....	Chippewa.....	Chippewa Park Assn., Big Rapids	June 19	3,000
Chippewa River.....	Union.....	Palmer & Taggart, Mt. Pleasant.	Aug. 2	1,000
Monroe county:				
River Raisin.....	Eureka.....	C. W. Kimmerle, Monroe.....	July 15	1,000
Montcalm county:				
Baldwin Lake.....	.....	R. C. Ecker, Greenville.....	June 13	3,000
Muskegon county:				
Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell, Hart.....	June 13	4,000
White Lake.....	Montague.....	John Hall, Montague.....	June 10	4,000
Oakland county:				
Crawford Lake.....	Bloomfield.....	Hugh Chalmers, Detroit.....	July 26	750
Green Lake.....	West Bloomfield.....	W. B. Flander, Orchard Lake.....	July 26	750
Cass Lake.....	West Bloomfield.....	F. E. Svec, Detroit.....	July 26	600
Deer Lake.....	Independence.....	Oliver N. Gardner, Detroit.....	July 26	600

Oceana county:					
Halberg Lake.....	Golden.....	Fred A. Tart, Mears.....	June 10	3,000	
Round Lake.....	Golden.....	J. P. Mungel, M. D., Hart.....	June 10	2,000	
Silver Lake.....	Golden.....	E. A. Post, Mears.....	June 10	3,000	
Richmond's Pond.....	Golden.....	E. A. Post, Mears.....	June 10	3,000	
Pentwater Lake.....	Pentwater.....	C. F. Lewis, Pentwater.....	June 10	3,000	
Oscola county:					
Hewitt Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	June 10	2,000	
Big Lake.....	Orient.....	S. F. Postal, Ewart.....	June 14	3,000	
Strawberry Lake.....	Cedar.....	Wm. F. Ramsey, Ewart.....	June 14	2,000	
Ottawa county:					
Spring Lake.....	Spring Lake.....	Samuel Falls, Spring Lake.....	June 13	4,000	
Cove Lake or Stern's Bayou.....	Robinson.....	Hon. W. H. Clark, Grand Haven.....	June 13	3,000	
Grand Lake.....	Presque Isle and Krakow.....	Jos. E. Kauffman, Presque Isle.....	July 31	900	
Saginaw county:					
Saginaw River.....	Saginaw.....	W. J. Hunsaker, Saginaw.....	Oct. 12	450	
Saginaw River.....	Several.....	W. S. Linton, Saginaw.....	July 7	2,000	
Van Buren county:					
Three Mile Lake.....	Paw Paw.....	Wm. M. Kirkwood, Paw Paw.....	July 7	1,000	
Total.....				156,100	

LARGE MOUTH BLACK BASS PLANTS, 1911.
ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Allegan county:				
Green Lake.....	Leighton.....	B. P. Keryon, Grand Rapids.....	June 5	6,000
Lester Lake.....	Lee.....	Anthony Duke, Grand Junction.....	June 9	4,000
Crooked Lake.....	Clyde.....	Hutchinson, Bravo.....	June 9	6,000
Osterhout Lake.....	Lee.....	Samuel Dawes, Grand Junction.....	June 9	6,000
Lower Scott Lake.....	Lee.....	Mark Law, Pullman.....	June 9	6,000
Upper Scott Lake.....	Lee.....	Chas. Horn, Pullman.....	June 9	6,000
Duncan Lake.....	Leighton.....	Gilbert A. Woodward, Calcedonia.....	June 6	6,000
Barry county:				
Fine Lake.....	Johnstown.....	Willard A. Knight, Battle Creek.....	June 5	20,000
Mill Lake.....	Johnstown.....	J. O. Caloupe, Battle Creek.....	June 5	4,000
Loon Lake.....	Assyria.....	M. O. Tuckerman, Battle Creek.....	June 5	4,000
Little Lake.....	Yanktee Springs.....	E. J. Watson, P. M., Irving.....	June 6	4,000
Thornapple Lake.....	Castleton.....	E. V. Hammond, Vermontville.....	June 6	6,000
Gurnsey Lake.....	Yanktee Springs.....	Z. C. Greusel, Kalamazoo.....	June 7	6,000
Little Long Lake.....	Kalamazoo.....	Z. C. Greusel, Kalamazoo.....	June 7	6,000
Holcomb Lake.....	Princetonville.....	Z. C. Greusel, Kalamazoo.....	June 7	6,000
Blue Lake.....	Orangeville.....	Z. C. Greusel, Kalamazoo.....	June 7	6,000
White Lake.....	Hope.....	D. P. Karns, Shultz.....	June 7	4,000
Wilkinson Lake.....	Hope.....	D. P. Karns, Shultz.....	June 7	4,000
Fair Lake.....	Barry.....	H. Green & Son, Deiton.....	June 7	6,000
Ashty Lake.....	Hope.....	J. Lewis Collister, Deiton.....	June 7	6,000
Walt Lake.....	Hope.....	E. M. Payne, Hastings.....	June 7	4,000
Perch Lake.....	Hope.....	E. A. Burton, Hastings.....	June 7	6,000
		Frank Maynard, Shultz.....	June 7	4,000
Benzie county:				
Harris Lake.....	Inland.....	N. J. Rovick, Thompsonville.....	June 21	6,000
Berrien county:				
Sand Lake.....		W. H. Trasse, Sand Lake.....	June 9	4,000
Calhoun county:				
Kalamazoo Mill Pond.....	Marshall and Marengo.....	F. R. Moses, Marshall.....	May 24	6,000
Lee Lake.....	Newton.....	H. K. Culver, Ceresco.....	June 5	6,000
Warner Lake.....	Tekonsha.....	H. K. Culver, Ceresco.....	June 5	6,000
Eaton county:				
Narrow Lake.....	Brookfield.....	Garry C. Fox, Charlotte.....	June 6	6,000
Penett Park Pond.....	Charlotte City.....	Garry C. Fox, Charlotte.....	June 6	4,000
Lacey's Lake.....	Kalamo.....	F. Wells, Charlotte.....	June 6	4,000
Mud Lake.....	Kalamo.....	L. Z. Stossom, Charlotte.....	June 6	4,000
Round Lake.....	Vermontville.....	Bert Stevens, Vermontville.....	June 6	4,000
Lost Lake.....	Sunfield.....	Orville Edwins, Woodbury.....	June 14	4,000

Looking Glass Lake	Sunfield	A. D. Childs, Sunfield	June 14	6,000
Bear Lake	Sunfield	Ray A. Childs, Sunfield	June 14	4,000
Sobby Lake	Sunfield	John Viels, Vermontville	June 14	4,000
Tamarack Lake	Sunfield	Peter Chatfield, Vermontville	June 14	4,000
Grand Traverse county:				
Fuller Lake	Fife Lake	Dr. D. E. Hills, Fife Lake	June 6	8,000
Ingham county:				
Burden Lake	White Oak	C. H. Lowe, Stockbridge	June 6	4,000
Grand River	Onondaga	Wm. M. Carroll, Onondaga	June 6	4,000
Ionis county:				
Pedler Lake	Campbell	E. A. Rising, Clarksville	June 14	4,000
Kalamazoo county:				
Eagle Lake	Charleston	Otto Buechner, Battle Creek	June 5	4,000
Kalkaska county:				
North Selkirk Lake	Kalkaska	Clio Rosenberg, Kalkaska	June 6	6,000
South Selkirk Lake	Kalkaska	Clio Rosenberg, Kalkaska	June 6	6,000
Log Lake	Kalkaska	Claud Pangborn, Kalkaska	June 6	6,000
Kittle Lake	Kalkaska	Claud Pangborn, Kalkaska	June 6	6,000
East Lake	Orange	R. B. Spencer	June 6	6,000
Rainbow Lake	Cold Springs	P. A. Doyle, Manvelona	June 6	6,000
Kent county:				
Dutch Lake	Tyrone	Richard Headley, Bailey	June 5	4,000
Camp Lake	Algoma	B. H. Putnam, Sparta	June 5	6,000
Round and Long Lakes	Salma	C. S. Puels, Kent City	June 5	6,000
Bostwick Lake	Cannon	Bert Ramsdell, Rockford	June 13	6,000
Brower Lake	Courtland	Wm. Halfry, Rockford	June 13	6,000
Horton Lakes	Spencer and Montcalm	R. W. Vanderlip, Gowen	June 15	6,000
Bass Lake	Spencer	Fred Holland, Gowen	June 15	6,000
Lake county:				
Lincoln Lake	Sweetwater	Geo. M. Brown, Detroit	June 8	6,000
Lapeer county:				
Millpond	Lapeer	E. J. Thrasher, Lapeer	June 3	6,000
Kinnunda Pond	Lapeer	E. J. Thrasher, Lapeer	June 3	4,000
Wippsing Lake	Elba	E. J. Thrasher, Lapeer	June 3	6,000
Middle Lake	Elba	E. J. Thrasher, Lapeer	June 3	4,000
Millers Lake	Mayfield	E. J. Thrasher, Lapeer	June 3	6,000
Spears Lake	Oregon	E. J. Thrasher, Lapeer	June 3	4,000
Eik Lake	Attica	J. H. Brewer, Imlay City	June 8	8,000
Long Lake	Attica	Imlay City F. & G. Club, Imlay City	June 8	6,000
Pleasant Lake	Attica	Imlay City F. & G. Club, Imlay City	June 8	8,000
Eik Lake	Attica	Imlay City F. & G. Club, Imlay City	June 8	8,000
Clear Lake	Attica	Imlay City F. & G. Club, Imlay City	June 8	8,000
Bass Lake	Attica	Imlay City F. & G. Club, Imlay City	June 8	8,000
Rose Lake	Arcadia	A. D. Conley, Imlay City	June 8	4,000
Goodrich Lake	Arcadia	A. D. Conley, Imlay City	June 8	6,000

Large Mouth Black Bass, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lapeer county.—Continued.				
Petz Lake.....	Inlay.....	Jess Burger, Capac.....	June 8	8,000
Bennie Lake.....	Inlay.....	H. M. Miller, Capac.....	June 8	6,000
Big Pond.....	Dryden.....	T. W. Van Kleeck, Dryden.....	June 9	6,000
Miller Lake.....	Dryden.....	T. W. Van Kleeck, Dryden.....	June 9	6,000
Five Lakes.....	Dryden.....	J. B. Hageman, North Branch.....	June 9	14,000
Miller Lake.....	Deerfield.....	K. M. Barbour, North Branch.....	June 9	6,000
Barnes Lake.....	Deerfield.....	K. M. Barbour, North Branch.....	June 9	6,000
Livingston county:				
Brunn Lake.....	Woodville and Lyndon.....	Edwin Farmer, Stockbridge.....	June 6	8,000
Peterson Lake.....	Pulman.....	F. G. Marshall, Stockbridge.....	June 6	8,000
Bass Lake.....	Vandilla and Putnam.....	F. G. Marshall, Stockbridge.....	June 6	6,000
Wheatland Lake.....	Harland.....	Robt. McCall, Millford.....	June 12	8,000
Mason county:				
Round Lake.....	Sheridan.....	Ernest Jaser, Bachelor.....	June 8	8,000
Pere Marquette River.....	Amber.....	John Grey, Scottville.....	June 8	4,000
Lost Lake.....	Eden.....	J. F. Pleiness, Custer.....	June 8	6,000
Crystal Lake.....	Amber.....	T. R. Reader, Scottville.....	June 8	6,000
North Ox Bow Lake.....	Riverton.....	D. S. Betka, Scottville.....	June 8	4,000
Tallman Lake.....	Branch.....	J. M. Willis & Son, Tallman.....	June 8	6,000
Gun Lake.....	Freesoil.....	Thod. S. Stephens, Freesoil.....	June 8	6,000
Ford Lake.....	Sheridan.....	Fountain Rod & Gun Club, Fountain.....	June 8	8,000
Blue Lake.....	Sheridan.....	Fountain Rod & Gun Club, Fountain.....	June 8	4,000
Manistee county:				
Shingle Mill Lake.....	Filer.....	Hugo Olson, Freesoil.....	June 8	6,000
Meosta county:				
Town Line Lake.....	Mostly Colfax.....	F. C. Kilsner, Big Rapids.....	June 6	6,000
Clear Lake.....	Colfax.....	P. W. Hathaway, Big Rapids.....	June 6	6,000
Rogers Power Pond.....	Big Rapids.....	M. C. Maxin, Big Rapids.....	June 6	8,000
Young's Lake.....	Grant.....	Samuel Troupe, Big Rapids.....	June 30	6,000
Montcalm county:				
Muscallonge Lake.....	Maple Valley.....	Jensen Bros., Trufant.....	June 15	6,000
Muskegon county:				
Eshines Lake.....	Blue Lake.....	John Mayer, Holton.....	June 3	4,000
Clear Lake.....	Cedar Creek.....	H. A. O'Connor, Holton.....	June 3	4,000
Mud Lake.....	Cedar Creek.....	H. A. O'Connor, Holton.....	June 3	4,000
Duck Lake.....	Cedar Creek.....	H. A. O'Connor, Holton.....	June 3	4,000
Crooked and Crocker Lakes.....	Cedar Creek.....	S. L. Skeels, Holton.....	June 3	8,000
Heart or Round Lakes.....	Holton.....	R. J. Patelski, Holton.....	June 3	4,000
Crooked, Old Joe's and Antwerp Lakes.....	Holton.....	R. J. Patelski, Holton.....	June 3	4,000

Twin Lakes.....	Dalton.....		F. Johnson, Twin Lakes.....	June	3	6,000
Bear Lake.....	Muskegon and Laketon.....		E. D. Magoon, Muskegon.....	June	3	6,000
Mona Lake.....	Norton and Spring Lake.....		E. D. Magoon, Muskegon.....	June	3	6,000
Little Black Lake.....	Casnovia.....		A. H. Armetage, Bailey.....	June	5	4,000
Trent Mill Pond.....	Blue Lake.....		C. L. Gold, Bailey.....	June	5	4,000
Obed Hall Lake.....			J. J. Howden, Muskegon.....	June	7	4,000
Canfield Lake.....						
Newargo county:						
Little Robinson Lake.....	Sherman.....		F. Daenzner, White Cloud.....	June	5	4,000
Long Lake.....	Troy.....		P. Christiansen, Beteley.....	June	5	6,000
Gipsey Lake.....	Reyer.....		Tony E. Haskins, Otis.....	June	5	6,000
Blue Lake.....	Monroe.....		Will T. Gardner, Otis.....	June	5	6,000
Robinson Lake.....	Sherman.....		C. Strehlich, White Cloud.....	June	5	6,000
Crooked Lake.....	Monroe.....		M. B. Draper, Grand Rapids.....	June	5	6,000
Crookery Creek.....	Grant.....		Arthur Miller, Bailey.....	June	5	4,000
Diamond Lake.....	Linton.....		W. H. Bigelow, Chicago.....	June	5	12,000
Crookery Creek.....	Ravenna.....		G. S. Stauffer, Ravenna.....	June	7	6,000
Osceola county:						
Pentwater Lake.....	Pentwater.....		S. D. Montgomery, Grand Rapids.....	June	7	8,000
Fuller Lake.....	Leavitt.....		E. L. Bunting, Walkerville.....	June	7	4,000
Mud Lake.....	Leavitt.....		E. L. Bunting, Walkerville.....	June	7	4,000
Black Lake.....	Colfax.....		E. L. Bunting, Walkerville.....	June	7	4,000
Russell Lake.....	Colfax.....		E. L. Bunting, Walkerville.....	June	7	8,000
Round Lake.....	Golden.....		F. A. Tart, Mears.....	June	7	8,000
Morris Lake.....	Golden.....		Fred A. Tart, Mears.....	June	7	6,000
Halberg Lake.....	Golden.....					
Oscoda county:						
Pond by Dam of Hersey River.....	Richmond.....		H. J. Crocker, Reed City.....	June	15	6,000
Oakland county:						
Cass Lake.....	West Bloomfield.....		John Tyre, Pontiac.....	June	2	1,200
Green Lake.....	Independence.....		C. C. Craigie, Waterford.....	June	2	4,000
Maceday Lake.....	Waterford.....		C. C. Craigie, Waterford.....	June	2	4,000
Waterford Lake.....	Waterford and Independence.....		C. C. Craigie, Waterford.....	June	2	4,000
Lotus Lake.....	Waterford.....		C. C. Craigie, Waterford.....	June	2	4,000
Hunttoon Lake.....	Waterford.....		C. C. Craigie, Waterford.....	June	2	4,000
Huron Lake.....	Springfield.....		F. G. Ely, Davisburg.....	June	3	8,000
Long Lake.....	Springfield.....		J. H. Bush, Davisburg.....	June	3	6,000
Lake Eliza.....	Springfield.....		Ira E. Kinney, Davisburg.....	June	3	6,000
Jumbo Lake.....	Springfield.....		Ira E. Kinney, Davisburg.....	June	3	6,000
Davisburg Mill Pond.....	Springfield.....		Ira E. Kinney, Davisburg.....	June	3	6,000
Orion Lake.....	West Bloomfield.....		W. E. Flanders, Orchard Lake.....	June	6	10,000
Orchard Lake.....	West Bloomfield.....		F. S. Campbell, Detroit.....	June	6	8,000
Echo Lake.....	Addison.....		G. W. Paton, Almont.....	June	9	10,000
Silver Lake.....	Waterford.....		J. W. Stephens, Pontiac.....	June	9	8,000
Long Lake.....	Rose.....		Dr. W. McConnell, Fenton.....	June	10	22,000
Wilson Lake.....	Holly.....		D. H. Colwell, Fenton.....	June	10	8,000
Van Norman Lake.....	Independence and Waterford.....		S. E. Thomas, Detroit.....	June	10	8,000

Large Mouth Black Bass Plants, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
<i>Oakland county.—Continued</i>				
Pond Lake.	Waterford	H. W. Baer, Pontiac.	June 10	10,000
Huron River, above dam.	Milford	T. H. Padley, Milford	June 12	10,000
Huron River, below dam.	Milford	T. H. Padley, Milford	June 12	10,000
Kent Lake.	Milford	R. S. Potts, Milford	June 12	8,000
Moore Lake.	White Lake.	Frank Bailey, Milford	June 12	8,000
Mc Withy Lake.	Commerce.	Tom Forley, Milford	June 12	8,000
Steeple Hill Lake.	Pontiac and Waterford	J. W. Jenkins, Pontiac	June 12	10,000
Three Mile Lake.	Waterford	A. L. Moore, Pontiac.	June 13	12,000
Lake Elizabeth	Waterford	A. McCollum, Pontiac.	June 13	10,000
Mountain View Lake	Waterford	R. F. Monroe, Pontiac.	June 13	8,000
Watkins Lake.				
<i>Van Buren county.</i>				
Bangor Mill Pond.	Bangor.	A. V. Mc Kee, Bangor	June 9	6,000
Coffee Lake.	Columbia.	F. Reinschulte, Grand Junction	June 9	4,000
Saddle Lake.	Columbia.	Owen C. Eagen, Grand Junction.	June 9	6,000
Silver Lake.	Columbia.	Owen C. Eagen, Grand Junction.	June 9	4,000
Munson Lake.	Columbia.	H. A. Kinney, Grand Junction	June 9	6,000
Total.....				1,003,200

LARGE MOUTH BASS PLANTS, 1911.
FINGERLINGS Nos. 1, 2, 3 AND 4.

County and name of water.	Township.	Applicant or Depositor.	Date.	Number.
Alcona county: Vaughan Lake	Curtis	John Ross, Lott	June 20	4,000
North Lake	Curtis	C. E. Schoolcraft, Glennie	June 20	4,000
Hunter Lake	Curtis	C. E. Schoolcraft, Glennie	June 20	4,000
Curtis Lake	Curtis	Allen Paul, Glennie	June 20	4,000
Sand Lake	Mitchell	Stephen Evans, Hardy	June 20	4,000
Crooked Lake	Mitchell	Stephen Evans, Hardy	June 20	5,000
Cedar Lake	Greenbush and Oscoda	Ormand Mallery, Greenbush	June 20	7,500
Alpena county: Beaver Lake	Osseneke	D. D. Hanover, Alpena	June 16	7,500
Long Lake	Maple Ridge	John Beck, Alpena	Sept. 16	1,125
Allegan county: Round Lake	Valley and Clyde	F. W. Marshall, Bravo	June 30	500
Antrim county: Birch Lake	Milton	Dr. C. E. Long, Elk Rapids	June 21	5,000
High Lake	Milton	E. M. Bunce, Chicago, Ill.	Sept. 7	425
Barry county: Mc Pharlin Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
Otis Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
Leach Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
Podunk Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
Dowd Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
Tanner Lake	Rutland	C. W. Mixer, Hastings	June 12	2,000
East Lake	Baltimore	C. W. Mixer, Hastings	June 12	2,000
Mixer Lake	Baltimore	C. W. Mixer, Hastings	June 12	2,000
Middle Lake	Baltimore	C. W. Mixer, Hastings	June 12	2,000
Clear Lake	Baltimore	C. W. Mixer, Hastings	June 12	2,000
Carter Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Gregory Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Long Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Pond Lily Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Robinson Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Barber Lake	Hastings	C. W. Mixer, Hastings	June 12	2,000
Middle Lake	Carleton	C. W. Mixer, Hastings	June 12	2,000
Tilson Lake	Carleton	C. W. Mixer, Hastings	June 12	2,000
Bates Lake	Hope	C. W. Mixer, Hastings	June 12	2,000
High Hill Lake	Assyria	C. W. Mixer, Hastings	June 12	2,000
Fine Lake	Assyria	P. K. Jewell, Assyria	June 17	2,000
	Johnson	E. A. Turner, Bedford	June 17	4,000

Large Mouth Black Bass Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Branch county:			1911.	
Blossom Lake.....	Sherwood.....	A. D. Kent, Sherwood.....	June 22	1,000
Sinead and Carry Lake.....	Batavia.....	F. T. Tappan, Coldwater.....	July 3	450
Morrison Lake.....	Coldwater.....	F. T. Tappan, Coldwater.....	July 3	450
Calhoun county:				
Ackley Lake.....	Convis.....	J. E. Cook, Bellevue.....	June 14	3,000
Lane's Lake.....	Convis.....	O. L. Hubbard, Marshall.....	June 17	2,000
Garfield Lake.....	Convis.....	F. A. Stuart, Marshall.....	June 17	2,000
Cedar Lake.....	Fredonia.....	C. S. Seaman, Marshall.....	June 17	4,000
Squaw Lake.....	Fredonia.....	C. S. Seaman, Marshall.....	June 17	2,000
Fish Lake.....	Fredonia.....	F. S. Moses, Marshall.....	June 17	3,000
Chapins Lake.....	Marengo.....	L. F. McWethy, Marshall.....	June 17	2,000
Pardee Lake.....	Lee.....	H. C. Faulkner, Marshall.....	June 17	2,000
Lake of the Woods.....	Lee.....	H. C. Faulkner, Marshall.....	June 17	2,000
Shedd Lake East.....	Tekonsha.....	E. Sinclair, Tekonsha.....	June 22	2,000
Shedd Lake West.....	Tekonsha.....	E. Sinclair, Tekonsha.....	June 22	1,500
Cass county:				
Lime Lake.....	Newburg.....	Fred Marsh, Cassopolis.....	June 22	1,000
Wetherbee Lake.....	Newburg.....	Fred Marsh, Cassopolis.....	June 22	1,500
Driscoll Lake.....	Newburg.....	Fred Marsh, Cassopolis.....	June 22	1,000
Donald's Lake.....	Penn.....	Frank Dennison, Vandalia.....	June 22	2,000
Shove-head Lake.....	Porter.....	Henry Sears, Vandalia.....	June 22	1,500
Birch Lake.....	Porter.....	Arthur Sears, Vandalia.....	June 22	1,000
Birch Lake.....	Porter.....	Arthur Sears, Vandalia.....	July 19	1,500
Diamond Lake.....	La Grange and Penn, Calvin and Jefferson.....	W. Hutchings, Cassopolis.....	July 2	750
Pine Lake.....	Jefferson and Howard.....	C. H. Kimmerle, Cassopolis.....	July 28	1,000
Grey Lake.....	Jefferson.....	C. H. Kimmerle, Cassopolis.....	July 28	1,000
Dewey Lake.....	Silver Creek.....	F. E. Tarrant, Chicago.....	Aug. 5	150
Charlevoix county:				
Walloon Lake.....	Melrose and Fvangeline.....	J. W. Hunter, Grand Rapids.....	June 10	4,000
Deer Lake.....	Boyne Valley.....	W. J. Pearson, Boyne Falls.....	June 30	500
Cheboygan county:				
Webber Lake.....	Menter.....	Paul Harker, Wolverine.....	June 23	2,400
Singer Lake.....	Welmont.....	Robt. Gunning, Wolverine.....	June 23	2,400
Burt Lake.....	Tuscarora and Burt.....	J. W. Lester, Indian River.....	June 23	4,800
Mullett Lake.....	Burt.....	W. H. Chatfield, Detroit.....	June 23	4,800
Douglas Lake.....	Munro.....	Hon. H. T. Baker, Weadock.....	June 24	2,000
Munro Lake.....	Munro.....	Hon. H. T. Baker, Weadock.....	June 24	2,000
Lancaster Lake.....	Munro.....	Hon. H. T. Baker, Weadock.....	June 24	1,000

Clare county:									
Light Point Lake	Garfield	Ed. B. Farrar, Ewart	June 14	4,000					
Barned Lake	Hatton	C. A. Kieman, Chicago	July 3	1,500					
Fisher's Lake	Hatton	C. A. Kieman, Chicago	July 3	1,500					
Monroe Lake	Surrey	C. W. Marshall, Farwell	July 3	1,000					
Farwell Mill Pond	Surrey	John Marshall, Farwell	July 3	1,500					
Crawford county:									
Section One Lake	Maple and Forest	Wm. S. Chaliker, Waters	June 23	3,200					
Portage Lake	Portage Lake	R. H. L'Hommedieu, Detroit	July 27	2,000					
Eaton county:									
Pine Lake	Walton	L. Cook & Son, Olivet	June 14	4,000					
Emmet county:									
Crooked Lake	Littlefield	Rufus L. Myers, Alanson	June 10	4,000					
Pickler Lake	Littlefield	Rufus L. Myers, Alanson	June 10	4,000					
Carp Lake	Carp Lake and Hebron	O. C. Cope, Carp Lake	June 10	4,000					
Crooked Lake	Littlefield	David Hastings, Conway	June 10	4,000					
Grand Traverse county:									
Fife Lake	Fife Lake	C. E. Hodges, Fife Lake	June 10	3,000					
Spider Lake	Union	Kingsley Sportsmen's Club, Kingsley	June 13	4,000					
Rainey Lake	East Bay	Earl J. Case, Kingsley	June 13	4,000					
Silver Lake	Garfield	B. Winnie, Traverse City	June 13	7,000					
Crooked or Hogsback Lake	Garfield	R. S. Hastings, Traverse City	June 13	3,000					
Truax Lake	Mayfield	R. S. Hastings, Traverse City	June 13	3,000					
Bass Lake	Whitewater	G. C. Pray, Mabel	June 21	4,000					
Dyer's Lake	Long Lake	G. E. Potragke, Traverse City	June 21	4,000					
Bass Lake	Long Lake	D. J. Dyer, Traverse City	June 21	3,000					
Rainer, Hogsback and Bass Lakes	Long Lake	D. J. Dyer, Traverse City	June 21	3,000					
		R. B. De France, Kingsley	Sept. 28	1,950					
Gratiot county:									
Pine River	Pine River	S. S. Dixon, St. Louis	June 13	3,000					
Genesee county:									
Long Lake	Fenton	E. L. Bray, Flint	July 26	300					
Hillsdale county:									
Moon Lake	Pittsford	H. B. Williams, Hudson	July 13	500					
Long Lake	Reading	Frank Grover, Reading	July 14	2,000					
Wilson Lake	Cambria	W. W. Weaver, Reading	July 14	1,000					
Lime Lake	Wright	J. F. Palmer, Hudson	Aug. 23	1,750					
Ingham county:									
Pine Lake	Meridian	E. V. Chilson, Lansing	June 14	3,000					
Lowe Lake	Springport	C. H. Lowe, Stockbridge	June 24	2,000					

Large Mouth Black Bass Plants 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Iosco county:			1911.	
Indian Lake.....	Plainfield.....	C. W. Luce, East Tawas.....	June 16	7,500
Bass Lake.....	Plainfield.....	C. W. Luce, East Tawas.....	June 16	6,300
Mud Lake.....	Plainfield.....	R. D. Brown, Hale.....	Oct. 6	300
Little Long Lake.....	Plainfield.....	Percy H. Wilson, Akron.....	Oct. 6	300
Ionia county:				
Long Lake.....	Orleans.....	W. F. Bricker, Belding.....	June 12	4,000
Ravell's Pond.....	Orleans.....	Chas. Madden, Belding.....	June 12	2,000
Kiddville Pond.....	Orisco.....	Dr. G. A. Stanton, Belding.....	June 12	3,000
Green's Lake.....	Orleans.....	Elmer E. Gates, Belding.....	June 12	2,000
Jackson county:				
Tompkins Mill Pond.....	Tompkins.....	H. W. Woodard, Tompkins.....	June 17	2,000
Clear Lake.....	Waterloo.....	M. L. Gorton, Chelsea.....	June 20	3,000
Clark's Lake.....	Columbia.....	H. A. Reece, Jackson.....	June 20	4,000
Minard Millpond or Sandstone Creek.....	Tompkins and Sandstone.....	J. E. Cheatham, Rives Junction.....	June 20	3,000
Gillett's Lake.....	Leon.....	J. E. Green, Jackson.....	June 20	3,000
Grass Lake.....	Grass Lake.....	Chester R. Smith, Grass Lake.....	June 20	3,000
Lakoon in Loomis Park.....	Jackson City.....	W. W. Todd, Jackson.....	June 24	1,500
Fay Lake.....	Napoleon.....	G. E. Rushton, Napoleon.....	June 29	2,000
Bessy Lake.....	Norvell.....	W. T. Walker, Norvell.....	June 29	2,500
Sweezy Lake.....	Norvell.....	S. A. Grant, Norvell.....	June 29	1,500
Wilbur Lake.....	Pulaski.....	R. F. Burgess, Norvell.....	June 29	1,500
Portage Lake.....	Jackson.....	H. B. Williams, Hudson.....	July 13	1,000
		Geo. E. Beebe, Jackson.....	Oct. 12	1,000
Kalamazoo County:				
Howard Lake.....	Schoolcraft.....	C. A. Morsel, Vicksburg.....	June 16	3,000
Sunset Lake.....	Schoolcraft.....	J. F. Fuller, Vicksburg.....	June 16	3,000
Asylum Lake No. 2.....	Kalamazoo.....	J. A. Hoffman, Kalamazoo.....	June 16	3,000
Asylum Lake No. 1.....	Kalamazoo.....	J. A. Hoffman, Kalamazoo.....	June 16	3,000
Indian Lake.....	Brady and Pavilion.....	F. O. Goldsmith, Vicksburg.....	June 16	4,000
Long Lake.....	Portage.....	J. A. Pyl, Kalamazoo.....	June 16	4,000
West Lake.....	Portage.....	J. A. Pyl, Kalamazoo.....	June 16	3,000
Thral Lake.....	Brady.....	J. C. Van Tassel, Vicksburg.....	June 16	3,000
Crooked Lake.....	Texas.....	J. W. Powers, Kalamazoo.....	Aug. 5	3,300
Pine Island Lake.....	Texas.....	J. W. Powers, Kalamazoo.....	Aug. 5	225
Kent county:				
Whippoorwill Lake.....	Grattan and Oakfield.....	J. E. Taylor, Belding.....	June 12	2,000
Deer Lake.....	Oakfield.....	J. E. Taylor, Belding.....	June 12	2,000
Sand Lake.....	Nelson and Pierson.....	F. E. Shattuck, Sand Lake.....	June 12	3,000
Pine Lake.....	Nelson.....	Wm. Coomer, Sand Lake.....	June 12	2,000
Reed's Lake.....	Grand Rapids.....	I. D. Lamarter, Sand Lake.....	June 15	4,000
Ermans Lake.....	Caledonia.....	G. A. Woodward, Caledonia.....	June 17	2,000
Pickrel Lake.....	Caledonia.....	Mich. Fish Commission.....	Oct. 14	300

Lake county:					
Star Lake.....	Cherry Valley.....	Geo. R. Lyons, Hesperia.....	June 17.....	5,000	
Watermill Lake.....	Cherry Valley.....	C. Hagerman, Ludington.....	June 17.....	3,000	
Switzer Lake.....	Cherry Valley.....	C. Hagerman, Ludington.....	June 17.....	3,000	
Malley's Lake.....	Cherry Valley.....	Thos. Malley, Decatur.....	June 17.....	2,000	
Cool Lake.....	Elk and North Range.....	Earl Fairbanks, Dublin.....	June 17.....	6,000	
Leelanau county:					
Leg Lake.....	Leelanau.....	G. M. Dame, Northport.....	July 20.....	350	
Lena wec county:					
Dewey Lake.....	Medina.....	H. B. Williams, Hudson.....	July 13.....	1,000	
Devil's Lake.....	Woodstock.....	H. B. Williams, Hudson.....	July 13.....	2,000	
Evans Lake.....	Franklin.....	H. B. Williams, Hudson.....	July 13.....	1,000	
John Cox Lake.....	Woodstock.....	Dr. J. E. Palmer, Brooklyn.....	July 14.....	750	
Little Stoney Lake.....	Cambridge.....	M. F. Griffin, Brooklyn.....	July 14.....	1,000	
Livingston county:					
Pardee Lake.....	Geneva.....	R. E. Barron, Howell.....	June 17.....	5,000	
Long Lake.....	Harland.....	H. J. Lee, Milford.....	July 7.....	1,500	
Long Lake.....	Harland.....	M. C. Williams, Milford.....	July 7.....	2,000	
Manistee county:					
Portage Lake.....	Maple Grove.....	Hans A. Wendel, Onekama.....	May 12.....	400	
Lake Siamia.....		J. J. Makiner, Kaleva.....	June 17.....	5,000	
Mecosta county:					
Bissell's Lake.....	Hinton.....	Henry Moore, Lakeview.....	June 15.....	3,000	
Lost Lake.....	Chippewa.....	F. Malmstone, Barryton.....	June 19.....	2,000	
Mungar Lake.....	Fork.....	F. Malmstone, Barryton.....	June 19.....	2,000	
Mill Pond of No. & So. Br. Chippewa River.....	Fork.....	F. Malmstone, Barryton.....	June 19.....	3,000	
Diamond Lake.....	Martiny and Sheridan.....	F. Malmstone, Barryton.....	June 19.....	3,000	
Moiles Lake.....	Sheridan.....	F. Malmstone, Barryton.....	June 19.....	2,000	
Diamond Lake.....	Martiny and Sheldon.....	F. Malmstone, Barryton.....	June 19.....	2,000	
Evans Lake.....	Chippewa.....	F. Malmstone, Barryton.....	June 19.....	3,000	
Chippewa Lake.....	Chippewa.....	Chippewa Park Assn., Big Rapids.....	June 19.....	3,000	
Roger's Pond.....	Mecosta, Austin, Colfax and Big Rapids.....	M. E. Darragh, Big Rapids.....	June 14.....	3,000	
Montmorency county:					
Gregg Lake.....	Montmorency.....	J. M. Clark, Onaway.....	June 14.....	4,500	
Silver Lake.....	Montmorency.....	J. M. Clark, Onaway.....	June 14.....	6,000	
Avery Lake.....	Albert.....	Alfred Parker, Atlanta.....	June 27.....	2,500	
West Twin Lake.....	Albert.....	Geo. F. Sachs, Lewiston.....	June 27.....	3,000	
Fish Lake.....	Albert.....	Geo. F. Sachs, Lewiston.....	June 27.....	2,000	
Montcalm county:					
Race Lake.....	Fairplains.....	F. J. Harlan, Beiding.....	June 12.....	2,000	
Clear or Grass Lake.....	Home.....	B. P. Angell, Beiding.....	June 12.....	2,000	
Cedar Lake.....	Richland.....	P. E. Curtis, Edmore.....	June 12.....	2,000	
Marl Lake.....	Home.....	P. E. Curtis, Edmore.....	June 12.....	2,000	
Offnear Lake.....	Fairplains.....	L. D. Curtis, Edmore.....	June 12.....	2,000	
Lake Horseshoe.....	Fairplains.....	W. H. Angell, Beiding.....	June 12.....	3,000	

Large Mouth Black Bass Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Montcalm county.—Continued.				
Minoka Lake.....	Eureka.....	R. C. Ecker, Greenville.....	June 13	2,000
Como Lake.....	Eureka.....	R. C. Ecker, Greenville.....	June 13	2,000
Hunter Lake.....	Eureka.....	Wm. Chase, Greenville.....	June 13	3,000
Turk Lake.....	Montcalm.....	Wm. Chase, Greenville.....	June 13	3,000
Perch Lake.....	Montcalm.....	Wm. Chase, Greenville.....	June 13	3,000
Fish Lake.....	Richland.....	J. W. Pfeiffer, Edmore.....	June 13	3,000
Bass Lake.....	Belvidere.....	R. Fleck, Six Lakes.....	June 13	3,000
Six Lakes.....	Belvidere.....	David Wortley, Lakeview.....	June 15	2,000
Bass Lake.....	Belvidere.....	Jos. Kimmell, Six Lakes.....	June 15	3,000
Horseshoe Lake.....	Cato.....	F. Faling, Lakeview.....	June 15	3,000
Big Brimmer Lake.....	Cato.....	B. E. Keyt, Lakeview.....	June 15	3,000
Pickered Lake.....	Cato.....	D. Wortley, Lakeview.....	June 15	3,000
Town Line Lake.....	Cato.....	C. W. Vining, Lakeview.....	June 15	3,000
Tamarack Lake.....	Cato.....	F. Moore, Lakeview.....	June 15	3,000
Little Brimmer Lake.....	Montcalm.....	Henry Paulson, Gowen.....	June 15	3,000
Horton Lake.....	Douglas.....	J. W. Campbell, Stanton.....	June 19	3,000
Clifford Lake.....	Douglas.....	E. A. Kemp, Greenville.....	Oct. 12	2,250
Mud Lake.....	Douglas.....	E. A. Kemp, Greenville.....	Oct. 12	2,250
Newaygo county:				
Pickered Lake.....	Goodwell.....	H. P. Olson, Woodville.....	June 15	3,000
Pickered Lake.....	Garfield.....	A. I. Forman, Newaygo.....	June 17	3,000
Ogemaw county:				
Frost Lake.....	Edwards.....	John Tolfree, West Branch.....	June 22	2,000
Edwards Lake.....	Edwards.....	John Tolfree, West Branch.....	June 22	2,000
Sidney Lake.....	West Branch.....	John Tolfree, West Branch.....	June 22	2,000
George Lake.....	Edwards and Horton.....	John Tolfree, West Branch.....	June 22	3,000
Crapo Lake.....	West Branch.....	John Tolfree, West Branch.....	June 22	3,000
Town Line Lake.....	Rose and Goodard.....	O. L. Rakestraw, Lupton.....	Oct. 6	300
North Lake.....	Cummings.....	O. L. Rakestraw, Lupton.....	Oct. 6	300
Green Lake.....	Rose.....	O. L. Rakestraw, Lupton.....	Oct. 6	300
Oakland county:				
Walled Lake.....	Fairplains.....	M. A. Porter, Northville.....	June 12	2,500
No Name.....	Highland.....	J. T. Van Buren, Clyde.....	July 7	1,500
White Lake.....	White Lake and Highland.....	A. E. Ormond, Milford.....	July 7	2,500
Andrus Lake.....	Hartland and Highland.....	J. N. Weaver, Milford.....	July 7	1,500
Grass Lake.....	White Lake.....	Robert Drummond, Milford.....	July 7	1,500
Crawford Lake.....	Bloomfield.....	Hugh Chalmers, Detroit.....	July 26	1,500
Pond Lake.....	Waterford.....	Mich. Fish Commission, Detroit.....	July 26	1,000
Lake Orion.....	Orion.....	J. E. Bolles, Detroit.....	Sept. 8	1,250
Campbell Lake.....	Waterford.....	Mich. Fish Commission, Detroit.....	Sept. 18	1,000
Woodhull Lake.....	Waterford.....	Mich. Fish Commission, Detroit.....	Sept. 18	1,000

Loon Lake.....	Waterford.....	Mitch. Fish Commission, Detroit.....	Sept. 18.....	1,200.....
Three Mile Lake.....	Pontiac and Waterford.....	Mitch. Fish Commission, Detroit.....	Sept. 25.....	600.....
Walled Lake.....	Novi and Commerce.....	D. F. Griswold, Northville.....	Aug. 23.....	500.....
Oscoda county:				
O'Brien's Lake.....	Menier.....	Geo. F. Russell, Mc Kinley.....	June 20.....	3,000.....
Oceana county:				
Mud Lake.....	Ferry.....	Dan Bragg, Shelby.....	June 10.....	3,000.....
Round Lake.....	Shelby.....	Dan Bragg, Shelby.....	June 10.....	2,000.....
Pentwater Lake.....	Pentwater.....	C. F. Lewis, Pentwater.....	June 10.....	3,000.....
Oscoda county:				
Diamond Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	June 10.....	3,000.....
Wright and Grover Lakes.....	Ewart.....	Wm. F. Ramsey, Ewart.....	June 14.....	3,000.....
Ottawa county:				
Cove Lake or Stern's Bayou.....	Robinson.....	Hon. H. W. Clark, Grand Haven.....	June 13.....	3,000.....
Otsego county:				
Cahoon Lake.....	T. 29 3 W. and T. 28 3 W.....	E. S. Chalker, Waters.....	June 23.....	4,000.....
Clear Lake.....	Chastert.....	Chris. Freiburg, Johannesburg.....	June 25.....	2,400.....
Crapo Lake.....	29 R. 11-14 2 W.....	Arnold Boutell, Saginaw.....	June 27.....	2,500.....
Presque Isle county:				
Lake of the Woods.....	Presque Isle.....	R. E. Ellsworth, Alpena.....	June 14.....	9,000.....
Grand Lake.....	Social.....	K. W. Blake, Alpena.....	June 14.....	12,500.....
Tuttle Lake.....	Rogers and Pulaski.....	B. C. Lark, Rogers.....	June 14.....	7,500.....
Swan Lake.....	Pulaski.....	B. C. Lark, Rogers.....	June 14.....	6,500.....
Lake Nettie.....	Bismark.....	H. Horwitz, Harris.....	June 14.....	7,500.....
Grand Lake.....	Presque Isle.....	J. E. Kaufman, Presque Isle.....	Sept. 16.....	1,250.....
Roscommon county:				
Campbell's Lake.....	Nester.....	John Tolfece, West Branch.....	June 22.....	3,000.....
Marl Lake.....	Gerrish.....	W. H. Lansing, Roscommon.....	June 25.....	3,000.....
Higgins Lake.....	Gerrish.....	W. H. Lansing, Roscommon.....	June 25.....	8,000.....
Higgins Lake.....	Gerrish.....	E. D. Church, Saginaw.....	July 27.....	1,400.....
Saginaw county:				
Saginaw River.....		W. J. Hunsaker, Saginaw.....	July 22.....	2,400.....
St. Joseph county:				
Mud Lake.....	Lockport.....	P. Mead, Three Rivers.....	June 22.....	1,000.....
Kaiser Lake.....	Ebbiss.....	J. F. Constantine, Three Rivers.....	June 22.....	1,500.....
Portage Lake.....	Mendon.....	F. S. Collier, Vicksburg.....	June 16.....	3,000.....
Tuscola county:				
Grass Lake.....	Drayton.....	Geo. Hamilton, Mayville.....	June 13.....	4,500.....
Dollar Lake.....	Drayton.....	Geo. Hamilton, Mayville.....	June 13.....	3,000.....
Cat Lake.....	Drayton.....	M. J. Bird, Mayville.....	June 13.....	4,500.....
Harmon Lake.....	Drayton.....	F. G. Fox, Mayville.....	June 13.....	6,000.....
Phelps Lake.....	Drayton.....	F. G. Fox, Mayville.....	June 13.....	6,000.....

Large Mouth Black Bass Plants, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Washtenaw county: Huron River..... Cavanaugh Lake..... Mirror Lake..... Cassiday Lake..... Lyndon..... Long Lake..... Silver Lake..... Manchester Pond..... Globe Pond..... Big and Little Portage Lakes.....	Superior..... Sylvan..... Sylvan..... Lyndon..... Freedom..... Manchester..... Tecumseh.....	M. Whitman, Ypsilanti..... John Kelmbach, Chelsea..... John Kelmbach, Chelsea..... John Kelmbach, Chelsea..... John Kelmbach, Chelsea..... Herman Glatz, Manchester..... A. P. Wagers, Manchester..... H. P. Hoyt, Tecumseh..... R. H. Killian, Ypsilanti.....	June 17..... June 17..... June 17..... June 17..... June 17..... June 20..... June 29..... June 29..... June 29.....	8,000..... 4,000..... 3,000..... 4,000..... 4,000..... 1,500..... 2,000..... 1,500..... 1,750.....
Wayne county: Coomer Lake..... Huron River..... Floose Pond..... River Rouge.....	Van Buren..... Van Buren..... Nankin.....	A. E. Smith, Belleville..... A. E. Smith, Belleville..... Dr. J. J. Marker, Floose..... Chas. Daniels, Detroit.....	June 17..... June 17..... Aug. 25..... Sept. 1.....	4,000..... 5,000..... 8,000..... 600.....
Total.....				684,875

WALL-EYED PIKE PLANTS, 1911.
FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Allegan county: Osterhout Lake.....	Lee.....	Walter E. Sheffer, Grand Junction.	May 20	150,000
Trobig Pond.....	Osego and Trobig.....	Allen Dunfield, Osego.	May 31	125,000
Schanable Lake.....	Watson.....	Allen Dunfield, Osego.	May 31	125,000
Linsley Spring Pond.....	Hopkins.....	W. F. Tiefenthal, Hopkins.	May 31	100,000
Lower Scott Lake.....	Lee.....	Chas. Horn, Pullman.	May 24	75,000
Upper Scott Lake.....	Lee.....	Chas. Horn, Pullman.	May 24	75,000
Kalamazoo Lake.....	Saugatuck.....	Chas. E. Bird, Saugatuck.	May 24	75,000
Tyler's Bayou.....	Saugatuck.....	D. A. Heath, Saugatuck.	May 24	75,000
Kalamazoo River.....	Saugatuck.....	D. A. Heath, Saugatuck.	May 24	75,000
Kalamazoo River.....	Saugatuck.....	Jas. Parry, Douglas.	May 24	75,000
Green Lake.....	Leighton.....	B. P. Kenyon, Grand Rapids.	May 16	75,000
Alpena county: Long Lake.....	Severn.....	Jas. Bowden, Alpena.	May 17	360,000
Long Lake.....	Severn.....	John Beck, Alpena.	May 17	360,000
Antrim county: Grass Lake.....	Severn.....	A. B. Wooten, Bellaire.	May 18	100,000
Six Mile Lake.....	Echo.....	I. Van Skiver, Ellsworth.	May 18	100,000
Bentley's Lake.....	Ranks.....	W. A. Boss, Ellsworth.	May 18	75,000
Barry county: Fire Lake.....	Johnstown.....	Willard A. Knight, Battle Creek.	May 20	400,000
Lake Twenty-one.....	Hope.....	O. J. Kingsbury, Battle Creek.	May 20	100,000
Long Lake.....	Hastings.....	Scott McIntosh, Cloverdale.	May 22	100,000
Ashy Lake.....	Hope.....	J. M. Payne, Quimby.	May 22	75,000
Mud Lake.....	Hope.....	Ovid Chamberlin, Cloverdale.	May 29	100,000
Twenty-one Lake.....	Hope.....	Pete Kingsley, Cloverdale.	May 29	100,000
Long Lake.....	Hope.....	B. Dickinson, Hastings.	May 29	100,000
French Lake.....	Hope.....	Frank Maynard, Shultz.	May 29	100,000
Pine Lake.....	Parisville.....	Arthur Sheld, Doster.	May 31	75,000
Chim Lake.....	Yankee Springs and Orangeville.	Ed. J. Anderson, Plainwell.	May 16	125,000
Wall Lake.....	Barry.....	M. M. Manning, Delton.	May 16	100,000
Benzie county: Big Piate Lake.....	Benzonian and Lake.....	R. A. Conklin, Honor.	May 18	125,000
Benrien county: Gallen River.....	New Buffalo.....	Wm. Schermack, New Buffalo.	May 19	360,000
Long Lake.....	Berrien.....	F. D. Layman, Berrien Centre.	May 19	150,000
Madren Lake.....	Buchanan.....	M. Landysun, Buchanan.	May 16	75,000
Faw Paw Lake.....	Watervliet.....	A. A. Woodward, Coloma.	May 24	100,000

Wall-Eyed Pike Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Branch county: Dean Lake.....	Sherwood.....	Henry Runyan, Sherwood.	May 31	100,000
Calhoun county: Hall's Lake..... Prairie Lake..... Brace Lake..... Ackley Lake..... Cresco Pond.....	Sheridan..... Clarence..... Marshall..... Convis..... Marshall.....	Floyd A. Andrews, Albion. W. H. Riever, Albion. H. C. Faulkner, Marshall. O. R. Cummings, Bellaire. Henry Lehman, Ceresco.	May 20 May 20 May 20 May 31 May 16	100,000 100,000 175,000 100,000 75,000
Cass county: Wood and Lime Lakes..... Lillie Lake..... Driscoll Lake..... Stone Lake..... Hutchings Lake..... Dewey Lake..... Birch Lake..... Diamond Lake..... Bunker Lake..... So Part of Goose Lake..... Hutchings Lake..... Lilly Lake..... Dristel and Bear Lakes..... Eagle Lake..... Fish Lake..... Bogart Lake.....	Porter and Newburg..... Newburg..... Newburg..... La Grange..... Newburg..... Silver Creek..... Porter..... La Grange..... Volinia..... Jefferson..... Newburg..... Newburg..... Munising..... Ontwa..... Marcellus..... Newburg.....	Claude Marsh, Jones. Ed Lamb, Jones. C. F. Trattles, Jones. Fred Marsh, Cassopolis. Fred Marsh, Cassopolis. Jas. W. Burke, Dowagiac. Arthur Sears, Vandalia. Gordon Hain, Cassopolis. Thos. T. Higgins, Cassopolis. Fred Marsh, Cassopolis. Ed Lamb, Jones. Perry L. Turner, Fikchart, Ind. C. S. Cosselman, Marcellus. Hugh Mc Gee, Marcellus.	May 19 May 19 May 19 May 19 May 19 May 20 May 19 May 19 May 25 May 31 May 31 May 31 May 25 May 25 May 25 May 25	300,000 210,000 150,000 240,000 210,000 175,000 180,000 360,000 75,000 100,000 150,000 75,000 100,000 100,000 100,000 75,000
Charlevoix county: Walloon Lake.....	Melrose and Evangeline.....	R. Metcalf, Petoskey.	May 20	75,000
Cheboygan county: Mullett Lake..... Mullett Lake..... Burt Lake.....	Sevel..... Sevel..... Sevel.....	W. H. Chatfield, Detroit. Clyde King, Indian River. J. J. Jones, Indian River.	May 23 May 23 May 23	750,000 625,000 750,000
Clare county: Bass Lake..... Silver Lake..... Sand Lake..... Eight Point Lake.....	Garfield..... Freeman..... Surrey..... Garfield.....	B. C. Grant, Chippewa. John Ferwerda, Ealmouth. F. E. Oliver, Farwell. F. S. Postal, Ewart.	May 16 May 16 May 16 May 16	150,000 150,000 150,000 375,000
Clinton county: Park Lake.....	Bath.....	Myles F. Gray, Lansing.	May 22	300,000

TWENTIETH REPORT—STATE FISHERIES.

Eaton county:								
Sobby Lake	Sunfield	John Viele, Vermontville	May 27	100,000				
Looking Glass Lake	Sunfield	A. D. Childs, Sunfield	May 27	100,000				
Pine Lake	Walton	L. Cook & Son, Olivet	May 31	125,000				
Emmet county:								
Pickrel Lake	Littlefield	Rufus L. Myers, Alanson	May 20	100,000				
Crooked Lake	Litchfield	Rufus L. Myers, Alanson	May 20	150,000				
Round Lake	Bear Creek	Henry Lindig, Petoskey	May 20	75,000				
Cenesee county:								
Long Lake	Fenton	E. L. Bray, Flint	May 22	450,000				
Grand Traverse county:								
Silver Lake	Garfield and Blair	R. S. Hastings, Traverse City	May 18	100,000				
Silver Lake	Garfield and Blair	Wm. Saunders, Traverse City	May 18	100,000				
Round Lake		Dr. C. E. Long, Elk Rapids	May 29	250,000				
Spider Lake	East Bay	Traverse City Rod & Gun Club, Traverse City	May 18	100,000				
Hogback and Crooked Lakes	Mayfield and East Bay	R. S. Hastings, Traverse City	May 18	100,000				
Green Lake	Green Lake	R. B. De France, Kingsley	May 15	100,000				
Porter Lake	Mayfield	R. B. De France, Kingsley	May 15	75,000				
Blue Lake	Union	Kingsley Sportsmens' Club, Kingsley	May 15	75,000				
Black Lake	Union	Kingsley Sportsmens' Club, Kingsley	May 15	75,000				
Rennie Lake	Union	Kingsley Sportsmens' Club, Kingsley	May 15	75,000				
Hogback Lake	Paradise	Kingsley Sportsmens' Club, Kingsley	May 15	75,000				
Fife Lake	Fife Lake	J. S. Hodges, Fife Lake	May 20	75,000				
Graiot county:								
Half Moon Lake	Seville	Eber Loomis, Elwell	May 17	75,000				
Pine River	Pine River	S. S. Dixon, St. Louis	May 17	100,000				
Hillsdale county:								
Sand Lake	Hillsdale	Wm. C. Kemp, Hillsdale	May 22	300,000				
Ionia county:								
Long Lake	Orleans	Wm. Oser, Belding	May 17	75,000				
Jordan Lake	Odessa and Woodland	Edwin Shellhorn, Lake Odessa	May 27	150,000				
Iosco county:								
Long Lake	Plainfield	Frank Eymmer, Ellike	May 17	360,000				
Lake Van Ettan	Oscoda	A. R. Weir, Au Sable	May 17	270,000				
Hale Lake	Plainfield	R. D. Brown, Hale	May 17	180,000				
Loon Lake	Plainfield	R. D. Brown, Hale	May 17	360,000				
Indian Lake	Plainfield	C. W. Luce, East Ta was	May 17	300,000				
Isabella county:								
Hall's Lake	Broomfield	J. M. Swisher, Remus	May 27	100,000				
Weidman Pond	Sherman and Nottawa	M. A. Drallette, Weidman	May 27	100,000				
Coldwater Lake	Nottawa	Rob't. Hyslop, Weidman	May 27	100,000				
Scott Lake	Nottawa	Rob't. Hyslop, Weidman	May 27	75,000				

Wall-Eyed Pike Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Jackson county:				
Grass Lake.....	Grass Lake.	Chester R. Smith, Grass Lake.	May 20	225,000
Stony Lake.....	Napoleon.....	M. E. Russell, Napoleon.	May 22	600,000
Gillett's Lake.....	Leon.....	V. E. Green, Gillett's Lake.	May 22	300,000
Clark's Lake.....	Columbia.....	H. A. Reece, Jackson.	May 22	300,000
Kalamazoo county:				
Gull Lake.....	Several.....	I. O. Galloup, Bettle Creek.	May 20	375,000
Howard's Lake.....	Kalamazoo.....	A. H. Hoffman, Kalamazoo.	May 22	125,000
Lower Wells Lake.....	Schoolcraft.....	C. L. Davis, Schoolcraft.	May 22	190,000
Black Lake.....	Schoolcraft.....	Marshall Heisroth, Schoolcraft.	May 23	100,000
Howard's Lake.....	Schoolcraft.....	Bert E. Beebe, Vicksburg.	May 23	75,000
Hogshoed Creek.....	Schoolcraft.....	C. R. Fellows, Schoolcraft.	May 23	75,000
Kalkaska county:				
Kettle Lake.....	Kalkaska.....	Clio Rosenberg, Kalkaska.	May 20	50,000
No. Selkirk Lake.....	Kalkaska.....	Clio Rosenberg, Kalkaska.	May 20	50,000
So. Selkirk Lake.....	Kalkaska.....	Clio Rosenberg, Kalkaska.	May 20	75,000
Manistee Lake.....	Cold Springs.....	R. W. Douglas, Darregh..	May 20	100,000
Kent county:				
Reed's Lake.....	Grand Rapids.....	L. J. DeLamerter, Grand Rapids.	May 31	150,000
Grand River.....	Grand Rapids.....	Mich. Fish Commission, Detroit.	May 31	300,000
Whippoorwill Lake.....	Grafton and Oakfield.....	V. E. Taylor, Belding.	May 27	175,000
Mc Keven Lake.....	Lowell.....	Chas. E. Brown, Alto.	May 26	150,000
Bass Lake.....	Spencer.....	Fred. Holland-Gowen.	May 17	75,000
Deer Lake.....	Oakfield.....	J. E. Taylor, Belding.	May 17	50,000
Ware's Lake.....	Nelson and Pierson.....	Frank Allen, Sand Lake.	May 15	75,000
Alddie Lake or Springs.....	Solon.....	Earl Rasco, Sand Lake.	May 15	75,000
Sand Lake.....	Nelson.....	Chas. W. Williams, Sand Lake.	May 15	75,000
Leelanau county:				
Bright's Lake.....	Kassan.....	C. W. Fralick, M. D., Maple City.	May 18	100,000
Carp Lake.....	Several.....	Albert Mealey, Provenant.....	May 18	150,000
Lenaee county:				
Devil's Lake.....	Woodstock.....	H. E. Hind, Devil's Lake.	May 22	300,000
Devil's Lake.....	Woodstock.....	W. J. Hampton & Son, Manitou Beach.	May 22	300,000
Manistee county:				
Bear Lake.....	Bear Lake and Pleasanton.....	J. P. Maise, Bear Lake.	May 18	150,000

Mason county:					
Turtle Lake	Sheridan	Philip Weaver, Bachelor	May 16	150,000	
Tallman Lake	Branch	Ernest Jaser, Bachelor	May 16	300,000	
Round Lake	Sheridan	Ernest Jaser, Bachelor	May 16	300,000	
Lincoln Lake	Pere Marquette	R. C. Bridge, Ludington	May 16	150,000	
St. Mary's Lake	Riverton	D. Belka, Scottville	May 16	450,000	
Hamlin Lake	Hamlin and Victory	J. D. Buckingham, Ludington	May 24	75,000	
North Ox Bow Lake	Riverton	C. F. Lewis, Pentwater	May 24	100,000	
Bass Lake	Summit and Pentwater	C. F. Lewis, Pentwater	May 24	100,000	
Mecosta county:					
Bissell's Lake	Hinton	Henry Moore, Lakeview	May 17	75,000	
Diamond Lake	Marling and Sheridan	Frank Malmstone, Barryton	May 17	75,000	
Mungar Lake	Fork	Frank Malmstone, Barryton	May 17	75,000	
Molles Lake	Fork	Frank Malmstone, Barryton	May 17	75,000	
Millpond of No. and So. Br. of Chippewa River	Fork	Frank Malmstone, Barryton	May 17	75,000	
Evans Lake	Chippewa	Frank Malmstone, Barryton	May 17	75,000	
Lost Lake	Chippewa	Frank Malmstone, Barryton	May 17	75,000	
Pine Lake	Wheatland	J. M. Swisher, Remus	May 27	100,000	
Lake 28	Wheatland	R. P. Swisher, Remus	May 27	100,000	
Meeker Lake	Sheridan	J. M. Swisher, Remus	May 27	75,000	
Ginrich Lake	Wheatland	J. M. Swisher, Remus	May 27	75,000	
Pickers Lake	Grant	Samuel Troupe, Big Rapids	May 20	75,000	
School Section Lake	Morton	Frank Shaler, Mecosta	May 27	100,000	
Chippewa Lake	Chippewa	Chippewa Park Assn., Big Rapids	May 27	150,000	
Pretty Lake	Mariny	E. C. Lewis, Mecosta	May 27	100,000	
John Brown Lake	Mariny	J. T. Ray, Barryton	May 27	75,000	
Missaukee county:					
Long Lake	Caldwell	E. A. Beuthien, Lake City	May 15	100,000	
Missaukee Lake	Several	E. A. Beuthien, Lake City	May 15	100,000	
Dyer Lake	Caldwell	T. H. Reeder, Lake City	May 15	100,000	
Long Lake	Lake	John Seafuse, Lake City	May 15	100,000	
Loon Lake	Pioneer	Ed. Baldwin, Lake City	May 15	75,000	
Montcalm county:					
Horseshoe Lake	Fairplains	Albert Jenks, Fenwick	May 17	75,000	
Tamarack Lake	Cato	John F. Seat, Lakeview	May 17	75,000	
Rock Lake	Richard	A. B. Stauffer, Vestaburg	May 27	100,000	
Bass Lake	Richard	Wm. Caris, Vestaburg	May 27	75,000	
Deaner Lake	Richard	W. A. Freeman, Vestaburg	May 27	75,000	
Duck Pond	Debie Valley	J. A. Freeman, Coral	May 27	75,000	
Long Lake	Douglas and Belvidere	F. E. Curtis, Edmore	May 27	100,000	
Little Whitefish Lake	Cato	B. J. Kay, Persol	May 15	50,000	
Little Brimmer Lake	Cato	Fern F. Moore, Lakeview	May 17	60,000	
Big Brimmer Lake	Cato and Belvidere	Fern F. Moore, Lakeview	May 17	60,000	
Town Line Lake	Pine	D. W. Orley, Lakeview	May 17	75,000	
Farnsworths Lake	Fine	L. B. Farnsworth, Lakes	May 17	50,000	
Horseshoe Lake	Belvidere	Joe Kimmel, Six Lakes	May 17	75,000	
Grass Lake	Fairplains	Alfred N. Shaw, Fenwick	May 17	75,000	

Wall-Eyed Pike Plants, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Montcalm county—Continued.				
Big Spruce Lake.....	Maple Valley.....	John Freeman, Coral.....	May 17.....	50,000
Cody Lake.....	Maple Valley.....	John Freeman, Coral.....	May 17.....	50,000
Pickard Lake.....	Cato.....	B. M. Aytz, Lakeview.....	May 17.....	50,000
Whitefish Lake.....	Pierson.....	C. W. Hart, Pierson.....	May 15.....	75,000
Montmorency county:				
Sucker Lake.....	Hillman.....	Thos McCaffrey, Hillman.....	May 17.....	150,000
Thunder Bay River.....	Hillman.....	Ford C. Rea, Hillman.....	May 17.....	300,000
Muskegon county:				
White Lake.....	Montague.....	Paul G. Kling, Montague.....	May 24.....	100,000
Big Blue Lake.....	Blue Lake.....	Hon. F. J. Russell, Hart.....	May 24.....	100,000
Bear Lake.....	.....	E. D. Magoon, Muskegon.....	May 24.....	100,000
Nowyogo county:				
Crockery Creek.....	Crockery.....	L. C. Murray, Coopersville.....	May 18.....	75,000
Conover Lake.....	Ensley.....	A. L. Brown, Sand Lake.....	May 15.....	50,000
Boblist Lake.....	Grove.....	C. W. Hart, Pierson.....	May 15.....	50,000
Oakland county:				
Davisburg Millpond.....	Springfield.....	I. E. Kenney, Davisburg.....	May 13.....	150,000
Round Lake.....	Springfield.....	I. E. Kenney, Davisburg.....	May 13.....	90,000
Jumbo Lake.....	Springfield.....	I. E. Kenney, Davisburg.....	May 13.....	90,000
Lake Eliza.....	Springfield.....	I. E. Kenney, Davisburg.....	May 13.....	150,000
Kurley Lake.....	Springfield.....	Clarence S. Longacre, Davisburg.....	May 13.....	90,000
Long Lake.....	Springfield.....	Clarence S. Longacre, Davisburg.....	May 13.....	240,000
Verdon Lake.....	Springfield.....	Clarence S. Longacre, Davisburg.....	May 13.....	150,000
Deer Lake.....	Independence.....	John King, Clarkston.....	May 20.....	360,000
Cass Lake.....	West Bloomfield.....	H. J. C. Wagner, Detroit.....	May 22.....	450,000
Walled Lake.....	Novi and Commerce.....	M. A. Porter, Northville.....	May 22.....	450,000
Van Norman Lake.....	Independence and Waterford.....	S. E. Thomas, Detroit.....	May 20.....	540,000
Long Lake.....	Rose.....	Dr. W. C. McConnell, Fenton.....	May 22.....	450,000
Pond Lake.....	Waterford.....	H. W. Baer, Pontiac.....	May 22.....	450,000
Oceana county:				
Pentwater Lake.....	Pentwater.....	S. D. Montgomery, Grand Rapids.....	May 24.....	100,000
Ree Dee Lake.....	Leavitt.....	E. L. Bunting, Walkerville.....	May 24.....	75,000
Pe-Ba-Ma Lake.....	Colfax.....	F. L. Bunting, Walkerville.....	May 24.....	50,000
Crystal Lake.....	Hart.....	Wm. R. Roach, Hart.....	May 24.....	100,000
Ogemaw county:				
Sidney Lake.....	West Branch.....	John Tolfree, West Branch.....	May 23.....	125,000
George Lake.....	Edwards and Horton.....	John Tolfree, West Branch.....	May 23.....	125,000
Piper Lake.....	Sec. 1 T. 2 and 3.....	John Tolfree, West Branch.....	May 23.....	125,000
Frost Lake.....	Edwards.....	John Tolfree, West Branch.....	May 23.....	125,000

TWENTIETH REPORT—STATE FISHERIES.

Edwards Lake.....	Edwards	John Tolfree, West Branch	May 25	125,000
Crawp Lake.....	West Branch	John Tolfree, West Branch	May 25	125,000
Mills Lake.....	Rickland	Henry Zeran, Prescott	May 17	210,000
Sage Lake.....	Hill	S. F. Ronger, Hale	May 17	300,000
De Vane Lake.....	Cunning	O. L. Rakestraw, Lupton	May 17	240,000
Black Lake.....	Cunning	O. L. Rakestraw, Lupton	May 17	60,000
Osceola county:				
Wright and Grover Lakes.....	Ewart	Wm. F. Farnsey, Ewart	May 16	250,000
Strawberry Lake.....	Lake and Cedar	C. F. Shaw, Ewart	May 16	175,000
Big Lake.....	Lake and Orient	C. F. Shaw, Ewart	May 16	200,000
Ottawa county:				
Spring Lake.....	Spring Lake	Samuel Falls, Spring Lake	May 18	100,000
Saginaw county:				
Saginaw River.....		W. S. Linton, Saginaw	May 18	625,000
St. Joseph county:				
Kaiser Lake.....	Fabius	L. F. Constantine, Three Rivers	May 19	150,000
Forey Lake.....	Fabius	L. F. Constantine, Three Rivers	May 19	360,000
Fisher Lake.....	Lockport and Park	Glaude Felker, Three Rivers	May 19	240,000
St. Joe Power Pond.....	Lockport	S. L. Handy, Three Rivers	May 19	360,000
Klinger Lake.....		Ferry L. Turner, Elkhart, Ind.	May 25	120,000
Hog Lake.....	Burr Oak	W. H. Bordner, Burr Oak	May 25	90,000
Van Buren county:				
Lake Cora.....	Paw Paw	Clarence E. Fox, Lake Cora	May 20	150,000
Maple Lake.....	Paw Paw and Antwerp	R. D. Loveland, Paw Paw	May 20	225,000
Turley's Lake.....		L. W. Arnold, Paw Paw	May 20	175,000
Three Mile Lake.....	Paw Paw	Wm. M. Kirkwood, Paw Paw	May 20	175,000
Saddle Lake.....	Columbia	O. C. Egan, Grand Junction	May 20	300,000
Little Bear Lake.....	Columbia	E. B. Eddy, Grand Junction	May 20	150,000
Lake Moon.....	Geneva	J. A. Gibson, Lacota	May 20	90,000
Base Line Lake.....	Columbia	J. A. Gibson, Lacota	May 20	90,000
Saddle Lake.....	Columbia	A. B. Lyster, Breedsville	May 31	100,000
Bangor Mill Pond.....	Bangor and Arlington	Archie V. McKee, Bangor	May 24	125,000
Washtenaw county:				
Huron River.....	Superior	M. Whitman, Ypsilanti	May 22	450,000
Wayne county:				
Coomer Lake and Huron River.....	Van Buren	A. E. Smith, Bellevue	May 18	625,000
Detroit River.....		Mich. Fish Commission, Detroit	May 23	2,000,000
Wexford county:				
Woodward Lake.....	Selma	E. E. Bunyes, Bunyes	May 15	75,000
Total.....				38,920,000

PERCH PLANTS, 1911.
FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Allegan county: Eagle Lake.....	Allegan.....	W. H. Spayde, Bloomingdale.....	May 16	80,000
Green Lake.....	Leighton.....	B. P. Kenyon, Grand Rapids.....	May 16	120,000
Swan Lake.....	Cheshire.....	I. E. Tripp, Allegan.....	May 16	120,000
Barry county: Sawmill Lake.....	Johnston.....	E. A. Turner, Bedford.....	May 16	120,000
Fine Lake.....	Johnston.....	Hon. W. A. Knight, Battle Creek.....	May 16	200,000
Podunk Lake.....	Rutland.....	C. W. Mixer, Hastings.....	May 17	120,000
Leach Lake.....	Carlton.....	C. W. Mixer, Hastings.....	May 17	120,000
Otis Lake.....	Rutland.....	C. W. Mixer, Hastings.....	May 17	120,000
Dowd Lake.....	Hastings.....	C. W. Mixer, Hastings.....	May 17	120,000
Cartier Lake.....	Carlton.....	C. W. Mixer, Hastings.....	May 17	120,000
Middle Lake.....	Irving.....	Seymour A. Reigler, Freeport.....	May 17	160,000
Sugarbush Lake.....	Hastings.....	Scott Mc Intosh, Quimby.....	May 17	80,000
Long Lake.....	Hastings.....		May 22	
Berrien county: Clear Lake.....	Buchanan.....	A. A. Worthington, Buchanan.....	May 16	80,000
Pike Lake.....	Bertrand.....	J. E. Scott, Buchanan.....	May 16	80,000
Little Indian Lake.....	Berrien.....	Oto Radewald, Niles.....	May 16	80,000
Murphy Lake.....	Berrien.....	Calvin Murphy, Berrien Centre.....	May 16	80,000
Smith Lake.....	Berrien and Cass.....	Calvin Murphy, Berrien Centre.....	May 16	120,000
Calhoun county: Hall's Lake.....	Sheridan.....	Floyd A. Andrews, Albion.....	May 16	80,000
Prairie Lake.....	Clarence.....	W. H. Reiver, Albion.....	May 16	240,000
Millpond Kalamazoo River.....	Marshall.....	W. J. Claybourne, Marshall.....	May 16	120,000
Williams Lake.....	Marango.....	W. J. Claybourne, Marshall.....	May 16	120,000
Warner Lake.....	Tekonsha.....	H. K. Culver, Ceresco.....	May 16	120,000
St. Mary's Lake.....	Bedford.....	H. H. Warner, Battle Creek.....	May 16	120,000
Turtle Lake.....	Burlington.....	C. H. Lowell, Union City.....	May 16	840,000
Charlevoix county: Deer Lake.....	Wilson and Boyne City.....	Terry S. Barber, Boyne City.....	May 20	120,000
Cheboygan county: Douglas Lake.....	Munro.....	Hon. H. F. Baker, Weadock.....	May 24	160,000
Munro Lake.....	Munro.....	Hon. H. F. Baker, Weadock.....	May 24	160,000
Crawford county: Portage Lake.....	Frederic.....	C. P. Mickelson, Mason.....	May 24	160,000
Howes Lake.....	Frederic.....	Marius Hanson, Grayling.....	May 24	120,000

Emmet county: Round Lake.....	Bear Creek.....	Henry Lindig, Petoskey.....	May 20	120,000
Genesee county: Haster Lake..... Copaconic Lake.....	Davison and Elba..... Grand Blanc, Fenton and Holly.....	E. Mc Cormick, Davison..... A. D. Banker, Grand Blanc.....	May 23 May 23	120,000 120,000
Grand Traverse county: Spider Lake..... Kennie Lake..... Hogsback or Crooked Lake..... Silver Lake..... File Lake..... Aruak Lake..... Cedar Hedge Lake..... Buck Lake.....	East Bay..... Union..... Mayfield and East Bay..... Carpent..... File Lake..... Whitewater..... Green Lake..... Green Lake.....	Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... Kingsley Sportsmen's Club, Kingsley..... R. N. Hester, Traverse City..... D. E. Hills, File Lake..... C. C. Pray, Mabel..... W. Pennington, Interlochen..... W. Pennington, Interlochen.....	May 15 May 15 May 15 May 18 May 20 May 18 May 18 May 18	160,000 160,000 120,000 160,000 120,000 160,000 160,000 160,000
Ionia county: Grand River..... Woodward Lake.....	Lyons and Portland..... Ronald.....	J. C. Schultz, Portland..... Ira Conkey, Shiloh.....	May 17 May 17	120,000 80,000
Iosco county: Long Lake..... Enola Lake.....	Plainfield..... Plainfield.....	E. C. Luce, Elllake..... G. W. Vrooman, Toledo, O.....	May 19 May 19	160,000 120,000
Kalamazoo county: Viley Lake..... Matteson Lake..... Asylum Lake No. 1..... Asylum Lake No. 2..... Austin Lake.....	Alamo..... Alamo..... Kalamazoo..... Kalamazoo..... Portage.....	H. W. Phillips, Alamo..... H. W. Phillips, Alamo..... J. A. Hoffman, Kalamazoo..... J. A. Hoffman, Kalamazoo..... S. J. Wyckel, Kalamazoo.....	May 16 May 16 May 16 May 16 May 16	80,000 80,000 80,000 120,000 120,000
Kent county: Pine Island Lake..... Camp Lake..... Myers Lake..... Ennons Lake..... Round Lake..... Long Lake.....	Plainfield..... Algonia..... Cedarland..... Caledonia..... Algonia and Solon..... Solon.....	Wm. Valentine, Grand Rapids..... B. H. Putnam, Sparta..... Geo. Myers, Rockford..... C. A. Woodward, Caledonia..... A. H. Sauer, Kent City..... A. H. Sauer, Kent City.....	May 13 May 18 May 20 May 22 May 18 May 18	120,000 120,000 120,000 80,000 80,000 120,000
Lake county: Peach Lake..... Imley Lake..... Chain Lakes..... Star Line Lake.....	Elk..... Elk..... Lake..... Lake.....	Geo. M. Brown, Detroit..... Geo. M. Brown, Detroit..... Geo. M. Brown, Detroit..... Geo. R. Lyons, Hesperia.....	May 18 May 18 May 18 May 18	120,000 120,000 120,000 200,000
Lapeer county: Vanderpoer Lake..... Pleasant Lake..... Long Lake..... Elk Lake.....	Rich..... Attica..... Attica..... Attica.....	E. D. Courtwright, Mayville..... Imley City Fish & Game Club, Imley City..... Imley City Fish & Game Club, Imley City..... Imley City Fish & Game Club, Imley City.....	May 17 May 23 May 23 May 23	120,000 80,000 120,000 120,000

Perch Plants, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lapeer county.—Continued.				
Bass Lake.....	Arcadia.....	Imlay City Fish & Game Club, Imlay C'y	May 23	120,000
Clear Lake.....	Arcadia.....	Imlay City Fish & Game Club, Imlay C'y	May 23	120,000
Rose Lake.....	Arcadia.....	A. D. Conley, Imlay City.....	May 23	120,000
Cranberry Lake.....	Arcadia.....	G. W. Caldwell, Imlay City.....	May 23	120,000
Lenawee county:				
Round Lake.....	Rollin.....	W. E. Alchin, Townley.....	May 22	120,000
Brownell's Lake.....	Rollin and Woodstock.....	F. A. Burns, Addison.....	May 22	80,000
Devil's Lake.....	Woodstock.....	W. J. Hampton & Son, Manitou Beach.....	May 22	120,000
Devil's Lake.....	Woodstock.....	H. E. Hand, Devil's Lake.....	May 22	160,000
Livingston county:				
Whalen Lake.....	Hartland.....	J. T. Watkins, Milford.....	May 23	80,000
Maxfield Lake.....	Hartland.....	T. H. Padley, Milford.....	May 23	80,000
Round Lake.....	Hartland.....	M. D. Linden, Milford.....	May 23	80,000
Manistee county:				
Portage Lake.....	Onekama.....	Hans A. Wendel, Onekama.....	May 17	320,000
Mecosta county:				
Clear Lake.....	Colfax.....	W. H. Redmond, Big Rapids.....	May 15	120,000
Missaukee county:				
Lake Missaukee.....	Reeder and Lake.....	F. D. McGregor, Lake City.....	May 15	160,000
Montcalm county:				
Whitefish Lake.....	Pierson.....	B. S. Davenport, Pierson.....	May 15	120,000
Rock Lake.....	Richland.....	A. B. Stauffer, Vestaburg.....	May 16	160,000
Grass Lake.....	Fairplains.....	Archie Sweers, Shiloh.....	May 17	160,000
Horseshoe Lake.....	Fairplains.....	H. H. Decker, Shiloh.....	May 17	120,000
Town Line Lake.....	Cato and Belvidere.....	C. W. Vining, Lakeview.....	May 17	160,000
5 Lakes in a collection between Ingham and West Lakes.....	Pine.....	Allen House, Coral.....	May 17	180,000
Big Spruce Lake.....	Maple Valley.....	J. A. Freeman, Coral.....	May 17	80,000
Cody Lake.....	Maple Valley.....	J. A. Freeman, Coral.....	May 17	80,000
Duck Pond.....	Maple Valley.....	J. A. Freeman, Coral.....	May 17	80,000
Muskegon county:				
Hills Lake.....	Cassovia.....	C. I. Cold, Bailey.....	May 18	80,000
Hunter's Lake.....	Twin Lake.....	A. U. Quint, Twin Lake.....	May 18	80,000
Crocker Creek and Tribes.....	Cassovia and others.....	Arthur Thomas, Bailey.....	May 18	120,000
Goose Egg Lake.....	Walton.....	E. P. Wadsworth, Twin Lake.....	May 18	80,000
Mc Graw's Lake.....	Menor.....	J. W. Mc Graw, Maitby.....	May 19	120,000

TWENTIETH REPORT—STATE FISHERIES.

Newaygo county: Diamond Lake..... Power Pond at Croton on Muskegon River..... Robinson's Lake..... Little Robinson Lake..... Peck's Lake..... Long Lake..... Dutch Lake..... Crystal Lake.....	Lincoln..... Croton..... Sherman..... Sherman..... Sherman..... Sherman..... Wooster..... Sherman.....	Capt. W. H. Bigelow, Chicago..... Geo. L. Erwin, Grand Rapids..... Chas. Streichhirsch, White Cloud..... Fred Daenzer, White Cloud..... John R. Grant, Fremont..... J. Kemperman, Fremont..... H. Kemperman, Fremont..... Frank Foster, Wooster.....	May 18..... May 18..... May 18..... May 18..... May 18..... May 18..... May 18..... May 18.....	120,000..... 160,000..... 120,000..... 120,000..... 120,000..... 160,000..... 120,000.....
Oakland county: Sears Lake..... Huron River..... Kent Lake..... Commerce Chain of Lakes..... Steepie Hill..... Long Lake..... Moore Lake..... McWhithey Lake..... Kellogg's Lake..... Lake Pettibone.....	Milford..... Milford..... Milford and Lyon..... Milford and Commerce..... Commerce..... White Lake..... Milford..... White Lake..... Highland..... Highland.....	T. H. Padley, Milford..... T. H. Padley, Milford..... T. H. Padley, Milford..... Tom Forbes, Milford..... T. H. Padley, Milford..... R. S. Potts, Milford..... Frank Bailey, Milford..... C. E. Lovejoy, Milford..... W. S. Lovejoy, Milford.....	May 23..... May 23..... May 23..... May 23..... May 23..... May 23..... May 23..... May 23..... May 23.....	80,000..... 80,000..... 80,000..... 120,000..... 80,000..... 80,000..... 80,000..... 80,000..... 80,000.....
Oscola county: Diamond Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	May 15.....	120,000.....
Ottawa county: Cora Lake or Stearn's Bayou..... Spring Lake.....	Robinson..... Spring Lake.....	Walter T. G. Penny, Grand Haven..... Samuel Falls, Spring Lake.....	May 18..... May 18.....	200,000..... 160,000.....
Tuscola county: Cat Lake..... Pelps Lake.....	Dayton..... Dayton.....	M. L. Bird, Mayville..... W. Whitehead, Mayville.....	May 17..... May 17.....	120,000..... 120,000.....
Van Buren county: Spring Lake..... Moon Lake..... Bankson Lake.....	Keeler..... Geneva..... Porter.....	Wm. Hoffman, Hartford..... J. H. Meyer, Iacota..... M. A. Quinlan, Bankson Lake.....	May 16..... May 16..... May 16.....	120,000..... 80,000..... 120,000.....
Washtenaw county: Cassidy Lake..... Mirror Lake..... Big and Little Perch Lake.....	Lyndon.....	Hon. J. Kalmbach, Chelsea..... Hon. J. Kalmbach, Chelsea..... R. H. Killian, Ypsilanti.....	May 22..... May 22..... May 22.....	120,000..... 120,000..... 160,000.....
Total.....				15,360,000.....

PERCH FINGERLINGS, 1911.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Branch county: Branch Creek.....			May 8	375
Coldwater Chain of Lakes.....	Coldwater and Ovid.....	Branch Co. Rod & Gun Club, Coldwater. Branch Co. Rod & Gun Club, Coldwater.	May 8	375
Ingham county: Pine Lake.....	Mendon.....	E. V. Chilson, Lansing.....	Aug. 9	600
Jackson county: Portage Lake.....	Waterloo and Henrietta.....	Geo. E. Beebe, Jackson.....	Oct. 12	600
Kent county: Reed's and Fish Lakes.....	Grand Rapids.....	L. J. De Lamarter, Grand Rapids.....	Aug. 8	525
Oakland county: Orchard Lake.....	West Bloomfield.....	F. S. Campbell, Detroit.....	Aug. 28	1,200
Van Buren county: Maple Lake.....	Paw Paw and Antwerp.....	R. D. Loveland, Paw Paw.....	Aug. 10	375
Wayne county: Eloise Pond.....	Nankin.....	Dr. J. J. Marker, Eloise.....	Aug. 25	800
Coomer Lake.....	Van Buren.....	A. E. Smith, Belleville.....	Aug. 25	1,000
Huron River.....	Van Buren.....	A. E. Smith, Belleville.....	Aug. 25	1,000
Total.....				6,850

BLUEGILLS AND SUNFISH PLANTS, 1911.
FINGERLINGS, YEARLINGS AND ADULTS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Branch county: Coldwater River and chain of small lakes connected by this River.....	Coldwater.....	F. T. Tappan, Coldwater.....	Aug. 23	600
Ingham county: No Name.....	.....	Chas. M. Norton, Lansing.....	July 19	1,200
Jackson county: Artificial Lake Lagoon in Loomis Park..... Portage Lake.....	City of Jackson..... Waterloo and Henrietta.....	W. W. Todd, Jackson..... Geo. E. Beebe, Jackson.....	June 24 Oct. 12	100 350
Total.....				2,250

TWENTIETH REPORT—STATE FISHERIES.

TOTALS OF PLANTS FOR THE YEAR 1911.

Brook Trout, Fry.....	5,665,000
Brook Trout, Fingerlings.....	10,000
Brook Trout, Yearlings.....	300
Rainbow Trout, Advanced Fry.....	2,404,500
Rainbow Trout, Fingerlings.....	156,000
Brown Trout, Fry and Advanced Fry.....	300,000
Black Spotted Trout, Fry.....	20,000
Lake Trout, Fry and Advanced Fry.....	3,932,000
Landlocked Salmon, Fingerlings.....	13,000
Small Mouth Black Bass, Advanced Fry.....	400,000
Small Mouth Black Bass, Fingerlings Nos. 1, 2, 3 and 4.....	156,100
Large Mouth Black Bass, Advanced Fry.....	1,003,200
Large Mouth Black Bass, Fingerlings Nos. 1, 2, 3 and 4.....	684,875
Wall-eyed Pike, Fry.....	38,920,000
Perch, Fry.....	15,360,000
Perch, Fingerlings.....	6,850
Bluegills and Sunfish, Fingerlings, Yearlings and Adults.....	2,250

BROOK TROUT PLANTS, 1912.

FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alger county:				
Au Train River.....	Rock River.	H. R. Harris, Marquette.....	April 26	15,000
Brs. of No. Manistique River.....	Munising	H. A. St. John, Marquette.....	April 26	6,000
Anna River.....	Munising	H. A. St. John, Marquette.....	April 26	9,000
Miner's Run.....	Munising	H. A. St. John, Marquette.....	April 26	3,000
Bohamian Creek.....	Rock River.	H. A. St. John, Marquette.....	April 26	4,500
Furnace Creek.....	Munising	H. A. St. John, Marquette.....	April 26	3,000
Stutt's Creek.....	Munising	H. A. St. John, Marquette.....	April 26	3,000
Snapneck Creek.....	Rock River.	H. A. St. John, Marquette.....	April 26	3,500
Indian River.....	Several.	H. R. Harris, Marquette.....	April 26	6,000
Little Creek.....		Jas. G. Gibson, Munising.....	May 14	12,000
Big Indian River.....		Geo. Wileys, Detroit.....	May 14	4,000
Bull Creek.....		W. E. Cox, Wetmore.....	May 14	30,000
Hartney's Creek.....	Au Train and Munising.	W. E. Cox, Wetmore.....	May 14	6,000
Red Jack's Springs and Creeks.....	Munising	W. E. Cox, Wetmore.....	May 14	6,000
Robinson's Creek.....	Au Train	W. E. Cox, Wetmore.....	May 14	4,000
Bull Creek.....	Munising	W. F. Cox, Wetmore.....	May 14	4,000
Alcona county:				
Sucker Creek.....	Alcona	Oscar Larson, Spruce.....	Mar. 30	6,000
Muskat Creek.....	Millen.....	Richard Collins, Alpena.....	Mar. 30	12,000
Newton Creek.....	Caledonia.	C. W. Edwards, Alpena.....	Mar. 30	6,000
Mitchell Creek.....	Mitchell	C. W. Edwards, Alpena.....	Mar. 30	4,000
Little Wolf Creek.....	Cuners	D. D. Hanover, Alpena.....	Mar. 30	6,000
Silver Creek.....	Caledonia.	D. D. Hanover, Alpena.....	Mar. 30	6,000
Wildcat Creek.....	Caledonia.	Jas. Briseiden, Alpena.....	Mar. 30	6,000
West Branch Creek.....	Caledonia.	W. A. Blackburn, Alpena.....	Mar. 30	6,000
Little Gilchrist Creek.....	Caledonia.	R. E. Ellsworth, Alpena.....	Mar. 30	4,000
Pine River.....	Millen.	Daniel Lavier, Lincoln.....	Mar. 29	8,000
Bluff Creek.....	Hawes	W. S. Linton, Saginaw.....	Mar. 29	10,000
West Branch Creek.....	27 N. of 6 and 7 E.	W. S. Linton, Saginaw.....	Mar. 29	10,000
Sucker Creek.....	Alcona	C. W. Luce, East Tawas.....	Mar. 29	12,000
Black River.....	27 N. of R. 8 E.	Geo. Burt, Harrisville.....	April 16	10,500
No. Branch Creek.....	Several.	John Macgregor, Harrisville.....	April 16	6,000
West Branch.....	Hawes	A. L. Noyes, Harrisville.....	April 16	4,500
Mill Creek.....	Harrisville.		April 16	3,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Allegan county: Silver Creek.....	Cooper.....	J. H. Sligar, Kalamazoo.....	Mar. 11	3,000
Chart, Abrams, Delano and Neely's Creeks.....	Gun Plains.....	Wm. Crispe, Plainwell.....	Mar. 8	4,500
Plummer Creek.....	Ganges.....	Ed. Anderson, Plainwell.....	Mar. 8	6,000
Swan Creek.....	Mann's.....	N. G. Nelson, Fennville.....	Mar. 18	3,000
Adsit Creek.....	Valley.....	W. H. Whitbeck, Fennville.....	Mar. 18	7,500
Bayley March Creek.....	Watson.....	A. L. Whitbeck, Fennville.....	Mar. 25	3,000
Rodger's Creek.....	Cheshire and Valley.....	Geo. N. Dean, Shelbyville.....	Mar. 7	1,500
Bear Creek.....	Allegan.....	Fitz Hamilton, Allegan.....	Mar. 7	3,000
Sand Creek.....	Monteray and Heath.....	Herbert H. Menery, Allegan.....	Mar. 7	4,500
Allegan county: Upper South Branch.....	Heath and Valley.....	Herbert Baker, Allegan.....	Mar. 7	3,000
No. Name.....	Several.....	L. F. Strich, Allegan.....	Mar. 30	10,000
Devil River.....	Long Rapids.....	Dr. W. E. Carr, Alpena.....	Mar. 30	6,000
Beaver Creek.....	Sanborn.....	John Nilsson, Leer.....	Mar. 30	7,500
Scott Creek.....	Ossineke.....	C. W. Luce, East Tawas.....	April 16	10,000
Trout Creek.....	Ossineke.....	C. W. Luce, East Tawas.....	Mar. 30	4,000
Godfrey Creek.....	Alpena.....	C. W. Edwards, Alpena.....	Mar. 30	2,000
Davis Creek.....	Green.....	J. Donovan, Alpena.....	Mar. 30	4,000
Berlinski Creek.....	Ossineke.....	Robt. H. Rayburn, Alpena.....	Mar. 30	6,000
Berlinski Creek.....	Sanborn and Ossineke.....	Robt. E. Ellsworth, Alpena.....	Mar. 30	6,000
Sanborn.....	Sanborn.....	Robt. E. Ellsworth, Alpena.....	Mar. 30	10,000
Antrim county: Rackett River.....	Chestonia.....	D. H. Meeker, Alba.....	April 8	2,000
Jordan River.....	Chestonia.....	R. C. Bennett, Alba.....	April 8	6,000
Landslide Creek.....	Chestonia.....	F. M. Parker, Alba.....	April 8	10,000
Rackett River.....	Chestonia.....	Albert A. Strickland, Alba.....	April 8	2,000
Cascade Creek.....	Chestonia.....	Albert A. Strickland, Alba.....	April 8	4,000
Jordan River.....	Chestonia.....	Orville W. Wittse, Alba.....	April 8	4,000
Little Manistee River.....	Near Deward.....	Wm. Weaver & Son, Elmira.....	April 9	8,000
Headwaters of Cedar River.....	Mancelona.....	Wm. Brewer, Mancelona.....	April 12	16,000
Cold Creek.....	Custer.....	C. L. Bailey, Mancelona.....	April 12	2,000
Finch Creek.....	Custer and Helena.....	J. W. Verdier, Mancelona.....	April 12	4,000
Bartholomew Creek.....	Jordan.....	Carl Stroebel, East Jordan.....	April 10	3,000
Gould Creek.....	Helena.....	H. S. Pinney, East Jordan.....	April 10	3,000
Spencer Creek.....	Keareney and Chestonia.....	Chas. H. Coy, Alden.....	April 10	3,000
Cedar River.....	Custer.....	A. B. Wooten, Bellaire.....	April 10	6,000
Cold Creek.....	Banks.....	A. B. Wooten, Bellaire.....	April 10	3,000
Bowser Creek.....	Banks and Marion.....	Henry Stemik, Ellsworth.....	April 10	3,000
One Creek.....	Banks and Marion.....	L. Van Skiver, Ellsworth.....	April 10	4,500

St. Clair Creek.....	Banks.....	Van Skiver, Ellsworth.....	April 10	3,000
Noyes Creek.....	Banks.....	W. A. Ross, Ellsworth.....	April 10	1,500
Wilkinson Creek.....	Central Lake and Banks.....	W. S. Richardson, Central Lake.....	April 10	3,000
Norman Creek.....	Central Lake.....	W. H. Uphogrove, Central Lake.....	April 10	1,500
Shanty Creek.....	Custer.....	A. B. Woolen, Bellaire.....	April 10	1,500
Arenac county:				
Miles Creek.....	Deep River.....	Francis Avery, Standish.....	April 6	4,000
No. Cedar and Willis Creeks.....	Gibson.....	Francis Avery, Standish.....	April 6	4,000
No. Br. of Deep River.....	Gibson.....	Francis Avery, Standish.....	April 6	4,000
Lindy Creek.....	Arenac.....	Francis Avery, Standish.....	April 6	4,000
Warner Creek.....	Deep River.....	Francis Avery, Standish.....	April 6	4,000
Cooler Creek.....	Arenac.....	Francis Avery, Standish.....	April 6	4,000
Dernno Creek.....	Maple Ridge.....	Francis Avery, Standish.....	April 6	4,000
Trib. to Deep River.....	Standish.....	Francis Avery, Standish.....	April 6	4,000
South Omer Creek.....	Deep River.....	Francis Avery, Standish.....	April 6	6,000
South Omer Creek.....	Standish.....	Francis Avery, Standish.....	April 6	4,000
Cooper Creek.....	Head in Deep River.....	Francis Avery, Standish.....	April 6	4,000
Deep River.....	Adams.....	Francis Avery, Standish.....	April 6	8,000
Hoptles Creek.....	Deep River.....	Jas. R. Adams, Sterling.....	April 6	2,000
Stier's Creek.....	Several.....	Jas. R. Adams, Sterling.....	April 6	4,000
Pine River.....	Deep River.....	Jas. R. Adams, Sterling.....	April 6	6,000
Parmelee Creek.....	Deep River.....	Jas. R. Adams, Sterling.....	April 6	4,000
Barry county:				
Trib. to Wanandoger Creek.....	Assyria.....	Hugh S. Jones, Bellevue.....	Mar. 12	1,500
Ellis Brook.....	Assyria.....	Hugh S. Jones, Bellevue.....	Mar. 12	4,500
Bagley Creek.....	Orangeville.....	A. D. Shep, Dozier.....	Mar. 26	3,000
Tributary to Gull Lake.....	Prairieville.....	Arch Spotsman, Cressey.....	Mar. 26	1,500
Glass Creek.....	Severa.....	Dougal Campbell, Cloverdale.....	Mar. 26	4,500
Tribs. to Thornapple River.....	Thornapple.....	A. C. Hindman, Grand Rapids.....	April 15	1,500
Kelly Creek.....	Baltimore.....	C. W. Mixer, Hastings.....	April 15	1,500
Upper Cedar Creek.....	Baltimore.....	C. W. Mixer, Hastings.....	April 15	6,000
West Creek.....	Rutland and Hastings.....	C. W. Mixer, Hastings.....	April 15	3,000
Mc Collum Creek.....	Hope.....	C. W. Mixer, Hastings.....	April 15	7,500
Tamarac Creek.....	Baltimore.....	C. W. Mixer, Hastings.....	April 15	3,000
Cedar Creek.....	Severa.....	C. W. Mixer, Hastings.....	April 15	3,500
Trib. to Cedar Creek.....	Severa.....	W. J. Michael, Hastings.....	April 15	7,500
High Bank Creek.....	Severa.....	J. H. Niess, Hastings.....	April 15	3,000
Quaker Creek.....	Maple Grove.....	A. J. Houghalin, Morgan.....	Mar. 20	6,000
		L. Z. Slosson, Charlotte.....	Mar. 20	3,000
Benzie county:				
South Branch.....	Platte.....	L. H. Stacey, Honor.....	April 13	2,000
Brundage Creek.....	Inland.....	L. H. Stacey, Honor.....	April 13	2,000
Colton Creek.....	Homesead.....	L. H. Stacey, Honor.....	April 13	2,000
North Branch of Platte River.....	Platte.....	L. H. Stacey, Honor.....	April 13	12,000
Platte River.....	Severa.....	F. A. Mitchell, Manistee.....	April 13	18,000
Other Creek.....	Lake.....	Fred Ballitz, Honor.....	April 13	2,000
Platte River Tribs.....	Platte.....	Fred Ballitz, Honor.....	April 13	2,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Benzie county.—Continued.				
Minor Creek.....	Benzie.	W. B. Covey, Honor.	April 13	2,000
Platte River.....	Homestead and Benzie.	W. B. Covey, Honor.	April 13	20,000
Brezolsley Creek.....	Benzie.	W. B. Covey, Honor.	April 13	2,000
Silver Creek.....	Homestead	W. B. Covey, Honor.	April 13	2,000
Coleson Creek.....	Homestead	W. B. Covey, Honor.	April 13	2,000
Betsy River.....		F. A. Mitchell, Manistee.	April 13	25,500
Carter Creek.....	Inland and Homestead.	N. J. Rovick, Thompsonville.	April 24	6,000
Tribbs. to Platte River.....		D. H. Power, Empire.	May 13	30,000
Baraga county:				
Canal Creek.....	Spurr	Peter Trudell, Jr., Negaunee	April 29	4,000
Outlet to Three Lakes.....	Spurr	Peter Trudell, Jr., Negaunee	April 29	4,000
Nestoria Creek.....	Spurr	Peter Trudell, Jr., Negaunee	April 29	4,000
Mc Donald Creek.....	Spurr	Peter Trudell, Jr., Negaunee	April 29	4,000
Outlet to Trout Lake.....	Spurr	Peter Trudell, Jr., Negaunee	April 29	4,000
Cliff Creek.....		Peter Trudell, Jr., Negaunee	April 29	4,000
Clear Creek.....	Covington	Sidna w. Hunting & Fishing Club, Sidna w	May 16	2,000
Rayne River.....	Arvon	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Huron River.....	Arvon and others.	Silver River Rod & Gun Club, L'Anse.	May 10	10,000
Sturgeon River.....	Several.	Silver River Rod & Gun Club, L'Anse.	May 10	12,000
Rock River.....	Covington and Baraga.	Silver River Rod & Gun Club, L'Anse.	May 10	8,000
Silver River.....	Arvon and Spurr	Silver River Rod & Gun Club, L'Anse.	May 10	10,000
Silver River.....	Arvon and Spurr	Silver River Rod & Gun Club, L'Anse.	May 10	12,000
Fall River.....	Several.	Silver River Rod & Gun Club, L'Anse.	May 10	8,000
Meadow Brook.....	L'Anse.	Silver River Rod & Gun Club, L'Anse.	May 10	4,000
Clear Creek.....	L'Anse and Baraga	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Beautos Creek.....	L'Anse and Baraga	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Gemacine Creek.....	Baraga.	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Steinback Creek.....	Baraga.	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Duck Creek.....	L'Anse.	Silver River Rod & Gun Club, L'Anse.	May 10	6,000
Cote's Creek.....	L'Anse.	Silver River Rod & Gun Club, L'Anse.	May 10	2,000
Sidna w. Creek.....	48-52	E. W. Mac Pherran, Marquette.	May 10	20,000
Perch Creek.....	48-52	E. W. Mac Pherran, Marquette.	May 14	8,000
Streams about 274 1/2 Mile Post	48-54	E. W. Mac Pherran, Marquette.	May 14	4,800
Branch of Sturgeon River.....	48-54	E. W. Mac Pherran, Marquette.	May 14	4,000
Clare county:				
Cedar Creek.....	Franklin.	W. E. Green, Harrison	April 5	14,000
Floodwood Creek.....	Summerfield	W. E. Green, Harrison	April 5	6,000
Smith Creek.....	Greenwood	Geo. J. Cummins, Harrison	April 5	4,000
No. Br. of Tobacco River.....	Hayes..	Geo. J. Cummins, Harrison	April 5	24,000
Town Line Creek.....	Hayes..	Andrew Hagen, Harrison	April 5	2,000
Green and Glishwash Creeks.....	Redding.	Wm. Blue, Temple	April 9	24,000
Five Lakes Creek.....	Grant.	D. W. Canfield, Clair	Mar.	4,500

So. Br. Tobacco River.....	Clare, Grant and Hatton	A. R. Canfield, Clarv.....	Mar. 26	12,000
Tobacco River, Clear Creek and others.	Arthur and Hatton	Wm. C. Cornell, Saginaw	Mar. 26	18,000
Middle Branch.....	Arthur and Hatton	E. A. Anderson, Clare	Mar. 26	12,000
Clear Brook.....	Arthur	Jas. S. Bicknell, Clare	Mar. 26	6,000
Halshead Creek.....	Grant	J. M. Davis, Clare	Mar. 26	3,000
Mc Kinley Creek.....	Surrey	F. C. Sanford, Clare	Mar. 26	3,000
Br. of So. Br. of Tobacco River.....		Fuller & Harris, Farwell	Mar. 26	3,000
Berrien county:				
Estes Creek.....	Buchanan	James F. Scott, Buchanan	Mar. 18	1,500
Kelsey Creek.....	Sodus	James E. Scott, Buchanan	Mar. 18	3,000
Farmer Creek.....	Watervliet	Ed. Gast, St. Joseph	Mar. 18	4,500
Mill Creek.....	Pipestone	Ed. Gast, St. Joseph	Mar. 18	3,000
Wollock Creek.....	Oronoko	J. W. Isbell, St. Joseph	Mar. 18	1,500
Hess Creek.....	Pipestone	J. W. Isbell, St. Joseph	Mar. 18	1,500
Pearl Creek.....	Pipestone	J. W. Isbell, St. Joseph	Mar. 18	1,500
Puнам Creek.....	Pipestone	J. W. Isbell, St. Joseph	Mar. 18	1,500
Howard Creek.....	Three Oaks	J. W. Isbell, St. Joseph	Mar. 18	4,500
Smith Creek.....	Lake	J. W. Isbell, St. Joseph	Mar. 18	3,000
Shedler Creek.....	Sodus	Claude Herring, St. Joseph	Mar. 18	7,500
Schafer Creek.....	Lincoln	Mark Herring, St. Joseph	Mar. 18	4,500
Taylor Creek.....	Lincoln	A. F. Herring, St. Joseph	Mar. 18	1,500
Graham Creek.....	Benton	A. F. Herring, St. Joseph	Mar. 18	3,000
Long Branch of Blue Creek.....	Benton	A. F. Herring, St. Joseph	Mar. 18	3,000
Hog Creek.....	Benton	Fred Herring, St. Joseph	Mar. 18	4,500
Katie and Crystal Springs	Bainbridge	D. B. Wallace, Benton Harbor	Mar. 18	6,000
Blue Creek.....	Pipestone	John De Temple, Benton Harbor	Mar. 18	4,500
Collins Creek.....	Pipestone	S. M. Clawson, Eau Clair	Mar. 18	3,000
Koohne Creek.....	Pipestone	S. M. Clawson, Eau Clair	Mar. 18	3,000
Calhoun county:				
Dickinson Creek.....	Marshall	E. J. Allen, Battle Creek	Mar. 12	3,000
Talmadge Brook.....	Marshall and Fr-donia	H. H. Taylor, Kalamazoo	Mar. 14	3,000
Tower Brook.....	Emmett	L. H. Tower, M. D., Battle Creek	Mar. 14	4,500
Silver Creek.....	Battle Creek	L. H. Tower, M. D., Battle Creek	Mar. 14	4,500
Seven Mile Brook.....	Leroy	W. H. Skinner, Battle Creek	Mar. 14	4,500
Shannon Creek.....	Leroy	M. S. Emmons, East Leroy	Mar. 14	3,000
Putnam Creek.....	Athens	Fred S. Hall, East Leroy	Mar. 14	1,500
Barber Creek.....	Athens	F. C. Woodruff, Athens	Mar. 15	1,500
Pidgeon Creek.....	Marshall	J. C. Gaw, Athens	Mar. 15	3,000
Newberry Creek.....	Newton	R. R. Hicks, Battle Creek	Mar. 12	3,000
Minges Brook.....	Bedford	W. B. Johnston, Battle Creek	Mar. 12	3,000
Bascon Creek.....	Bedford	S. J. Rathbun, Battle Creek	Mar. 12	4,500
Kesler's Brook.....	Emmett	L. M. Turner, Battle Creek	Mar. 12	3,000
Gulf Creek.....	Emmett	Walter Judd, Battle Creek	Mar. 12	3,000
Helmier's Brook.....	Battle Creek	E. R. Newman, Battle Creek	Mar. 12	1,500
Eagle Brook.....	Emmett	Geo. H. Williams, Battle Creek	Mar. 12	3,000
Harper Creek.....	Emmett	Geo. H. Williams, Battle Creek	Mar. 12	1,500
		C. E. Kistler, Battle Creek	April 27	6,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Class county:				
Thorp Creek.....	Jefferson.....	G. F. Harmon, Cassopolis.....	Mar. 18.....	1,500.....
Mc Nab's or Jones Creek.....	LaGrange and Penn.....	C. H. Kimmelt, Cassopolis.....	Mar. 18.....	3,000.....
Thorp Creek.....	Jefferson.....	C. H. Kimmelt, Cassopolis.....	Mar. 18.....	3,000.....
Haisell Creek.....	Jefferson.....	C. H. Kimmelt, Cassopolis.....	Mar. 18.....	3,000.....
Miller Creek.....	Pokagon.....	John Wiant, Berrien Center.....	Mar. 18.....	3,000.....
Pokagon Creek.....	Pokagon.....	Fred Phillips, Dowagiac.....	Mar. 18.....	3,000.....
Mc Kinney Creek.....	Pokagon.....	Fred Phillips, Dowagiac.....	Mar. 18.....	3,000.....
Pravine Creek.....	Pokagon.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Miller Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Garman Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Kenny Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Starrett Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Broadhurst Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	3,000.....
Silver Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Clemlenon Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Anthony Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Yaw Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Mc Ombert Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Glenwood Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Hampton Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	Mar. 18.....	1,500.....
Wilson Creek.....	Newberg.....	Hugh Mc Kee, Marcellus.....	Mar. 18.....	1,500.....
Rocky River.....	Marcellus.....	C. S. Jones, Marcellus.....	Mar. 8.....	1,500.....
Charlevoix county:				
Boyne River.....	Boyne Valley.....	Wm. Weaver & Son, Elmira.....	April 9.....	12,000.....
Deer Creek.....	Boyne Valley.....	Chas. Galster, Boyne Falls.....	April 12.....	10,000.....
Finlay Creek.....	Boyne Valley.....	Chas. Galster, Boyne Falls.....	April 12.....	4,000.....
North and South Boyne River.....	Boyne Valley.....	Chas. Galster, Boyne Falls.....	April 12.....	16,000.....
Warner Creek.....	Wilson and Warner.....	Terry S. Barber, Boyne City.....	April 12.....	6,000.....
Deerlick Creek.....	Boyne Valley.....	Terry S. Barber, Boyne City.....	April 12.....	4,000.....
Collins Creek.....	Boyne Valley.....	Terry S. Barber, Boyne City.....	April 12.....	4,000.....
Murray Creek.....	South Arm.....	W. A. Stroebel, East Jordan.....	April 10.....	3,000.....
Rauney, Cooper and Liskum Creeks.....	South Arm.....	Lorence O. Isman, Ellsworth.....	April 10.....	7,500.....
Chesapeake county:				
Lapareil Creek.....	Inverness.....	Yakama Club, Cheboygan.....	April.....	20,000.....
Grass Bay Stream.....	Benton.....	Albert T. Mc Clinch, Cheboygan.....	April.....	4,000.....
Elliott Stream.....	Benton.....	August Frelkorn, Cheboygan.....	April.....	6,000.....
Little Black Creek.....	Beaugrand.....	W. H. Borrow, Cheboygan.....	April.....	4,000.....
Elliott Creek.....	Benton.....	Geo. A. Barber, Cheboygan.....	April.....	8,000.....
Little Black Creek.....	Beaugrand.....	Geo. A. Barber, Cheboygan.....	April.....	6,000.....
Little Milligan Creek.....	Benton.....	B. C. Paquette, Cheboygan.....	April.....	4,000.....
Myers Creek.....	Benton.....	Dr. Armour, Cheboygan.....	April.....	4,000.....
Nigger Creek.....	Burt.....	C. T. Snowden, Cheboygan.....	April.....	6,000.....

Carp Creek.....	Munro and Burt.....	Edwin A. Riggs, Topinabee.....	April	2	4,000
Nigger Creek.....	Burt and Monroe.....	Edwin A. Riggs, Topinabee.....	April	2	8,000
Cedar Creek.....	Tuscarora and Littlefield.....	J. W. Lester, Indian River.....	April	2	8,000
Stoney Creek.....	Walker and Kochler.....	J. W. Lester, Indian River.....	April	2	19,000
Lower Little Pigeon River.....	Kochler and Walker.....	J. W. Lester, Indian River.....	April	2	12,000
E. Br. of Big Pigeon River.....	Tuscarora.....	Gerard King, Indian River.....	April	2	15,000
Pigeon River.....	Ellis and Kochler.....	C. A. Campbell, Afion.....	April	2	12,000
Big Pigeon River.....	Kochler.....	Clyde King, Indian River.....	April	2	12,000
W. Br. of Lower Little Pigeon River.....	Kochler and Walker.....	Clyde King, Indian River.....	April	2	12,000
Little Pigeon River.....	Kochler.....	Clyde King, Indian River.....	April	2	18,000
East Branch of Little Sturgeon.....	Munda.....	C. E. Cornwell, Wolverine.....	April	2	16,000
Sturgeon River.....	Waverly.....	J. M. Clark, Onaway.....	April	16	6,000
Mulligan Creek.....	Forest and Waverly.....	J. M. Clark, Onaway.....	April	16	3,000
Welcher Creek.....	Forest.....	J. M. Clark, Onaway.....	April	16	3,000
Mc Pherson Creek.....	Forest.....	J. M. Clark, Onaway.....	April	16	3,000
Gregg Creek.....	Forest.....	J. M. Clark, Onaway.....	April	16	9,500
Davis Creek.....	Forest.....	J. M. Clark, Onaway.....	April	16	3,000
Giller Creek.....	Forest.....	J. M. Clark, Onaway.....	April	16	3,000
Silver Creek.....	Severals.....	Chas. F. Davis, Burr Lake.....	April	12	4,000
Upman's Creek.....	Mackinaw.....	E. R. Pierce, Mackinaw.....	April	12	6,000
Mill Creek.....					
Chippewa county:					
Headwaters of the Pine River.....	Rudyard.....	A. E. Marriott, Soo.....	May	11	20,000
Spring Creek.....	Pickford.....	Adelot Desormeau, Keiden.....	May	7	10,000
Desnetaux Creek.....	Pickford.....	Dr. J. A. Cameron, Pickford.....	May	8	10,000
Grant's Creek.....	Superior.....	Robt. P. Hudson, Soo.....	May	10	10,000
Club Creek.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April	10	7,500
Bisquit Creek.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April	10	6,500
Trout Brook.....	Rudyard and Trout Lake.....	J. C. Suss, Rudyard.....	April	10	6,000
Bear Creek.....	Rudyard.....	J. C. Suss, Rudyard.....	April	10	6,000
E. Br. of Washkey River.....	Doster Lake.....	F. L. Everling, Brimley.....	May	14	14,000
Trapper's Creek.....	Trout Lake.....	Chase S. Osborn, Soo.....	May	14	12,000
Sweetbriar Creek.....	Rudyard.....	Chase S. Osborn, Soo.....	May	14	12,000
St. Mary's River.....		Mich. Fish Commission, Detroit.....	May	15	41,000
Clinton county:					
Lost Creek.....	Dallas.....	J. B. Miller, Pewamo.....	Mar.	12	1,500
Fuller Creek.....	Dallas.....	J. B. Miller, Pewamo.....	Mar.	12	2,000
Jacmunson Creek.....	Eagle.....	F. L. Berry, Grand Ledge.....	May	10	6,000
Crawford county:					
Au Sable River.....	Severals.....	F. B. Dickerson, Detroit.....	April	4	48,000
E. Br. of Au Sable.....	Graying.....	W. B. Burton, Graying.....	April	4	30,000
No. Br. of Au Sable.....	Chester and Maple Forest.....	W. B. Burton, Saginaw.....	April	4	30,000
No. Br. of Au Sable.....	Maple Forest.....	Paul F. H. Morley, Saginaw.....	April	4	16,000
Big Creek.....	Maple Forest.....	T. E. Douglas, Lovells.....	April	4	16,000
Big Creek.....	Maple Forest.....	P. J. Welch, Lewiston.....	April	4	16,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Crawford county.—Continued.				
Beaver Creek	Maple Forest	Geo. H. Boyd, Atlanta	April 6	8,000
So. Br. of Au Sable River and tribs	Several	Orlando F. Barnes, Roscommon	April 6	50,000
Headwaters of Manistee River	T. 28, R. 4 W.	B. F. Jones, Albion	April 8	30,000
Au Sable River	Grayling	J. C. Burton, Grayling	April 4	40,000
Delta county:				
Carr Creek	Garden	Lewis Cannon, Uno	May 14	4,000
W. Br. of Bark River	Several	J. H. Boyle, Bark River	April 24	4,500
Bark River	Several	J. H. Boyle, Bark River	April 24	4,500
E. Br. of Bark River	Several	J. H. Boyle, Bark River	April 24	3,500
Osgontz Creek	Mason	W. R. Calloway, Minneapolis	April 24	7,500
Scott's Creek	Several	W. R. Calloway, Minneapolis	April 24	7,500
Thompson Creek	Several	W. R. Calloway, Minneapolis	April 24	7,500
W. Br. of Fish Dam River	Nahma	F. W. Goode, Nahma	April 19	3,000
Little Black Creek	Nahma	F. W. Goode, Nahma	April 19	3,000
Mallman Creek	Nahma	F. W. Goode, Nahma	April 19	3,000
Squaw Creek	Cornea and Baldwin	F. W. Goode, Nahma	April 19	3,000
Ten Mile Creek	Ford River	Timothy Killian, Escanaba	April 19	7,500
Rapid River	Several	Timothy Killian, Escanaba	April 19	9,000
Day's River	Brampton	Timothy Killian, Escanaba	April 19	12,000
Banks Brook	Wells	Timothy Killian, Escanaba	April 19	9,000
Bark River	Bark River	Timothy Killian, Escanaba	April 19	4,500
Walker Brook	Wells	Timothy Killian, Escanaba	April 19	6,000
Garden Creek	Garden	Timothy Killian, Escanaba	April 19	7,500
Branches of Sturgeon River	Nahma	Timothy Killian, Escanaba	April 19	10,500
Tacooish River	Masonville	Timothy Killian, Escanaba	April 19	10,500
Furnish Brook	Masonville	Timothy Killian, Escanaba	April 19	12,000
Shell Brook	Masonville	Timothy Killian, Escanaba	April 19	7,500
Dickinson county:				
Headwaters of Ford River	Sagola	H. M. Boll, Channing	April 24	9,000
Ford River	Sagola	W. W. Pritchard, Channing	April 24	7,500
Ford River	Sagola	Chas. Gustafson, Channing	April 24	7,500
Outlet from Sawyer Lake	Sagola	R. F. Boll, Channing	April 24	1,500
Squaw Creek	Sagola	R. F. Boll, Channing	April 24	1,500
Blueberry Creek	Sagola	H. M. Boll, Channing	April 24	1,500
Black or Webber's Creek	Sagola	Thos. Brady, Channing	April 24	4,500
Bear Creek or Breen Creek	Waucedah	H. Vielmetti, Loretto	April 24	4,500
Sturgeon River	Waucedah	C. Baxter, Loretto	April 24	4,500
Black Creek	Waucedah	A. J. Wellin, Loretto	April 24	7,500
No Name	Waucedah	J. J. Legendie, Norway	April 24	4,500
Fern Creek	Norway	Raymond Turner, Norway	April 24	3,000
Beaver Creek	Waucedah	Pan Vanitvelt, Waucedah	April 24	4,500
Cassidy Creek	Waucedah	Pan Vanitvelt, Waucedah	April 24	4,500

Alberta Creek.....	Norway.....	J. E. Quarnstrom, Iron Mountain.	April 24	3,000
Badwater Creek.....	Breitung.....	J. E. Quarnstrom, Iron Mountain.	April 24	3,000
Merriman Creek.....	Breitung.....	Jos. W. Conie, Waucedah.	April 24	7,500
Brown Creek.....	Norway and Waucedah	W. F. Dody, Norway.	April 24	6,000
Mitchell's Creek.....	Norway and Felch.	A. F. Brackett, Norway.	April 24	4,500
No. Br. of Cassidy Creek.	Norway.....	G. W. Olsen, Norway.	April 24	4,500
Water Works Creek.....	Waucedah.....	W. J. Turner, Vulcan.	April 24	3,000
Hay and Red Dam Creeks	Norway.....	T. Killian, Escanaba.	April 24	6,000
Pine Creek.....	West Branch.....	T. Killian, Escanaba.	April 19	7,500
Campbell Brook.....				
Big Brook.....				
Eaton county:				
Spring Brook.....		C. A. Snider, Eaton Rapids.	Mar. 21	4,500
Gale Creek.....		C. A. Snider, Eaton Rapids.	Mar. 21	7,500
Emmet county:				
Maple River and Tributaries.	Several.....	J. W. Hunter, Grand Rapids.	April 12	100,000
Carp River.....	Carp Lake.....	O. C. Cope, Carp Lake.	April 12	10,000
Carp River.....	Carp Lake.....	E. R. Pierce, Mackinaw.	April 12	10,000
Goodrich Creek.....	Littlefield.....	C. R. Ruggles, Oden.	April 12	6,000
Curtis Creek.....	Littlefield.....	Wm. L. Curtis, Petoskey.	April 12	6,000
Heber Creek.....	Little Trance.....	Wm. L. Curtis, Petoskey.	April 12	4,000
Tannery Creek.....	Bear Creek.....	Geo. C. Braun, Petoskey.	April 12	4,000
Bear Creek.....		Geo. C. Braun, Petoskey.	April 12	16,000
Gogebic county:				
Branch of Presque Isle River.	48-14.....	E. W. Mac Pherran, Marquette.	May 14	10,000
Tributary to Lake Ruth	48-15.....	E. W. Mac Pherran, Marquette.	May 14	6,000
Mud Creek.....	Wakefield and Marenisco	M. M. Riley, Milwaukee.	May 6	6,000
Big Presque Isle River.	Several.....	M. M. Riley, Milwaukee.	May 6	14,000
Little Presque Isle River.	Several.....	M. M. Riley, Milwaukee.	May 6	10,000
Cherry Creek.....	Several.....	M. M. Riley, Milwaukee.	May 6	8,000
Lula Creek.....	Wakefield.....	M. M. Riley, Milwaukee.	May 6	2,000
Forb's Brook.....	Ironwood.....	Harry Barr, Ironwood.	May 1	4,000
Clover Creek.....	Marenisco.....	D. E. Sutherland, Sherwood.	May 1	4,000
Foster's Brook.....	Ironwood.....	D. E. Sutherland, Sherwood.	May 1	4,000
Dandy Brown's Brook.	Ironwood.....	D. E. Sutherland, Sherwood.	May 1	2,000
Pidgeon Creek.....	Ironwood.....	Jas. Sampson, Ironwood.	May 1	2,000
Ryan's Creek.....	Ironwood.....	Jas. Sampson, Ironwood.	May 1	4,000
Hazel Creek.....	Ironwood.....	Pat Mullens, Ironwood.	May 1	4,000
Sampson's Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Honey Moon Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Nine Mile Creek.....	Bessemer.....	O. F. Stabler, Ironwood.	May 1	2,000
Lum Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Fox Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Mays Brook.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Barry Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Slippery Elm Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	4,000
Alder Creek.....	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000
Jimmie Thomas Brook.	Marenisco.....	O. F. Stabler, Ironwood.	May 1	2,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Gogebic county.—Continued.				
Fin Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	May 1	2,000
Little Spring Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	May 1	2,000
Sutherland Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	May 1	2,000
Weazel Creek.....	Marenisco.....	L. L. Wright, Gogebic.....	May 1	12,000
Slate River.....	Marenisco.....	L. L. Wright, Gogebic.....	May 1	4,000
Wright Creek.....	Marenisco.....	L. L. Wright, Gogebic.....	May 1	4,000
Trout Brook.....	Watersmeet.....	A. C. Brownell, Watersmeet.....	May 1	2,000
Dellies Creek.....	Watersmeet.....	Jas. McCloskey, Watersmeet.....	May 1	2,000
Hansen Creek.....	Watersmeet.....	J. D. Vantwood, Watersmeet.....	May 1	4,000
Camp No. 2 Creek.....	Watersmeet.....	C. M. McDonald, Watersmeet.....	May 1	8,000
Middle Branch of Ontonagon.....	Watersmeet.....	J. F. Johnson, Watersmeet.....	May 1	2,000
Beaver Station Creek.....	Watersmeet.....	A. D. Johnson, Bessemer.....	May 1	6,000
Croked Creek.....	Watersmeet.....	A. D. Johnson, Bessemer.....	May 1	6,000
Henderson Creek.....	Watersmeet.....	N. D. Murphy, Watersmeet.....	May 1	4,000
Duck Creek.....	Watersmeet.....	Wm. Bonifas, Watersmeet.....	May 1	4,000
Morrison Creek.....	Watersmeet.....	B. H. Darling, Watersmeet.....	May 1	6,000
Tributary to Bass Lake.....	Watersmeet.....	Marvin Hughtitt, Chicago.....	May 1	6,000
Clearwater Creek.....	T. 44 R. 41 W.....	Marvin Hughtitt, Chicago.....	May 1	6,000
Landford Creek.....	T. 44 R. 41 W.....	Marvin Hughtitt, Chicago.....	May 1	10,000
Headwaters of Ontonagon River, Main Branch.....	T. 44 R. 41 W.....	Marvin Hughtitt, Chicago.....	May 1	10,000
Gladwin county:				
Cedar River.....	Sherman.....	Jas. E. Tobin, Gladwin.....	April 6	18,000
Grand Traverse county:				
Tributaries to East and 22d Creek.....	Whitewater.....	D. H. Power, Kingsley.....	May 14	30,000
Battle Creek.....	Whitewater.....	Elk Rapids Gun & Angler's Club, Elk Rapids.....	April 10	7,500
Follet's Brook.....	Whitewater.....	Elk Rapids Gun & Angler's Club, Elk Rapids.....	April 10	6,000
Boardman River.....	Several.....	R. S. Hastings, Traverse City.....	April 3	40,000
Twenty-two Creek.....	Union.....	Fred E. Mills, Fife Lake.....	April 9	8,000
Carpenter Creek.....	Fife Lake.....	Fred E. Mills, Fife Lake.....	April 9	8,000
Parker Creek.....	Union.....	Fred E. Mills, Fife Lake.....	April 9	8,000
Yuba Creek.....	Acme.....	Elk Rapids Gun & Angler's Club, Elk Rapids.....	April 10	9,000
Sands Creek.....	Paradise.....	R. B. De France, Kingsley.....	April 1	4,000
Twenty-two Creek.....	Fife Lake.....	R. B. De France, Kingsley.....	April 1	8,000
Mayfield Creek.....	Paradise.....	H. W. Dunne, Kingsley.....	April 1	4,000
Beaver Meadow Creek.....	Paradise.....	Leland Tripp, Kingsley.....	April 1	4,000
Hills Brook.....	Paradise.....	Leland Tripp, Kingsley.....	April 1	2,000
Clark Creek.....	Paradise.....	Leland Tripp, Kingsley.....	April 1	2,000
Biddlecomb Creek.....	Paradise.....	Leland Tripp, Kingsley.....	April 1	6,000
Slaughter House Creek.....	Paradise.....	Leland Tripp, Kingsley.....	April 1	2,000

Newmarsh Spring Creek	Paradise	Leland Tripp, Kingsley	April	1	6,000
Gray's Creek	Paradise	Leland Tripp, Kingsley	April	1	6,000
Parker Creek	Paradise	Leland Tripp, Kingsley	April	1	8,000
Gene Creek	Aome	Ed. Gilbert, Traverse City	April	2	8,000
Witchell's Creek	East Bay	Ed. Gilbert, Traverse City	April	2	12,000
Williamsburg Creek	Several	C. O. Carver, Traverse City	April	2	6,000
East Creek	Paradise	Earl J. Case, Traverse City	April	2	6,000
Potter Creek	Paradise	Earl J. Case, Traverse City	April	2	6,000
Hillsdale county:					
Douglas Creek	Wheatland	D. J. Douglas, Pittsford	Mar.	11	6,000
Lake Pleasant Brook	Hillsdale and Jefferson	W. C. Kemp, Hillsdale	Mar.	20	9,000
Houghton county:					
Sturgeon River and small branches	48-52	Fred Stoyle, Houghton	May	10	16,000
Sturgeon River and branches	48-52	John T. McCall, Houghton	May	10	16,000
Sturgeon River and small branches	Calumet	Jeff Alexander, Houghton	May	8	6,000
Mc Gunn's Creek	Laird	Chas. O. Jackola, Calumet	May	6	8,000
L'aveque's Creek	Alouez	C. W. Stannard, Rockland	May	8	8,000
Branch of Otter River	Portage	F. R. Chynowitt, Phenix	May	8	2,000
La Chappelle Creek	Chassell	Peter A. Larsen, Chassell	May	8	2,000
East Branch of East Branch of Otter River	Chassell	Geo. W. Festing, Chassell	May	8	2,000
South East Branch of Ontonagon River	Several	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	2,000
Boycroft Creek	Duncan	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	2,000
Johnson's Creek	Duncan	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	2,000
Sidnaw Creek	Duncan	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	10,000
Hill Creek	Duncan	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	6,000
Dead Stream	Duncan and Covington	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	4,000
Porch Creek	Duncan and Covington	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	2,000
Little Beaver Creek	Duncan	Sidnaw Hunting & Fishing Club, Sidnaw	May	6	16,000
Jumbo Creek and Branches	Duncan	F. L. Crull, Kenton	May	6	4,000
Hoppe Creek	Several	Wm. Kroll, Kenton	May	6	4,000
Smith Creek	Duncan	Wm. Kroll, Kenton	May	6	6,000
Stoney Creek	Duncan and Iron River	Wm. Kroll, Kenton	May	6	4,000
Spargo Creek	Duncan and Iron River	Wm. Kroll, Kenton	May	6	10,000
Beaver Creek	Duncan	Wm. Kroll, Kenton	May	6	4,000
White Creek	Duncan	Wm. Kroll, Kenton	May	6	1,000
Fox Creek	Duncan and Interior	Wm. Kroll, Kenton	May	6	6,000
Lees Creek	Duncan and Iron	Wm. Kroll, Kenton	May	6	6,000
Spring Creek	Duncan	Wm. Kroll, Kenton	May	6	4,000
Shane Creek	Chassell	S. Holoppa, Chassell	May	8	4,000
Potter's Creek	Portage	Wm. Holoppa, Chassell	May	8	6,000
West Branch Pilgrim River	Torch Lake	Geo. Williams, Houghton	May	8	4,000
Arctadian Mill Creek	Portage	J. C. Morrin, Houghton	May	8	2,000
Auron Creek	Elm River	Robt. H. Shields, Houghton	May	8	2,000
West Branch Sleeping River	Elm River	F. G. Lukey, Winona	May	8	4,000
East Branch Sleeping River	Elm River	R. B. Seeber, Winona	May	8	4,000
Sleeping River	Elm River	M. J. Finnegan, Winona	May	8	8,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Houghton county.—Continued.				
Eber's Creek	Portage	J. C. Campbell, Chassel	May 8	4,000
East Branch Salmon Trout River	Portage and Adams.	H. M. Keever, Houghton	May 8	4,000
Hennes Creek	Portage	Chas. Smith, Hubbel	May 8	6,000
Middle Branch Firesteel River	Elm River.	L. H. Richardson, Houghton.	May 10	8,000
Burt Creek	Elm River.	Geo. Williams, Houghton.	May 10	8,000
Trap Rock River	Calumet and Osceola	Geo. Williams, Houghton.	May 10	6,000
Mucky Creek	Elm River.	Jas. T. Healey, Houghton.	May 10	4,000
Pike River	Elm River.	Mrs. B. T. Barry, Houghton	May 10	4,000
Misc. River	Portage and Chassel	Portage Lake R. & C. Club, Houghton	May 10	4,000
Elm River.	Bohemia and Elm River.	Portage Lake R. & C. Club, Houghton.	May 10	12,000
Salmon Trout River.	Elm River and Stanton	Portage Lake R. & C. Club, Houghton.	May 10	10,000
Gnawerton River.	Stanton and Adams	Portage Lake R. & C. Club, Houghton.	May 10	6,000
Pligrin River.	Stanton and Adams	Portage Lake R. & C. Club, Houghton.	May 10	6,000
Santee River.	Portage and Adams.	Portage Lake R. & C. Club, Houghton.	May 10	6,000
Otter River.	Several.	Portage Lake R. & C. Club, Houghton.	May 10	10,000
Sole's Creek.	Stanton	Portage Lake R. & C. Club, Houghton.	May 10	4,000
Stocks Creek.	Stanton	Portage Lake R. & C. Club, Houghton.	May 10	8,000
Bear Creek.	Portage	Portage Lake R. & C. Club, Houghton.	May 10	6,000
Otter River.	Chassel	Clare F. Hancock, Chassel	May 10	6,000
Bart Creek.	Portage	C. W. Danielson, Chassel	May 10	6,000
Beaver Creek.	Portage	Wm. O. Missitz, Chassel	May 10	6,000
		Ed. Holappa, Chassel.	May 10	4,000
Iron county:				
North Branch of Paint River.	Iron River.	M. D. McDonough, Iron River	May 1	10,000
Section 33 Creek	Iron River.	M. D. McDonough, Iron River	May 1	4,000
South Branch of Paint River	Sambaugh.	M. D. McDonough, Iron River	May 1	8,000
Iron River.	Iron	M. D. McDonough, Iron River	May 1	8,000
Lower Deer Creek	Crystal Falls	Arvid Bjork, Crystal Falls	May 1	10,000
Net River.	Hematite.	Geo. Premo, Amasa.	May 1	8,000
Little Hemlock Creek.	Hematite.	Geo. Premo, Amasa.	May 1	4,000
Holmes Creek.	Crystal Falls	Geo. Premo, Amasa.	May 1	4,000
Paint River.	Crystal Falls	Geo. Premo, Amasa.	May 1	8,000
Nash's Creek	Iron River.	I. W. Byers, Iron River	May 1	1,500
Sunset Lake Creek	Iron River.	I. W. Byers, Iron River	May 1	2,000
Cook's Run.	Iron	L. A. Carmichael, Beechwood	May 1	6,000
Raymon Creek.	Mansfield.	R. E. Boli, Channing	April 24	1,500
Ingham county:				
Baldwin Creek.	Onondaga.	W. M. Carroll, Onondaga	April 15	1,500
Willow Creek.	Aurelius.	W. T. Holcomb, Mason.	Mar. 20	1,500
Columbia Creek.	Aurelius.	W. T. Holcomb, Mason.	Mar. 20	4,500

Ionia county:					
Hamilton Creek.	Ronald.	T. I. Martin, Ionia.	Mar. 28	3,000	
Timberland Creek.	Easton.	Snyder & Wortman, Ionia	Mar. 28	3,000	
Libhart Creek.	Sebwa and Ionia.	A. J. Kling, Ionia	Mar. 28	3,000	
Tibbetts Creek.	Berlin.	A. J. Kling, Ionia	Mar. 28	3,000	
Spar Creek.	Muir.	E. T. Ammon, Ionia	Mar. 28	1,500	
Spaulding Creek.	Ionia.	E. T. Ammon, Ionia	Mar. 28	3,000	
Spring Brook.	Orange.	John Coon, Ionia.	Mar. 28	4,500	
Dixide Creek.	Easton.	Milo Van Syke, Ionia.	Mar. 28	1,500	
Spencer Creek.	Orleans.	E. Brown, Shiloh.	Mar. 28	1,500	
Warner Creek.	Orleans.	E. Brown, Shiloh.	Mar. 28	1,500	
No Name.	Ronald.	A. Mellard, Ionia.	Mar. 28	1,500	
Prairie Creek.	Ronald.	John Galloway, Palo.	Mar. 12	1,000	
Faxon Creek.	Lyonis Plains	J. B. Miller, Pewardo.	Mar. 12	3,000	
Fish Creek and Tributaries.	North Plains and Ronald.	A. E. Clark, Hubbardston	Mar. 12	3,000	
Brown Brook.	North Plains	H. M. Brown, Muir	Mar. 12	3,000	
Ely Creek.	Ronald.	C. A. Datzell, Ionia	Mar. 13	1,500	
Ludwick Creek.	Ronald.	T. A. Huss, Muir	Mar. 13	1,500	
Holden Brook.	Boston and Berlin.	Newell Holden, Ionia	Mar. 13	3,000	
Hunt's Creek.	Easton.	J. Wallington, Saranac	Mar. 13	3,000	
Arnold's Creek.	Boston.	J. Wallington, Saranac	Mar. 13	3,000	
Hawn's Creek.	Boston and Keene.	J. Wallington, Saranac	Mar. 13	3,000	
Pearshall Creek.	Keene and Easton.	J. Wallington, Saranac	Mar. 13	3,000	
Steven's Creek.	Easton.	J. Wallington, Saranac	Mar. 13	3,000	
Dexter Creek.	Campbell.	E. A. Rising, Clarksville.	Mar. 16	1,500	
Campbell Creek.		John Wallington, Saranac	Mar. 13		
Iosco county:					
Van Ettan Creek.	Oscoda.	J. H. McGillivray, Oscoda	April 16	3,000	
Ginley Creek.	Grant.	C. W. Luce, East Tawas.	April 16	7,500	
Cold Creek.	Grant and Tawas.	C. W. Luce, East Tawas.	April 16	6,000	
Silver Creek.	Wilbur and Baldwin.	C. W. Luce, East Tawas.	April 16	12,000	
Gates Creek.	Tawas and Baldwin.	C. W. Luce, East Tawas.	April 16	6,000	
Vaughan Creek.	Plainfield.	C. W. Luce, East Tawas.	April 16	6,000	
Pickett Creek.	Plainfield.	C. W. Luce, East Tawas.	April 16	8,000	
Smith Creek.	Plainfield.	C. W. Luce, East Tawas.	Mar. 29	6,000	
Hale Creek.	Plainfield.	R. D. Brown, Hale	Mar. 29	8,000	
Isabella county:					
Labun Creek.	Nottawa.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Fussman Creek.	Nottawa.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Ingler Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	April 9	1,500	
Theisen Creek.	Nottawa.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Simmons Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Seymore Creek.	Gilmore.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Hobron Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	April 9	4,500	
Flag and Parcher Drain.	Lincoln.	M. R. Castel, Shepherd.	April 9	7,500	
Potter Creek.	Severus.	J. E. Meyer, Shepherd.	April 9	3,000	
Tupman Creek.	Nottawa.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	
Wood's Creek.	Gilmore.	Geo. L. Granger, Mt. Pleasant.	April 9	3,500	
Perry Creek.	Gilmore.	Geo. L. Granger, Mt. Pleasant.	April 9	3,000	

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Isabella county.—Continued.				
Campau Creek.....	Deerfield	Geo. L. Granger, Mt. Pleasant	April 9	1,500
Cooper Brook.....	Deerfield	Geo. L. Granger, Mt. Pleasant	April 9	3,000
Stony Creek.....	Deerfield	Geo. L. Granger, Mt. Pleasant	April 9	3,000
Phillips Creek.....	Deerfield	Geo. L. Granger, Mt. Pleasant	April 9	1,500
Zuck's Creek.....	Deerfield	Geo. L. Granger, Mt. Pleasant	April 9	3,000
Walker Creek.....	Sherman and Coldwater	Miles A. Drallette, Weidman	April 4	8,000
Spring Brook.....	Fremont	John Underwood, Winn	April 3	2,000
Delo Creek.....	Fremont	John Underwood, Winn	April 3	4,000
Fulter Creek.....	Gilmore	A. R. Mussel, Clare	Mar. 26	6,000
Chippewa Creek.....	Wise	C. A. Allen, Loomis	Mar. 27	4,500
Lewis Creek.....	Wise and Vernon	C. A. Allen, Loomis	Mar. 27	3,000
Henry Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Pumprey Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Logie Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Rogers Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Sawdy Brook.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Babcock Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Dermott Creek.....	Rolland	Roger Scott, Blanchard	Mar. 28	1,500
Jackson county:				
Branch of North Branch of Kalamazoo River.	Hanover	F. W. McKenzie, Concord	Mar. 18	3,000
No Name.....	Springport	W. M. Carroll, Onondaga	April 15	1,500
Skinner Creek.....	Hanover	W. C. Burdett, Hanover	Mar. 20	1,500
Ramsdell Creek.....	Hanover	Irving Woodliff, Hanover	Mar. 20	1,500
Sandstone Creek.....	Sandstone and Blackman	Geo. E. Beebe, Jackson	Mar. 22	3,000
Four Mile Creek.....	Blackman	Geo. E. Beebe, Jackson	Mar. 22	3,000
Headwaters of Grand River.	Berry	Geo. E. Beebe, Jackson	Mar. 20	6,000
West Branch Kalamazoo River	Hillsdale	Geo. E. Beebe, Jackson	Mar. 20	3,000
Rives Junction Creek.....	Rives	Geo. E. Beebe, Jackson	Mar. 20	1,500
Dew Brook.....	Horton	Geo. E. Beebe, Jackson	Mar. 20	3,000
Rice Creek.....	Parma	Geo. E. Beebe, Jackson	Mar. 20	4,500
Crouch Creek.....	Summit	Geo. E. Beebe, Jackson	Mar. 20	3,000
Snyder's Creek.....	Toppikins	Geo. E. Beebe, Jackson	Mar. 20	3,000
Wade Creek.....	Spring Arbor	Geo. E. Beebe, Jackson	Mar. 20	1,500
Inlet to Brill's Lake.....	Levin	H. B. Davis, Jackson	Mar. 20	1,500
Inlet to Mud Lake.....	Levin	H. B. Davis, Jackson	Mar. 20	1,500
Greenshaw and Kamsdell Creeks	Hanover	G. T. Greenshaw, Hanover	Mar. 20	3,000
Thayer's Creek.....	Norvell	B. T. Burgess, Norvell	Mar. 14	3,000
Trass Lake Creek.....	Grass Lake	C. R. Smith, Grass Lake	Mar. 14	3,000
Deering Creek.....	Sandstone	Jay King, Parma	Mar. 14	3,000
Beaver Creek.....	Sandstone	J. H. Hunn, Parma	Mar. 14	3,000
Cutler's Creek.....	Spring Arbor and Concord	D. F. Roe, Parma	Mar. 14	3,000
Tributary to Rice Creek.....	Parma	F. D. Bailey, Parma	Mar. 14	1,500

Johnson's Creek...	Parma	F. D. Balley, Parma	Mar. 14	3,000
Keeler Creek	Concord	H. D. Abbott, Parma	Mar. 14	1,500
Wilcox Creek	Parma	H. D. Abbott, Parma	Mar. 14	2,000
Mackey Brook	Parma	E. H. Barsdale, Parma	Mar. 14	2,000
Barber Brook	Parma	E. H. Barsdale, Parma	Mar. 14	2,000
Showerman Brook	Parma	Jos. Neidham, Parma	Mar. 14	3,000
Needham Creek	Several	B. W. Dicer, Jackson	Mar. 14	1,500
Tributary to Sandstone Creek	Concord	B. W. Dicer, Jackson	Mar. 14	1,500
Indian Springs Creek	Parma	M. E. Hawes, Parma	Mar. 14	1,500
Winegar Creek	Parma	M. E. Hawes, Parma	Mar. 14	1,500
Skinner Brook	Concord	M. E. Hawes, Parma	Mar. 14	1,500
Kalamazoo county:				
Wells Creek	Portage	Neil DeKam, Kalamazoo	Mar. 18	1,500
Catson Creek	Portage	Neil DeKam, Kalamazoo	Mar. 18	3,000
Hopkins Spring Brook	Alamo	Posler L. Deal, Williams	Mar. 26	1,500
Dobbin Spring Brook	Alamo	E. F. Bachman, Battle Creek	Mar. 12	1,500
Henton Brook	Charleston	E. F. Bachman, Battle Creek	Mar. 12	1,500
Lawler Creek	Charleston	Wm. Mondy, Kalamazoo	Mar. 11	6,000
Portage Creek	Kalamazoo	Geo. M. Allen, Kalamazoo	Mar. 11	3,000
Travia Creek	Cooper	Wm. Murray, Kalamazoo	Mar. 11	1,500
Albertson's Creek	Cooper	D. W. Osborne, Kalamazoo	Mar. 11	3,000
Arcadia Creek	Kalamazoo	John Ott, Kalamazoo	Mar. 11	7,500
Spring Brook	Cooper	C. C. Davis, Schoolcraft	Mar. 8	1,500
Boles Creek	Portage	C. C. Davis, Schoolcraft	Mar. 8	3,000
Harrison Creek	Prairie Ronde	C. W. Purcell, Schoolcraft	Mar. 8	3,000
Smith's Creek	Schoolcraft	E. O. Smith, Schoolcraft	Mar. 8	3,000
Frank's Run	Schoolcraft	E. O. Goldsmith, Vicksburg	Mar. 8	1,500
Spring Run	Schoolcraft	T. E. Himebaugh, Vicksburg	Mar. 8	1,500
No Name	Pavilion	Wm. Crispe, Pawell	Mar. 8	3,000
Abram Creek	Mostly Otsego	C. W. Crispe, Kalamazoo	Mar. 9	1,500
Cooper Stream	Cooper	Henry Hobbs, Kalamazoo	Mar. 9	6,000
Portage Creek	Several	Henry Hobbs, Kalamazoo	Mar. 9	7,500
Davis Creek	Pavilion and Kalamazoo	Henry Hobbs, Kalamazoo	Mar. 9	1,500
Axtle Creek	Kalamazoo	F. H. Skimmer, Battle Creek	Mar. 14	4,500
Stoney Brook	Alamo	C. A. Wise, Kalamazoo	Mar. 9	4,500
Hall's Spring Brook	Alamo	C. A. Wise, Kalamazoo	Mar. 9	3,000
Hampton Brook	Alamo	C. A. Wise, Kalamazoo	Mar. 9	3,000
Kalamazoo county:				
Little Cannon Creek	Springfield or 24-6	Ransom Thornton, Stittsville	Mar. 27	12,000
Rapid River	Springfield or 24-6	A. F. Davidson, Marcelona	April 12	10,000
Rapid River	Several	W. W. Morse, Rapid City	April 10	15,000
Rapid River	Several	Elk Rapids G. & A. Club, Elk Rapids	April 10	15,000
Kent county:				
Crimmon Creek	Mostly Oakfield	Freeman Addis, Harvard	Mar. 25	4,500
Butternut Creek	Spencer	Alonzo Griswold, Cedar Springs	Mar. 25	12,000
Spring Creek	Solon	R. B. Cawthorne, Cedar Springs	Mar. 23	4,500
Rector Creek	Courtland and Alkoma	Geo. F. Rector, Edgerton	Mar. 23	1,500
Chalmers Creek	Courtland	Geo. F. Rector, Edgerton	Mar. 23	1,500

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Kent county—Continued.				
Wadell Creek	Cannon	W. J. Solomon, Belmont	Mar. 23	3,000
Wadell Brook	Plainfield	F. C. Steed, Grand Rapids	Mar. 23	9,000
Big Cedar Creek	Severell	R. B. Cawthorpe, Cedar Springs	Mar. 23	7,500
Little Cedar Creek	Severell	R. B. Cawthorpe, Cedar Springs	Mar. 23	3,000
Spring Creek	Solon and Nelson	Earl Rasco, Sand Lake	Mar. 23	3,000
London Creek	Solon and Nelson	Chas. Marble, Sand Lake	Mar. 23	4,500
Sozzani Creek	Courland	B. Cawthorpe, Cedar Springs	Mar. 23	1,500
Rock Creek	Nelson	R. B. Cawthorpe, Cedar Springs	Mar. 23	1,500
Zoppa Creek	Nelson	Earl Rasco, Sand Lake	Mar. 23	1,500
Arthur's Creek	Severell	Otis Peck, Sand Lake	Mar. 23	1,500
Duke Creek	Nelson	D. M. Boss, Sand Lake	Mar. 23	3,000
English Creek	Tyrone, Solon, etc	F. F. Shattuck, Sand Lake	Mar. 23	7,500
Barber's, Snow and Dutchman Creeks	Tyrone	R. Headley, Bailey	Mar. 25	3,000
Leaf Creek	Algona	C. S. Puelis, Kent City	Mar. 25	12,000
Finley Creek	Tyrone	Dr. H. L. Miller, Kent City	Mar. 25	1,500
No Name	Byron	C. L. Gold, Bailey	Mar. 25	3,000
Rush Creek	Byron	Arthur Miller, Bailey	Mar. 25	1,500
Buck Creek	Wyoming	Harvey G. Taylor, Grandville	Mar. 18	1,500
Butchins Stream	Oakfield	Harvey G. Taylor, Grandville	Mar. 18	6,000
Wright Creek	Vergennes and Lowell	W. H. Zylstra, Grand Rapids	Mar. 18	9,000
Cherry Creek	Vergennes	F. J. Cole, Greenville	Mar. 28	3,000
Baird Creek	Vergennes and Lowell	U. B. Williams, Lowell	Mar. 12	3,000
Koph Creek	Vergennes	U. B. Williams, Lowell	Mar. 12	3,000
Kinison Creek	Lowell	U. B. Williams, Lowell	Mar. 12	4,500
Honey Creek	Ada	U. B. Williams, Lowell	Mar. 12	3,000
Spring Brook	Lowell	Harry G. Thompson, Ada	Mar. 13	3,000
		U. B. Williams, Lowell	Mar. 12	1,500
Keweenaw county.				
Buffalo Creek	Grant	Joe Hensley, Calumet	May	4,000
Upper Waters Montreat River	Grant	W. R. Vivian, Laurium	May	8,000
Montreat River	Grant and Sherman	H. E. Langer, Laurium	May	8,000
Mosquito Creek	Grant	J. M. Shields, Phoenix	May	8,000
Black Creek	Allouez	Thos. Wilcox, Calumet	May	6,000
Silver Creek	Grant and Sherman	Thos. Wilcox, Calumet	May	4,000
Bosy Creek	Allouez	C. L. Webb, Laurium	May	8,000
Gratiot River	Allouez	Keweenaw Rod & Gun Club, Mohawk	May	6,000
Trap Rock River	Allouez	Keweenaw Rod & Gun Club, Mohawk	May	10,000
Montreat River	Grant	Keweenaw Rod & Gun Club, Mohawk	May	12,000
Tobacco River	Schoolcraft	Johnson Vivian, Laurium	May	4,000
Gratiot River	Mostly Sherman	Geo. Williams, Calumet	May	8,000
Tobacco River	Houghton	Andrew Jackson, Gay	May	8,000
East Branch of Tobacco River	Houghton	Amos Bammert, Phoenix	May	6,000

	Frank Buschell, Lake Linden	May	8	4,000
The White Birch.....	Frank Buschell, Lake Linden	May	8	4,000
Lake county:				
Sable River.....	H. W. Marsh, Manistee.....	April	11	40,000
Pine and Little Manistee Rivers.....	H. W. Marsh, Manistee.....	April	11	50,000
Pine and Little Manistee Rivers.....	Geo. Cutler, Luther.....	April	11	50,000
Pine River.....	Geo. B. Sawrey, Luther.....	April	11	20,000
Little Manistee River.....	Hon. H. D. Jewell, Grand Rapids.....	April	25	46,000
Headwaters of Big Sable River.....	Wm. Utter, Peacock.....	April	25	16,000
Baldwin Creek.....	C. F. Camp, Grand Rapids.....	April	25	16,000
Dannaber Creek.....	C. F. Camp, Grand Rapids.....	April	25	12,000
Blood Creek.....	C. F. Camp, Grand Rapids.....	April	25	9,000
Sanborn or Farnsworth Creek.....	C. A. Kantz, Nirvana.....	April	8	6,000
Baker Creek.....	A. S. Coutant, Mt. Pleasant.....	April	8	6,000
Lorse Creek.....	A. S. Coutant, Mt. Pleasant.....	April	8	3,000
Middle Branch of Marquette River.....	G. W. Baylis, Mt. Pleasant.....	April	8	15,000
Pere Marquette River.....	Geo. F. Duffing, Baldwin.....	April	8	9,000
Sanborn Creek.....	H. W. Davis, Baldwin.....	April	8	9,000
Baldwin Creek or North Branch of Pere Marquette River.....	H. W. Davis, Baldwin.....	April	8	15,000
Jumbo Creek.....	Wm. Keyser, Baldwin.....	April	8	3,000
Danaber Creek.....	J. B. Morley, Saginaw.....	April	8	7,500
Middle Branch Pere Marquette River and Tributary of Blood's Creek.....	C. Hagerman, Ludington.....	April	8	12,500
Pere Marquette River.....	W. R. Humphrey, Saginaw.....	April	8	22,500
Pere Marquette River and Tributaries.....	W. B. Mershon, Saginaw.....	April	8	22,500
Bowman Creek.....	Geo. Grant, Saginaw.....	April	8	3,000
Cedar Creek (Big South Branch).....	Geo. M. Brown, Detroit.....	April	8	18,000
Sable River.....	C. Hagerman, Ludington.....	April	8	25,000
Sweetwater Creek.....	C. Hagerman, Ludington.....	April	8	5,000
Middle Branch Pere Marquette.....	Thos. F. Bray, Reed City.....	Mar.	26	7,500
Lapeer county:				
Carpenter Creek.....	E. J. Thresher, Lapeer.....	Mar.	27	4,500
Miller Creek.....	E. J. Thresher, Lapeer.....	Mar.	27	4,500
Headwaters of Mill Creek.....	E. J. Thresher, Lapeer.....	Mar.	27	7,500
Gravel Creek.....	K. M. Barbour.....	Mar.	27	4,500
Leelanau county:				
Knox Creek.....	F. R. Dailey, Empire.....	April	13	2,000
Lardie's Creek.....	E. R. Dailey, Empire.....	April	13	2,000
Dunn's Creek.....	Nessen Bros., Glen Arbor.....	April	13	2,000
Atkinson Pond and Stream.....	D. H. Day, Glen Arbor.....	April	13	4,000
Peters Run.....	F. H. Blackledge, Indianapolis.....	April	10	3,000
No Name.....	F. H. Blackledge, Indianapolis.....	April	10	3,000
Mosse's Creek.....	D. H. Power, Sutton Bay.....	April	3	12,000
Victoria Creek.....	Elmer Billman, Cedar City.....	April	2	12,000
Kritz Creek.....	James Daley, Empire.....	April	13	2,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lenawee county: Evans Creek.	Franklin.	Jewett Wheelan, Tipton	Mar. 20	10,500
Livingston county: Branch of One-Creek Stewart Creek Walker's Creek Bishop's Creek Beech Creek Mc Donnell's Creek One-Creek Woodruff Creek Weichert Creek Peath's Creek.	Hartland and Osceola. Hamburg. Genoa and Hamburg. Green Oak. Brighton Brighton Several Hartland and Brighton. Genoa and Hamburg. Green Oak.	G. B. Merrill, Oak Grove B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton B. T. O. Clark, Brighton	Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16 Mar. 16	6,000 1,500 4,500 1,500 1,500 3,000 4,500 6,000 3,000 1,500
Luce county: Lakerton Creek East Creek Clybourn Creek Headwaters of Tahquamenon River Headwaters of Tahquamenon River Murphy Creek Linton Creek Two Heart Creek West Branch of Sage River, Tributary to Tahquamenon River.	Columbus and Wakefield Columbus Columbus Columbus Columbus 47 N. or R. 8, 9, 10 W 48 N. of R. 8 W Mc Millan Pentland Pentland	H. K. Skinner, McMillen H. K. Skinner, McMillen H. A. Heidebrecht, McMillen H. A. Heidebrecht, McMillen W. G. Fretz, Newberry. W. S. Linton, Saginaw W. S. Linton, Saginaw R. C. Bradley, Newberry. Wm. Hausen, Rexton.	May 14 May 14 May 14 May 14 May 14 May 14 May 14 May 14 May 1	4,000 4,000 4,000 8,000 12,000 12,000 12,000 20,000 8,000
MacKenzie county: Headwaters of Mill-coupin River. East Branch of Sage. Hendrix Creek North Branch of Carp River. Silver Creek Carp River Branch of North Branch of Carp River South Branch of Carp River Small Brevoort River.	44-10 Hudson Hudson and Hendricks Brevoort and St. Ignace Brevoort and St. Ignace Brevoort and Moran Moran	W. G. Fretz, Newberry. Wm. Hausen, Rexton Wm. Hausen, Rexton Fred Kruger, St. Ignace. Fred Kruger, St. Ignace. O. C. Boynton, St. Ignace. J. L. Mochosky, St. Ignace. Wm. Massey, Allenville.	May 14 April 19 April 19 May 17 May 17 May 17 May 17 May 17	6,000 7,500 9,000 10,000 10,000 12,000 10,000 10,000
Macomb county: Smith's Creek Stoney Creek Silver Creek Hilton's Creek Hornor's Brook Benjamin's Creek	Several. Avon Bruce. Washington. Bruce. Washington.	F. Glaspie, Romeo F. Glaspie, Romeo F. Glaspie, Romeo H. W. Bradley, Romeo. H. W. Bradley, Romeo. H. W. Bradley, Romeo.	April 6 April 6 April 6 April 6 April 6 April 6	3,000 4,500 3,000 1,500 1,500 3,000

Mason county:									
Toal's Creek	Grant	Hugo Olson, Free-soil	April 8	1,500					
Saubel River	Severel	Thos. S. Stephens, Free-soil	April 8	15,000					
South Lincoln Creek	Victory and Sherman	D. S. Betka, Sherman	April 8	6,000					
Swan Creek	Eden and Riverton	D. S. Betka, Sherman	April 8	6,000					
Weldon Creek	Branch and Custer	C. Hagerman, Ludington	April 8	7,500					
Nickerson Creek	Summit and Riverton	C. F. Lewis, Pontwater	April 22	3,000					
Quinn Creek	Summit and Riverton	C. F. Lewis, Pontwater	April 22	3,000					
Manistee county:									
Bear Creek	Severel	F. A. Mitchell, Manistee	April 13	22,500					
Beaver Creek	Maple Grove	T. G. Trimble, Manistee	April 13	4,500					
Cedar Creek	Severel	T. G. Trimble, Manistee	April 13	4,500					
Kaiser Creek	Bear Lake and Maple Grove	T. G. Trimble, Manistee	April 13	3,000					
Third Creek	Marilla	W. S. Smith, Copemish	April 13	12,000					
Hatch's Creek	Cleon and Springfield	F. A. Mitchell, Manistee	April 13	1,500					
Welch Creek	Springdale	Jas. P. Maise, Bear Lake	April 13	1,500					
Leonard's Creek	One-kama	Hans A. Wendel, One-kama	April 13	1,500					
Wendt's Creek	One-kama	Hans A. Wendel, One-kama	April 13	1,500					
Hanson's Creek	One-kama	Hans A. Wendel, One-kama	April 13	1,500					
Carlton Creek	One-kama	Hans A. Wendel, One-kama	April 13	1,500					
Schroeder's Creek	One-kama and Bear Lake	Hans A. Wendel, One-kama	April 13	1,500					
Schultz Creek	Brown	Peter Schneider, Chief	April 13	3,000					
Wilson Creek	Brown	Peter Schneider, Chief	April 13	3,000					
Willson Creek	Brown	Peter Schneider, Chief	April 13	3,000					
Johnson's Creek	Severel	Ira J. Mathews & Son, Norwalk	April 13	1,500					
Bear Creek	Severel	Ed. Gilbert, Traverse City	April 13	3,000					
Claybank Creek	Severel	T. A. Brown, Eastlake	April 25	12,000					
Pine Creek	Stromach and Brown	T. A. Brown, Eastlake	April 8	6,000					
No Name	Manistee	J. G. Trimble, Manistee	April 8	9,000					
Pine Creek	Springdale	Frank Richwalski, Manistee	April 5	3,000					
Big Bear Creek	Springdale and Maple Grove	Ray Marker, Bear Lake	April 13	1,500					
Green's Creek	Springdale	Ray Marker, Bear Lake	April 13	12,000					
Cedar Creek	Springdale	Ray Marker, Bear Lake	April 13	3,000					
Well's Creek	Springdale	Ray Marker, Bear Lake	April 13	4,500					
Bowen's Creek	Pleasanton and Arcadia	Ray Marker, Bear Lake	April 13	3,000					
Bond's Creek	Maple Grove	Ray Marker, Bear Lake	April 13	4,500					
Little Bear Creek	Pleasanton and Springdale	Ray Marker, Bear Lake	April 13	3,000					
6,000									
Meosco county:									
Ryan and Mitchell Creek and Tributaries	Coffax	W. H. Redman, Big Rapids	April 6	16,000					
Little and Big Buckhorn Creeks and Cherry Creek	Meosco	Mich. Fish Commission	May	30,000					
Paris and Herrick Creeks	Green	Mich. Fish Commission	May	30,000					
Benjamin Creek	Fork	W. L. Ladin, Barryton	April 4	4,000					
Tanner Creek	Fork	W. L. Ladin, Barryton	April 4	4,000					
Brown Creek	Fork	W. L. Ladin, Barryton	April 4	2,000					
Tanner Creek	Fork	W. L. Ladin, Barryton	April 4	4,000					
Butte's Creek	Fork	O. S. Wood, Barryton	April 4	4,000					
Rattail Creek	Fork	O. S. Wood, Barryton	April 4	4,000					
Scott Creek	Millbrook	Roger Scott, Blanchard	April 4	1,500					

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Mecosta county.—Continued.				
Decker Creek.	Millbrook and Rolland	Roger Scott, Blanchard	April 28	3,000
Pine River and Branches.	Millbrook.	T. O. Pattison, Millbrook.	April 28	27,500
West Branch of Pine River.	Wheatland	J. M. Swisher, Remus.	April 28	1,500
Pine River.	Wheatland	J. M. Swisher, Remus.	April 28	3,000
Indian Creek.	Wheatland and Sherman	Geo. Colgrove, Remus.	April 28	4,500
Abbey Creek.	Wheatland	Geo. A. Colgrove, Remus.	Mar. 28	3,000
Bingson Creek.	Wheatland and Bloomfield.	P. J. Thielsen, Remus.	Mar. 28	9,000
Poney Creek.	Wheatland and Martiny	P. J. Thielsen, Remus.	Mar. 28	4,500
East Branch of Little Muskegon River	Morton.	M. Carmen, Mecosta.	Mar. 28	1,500
Cold Creek.	Morton.	John O'Brien, Mecosta.	Mar. 28	3,000
Painter Creek.	Morton.	F. O. Redick, Mecosta.	Mar. 28	1,500
Dead Stream.	Morton.	John Snyder, M. D., Mecosta.	Mar. 28	1,500
Little Muskegon River.	Morton.	F. O. Redick, Mecosta.	Mar. 28	4,500
Schroeder Creek.	Hinton.	Ray Carmen, Mecosta.	Mar. 28	4,500
Gilbert Creek.	Morton.	Ray Carmen, Mecosta.	Mar. 28	4,500
Quigley Creek.	Deerfield.	Isaac Laird, Morley.	Mar. 23	6,000
Hornet Creek.	Deerfield.	Ira Helms, Morley.	Mar. 23	6,000
Brockway Creek.	Hinton.	Andy Helms, Morley.	Mar. 23	6,000
Clear Brook.	Mecosta.	C. F. Barnard, Stanwood.	Mar. 26	1,500
Marquette county:				
Spruce River.	Michigan and Republic.	C. F. Sundstrom, Michigan	April 29	10,000
Fence River.	Michigan and Republic.	C. F. Sundstrom, Michigan	April 29	10,000
Hunter's Brook.	41-42 R. 24.	C. E. Voght, Escanaba.	May 1	12,000
De Longchamps Creek.	Champion	C. Van Riper, M. D., Champlon	April 29	4,000
Deer Creek.	Ishpeming.	F. H. Berg, Ishpeming.	April 29	4,000
Boer Creek.	Ishpeming.	Geo. A. Newett, Ishpeming.	April 29	4,000
Mullins Creek.	Ishpeming.	Geo. A. Newett, Ishpeming.	April 29	10,000
Ropes Creek.	Ishpeming and Eby.	Geo. A. Newett, Ishpeming.	April 29	10,000
Wableman's Creek.	Ishpeming and Negaunee.	Geo. A. Newett, Ishpeming.	April 29	6,000
Escanaba River.	Several.	Geo. A. Newett, Ishpeming.	April 29	32,000
West Branch of Escanaba River.	Humboldt and Eby.	J. D. Spitzer, Ishpeming.	April 29	12,000
Foster's Creek.	Chocoley.	E. C. Geisregen, Marquette.	April 29	10,000
Cedar Creek.	Chocoley.	E. C. Geisregen, Marquette.	April 29	10,000
Nelson Creek.	Chocoley.	E. C. Geisregen, Marquette.	April 29	10,000
Captain's Creek.	Republic.	H. R. Gamble, Republic.	April 29	10,000
Brush Creek.	Republic.	C. W. Munson, Republic.	April 29	10,000
Gramat Creek.	Republic.	C. W. Munson, Republic.	April 29	6,000
Bear Creek.	Republic.	C. W. Munson, Republic.	April 29	6,000
Midway Creek.	Republic.	C. W. Munson, Republic.	April 29	8,000
Black River.	Republic and Humboldt.	C. W. Munson, Republic.	April 29	8,000
Spruce River.	Republic.	C. W. Munson, Republic.	April 29	8,000
West Branch of Escanaba River	Eby.	C. W. Munson, Republic.	April 29	12,000
Beaver Creek.	Republic.	C. W. Munson, Republic.	April 29	8,000

Morgan Creek.....	Nezance.....	Nezance R. & G. Club, Nezance.....	April 29	4,000
Schwitzer Creek.....	Several.....	Nezance R. & G. Club, Republic.....	April 29	14,000
Carp River.....	Islipening and Nezance.....	Nezance R. & G. Club, Republic.....	April 29	12,000
Trouties to Horseshoe Lake.....	Nezance.....	Nezance R. & G. Club, Republic.....	April 29	2,000
Teal Lake inlets.....	Nezance.....	Nezance R. & G. Club, Republic.....	April 29	2,000
Tributaries to Sec. 21 Lake.....	Forsyth.....	Peter Koski, Gwinn.....	April 26	3,000
Boyle Lake, Tributary to Escanaba River.....	Nezance.....	Peter Koski, Gwinn.....	April 26	3,000
Chandler's Brook, Tributary to Escanaba River.....	Nezance.....	Jno. R. Reigart, Princeton.....	April 26	4,500
Big West Creek, Tributary to Escanaba River.....	Nezance.....	Jno. R. Reigart, Princeton.....	April 26	7,500
Little East Creek, Tributary to Escanaba River.....	Nezance.....	J. I. Kelton, Princeton.....	April 26	3,500
Half Way Creek, Tributary to Escanaba River.....	Forsyth.....	T. I. Kelton, Princeton.....	April 26	4,500
Links Creek, Tributary to Escanaba River.....	Forsyth.....	G. R. Jackson, Princeton.....	April 26	6,000
Bear Creek, Tributary to Escanaba River.....	Forsyth.....	G. R. Jackson, Princeton.....	April 26	4,500
Green Creek, Tributary to Escanaba River.....	Forsyth.....	G. R. Jackson, Princeton.....	April 26	4,500
East Branch, Tributary to Escanaba River.....	Chocoday and Sands.....	W. S. Ewing, Harvey.....	April 26	9,000
Silver Creek.....	Chocoday.....	W. S. Ewing, Harvey.....	April 26	9,000
Cherry Creek.....	Islipening and Eby.....	H. A. St. John, Marquette.....	April 26	4,500
Little Dead River.....	Marquette.....	H. A. St. John, Marquette.....	April 26	3,000
West Branch of Taughing Whitefish River.....	Marquette.....	H. A. St. John, Marquette.....	April 26	9,000
Yellow Jug and its branches.....	Marquette.....	H. A. St. John, Marquette.....	April 26	3,000
Pickeral Lake Creek.....	Marquette.....	H. A. St. John, Marquette.....	April 26	3,000
Reany Creek.....	Marquette.....	H. A. St. John, Marquette.....	April 26	4,500
Silver Creek.....	Marquette.....	H. A. St. John, Marquette.....	April 26	4,500
Cherry Creek.....	Marquette.....	H. A. St. John, Marquette.....	April 26	4,500
Big Creek.....	Powell.....	H. A. St. John, Marquette.....	April 26	3,000
Bear Creek.....	Marquette.....	H. A. St. John, Marquette.....	April 26	3,000
South Branch of Wilson Creek.....	Skandia.....	H. A. St. John, Marquette.....	April 26	6,000
Branches of Dead River.....	Powell.....	H. R. Harris, Marquette.....	April 26	9,000
Whitefish River.....	Powell.....	H. R. Harris, Marquette.....	April 26	4,500
The Pup.....	Powell.....	H. R. Harris, Marquette.....	April 26	3,000
Wilson Creek.....	Powell.....	H. R. Harris, Marquette.....	April 26	4,500
Alder Creek.....	Powell.....	H. R. Harris, Marquette.....	April 26	3,000
Chocoday River and Branches.....	Powell.....	H. R. Harris, Marquette.....	April 26	15,000
Garlie River.....	Powell.....	H. R. Harris, Marquette.....	April 26	7,500
Menominee county:				
Big Brook.....	Stephenson and Cedarville.....	C. G. Walton, P. M., Daggett.....	April 24	6,000
Big Brook.....	Stephenson and Cedarville.....	I. Thome, Stephenson.....	April 24	6,000
Ten Mile Creek.....	Spaulding.....	C. B. Wheel, Powers.....	April 20	6,000
Reed's Creek.....	Spaulding.....	E. D. Ehlers, Powers.....	April 20	7,500
Durkman's Creek.....	Spaulding.....	Johns, Powers.....	April 20	6,000
Wilson Creek.....	Wilson.....	A. P. Gillis, Powers.....	April 24	6,000
Black Creek.....	Holmes.....	Geo. Kroenke, Vulcan.....	April 20	3,000
Hay Creek.....	Holmes.....	W. J. Turner, Vulcan.....	April 24	3,000
Little Cedar River.....	Mayer.....	A. J. Kremer & J. D. Hayes, Hermanville.....	April 24	3,500
Inlets to Hermanville Pond.....	Mayer.....	J. D. Hayes, Hermanville.....	April 24	1,500
Cumard's and Vesper Creeks.....	Mayer.....	J. D. Hayes & E. J. Kremer, Hermanville.....	April 24	1,500
Camp Twenty-Five Creek.....	Mayer.....	J. H. Hayes, Hermanville.....	April 24	3,000
Camp Seven Creek.....	Mayer.....	J. H. Hayes, Hermanville.....	April 24	1,500
North Branch Cedar River.....	Spaulding.....	Antoine Gignert, Powers.....	April 24	1,500
Quade Creek.....	Spaulding.....	Chas. M. Quade, Powers.....	April 24	15,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Menominee county.—Continued.				
Wheeler Creek.....	Spaulding.	B. Wheeler, Powers.	April 24	4,500
Hay Creek.....	Spaulding.	Irving Bruin Powers.	May 1	8,000
Spaulding Cedar River	Spaulding.	B. Wheeler, Powers.	April 24	9,000
Missaukee county:				
Little Carnion Creek.....	Pioneer	Warren Jones, Lake City	Mar. 27	3,000
Mosquito Creek.....	Reeder and Riverside	F. M. Nye, Lake City	Mar. 27	6,000
Taylor Creek.....	Butterfield and Aetna	F. M. Nye, Lake City	Mar. 27	3,000
Hill Creek.....	Pioneer and Bloomfield.	F. H. Reeder, Lake City	Mar. 27	6,000
Farm Creek.....	Bloomfield.	Fred Reese, Lake City	Mar. 27	6,000
No Name.....	Clam and Union.	Hiram Schelfers, Vogel Center.	April 6	3,000
Cranberry Creek.....	Riverside and others.	Hiram Schelfers, Vogel Center.	April 6	3,000
Clam River.....	Forest and Bloomfield.	Warren A. Brott, South Boardman	April 9	15,000
Hopkins River.....	Forest and Bloomfield.	Warren A. Brott, South Boardman	April 9	7,500
West Branch of Muskegon River	Forest and West Branch	Warren A. Brott, South Boardman	April 9	7,500
Little Butterfield Creek	Lake Riverside and others	Herr Plummer, Lake City	Mar. 23	4,500
Hopkins Creek.....	Reeder.	C. Milligan, Lake City	Mar. 23	4,500
Butterfield Creek.....	Several	Bert Ostrandler, Lake City	Mar. 23	6,000
West Branch of Muskegon River	West Branch	Dr. J. Doudins, Lake City	Mar. 23	6,000
Hopkins Creek.....	Caldwell and Bloomfield.	J. B. Proctor, Lake City	Mar. 23	6,000
Chase Creek.....	Liberty and Caldwell.	J. Frank Stevens, Lake City	Mar. 23	7,500
Morse Creek.....	Caldwell.	Chas. H. Bostick, Manton	Mar. 30	4,500
Golden Creek.....	Caldwell.	Chas. H. Bostick, Manton	Mar. 30	4,500
Montcalm county:				
Prairie Creek.....	Rushnell	B. L. Goodsell, Vickeryville	Mar. 25	9,000
Grant Creek.....	Pierson.	W. L. Brown, Sand Lake	Mar. 25	1,500
Carpenter Creek.....	Seyral	W. E. Shattuck, Sand Lake	Mar. 25	1,500
Black Creek.....	Windfall	F. E. Shattuck, Sand Lake	Mar. 25	10,500
Church Creek.....	Reynolds.	J. A. Collins, Howard City	Mar. 25	3,000
Indian Creek.....	Reynolds.	W. H. Collins, Howard City	Mar. 25	3,000
Whitefish Creek.....	Windfield.	J. G. Buck, Howard City	Mar. 25	3,000
Bruce Creek.....	Windfield.	G. V. Fulms, Howard City	Mar. 25	6,000
Handy and Fosal Creeks	Pierson and Reynolds.	W. H. Lovely, Howard City	Mar. 25	6,000
Rice Creek.....	Reynolds.	W. H. Lovely, Howard City	Mar. 25	4,500
Ryan Creek.....	Several.	W. H. Lovely, Howard City	Mar. 25	3,000
Little Muskegon River	Montcalm	W. H. Lovely, Howard City	Mar. 25	4,500
Little Punny or Cedar Creek	Montcalm	W. H. Lovely, Howard City	Mar. 25	10,500
Horton Creek.....	Several.	Miles A. Drallette, Weidman.	Mar. 23	6,000
Turk Lake.....	Montcalm	Geo. C. Bower, Greenville	April 4	3,000
Beridge's Creek.....	Pairplains	E. A. Kemp, Greenville	Mar. 28	3,000
Korte's Creek.....	Pine	E. A. Kemp, Greenville	Mar. 28	1,500
Bronerick Creek.....	Pine	F. D. Briggs, Langston.	Mar. 28	4,500
		F. D. Briggs, Langston.	Mar. 28	3,000

West Branch.....	Pine.....	F. D. Briggs, Langston.....	Mar. 28	3,000
Inlet to Muscalonge Lake.....	Pine.....	F. D. Briggs, Langston.....	Mar. 28	4,500
Horton Creek.....	Maple Valley.....	Jensen Bros., Trudant.....	Mar. 28	3,000
Dixon Creek.....	Montcalm.....	Henry Paulsen, Gowen.....	Mar. 28	9,000
Hunter's Creek.....	Fair Plains.....	H. E. Brown, Shiloh.....	Mar. 28	1,500
Bennet Creek.....	Bushnell.....	G. Edwards, Fenwick.....	Mar. 28	1,500
Castle's Creek.....	Bushnell.....	Herbert Edwards, Fenwick.....	Mar. 28	1,500
Deer's Creek.....	Bushnell.....	F. Taylor, Sheridan.....	Mar. 28	7,500
Fish Creek.....	Several.....	C. B. Karden, Stanton.....	Mar. 28	3,000
Bachman Creek.....	Douglas.....	C. B. Karden, Stanton.....	Mar. 28	3,000
Cedar Creek.....	Douglas.....	C. B. Karden, Stanton.....	Mar. 28	3,000
Branch of Fish Creek.....	Douglas.....	C. B. Karden, Stanton.....	Mar. 28	3,000
Hooker Creek.....	Day.....	Geo. E. Dakin, Stanton.....	Mar. 28	3,000
Snake Run.....	Eureka.....	F. J. Cole, Greenville.....	Mar. 28	3,000
Willcox Creek.....	Eureka.....	Albert Evans, Fishville.....	April 25	7,500
Middle Branch of Fish Creek.....	Richland.....	F. E. Curtis, Edmore.....	April 3	8,000
South Branch of Pine River.....	Edmore.....	F. E. Curtis, Edmore.....	April 3	8,000
Sackett's Creek.....	Highland and Home.....	F. E. Curtis, Edmore.....	April 3	4,000
Wolf Creek.....	Ferris.....	J. W. Johnson, Eimhall.....	April 3	4,000
Chapin Creek.....	Ferris.....	Alfred Johnson, Riverdale.....	April 3	2,000
Inlet to Mud Lake.....	Several.....	M. J. Briggs, Vestaburg.....	April 3	6,000
South Branch of Pine River.....	Several.....	M. J. Briggs, Vestaburg.....	April 3	6,000
Montmorency county:	Montmorency county:			
North Branch of Thunder Bay River.....	Montmorency and Long Rapids.....	W. H. Farrier, Hillman.....	April 12	9,000
Royston Creek.....	Montmorency.....	Wm. A. Cannon, Royston.....	April 12	4,500
Anchor Creek.....	Hillman.....	J. Ben Johnson, Royston.....	April 12	3,000
Sucker Creek.....	Hillman.....	Austin Rea, Hillman.....	April 12	3,000
Thunder Bay River and Tributaries.....	Hillman.....	Austin Rea, Hillman.....	April 12	4,500
Gilchrist Creek.....	Rust.....	Austin Rea, Hillman.....	April 12	4,500
Brush Creek.....	Hillman.....	W. E. Lake, Hillman.....	April 12	4,500
Miller Creek.....	Hillman.....	G. A. Murphy, Hillman.....	April 12	4,500
Hunt Creek.....	Rust and Hillman.....	Geo. Sachs, Lewiston.....	April 18	8,000
Middle Branch of Big Creek.....	Albert and Rust.....	Geo. Sachs, Lewiston.....	April 18	10,000
Big Black River.....	29-1 E, 27 and 28-1 W.....	W. J. Simmons, Cayford.....	April 18	20,000
Sheridan Creek.....	Several.....	Geo. F. Sachs, Lewiston.....	April 4	4,000
Bullock Creek.....	Albert.....	W. E. Cart, Alpena.....	Mar. 30	6,000
Muskegon county:	Rust 29-4 E.....			
Lake Creek.....	Casnovia.....	Theo. W. Owen, Bailey.....	Mar. 25	4,500
Miller Creek.....	Casnovia and Ashland.....	A. Miller, Bailey.....	Mar. 25	1,500
Comstock Creek.....	Casnovia.....	C. L. Gold, Bailey.....	Mar. 25	3,000
Norris Creek.....	Sullivan.....	F. Sheringer, Sullivan.....	April 16	6,000
Smith's Creek.....	Montague.....	Wm. Paulie, Montague.....	Mar. 22	3,000
Sand Creek.....	Grand and Montague.....	A. F. Casselman, Montague.....	Mar. 22	6,000
Carleton Creek.....	Montague.....	A. F. Casselman, Montague.....	Mar. 22	6,000
Little Flower Creek.....	White River.....	Will Lacombe, Jr., Montague.....	Mar. 22	3,000
Lamford Creek.....	Montague.....	Chas. Howel, Montague.....	Mar. 22	3,000
Mud Creek.....	Blue Lake.....	Richard Hall, Montague.....	Mar. 22	3,000
Mill Creek.....	Montague.....	Carl N. Gasahl, Montague.....	Mar. 22	3,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county.—Continued.				
Klett's Stream.....	Montagne.....	Clinton C. Smith, Montague.....	Mar. 22	3,000
Flower Creek.....	White River.....	J. B. Aveline, Montague.....	Mar. 22	4,500
Carlton Creek.....	Montagne.....	Paul G. Kling, Montague.....	Mar. 22	6,000
Flower Creek.....	White River and Claybank	Chas. Hansen, Montague.....	Mar. 22	4,500
White River Creek.....	White River.....	Prof. J. A. Sadony, Montague.....	Mar. 22	1,500
Silver Creek.....	Blue Lake and Whitehall.....	E. D. Magoon, Muskegon.....	Mar. 22	6,000
Duck Creek.....	Dalton and Fruitland.....	E. D. Magoon, Muskegon.....	Mar. 22	4,500
Little Black Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 22	4,500
Mosquito Creek.....	Eggleston.....	E. D. Magoon, Muskegon.....	Mar. 22	6,000
Ryerson Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 22	3,000
Weyland Creek.....	Blue Lake.....	E. D. Magoon, Muskegon.....	Mar. 22	6,000
Big Black Creek.....	Muskegon.....	E. D. Magoon, Muskegon.....	Mar. 22	9,000
Waprens Creek.....	Fruitland and Laketon.....	E. D. Magoon, Muskegon.....	Mar. 22	4,500
Wolf Creek.....	Ravenna.....	H. A. Muzzall, Coopersville.....	Mar. 21	3,000
Yorris Creek.....	Ravenna.....	E. D. Magoon, Muskegon.....	Mar. 22	9,000
Tintature Creek.....	Ravenna and Cedar Creek.....	A. H. Moore, Ravenna.....	Mar. 22	3,000
Cedar Creek.....	Holton.....	D. L. Skeels, Holton.....	Mar. 22	6,000
Cedar Creek.....	Holton.....	R. J. Patelski, Holton.....	April 2	6,000
Newaygo county:				
Foxville Creek.....	Monroe.....	John W. Orth, Woodville.....	April 2	2,000
Norton Creek.....	Goodwell.....	Glenn Bullman, Woodville.....	April 2	6,000
Towne's Creek.....	Monroe and Wilcox.....	J. C. Russell, Woodville.....	April 2	4,000
Manchip Creek.....	Monroe.....	J. C. Russell, Woodville.....	April 2	4,000
Williams Creek.....	Sheridan and Garfield.....	J. A. Gerber, Fremont.....	April 2	6,000
Minnie Creek.....	Bridgeton.....	J. A. Gerber, Fremont.....	April 2	4,000
Cushman Creek.....	Greenwood.....	J. A. Gerber, Fremont.....	April 2	4,000
Martin's Creek.....	Denver.....	W. D. Sargeant, Fremont.....	April 2	6,000
Dowling Creek.....	Lincoln.....	W. D. Sargeant, Fremont.....	April 2	6,000
Kinney Creek.....	Monroe.....	Allen J. Titus, Grant.....	April 1	3,000
Post's Barnum and Isenhart Creeks	Grant and Ashland.....	Wm. Kimball, White Cloud.....	April 1	3,000
Biglow and Coolbrough Creeks	Brooks and East.....	S. D. Thompson, Newaygo.....	Mar. 25	12,000
Big Brooks.....	Brooks and East.....	M. H. Whitmore, Newaygo.....	Mar. 25	3,000
Penoyer Creek.....	Wilcox.....	S. D. Bonner, Newaygo.....	Mar. 25	6,000
Millen Creek.....	Monroe.....	G. E. Whitman, White Cloud.....	Mar. 25	3,000
Mattison Creek.....	Wilcox.....	G. E. Whitman, White Cloud.....	Mar. 25	3,000
White River.....	Monroe.....	Branch Bros., White Cloud.....	Mar. 25	12,000
Kinney Creek.....	Wilcox.....	Dan Matheson, White Cloud.....	Mar. 25	3,000
Five Mile Creek.....	Sherman.....	W. S. Barton, White Cloud.....	Mar. 25	3,000
Inlet of Little Robinson Lake.....	Wilcox.....	Fred Daenger, White Cloud.....	Mar. 25	1,500
White River.....	Home.....	W. D. Hopkinson, Big Rapids.....	Mar. 25	12,000
Little South Branch.....	Troy.....	P. Christenson, Bitely.....	Mar. 25	6,000
Cedar Creek.....	Home.....	P. Christenson, Bitely.....	Mar. 25	4,500
Tank Creek.....	Home.....	P. Christenson, Bitely.....	Mar. 25	4,500

Ashland Creek.....	Ashland and Casnovia.....	C. L. Gold, Bailey.....	Mar. 25	1,500
Benhart Creek.....	Ashland.....	C. L. Gold, Bailey.....	Mar. 25	3,000
Simpson Creek.....	Ensey.....	Jas. Simpson, Sand Lake.....	Mar. 23	3,000
Frey Creek.....	Ensey.....	David Curtis, Sand Lake.....	Mar. 23	3,000
Reynolds Creek.....	Ensey.....	R. C. Ensey, Sand Lake.....	Mar. 25	3,000
Mullin Creek.....	Wilcox.....	Ed. Ströjle, Fremont.....	Mar. 25	1,500
Engelright Creek.....	Ensey.....	W. J. Reynolds, Sand Lake.....	Mar. 23	1,500
Reynolds Creek.....	Ensey.....	Mich. Fish Commission.....	April 13	30,000
Little South Branch Pere Marquette River.....				
Oakland county:				
Sherwood Creek.....	Milford.....	W. C. Brown, Milford.....	Mar. 26	3,000
Petibone Creek.....	Milford.....	F. B. Hatch, Milford.....	Mar. 26	3,000
Dunlap Creek.....	Oxford.....	M. L. Miller, Oxford.....	Mar. 27	2,500
Paint Creek and Tributaries.....	Avon and Oakland.....	G. R. Chapman, Rochester.....	Mar. 27	4,500
Zuck Creek.....	Brandon.....	A. V. Button, Ortonville.....	Mar. 27	3,000
Yo Nam.....	Springfield.....	J. V. Aurand, Davisburg.....	Mar. 12	3,000
Harris Creek.....	Haveland.....	A. P. Button, Ortonville.....	Mar. 27	3,000
Shiawassee Creek.....	Springfield.....	F. G. Ely, Davisburg.....	Mar. 12	3,000
Weatherston Creek.....	Springfield.....	F. G. Ely, Davisburg.....	Mar. 12	3,000
Headwaters of The Thread.....	Groveland.....	Chas. T. Green, Davisburg.....	Mar. 12	1,500
Oceana county:				
South Branch of Cedar River.....	Weare and Crystal.....	C. F. Lewis, Pentwater.....	Mar. 22	3,000
Mears Creek.....	Weare.....	C. F. Lewis, Pentwater.....	Mar. 22	1,500
Crystal Creek.....	Weare and Crystal.....	C. F. Lewis, Pentwater.....	Mar. 22	1,500
Webb Creek.....	Weare and Golden.....	C. F. Lewis, Pentwater.....	Mar. 22	3,000
Dunaw Creek.....	Weare and Riverton.....	C. F. Lewis, Pentwater.....	Mar. 22	1,500
Dunley Creek.....	Weare.....	C. F. Lewis, Pentwater.....	Mar. 22	1,500
Cedar Creek.....	Weare and Crystal.....	C. F. Lewis, Pentwater.....	Mar. 22	4,500
Crystal Creek.....	Cedar, Weare and Pentwater.....	Ira C. Ford, Walkerville.....	Mar. 22	3,000
Freeman Creek.....	Colfax.....	E. L. Bunting, Walkerville.....	Mar. 22	3,000
Clark's Creek.....	Leavitt.....	E. L. Bunting, Walkerville.....	Mar. 22	6,000
Tributaries to Beaver Creek.....	Leavitt and Colfax.....	O. E. Vine, Walkerville.....	Mar. 22	1,500
Senan Creek.....	Crystal.....	W. R. Koch, Hart.....	Mar. 22	6,000
Backfire Creek.....	Fibrage.....	W. R. Koch, Hart.....	Mar. 22	1,500
Shingle's Creek.....	Hart.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Weaver Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Park Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Monty Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Harris Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Silver Lake Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Nelson Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Hunter Creek.....	Golden.....	Edwin A. Post, Mears.....	Mar. 25	3,000
Chariton Creek.....	Grant.....	Frank P. Monroe, Rothbury.....	Mar. 22	7,500
Ogemaw county:				
Klacking Creek.....	Churchill and West Branch.....	Cascallen Bros., Selkirk.....	April 6	8,000
Rifle River Tributaries.....	Churchill.....	Cascallen Bros., Selkirk.....	April 6	16,000
East Branch of Tittabawassee River.....	Horton.....	John Tollree, West Branch.....	April 6	19,000
Pitch Creek.....	Klacking and Cumming.....	John Tollree, West Branch.....	April 6	18,000
West Branch of Rifle River.....	West Branch.....	John Tollree, West Branch.....	April 6	12,000

Brook Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Ogemaw county—Continued.				
Weldman Creek.....	West Branch.....	John Tolfree, West Branch.....	April 6	6,000
Wacking Creek.....	Severl.....	John Tolfree, West Branch.....	April 6	8,000
Wood's Creek.....	West Branch.....	John Tolfree, West Branch.....	April 6	6,000
Carpo Creek.....	West Branch.....	John Tolfree, West Branch.....	April 6	4,000
Mainfield Creek.....	Edwards.....	John Tolfree, West Branch.....	April 6	6,000
Whitney Creek.....	Richland.....	Geo. Eymar, Prescott.....	Mar. 29	8,000
Crainer Creek.....	Richland.....	Geo. Eymar, Prescott.....	Mar. 29	4,000
Johnson Creek.....	Richland.....	Henry Zaran, Prescott.....	Mar. 29	10,000
Kindorf Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 29	4,000
Oyster Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 29	4,000
No Name.....	Rose and Goodar.....	O. L. Rakestraw, Lupton.....	Mar. 29	2,000
Yaugin Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 29	4,000
Russ Creek.....	Rose.....	O. L. Rakestraw, Lupton.....	Mar. 29	4,000
Ontonagon county:				
250 $\frac{1}{2}$ Mile Post, Branch of Michigamme River.....	48-39.....	E. W. MacPherran, Marquette.....	May 15	6,000
218 $\frac{1}{2}$ Mile Post, Branch of Ontonagon River.....	47-38.....	E. W. MacPherran, Marquette.....	May 15	6,000
Merryweather Creek.....	48-41.....	E. W. MacPherran, Marquette.....	May 15	6,000
Branch Trout Creek.....	47-37.....	H. W. Grams, Houghton.....	May 10	10,000
Firesheel River.....	51 and 52.....	H. W. Grams, Houghton.....	May 10	10,000
Trout Creek.....	Interior.....	O. H. Losey, Trout Creek.....	May 6	19,000
Silver Creek.....	Stannard.....	Alex. Turner, Bruce's Crossing.....	May 6	8,000
Pine Creek.....	Haight.....	P. J. Taylor, Roselawn.....	May 6	6,000
The Baltimore.....	Severl.....	J. N. Howlett, Bruce's Crossing.....	May 6	10,000
Tackert's Creek.....	Stannard.....	C. S. Barnes, Bruce's Crossing.....	May 6	2,000
Prayer's Creek.....	Stannard.....	S. A. Stuesser, Bruce's Crossing.....	May 6	2,000
Clear Creek.....	Stannard and Haight.....	L. G. Stuesser, Bruce's Crossing.....	May 6	4,000
Clear Creek.....	Stannard.....	John Kohn, Rockland.....	May 6	12,000
Davey's Creek.....	Rockland.....	John Kohn, Rockland.....	May 6	6,000
Spring Creek.....	Rockland.....	W. P. Voghtlin, Rockland.....	May 6	10,000
Landing Creek.....	Rockland.....	W. P. Voghtlin, Rockland.....	May 6	8,000
Sucker Creek.....	Rockland.....	W. P. Voghtlin, Rockland.....	May 6	6,000
Voghtlin's Creek.....	Rockland.....	W. P. Voghtlin, Rockland.....	May 6	6,000
Rockland Creek.....	Rockland.....	W. G. Richards, Rockland.....	May 6	2,000
Rockland Creek.....	Rockland.....	W. G. Richards, Rockland.....	May 6	2,000
Bingham Creek.....	Matchwood.....	L. L. Wright, Gogebic.....	May 1	4,000
Oscola county:				
Frantz Creek.....	Highland.....	C. W. Graves, Dighton.....	April 11	6,000
Middle Branch Muskegon River.....	Highland and Marion.....	C. W. Graves, Dighton.....	April 11	20,000
Highland Creek.....	Highland.....	C. W. Graves, Dighton.....	April 11	6,000
West Branch of Clam River.....	Severl.....	Fred R. Price, Marion.....	April 9	15,000
Ghost Creek.....	Marion.....	Patrick White, Marion.....	April 9	3,000
Middle Branch Muskegon River.....	Severl.....	Patrick White, Marion.....	April 9	9,000

Ceasar Creek.....	Marion.....	Patrick White, Marion.....	April 9	3,000
Highland.....	Highland.....	Patrick White, Marion.....	April 9	3,000
Duessler's Creek.....	Hersey.....	Lewis Woodward, Hersey.....	April 8	3,000
Upper Part of Big Stone Creek.....	Several.....	Joel Perry, Ewart.....	Mar. 26	3,000
Twin Creek.....	Hartwick & Syivan.....	Wm. Ramsey, Ewart.....	Mar. 26	6,000
Grindstone Creek.....	Hersey.....	Wm. Ramsey, Ewart.....	Mar. 26	7,500
Cat Creek.....	Leroy.....	L. A. Moody, Ewart.....	Mar. 26	3,500
East Branch Hersey Creek.....	Lincoln.....	J. W. Patterson, Ewart.....	Mar. 26	3,000
Hersey River.....	Several.....	Cornel & Carrow, Reed City.....	Mar. 26	12,000
Mc Donald's Creek.....	Lincoln and Richmond.....	A. J. Almer, Reed City.....	Mar. 26	3,000
Myer's Creek.....	Burdell.....	T. F. Pettie, Tustin.....	Mar. 28	4,500
Pine River Creek.....	Burdell.....	W. A. McDowell, Tustin.....	Mar. 28	3,000
Edgett's Creek.....	Burdell.....	W. M. Budge, Tustin.....	Mar. 28	3,000
Anderson Creek.....	Burdell.....	J. M. Robbins, Tustin.....	Mar. 28	3,000
Hoover Creek.....	Burdell.....	W. C. Kidder, Tustin.....	Mar. 28	9,000
Coe Creek.....	Burdell and Dover.....	J. M. Perry, Tustin.....	Mar. 28	4,500
Nigger Creek.....	Burdell.....	E. Harmer, Tustin.....	Mar. 28	3,000
Mc Govern Creek.....	Burdell.....	E. Pullman, Tustin.....	Mar. 28	3,000
Beaver Creek.....	Burdell.....	G. A. Swanson, Tustin.....	Mar. 28	1,500
Oscoda county:				
Upper Branch of Thunder Bay River.....		J. D. Hawks, Detroit.....	Mar. 30	60,000
Moffet Creek.....		A. M. McLean, Alpena.....	Mar. 30	4,000
Middle Branch.....		Geo. F. Sachs, Lewiston.....	April 4	16,000
East Branch.....	Elmerton.....	Geo. F. Sachs, Lewiston.....	April 4	10,000
Otsego county:				
Sturgeon River.....	22 N. 2 W.....	D. M. Sly, Vanderbilt.....	April 2	18,000
Headwaters of Pigeon River.....	Several.....	R. H. J. Hommedieu, Detroit.....	April 2	38,000
Headwaters of Sturgeon River.....	Several.....	R. H. J. Hommedieu, Detroit.....	April 2	38,000
North Branch of Au Sable River.....	Chester.....	F. E. Douglas, Lovells.....	April 13	26,000
North Branch of Upper waters.....	Chester.....	Arnold Boutill, Saginaw.....	April 4	30,000
Ottawa county:				
Pigeon River.....	Olive.....	C. McKinley, West Olive.....	April 16	6,000
Presque Isle county:				
Black River.....	Ocqueoc and Case.....	J. M. Clark, Onaway.....	April 16	24,000
Indian Creek.....	Ocqueoc and Case.....	W. C. Monroe, Mt. D., Millersburg.....	April 16	3,000
Little Ocqueoc River.....	Several.....	W. H. Friers, Millersburg.....	April 16	15,000
Little Ocqueoc River.....	Metz.....	W. H. Friers, Millersburg.....	April 16	8,500
No Name.....	Metz.....	H. Horwitz, Hawks.....	April 16	3,500
Tributary to Ocqueoc River.....	Bismack and Belknap.....	H. Horwitz, Hawks.....	April 16	3,000
No Name.....	Metz, T. 33 N. R. 5 E.....	H. Horwitz, Hawks.....	April 16	6,000
Queen Creek.....	Belknap.....	T. C. Harries, Metz.....	April 16	6,000
Trout River.....		Basil G. Larke, Rogers.....	April 16	6,000
Roscommon county:				
Hickins Lake Trout Stream.....	Gerrish.....	B. H. Helen, Roscommon.....	April 6	6,000
Esbern Creek.....	Richfield.....	D. Procniet, St. Helens.....	April 6	4,000
South Branch Au Sable River.....	Pennfield and South Branch.....	Wm. F. Johnson, Roscommon.....	April 6	30,000

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1912.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
St. Joseph county:				
Gembling Creek.	Fabius	Warren Klocke, Three Rivers	Mar. 18	1,500
No Name	Lockport	C. R. Jackson, Three Rivers	Mar. 18	1,500
Spring Creek	Lockport	Amos Ives, Three Rivers	Mar. 18	1,500
Sherrill's Creek	Flowerfield	S. J. Andrews, Marcellus	Mar. 18	1,500
Jas. O'Brien Creek	Flowerfield	S. J. Andrews, Marcellus	Mar. 18	1,500
Parker's Brook	Burr Oak	F. W. Clements, Burr Oak	Mar. 11	4,500
Prairie River	Burr Oak	Perry L. Turner, Elkhart	Mar. 11	1,500
No Name				
Sanilac county:				
Leins or Burgess Creek	Sanilac	Geo. A. Burgess, Pt. Sanilac	Mar. 27	3,000
Schoolcraft county:				
Silver Creek	Thompson	H. B. Witter, Manistique	April 19	3,000
Indian River	Thompson	H. B. Witter, Manistique	April 19	12,000
Thompson Creek	Germfask	Benjamin Gero, Manistique	April 19	3,000
East Branch Manistique River	Germfask	A. McDougall, Germfask	May 14	12,000
Tuscola county:				
Chapel Creek	Junita	W. Vandecar, Caro	Mar. 27	3,000
No Name	Fremont	Arthur Haines, Mayville	Mar. 27	1,500
Sucker Creek	Dayton	Arthur Haines, Mayville	Mar. 27	6,000
Herd's Creek	Fremont	J. W. Schermerhorn, Mayville	Mar. 27	3,000
Van Buren county:				
Mill Creek	Geneva	G. F. M. Pratt, Coloma	April 25	6,000
Spreibush Creek	Sevier	J. T. Tolles, South Haven	Mar. 8	7,500
Scott's Creek	Waverly	J. A. Gibson, Lacota	Mar. 8	10,500
Harden Creek	Almeta	W. L. Scott, Bloomingdale	Mar. 8	1,500
Hartavan Creek	Sevier	Dr. C. A. Wise, Kalamazoo	Mar. 9	3,000
South Branch Paw Paw River	Sevier	Dr. R. F. Belch, Kalamazoo	Mar. 9	3,000
Newberry Brook	Antwerp and Paw Paw	Dr. R. F. Belch, Kalamazoo	Mar. 9	6,000
Campbell's Creek	Alamo	J. H. Sigler, Kalamazoo	Mar. 11	4,500
Williams Creek	Alamo	D. W. Osborne, Kalamazoo	Mar. 11	4,500
Hall Spring Brook	Paw Paw and Decatur	Wm. Monday, Kalamazoo	Mar. 11	4,500
West Branch Paw Paw River	Paw Paw and Decatur	H. F. Ball, Paw Paw	Mar. 18	6,000
East Branch Paw Paw River	Paw Paw and Porter	R. D. Loveland, Paw Paw	Mar. 18	7,500
No Name	Decatur	Levi Lyle, Decatur	Mar. 18	3,000
Washtenaw county:				
Outlet to Flannel Lake	Lyndon	Geo. Scripser, Chelsea	April 27	3,000
Williams Creek	Manchester and Shannon	Wm. Stonaway, Manchester	Mar. 20	3,000
Schaible Creek	Manchester	A. J. Waters, Manchester	Mar. 20	3,000

Iron Creek.....	Manchester.	A. J. Waters, Manchester.....	Mar. 20	4,500
South Branch Paint or Clawson's Creek.....	Ypsilanti and Pittsfield..	W. A. Clawson, Ypsilanti.....	Mar. 14	3,000
Honey Creek.....	Lima and Scio.....	C. F. Stabler, Ann Arbor.....	Mar. 14	6,000
Youngs Creek.....	Lyndon.....	Dr. T. I. Clark, Jackson.....	Mar. 14	1,500
Clark's Creek.....	Lyndon.....	Dr. T. I. Clark, Jackson.....	Mar. 14	1,500
No Name.....	Lyndon.....	Dr. T. I. Clark, Jackson.....	Mar. 14	3,000
Green's Creek.....	Lyndon.....	Dr. T. I. Clark, Jackson.....	Mar. 14	1,500
Wayne county:	Van Buren and Ypsilanti.....	L. Seamans, Bellevue.....	Mar. 16	6,000
Campbell Creek.....	Van Buren and Ypsilanti.....	L. Seamans, Bellevue.....	Mar. 16	6,000
Wexford county:	Van Buren and Ypsilanti.....	L. Seamans, Bellevue.....	Mar. 16	6,000
Clam River.....	Lake.....	Chas. Peterson, Lucas.....	April 9	12,000
Hawley Creek.....	Hanover.....	G. A. Brigham, Buckley.....	April 4	4,000
Anderson Creek.....	Hanover.....	G. A. Brigham, Buckley.....	April 4	4,000
Fletcher Creek.....	Wexford.....	G. A. Brigham, Buckley.....	April 4	6,000
Dean Creek.....	Hanover.....	R. B. DeFrance, Kingsley.....	April 4	4,000
Buttermilk Creek.....	Greenwood.....	R. B. DeFrance, Kingsley.....	April 1	6,000
Silver Creek.....	Greenwood.....	R. B. DeFrance, Kingsley.....	April 1	4,000
Big Filer Creek.....	Greenwood.....	R. B. DeFrance, Kingsley.....	April 1	4,000
Little Filer Creek.....	Greenwood.....	R. B. DeFrance, Kingsley.....	April 1	4,000
No Name.....	Greenwood and Colfax.....	Henry Bruges, Summit City.....	April 1	4,500
Filer Creek.....	Greenwood.....	W. Y. Spidell, Manton.....	Mar. 29	3,000
Underground Creek.....	Greenwood.....	Herman Bruges, Manton.....	Mar. 29	3,500
Soper Creek.....	Greenwood and Hanover.....	Samuel Boyd, Manton.....	Mar. 29	4,500
Uwick Creek.....	Hanover.....	Walter Rozell, Manton.....	Mar. 29	4,500
Harger Creek.....	Greenwood and Colfax.....	C. S. Guilberison, Manton.....	Mar. 29	3,000
Silver Creek.....	Greenwood.....	C. H. Tyler, Manton.....	Mar. 29	4,500
Buttermilk Creek.....	Greenwood.....	C. H. Tyler, Manton.....	Mar. 29	3,000
Whitmore Creek.....	Liberty.....	C. H. Bostick, Manton.....	Mar. 30	1,500
Taylor Creek.....	Liberty.....	C. H. Bostick, Manton.....	Mar. 30	1,500
Cedar Creek.....	Liberty and Cedar Creek.....	C. H. Bostick, Manton.....	Mar. 30	6,000
Total.....				7,351,000

[BROOK TROUT PLANTS, 1912.
ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Wexford county: Slagle Creek.....	Slagle.....	Mich. Fish Commission, Detroit.....	May 27	15,000

BROOK TROUT PLANTS, 1912.
YEARLINGS AND 2 YEAR OLDS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Wexford county: Slagle Creek.....	Slagle.....	Mich. Fish Commission, Detroit.....	May 27	10,000

RAINBOW TROUT PLANTS, 1912.
FRY AND ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county: South Branch of Pine River..... Spring Brook.....	Curtis Mitchell.....	Jos. Turcott, Oscoda..... Fred H. Loud, Ausable.....	June 11 June 11	7,500 10,500
Alger county: Rhonda River..... Kill Buck River.....	Burt Burt.....	Chas. F. Hickok, Grand Marais..... Chas. F. Hickok, Grand Marais.....	May 14 May 14	4,000 4,000

TWENTIETH REPORT—STATE FISHERIES.

Rainbow Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Arenac county: Mansfield Creek..... Demno Creek..... South Omer Creek..... North Branch of Deep River, South Omer..... Cooler Creek..... Big, Townline and Murphy Creeks, Tributaries to Rifle River.....	Clayton..... Arenac..... Deep River..... Gibson..... Deep River..... Several.....	Henry Zerán, Prescott..... Frances Avery, Standish..... Frances Avery, Standish..... Frances Avery, Standish..... Frances Avery, Standish..... Nelson Deford, Sterling.....	June 10 June 11 June 11 June 11 June 11 June 11	4,500 4,500 4,500 3,000 3,000 12,000
Baraga county: Sterks Creek..... Small Branch Sturgeon River..... Small Branch Sturgeon River..... Clear Creek..... Three Lakes Outlet..... Nestoria Creek..... Canal Creek..... Mc Donald Creek..... Cliff Creek.....	L'Anse..... Baraga..... Baraga..... Baraga..... Spurr..... Spurr..... Spurr..... Spurr..... Spurr.....	Silver River R. & G. Club, L'Anse..... I. N. Hass, Houghton..... Jno. C. Pryon, Houghton..... H. L. Swift, Houghton..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee.....	June 8 June 8 June 8 June 8 June 7 June 7 June 7 June 7 June 7	4,000 2,000 4,000 12,000 4,000 2,000 2,000 2,000 2,000
Barry county: Thornapple River and Tributaries..... Fall Creek..... Eight Mile Creek..... Adams Lake.....	Several..... Barry and Ross..... Prattville.....	Luther B. Hills, Irving..... F. H. Barlow, Hastings..... Geo. W. Lawrence, Deiton..... Fay Nichols, Doster.....	May 21 May 21 May 23 May 23	4,500 7,500 3,000 1,500
Benzie county: Crystal Lake Inlet.....	Benzonía.....	David E. Burns, Beulah.....	June 12	7,500
Berrien county: Townsend Creek..... Gray Creek..... Wilson Creek..... Love Creek..... Leman Creek..... Pipestone Creek..... Blue Creek..... Loree Creek..... Branch of St. Joseph River..... Hickory Creek..... Tributaries of St. Joseph River..... Central Springs Creek..... Edeson Creek..... Yellow Creek.....	Berrien..... Oronoko..... Oronoko..... Berrien..... Oronoko..... Benton..... Benton..... Oronoko..... St. Joseph..... Several..... Benton..... Royalton.....	John G. Murdoch, Berrien Springs..... John G. Murdoch, Berrien Springs..... John G. Murdoch, Berrien Springs..... John G. Murdoch, Berrien Springs..... J. W. Isbell, St. Joseph..... J. W. Isbell, St. Joseph..... J. W. Isbell, St. Joseph..... W. V. Lucker, St. Joseph..... A. F. Herring, St. Joseph..... A. F. Herring, St. Joseph..... Claude H. Chrest, St. Joseph..... Claude H. Chrest, St. Joseph..... Claude H. Chrest, St. Joseph.....	May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20 May 20	3,000 1,500 3,000 3,000 3,000 3,000 3,000 3,000 6,000 6,000 1,500 1,500 3,000

Rainbow Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Branch county: Shoener Brook.....		Leo H. Wood, Athens.....	May 21	1,500
Coldwater River.....		Jno. B. Shipman, Coldwater.....	May 23	6,000
Calhoun county: Nottwa Creek.....	Athens and Newton.....	F. G. Woodruff, Athens.....	May 21	3,000
Pascon Creek.....	Several.....	W. A. Skellinger, Battle Creek.....	May 21	6,000
Rice Creek.....	Marshall.....	W. J. Clayborne, Marshall.....	May 21	7,500
Wilder Creek.....	Morengo.....	W. J. Clayborne, Marshall.....	May 21	7,500
Cass county: Silver Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Mcomber Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Lyle Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Ireland Creek.....	Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Pokagon Creek.....	Pokagon.....	Fred Phillips, Dowagiac.....	May 20	3,000
Peavine Creek.....	Several.....	Fred Phillips, Dowagiac.....	May 20	1,500
Little Dowagiac Creek.....	Pokagon.....	Fred Phillips, Dowagiac.....	May 20	6,000
Miller Creek.....	Several.....	Fred Phillips, Dowagiac.....	May 20	1,500
South Branch Dowagiac Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Carman Creek.....	Wayne and Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Tyrone Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Broadhurst Creek.....	Wayne and Silver Creek.....	Fred Phillips, Dowagiac.....	May 20	1,500
Pine Lake Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Kenny Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Gage Creek.....	Several.....	Fred Phillips, Dowagiac.....	May 20	1,500
Big Dowagiac Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	6,000
Hatch Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Hampton Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Glenwood Creek.....	Wayne.....	Fred Phillips, Dowagiac.....	May 20	1,500
Kinzow Creek.....	Jefferson.....	Fred Phillips, Dowagiac.....	May 20	1,500
Centennial Mill Pond.....	La Grange and Jefferson.....	C. H. Kimmurle, Cassopolis.....	May 20	3,000
Shaw Creek.....	Jefferson and Howard.....	C. H. Kimmurle, Cassopolis.....	May 20	4,500
Spring Run.....	Marcellus.....	Angelo I. Maxam, Marcellus.....	May 23	1,500
Conklin Stream.....	Mostly Marcellus.....	B. F. Mikel, Marcellus.....	May 23	3,000
Charlevoix county: North Boyne River.....	Boyne Valley.....	Chas. Galster, Boyne Valley.....	May 31	12,000
Boyne River.....	Boyne Valley.....	Chas. Galster, Boyne Valley.....	May 31	12,000
West Branch of Sturgeon River.....	Hudson.....	C. F. Hoffman, Vanderbilt.....	June 11	15,000
Cheboygan county: Big Sturgeon River.....		J. J. Jones, Indian River.....	June 11	9,000
Sturgeon River.....		F. E. Martin, Indian River.....	June 11	9,000
North Twin Lake Inlets.....		J. W. Lester, Indian River.....	June 11	3,000

Chippewa county: Little Munuscong River.....	Pickford.....	Dr. J. A. Cameron, Pickford.....	May 15	10,000
St. Mary's River at East Neebish Rapids.....	Sugar Island.....	Chase S. Osborn, Sault Ste. Marie.....	May 30	20,000
St. Mary River at Falls.....	Several.....	Mich. Fish Commission, Detroit.....	May 21	40,000
Clare county: Halsted Creek.....	Sheridan and Grant.....	N. H. Patrick, Clare.....	June 5	4,500
Five Lake Creek.....	Grant.....	Wm. H. Caple, Clare.....	June 5	3,000
Clear Creek.....	Arthur.....	Jas. S. Bicknell, Clare.....	June 5	4,500
Lowery Creek.....	Grant.....	Wm. Lange, Clare.....	June 5	3,000
Tobacco River above Clare Dam.....	Surrey and Grant.....	A. T. Stevens, Clare.....	June 5	6,000
Middle Branch.....	Arthur and Hatton.....	E. A. Anderson, Clare.....	June 5	6,000
Tobacco River.....	Surrey.....	W. C. Fuller, Farwell.....	June 5	4,500
Clinton county: Little Maple River.....	Ovid and Victor.....	F. D. Cleveland, Shepardsville.....	June 3	10,500
Delta county: Portage Creek and Cedar Brook.....	Ford River and Wells.....	Timothy Killian, Escanaba.....	June 12	8,000
Dickinson county: Sturgeon River.....	Waucedah.....	John Langdon, Loretto.....	June 14	8,000
Pine Creek.....	Waucedah.....	Herman Vielmette, Loretto.....	June 14	6,000
Hamilton Creek.....	Waucedah.....	Dan Vanitvelt, Waucedah.....	June 14	4,000
Water Works Creek.....	Norway.....	Wm. H. Weber, Norway.....	June 14	4,000
Ford River.....	Sagola.....	W. W. Pritchard, Channing.....	June 14	8,000
Michiganme River.....	Sagola.....	J. T. Dunwoodie, Channing.....	June 14	10,000
Squaw Creek.....	Sagola.....	J. T. Dunwoodie, Channing.....	June 14	4,000
Ford River.....	Sagola.....	W. T. Stevens, Channing.....	June 14	8,000
Eaton county: Sandstone Creek.....	Onelda.....	Fred L. Berry, Grand Lodge.....	June 3	3,000
Geogic county: Hill Creek.....	Bessemer.....	J. A. Voghtlin, Bessemer.....	June 14	6,000
Rainbow Creek.....	Bessemer.....	J. T. Voghtlin, Bessemer.....	June 14	4,000
Pine Creek.....	Bessemer.....	J. T. Voghtlin, Bessemer.....	June 14	6,000
Thousand Island Lake Inlets.....	Watersmeet.....	A. D. Johnston, Bessemer.....	June 14	4,000
Wolf Lake Outlet.....	Watersmeet.....	A. D. Johnston, Bessemer.....	June 14	2,000
Morrison Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	June 14	4,000
Sargant's Creek.....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	4,000
Henderson's Creek.....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	4,000
Duck Creek.....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	6,000
Camp Two Creek.....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	4,000
Bellies Creek.....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	2,000
Ontonagon River, (Middle Branch).....	Watersmeet.....	M. Hughtitt, Jr., Chicago, Ill.....	June 14	10,000
No Name.....	Wakfield.....	C. F. Holly, Bessemer.....	June 14	2,000
Sand Island Creek.....	Bessemer and Wakfield.....	W. R. Kulascurcz, Bessemer.....	June 14	4,000
No Name.....	Wakfield.....	G. S. Barber, Bessemer.....	June 14	2,000
No Name.....	48-46.....	Tony Trizer, Bessemer.....	June 14	4,000
Swamp Creek.....	Bessemer.....	Chas. M. Fraser, Bessemer.....	June 14	4,000

Rainbow Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Gogebic county.—Continued.				
Maple Creek.....	Bessemer.....	J. A. Voghtlin, Bessemer.....	June 14	6,000
Rock Creek.....	Bessemer.....	J. A. Voghtlin, Bessemer.....	June 14	6,000
Grand Traverse county:				
Boardman River.....	Sevelal.....	R. S. Hastings, Traverse City.....	May 25	21,000
Boardman River.....	Blair.....	Chas. T. Cedersten, Traverse City.....	May 25	19,500
Hillsdale county:				
No Name.....	Somerset and Wheatland.....	Frank Carney, Jerome.....	May 21	3,000
Branch of Raisin River.....	Somerset.....	Wm. Bickford, Jerome.....	May 21	1,500
Branch of Raisin River.....	Somerset.....	Wm. Bickford, Jerome.....	May 21	3,000
Houghton county:				
Graverod River.....	Stanton.....	Portage Lake R. & C. Club, Houghton.....	June 8	12,000
Small Branch Sturgeon River.....	Laird.....	Paul D. Swift, Houghton.....	June 8	20,000
Ingham county:				
Stearmore River.....	Alaidon.....	C. P. Mickelson, Mason.....	May 21	6,000
Mud Creek.....	Alaidon.....	C. P. Mickelson, Mason.....	May 21	4,500
Willow Creek.....	Vevay and Aurelius.....	C. P. Mickelson, Mason.....	May 21	4,500
Ionia county:				
Morrison Lake Creek.....	Boston.....	John Wallington, Saranac.....	June 3	1,500
Dexter Creek.....	Easton.....	John Wallington, Saranac.....	June 3	3,000
Dickson Creek.....	Olisco.....	Clinton F. Hall, Belling.....	June 3	9,000
Prairie Creek with Pond.....	Ionia.....	Chas. Stein, Ionia.....	June 3	6,000
Arnold Creek.....	Ionia.....	Andrew Christensen, Ionia.....	June 3	1,500
Porrets and Libheart Creeks.....	Orange.....	Roscoe Belmont, Ionia.....	June 3	6,000
Knapp Creek.....	Lyons.....	Dr. Weston, M. D., Muir.....	June 3	1,500
Speer's Creek.....	Lyons.....	Thos. Weston, M. D., Muir.....	June 3	1,500
Fish Creek and Tributaries.....	North Plains and others.....	A. E. Clark, Hubbardston.....	June 3	15,000
Iosco county:				
Van Etan Creek and Penoyer Creek.....	Oscoda.....	J. H. Mc Gillivray, Oscoda.....	June 11	9,000
Iron county:				
Sec. 33 Creek.....	Iron River.....	Belmont, Warles, Ironwood.....	June 14	8,000
Paint River.....	Crystal Falls, etc.....	Arvid Bjork, Crystal Falls.....	June 14	10,000
Paint River (Lower).....	Crystal Falls.....	Arvid Bjork, Crystal Falls.....	June 14	4,000
Michigamme River.....	Crystal Falls.....	W. W. Fritchard, Channing.....	June 14	10,000
Isabella county:				
Chippewa Creek.....	Gilmore.....	A. R. Mussel, Clare.....	June 5	4,500

Jackson county:									
Tributary to Kalamazoo River.....	Hanover and Concord.....	Frank W. Mc Kenzie, Concord.....	May 20	3,000					
Four Mile Creek.....	Blackman.....	Geo. E. Beebe, Jackson.....	May 21	4,500					
Headwaters of Kalamazoo River, East Branch.....	Several.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
West Branch of Kalamazoo River.....	Hillsdale.....	Geo. E. Beebe, Jackson.....	May 21	6,000					
Headwaters of Grand River.....	Liberty.....	Geo. E. Beebe, Jackson.....	May 21	4,500					
DeWitt Brook.....	Horton.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
Leoni Creek.....	Leoni.....	Geo. E. Beebe, Jackson.....	May 21	1,500					
Shnyder's Creek.....	Spring Arbor.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
Cutler Creek.....	Rives.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
Rives Junction Creek.....	Summit.....	Geo. E. Beebe, Jackson.....	May 21	1,500					
Rice Creek.....	Parma.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
Willow Creek.....	Hanover.....	Geo. E. Beebe, Jackson.....	May 21	6,000					
Wade Creek.....	Tompkins.....	Geo. E. Beebe, Jackson.....	May 21	3,000					
Sandstone Creek.....	Sandstone and Blackman.....	Geo. E. Beebe, Jackson.....	May 21	1,500					
Thayer's Creek.....	Norvell.....	B. T. Burgess, Norvell.....	May 21	6,000					
Inlet to Farwell Lake.....	Hanover.....	G. T. Greenshaw, Hanover.....	May 21	3,000					
South Branch of Kalamazoo River.....	Hanover and Scipio.....	Levi Strat, Hanover.....	May 21	3,000					
Whitman Creek.....	Springport and Clarence.....	Guy N. Lininger, Springport.....	May 21	3,000					
Kalamazoo county:									
Frakes Creek.....	Schoolcraft.....	A. M. Fellows, Schoolcraft.....	May 23	3,000					
Stony Brook.....	Comstock.....	W. R. Skellinger, Battle Creek.....	May 21	4,500					
Earls Creek.....	Charleston.....	H. D. Streator, Galesburg.....	May 21	1,500					
Hinton Creek.....									
Kent county:									
Buck Creek.....	Wyoming.....	W. H. Zylstra, Grand Rapids.....	May 23	7,500					
Upper Waters of Rogue River and Tributaries.....	Courtland and Algoma.....	H. C. Murray, Sparta.....	May 25	6,000					
Munn Creek.....	Algoma and Courtland.....	Geo. E. Rector, Edgerton.....	June 17	3,000					
Harding Creek.....		Geo. E. Rector, Edgerton.....	June 17	1,500					
Mill Creek.....		Dwight Lydell, Constock Park.....	June 17	15,000					
Keweenaw county:									
Seneca Creek and Dam.....	Allouez.....	Jas. Jackson, Mohawk.....	June 8	4,000					
Montreal River Meadows.....	Eagle Harbor and Sherman.....	John Henich, Calumet.....	June 8	20,000					
Gratiot River.....	Allouez and Houghton.....	C. W. Thomson, Laurium.....	June 8	10,000					
Phoenix Dam.....	Houghton.....	N. Lehten, Phoenix.....	June 8	4,000					
Garden City River.....	Houghton.....	Fred Bond, Phoenix.....	June 8	4,000					
Silver River.....	Grant.....	Albert Brockway, Lake Linden.....	June 8	4,000					
Montreal River.....	Grant and Eagle Harbor.....	Andrew Mollant, Alhambet.....	June 8	8,000					
Silver River.....	Grant.....	Wm. R. Bennetts, Eagle River.....	June 8	2,000					
Lake county:									
Baldwin Creek.....	Pleasant Plains.....	F. C. Camp, Grand Rapids.....	May 25	12,000					
North Branch of Pere Marquette River.....	Several.....	Parson, Dennis & Co., Detroit.....	June 4	15,500					
Pere Marquette River.....	Pleasant Plains and Webber.....	Geo. M. Brown, Detroit.....	June 4	17,500					
Sanborn Creek.....		R. J. Matthews, Baldwin.....	June 4	15,000					
Pere Marquette River.....		Geo. Grant, Saginaw.....	June 4	15,000					
Pere Marquette River.....		Geo. M. Brown, Detroit.....	June 4	27,000					
Sauble River.....	Several.....	C. Hagerman, Ludington.....	June 4	30,000					

Rainbow Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lapeer county: North Branch of Clinton River. Borsig Creek.	Several. Metamora and Dryden.	H. W. Bradley, Romeo. P. B. Glaspie, Oxford.	June 18 June 6	7,500 3,000
Iscelantou county: No Name. No Name. Peters Run. Peters Run. Crystal River. One of the Ponds on Knox Creek and Knox Creek.	Leland. Leland. Glen Arbor.	Frank H. Blackledge, Indianapolis, Ind Mich. Fish Commission, Detroit Frank H. Blackledge, Indianapolis, Ind Jas. Daly, Empire. Jas. Daly, Empire.	June 15 May 25 May 25 June 15 June 15 June 15	3,000 3,000 3,000 3,000 4,500 3,000
Lenaewee county: Evans Creek.	Franklin.	Jewett Whelan, Tipton.	May 21	9,000
Luce county: Tatquamenon River. Tatquamenon River.	Several. Columbus.	Wm. S. Linton, Saginaw. F. H. Rickerd, Laketon.	June 7 June 7	18,000 8,000
Mackinac county: Black River.	Several.	W. R. Calloway, Minneapolis, Minn.	June 19	25,000
Macomb county: Silver Creek.	Bruce.	F. Gillespie, Romeo.	June 18	4,500
Manistee county: Tributary to Bar Creek. Bar Creek.	Arcadia. Arcadia.	P. C. Chombeslond, Arcadia. Willie Paquette, Arcadia.	June 15 June 15	3,000 3,000
Marquette county: Nilson's Creek. Captain's Creek. Michiganum River. Bruce Creek. West Branch of Escanaba River. Spruce River. Black River. Trot Falls Creek. Inlets to Fowl Lake. Muller's Pond Inlets. Muller's Pond Inlets. Outlet to Forsyth Lake. Connors Creek. West Branch Escanaba River.	Humboldt. Republic. Republic. Ely. Republic. Republic and Humboldt. Republic. Negaunee. Negaunee. Negaunee. Negaunee. Negaunee. Champion. Ely.	D. T. Morgan, Republic. Him. R. Gamble, Republic. C. W. Munson, Republic. C. W. Munson, Republic. C. W. Munson, Republic. C. W. Munson, Republic. C. W. Munson, Republic. B. Bengston, Republic. Negaunee G. & R. Club, Negaunee. Negaunee G. & R. Club, Negaunee. Negaunee G. & R. Club, Negaunee. Lewis N. Tourillard, Ishpeming. Geo. A. Newett, Ishpeming.	June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7 June 7	6,000 8,000 10,000 8,000 8,000 6,000 6,000 8,000 4,000 4,000 4,000 4,000 4,000 8,000

Dead and Escanaba Rivers	Ely and Ishpeming	Geo. A. Newett, Ishpeming	June 7	12,000
Spruce River	Several	Geo. A. Newett, Ishpeming	June 7	6,000
Peskebec River	Michigan	Geo. A. Newett, Ishpeming	June 7	10,000
Dishroo Creek	Champion	Edward M. Stoddard, Michigamme	June 7	4,000
Mason county:	Sherman	Fountain Gun & Rod Club, Fountain	June 4	15,000
Lincoln River	Scottville	John Gray, Scottville	June 4	12,000
Pere Marquette River				
Mecosta county:	Hinton	Arthur Royce, Altona	June 3	3,000
Seaton Creek	Hinton	John Wright, Lakeview	June 3	6,000
Sylvesters Creek	Hinton	C. W. Yimling, Lakeview	June 3	3,000
Tompkins Creek	Hinton	W. S. Jaffin, Barryton	June 13	3,000
South Branch of Chippewa River	Fork	W. S. Jaffin, Barryton	June 13	4,500
Bulls Creek	Fork	W. S. Jaffin, Barryton	June 13	3,000
Barnier Creek	Sheridan	W. S. Jaffin, Barryton	June 13	3,000
Brown Creek	Fork	W. S. Jaffin, Barryton	June 13	1,500
Benjamin Creek	Fork	W. S. Jaffin, Barryton	June 13	3,000
Ravall Creek	Fork	W. S. Jaffin, Barryton	June 13	3,000
North Branch of Chippewa River	Fork	O. S. Wood, Barryton	June 13	7,500
Menominee county:	Spaulding	Wm. Frazer, Powers	June 14	4,000
Ten Mile Creek	Spaulding	Jas. McKibbin, Powers	June 14	8,000
West Branch Little Cedar River	Spaulding	Jas. McKibbin, Powers	June 14	10,000
West Branch Little Cedar River	Spaulding	Antoine Giguere, Powers	June 14	12,000
Spaulding Main River	Spaulding	Anthony F. Gillis, Powers	June 14	12,000
Cedar River	Spaulding	Chas. J. Quade, Powers	June 14	10,000
Quade Creek	Spaulding			
Montcalm county:	Several	A. B. Goodwin, Carson	June 11	16,500
Fish Creek	Horne	L. D. Curtis, Edmore	June 3	3,000
Rimmer Creek	Cato and Belvidere	Chesley Stalling, Lakeview	June 3	3,000
Annarack Creek	Cato and others	John E. Seal, Lakeview	June 3	9,000
Outlet of Muscalonge Lake	Maple Valley and Spencer	Jensen Bros., Trufant	June 3	3,000
Flat River	Montcalm	H. Faulson, Gowen	June 3	9,000
Horon Creek	Montcalm	R. Finch, Gowen	June 3	3,000
West Lake	Pine	F. D. Biggs, Langston	June 3	3,000
West Branch Creek	Pine	F. D. Biggs, Langston	June 3	3,000
Brodereck Creek	Pine	F. D. Biggs, Langston	June 3	3,000
Kortek Creek	Pine	F. D. Biggs, Langston	June 3	3,000
Whitbas Creek	Pine	F. D. Biggs, Langston	June 3	2,500
Inlet of Duner Lake	Richland	Brinton F. Hall, Bedding	June 3	7,500
Chap Creek	Evergreen	Wm. Gars, Vestaburg	June 3	3,000
Fish Creek	Several	C. B. Rarden, Stanton	June 3	3,000
		C. B. Rarden, Stanton	June 3	9,000
Montmorency county:	Several	John M. Farrier, Hillman	June 7	22,000
Thunder Bay River	Montmorency and Long Rapids	Geo. P. Crowley, Hillman	June 7	16,000
North Branch of Thunder Bay River				

Rainbow Trout Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county:				
Canberry Creek	Ravenna	S. I. Alberts, Ravenna	June 17	3,000
Crocker Creek	Ravenna	F. Bachloman, Ravenna	June 17	4,500
Thalute Creek	Ravenna	A. E. Young, Ravenna	June 17	1,500
Crocker Creek	Ravenna	Carl A. Stadler, Ravenna	June 17	4,500
Lake Creek	Casnovia	Fred Bearrs, Bailey	June 17	3,000
Newaygo county:				
White Riv.	Several	W. D. Sargeant, Fremont	May 25	12,000
William Creek	Sheridan	W. D. Sargeant, Fremont	May 25	4,500
Martin Creek	Denver	W. D. Sargeant, Fremont	May 25	4,500
Cedar Creek	Several	Wm. Pennoyer, Hilton	May 25	10,500
Brookesser Creek	Bridgeport and Shendon	Floyd Matthews, Hilton	May 25	9,000
Crocker Creek and small tributaries	Casnovia	C. J. Cold, Bailey	May 25	10,500
Crocker Creek	Ashtland and Grant	A. J. Vitus, Grant	May 25	12,000
White River	Lincoln	W. S. Barton, White Cloud	May 25	3,000
Robinson's Lake Outlet	Sherman	Chas. Streichirsch, White Cloud	May 25	3,000
Lower Cold Creek	Lincoln	Branch Bros., White Cloud	May 25	3,000
Gold Creek, East Branch	Lincoln	Adelbert Branch, White Cloud	May 25	1,500
Minepog Creek	Beaser and Monroe	Geo. E. Lyons, Hesperia	May 25	1,500
Little South Branch Pere Marquette River	Several	Mich. Fish Commission, Detroit	June 18	40,000
Oakland county:				
Stony Creek	Several	W. H. Bradley, Romeo	June 18	7,500
Upper Pettibone Creek	Highland	Frank Bailey, Milford	June 2	1,500
Field Creek	White Lake and Commerce	Tros. Forbes, Milford	June 2	6,000
Huron River and Tributaries	Commerce and Milford	T. H. Paddy, Milford	June 2	9,000
Pettibone Creek	Milford and Highland	R. S. Potts, Milford	June 2	3,000
Sherwood Creek	Milford	R. S. Potts, Milford	June 2	1,500
Lanning Creek	Oxford	Robt. Marshall, Oxford	June 6	1,500
Thurston Creek	Orion	A. A. Bellaire, Oxford	June 6	3,000
Hunter Creek	Oxford and Orion	Philo Ensley, Oxford	June 6	3,000
Tanner's Creek	Oakland	C. L. Randall, Oxford	June 6	3,000
Frost Creek	Orion	Ezra Chamberlin, Orion	June 6	6,000
Mac Intyre Creek	Brandon	Jas. Staples, Ortonville	June 6	3,000
Paint Creek	Oxford	Albert Marshall, Oxford	June 6	3,000
Oceana county:				
Gene Rouse Creek	Hart	L. B. Mitchell, Hart	June 17	3,000
Pentwater River	Several	Rufus Skeels, Hart	June 17	4,500
Cedar Creek	EbrIDGE	Ralph De Vries, Hart	June 17	4,500
Read Creek	Ferry	Fred Wright, Hart	June 17	1,500
Pentwater River	Pentwater and Weare	S. D. Montgomery, Grand Rapids	June 17	7,500
North Branch of South Branch of Pentwater River	EbrIDGE	Ray Thompson, Hart	June 17	4,500

Ogemaw county: Peach Lake Creek.....	West Branch, 21 W. R. 2 E. and 21 W. R. 3 E.....	Jno. Tolfree, West Branch.....	June 11	3,000
Eddy Creek.....	Horton.....	Jno. Tolfree, West Branch.....	June 11	6,000
East Branch of Tittabawassee River.....	West Branch.....	Jno. Tolfree, West Branch.....	June 11	3,000
Wood's Creek.....	Richland.....	Henry Zerán, Prescott.....	June 10	4,500
Eddy Creek.....	Churchill.....	Ed. Strauble, Selkirk.....	June 10	6,000
Silver Creek.....	Churchill.....	Geo. Peter, Selkirk.....	June 11	3,000
Detrich Creek.....	Churchill.....	Cascallen Bros, Selkirk.....	June 11	9,000
Rifle River.....	Edwards.....	J. A. Priddy, West Branch.....	June 11	7,500
Klacking and Perkins Creeks.....			June 11	3,000
Inlet of Campbell Lake.....				
Ontonagon county: Cascade River.....		G. A. Bergland, Milwaukee, Wis.....	June 8	10,000
Oscoda county: Middle Branch of the Muskegon River.....	Marion.....	C. W. Graves, Dighton.....	June 14	15,000
Norton Creek.....	Middle Branch.....	Geo. Baird, Marion.....	June 12	10,500
Aldrich Creek.....	Marion.....	Geo. Baird, Marion.....	June 12	3,000
Oscoda county: Clear Lake Outlet.....		H. D. Neal, Rose City.....	June 10	3,000
Otsego county: Headwaters of the Sturgeon River.....	Several.....	R. H. L'Hommedieu, Detroit.....	June 11	37,500
Ottawa county: Rush Creek.....	Georgetown.....	A. T. Walker, Jenison.....	May 21	9,000
Roscommon county: Chapman Creek.....	T. 21 W. R. 1 W. and T. 21 W. R. 1 E.....	John Tolfree, West Branch.....	June 11	6,000
Spring Creek.....	Gerrish.....	C. P. Mickelson, Mason.....	June 11	4,500
Higgins Lake Trout Stream.....		B. H. Hellen, Roscommon.....	June 11	4,500
St. Joseph county: Keers Creek.....	Jabins.....	Amon Ives, Three Rivers.....	May 20	1,500
Portage River and Tributaries.....	Lockport.....	A. R. Jackson, Three Rivers.....	May 20	7,500
Prairie River.....	Lockport.....	Geo. O. Jackson, Three Rivers.....	May 23	3,000
Rocky River and Tributaries.....	Fabius.....	C. R. Jackson, Three Rivers.....	May 20	6,000
Hog Creek.....	Burr Oak.....	Geo. E. Lewis, Burr Oak.....	May 23	3,000
Klinger Lake Inlets.....	Constantine.....	Perry L. Turner, Elkhart, Ind.....	May 23	3,000
Mill Creek.....	Constantine.....	W. N. Harvey, Constantine.....	May 23	6,000
Fawn River.....	Constantine.....	W. N. Harvey, Constantine.....	May 23	6,000
Shiawassee county: Big Maple River.....	Ovid.....	F. D. Cleveland, Shepardsville.....	June 3	12,000
Van Buren county: North Branch of Big Dowagiac Creek.....	Several.....	Fred Phillips, Dowagiac.....	May 20	7,500
East Branch of Paw Paw River.....	Antwerp and Porter.....	R. D. Loveland, Paw Paw.....	May 20	7,500

Rainbow Trout Plants, 1912.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Washtenaw county: Huron River and Mill Creek.....		L. D. Alley, Dexter.....	May 21	9,000
South Branch of Paint or Clawson's Creek.....		Willard A. Clawson, Ypsilanti.....	May 21	4,500
Wexford county: Buttermilk Creek.....	Liberty and Greenwood.....	C. A. Zimmerman, Manton.....	May 31	6,000
Total				1,934,500

RAINBOW TROUT PLANTS, 1912.

FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Presque Isle county: Durgee's Lake.....	Metz.....	Lee J. Smits, Detroit.....	Oct. 21	2,000

RAINBOW TROUT PLANTS, 1912.

2 YEAR OLDS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Mecosta county: Buckhorn Creek and Muskegon River.....	Greene.....	Mich. Fish Commission, Detroit.....	May 20	12,000

GERMAN BROWN TROUT PLANTS, 1912.

FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Charlevoix county: North Boyne River.....	Boyne River.....	Chas. Galster, Boyne Falls.....	April 12	30, 000
Mecosta county: Paris Creek.....	Green.....	Mich. Fish Commission, Detroit.....	Mar. 16	100, 000
Little Muskegon River.....	Yorton.....	Ray Carter, Mecosta.....	April 4	42, 000
Muskegon River.....	Green.....	Mich. Fish Commission, Detroit.....	May 20	30, 000
Newaygo county: Little South Branch of the Pere Marquette.....	Several.....	Mich. Fish Commission, Detroit.....	April 13	50, 000
Cedar Creek.....	Several.....	Wm. Pomeroy, Holton.....	April 16	30, 000
Ogemaw county: Rifle River.....	Richland.....	Henry Zeran, Prescott.....	Mar. 29	21, 000
Oscoda county: Hershey River.....	Richmond and Lincoln.....	J. G. Ruppert, Reed City.....	April 10	30, 000
Hershey River.....	Richmond and Lincoln.....	Alex. Peppier, Reed City.....	April 10	30, 000
Total.....				363, 000

LAKE TROUT PLANTS, 1912.

FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
St. Marys River.....		State Board of Fish Comms., Detroit..	May 15	500, 000
Lake Huron.....		State Board of Fish Comms., Detroit..	May 20	1, 000, 000
Lake Superior.....		State Board of Fish Comms., Detroit..	May 19	1, 000, 000
Total.....				2, 500, 000

SMALL MOUTH BLACK BASS PLANTS, 1912.

ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alleghen county:				
Eagle Lake.....	Alleghen.....	Wm. H. Spayde, Bloomingdale.....	June 6	6,000
Clear Lake.....	Lee.....	Wm. H. Evans, Grand Junction.....	June 6	6,000
Penners Lake.....	Martin.....	Wm. McLeod, Martin.....	June 6	4,000
Geneva Lake.....	Wayland.....	S. M. Boyer, Shelbyville.....	June 6	6,000
Antrim county:				
Thayer's Lake.....	Helena.....	O. P. Anderson, Bellaire.....	June 6	6,000
Grass Lake.....	Several.....	A. B. Wootan, Bellaire.....	June 6	6,000
Intermediate Lake.....	Several.....	I. E. Dickinson, Bellaire.....	June 6	8,000
Forch Lake.....	Several.....	F. B. Dickerson, Detroit.....	June 6	8,000
Hanley Lake.....	Central Lake.....	W. H. Uphengrove, Central Lake.....	June 6	6,000
Skinner Lake.....	Banks.....	L. Van Skiver, Ellsworth.....	June 6	6,000
Losy's Lake.....	Worner.....	Albert Losey, Elmira.....	June 6	4,000
Barry county:				
Thornapple River.....	Baltimore.....	C. M. Watson, Irving.....	June 7	8,000
Clear Lake.....	Orangeville and Yankee Springs.....	John L. Ormsbe, Dowling.....	June 7	6,000
Gun Lake.....	Orangeville and Yankee Springs.....	Austin Dwight, Shelbyville.....	June 5	6,000
Berrien county:				
Pike Lake.....	Bertrand.....	Jas. E. Scott, Buchanan.....	June 11	6,000
Clear Lake.....	Buchanan.....	Jas. E. Scott, Buchanan.....	June 11	6,000
Lake Chapin.....	Several.....	John G. Murdoch, Berrien Springs.....	June 11	6,000
St. Joseph River and Power Pond.....	Several.....	Graham O. McOmber, Berrien Springs.....	June 11	10,000
Singer Lake.....	Oronoko.....	Graham O. McOmber, Berrien Springs.....	June 11	6,000
Cass county:				
Diamond Lake.....	Penn.....	C. A. Russ, Cassopolis.....	June 19	6,000
Calhoun county:				
Lower Kalamazoo River.....	Marshall.....	W. J. Clayborne, Marshall.....	June 8	8,000
Brace Lake.....	Eckford.....	F. A. Stuart, Marshall.....	June 8	8,000
Iyon Lake.....	Fredonia.....	E. L. Holmes, Marshall.....	June 8	8,000
Gioquac Lake.....	Battle Creek.....	Gioquac Resort Assn., Battle Creek.....	June 8	10,000
Harts Lake.....	Battle Creek.....	A. N. Buckner, Battle Creek.....	June 8	8,000
Duck Lake.....	Clarence.....	L. E. Landon, Springport.....	June 4	8,000
Cheboygan county:				
Douglas Lake.....	Munro.....	A. M. Morrow, Pellston.....	June 4	8,000
Eaton county:				
Grand River.....	Windsor.....	Freeman G. French, Dimondale.....	June 14	6,000

Emmet county:									
Round Lake.....	Bear Creek.....				Henry Lindig, Petoskey.....	June	4	6,000	
Creeked Lake.....	Littlefield.....				C. E. Ruggles, Oden.....	June	4	8,000	
Carp Lake.....	Carp Lake and Hebron.....				O. C. Cope, Carp Lake.....	June	4	8,000	
Grand Traverse county:									
Boardman Lake.....	Traverse.....				Traverse City Fly Casting Club, Traverse City.....	June	6	6,000	
Cedar Hedge Lake.....	Green Lake.....				Wm. Saunders, Traverse City.....	June	6	6,000	
Silver Lake.....	Garfield.....				Wm. Saunders, Traverse City.....	June	6	6,000	
Jackson county:									
Olcott's, Big Wolf and Little Wolf Lakes.....	Severl.....				Wm. W. Todd, Jackson.....	June	7	12,000	
Vandercook's Lake.....	Summit.....				Geo. F. Beebe, Jackson.....	June	7	6,000	
Portage Lake.....	Waterloo and Henrietta.....				Geo. F. Beebe, Jackson.....	June	7	6,000	
Grass Lake.....	Leoni.....				Geo. F. Beebe, Jackson.....	June	7	4,000	
Clark's Lake.....	Columbia.....				Jno. E. Pinegar, Jackson.....	June	7	8,000	
Farwell Lake.....	Hanover.....				G. T. Greenshaw, Hanover.....	June	7	6,000	
Kalamazoo county:									
Sherman Lake.....	Ross.....				O. A. VanDeusen, Battle Creek.....	June	8	8,000	
Eagle Lake.....	Charlston.....				Lewis R. McLeod, Battle Creek.....	June	8	6,000	
Dustin Lake.....	Oshimo.....				Frank Wright, Oshimo.....	June	6	4,000	
Hampton Lake.....	Portage.....				Geo. W. Locke, Kalamazoo.....	June	5	4,000	
Gourdneck Lake.....	Portage and Schoolcraft.....				E. R. Conrad, Vicksburg.....	June	5	6,000	
West Lake.....	Portage.....				E. R. Conrad, Vicksburg.....	June	5	6,000	
Austin Lake.....	Portage.....				E. R. Conrad, Vicksburg.....	June	5	8,000	
Indian Lake.....	Brady.....				E. O. Goldsmith, Vicksburg.....	June	5	6,000	
Kent county:									
Middle Lake.....	Solon.....				Earl Rasco, Sand Lake.....	June	4	4,000	
Crandall Lake.....	Solon.....				Earl Rasco, Sand Lake.....	June	4	4,000	
Sand Lake.....	Nelson.....				Earl Rasco, Sand Lake.....	June	4	6,000	
Clear Lake.....	Solon.....				Chas. S. Parks, Kent City.....	June	4	4,000	
Spring Lake.....	Solon.....				Chas. S. Parks, Kent City.....	June	4	4,000	
Park Lake.....	Tyrone.....				Chas. S. Parks, Kent City.....	June	4	4,000	
Big Bostwick Lake.....	Cannon.....				Will Kilroy, Rockford.....	June	3	6,000	
Thornapple River.....					Geo. H. Richardson, Ada.....	June	29	4,000	
Kalkaska county:									
Island Lake.....	Wilson.....				Montie B. Darby, Kalkaska.....	June	4	12,000	
Lake county:									
Switzer Lake.....	Cherry Valley.....				C. Hagerman, Ludington.....	June	5	4,000	
Watermill Lake.....	Cherry Valley.....				W. R. Clark, Baldwin.....	June	5	4,000	
Hamlin Lake.....	17 N. of R. 13 W.....				R. J. Matthews, Baldwin.....	June	6	2,000	
Lincoln Lake.....	Sweetwater.....				Wm. Utter, Pescock.....	June	4	4,000	
Sable Lakes.....	Elk.....				Earl Fairbanks, M. D., Irons.....	June	4	8,000	
Pickrel Lake.....	Elk and North Range.....					June	4	4,000	

Small Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Livingston county:				
Nashy Lake.....	Hartland.....	H. J. Lee, Milford.....	June 7	4,000
Long Lake.....	Hartland.....	M. C. Williams, Milford.....	June 7	4,000
Manistee county:				
Little Manistee Lake.....	Manistee.....	T. G. Trimble, Manistee.....	June 5	6,000
Portage Lake.....	Onckama.....	Hans A. Wudel, Onckama.....	June 5	8,000
Bear Lake.....	Bear Lake and Pleasanton.....	Wear Lake R. & C. Club, Bear Lake.....	June 5	8,000
Glover's Lake.....	Pleasanton.....	F. L. Glover, Bear Lake.....	June 6	4,000
Bar Lake.....	Arcadia.....	A. H. Stackman, J. P., Arcadia.....	June 6	6,000
Mason county:				
Hamlin Lake.....	Hamlin.....	C. Hagerman, Ludington.....	June 5	6,000
Pere Marquette River.....	Scottville.....	John Grey, Scottville.....	June 5	6,000
Lincoln Lake.....	Lincoln.....	Elvin Swarthout, Grand Rapids.....	June 5	6,000
Gun Lake.....	Freesoil and Sherman.....	Thos. S. Stephens, Freesoil.....	June 5	6,000
Long Lake.....	Branch.....	Ernest Jaser, Walthalla.....	June 5	6,000
Emerson Lake.....	Branch.....	Ernest Jaser, Walthalla.....	June 5	6,000
Mecosta county:				
Rustford Pond.....	Deerfield.....	Ira Helms, Morley.....	June 4	4,000
Town Line Lake.....	Collax.....	W. H. Redmond, Big Rapids.....	June 4	6,000
Long Lake.....	Morton.....	J. H. Snyder, Mecosta.....	June 20	6,000
Missaukee county:				
Clam River.....	Reeder.....	A. L. Weidler, Mc Bain.....	June 4	6,000
Dyer Lake.....	Caldwell.....	F. D. Mc Gregor, Lake City.....	June 4	4,000
Diar Lake.....	Caldwell.....	Fred F. Rose, Lake City.....	June 4	6,000
Long Lake.....	Caldwell.....	F. M. Nye, Lake City.....	June 4	6,000
Sapphire Lake.....	Lake.....	F. A. Beuthien, Lake City.....	June 4	6,000
Lake Missaukee.....	Several.....	Chas. S. Ostrander, Lake City.....	June 4	6,000
Section 10 Lake.....	Lake.....	W. J. Brown, Lake City.....	June 4	6,000
Round Lake.....	Caldwell.....	Warren Jones, Lake City.....	June 4	4,000
Muskegon county:				
Twin Lake.....	Dalton.....	T. M. Johnson, Twin Lake.....	June 7	6,000
Town Line Lake.....	Several.....	John Adams, Twin Lake.....	June 7	6,000
Crooked Lake.....	Holton.....	John Adams, Twin Lake.....	June 7	6,000
White Lake.....	Montague and others.....	Earl N. Gassahl, Montague.....	June 7	6,000

NeWAYgo county:					
Sand Lake.....	Ashland.....	Allen J. Titus, Grant.....	June 4	10,000	
Diamond Lake.....	Lincoln.....	Branch Bros., White Cloud.....	June 4	18,000	
Lost Lake.....	Merrill.....	Frank Bird, Ota.....	June 4	4,000	
Cystal Lake.....	Sherman.....	Iterman Kemperman, Fremont.....	June 7	6,000	
Dutch Lake.....	Wroster.....	Iterman Kemperman, Fremont.....	June 7	6,000	
Fremont Lake.....	Sheridan.....	W. F. Reber, Fremont.....	June 7	8,000	
Oakland county:					
Watkins Lake.....	Waterford.....	E. L. Keyser, Pontiac.....	June 5	8,000	
Elizabeth Lake.....	Waterford.....	H. Y. Walker, Pontiac.....	June 5	6,000	
Oscana county:					
Silver Lake.....	Golden.....	Frank T. Sloan, Mears.....	June 7	8,000	
Pentwater Lake.....	Pentwater.....	C. F. Lewis, Pentwater.....	June 7	8,000	
Oscola county:					
Hewitt Lake.....	Burdette Lake.....	Hon. J. M. Perry, Tustin.....	June 15	6,000	
St. Joseph county:					
Sturgis Power Pond.....	Mendon and Nottawa.....	Chas. Baer, Mendon.....	June 5	6,000	
Sand Lake.....	Nottawa.....	M. Bowersox, Nottawa.....	June 5	10,000	
Van Buren county:					
Cedar Lake.....	Porter.....	R. W. Mitchell, Lawton.....	June 11	6,000	
Bankson Lake.....	Porter.....	V. B. Finch, Lawton.....	June 11	6,000	
Eagle Lake.....	Paw Paw.....	Ben. Desenhur, Lawton.....	June 11	6,000	
Base Line Lake.....	Geneva.....	W. E. Grimes, South Haven.....	June 6	6,000	
Little Bear Lake.....	Columbia.....	E. B. Eddy, Grand Junction.....	June 6	6,000	
North Lake.....	Pine and Almena.....	Wm. X. Bruns, Grand Junction.....	June 6	6,000	
Fish Lake.....	Pine Grove.....	Frank Wright, Oshkimo.....	June 6	6,000	
North Lake.....	Pine Grove and Alamo.....	F. W. Schoolcraft, Kendall.....	June 6	6,000	
West Lake.....	Almena.....	F. W. Schoolcraft, Kendall.....	June 6	4,000	
Tamarack Lake.....	Pine Grove.....	F. W. Schoolcraft, Kendall.....	June 6	4,000	
Wexford county:					
Cadillac Lake.....	Clam Lake.....	N. V. Gerrish, Cadillac.....	June 3	6,000	
Lake Mitchell.....	Cherry Grove.....	N. V. Gerrish, Cadillac.....	June 3	6,000	
Total.....				732,000	

SMALL MOUTH BLACK BASS PLANTS, 1912.—Continued.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alger county: Au Train Lake.....	Au Train.....	Garrison & Doucette, Jr., Au Train.....	July 3	5,000
Baraga county: Sciffer's Lake..... Lake Ruth..... Beaufort Lake..... Lake George.....	I'Anse..... Spurr..... Spurr..... Spurr.....	Silver River R. & G. Club, I'Anse..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee..... Peter Trudell, Jr., Negaunee.....	July 9 July 9 July 9 July 9	1,500 1,500 1,500 1,500
Charlevoix county: Deer Lake..... South Arm of Pine Lake.....	Boyne Valley.....	Wm. J. Pearson, Boyne Falls..... Frederick M. Mayne, Charlevoix.....	Aug. 7 Aug. 20	1,000 1,000
Cass county: Fish Lake.....	Penn.....	S. Stevens, Battle Creek.....	June 19	3,000
Chippewa county: Duck Lake.....		Chase S. Osborn, Scult Ste. Marie.....	Aug. 14	2,000
Clare county: Eight Point Lake.....	Garfield.....	S. F. Postal, Evart.....	Aug. 14	1,000
Clinton county: Round Lake.....	Victor.....	Wm. H. Rawley, Laingsburg.....	July 25	1,000
Crawford county: Shoepack Lake..... K. P. Lake.....	Maple Forest.....	C. P. Mickelson, Mason..... Geo. F. Owen, Lovells.....	Aug. 22 Aug. 22	1,400 1,400
Gladwin county: Pratt Lake.....	Sage.....	Hon. Eugene Foster, Gladwin.....	Aug. 6	1,000
Gogebic county: Lake Gogebic.....	Matchwood.....	L. L. Wright, Gogebic.....	Oct. 23	1,000
Houghton county: Bear Lake..... Lake Roland..... Fales Lake.....	Hancock..... Elm River..... Elm River.....	J. Seldon, Calumet..... R. R. Sieber, Winona..... Geo. Williams, Calumet.....	July 10 July 10 July 10	2,000 2,500 1,000
Iosco county: Long Lake.....	Plainfield.....	M. N. Cray, Ellack.....	June 28	1,800

Iron county: Lake John Brown.....	Iron River.....	E. L. Crull, Kenton.....	July 10	2,000
Jackson county: Fay Lake.....	Norvell.....	Hon. L. W. Watkins, Manchester.....	July 25	1,000
Keweenaw county: Schlatter Lake.....	Grant.....	Dan D. Mac Intyre, Calumet.....	July 10	1,500
Lake Addie.....	Grant.....	Walter Edwards, Calumet.....	July 10	1,500
Lake Medora.....	Grant and Eagle Harbor.....	Howard Anger, Calumet.....	July 10	1,500
Gratiot Lake.....		Wm. M. Lyon, Calumet.....	July 10	1,500
Leelanau county: Leg Lake.....	Leelanau.....	Gilman M. Darne, Northport.....	Aug. 15	1,000
School Lake.....	Cleveland.....	Jos. Shalda, Maple City.....	Aug. 31	1,000
Livingson county: Pardu Lake.....	Genos.....	R. E. Barron, Howell.....	June 20	900
Marquette county: Long Lake.....	Republic.....	C. W. Munson, Republic.....	June 9	1,500
Lake Michigan.....	Michiganme.....	Geo. A. Newett, Ishpenning.....	June 9	2,000
Gibson Lake.....	Michiganme.....	Geo. A. Newett, Ishpenning.....	June 9	1,500
Lake Hattie.....	Humboldt.....	John Hyry, Bescon.....	June 9	1,500
Pellessers' Lake.....	Sands.....	W. S. Ewing, Harvey.....	June 9	2,000
Mackinaw county: South Manistique or Whitefish Lake.....		F. P. Bohn, Newberry.....	Oct. 22	1,000
Mecosta county: Muskegon River.....	Greene.....	Jay G. Reed, Paris.....	July 17	1,000
Monroe county: River Raisin.....		C. W. Kenmerling, Monroe.....	Aug. 17	1,000
Montmorency county: Long Lake.....	Montmorency.....	Wm. Scott, Hillman.....	July 1	500
Sucker Lake.....	Hillman.....	Austin Rea, Hillman.....	July 1	300
Oakland county: Deer Lake.....	Independence.....	Oliver M. Gardner, Detroit.....	June 26	1,500
Avery Lake.....	Oxford.....	John H. Avery, Detroit.....	Aug. 14	600
Leon Lake.....	Waterford.....	E. D. Parshall, Pontiac.....	Aug. 14	600
Ogemaw county: Sage Lake.....	Hill.....	B. L. Holliday, Lupton.....	June 28	1,200
Ontonagon county: Lake Gogebic.....	Matchwood and Gogebic.....	Johnson & Erickson, Bergland.....	July 10	4,000
Long Lake.....	Interior.....	O. H. Losey, Trout Creek.....	July 10	1,500
Beaver Lake.....	Rockland.....	W. P. Voghtlin, Rockland.....	July 10	1,500

Small Mouth Black Bass Plants, 1912.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Saginaw county: Saginaw River.....		W. J. Hunsaker, Saginaw.....	Aug. 2	2,000
Washtenaw county: Long Lake.....	Lyndon.....	Hon. John Kaimback, Chelsea.....	June 24	900
Total.....				71,100

LARGE MOUTH BLACK BASS PLANTS, 1912.

ADVANCED FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county: Hubbard Lake.....	Alcona and Caledonia.....	Oscar Larson, Spruce.....	June 25	16,000
Allegan county: Duncan Lake.....	Leighton.....	Gilbert A. Woodward, Caledonia.....	June 21	6,000
Little Tom Lake.....	Clyde.....	N. G. Nelson, Fennville.....	June 24	4,000
Lower Scott Lake.....	Lee.....	Mark Maw, Pullman.....	June 24	6,000
Root Lake.....	Wayland.....	Geo. N. Dean, Shelbyville.....	June 18	6,000
Round Lake.....	Wayland.....	John D. Kimmel, Shelbyville.....	June 18	6,000
Seikirk Lake.....	Wayland.....	Carl A. Warner, Shelbyville.....	June 18	6,000
Fenner Lake.....	Martin.....	Wm. McLeod, Martin.....	June 18	4,000
Lake Sixteen.....	Martin.....	Wm. McLeod, Martin.....	June 18	4,000
Osterhout Lake.....	Lee.....	Samuel Dawes, Grand Junction.....	June 18	6,000
Hutchins Lake.....	Clyde and Ganges.....	J. A. Barron, Fennville.....	June 18	6,000
Perch Lake.....	Manlius and Clyde.....	A. L. Whitbeck, Fennville.....	June 18	6,000
Upper Scott Lake.....	Hopkins.....	Chas. Horn, Pullman.....	June 18	8,000
Hearland Lake.....	Hopkins.....	W. F. Tiefenthal, Hopkins.....	June 13	6,000
Three Corners Lake.....	Hopkins.....	W. F. Tiefenthal, Hopkins.....	June 13	4,000
East Lake.....	Hopkins.....	Louis Ellinger, Hopkins.....	June 13	6,000
Minor Lake.....	Allegan and Hopkins.....	L. Van Patten, Hopkins.....	June 13	4,000
Dumont Lake.....	Allegan.....	E. L. Douglas, Allegan.....	June 13	8,000
Reed's Lake.....	Trowbridge.....	C. N. McDuffie, Allegan.....	June 13	4,000
Little John Lake.....	Allegan.....	John Burgess, Allegan.....	June 13	4,000
Minkler Lake.....	Trowbridge.....	D. H. Kent, Allegan.....	June 13	6,000

TWENTIETH REPORT—STATE FISHERIES.

School Section.....	Watson.....		June 13	4,000
Big Lake.....	Watson.....		June 13	6,000
Big Lake.....	Watson.....		June 13	6,000
Little John Lake.....	Allegan.....		July 1	4,000
Alpena county:				
Long Lake.....	Several.....		June 25	20,000
Antrim county:				
High Lake.....	Milton.....		June 28	10,000
Baraga county:				
Cliff Lake.....	Spurr.....	Peter Trudell, Jr., Negaunee.	July 9	1,500
Bella Lake.....	Arvon.....	Silver River R. & G. Club, L'Anse.	July 9	2,500
Pine Lake.....	L'Anse.....	Silver River R. & G. Club, L'Anse.	July 9	1,500
Big Lake.....	Baraga.....	Silver River R. & G. Club, L'Anse.	July 9	2,500
Barry county:				
Metcalf Lake.....	Johnstown.....	Chas. C. Green, Battle Creek.	June 21	6,000
Bristol Lake.....	Johnstown.....	Ray Babcock, Bedford	June 21	6,000
Long Lake.....	Johnstown.....	Ray Babcock, Bedford	June 21	6,000
Clear Lake.....	Baltimore.....	John L. Ormsbe, Dowling	June 21	8,000
High Hill Lake.....	Assyria.....	P. K. Jewell, Assyria.	June 21	4,000
West Lake.....	Assyria.....	P. K. Jewell, Assyria.	June 21	4,000
Mud Lake.....	Johnstown.....	Robt. E. Dullam, M. D., Battle Creek.	June 21	4,000
Mill Lake.....	Johnstown.....	Willard A. Knight, Battle Creek.	June 21	20,000
Fine Lake.....	Hope.....	Ray F. Pierce, Shultz.	June 15	6,000
Horseshoe Lake.....	Hope.....	Mrs. Hiram Gibson, Cloverdale.	June 15	8,000
Long Lake.....	Hope.....	B. Dickinson, Hastings	June 15	8,000
Head Lake.....	Hope.....	Grant Dickerson, Cloverdale	June 5	6,000
Lake 21.....	Hope.....	Pete Kingsbery, Cloverdale	June 15	6,000
Wall Lake.....	Hope.....	Ovid Chamberlin, Cloverdale	June 15	6,000
Wad Lake.....	Hope.....	J. M. Payne, Hastings.	June 15	6,000
Ashty Lake.....	Hope.....	J. M. Payne, Hastings.	June 15	6,000
Wilkinson Lake.....	Hope.....	Henry Moorhus, Delton	June 15	6,000
Thornapple Lake.....	Castleton.....	Henry W. Wade, Morgan	June 12	6,000
Payne Lake.....	Yankee Springs.....	Willis E. Streeter, Middleville	June 12	6,000
Gun Lake.....	Yankee Springs.....	Willis E. Streeter, Middleville	June 12	6,000
Clear Lake.....	Baltimore.....	A. A. Anderson, Hastings	June 12	8,000
Carter Lake.....	Hastings.....	John L. Ormsbe, Dowling	June 12	6,000
Leach Lake.....	Rutland.....	C. W. Mixer, Hastings	June 29	6,000
Long Lake.....	Hastings.....	C. W. Mixer, Hastings	June 29	6,000
Gregory Lake.....	Hastings.....	C. W. Mixer, Hastings	June 29	6,000
Barber Lake.....	Carleton.....	C. W. Mixer, Hastings	June 29	6,000
McParlin Lake.....	Rutland.....	C. W. Mixer, Hastings	June 29	6,000
Pine Lake.....	Prairieville.....	Arthur Sheip, Doster	July 1	4,000
Dowd Lake.....	Rutland.....	C. W. Mixer, Hastings	June 29	6,000
Otis Lake.....	Rutland.....	C. W. Mixer, Hastings	June 29	6,000
Pond Lilly Lake.....	Hastings.....	C. W. Mixer, Hastings	June 29	6,000

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Berrien county:				
Mill Creek Pond		F. E. Rowland, Watervliet	June 24	6,000
Paw Paw Lakes		A. S. Miles, Benton Harbor	June 24	8,000
Long Lake	Berrien	F. D. Layman, Berrien Centre	June 18	6,000
Yellow Lake	Buchanan	Jas. E. Scott, Buchanan	June 24	6,000
Madron Lake	Buchanan	Jas. E. Scott, Buchanan	June 24	6,000
Weaver Lake	Buchanan	Jas. E. Scott, Buchanan	June 24	6,000
Calhoun county:				
Coldwater Lake	Ovid	F. T. Tappan, Coldwater	June 26	20,000
Coldwater River	Ovid and Coldwater	F. T. Tappan, Coldwater	June 26	14,000
Cruzg Morrison, North and South Messenger Lakes	Coldwater and Girard	F. T. Tappan, Coldwater	June 26	20,000
Kenyon Lake	Sherwood	Leo. E. Wood, Athens	June 21	6,000
Lower Lake	Sherwood	J. C. Gaw, Athens	June 21	8,000
Kirby Lake	Sherwood	J. J. Bantford, Union City	June 26	8,000
Havyn Lake	Sherwood	A. S. Kent, Sherwood	June 26	4,000
Blossom Lake	Sherwood	C. J. Shiner, Colon	June 26	4,000
Goodrich Lake	Sherwood	A. Blackman, Sherwood	June 26	4,000
Dane Lake	Sherwood	A. Blackman, Sherwood	June 26	4,000
Sinead and Carry	Batavia	T. T. Tappan, Coldwater	June 27	16,000
Marble Lake and Tributaries	Quincy	L. V. Turner, Quincy	June 27	16,000
Calhoun county:				
Spring Lake No. 3	Penfield	Bert Schmau, Battle Creek	June 21	4,000
Clear Lake	Penfield	Emory A. Wilson, Battle Creek	June 21	6,000
Spring Lake No. 4	Penfield	Chas. R. Young, Battle Creek	June 21	4,000
Barnum and Graham Lakes	Leroy	P. F. Muir, Battle Creek	June 21	10,000
Wabascoo Lake	Bedford	Weickgenant & Coe, Battle Creek	June 21	8,000
Beadie Lake	Battle Creek	Sam. M. Weeks, Battle Creek	June 21	8,000
Goguac Lake	Sheridan	Bauer & Hamilton, Battle Creek	June 21	8,000
Hall's Lake	Sheridan	L. J. Deving, Albion	June 21	6,000
Montcalm Lake	Clarence	L. J. Deving, Albion	June 21	6,000
Clark's Lake of Gang Lakes	Convis	F. A. Stuart, Marshall	June 21	6,000
Garfield Lake	Marshall	F. G. Seaman, Marshall	June 21	4,000
Squaw Lake	Fredonia	F. G. Seaman, Marshall	June 21	10,000
Kalamazoo River below dam	Fredonia	Robt. F. Grant, Marshall	June 21	4,000
Kalamazoo River Mill Pond	Fredonia	C. F. Seaman, Marshall	June 21	6,000
Cedar Lake	Fredonia	W. T. Phelps, Marshall	June 21	8,000
Long Lake	Sheridan	C. E. Couse, Marshall	June 21	6,000
Winnepeg Lake	Fredonia	Wm. J. Clisbourne, Marshall	June 21	6,000
Long Lake	Fredonia	Ethan Allen, Marshall	June 21	8,000
Fish Lake	Maynardo	L. R. Crampton, Marshall	June 21	6,000
Maynard Lake	Maynardo	L. R. Crampton, Marshall	June 21	8,000
Keasler Lakes	Albion	D. S. Howe, Homer	June 24	4,000
Turtle Lake	Burlington	A. Lundteigen, Union City	June 26	4,000

Warners Lake.....	Burlington.....	H. F. Johnson, Union City.....	June 26	4,000
Lee Lake.....	Leroy.....	W. H. Hubbard, Union City.....	June 26	4,000
Homer Lake.....	Homer.....	Chas. Blashfield, Homer.....	June 26	6,000
Cass county:				
Crane Pond.....	Newberg.....	Earl J. Williams, Vandalia.....	June 29	4,000
Fish Lake.....	Townline between Penn and Volinia.....	S. S. Stevens, Battle Creek.....	June 19	6,000
Jones Lake.....	La Grange.....	Art Shipper, Cassopolis.....	June 19	6,000
Weatherbe and Lime Lakes	Porter and Calven.....	Fred Marsh, Cassopolis.....	June 19	12,000
Stone Lake.....	La Grange.....	C. A. Russ, Cassopolis.....	June 19	16,000
Diamond Lake.....	Several.....	Perry L. Turner, Elkhardt, Ind.....	June 19	12,000
Earl Lake.....	Onawa.....	H. B. Lawrence, Decatur.....	June 24	8,000
Saddlelog Lake.....	Marcellus.....	F. E. Parrant, Chicago, Ill.....	June 24	8,000
Deer Lake.....	Silver Creek.....	W. L. Arnold, Marcellus.....	June 25	6,000
Golf Lake.....	Marcellus.....	Chas. S. Cosselman, Marcellus.....	June 25	6,000
Finch Lake.....	Marcellus.....	A. B. Laverne, Marcellus.....	June 25	8,000
Pine Lake.....	Marcellus.....	Frank W. Patch, Marcellus.....	June 25	8,000
Pine Lake.....	Marcellus.....	Geo. Hayes, Marcellus.....	June 25	6,000
Huyck Lake.....	Marcellus.....	A. J. Smith, Marcellus.....	June 25	4,000
Little Fish Lake.....	Volinia.....	Erby Brown, Marcellus.....	June 25	4,000
Butter Lake.....	Porter.....	C. S. Jones, Marcellus.....	June 25	4,000
Bunker Lake.....		Fred Jones, Jones.....	June 26	6,000
Sylvania Lake.....				
Elbow Lake.....				
Charlevoix county:				
South Arm of Pine Lake.....		Carl Stroebel, East Jordan.....	June 28	18,000
Cheboygan county:				
Douglas Lake.....	Munro.....	A. M. Morrow, Pellston.....	June 14	10,000
Clinton county:				
Looking Glass River.....	Eagle.....	Wm. Ray, Eagle.....	June 20	6,000
Alward Lake.....	Olive.....	Arthur St. Clair, Dewitt.....	June 29	8,000
Easton county:				
Tamarack Lake.....	Sunfield.....	Peter Chatfield, Vermontville.....	June 22	6,000
Looking Glass River.....	Oneida.....	Bruce B. Douglas, Waconosta.....	June 22	8,000
Emmet county:				
Round Lake.....	Bear Creek.....	Henry Lindig, Petoskey.....	June 14	8,000
Crooked Lake.....	Littlefield.....	Sheldon Cole, Oden.....	June 14	10,000
Genesee county:				
Argentine Pond.....	Argentine.....	Clyde Stags, Argentine.....	June 21	10,000
Long Lake.....	Fenton.....	Everett L. Bray, Flint.....	June 21	14,000
Lobbell Lake.....	Argentine.....	Ovid Bluegill Club, Ovid.....	June 21	12,000

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Grand Traverse county:				
Little Umicte Lake.....	Union.....	R. B. De-France, Kingsley.....	June 21	6,000
Duck Lake.....	Grant and Long Lake.....	R. B. De-France, Kingsley.....	June 21	8,000
Big Umicte Lake.....	Union.....	R. B. De-France, Kingsley.....	June 21	8,000
Green Lake.....	Green Lake.....	R. B. De-France, Kingsley.....	June 21	8,000
Hogback Lake.....	Paradise.....	Kingsley Sportsmen's Club, Kingsley.....	June 21	8,000
Rennie Lake.....	Union.....	Kingsley Sportsmen's Club, Kingsley.....	June 21	8,000
Brewster Lake.....	Mayfield.....	A. B. Stimson, Kingsley.....	June 21	6,000
Rainey Lake.....	East Bay.....	Earl J. Case, Kingsley.....	June 21	14,000
Bass Lake.....	Several.....	G. E. Potrafke, Traverse City.....	June 28	10,000
Cedar Hedge Lake.....	Green Lake.....	Wm. Saunders, Traverse City.....	June 28	8,000
Silver Lake.....	Garfield.....	Ed. Gilbert, Traverse City.....	June 28	10,000
Ionia county:				
Bailey's Lake.....	North Plains.....	F. A. Bailey, North Plains.....	June 20	4,000
Woodward Lake.....	Ronald.....	Clyde Dalrymple, Shiloh.....	June 20	4,000
Owl Lake.....	Orleans.....	Frank Allen, Shiloh.....	June 20	4,000
Long Lake.....	Orleans.....	Hon. W. F. Bricker, Belding.....	June 17	12,000
Ravell's Pond.....	Orleans.....	Chas. Madden, Belding.....	June 17	4,000
Municipal Pond.....	Portland.....	Jos. Patterson, Portland.....	June 22	6,000
Looking Glass River.....	Portland.....	Jos. Patterson, Portland.....	June 22	6,000
Commonwealth Pond.....	Lyons and Portland.....	C. L. Hale, Portland.....	June 22	6,000
Warren Mill Pond.....	Portland.....	F. S. Lockwood, Portland.....	June 22	6,000
Church Lake.....	Campbell.....	E. A. Rising, Clarksville.....	June 22	4,000
Pedler Lake.....	Campbell.....	E. A. Rising, Clarksville.....	June 22	4,000
Jordan Lake.....	Odessa and Woodland.....	Edwin S. Shellhorn, Lake Odessa.....	June 22	6,000
Tupper Lake.....	Odessa.....	Edwin S. Shellhorn, Lake Odessa.....	June 22	6,000
Peck Lake.....	Boston.....	John Wallington, Saranac.....	June 29	6,000
Huchins Pond.....	Berlin.....	John Wallington, Saranac.....	June 29	6,000
Walter's Pond.....	Boston.....	John Wallington, Saranac.....	June 29	6,000
Morrison Lake.....	Boston.....	John Wallington, Saranac.....	June 29	6,000
Hubbardston Mill Pond on Fish Creek.....	North Plains.....	A. E. Clark, Hubbardston.....	June 28	10,000
Iosco county:				
Bass Lake.....	Plainfield.....	C. W. Luce, East Tawas.....	June 26	12,000
Indian Lake.....	Plainfield.....	C. W. Luce, East Tawas.....	June 26	16,000
Van Ettin Lake (formerly Pine)	Oscoda.....	Alfred R. Weis, Au Sable.....	June 26	
Isabella county:				
Hail's Lake.....	Broomfield.....	J. M. Swisher, Remus.....	June 20	4,000
Weidman Pond.....	Sherman and Nottawa.....	Miles A. Drallette, Weidman.....	June 20	6,000
Scutt Lake.....	Nottawa.....	Robt. Hyslop, Weidman.....	June 20	4,000
Perch Lake.....	Sherman.....	Robt. Hyslop, Weidman.....	June 20	6,000

Coldwater Lake.....	Nottawa.....	Robt. Hyslop, Weidman.....	June 20	6,000
Bass Lake.....	Fremont.....	E. E. Peasley, Vestaburg.....	June 20	10,000
Stevenson Lake.....	Vernon.....	Wm. H. Caple, Clare.....	June 28	10,000
Jackson county:	Norvell.....	Chester R. Smith, Grass Lake.....	June 21	6,000
Tamarack Lake.....	Leoni and Napoleon.....	Geo. E. Beebe, Jackson.....	June 21	8,000
Michigan Centre Pond	Several.....	Geo. E. Beebe, Jackson.....	June 21	8,000
Wolf Lake.....	Leoni.....	Geo. E. Beebe, Jackson.....	June 21	8,000
Brill's Lake.....	Napoleon.....	Geo. E. Beebe, Jackson.....	June 21	8,000
Cranberry Lake.....	Summit.....	Geo. E. Beebe, Jackson.....	June 21	8,000
Brown's Lake.....	Napoleon.....	G. E. Rushton, Napoleon.....	June 14	10,000
Stony Lake.....	Norvell.....	Leo. R. Kader, Norvell.....	June 14	6,000
Sweezy Lake.....	Norvell.....	H. N. Raby, Norvell.....	June 14	6,000
Bessie Lake.....	Hanover.....	Eugene B. Strait, Hanover.....	June 14	4,000
Horseshoe Lake.....	Hanover.....	Burr Richards, Hanover.....	June 14	4,000
Rushine Lake.....	Hanover.....	Wm. M. Ransom, Jonesville.....	June 14	6,000
Mud Lake.....	Columbia.....	Jno. E. Pincgar, Jackson.....	June 12	8,000
Clark's Lake.....	Napoleon.....	F. J. Thoman, Jackson.....	June 12	6,000
Ackerson Lake.....	City of Jackson.....	Wm. W. Todd, Jackson.....	June 12	6,000
Lagoon in Loomis Park.....	Napoleon.....	E. S. Loomis, Jackson.....	June 12	6,000
Ackerson Lake.....	Sandstone.....	E. L. Farrand, Jackson.....	June 12	4,000
List Lake.....				
Kalamazoo county:	Ross.....	Clarence E. Muirhead, Battle Creek.....	June 21	6,000
Converse Lake.....	Ross.....	Harry S. Parker, Battle Creek.....	June 21	6,000
Sherman Lake.....	Several.....	J. O. Gallup, Battle Creek.....	June 21	8,000
Gull Lake.....	Charleston.....	Orto A. Buechner, Augusta.....	June 21	6,000
Earls Lake.....	Ross.....	F. S. Kenfield, Augusta.....	June 21	8,000
Gull Lake.....	Richland.....	H. D. Stratton, Galesburg.....	June 21	8,000
Middle Lake.....	Richland.....	H. D. Stratton, Galesburg.....	June 21	8,000
Black Lake.....	Schoolcraft.....	M. N. Grimes, Schoolcraft.....	June 19	4,000
West Lake.....	Portage.....	J. F. Palmer, Vicksburg.....	June 19	6,000
Gourdneck Lake.....	Schoolcraft.....	Orley W. Holmes, Vicksburg.....	June 19	8,000
Little Indian Lake.....	Pavilion.....	T. E. Himebaugh, Vicksburg.....	June 19	6,000
Thral's Lake.....	Brady.....	C. B. Fraker, Vicksburg.....	June 19	4,000
Upridge Lake.....	Brady.....	C. G. Foster, Vicksburg.....	June 19	4,000
Little Rawson Lake.....	Schoolcraft.....	Harry M. Day, Vicksburg.....	June 19	4,000
Pickrel Lake.....	Schoolcraft.....	R. B. Erwine, Vicksburg.....	June 19	6,000
Bear Lake.....	Schoolcraft.....	C. C. Briggs, Vicksburg.....	June 19	6,000
Kimble Lake.....	Schoolcraft.....	B. R. Platt, Vicksburg.....	June 19	8,000
Rawson or Barton Lake.....	Schoolcraft.....	W. W. Yates, Vicksburg.....	June 19	4,000
Sunset Lake.....	Schoolcraft.....	Albert Oswalt, Vicksburg.....	June 19	4,000
Howard Lake.....	Brody.....	E. O. Goldsmith, Vicksburg.....	June 19	8,000
Indian Lake.....	Comstock.....	Walter C. Hipp, Kalamazoo.....	June 19	6,000
Campbell Lake.....	Comstock.....	L. V. Shellman, Kalamazoo.....	June 19	6,000
Lynons Lake.....	Portage.....	Wm. H. Johnson, Kalamazoo.....	June 19	6,000
West Lake.....	Portage.....	E. R. Conrad, Vicksburg.....	June 19	6,000
Hampton Lake.....	Schoolcraft.....	Chas. E. Leyen, Vicksburg.....	June 19	10,000
Austin Lake.....	Schoolcraft.....		June 19	10,000

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or de-positor.	Date.	Number.
Kalkaska county:				
Wellman's Mill Pond	Boardman	(Geo. A. Stone, Jr., South Boardman	June 14	4,000
Long Lake, also called Fuller's and Naylor's	Springfield and Lake	David E. Hills, M. D., Fife Lake.	June 14	6,000
Kent county:				
Hopkins or Mud Lake	Almena	A. T. Edison, Grand Rapids	June 22	10,000
Pine Island Lake	Plainfield	W. C. Hazell, Grand Rapids.	June 22	12,000
Oton Lake	Solon	Dr. H. L. Miller, Kent City	June 24	6,000
Long Lake	Solon	A. H. Sauer, Kent City	June 24	6,000
Emmons Lake	Caladonia	Gilbert A. Woodward, Caladonia	June 21	6,000
Horton Lake	Swanee and Montreal	R. M. Vanderlin, Gowen	June 20	4,000
Blue Lake	Oakfield	Fred J. Cope, Greenville	June 20	4,000
Ziegenfuss Lake	Oakfield	J. S. Gibson, Greenville	June 20	6,000
Murray Lake	Yergennes and Granton.	D. A. Church, Lowell	June 17	6,000
County Lake	Solon	Earl Rasco, Sand Lake	June 15	4,000
Little Lake	Courtland	J. E. Ward, Rockford	June 15	6,000
St. Joseph Lake	Cannon	Will Kilby, Rockford	June 15	4,000
Big Bestwick Lake	Cannon	(Geo. De Puy, Rockford	June 15	6,000
Round Lake	Oakfield	Freeman Addis, Harvard	June 28	8,000
Strain Lake	Oakfield	Freeman Addis, Harvard	June 28	8,000
Pickered Lake	Plainfield	Alonzo House, Belmont	July 3	10,000
Lake county:				
North Lake	Pleasant Plains	Parson, Dennis & Co., Detroit	June 26	6,000
L. Lake	Pleasant Plains	Parson, Dennis & Co., Detroit	June 26	8,000
Crandle Lake	Pleasant Plains	Parson, Dennis & Co., Detroit	June 26	6,000
Little Star Lake	Pleasant Plains	Parson, Dennis & Co., Detroit	June 26	6,000
Whelan Lake	Pleasant Plains	H. W. Davis, Baldwin	June 26	10,000
Putnam or West Lake	Webber	Geo. N. West, Baldwin	June 26	6,000
Big Mud Lake	Webber	H. W. Levertz, Baldwin	June 26	6,000
Bray Lake	Webber	H. W. Levertz, Baldwin	June 26	6,000
Mud and Perch Lakes	Elkworth and Eden	Geo. Cutler, Luther	June 15	6,000
Wolf Lake	Webber	Axel H. Nelson, Peacock	June 25	8,000
Sable Lakes	Eik	Wm. Utter, Peacock	June 25	24,000
Perch Lake	Eik	Watts S. Humphrey, Saginaw	June 27	8,000
Little Bass Lake	Eik	W. P. Jones, Peacock	June 27	8,000
Crooked Lake	Cherry Valley	Andrew Loree, Nirvana	June 28	8,000
Cool Lake	Elk and North Range	Earl Fairbanks, M. D., Nirvana	June 28	8,000
Lapeer county:				
Petz Lake	Imlay	Jess Burger, Capac.	June 18	6,000
Twin Lake	Imlay	Frank W. Pritzel, Imlay City	June 18	8,000
Elk Lake	Arcadia	Imlay City F. & G. Club, Imlay City	June 18	8,000
Lake Pleasant	Attica	Imlay City F. & G. Club, Imlay City	June 18	8,000
Millpond	Lapeer	F. J. Thrasher, Lapeer	June 19	8,000
Edmond's Pond	Lapeer	E. J. Thrasher, Lapeer	June 19	10,000

Middle Lake.....	Elba.....	E. J. Thrasher, Lapeer.....	June 19	6,000
Mille's Lake.....	Mayfield.....	E. J. Thrasher, Lapeer.....	June 19	6,000
Spears Lake.....	Oregon.....	E. J. Thrasher, Lapeer.....	June 19	6,000
Nepising Lake.....	Eiba.....	E. J. Thrasher, Lapeer.....	June 19	8,000
Livingston county:				
Brun Lake.....	Woodville and Lyndon.....	Hon. Edwin Farmer, Stockbridge.....	June 28	8,000
Morgan Lake.....	Putnam.....	A. F. Morgan, Pinckney.....	June 28	6,000
Mason county:				
Blue Lake.....	Sheridan.....	Fountain Gun & Rod Club, Fountain.....	June 27	8,000
Long Lake.....	Long Lake.....	Fountain Gun & Rod Club, Fountain.....	June 27	8,000
Gun Lake.....	Sherman and Fretsoil.....	Fountain Gun & Rod Club, Fountain.....	June 27	8,000
Ford Lake.....	Sheridan.....	Fountain Gun & Rod Club, Fountain.....	June 27	8,000
Manistee county:				
Little Manistee Lake.....	Manistee.....	T. G. Trimble, Manistee.....	June 27	10,000
Mecosta county:				
Clear Lake.....	Coffax.....	H. J. Ward, Big Rapids.....	June 15	6,000
Hoots Lake.....	Hinton.....	H. H. Moore, Lakeview.....	June 20	6,000
Balls Lake.....	Millbrook.....	D. H. Howard, Millbrook.....	June 20	4,000
Perch Lake.....	Mertny.....	Ray Garman, Mecosta.....	June 20	6,000
Round Lake.....	Morton.....	Frank O. Redlick, Mecosta.....	June 20	6,000
Long Lake.....	Wheatland.....	John H. Snyder, Mecosta.....	June 20	6,000
Shawledt Lake.....	Sheridan.....	John O'Brien, Mecosta.....	June 20	6,000
Ball Moon Lake.....	Martiny.....	Ed. Freidel, Mecosta.....	June 20	6,000
Pretty Lake.....	Coffax.....	T. E. Lewis, Mecosta.....	June 20	4,000
Lake No. 6.....	Sheridan and Wheatland.....	T. E. Gale, Mecosta.....	June 20	4,000
Cook Creek.....	Wheatland.....	Adolph Drager, Rodney.....	June 20	4,000
Plecker Lake.....	Wheatland.....	J. M. Swisher, Remus.....	June 20	4,000
Blue Lake.....	Wheatland.....	J. M. Swisher, Remus.....	June 20	4,000
Clinton Lake.....	Sheridan.....	R. P. Swisher, Remus.....	June 20	6,000
Lake 29.....	Sheridan.....	Frank Malmstone, Barryton.....	June 27	8,000
Moles Lake.....	Chippewa.....	Frank Malmstone, Barryton.....	June 27	8,000
Evans Lake.....	Martiny and Sheridan.....	Frank Malmstone, Barryton.....	June 27	8,000
Diamond Lake.....	Fork.....	O. Wood, Barryton.....	June 27	8,000
Railroad Lake.....	Fork.....	O. Wood, Barryton.....	June 27	10,000
Lake Nunigar.....	Sheridan and Martiny.....	O. Wood, Barryton.....	June 27	10,000
Lake Nungar.....		W. T. Lathin, Barryton.....	June 27	6,000
Chippewa Mill Pond.....				
Tubbs Lake.....				
Missaukee county:				
Gosse Lake.....	Caldwell.....	S. Stone, Lake City.....	June 14	6,000
Section 10 Lake.....	Reeder and Lake.....	A. E. Rupprich, Lake City.....	June 14	6,000
Long Lake.....	Caldwell.....	Jas. Byers, Lake City.....	June 14	8,000
Missaukee Lake.....	Several.....	F. D. Mc Gregor, Lake City.....	June 14	6,000
Montcalm county:				
Clear Lake.....	Montcalm.....	W. H. Angell, Belding.....	June 17	4,000
Sun Lake.....	Montcalm.....	Wm. Chase, Greenville.....	June 17	6,000
Perch Lake.....	Montcalm.....	Wm. Chase, Greenville.....	June 17	6,000

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Montcalm county.—Continued.				
Hunter Lake.....	Montcalm.....	Wm. Chase, Greenville.....	June 17	6,000
Turk Lake.....	Richland.....	E. A. Kemp, Greenville.....	June 17	6,000
Zeigenfuss Lake.....	Home.....	E. A. Kemp, Greenville.....	June 17	8,000
Marl Lake.....	Richland.....	F. E. Curtis, Edmore.....	June 20	4,000
Cedar Lake.....	Belvidere.....	F. E. Curtis, Edmore.....	June 20	4,000
Deaner Lake.....	Cato and Belvidere.....	Wm. Caris, Vestaburg.....	June 20	4,000
Bass Lake.....	Cato.....	Geo. Whitcomb, Lakeview.....	June 20	8,000
Town Line Lake.....	Cato.....	David Wortley, Lakeview.....	June 20	8,000
Brimmer Lake.....	Maple Valley.....	C. W. Vining, Lakeview.....	June 20	8,000
Muscalonge Lake.....	Maple City.....	Fred Faling, Lakeview.....	June 20	8,000
Horton Lake.....	Montcalm.....	Jno. A. Freeman, Corral.....	June 20	4,000
Six Lakes.....	Belvidere.....	Jensen Bros., Trufant.....	June 20	4,000
Baldwin Lake.....	Eureka.....	H. Paulson, Cowen.....	June 20	6,000
Minoka or Fatal Lake.....	Eureka.....	Oscar Floch, Six Lakes.....	June 20	8,000
Sanderson Lake.....	Eureka.....	E. B. Slavson, Greenville.....	June 20	6,000
Mud Lake.....	Eureka.....	R. C. Eckler, Greenville.....	June 20	6,000
Bass Lake.....	Douglas.....	Roy C. Dickerson, Greenville.....	June 20	4,000
Long Lake.....	Polkates and Belvidere.....	Leon Russel, Greenville.....	June 20	6,000
Onnear Lake.....	Home.....	F. W. Pfeiffer, Edmore.....	June 20	6,000
Potter and Tallman Lakes.....	Fairplains.....	F. E. Curtis, Edmore.....	June 20	4,000
Loon Lake.....	Crystal.....	L. D. Curtis, Edmore.....	June 20	6,000
Pickrel Lake.....	Businell.....	Wyckoff & Smith, Greenville.....	June 20	8,000
Montmorency county:	Hillman.....	W. H. Everest, Crystal.....	June 28	8,000
Hillman Power Pond.....	Hillman.....	Bert Goodsell, Vickeryville.....	June 28	8,000
Muskegon county:	Hillman.....	Thos. A. Lake, Hillman.....	July 1	7,500
Crockery Creek Pond.....	Ravenna.....	Carl A. Stauffer, Ravenna.....	June 22	8,000
Crystal Lake.....	Whitehall and Blue Lake.....	H. B. Nirson, Whitehall.....	June 22	8,000
White Lake.....	Severil.....	Frank D. Mc Gulre, Chicago, Ill.....	June 22	10,000
Big Blue Lake.....	Casnovia.....	Hon. F. J. Russell, Hart.....	June 22	8,000
Obedhall Lake.....	Blue Lake.....	Theo. W. Owen, Bailey.....	June 24	6,000
Burns Lake.....	Dalton.....	A. U. Quoit, Twin Lake.....	June 17	4,000
Goose Egg Lake.....	Dalton.....	Geo. L. Putnam, Twin Lake.....	June 17	4,000
West Lake.....	Dalton.....	T. M. Johnson, Twin Lake.....	June 17	8,000
North Lake.....	Dalton.....	T. M. Johnson, Twin Lake.....	June 17	4,000
Middle Lake.....	Dalton.....	T. M. Johnson, Twin Lake.....	June 17	4,000
Crocker Lake.....	Cedar.....	T. M. Johnson, Twin Lake.....	June 17	8,000
Crockery Creek.....	Casnovia.....	John Adams, Twin Lake.....	June 17	8,000
Newaygo county:	Home.....	Elliott T. Slocum, Detroit.....	June 28	8,000
Twin Lake.....	Lincolin.....	H. T. Dennis, Detroit.....	June 26	8,000
Diamond Lake.....	Lincolin.....	Jos. Horner, Grand Rapids.....	June 25	8,000

Benton Lake	6,000	June 25	Chester E. Fish, Otia.
Blue Lake	6,000	June 25	Ed. Brohman, Otia.
Crooked Lake	8,000	June 25	M. B. Draper, Grand Rapids.
Pettibone Lake	6,000	June 25	Chas. Higley, Bitely.
Crockery Lake	6,000	June 24	R. Headley, Bailey.
Hess Lake	10,000	June 24	M. H. Whitmore, Newaygo.
Pickeral Lake	18,000	June 24	Sterling Barbour, Fremont.
Croton Dam Pond	18,000	June 24	Geo. L. Erwin, Grand Rapids.
Long Lake	6,000	June 17	Frank Foster, Wooster.
Long Lake	6,000	June 17	Jacob Kemperman, Fremont.
Gaalberth's Lake	6,000	June 17	John R. Grant, Fremont.
Wildes Lake	6,000	June 17	R. A. Crandall, Fremont.
First Lake	4,000	June 17	Christian Wilde, Fremont.
Baptist Lake	6,000	June 15	Wm. Wisner, Sand Lake.
Canover Lake	6,000	June 15	Wm. Wisner, Sand Lake.
Crockery Creek	8,000	June 29	L. C. Murray, Coopersville.
Pickeral Lake	6,000	June 28	Sterling Barbour, Fremont.
Oakland county:			
Watkins Lake	8,000	June 19	R. F. Monroe, Pontiac.
Green Lake	12,000	June 20	Walter E. Flanders, Orchard Lake.
Union Lake	16,000	June 20	Walter E. Flanders, Orchard Lake.
Narwin Lake	6,000	June 17	A. P. Button, Ortonville.
Echo Lake	10,000	June 17	G. W. Paton, Almont.
Twin Lakes	12,000	June 17	Ezra Chamberlin, Orion.
Cranberry Lake	4,000	June 17	Ezra Chamberlin, Orion.
Lake Orion	10,000	June 17	J. E. Bolles, Detroit.
Taylor's Lake	6,000	June 11	F. A. La Baron, Fenton.
Huron Lake	8,000	June 11	F. C. Ely, Davisburg.
Rapelle Lake	8,000	June 11	Chas. J. Hadley, Davisburg.
Dickson Lake	4,000	June 11	Chas. F. Rolland, Fenton.
Wilson Lake	6,000	June 11	J. W. Giles, Fenton.
Cass Lake	12,000	June 13	T. J. Tyre, Pontiac.
Sears Lake	14,000	June 13	W. C. Brown, Milford.
Huron River	6,000	June 13	T. H. Padley, Milford.
Grass Lake	6,000	June 13	Robt. Drummond, Milford.
Burns Lake	4,000	June 13	David Mackey, Holly.
Marsh Lake	4,000	June 13	David Mackey, Holly.
Teuple Hill Lake	8,000	June 13	Tom Forbes, Milford.
Deer Lake	10,000	June 21	C. R. Lambert, Detroit.
Winnovan Lake	4,000	June 21	Burt Carnus, Fenton.
Lotus, Huntoon and Maceday Lakes	20,000	June 21	H. O. Whitfield, Pontiac.
Orchard Lake	10,000	June 24	C. C. Craigie, Clarkston.
Walled Lake	14,000	June 22	F. B. Keith, Pontiac.
Elizabeth Lake	12,000	June 22	E. S. Campbell, Detroit.
Angelus or Three Mile Lake	10,000	June 21	M. A. Porter, Northville.
Angelus or Three Mile Lake	12,000	June 22	A. L. Moore, Pontiac.
Crescent Lake	10,000	June 27	A. W. Warren, Jenks, Kansas City, Mo.
Lake Orion	10,000	June 27	Henry M. Seely, Detroit.
Lake Orion	10,000	June 17	Hon. T. D. Seely, Pontiac.
Lake Orion	10,000	June 17	Lake Orion Summer Homes Co., Detroit.

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date	Number.
Oceana county: Round Lake. Silver Lake. Crystal Lake. Pentwater Lake.	Golden. Golden. Hart. Pentwater.	Clarence B. Tucker, Mears. V. P. Mudgett, M. D., Hart. W. R. Roach, Hart. S. D. Montgomery, Grand Rapids.	June 22 June 22 June 22 June 22	6,000 6,000 6,000 8,000
Ogemaw county: Town Line Lake. Black Lake. Lake George. Cranberry and North Lakes.	Goodar. Hill. Hill. Hill.	O. L. Rekestraw, Lupton. Ray M. Stuart, Lupton. B. L. Holliday, Lupton. J. D. Phimore, Bay City.	June 28 June 28 June 28 June 28	8,000 8,000 8,000 12,000
Oscoda county: Diamond Lake. Big Lake. Strawberry Lake. Wright and Grover Lakes.	Burdette. Orient. Cedar. Ewart.	Hon. J. M. Perry, Tustin. S. F. Postal, Ewart. Wm. F. Ramsey, Ewart. Wm. F. Ramsey, Ewart.	June 15 June 28 June 28 June 28	6,000 10,000 6,000 12,000
Oscoda county: DeFord Lake.	Atherton.	D. A. Neal, Rose City.	June 28	6,000
Ottawa county: Mud Lake or Jamestown Lake. Cove Lake or Stern's Bayou. Crocky Lake. Tubb Bayou. Bruce Bayou.	Jamestown. Robinson. Chester. Crockery. Crockery.	Jas. Brandt, Jr., Hudsonville. Hon. Walter H. Clark, Grand Haven. Ben Whitesell, Conklin. Fred Gordon, Numica. Fred Gordon, Numica.	June 18 June 28 June 28 June 28 June 28	4,000 24,000 10,000 8,000 8,000
Presque Isle county: Grand Lake.	Presque and Krakow.	Jas. E. Kauffman, Presque Isle.	June 25	20,000
St. Joseph county: Mud Lake. Blaine Lake. Bidans Lake. Portage Lake. Iron Lake. Hawkins Lake. Fish Lake. Clear Lake.	Leonidas. Burr Oak. Burr Oak. Park. Colon. Burr Oak. Burr Oak. Fabus.	F. S. Miller, Leonidas. Anthony Bros., Sturgis. Anthony Bros., Sturgis. Cus. Pebody, Vicksburg. A. I. Whitehouse, Burr Oak. Wm. H. Bordner, Burr Oak. Wm. H. Bordner, Burr Oak. C. N. Fisher, Three Rivers.	June 21 June 19 June 19 June 19 June 27 June 27 June 27 June 26	6,000 6,000 6,000 6,000 8,000 8,000 6,000 10,000
Van Buren county: Nymac's Dam. Lake Courteen. Dyer Lake.	Bangor. Columbia. Bangor.	J. D. Naltzger, Bangor. W. E. Grimes, South Haven. Jeremiah Welker, Bangor.	June 24 June 24 June 24	8,000 6,000 6,000

Lake George.....	Lawrence.....	Carlton Vanderveer, Lawrence	June 24	8,000
Three Mile Lake.....	Paw Paw.....	W. M. Kirkwood, Paw Paw	June 24	6,000
Pugsley's Lake.....	Waverly and Paw Paw.....	E. W. Arnold & Son, Paw Paw	June 18	6,000
Hemlock Lake.....	Pine Grove.....	F. W. Schoolcraft, Kendall	June 18	6,000
Fish Lake.....	Almena.....	R. E. Yickers, Gobleville	June 18	6,000
Lake Mill.....	Bloomington.....	J. L. & W. S. Mitchell, Bloomington	June 18	6,000
Scott Lake.....	Arlington.....	Chas. H. Holmes, Berlamont	June 18	4,000
Lake Eleven.....	Columbia.....	Jas. A. Gibson, Lacato	June 18	4,000
Moan Lake.....	Geneva.....	I. E. Righter, Mc Donald	June 18	6,000
Donivan Lake.....	Bangor.....	Henry R. Gross, Mc Donald	June 18	6,000
Van Ocken Lake.....	Van Ocken Lake.....	Owen C. Egan, Grand Junction	June 18	8,000
Silver Lake.....	Columbia.....	Owen C. Egan, Grand Junction	June 18	8,000
Saddle Lake.....	Keeler.....	Wm. Hoffman, Hartford	June 24	4,000
Keeler Lake.....	Porter.....	J. K. Mowry, Lawton	June 24	6,000
Huzzy Lake.....	Hamilton.....	G. L. A. Brown, Decatur	June 24	4,000
Pond Lilly Lake.....	Decatur.....	D. W. Rose, Decatur	June 24	6,000
Pickrel Lake.....	Decatur.....	C. E. Criffield, Decatur	June 24	6,000
Lake of the Woods.....	Decatur.....			
Washtenaw county:				
Howell Lake.....	Lyndon.....	Dr. T. I. Clark, Jackson	June 24	4,000
Cunningham Lake.....	Lyndon.....	Dr. T. I. Clark, Jackson	June 24	4,000
Clark's Lake.....	Lyndon.....	Dr. T. I. Clark, Jackson	June 24	4,000
South Lake.....	Lyndon.....	Dr. T. I. Clark, Jackson	June 24	8,000
Gorman Lake.....	Lyndon.....	Dr. T. I. Clark, Jackson	June 24	4,000
Stapish Lake.....	Lyndon.....	John Mc Kernen, Chelsea	June 24	4,000
Cavanaugh Lake.....	Sylvan.....	Hon. John Kalmbach, Chelsea	June 24	8,000
Cassidy Lake.....	Lyndon.....	Hon. John Kalmbach, Chelsea	June 24	12,000
Mirror Lake.....	Lyndon.....	Hon. John Kalmbach, Chelsea	June 24	6,000
Half Moon Lake.....	Dexter and Putnam.....	Elmer C. Glenn, Pinckney	June 28	14,000
Wayne county:				
Huron River.....	Van Buren.....	A. E. Smith, Belleville	June 29	20,000
Coomer Lake.....	Van Buren.....	A. E. Smith, Belleville	June 29	10,000

Total..... 3,149,500

LARGE MOUTH BLACK BASS PLANTS, 1912.

FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county:				
Mc Collum Lake.	Mitchell	S. K. Mc Collum, Comins.	July 19	1,500
Mc Phee Lake.	Mitchell	S. J. Evans, Hardy.	July 19	600
Freesoil Lake.	Mitchell	S. J. Evans, Hardy.	July 19	600
Crooked Lake.	Mitchell	Stephen Evans, Hardy.	July 19	1,500
Sand Lake.	Mitchell	A. R. Code, Au Sabie.	July 19	1,500
Alcona county:				
Reddy's Lake.	Au Train	Dee Lake Club, Wetmore.	July 3	5,000
Mirror Lake.	Au Train	Dee Lake Club, Wetmore.	July 3	5,000
Dee Lake.	Munising	H. Malott, Detroit.	July 3	3,000
Wiley Lake.	Munising	H. Malott, Detroit.	July 3	3,000
Half Moon Lake.	Munising	Dee Lake Club, Wetmore.	July 3	5,000
Baraga county:				
Cliff Lake.	Spurr.	Peter Trudell, Jr., Negaunee.	July 9	1,500
Bella Lake.	Arvon.	Silver River R. & G. Club, L'Anse.	July 9	2,500
Pine Lake.	L'Anse.	Silver River R. & G. Club, L'Anse.	July 9	1,500
Big Lake.	Baraga.	Silver River R. & G. Club, L'Anse.	July 9	2,500
Barry county:				
Mixer Lake.	Baltimore	C. W. Mixer, Hastings.	June 28	3,000
Robinson Lake.	Hastings	C. W. Mixer, Hastings.	June 28	3,000
Podunk Lake.	Rutland.	C. W. Mixer, Hastings.	June 28	3,000
East Lake.	Baltimore	C. W. Mixer, Hastings.	June 28	3,000
Middle Lake.	Baltimore	C. W. Mixer, Hastings.	June 28	3,000
Tanner Lake.	Rutland.	C. W. Mixer, Hastings.	June 28	3,000
Bates Lake.	Rutland.	C. W. Mixer, Hastings.	June 28	3,000
Tilson Lake.	Hope.	C. W. Mixer, Hastings.	June 28	3,000
Middle Lake.	Carleton.	C. W. Mixer, Hastings.	June 28	3,000
Benzie county:				
Big Platte Lake.	Benzenia and Lake	Wesley B. Covey, Honor.	Sept. 19	525
Little Platte Lake.	Lake and Platte.	Wesley B. Covey, Honor.	Sept. 19	525
Clare county:				
Windover Lake.	Freeman.	Chas. Lyon, North Star.	July 17	2,500
Bass Lake.	Arthur.	F. A. Fowler, Clare.	July 6	3,000
Lilly Lake.	Arthur.	F. A. Fowler, Clare.	July 6	3,000
Crooked Lake.	Garfield.	W. M. Scott, Lake.	July 2	9,000
Farwell Millpond.	Surrey.	W. C. Fuller, Farwell.	July 2	4,500
South Lake.	Grant.	Wm. Lange, Clare.	July 2	6,000
Dewey Lake.	Grant.	Jas. N. Bicknell, Clare.	July 2	6,000

Arnold Lake.....	Hughes and Frost.....	Hughes Bros. & Co., Harrison.....	July 6	4,000
Long Lake.....	Frost.....	Hughes Bros. & Co., Harrison.....	July 6	7,000
Budd Lake.....	Hayes.....	Hughes Bros. & Co., Harrison.....	July 6	5,000
Faton county:				
Narran Lake.....		Ezra Huber, Charlotte.....	Aug. 30	500
Gladwin county:				
Pratt's Lake.....	Sage.....	Hon. Eugene Foster, Gladwin.....	Sept. 4	600
Hillsdale county:				
Louie Lake.....	Wright.....	John E. Palmer, Hudson.....	July 10	1,500
First Sand Lake.....	Hillsdale.....	Jonesville R. & C. Club, Jonesville.....	July 9	2,400
Half Moon Lake.....	Eyette.....	Jonesville R. & C. Club, Jonesville.....	July 9	2,400
Grays Lake.....	Eyette.....	Jonesville R. & C. Club, Jonesville.....	July 9	2,400
Hastings Lake.....	Scipio.....	Jonesville R. & C. Club, Jonesville.....	July 9	3,500
Courtright Lake.....	Eyette.....	Jonesville R. & C. Club, Jonesville.....	July 9	3,500
Ackerly Lake.....	Eyette.....	Jonesville R. & C. Club, Jonesville.....	July 9	1,600
Mosherville Lake.....	Scipio.....	Don Daykin, Mosherville.....	July 9	2,400
Cobb Lake.....	Scipio.....	J. R. Pope, Jonesville.....	July 9	2,400
Houghton county:				
Fate Lake.....	Elm River.....	Geo. Williams, Calumet.....	July 10	1,000
Two Small Lakes.....	Elm River.....	Paul D. Swift, Houghton.....	July 10	1,500
Twin Lake.....	Elm River.....	Mrs. B. T. Barry, Houghton.....	July 10	2,000
Iron county:				
2 Lakes—No Name.....		Wm. Kroll, Kenton.....	July 10	2,500
Isabella county:				
Bullhead Lake.....	Freemont.....	A. E. Shenk, Vestaburg.....	July 1	2,000
Kent county:				
Reed's Lake.....	Grand Rapids.....	L. J. De Lamarier, Grand Rapids.....	June 25	10,000
Pickrel Lake.....		A. C. House, Belmont.....	Oct. 22	1,000
Keweenaw county:				
Lac La Belle.....	Grant.....	Jos. W. Salden, Calumet.....	July 10	2,000
Deer Lake.....	Grant.....	W. P. Mc Gee, Phoenix.....	July 10	1,500
Beaver Lake.....	Eagle Harbor.....	F. W. Taylor, Phoenix.....	July 10	1,500
Thayer's Lake.....	Sherman.....	Geo. Foley, Mohawk.....	July 10	1,000
Breakfast Lake.....	Grant.....	G. J. Ross, Calumet.....	July 10	1,500
Bete Gris Bayou.....	Grant.....	Thos. Hoatson, Calumet.....	July 10	2,000
Gratiot Lake.....	Central.....	Thos. U'ren, Mohawk.....	July 10	2,000
Lac La Belle.....	Eagle Harbor.....	Patrick M. Harrington, Phoenix.....	July 10	2,000
Lenawee county:				
Devil's Lake.....	Woodstock.....	H. E. Hand, Devil's Lake.....	July 10	2,400
Sand Lake.....	Franklin and Cambridge.....	F. F. Putnam, Putnam.....	July 10	2,100
Round Lake.....	Rollin.....	W. F. Alchin, Townley.....	July 10	500

Large Mouth Black Bass Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Livingston county: Maxfield Lake	Hartland	J. N. Weaver, Milford	July 3	3,000
Lare county: Dollerville Lake and Taquamnon River	46 N. 10 West	E. C. Underwood, Dollerville	July 3	5,000
Marquette county: Perch Lake	Republic	B. Bengston, Republic	July 2	3,000
Superior Lake	Republic	B. Bengston, Republic	July 2	3,000
Sauk Head Lake	Powell	H. A. St. John, Marquette	July 2	4,000
Lake Independence	Marquette	H. A. St. John, Marquette	July 2	4,000
Bear Lake	Powell	H. A. St. John, Marquette	July 2	4,000
Twin Lake	Marquette	H. A. St. John, Marquette	July 2	4,000
Pick Lake	Powell	H. A. St. John, Marquette	July 2	4,000
Hills Dam Lake	Powell	H. A. St. John, Marquette	July 2	4,000
Marquette Lake	Marquette and Negaunee	Frank G. Jenks, Negaunee	July 9	1,500
Strawberry Lake	Sands	Hon. W. S. Ewing, Harvey	July 9	1,500
Skinner's Lake	Republic	C. W. Munson, Republic	July 9	1,500
Porterfield's Lake	Humboldt	C. W. Munson, Republic	July 9	1,500
Mason county: Hopkins Lake	Summit	H. C. Cole, Ludington	July 2	6,000
Hamlin Lake	Hamlin and Victory	Dr. J. D. Buckingham, Ludington	July 2	6,000
North Ox Bow Lake	Riverton	D. S. Betka, Scottville	July 2	6,000
Montcalm county: Rock Lake	Richland	John T. Bridwell, Vestaburg	July 1	3,000
Montmorency county: Cranberry Lake	Montmorency	S. Rice, Hillman	July 1	9,000
Valentine Lake	Briley	Robt. Bauer, Alpena	July 1	9,000
Valentine Lake	Briley	Geo. Rouse, Atlanta	July 1	7,500
Muskegon county: Little Black Lake	Norton and Spring Lake	E. D. Magoon, Muskegon	June 29	4,000
Mona Lake	Norton	E. D. Magoon, Muskegon	June 29	4,000
Bear Lake	Muskegon and Laketon	E. D. Magoon, Muskegon	June 29	4,000
Newaygo county: Boblist Lake	Grove	B. S. Davenport, Pierson	July 11	2,000
Oakland county: Foster's Lake	Springfield	Edmund Foster, Clarkston	July 6	4,000
Long or Porter's Lake	White Lake	F. B. Hatch, Milford	July 3	7,000
Crawford Lake	Bloomfield	Hugh Chalmers, Detroit	Aug. 30	500
Avery Lake	Oxford	John H. Avery, Detroit	Aug. 14	200

Ogemaw county:					
West Brook.....	Edwards.....	J. A. Priddy, West Branch.....	July 12	1,500	
Frost Lake.....	Edwards.....	J. A. Priddy, West Branch.....	July 12	2,500	
Ontonagon county:					
Beaver Dams.....	Rockland.....	F. Hibbard, Rockland.....	July 10	1,500	
Oscoda county:					
Flat Lake.....	Clinton.....	S. K. Mc Collum, Comins.....	July 19	900	
Otsego county:					
Otsego Lake.....		Hon. E. B. Bolton, Gaylord..	July 12	4,400	
Roscommon county:					
Higgins Lake.....	Gerrish.....	Jas. A. Gallagher, Roscommon.....	July 12	5,000	
Bad River.....	St. Charles.....	A. T. Sanderson, St. Charles.....	July 23	1,200	
Saginaw River.....	St. Charles.....	W. J. Hunsaker, Saginaw.....	July 23	15,000	
Total.....				321,050	

LARGE MOUTH BLACK BASS PLANTS, 1912.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Kent county: Bendis Lake..... Pickered Lake.....		Dwight Lydell, Comstock Park..... Dwight Lydell, Comstock Park.....	May 15 May 17	800 200
Total.....				1,000

PERCH PLANTS, 1912.
FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alleghen county: Tribig Pond..... School Section Lake..... Dumont Lake..... Miller Lake..... Jinisty Lake..... East Lake..... Three Cornered Lake..... Boot Lake..... Green Lake..... Crooked Lake..... Lower Scott Lake..... Upper Scott Lake.....	Otsego and Trobig..... Watson..... Alleghen..... Alleghen and Hopkins..... Hopkins..... Hopkins..... Hopkins..... Wayland..... Leighton..... Clyde..... Lee..... Lee.....	Allen Dunfield, Otsego..... J. T. Cloney, Allegan..... Chas. E. Bond, Allegan..... Kenneth P. Beater, Hopkins..... John W. Linsley, Hopkins..... W. F. Tiefenthal, Hopkins..... W. F. Tiefenthal, Hopkins..... Geo. N. Dean, Shelbyville..... T. B. Rose & Son, Moline..... A. Hutchinson, Bravo..... Mark Maw, Pullman..... Chas. Horn, Pullman.....	May 23 May 23 May 23 May 23 May 23 May 23 May 23 May 23 May 23 June 21 June 21 June 21	160,000 120,000 160,000 160,000 120,000 120,000 120,000 120,000 160,000 160,000 120,000 100,000
Antrim county: Losey's Lake.....	Warner.....	Albert Losey, Elmira.....	May 21	120,000

Barry county:					
Wilkinson Lake.....	Hope	Henry Moorhus, Delton	May 25	160,000	
Mud Lake.....	Hope	Ovid Chamberlin, Cloverdale	May 25	120,000	
Wall Lake.....	Hope	Daniel E. Birdsall, Hastings	May 25	160,000	
Shallow Lake.....	Hope	W. D. Hayes, Hastings	May 25	120,000	
Lake Twenty-one.....	Hope	O. J. Kingsbury, Hope	May 25	120,000	
Long Lake.....	Hope	B. Dickinson, Hastings	May 25	120,000	
Horseshoe Lake.....	Hope	Mrs. Hiram Gibson, Cloverdale	May 25	160,000	
Lawnhead Lake.....	Woodland and Carleton	F. J. Geiger, Woodland	May 25	120,000	
Mud Lake.....	Johnstown	Robt. E. Dullam, M. D., Battle Creek	May 29	80,000	
Mill Lake.....	Johnstown	D. D. Ford, Battle Creek	May 29	120,000	
Clear Lake.....	Johnstown	Hon. Willard A. Knight, Battle Creek	May 29	200,000	
Ellis Lake.....	Baltimore	John L. Ormsbe, Dowling	June 28	120,000	
Kilpatric Lake.....	Assyria	F. M. Quick, Nashville	June 25	120,000	
Pine Lake.....	Woodland	C. J. Scheidt, Nashville	June 23	120,000	
Pat and Kidder Lakes.....	Prairieville	Fay Nichols, Doster	July 1	160,000	
	Woodland	Burnie Jordan, Woodland Center	July 3	120,000	
Berrien county:					
Lake Chapen.....	Sewal	John G. Murdoch, Berrien Springs	May 27	200,000	
Singer Lake.....	Oronoke	John G. Murdoch, Berrien Springs	May 27	190,000	
Clear Lake.....	Buchanan	Jas. E. Scott, Buchanan	May 27	120,000	
Pike Lake.....	Bertrand	Jas. E. Scott, Buchanan	May 27	120,000	
Weaver Lake.....	Buchanan	Jas. E. Scott, Buchanan	May 27	120,000	
Branch county:					
Dane Lake.....	Sherwood	A. Blackman, Sherwood	May 22	80,000	
Blossom Lake.....	Sherwood	A. S. Kent, Sherwood	May 22	120,000	
Marble Lake.....	Quincy	C. A. Bishop, Quincy	May 22	160,000	
Lake of the Woods.....	Ovid	F. T. Tappan, Coldwater	June 26	120,000	
Clegg, Morrison, North, South and Messenger Creeks.....	Coldwater and Giral	F. T. Tappan, Coldwater	July 2	120,000	
Coldwater River.....	Ovid and Coldwater	F. T. Tappan, Coldwater	July 2	120,000	
Branch Creek.....	Coldwater and Ovid	F. T. Tappan, Coldwater	July 2	80,000	
Calhoun county:					
Turtle Lake.....	Burlington	F. R. Sullivan, Union City	May 22	120,000	
Wabascon Lake.....	Bedford	Weickerman & Coe, Battle Creek	May 29	160,000	
Gogiac Lake.....	Battle Creek	Gogiac Resort Assn., Battle Creek	May 29	200,000	
St. Mary's Lake.....	Bedford	H. H. Warner, Battle Creek	May 29	120,000	
Harts Lake.....	Battle Creek	Jad M. Blington, Battle Creek	May 29	120,000	
Keasler Lake.....	Albion	D. S. Howe, Homer	July 2	120,000	
Prairie Lake.....	Clarence	W. H. Riever, Albion	July 1	80,000	
Long Lake.....	Fredonia	W. J. Clayborne, Marshall	July 1	120,000	
Mill Pond on Kalamazoo River.....	Marshall	W. J. Clayborne, Marshall	July 1	120,000	
Cass county:					
Lilly Lake.....	Newberg	Fred Marsh, Cassopolis	May 22	120,000	
Elbow Lake.....	Porter	Fred Jones, Jones	May 22	80,000	
Pleasant Lake.....	Ontwa	Eugene A. Smith, Edwardsburg	May 24	120,000	
Eagle Lake.....	Ontwa	Perry L. Turner, Eiknaart, Ind.	May 24	160,000	
Stone Lake.....	La Grange	Fred Marsh, Cassopolis	May 24	160,000	

Perch Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cass county—Continued.				
Diamond Lake.....	Several.	C. A. Russ, Cassopolis.	May 24	160,000
Charlie Pond.....	Newburg.	Karl J. Williams, Vandalia.	May 24	80,000
Bunker Lake.....	Volinia.	Floyd Brown, Marcellus.	May 24	120,000
Eaton county:				
Grand River.....	Windsor.	Freeman G. French, Dimondale.	July 2	80,000
Saubly Lake.....	Sunfield.	C. M. Putman, Nashville.	June 25	120,000
Emmet county:				
Round Lake.....	Bear Creek.	Henry Lindig, Petoskey.	May 21	120,000
Genesee county:				
Lee's Lake.....	Fenton.	C. A. Damon, Fenton.	May 27	160,000
Silver Lake.....	Fenton.	G. E. Beadley, Fenton.	May 27	120,000
Day's Lake.....	Fenton.	L. F. Morehouse, Fenton.	May 27	160,000
Pine Lake.....	Fenton.	J. Max Davis, Fenton.	May 27	120,000
Loddell Lake.....	Argentine.	Ovid Blue Gill Club, Ovid.	July 2	160,000
Argentine Pond.....	Argentine.	Clyde Stage, Argentine.	July 2	160,000
Grand Traverse county:				
Bass Lake.....	Several.	G. E. Potrafke, Traverse City.	May 25	160,000
Silver Lake.....	Garfield and Blair.	G. E. Potrafke, Traverse City.	May 25	160,000
Rennie Lake.....	Union.	Kingsley Sportsmen's Club, Kingsley.	May 25	120,000
Hogsback or Crooked Lake.	Mayfield and East Bay.	Kingsley Sportsmen's Club, Kingsley.	May 21	120,000
Spider Lake.....	East Bay.	Kingsley Sportsmen's Club, Kingsley.	May 21	120,000
Fife Lake.....	Fife Lake.	Fred Bechtstein, Fife Lake.	May 21	120,000
Hillsdale county:				
Mosherville Lake.....	Scipio.	L. S. Strait, Hanover.	June 22	120,000
Cobb Lake.....	Scipio.	L. S. Strait, Hanover.	June 22	120,000
Ionia county:				
Morrison Lake.....	Boston.	John Wallington, Saranac.	May 27	160,000
Jordan Lake.....	Odessa and Woodland.	Edwin Shellhorn, Lake Odessa.	July 3	160,000
Tupper Lake.....	Odessa.	Edwin Shellhorn, Lake Odessa.	July 3	120,000
Jackson county:				
Farrel Pond.....	Norvell.	W. F. Walker, Norvell.	May 22	80,000
Stony Lake.....	Napoleon.	G. E. Rushton, Napoleon.	May 22	120,000
Clark's Lake.....	Columbia.	Jno. E. Pinegar, Jackson.	May 22	120,000
Ackerson Lake.....	Napoleon.	F. J. Shoman, Jackson.	May 22	120,000
Orcutt's Big Wolf and Little Wolf Lakes.	Several.	Wm. W. Todd, Jackson.	July 1	320,000
Farwell Lake.....	Hanover.	G. T. Greenshaw, Hanover.	July 2	160,000
Rushtine Lake.....	Hanover.	W. P. Burdette, Hanover.	July 2	120,000

TWENTIETH REPORT—STATE FISHERIES.

Homeshoe Lake.....	Hanover	Alfred Folks, Pulaaski.....	June 22	80,000
Lagoon in Loomis Park	City of Jackson	Wm. W. Todd, Jackson.....	June 25	120,000
Vandercook's Lake.....	Summit	Geo. E. Beebe, Jackson.....	June 25	120,000
Gillets Lake.....	Leoni	Geo. E. Beebe, Jackson.....	June 25	120,000
Grass Lake.....	Grass Lake	Geo. E. Beebe, Jackson.....	June 25	120,000
Wolf Lake.....	Leoni	Geo. E. Beebe, Jackson.....	June 25	120,000
Portage Lake.....	Waterloo and Napoleon	Geo. E. Beebe, Jackson.....	June 25	120,000
Michigan Center Pond	Leoni	Geo. E. Beebe, Jackson.....	June 25	120,000
Vineyard Lake.....	Columbia	H. R. Blanchard, Brooklyn.....	June 27	120,000
Kalamazoo county:				
Austin Lake.....	Portage	Mr. Luman, Vicksburg.....	May 23	160,000
West Lake.....	Portage	E. R. Conrad, Vicksburg.....	May 23	120,000
Gourdneck Lake.....	Portage and Schoolcraft	E. R. Conrad, Vicksburg.....	May 23	160,000
Hampton Lake.....	Portage	E. R. Conrad, Vicksburg.....	May 23	160,000
West Lake.....	Portage	Wm. H. Johnson, Kalamazoo.....	May 23	120,000
Harrison Lake.....	Prairie	Owen W. Harrison, Schoolcraft.....	May 23	120,000
Sherman Lake.....	Ross	Orin Abbott, Battle Creek.....	May 29	120,000
Eagle Lake.....	Charleston	Otto A. Buechner, Augusta.....	July 1	400,000
Kent county:				
Long Lake.....	Solon	A. H. Saur, Kent City.....	May 25	120,000
Squaw Lake.....	Algoma	Dr. H. L. Miller, Kent City.....	May 25	120,000
Stoner Lake.....	Courtland	J. E. Ward, Rockford.....	May 21	120,000
Pickrel Lake.....		Dwight Lydell, Comstock Park.....	May 30	480,000
Grand River.....		Dwight Lydell, Comstock Park.....	May 29	320,000
Emmons Lake.....	Caledonia	Gilbert A. Woodward, Caledonia.....	July 1	120,000
Lake county:				
Putman or West Lake.....	Webber	Geo. N. West, Baldwin.....	May 25	240,000
North Hamlin Lake.....	17 N. R. 13 W	W. R. Clark, Baldwin.....	May 25	240,000
Perch Lake.....	Sweetwater	Geo. M. Brown, Detroit.....	July 2	80,000
Lincoln Lake.....	Sweetwater	Geo. Grant, Saginaw.....	July 2	80,000
Lapeer county:				
Pleasant Lake.....	Attica	Imlay City F. & G. Club, Imlay City.....	May 27	200,000
Elk Lake.....	Arcadia	Imlay City F. & G. Club, Imlay City.....	May 27	200,000
Lenawee county:				
Globe Pond.....	Tecumseh	H. C. Hoyt, Tecumseh.....	July 2	120,000
Livingston county:				
Round Lake.....	Hartland	C. E. Lovejoy, Milford.....	July 3	120,000
Long Lake.....	Hartland	T. H. Padley, Milford.....	July 3	120,000
Mecosta county:				
Pine Lake.....	Wheatland	J. M. Swisher, Remus.....	July 3	120,000
Montcalm county:				
Sanderson Lake.....	Fairplains	E. A. Kemp, Greenville.....	July 1	160,000
Rock Lake.....	Richland	A. B. Stauffer, Vestaburg.....	July 1	160,000

Perch Plants, 1912.--Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county: Oedhaal Lake.....	Casnovia.....	Theo. W. Owen, Bailey.....	May 25	120,000
Newaygo county: Rolinson's Lake..... Crocker Lake..... Croton Dam Pond.....	Sherman..... Grant..... Croton.....	Chas. Streichirsch, White Cloud..... R. Headley, Bailey..... Geo. L. Erwin, Grand Rapids.....	May 25 May 25 May 25 June 20	120,000 120,000 120,000 400,000
Oakland county: Davisburg Mill Pond..... Lake Euiza..... Jumbo Lake..... Round Lake..... Kirky Lake..... Werdon Lake..... Long Lake..... Huron Lake..... Huron River..... Lower Pond..... Austin Lake..... Upper Pettibone Lake..... Extension of Pelter's Pond.....	Springfield..... Springfield..... Springfield..... Springfield..... Springfield..... Springfield..... Springfield..... Milford..... Milford..... Milford..... Highland..... Milford.....	Ira E. Kinney, Davisburg..... Ira E. Kinney, Davisburg..... Ira E. Kinney, Davisburg..... Ira E. Kinney, Davisburg..... Clarence S. Longacre, Davisburg..... Clarence S. Longacre, Davisburg..... Clarence S. Longacre, Davisburg..... F. C. Ely, Davisburg..... T. H. Padley, Milford..... W. C. Brown, Milford..... R. S. Potts, Milford..... Frank Bailey, Milford..... T. H. Padley, Milford.....	July 2 July 2 July 2 July 2 July 2 July 2 July 2 July 3 July 3 July 3 July 3 July 3 July 3	120,000 120,000 80,000 80,000 80,000 120,000 120,000 120,000 80,000 120,000 120,000 120,000 80,000
St. Joseph county: Long Lake..... St. Joseph River..... Hawkins Lake..... Long Lake..... Hog Creek..... Eberhard Lake.....	Fabius..... Several..... Burr Oak..... Colon..... Burr Oak..... Burr Oak.....	A. W. Pound, Jones..... Wallace N. Harvey, Constantine..... Wm. H. Bordiner, Burr Oak..... R. C. Himebaugh, Burr Oak..... Van Husan & Spencer, Burr Oak..... P. L. Start, Burr Oak.....	May 22 May 23 June 22 June 22 June 22 June 22	120,000 120,000 120,000 120,000 120,000 160,000
Van Buren county: Gravel Lake..... Hersy Lake..... Sand Lake..... Little Bear Lake..... Base Line Lake..... Saddle Lake..... Bangor Millpond..... Three Mile Lake.....	Porter..... Porter..... Antwerp..... Columbia..... Columbia..... Columbia..... Bangor..... Paw Paw.....	R. F. Thornton, Lawton..... V. B. Finch, Lawton..... John Kellog, Lawton..... E. B. Eddy, Grand Junction..... Robt. Messel, Grand Junction..... A. B. Lyster, Breedsville..... Archib. Mc Kee, Bangor..... Wm. M. Kirkwood, Paw Paw.....	May 27 May 27 May 27 June 21 June 21 June 21 June 21 June 21	160,000 160,000 120,000 120,000 80,000 160,000 120,000 320,000

	Freesin.....	Herman Glatz, Manchester.....	July 2	120,000
Washtenaw county: Silver Lake.....			July 1	400,000
Wayne county: Detroit River.....		Mich. Fish Commission, Detroit.....		
Total.....				21,440,000

PERCH PLANTS, 1912.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county: Sand Lake.....	Mitchell.....	Stephen Evans, Comins.....	Aug. 10	800
Crooked Lake.....	Mitchell.....	Stephen Evans, Hardy.....	Aug. 10	800
Hubbard Lake.....	28 N. of R. 7 E.....	W. S. Linton, Saginaw.....	Aug. 9	2,000
Barry county: Little Long Lake.....		Mrs. M. Jones, Cloverdale.....	July 12	750
Branch county: Goodrich Lake.....	Sherwood.....	A. Blackman, Sherwood.....	July 20	1,000
Lower Lake.....	Sherwood.....	Harry G. Lewis, Athens.....	July 20	1,000
Leht Lake.....	Sherwood.....	Leo E. Wood, Athens.....	July 20	1,000
Kenyon Lake.....	Sherwood.....	Leo E. Wood, Athens.....	July 20	1,000
Benzie county: Little Platte Lake.....	Lake and Platte.....	W. B. Covey, Honor.....	Sept. 19	1,625
Berrien county: Dayton Lake.....	Bertrand.....	Leo R. Arnold, Dayton.....	Aug. 24	1,600
Calhoun county: Beadle Lake.....	Emmet.....	C. E. Kistler, Battle Creek.....	July 20	1,000
Crawford county: Fortage Lake.....		M. Hanson, Grayling.....	Oct. 10	1,000

Perch Plants, 1912.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cass county: Saddlebag Lake..... Indian Lake..... Magician Lake.....	Marcellus Silver Creek Silver Creek and Keeler	H. B. Lawrence, Decatur. Fred Phillips, Dowagiac. Fred Phillips, Dowagiac.	July 12 Aug. 24 Aug. 24	750 1,000 1,000
Charlevoix county: Deer Lake.....	Boyer Valley	Hon. W. M. J. Pearson, Boyne Falls	Aug. 7	800
Clare county: Bass Lake.....	Arthur	F. A. Fowler, Chicago, Ill.	Aug. 14	1,200
Clinton county: Round Lake.....	Victor	Wm. H. Rowley, Laingsburg	July 25	1,000
Easton county: Narrow Lake.....		Ezra Huber, Charlotte	Aug. 30	750
Gladwin county: Pratts Lake.....	Sage	Hon. Eugene Foster, Gladwin	Sept. 4	750
Ionia county: Long Lake..... Mud Lake.....	Orleans Orleans	W. B. Connor, Shiloh E. E. Brown, Shiloh	July 22 July 22	1,000 750
Jackson county: Fay Lake.....	Norvell	Hon. L. W. Watkins, Manchester	July 25	1,000
Kent county: Duck Lake..... Pickeral Lake.....		D. Lydell, Comstock Park A. C. House, Belmont	Aug. 17 Oct. 22	1,000 2,000
Leelanau county: South Barr Lake..... Glen Lake..... Davis Lake..... Carp or Leelanau Lake.....	Empire Empire Kasson Leland	Jas. Daly, Empire D. H. Day, Glen Haven Wm. Sartler, Empire Frank H. Blackledge, Indianapolis, Ind.	Aug. 31 Aug. 31 Aug. 31 Aug. 31	1,000 1,000 1,000 1,000
Lenawee county: Southworth Pond.....	Raisin	H. D. Roff, Adrian	July 13	750
Manistee county: Portage Lake.....	Onekama	Hans A. Wendel, Onekama	Aug. 15	1,200
Meosata county: Moiles Lake.....	Sheridan	W. T. Laflin, Barryton	Aug. 23	1,200

Monroe county:									
Raisin River:	Dundee	J. F. Berg, Dundee	Aug. 17	1,200					
Montcalm county:									
Butternut Lake	Pierson	B. S. Davenport, Grand Rapids	Aug. 23	1,000					
Pickarel Lake	Bushnell	Bert Goodsell, Vicksburg	Aug. 24	1,000					
Baldwin Lake	Eureka	T. I. Phelps, Greenville	Aug. 24	1,000					
Horseshoe Lake	Fairplains	H. H. Decker, Shiloh	July 22	750					
Big Spruce Lake	Maple Valley	John A. Freeman, Coral	July 22	750					
Cody Lake	Maple Valley	John A. Freeman, Coral	July 22	750					
Duck Lake	Maple Valley	John A. Freeman, Coral	July 22	750					
Newaygo county:									
Boblist Lake	Grove	B. S. Davenport, Pierson	July 11	2,000					
Oakland county:									
Lake Orion	Orion	Lake Orion Summer Homes Co., Detroit	July 13	1,000					
Crawford Lake	Bloomfield	Hugh Chalmers, Detroit	Aug. 30	750					
Green Lake	West	Walter E. Chalmers, Orchard Lake Sta.	July 17	300					
Wingate Lake	Waterford	Mr. Caulkins, Grand Rapids	Aug. 18	600					
Loon Lake	Waterford	Mich. Fish Commission	Sept. 19	1,000					
Oceana county:									
Round Lake	Golden	F. A. Tart, Mears	July 19	1,000					
Morris Lake	Golden	F. A. Tart, Mears	July 19	1,000					
Halberg Lake	Golden	F. A. Tart, Mears	July 19	1,000					
Ogemaw county:									
Lake George	Hill	E. L. Holliday, Lupton	Aug. 2	1,000					
Presque Isle county:									
Grand Lake	Crapo and Presque	N. A. Eddy, Bay City	Aug. 2	2,000					
St. Joseph county:									
Sweet Lake	Sherman	S. E. Williams, Sturgis	Oct. 16	500					
Hainey Lake	Sherman	S. E. Williams, Sturgis	Oct. 16	500					
Fish Lake	Sherman	Jas. R. Smith, Burr Oak	Oct. 28	500					
Burr Oak Lake	Sherman	Jas. R. Smith, Burr Oak	Oct. 28	500					
Saginaw county:									
Saginaw River		W. S. Linton, Saginaw	Aug. 2	400					
Tuscola county:									
Harmon Lake	Dayton	Marshall I. Lewis, Mayville	Aug. 2	1,000					
Van Buren county:									
Lake Eleven	Columbia	Chas. H. Holmes, Bertramont	July 12	750					
Lake Fourteen	Columbia	I. J. Godfrey, Bertramont	July 12	750					
Brandywine Lake	Pine Grove	Earl H. Hays, Pine Grove	July 12	750					
Lake of the Woods	Decatur	Wilton E. Knoll, Decatur	July 12	750					

Perch Plants, 1912.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Wayne county: Eloise Pond.....	Nankin.....	Dr. J. J. Marker, Eloise.....	July 13	750
Huron River.....	Van Buren.....	A. E. Smith, Belleville.....	July 13	750
Coomer Lake.....	Van Buren.....	A. E. Smith, Belleville.....	July 13	750
Total.....				61,425

PERCH PLANTS, 1912.
YEARLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Genesee county: Long Lake.....	Fenton.....	Chas. Leal, Fenton.....	July 3	125
Livingston county: Morgan Lake.....	Putnam.....	A. F. Morgan, Pinckney.....	July 3	150
Oakland county: Orchard Lake.....	West Bloomfield.....	F. S. Campbell, Detroit.....	July 3	225
Herbach Lake.....	Holly.....	F. J. Hoffman, Fenton.....	July 3	75
Wilson Lake.....	Holly.....	D. H. Colwell, Fenton.....	July 3	75
Dickson Lake.....	Holly.....	Chas. E. Rolland, Fenton.....	July 3	75
Shawasee county: Agenen Lake.....	Antrim.....	Edwin Shelp, Bancroft.....	July 3	100
Total.....				825

SUNFISH AND BLUEGILL PLANTS, 1912.
FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Benzie county: Big Plate Lake.....	Benzonía and Lake.....	W. S. Covey, Honor.....	Sept. 18	300
Oakland county: Parkinson Lake..... Loon Lake.....	Independence..... Waterford.....	John Parkinson, Pontiac..... Mich. Fish Commission.....	July 16 Sept. 19	800 1,000
Total.....				2,100

SMELT EGGS, 1912.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Antrim county: Torch Lake.....	Several.....	Michigan Fish Commission, Detroit.....	April 4	6,000,000
Benzie county: Crystal Lake.....	Several.....	Michigan Fish Commission, Detroit.....	April 6	16,400,000
Total.....				22,400,000

TOTALS OF PLANTS FOR THE YEAR 1912.

Brook Trout, Fry.....	7,351,000
Brook Trout, Advanced Fry.....	15,000
Brook Trout, Yearlings and Two-year Olds.....	10,000
Rainbow Trout, Fry and Advanced Fry.....	1,934,500
Rainbow Trout, Fingerlings.....	2,000
Rainbow Trout, Two-year Olds.....	12,000
German Brown Trout, Fry.....	363,000
Lake Trout, Fry.....	2,500,000
Small Mouth Black Bass, Advanced Fry.....	732,000
Small Mouth Black Bass, Fingerlings.....	71,100
Large Mouth Black Bass, Advanced Fry.....	3,149,500
Large Mouth Black Bass, Fingerlings.....	321,050
Large Mouth Black Bass, Yearlings.....	1,000
Perch, Fry.....	21,440,000
Perch, Fingerlings.....	61,425
Perch, Yearlings.....	825
Sunfish and Bluegills, Fingerlings.....	2,100
Smelt Eggs.....	22,400,000

SUMMARY OF FISH COMMISSION PROPERTY.

(Including lands, buildings, ponds, dams, raceways, water rights, tools, apparatus, furniture, machinery, permanent equipment and all state property in the custody of the Board. Itemized inventory filed with Auditor General, Lansing, also on file at office of the Board, Detroit.)

Paris Station, Mecosta County.....	\$26,683 59
Sault Station, Chippewa County.....	12,008 19
Mill Creek Station, Kent County.....	22,304 25
Harrietta Station, Wexford County.....	13,914 69
Drayton Plains Station, Oakland County.....	13,915 50
Detroit Station, Wayne County.....	9,395 50
Office, Detroit.....	1,467 57
Total.....	\$99,689 29

FINANCIAL STATEMENT.

CURRENT EXPENSES.

Year ending June 30, 1911.

1910.			
July 1	Balance on hand	\$1,184 89	
	Received from State during quarter	8,749 98	
	Vouchers paid during quarter		\$9,685 70
Sept. 30	Balance		249 17
		<hr/>	<hr/>
		\$9,934 87	\$9,934 87
1910.			
Oct. 1	Balance on hand	\$249 17	
	Received from State during quarter	2,916 66	
	Loan from Peninsular State Bank	5,000 00	
	Refund from John Peeper, Jr.	29	
	Refund from D. H. Power	18	
	Vouchers paid during quarter		7,334 39
Dec. 31	Balance		831 91
		<hr/>	<hr/>
		\$8,166 30	\$8,166 30
1911.			
Jan. 1	Balance on hand	\$831 91	
	Received from State during quarter	11,666 64	
	Refund from D. H. Power	18	
	Vouchers paid during quarter		7,794 45
	Loan paid to Peninsular State Bank		5,000 00
Mar. 31	Overdrawn at end of quarter	295 72	
		<hr/>	<hr/>
		\$12,794 45	\$12,794 45
1911.			
April 1	Overdraft		295 72
	Received from State during quarter	\$11,666 72	
	Vouchers paid during quarter		10,217 25
June 30	Balance		1,153 75
		<hr/>	<hr/>
		\$11,666 72	\$11,666 72
1911.			
July 1	Balance on hand	\$1,153 75	
	Received from State during quarter	5,916 66	
	Refund from W. J. Hunsaker	08	
	Vouchers paid during quarter		\$7,634 69
Sept. 30	Overdraft at end of quarter	564 20	
		<hr/>	<hr/>
		\$7,634 69	\$7,634 69
1911.			
	Overdraft		564 20
	Received from State during quarter	\$2,958 33	
	Loan from Peninsular State Bank	5,000 00	
	Refund, Edison Soo Electric Co.	12 00	
	Vouchers paid during quarter		7,376 54
Dec. 31	Balance		29 59
		<hr/>	<hr/>
		\$7,970 33	\$7,970 33

1912.			
Jan. 1	Balance on hand	\$29 59	
	Received from State during quarter	\$14,791 65	
	Vouchers paid during quarter		\$8,102 40
	Loan paid to Peninsular State Bank		5,000 00
Mar. 31	Balance		1,718 84
		<hr/>	<hr/>
		\$14,821 24	\$14,821 24
1912.			
April 1	Balance on hand	\$1,718 84	
	Received from State during quarter	8,874 99	
	Refund from American Pump Co.	1 36	
	Vouchers paid during quarter		11,116 35
June 30	Overdraft at end of quarter	*521 16	
		<hr/>	<hr/>
		\$11,116 35	\$11,116 35

SPECIAL PURPOSES.

Year ending June 30, 1911.

1910.			
July 1	Balance on hand	\$375 39	
	Received from State during year	3,200 00	
	Vouchers paid during year		2,673 86
1911.			
June 30	Balance		901 53
		<hr/>	<hr/>
		\$3,575 39	\$3,575 39

Year ending June 30, 1912.

1911.			
July 1	Balance on hand	\$901 53	
	Received from State during year	3,000 00	
	Vouchers paid during year		3,259 69
1912.			
June 30	Balance		641 84
		<hr/>	<hr/>
		\$3,901 53	\$3,901 53

(*Due from State, one-twelfth of current appropriation for year ending June 30, 1912, \$2,958.33, to meet overdraft and liabilities incurred prior to June 30.)

A DEFENSE OF THE HUMBLE DOGFISH.

BY GEO. W. MILES, COMMISSIONER OF FISHERIES AND GAME FOR THE STATE OF INDIANA.

When the white man first came into the Western country, bringing with him the pride of his modern civilization, he found the lakes and streams swarming with splendid game fishes. Bass there were in such great numbers that, though they were of size and strength to make them respectable, the taking of them was hardly considered proper sport, its accomplishment was so easy. There were pike and pickerel of weights up to twenty pounds and more, and sometimes muscallonge still larger, to test his tackle and his skill, and these did he prefer to pursue, their capture being more in keeping with his estimate of his own dignity and prowess. All these were admitted to his table and proudly offered to his guests, not because of the superior excellence of their flavor (which was excellent indeed) but because of the vanity of the master of the household, whose sportmanship was thus best exploited.

Bluegills, crappies, bullheads, perch and other humbler fishes were there also in these lakes and streams in countless numbers, created to be caught by the women and children (and probably intended to be eaten that their joy in the catching of them might not be marred), and these, too, were admitted to the table on ordinary occasions, always to the humbling of the pride of the master of the household, however, who never failed to apologize for the presence of them if a guest were at the board.

Now, as the early Hoosiers would have said, "betwixt and between" there was another fish in which the waters also abounded, and in which they abound even to this day, which, though its size would have entitled it to respect, was so utterly stupid that no man of the time with a drop of sportsman's blood in his veins could feel any pride in pursuing it, while, on account of its great strength, it was much in disfavor with the children, whose precious hooks and lines it innocently broke or made off with. And the fates had been unfair enough to give to it the name of dogfish, for no reason that any scientist living or dead could ever explain. And for the reasons I have given, the dogfish was despised, and its flesh remained untasted.

For the reasons I have given, and for still another reason. The Indians ate them; the Indians ate dogs, too—and there was the name; Ugh.

In truth, the Indians probably ate them for the very best reason in the world—that they are good to eat. But they made use of them almost to the exclusion of the other varieties I have mentioned, possibly not because they preferred them, but because they could secure them more easily than they could the others; for, you know, an Indian never fails to follow the lines of least resistance. I have told you of the dogfish's stupidity. He will bite at any sort of a bait, be it alive or dead, large or small, and get himself fastened on any kind of device; or

he will lie still in shallow water until you slip a noose around his neck and pull him out. And so the Indians could get him easily, while it was difficult for them, without fish hooks or spears or nets as they were, to secure any other fish.

Did you ever see an Indian cook anything? If you did, I warrant you had no stomach for food of that same kind for many a day thereafter, while the memory of their culinary process remained acute. I cannot tell you how they cooked dogfish, and I would not if I could, for I want that it shall be forever forgotten, as I shall show you before I am through. But I have been told how they cook a dog—and so have you, I doubt not.

And so the poor dogfish, for no fault of his own, was placed under the ban as an outcast, despised by all members of society, and no person who had any care for his good name or reputation dared taste of the flesh of one. There were a few, just one now and then, who defied the good opinion of their neighbors and ate of them, and every one of these always therefore stoutly defended them as being of fine flavor, but his opinion was ignored as unworthy of attention. Children were taught at their mothers' knees that if they would keep their good names and hold honored places in society they must not eat dogfish! All men and women in Indiana and her neighboring States have grown up with this prejudice imbedded deep within them, so that if you ask any one of them if dogfish is good to eat he will rather question your sanity than answer you with a simple "no." And to ask him if he ever tasted of the flesh of one is to insult him. Would he so far forget his place in life as to do such a disreputable thing! (But let me tell you, in confidence—I know a lot of proud Hoosiers who would be deeply wounded if you asked them such a question, who have feasted on dogfish and praised it most highly; but they didn't know what kind of fish it was when they ate it. And I am not going to tell you who they are).

The foolish and erroneous prejudice against the dogfish has influenced every grade of society. Even David Starr Jordan, whose name all Indianians love to honor, who knew everything about all the fishes of the lakes and the seas (everything that a scientist could know, but a scientist cannot know what fish is best to eat one whit better than can you or I), who calls them bowfish, and says that they belong to the family of Amiidae (whatever that has to do with it), that they have partially developed lungs and can breathe the air a little, and therefore live longer out of water than any other fish, that the one that has the spot on its tail is the male and is smaller than the female, and gives us much more valuable and interesting information about them, gratuitously adds that they are called dogfish "because even the dogs will not eat them." He even quotes Dr. Kirtland as having said that in some places they were called the lawyer fish, because "they will bite at anything and are good for nothing when caught." And he further defames them by saying: "The flesh of the species is very watery, pasty, much of the substance evaporating when exposed to the air. It is illflavored, and is not often used as food."

Now, I am willing to lay a wager that Dr. Jordan never tasted the flesh of a dogfish in all his life. His position in society is sufficient evidence of that. If it were not, the falsity of his statements would be,

for he was an honorable man and would not have said its flesh was illflavored if he had eaten of one. He simply had the old prejudice born and bred into him, and it led him unwittingly into error.

Mr. Wm. T. Hornaday, the director of the New York zoological park, has written a book on natural history, and he also gives much interesting information about the dogfish. He says of it: "To naturalists the dogfish is a creature of much interest. Like the prong-horned antelope, it is so unique and peculiar that it has been necessary to create for it a grand division of classification which it occupies all alone. The antelope is only a Family, but this fish is a whole Order. Its other English names are Mudfish, Bowfish, Grindle and Lawyer, and since Linnaeus christened it *Amia calva*, in 1766, eleven other naturalists have given it eleven other names in Latin.

"The dogfish has an air-bladder that is divided into cells and is a half-developed lung. At intervals it ascends to the surface of the water, gulps down a mouthful of air, just as a turtle does, and descends again. If hindered from rising when the time comes to take in a supply of fresh air, the fish struggles violently like a mammal about to be drowned; but it can expel air below the surface. This characteristic indicates that lungs were first developed in fishes from modifications of their air-bladders." For all of which we thank Mr. Hornaday. But why should he leave off talking, as a scientist, about things he knew very well, no doubt, to tell us, in an unscientific way, what he knew nothing at all about, that "save to the negroes of the South its flesh is quite unpalatable and valueless as food?" Another case of false training in youth. For again, I will wager that Mr. Hornaday never tasted the flesh of a dogfish, unless he thought it was that of a catfish or pickerel. And if he ever did that, I will wager again that he declared the flavor of it to be splendid, just as many other good people have done when they were similarly deceived. Anyhow, we don't need a scientist to tell us whether the flesh of a fish has a good flavor, or whether it has not.

I never yet have known anybody, neither a negro of the South, or a white man of the North, that has eaten of the flesh of a dogfish that has been properly dressed and cooked, but admitted the flavor of it to be as fine as that of a bass or of a pickerel, which latter it much resembles; though I have known of a great many epicurean people doing this who would not have eaten of it at all if they had known it was dogfish. The only ones I have found who have told me that dogfish were not good to eat have been those who have never tasted of them.

Now, all the lakes and streams in Indiana abound in these beautiful fish, and if people made common use of them, as they ought to do, and as they do of bass, pickerel, catfish, sunfish and perch, the flesh of neither one of which has any better flavor than has theirs, the value of our waters as food producers will be greatly augmented.

Wherefore, let me beg of every citizen of the State who has never eaten of dogfish (or who doesn't know it if he has), but has always believed them to be unfit for food because about everybody else seemed to think they were, that he lay aside his prejudice long enough to give the matter at least one honest test.

Before you do this, though, I beg of you that you let me advise you

carefully as to how the fish should be dressed and made ready for cooking, for I would have the test a fair one, otherwise the fish may be condemned on account of its not having been properly prepared, and for no fault of its own. Not that any particular method is necessary for the preparation of this particular fish, but a dogfish is large and his body is round and thick, and if the dressing be not properly done, the pieces of his flesh will not cook through, and rare fish of any kind is an abomination.

Many people have told me that they liked small bass but not large ones, which they asserted tasted "mossy." I knew that the large bass was improperly dressed, otherwise, with similar cooking, its flavor would have been exactly the same as that of the small one. Others have said they disliked pickerel or pike. There is no finer fish in any of our waters than these. They are just about as good as dogfish. But the bodies of them are likewise round and thick, and they cannot be properly cooked if the skins be left on them and the "backbones" be left inside them. And the same thing is true of all large fish, including carp, which, when properly prepared, are very, very much better than you have ever given them credit for being.

But to return to our dogfish: First take the skin off him. It is thick and tough and his flesh cannot be well cooked through it. You can do it more easily than you can take off his scales, in the following manner:

With a sharp pocket knife rip his hide down the belly and back from the head to the tail. Now tack his tail fast to the board, cut the skin around the tail and start it with your knife until you can grasp it with a pair of pincers; then pull steadily, following along and parting the skin from the flesh lightly with a knife, as though you were skinning a muskrat or other fur-bearing animal. Draw the nails, turn the fish over and repeat the process on the other side. Now cut off the head and tail and remove the entrails. The body of the fish, solid and firm and of a reddish color, much like that of a catfish, will appear appetizing to you. Next lay it down on the board, belly uppermost, and with your knife separate the ribs from the "backbone," cut the flesh free from this bone and take it entirely out. You will now have all the valuable flesh of the fish in two slabs which, when washed and cut into pieces of the proper size, will be ready for the frying pan.

In this frying pan have fat enough so that these pieces will almost float, and fry much as you do doughnuts. Have it good and hot when the pieces, first coated with flour or corn meal, are dropped into it, and keep it thus until they are fried nearly as brown as doughnuts. Then with a fork lift them up, allowing the hot fat to drain from them, and serve.

I have advised the skinning of a dogfish from the tail toward the head, because the skin of it, which adheres rather tenaciously to the flesh, is more easily removed that way than if pulled from the head downward. The same is true of a pike or a pickerel, on which the skin also sticks hard to the flesh. Neither of these fish should ever be cooked with the skin on it. Bass, crappies, bluegills, sunfish and perch may be skinned easily, and the flavor of every one of them will be greatly improved if it is skinned before being cooked. But whether it be skinned or not,

any fish weighing more than a pound should have the "backbone" removed from it before it is fried.

Now, while I am perfectly sure that Dr. Jordan never ate of a dogfish, or at least of a dogfish that was properly cooked, he having furnished conclusive evidence of that, I am not quite certain that he never dissected one, so that he thought himself familiar with the texture of the flesh of them, though I hardly think he did.

I have never net seen one of them, the flesh of which was "watery, pasty, much of the substance evaporating when exposed to the air," but it is just possible he may have done so, for I have it on authority of others who have dressed them, that on rare occasions one of them is found that is, as they describe it to me, "rather soft, or mushy." What is the cause of this I am unable to say. But if this is all the evil that can truthfully be charged to the dogfish, I shall continue to regard him with much respect. I need not advise you that, should you ever find one, the flesh of which is like this, you simply throw it away, as you would any other food animal that appeared to be in an unhealthful condition.

But I beg of you, that you put away the old prejudice that you have carried with you all your years without reason. Give the dogfish a fair and honest trial. If your verdict be that his flesh is not good, I will abide by it. On the other hand, should you agree with me that it should be eaten, much value will be added to our lakes and streams, for he is easily propagated, and notwithstanding the wantonness with which he has ever been sought out for destruction, his numbers are legion in every water of the State.

TWENTIETH BIENNIAL REPORT

OF THE

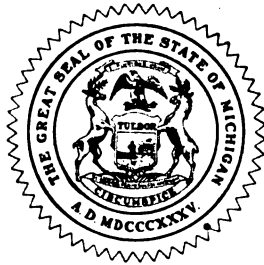
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STATE BOARD

OF

FISH COMMISSIONERS

FOR YEARS 1911 AND 1912, INCLUDING TABLES OF FISH
PLANTS FOR LAST HALF OF 1910



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