

POR T—STATE FISHERIES.

the Wayne hatchery. I retained 10,000 fry and been planted in certain streams in Wayne County aware Rivers. Several small specimens of silver re the close of the season. The fish were four or the hatchery for identification. Meanwhile the took food and remained perfectly healthy. They will run from six to nine inches in length. They water and take food eagerly and show every sign ment in fresh water. We may have to put fences going out. They will jump two or three feet if anys eagerly as brook trout. It looks as though the our lakes. We feel very much encouraged in this

n of the rainbow trout in New York, I know from at Caledonia came from J. B. Campbell, who was time an assistant of Mr. Livingston Stone on the of the first eggs hatched in New York and others r. Since that time New York has received rain species. Mr. Frank N. Clark was on the McCloud t was. At that time the rainbow trout were very me at least—I don't know whether Mr. Clark will wo kinds of rainbows in the McCloud River, the fish. I presume one was a subspecies and the

t in 1876 Dr. Bean and I made a trip to the Sacrap to the McCloud River. In 1877 I went to the 1878 I made the same trip with shad again, and h the proprietor of a private hatchery for a supply ought back to Northville. The first rainbow eggs e fish, but they were not the first rainbow trout we had eggs; just where we got them I don't re Mr. Bower mentioned as being the first rainbows ext lot of fry came from the yearlings that we We started with 125 yearlings from four to twelve some of the larger fish. We had a small take of unted in the Au Sable River by Mr. Fitzhugh.

TWENTIETH BIENNIAL REPORT

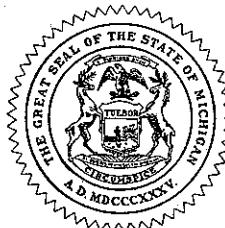
OF THE

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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BOARD OF FISH COMMISSIONERS.

COMMISSIONERS.

..... President
WALTER J. HUNSAKER.

..... Vice-President
—
..... Superintendent
..... Treasurer
—

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 gulley 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.

Completed two new outlets. One pond is 20 and 5½ feet deep in the center, thus disposing more convenient fo

Built new concrete int ponds 2 and 3. Made ne posts, cap and splashboa venience and safety in

Bought new gasoline e mud and silt from ponds ling lawns. This equipm outfit noted in connectio

Other repairs and impi as follows: One new fla seines, new pump and damaged by muskrats, cle in the natural bottom o screens, painted and rep lared the office room in

As stated in our last repair by the U. S. Bur of its lease from this bo permanent equipment wa pancy the floors have b the tank and jar equipm ept the north jar batte The option on the Bureau

Built concrete founda recently transferred from the necessary piping for est pond; also provided power. This little power economical quite beyond

The proposed new pon in our last report, has 1 acres and a maximum d dam across a narrow open basin, supported by low. The basin was fi drainage was provided t creek channel, but practi itself. In proportion to

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, thns 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 drive way 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 graveling and drainage, but mainly this was taken care of at odd times.

The distributing car "Pontinalis" is out of commission and dismantled. Its serviceable 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. Reshingled 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 leveled, 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 employees' 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 in 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:

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.

November 4th, 1912.

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 thus 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, it 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, intow 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 serviceable 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 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 overdrat 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 walking 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 employees, 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 observation of protective laws, we concur in recommending a careful consideration of the needs of the warden services. 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, how can 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 shall soon be forced to adopt a higher scale of wages. The general run of fish commission service is of necessity disagreeable and oppressive 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 widespread 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 pig-pout were considered nearly worthless and often were unsalable at any price; today they are a standard food fish and bring fair prices. Dogfish, useful only as a fertilizer. Not much longer ago frogs and mud-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 skinning them assuredly tends to conserve and protect rather than to drive article or food. If used at their true edible value they at least would 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. After 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 ~~brook~~ waters.

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 sentinel in favor of checking this rainbow invasion by attacking and fighting them with spears and nets.

Doubtless the destruction alleged during the mating season is greatly exaggerated. On the other hand, the small sizes and the young that mingle freely with brook trout the year round compete for the general food supply and thus make some inroad impossible to determine to what extent rainbows forcibly displace brook trout. The natural home of brook trout is in waters that are cool all the time. Their range is controlled by temperature. They retreat without protest in the face of uncongenial temperatures, retiring voluntarily from

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 graying 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 graying 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 graying 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 hue or 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 muscallonge, 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. To-day 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 classes 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.
Allegan 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: Galen 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..... Wilson.....	J. W. Hunter Grand Rapids..... Wm. J. Pearson, Boyne Falls.....	July 2 July 2	2,000 2,000
Cheboygan county: Burt 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..... Rouanac Lake.....	Holton..... Holton.....	C. A. Killeman, Chicago, 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

TWENTIETH REPORT—STATE FISHERIES.

Eaton county: Narrow or Grand Lake..... Bennett Park Pond.....	Brookfield..... Charlotte City.....	Garry C. Fox, Charlotte..... R. S. Spencer, Charlotte.....	July 25 July 25	1,000 500
Gogebic county: Lake Gogebic.....	Matchwood and Marenisco.....	G. A. Bergland, Milwaukee.....	July 16	1,000
Houghton county: Booth Lake..... Crystal Lake..... Elmer 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..... 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	500 500 500 500 750 500 1,000 500 500 1,000 500
Ionia county: Looking Glass River..... Commonwealth Pond..... Municipal Pond.....	Portland..... Portland..... Portland.....	W. E. Parker, 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..... Loug 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: Leg Lake..... Leg Lake.....	Leelanau..... Leelanau.....	G. M. Dame, Northport..... G. M. Dame, Northport.....	July 2 July 23	1,500 1,000

TWENTIETH REPORT—STATE FISHERIES.

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

TWENTIETH REPORT—STATE FISHERIES.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lenawee county: Sand Lake.....	Franklin.....	Elmer Putman, Putman.....	1910. Aug. 3	1,000
Livingston county: Zuky Lake..... Bishop Lake.....	Hamburg..... Hamburg.....	E. E. Gwimmer, Ann Arbor..... Gilbert Thrasher, Brighton.....	Aug. 16 Oct. 18	450 200
Marquette county: Section 15 Lake..... Teal Lake..... Silver Lake.....	Marquette..... City of Negauance..... Champion.....	Frank G. Jenks, Marquette..... Negauance R. and G. Club, Negauance..... Geo. Voelker, Ishpeming.....	July 15 July 15 July 15	750 750 1,000
Mecosta county: Muskegon River.....	Green.....	Thos. Bloxsom, 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.....	Hoo. F. J. Russell, Hart.....	July 23	1,500
Oakland county: Loun Lake..... Pond Lake..... Deer Lake..... Cass Lake..... Pond Lake..... Loon 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.....	Win. R. Roach, Hart..... M. D. Girard, Pentwater.....	July 23 July 23	1,000 1,750
Osceola county: Hewitt Lake.....	Burdette.....	Hon. J. M. Perry, Tustin.....	July 2	1,000
Otsego county: Otsego Lake.....	Bagley.....	Hon. E. B. Boltou, 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

Schoolcraft county: Indian Lake.....	Thompson and Hiawatha.....	Benj. Gero, Manistique.....	July 15	1,000
Van Buren county: Lake Cota..... Lake George.....	Paw Paw..... Lawrence.....	Otto Ihling, Kalamazoo..... Carlton Vanderveer, Lawreuce.....	Aug. 17 Aug. 17	600 450
Washtenaw county: Strawberry Lake..... Tabaus Lake..... Whitmore Lake..... Horseshoe Lake..... Independence Lake..... Joslin Lake.....	Green Oak, etc..... Northfield..... Northfield..... Northfield..... Webster..... Lyndon.....	E. E. Gwimmer, Ann Arbor..... E. E. Gwimmer, Ann Arbor..... E. E. Gwimmer, Ann Arbor..... E. E. Gwimmer, Ann Arbor..... E. E. Gwimmer, Ann Arbor..... F. G. Marshall, Stockbridge.....	Aug. 16 Aug. 16 Aug. 16 Aug. 16 Aug. 16 Aug. 2	450 300 450 450 300 200
Wexford county: Pleasant Lake.....	Selma.....	E. E. Bunyea, Bunyea.....	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.
Allegan county: Plainwell Millpond Big Lake	Gun Plains Watson	Wm. Cripe, Plainwell E. J. Anderson, Plainwell	July 2 July 2	6,000 0,000
Barry county: Silver Lake	Prairieville	R. L. Soule, Plainwell	July 2	4,000
Charlevoix county: Walloon 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 Rennie 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. Bechstein, 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
Ionia county: Walters Pond Huhrs Pond Morrison Lake Peck Lake Looking Glass Pond Lowell Electric Pond Smyrna Dam	Boston Boston Boston Berlin Portland Keene Otsego	J. Wallington, Saranac J. Wallington, Saranac J. Wallington, Saranac J. Wallington, Saranac Jos. 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 Ostemo Portage	E. M. Bresse, 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 Ward's Lake	Spencer Spencer Courtland Nelson and Pierson	S. W. Bigler, Lincoln Lake R. M. Vanderlip, Gowen Cedar Springs, R. 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

TWENTIETH REPORT—STATE FISHERIES.

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

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

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

TWENTIETH REPORT—STATE FISHERIES.

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

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

TWENTIETH REPORT—STATE FISHERIES.

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, Begal 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.	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.	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. Mastodon. 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. Dormott Lake. Guy 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. Robt. Hyslop, Weidman. Robt. Hyslop, Weidman. Robt. Hyslop, 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. Tamarack Lake. Lagoon in Loonis Park. Moulague Lake.	Grass Lake. Norvell. Jackson. Springport.	C. R. Smith, Grass Lake. C. R. Smith, Grass Lake. Hon. W. W. Todd, Jackson. L. E. Landon, Springport.	July 8 July 8 July 9 July 30	3,000 3,000 2,000 750
Kalamazoo county: Fox Milldam. Black Lake. Rawson Lake.	Prairie Ronde. Schoolcraft. Schoolcraft.	S. D. Fox, Schoolcraft. M. N. Grimes, Schoolcraft. Thos. Hewitt, Schoolcraft.	July 9 July 9 July 9	3,000 2,000 3,000
Kent county: Reeds Lake.	Grand Rapids.	L. J. DeLamarter, Grand Rapids.	July 30	1,000
Keweenaw county: Lac LaBelle.	Grant.	J. W. Senden, Calumet.	July 16	2,000
Lake county: Lincoln Lake. Hammond Lake. Wolf or Round Lake. Indian Lake. Little Bass Lake. East Lake. Big Lake.	Elk. Pleasant Plains. Webber. Elk. Elk. Elk.	Geo. M. Brown, Detroit. Wm. Clark, Wingleton. Harley Bartlett, Baldwin. W. P. Jones, Peacock. W. P. Jones, Peacock. Wm. Utter, Peacock. Wm. Utter, Peacock.	July 30 July 30 July 22 July 22 July 22 July 22	200 200 750 500 500 500 500
Lapeer county: Mirror Lake. Vanderpool Lake. Jenness Lake. Hall and Salmon Lake. Kellogg Lake.	Lapeer. Rich. Attica. Lapeer. Lapeer.	Mathias Caley, Lapeer. Ed. D. Cartright, Mayville. F. Harrison, Attica. B. Martin, Metamora. M. F. Kellogg, Hunters Creek.	Aug. 16 July 8 July 8 Aug. 16 Aug. 16	1,000 4,000 1,250 800 800
Leelanau county: South Bar Lake.	Empire.	Jas. Dailey, Empire.	Aug. 5	750
Lenawee county: Amen Millpond. Devil's Lake. Bear Lake. Jewell's Lake. Devil's Lake. Raisin River.	Hudson. Woodstock. Hudson. Medina. Woodstock. Deerfield.	E. W. Ames, Hudson. H. E. Hand, Tecumseh. Jas. B. Thorn, Hudson. Jas. B. Thorn, Hudson. H. E. Hand, Tecumseh. F. Greenfield, Deerfield.	July 20 July 20 July 20 July 20 Aug. 3 Oct. 5	750 1,800 750 750 300 800
Livingston county: Walker Lake. Peterson Lake. Bass Lake. Big and Little Portage Lakes. Trains Lake. Pardes Lake.	Hamburg. Putnam. Vandalla and Putnam. Dexter. Superior. Genna.	Gilbert Thrasher, Brighton. F. G. Marshall, Stockbridge. F. G. Marshall, Stockbridge. R. H. Killian, Ypsilanti. Jerome N. West, Ypsilanti. R. E. Barron, Howell.	Oct. 18 Aug. 2 Aug. 2 Oct. 8 Oct. 8 Oct. 14	160 800 600 500 400 800
Mackinac county: Manistique Lake.	Portage.	Dent Hurd, Curtis.	July 15	2,500

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES

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

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Marquette county:-			1910.	
Allen's Lake.	Humboldt.	H. R. Gamble, Republic.	July 15	2,000
Granite Lake.	Republic.	H. R. Gamble, Republic.	July 15	1,500
Perch Lake.	Forsythe.	H. R. Gamble, Republic.	July 15	1,500
Me Lake.	Ishpeming.	A. C. Seass, Negaunee.	July 15	1,000
Cleveland Lake of Lillie Pond.	Powell.	Hon. W. H. McCorkindale, Ishpeming.	July 15	1,000
Bear Lakes.	Marquette.	H. A. St. John, Marquette.	July 15	1,000
Lake on Sec. 32 — 49 — 25.	Skandia.	H. A. St. John, Marquette.	July 15	1,000
Abram Lake.	Powell.	Chas. Wilson, Yalmar.	July 15	1,000
Bear Lake.	Powell.	H. A. St. John, Marquette.	July 15	150
Independence Lake.	Marquette.	H. A. St. John, Marquette.	July 15	600
Hills Dam Lake.	Marquette.	H. A. St. John, Marquette.	July 15	450
Maugum Lake.	Marquette.	H. A. St. John, Marquette.	July 15	450
Sec. 32-49-20 Lake.	Marquette.	H. A. St. John, Marquette.	July 15	300
Mecosta county:				
Moore's Lake.	Hinton.	C. W. Vining, Lakeview.	J July 1	3,000
Meeker Lake.	Wheatland.	J. M. Swisher, Remus.	July 1	2,000
Fine Lake.	Wheatland.	J. M. Swisher, Remus.	July 1	2,000
Blue Lake.	Morton and Martiny.	P. J. Theisen, Remus.	July 1	3,000
Lake 28.	Sheridan.	P. J. Theisen, Remus.	July 1	2,000
Long Lake.	Morton.	P. J. Theisen, Remus.	July 1	3,000
Lake No. 6.	Sheridan.	Ray Carman, Mecosta.	July 1	2,000
Perch Lake.	Martiny.	Ray Carman, Mecosta.	July 1	2,000
Pretty Lake.	Morton.	E. C. Lewis, Mecosta.	July 1	2,000
Round Lake.	Millbrook.	F. O. Redick, Mecosta.	July 1	2,000
Millbrook Millpond.	Millbrook.	T. O. Patterson, Millbrook.	July 1	2,000
Kearney Lake.	Millbrook.	Roger Scott, Blanchard.	July 1	2,000
Muskegon River.	Green.	Thos. Bloxson, Paris.	July 15	1,500
Montcalm county:				
Big Brimmer Lake.	Cato.	C. W. Vining, Lakeview.	July 1	3,000
Little Brimmer Lake.	Cato.	C. W. Vining, Lakeview.	July 1	3,000
Tamarack Lake.	Cato.	C. W. Vining, Lakeview.	July 1	3,000
Bass Lake.	Belvidere.	David Wortley, Lakeview.	July 1	2,000
Town Line Lake.	Belvidere and Cato.	David Wortley, Lakeview.	July 1	3,000
Clifford Lake.	Douglas.	John W. Campbell, Stanton.	July 1	3,000
Mud Lake.	Belvidere.	M. B. Cornell, Six Lakes.	July 1	2,000
Six Lakes.	Belvidere.	J. W. Gasfield, Six Lakes.	July 1	4,000
Horseshoe Lake.	Belvidere.	Joseph Kimmell, Six Lakes.	July 1	3,000
Merrifield Lake.	Home.	N. C. Merrifield, Six Lakes.	July 1	2,000
Cedar Lake.	Belvidere and Douglas.	F. E. Curtiss, Edmore.	July 9	2,000
Long Lake.	Richland.	F. E. Curtiss, Edmore.	July 9	3,000
Mari Lake.	Bushnell.	F. E. Curtis, Fenwick.	July 9	2,000
Snow's Lake.	Bushnell.	M. F. Perry, Fenwick.	July 9	2,000
Hammer Lake.	Bushnell.	M. F. Perry, Fenwick.	July 9	2,000
Pickerel Lake.	Bushnell.	M. F. Perry, Fenwick.	July 9	2,000
Dearborn county:				
Bass Lake.	Richland.	Wm. Carls, Vestaburg.	July 9	2,000
Lady Lake.	Richland.	F. H. McDowell, Vestaburg.	July 9	2,000
Robbins Lake.	Richland.	A. J. Williams, Riverdale.	July 9	2,000
Montgomery 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.	Milford.	F. D. Sands, Milford.	July 2	3,000
Livermore Lake.	Milford.	F. D. Sands, Milford.	July 2	2,000
Hunnewell Lake.	Milford.	F. B. Hatch, Milford.	July 2	2,000
Long Lake.	White Lake.	F. B. Hatch, Milford.	July 2	4,000
Pettibone Lake.	Highland.	F. B. Hatch, Milford.	July 2	4,000
Sears Lake.	Milford.	F. B. Hatch, Milford.	July 2	4,000
Keni Lake.	Milford and Lyon.	F. B. Hatch, Milford.	July 2	4,000
Loon Lake.	Commerce.	F. B. Hatch, Milford.	July 2	4,000
Morrison and Proud's Lake.	Commerce.	T. H. Padley, Milford.	July 2	2,000
Austin and Round Lakes.	Commerce.	T. H. Padley, Milford.	July 2	2,000
Porter Lake.	Millford and Highland.	R. S. Potts, Milford.	July 2	3,000
Huron Lake.	Springfield.	T. A. Forbes, Milford.	July 2	3,000
Davisburg Millpond.	Springfield.	F. G. Ely, Davisburg.	July 2	4,000
Kirkby Lake.	Springfield.	Ira E. Kinney, Davisburg.	July 2	3,000
Long Lake.	Springfield.	Ira E. Kinney, Davisburg.	July 2	4,000
Watkins Lake.	West Bloomfield.	R. F. Monroe, Pontiac.	July 2	8,000
Cass Lake.	Waterford.	H. J. C. Wagner, Detroit.	July 2	8,000
Pleasant Lake.	West Bloomfield.	J. S. Ebner, Pontiac.	July 9	4,000
Schoolhouse Lake.	Waterford.	S. Bartlett, Pontiac.	July 15	400
Lake Elizabeth.	Waterford.	A. L. Moore, Pontiac.	July 15	400
Divine Lake.	Holly.	John Divine, Holly.	July 15	1,800
Burns Lake.	Holly.	David Mackay, Holly.	July 15	500
Orchard Lake.	West Bloomfield.	F. S. Campbell, Detroit.	July 15	750
Lake Orion.	Orion.	J. E. Bolles, Detroit.	Aug. 16	800
Union Lake.	West Bloomfield.	G. M. Van Buskirk, Pontiac.	Aug. 16	1,200
Pond Lake.	Waterford.	Marvin Hess, Drayton Plains.	Aug. 16	800
Huron Lake.	Springfield.	F. G. Ely, Davisburg.	Aug. 16	800
Ogemaw county:				
Big Au Sable Lake.	Goodar.	C. M. Stewart, Lupton.	July 15	1,000
Black Lake.	Hill.	C. M. Stewart, Lupton.	July 15	1,500
Devoe Lake.	Cummings.	R. M. Stewart, Lupton.	July 15	1,500
Green Lake.	Rose.	R. M. Stewart, Lupton.	July 15	1,000
North Lake.	Cummings.	R. M. Stewart, Lupton.	July 15	1,500
Rifle Lake.	Hill.	R. M. Stewart, Lupton.	July 15	1,500
Round Lake.	Hill.	R. M. Stewart, Lupton.	July 15	1,500
Spring Lake.	Cumming.	R. M. Stewart, Lupton.	July 15	1,000
Cumming Lake.		H. Bader, Rose City.	July 15	1,500

TWENTIETH REPORT—STATE FISHERIES.

Large Mouth Black Bass, 1910.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Onondaga county: Bass Lake.....	Interior.....	Arbutus R. and G. Club, Trout Creek.....	1910, July 16	1,500
Ottawa county: Crockery Lake.....	Chester.....	E. O. Ailey, M. D., Conklin.....	Aug. 12	300
Presque Isle county: Esau Lake..... Grand Lake.....	Presque Isle..... Crappo 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..... Paw Paw.....	O. C. Egan, Grand Junction..... O. C. Egan, Grand Junction..... E. B. Eddy, Grand Junction..... A. V. McKee, Bangor..... O. G. Moreland, Bangor..... J. Welker, Bangor..... W. E. Grimes, South Haven..... W. E. Grimes, South Haven..... R. D. Loveland, Paw 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 2,000 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: Cooper Lake..... Huron River..... Lake Huron.....	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

TWENTIETH REPORT—STATE FISHERIES.

LARGE MOUTH BLACK BASS.

YEARLINGS.

County and name of water.	Towuship.	Applicant or depositor.	Date.	Number.
Kent county: Pickerel 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
Cajhoun county: Halls Lake. Capins Lake. Bear Lake.	Sheridan. Marengo. 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. Kleman, Chicago. C. A. Kleman, Chicago. C. A. Kleman, 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
Gratiot county: Half Moon Lake.	Seville.	Wm. Stacey, Riverdale.	Ang. 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: Parreanit Lake.	Adams.	Jas. H. Lucas, Houghton.	July 15	200

TWENTIETH REPORT—STATE FISHERIES.

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. Traverse, 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. 24 Sept. 24 Sept. 24 Sept. 24 Sept. 24 Sept. 24 Sept. 24	600 600 600 600 600 450 450
Kalkaska county: Monistee 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 Lamarter, 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: Deane Lake. Bass Lake.	Richland. Richland.	Wm. Caris, Vestaburg. T. H. McDale, Vestaburg.	Aug. 26 Aug. 26	450 600
Mecosta county: Lake 28.	Sheridan.	R. P. Swisber, 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

TWENTIETH REPORT—STATE FISHERIES.

Warmouth Bass, 1910.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Newaygo county:			1910.	
North Lake.		Fred Osborne, Grant.	Aug. 27	450
Blanch Lake.		A. J. Titus, Grant.	Aug. 27	450
Long Lake.		Jacob Kemperman, Fremont.	Aug. 27	600
Railway Lake.		Geo. R. Lyons, Hesperia.	Aug. 27	450
Stoney Lake.		Geo. R. Lyons, Hesperia.	Aug. 27	600
Bullhead Lake.		Geo. R. Lyons, Hesperia.	Aug. 27	600
Sand Lake.		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. Roach, 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
Junius Beach Pond.	Golden.	Edwin A. Post, Mears.	Aug. 29	600
Silver Lake.	Golden.	C. E. Muchart, Mears.	Aug. 29	600
Pentwater Lake.	Pentwater.	S. D. Montgomery, Grand Rapids.	Aug. 29	600
Osceola county:				
Wilson Lake.	Everett.	S. F. Postal, Evart.	Sept. 22	500
Ottawa county:				
Crockery Lake.	Chester.	Dr. E. O. Cilley, Conklin.	Sept. 21	400
Crauberry Lake.	Wright.	Dr. E. O. Cilley, Conklin.	Sept. 21	400
Presque Isle county:				
Grand Lake.	Crappo.	N. A. Eddy, Bay City.	Aug. 26	450
St. Joseph county:				
Mud Lake.	Fabius.	Jno. G. Krull, Three Rivers.	Sept. 9	450
Loug Lake.	Colon.	Dr. F. W. Clements, Burr Oak.	Sept. 10	750
Van Buren county:				
East Lake.	Alineua.	John Wiltsea, Kendall.	Aug. 30	450
Moon Lake.	Geneva.	Chas. Squires, Lacota.	Aug. 30	300
Mou Lake.	Geneva.	J. A. Gibson, Lacota.	Aug. 30	300
Lillie Lake.	Hamilton.	John Baker, Decatur.	Aug. 30	600
Keeler Lake.	Keeler.	Thos. S. Hare, 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:			1910.	
Sawmill Lake.	Johnstown.	E. A. Turner, Bedford.	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
Lenawee 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.	Crappo, 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	Watford 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 Honer	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.....	Silver Creek.....	F. H. Codding, Dowagiac.....	1910. Oct. 17	3,000
Christian Creek.....	Penn etc.....	H. H. Roth, Cassopolis.....	Oct. 18	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: Lamberton 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.....	Milford.....	R. S. Potts, Milford.....	Oct. 19	1,500
Indian Garden Lake.....	Milford.....	Tom A. Forbes, Milford.....	Oct. 19	1,500
Long Lake.....	Orion.....	W. A. Benjamin, Orion.....	Oct. 24	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

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

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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 Fingerlings Nos. 1, 2, 3 and 4.....	374,000
Large Mouth Black Bass, Fingerlings Nos. 1, 2, 3 and 4.....	555,810
Large Mouth Black Bass, Yearlings.....	30,600
Walemouth Bass, Yearlings.....	30,100
Perch, Fingerlings.....	11,450
Sunfish and Blugills, Fingerlings and Yearlings.....	3,675
Grass Pike, Yearlings.....	3,400
Landlocked Salmon, Fingerlings.....	5,000
Lake Trout, Fingerlings.....	5,000
Rainbow Trout, Fingerlings.....	63,100

TWENTIETH REPORT—STATE FISHERIES.

BROOK TROUT PLANTS, 1911.

FRY.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alcona county:			1911.	
West Branch	Hawes	John Macgregor, Harrisville	Mar. 13	4,500
South Branch of Black River	Harrisville, Haynes and Alcona	Geo. Burt, Harrisville	Mar. 13	6,000
Black River	Harrisville, Haynes and Alcona	F. J. Elmer, Harrisville	Mar. 13	7,500
Black River		C. W. Luce, East Tawas	Mar. 13	10,500
Venetian Creek		C. E. Lovelace, Mikado	Mar. 13	9,000
West Branch	T. 27 N. of R. 6 and 7 E	W. S. Linton, Saginaw	Mar. 13	7,500
Sucker Creek	T. 27 N. of R. 8 E.	W. S. Linton, Saginaw	Mar. 13	9,000
Pine River	Millett	Daniel Lavier, Lincoln	Mar. 13	6,000
Bluff Creek	Hawes	E. R. Wyman, Alpena	Mar. 13	4,500
McKnight Creek		Jas. Briselden, Alpena	Mar. 17	3,000
Wildcat Creek		W. A. Blackburn, Alpena	Mar. 17	4,500
Little North Branch	Caledonia	C. W. Edwards, Alpena	Mar. 17	3,000
Mitchell Creek		C. W. Edwards, Alpena	Mar. 17	4,000
Newton Creek		D. D. Hanover, Alpena	Mar. 17	4,000
Silver Creek		Richard Collins, Alpena	Mar. 17	3,000
Muskrat Creek		R. E. Ellsworth, Alpena	Mar. 17	4,500
Little Gilchrist Creek		Wm. Ellis, Au Sable	Mar. 18	4,500
Bamfield or Nine Mile Creek		J. A. Pattee, Curran	Mar. 18	3,000
Silver Creek		J. A. Pattee, Curran	Mar. 18	3,000
The Little Wolf		S. C. McCollum, Comins	Mar. 18	4,500
McGinn Creek		F. H. Loud, Au Sable	Mar. 18	6,000
South Branch of Pine River		F. H. Loud, Au Sable	Mar. 18	3,000
Spring Creek		A. L. Noyes, Harrisville	Mar. 25	4,500
Mill Creek				
Allegan county:				
Plummer Creek	Ganges	N. G. Nelson, Fennville	Feb. 23	2,000
Manis Creek	Manlius	W. H. Whitbeck, Fennville	Feb. 23	2,000
Swan Creek	Valley	A. L. Whitbeck, Fennville	Feb. 23	2,000
Dowd's Creek	Heath and Monterey	Chas. E. Bond, Allegan	Feb. 27	4,000
Bear Creek	Heath and Monterey	C. P. Symon, Allegan	Feb. 27	5,000
Silver and Alram's Creeks	Gun Plains	Wm. Crispé, Plainwell	Mar. 3	4,500
Chart, Abrams, Delano and Neely's Creeks	Gun Plains	E. J. Anderson, Plainwell	Mar. 3	6,000
Webster Creek	Gun Plains	R. L. Soule	Mar. 3	1,500
Silver Creek	Silver Creek	O. C. Rice, Kalamazoo	Mar. 3	3,000
Bayley March Creek	Cheshire and Valley	Fitz. Hamilton, Kalamazoo	Mar. 27	3,000
Alpena county:				
Trout Creek	Alpena	W. E. Rogers, Alpena	Mar. 17	1,500
Bartelski Creek	Sanborn and Ossineke	H. E. Ellsworth, Alpena	Mar. 17	4,500
Davis Creek	Ossineke	R. E. Ellsworth, Alpena	Mar. 17	4,500
Upper South Branch	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 and Chestonia	A. B. Wooten, Bellaire	Mar. 16	2,000
Cedar River	Banks	Dr. I. M. Newman, Central Lake	Mar. 16	4,000
Town Line Creek	Banks and Central Lake	W. F. Carpenter, Central Lake	Mar. 16	2,000
Ogletree Creek	Central Lake and Banks	W. S. Richardson, Central Lake	Mar. 16	2,000
Wilkinson Creek	Central Lake	W. H. Upthegrove, Central Lake	Mar. 16	1,000
Norman Creek	Banks	Henry Strukt, Ellsworth	Mar. 16	2,000
Bosse Creek	Banks	W. A. Boss, Ellsworth	Mar. 16	1,000
Noyes Creek	Banks and Marion	L. Van Skiver, Ellsworth	Mar. 16	2,000
St. Clair Creek	Echo	L. Van Skiver, Ellsworth	Mar. 16	3,000
Ore Creek	Jordan	Carl Stroebel, East Jordan	Mar. 16	4,000
Bartholomew Creek	Helena	Carl Stroebel, East Jordan	Mar. 16	5,000
Jordan River	Chestonia	H. S. Pinney, East Jordan	Mar. 16	2,000
Gould Creek	Chestonia	Chas. H. Coy, Alden	Mar. 16	2,000
Spencer Creek	Chestonia	Wm. Weaver & Son, Elmira	Mar. 22	6,000
Jordan River	Chestonia	F. M. Parker, Alba	Mar. 22	7,500
Jordan River	Chestonia	A. A. Strickland, Alba	Mar. 22	1,000
Landslide Creek	Chestonia	D. H. Meeker, Alba	Mar. 22	1,000
Racket River	Chestonia	R. C. Bennett, Alba	Mar. 22	5,000
Cascade Ck and Racket River, Tribs. to Jordan River	Chestonia	R. C. Bennett, Alba	Mar. 22	4,000
Green River				
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	7,500
Big Creek	Mason, Arenac and AuGres	C. D. Brooks, Omer	Mar. 13	7,500
Stier's Creek	Deep River	J. R. Adams, Sterling	Mar. 23	3,000
Paremelee Creek	Adams	J. R. Adams, Sterling	Mar. 23	2,000
Hoptiles Creek	Adams, Deep River and Arenac	J. R. Adams, Sterling	Mar. 23	4,000
Pine River	Heads in Deep River	Francis Avery, Standish	Mar. 23	6,000
Deep River	Gibson	Francis Avery, Standish	Mar. 23	4,000
Lindy Creek	Deep River	Francis Avery, Standish	Mar. 23	3,000
North Branch of Deep River and South Omer	Deep River	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
Demno 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	3,000
Omer, Cedar and Willis Creeks		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		H. A. St. John, Marquette	April 15	1,500
Stutt's Creek		H. A. St. John, Marquette	April 15	3,000
Miner's River	Munising	H. A. St. John, Marquette	April 15	3,000

TWENTIETH REPORT—STATE FISHERIES.

Brook trout plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Alger county.—Continued.			1911.	
Slapneck Creek.	Rock River.	H. R. Harris, Marquette.	April 15	4,500
Au Train River.	Rock River.	H. R. Harris, Marquette.	April 15	6,000
Little Indian River.		Ceo. Wiley, Detroit.	April 19	7,500
Bull Creek.	Munising.	Ceo. Wiley, Detroit.	April 19	3,000
Squaw Creek.	Au Train.	Fred S. Case.	April 19	3,000
Robinson's Creek.	Munising.	Fred S. Case.	April 19	3,000
Big Indian Creek and tributaries.	Burt.	Fred S. Case.	April 19	9,000
West Branch of the Sucker.	Burt.	Lewis Williams, Grand Marais.	April 19	3,000
Sucker River.		Thos. J. McCann, Grand Marais.	April 19	7,500
Branches of North Manistique River.		H. A. St. John, Marquette.	April 15	4,500
Barry county:				
Bagley Creek.	Orangeville.	A. J. Shelp, Doster.	Feb. 27	1,500
Tributaries to Wanangoger Creek.	Assyria.	H. S. Jones, Beltevus.	Feb. 27	2,000
Ellis or Spring Brook.	Assyria.	H. S. Jewell, Assyria.	Feb. 27	1,500
Crooked Brook.		L. H. Sabin, Battle Creek.	Feb. 27	1,500
Hamilton Brook.		A. C. Hindman, Grand Rapids.	Mar. 1	3,000
Three tributaries to Thornapple River.	Thornapple.	J. H. Neiss, Hastings.	Mar. 1	3,000
Tributaries to Cedar Creek.	Hope, Baltimore and Hastings.	J. H. Neiss, Hastings.	Mar. 1	1,500
Hill Creek.	Yankee Springs.	W. J. Michnel, Hastings.	Mar. 1	6,000
Cedar Creek.	Barry, Cedar Creek, Baltimore and Hastings.	Dr. C. W. Mixer, Hastings.	Mar. 1	2,000
Tamarac Creek.	Baltimore.	Dr. C. W. Mixer, Hastings.	Mar. 1	4,000
West Creek.	Rutland and Hastings.	Dr. C. W. Mixer, Hastings.	Mar. 1	1,500
Upper Cedar Creek.	Baltimore.	Dr. C. W. Mixer, Hastings.	Mar. 1	1,500
McCollum Creek.	Hope.	Dr. C. W. Mixer, Hastings.	Mar. 1	1,500
Kelley Creek.	Baltimore.	C. H. Osborn, Hastings.	Mar. 1	4,000
Power's Creek.	Irving.	F. H. Barlow, Hastings.	Mar. 1	4,000
Fall Creek.	Several.	A. J. Houghtalin, Morgan.	Mar. 1	4,000
High Bank Creek.	Johnstown, Baltimore, Castleton and Cleveland.	Arch Sootsmant, Cressey.	Mar. 1	1,500
Tributaries of Gull Lake.	Prairieville.	D. Campbell, Cloverdale.	Mar. 3	4,500
Glass Creek.	Thornapple.	A. W. Crane, M. D., Kalamazoo.	Mar. 3	3,000
Gull Lake.	Prairieville.	A. W. Crane, M. D., Kalamazoo.	Mar. 3	2,000
No name.	Barry.	E. W. MacPherran, Marquette.	May 9	4,500
Baraga county:		E. W. MacPherran, Marquette.	May 9	1,500
Perch Creek.	48-25.	E. W. MacPherran, Marquette.	May 9	15,000
Branch of Sturgeon River.	48-34.	E. W. MacPherran, Marquette.	May 9	4,500
Sidnaw Creek.	48-32.	E. W. MacPherran, Marquette.	May 9	1,500
Streams about 274½ Mile Post.	48-34.	Sidnaw H. and F. Club, Sidnaw.	April 19	6,000
Clear Creek.	Covington.	Frank Perry, Michigamme.	April 21	6,000
Spurr Creek.	Spurr.			
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	1,500
Sturgeon River.	L'Anse and others.	Silver River R. and G. Club, L'Anse.	April 26	12,000
Coles Creek.	L'Anse.	Silver River R. and G. Club, L'Anse.	April 26	7,500
Silver River.	L'Anse.	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	4,500
Steinbach Creek.	L'Anse.	Silver River R. and G. Club, L'Anse.	April 26	3,000
Gamache Creek.	Baraga.	Silver River R. and G. Club, L'Anse.	April 26	3,000
Duck Creek.	L'Anse.	Silver River R. and G. Club, L'Anse.	April 26	3,000
Clear Creek.	L'Anse.	Silver River R. and G. Club, L'Anse.	April 26	3,000
West Branch.	Baraga.	Silver River R. and G. Club, L'Anse.	April 26	3,000
Kelsey Creek.	Baraga.	Silver River R. and G. Club, L'Anse.	April 26	3,000
Cosgrove's Creek.	Baraga.	Wm. C. Birk, Baraga.	April 26	3,000
Slate River.	Arvon.	A. B. Cosgrove, Baraga.	April 26	3,000
Branch county:		Louis Robillard, Baraga.	April 26	3,000
Stanton's Creek.	Sherwood.	W. L. Mason, L'Anse.	April 26	9,000
Brewster's Brook.	Girard.	H. H. Hubbard, Union City.	Feb. 24	1,500
Shinneman Brook, Mott's, Hog, Allen and Branch Creeks.	Coldwater.	F. T. Tappan, Coldwater.	Mar. 3	3,000
Benzie county:		F. T. Tappan, Coldwater.	Mar. 3	22,500
Platte River.	Homestead.	Frank Conklin, Honor.	Mar. 17	10,000
Silver Creek.	Homestead.	L. H. Stacey, Honor.	Mar. 17	2,000
Brundage Creek.	Inland.	L. H. Stacey, Honor.	Mar. 17	2,000
Colton 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	2,000
Breofsley Creek.	Benzonia.	L. H. Stacey, Honor.	Mar. 17	10,000
Miner Creek.	Benzonia.	W. B. Covey, Honor.	Mar. 17	2,000
Root's Creek and Platte River.	Homestead and Platte.	W. B. Covey, Honor.	Mar. 17	2,000
Platte River.	Homestead, Inland and Benzonia.	I. P. Covey, Honor.	Mar. 17	14,000
Betsey River.	Blaine.	F. A. Mitchell, Manistee.	Mar. 17	20,000
Herring Creek.		F. A. Mitchell, Manistee.	Mar. 17	30,000
		Ben Little, Frankfort.	Mar. 21	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
Farmer Creek.	Pipestone.	Ed. A. Gast, St. Joseph.	Feb. 23	3,000
Three Branches of Row Creek.	Sodus and Berrien.	F. K. George, St. Joseph.	Feb. 23	5,000
Fisher Creek.	Watervliet.	F. K. George, St. Joseph.	Feb. 23	3,000
Spring fed brooks near Watervliet.	Bainbridge.	E. E. Rowland, Watervliet.	Feb. 23	3,000
Branch of Mill Creek, Smith Creek.	Bainbridge.	Albert Buijack, Watervliet.	Feb. 23	1,500
Blue Creek.	Benton.	John De Tample, Benton Harbor.	Feb. 23	3,000
Hog Creek.	Three Oaks.	Fred Herring, St. Joseph.	Feb. 23	3,000
Shedd Creek.	Lake.	Claude Herring, St. Joseph.	Feb. 23	5,000
Shafer Creek.		Mark Herring, St. Joseph.	Feb. 23	3,000
Long Branch of Blue Lake.		A. F. Herring, St. Joseph.	Feb. 23	2,000

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Berrien County.—Continued.			1911.	
Tabor Creek.	Sodus.	A. F. Herring, St. Joseph.	Feb. 23	1,500
Graham Creek.	Lincoln.	A. F. Herring, St. Joseph.	Feb. 23	2,000
Smith Creek.	Pipestone.	J. W. Isbell, St. Joseph.	Feb. 23	2,000
Pearl Creek.	Pipestone.	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Hess Creek.	Oronoko.	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Morlock Creek.	Pipestone.	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Howard Creek.	Benton.	J. W. Isbell, St. Joseph.	Feb. 23	1,500
Putnam Creek.	Benton.	E. I. Backus, St. Joseph.	Feb. 23	1,500
Claypool Creek.	Waterniet.	E. I. Backus, St. Joseph.	Feb. 23	1,500
Eckert Creek.	New Buffalo.	Chas. E. Shaefer, St. Joseph.	Feb. 23	1,500
Ox Creek.	Pipestone.	W. J. Luckier, St. Joseph.	Feb. 23	2,000
Jones Creek.	Pipestone.	W. J. Shermack, New Buffalo.	Feb. 23	3,000
Spring Brook.	Pipestone.	S. M. Clawson, Ean Claire.	Mar. 24	3,000
Koone Creek.	Pipestone.	S. M. Clawson, Ean Claire.	Mar. 24	3,000
Collins Creek.				
Calhoun County:	Leroy.	C. M. Hall, Union City.	Feb. 24	3,500
Wright Creek.	Newton.	A. E. Carpenter, Union City.	Feb. 24	1,500
Oberhauser Creek.	Newton.	A. E. Carpenter, Union City.	Feb. 24	3,000
Love Creek.	Baileyton.	H. T. Carpenter, Union City.	Feb. 24	1,500
Watson Creek.	Newton and Leroy.	D. D. Buell, Union City.	Feb. 24	1,500
Katz Creek.	Newton and Leroy.	B. P. Long, Union City.	Feb. 24	3,000
Theerson Creek.	Burlington and Athens.	H. H. Lowell, Union City.	Feb. 24	1,500
Beagle Creek.	Burlington and Athens.	H. H. Lowell, Union City.	Feb. 24	1,500
Well's Creek.	Burlington and Athens.	H. H. Taylor, Marshall.	Feb. 27	3,000
Taumader Brook.	Battle Creek.	Henry Champion, Battle Creek.	Feb. 27	2,000
Mingus Brook.	Battle Creek.	Smith Bramble, Battle Creek.	Feb. 27	2,000
Pigeon Creek.	Emmet.	W. H. Skinner, Battle Creek.	Feb. 27	3,000
Dickinson Creek.	Emmet.	D. H. Frazier, Battle Creek.	Feb. 27	3,000
Bacon Creek.	Bedford.	W. H. Pulsifer, Battle Creek.	Feb. 27	1,500
Adams Brook.	Bedford.	Geo. H. Williams, Battle Creek.	Feb. 27	2,000
Seven Mile Creek.	Bedford.	Geo. H. Williams, Battle Creek.	Feb. 27	1,500
Beagle Brook.	Leroy.	B. R. Newman, Battle Creek.	Feb. 27	3,000
Newberry Creek.	Leroy.	M. S. Emmons, East Leroy.	Feb. 27	1,500
Service Creek.	Leroy.	Ross E. Fuller, East Leroy.	Feb. 27	1,500
Sprague Creek.	Athens.	Fred H. Hall, East Leroy.	Feb. 27	1,500
Shannon Creek.	Athens.	F. G. Woodruff, Athens.	Feb. 27	1,500
Putman Creek.	Athens.	J. C. Gaw, Athens.	Feb. 27	1,500
Barker Creek.	Athens.	Glenda R. Waterman, East Leroy.	Feb. 27	1,500
Pine Creek.	Athens.	Dor Waterman, East Leroy.	Feb. 27	1,500
Pine Creek.	Battle Creek.	Dor Waterman, East Leroy.	Feb. 27	1,500
Kelsey Creek.	Emmett.	L. H. Tower, M. D., Battle Creek.	Mar. 25	7,500
Silver Creek.	Emmett.	L. H. Tower, M. D., Battle Creek.	Mar. 25	7,500
Tower Brook.				
Exempted Miller Creek.				
No name.				
Gleason Creek.	Pokagon.	John Wyant, Berrien Center.	Feb. 23	1,500
Keagan's Creek.	La Grange and Howard.	R. W. Hahn, Elkhart, Ind.	Feb. 24	3,000
Silver Creek.	La Grange and Penn.	J. E. Underwood, Cassopolis.	Feb. 24	4,500
McNab's or Jones Creek.	Jefferson.	J. H. Kelsey, Cassopolis.	Feb. 24	3,000
Thorp Creek.	La Grange and Penn.	Arthur Sears, Vandalia.	Feb. 24	1,500
Shaw's Creek.	Jefferson.	C. H. Kimmerle, Cassopolis.	Feb. 24	3,000
Centennial Mill Creek.	Jefferson and Harvard.	C. H. Kimmerle, Cassopolis.	Feb. 24	3,000
Hadsell Creek.	La Grange.	C. H. Kimmerle, Cassopolis.	Feb. 24	3,000
Glenwood Creek.	Jefferson.	C. H. Kimmerle, Cassopolis.	Feb. 24	3,000
Hampton Creek.	Wayne.	Fred Phillips, Dowagiac.	Feb. 24	6,000
Kenney Creek.	Wayne.	Fred Phillips, Dowagiac.	Feb. 24	4,500
Gleneden Creek.	Wayne.	Fred Phillips, Dowagiac.	Feb. 24	1,500
McComber Creek.	Silver Creek.	Fred Phillips, Dowagiac.	Feb. 24	1,500
Silver Creek.	Silver Creek.	Fred Phillips, Dowagiac.	Feb. 24	1,500
Miller Creek.	Silver Creek.	Fred Phillips, Dowagiac.	Feb. 24	1,500
Yaw Creek.	Silver Creek.	Fred Phillips, Dowagiac.	Feb. 24	3,000
Starrett Creek.	Silver Creek.	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
Pearvine Creek.	Potagon.	Fred Phillips, Dowagiac.	Feb. 24	1,500
McKinney Creek.	Potagon.	Fred Phillips, Dowagiac.	Feb. 24	1,500
Wilson Creek.	Potagon.	Fred Phillips, Dowagiac.	Feb. 24	1,500
Rock River.	Newberg.	Fred Phillips, Dowagiac.	Feb. 24	8,000
Tributary of Dowagiac Creek.	Marcellus.	Hugh McKee, Marcellus.	Mar. 24	3,000
Charlevoix County:	Volinia.	C. S. Jones, Marcellus.	Mar. 24	1,500
Murray Creek.	South Arm.	Floyd Brown, Marcellus.	Mar. 24	1,500
Deer Creek.	Wilson.	W. A. Stroebe, East Jordan.	Mar. 16	2,000
Brown's Creek.	South Arm.	Carl Stroebe, East Jordan.	Mar. 16	4,000
Todd Creek.	South Arm.	Carl Stroebe, East Jordan.	Mar. 16	3,000
Healy Creek.	Wilson.	Abe W. Carson, East Jordan.	Mar. 16	2,000
Porter Creek.	Wilson and South Arm.	W. F. Empy, East Jordan.	Mar. 16	2,000
Warner Creek.	Wilson and Warner.	Terry S. Barber, Boyne City.	Mar. 16	4,000
Collins Creek.	Boyne Valley.	Terry S. Barber, Boyne City.	Mar. 22	4,500
Deeflick Creek.	Boyne Valley.	Terry S. Barber, Boyne City.	Mar. 22	3,000
Deer Creek.	Boyne Valley.	John L. A. Galster, Boyne Falls.	Mar. 22	2,000
Findley Creek.	Boyne Valley.	John L. A. Galster, Boyne Falls.	Mar. 22	6,000
Boyne River.	Boyne Valley.	Chas. Galster, Boyne Falls.	Mar. 22	2,000
Boyne River.	Boyne Valley.	Wm. Weaver & Son, Elimira.	Mar. 22	7,500
W. Branch of Sturgeon River.	Hudson.	C. F. Hoffman, Vanderbilt.	Mar. 23	9,000
W. Branch of Sturgeon River.		Clyde King, Indian River.	Mar. 15	10,500
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	4,500
East Branch of Little Sturgeon River.	Koehler.	Clyde King, Indian River.	Mar. 15	7,500
Pigeon River.	Ellis and Kochler.	C. A. Campbell, Afton.	Mar. 15	10,500
Sturgeon River.	Munda.	C. E. Cornell, Wolverine.	Mar. 15	16,000
Elliott Creek.	Benton.	Geo. A. Barber, Cheboygan.	Mar. 15	6,000

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cheboygan county.—Continued.			1911.	
Little Black Creek.	Beaugrand.	W. H. Borrow, Cheboygan.	Mar. 15	3,000
Nigger Creek.	Burt and Monroe.	E. A. Riggs, Topinabee.	Mar. 15	6,000
Carp Creek.	Munro and Burt.	E. A. Riggs, Topinabee.	Mar. 15	4,500
Lower Little Pigeon River.	Koehler.	J. W. Lester, Indian River.	Mar. 15	7,500
East Branch Big Pigeon River.	Koehler and Walker.	J. W. Lester, Indian River.	Mar. 15	7,500
Cedar Creek.	Tuscarora and Littlefield.	J. W. Lester, Indian River.	Mar. 15	4,500
Stony Creek.	Walker and Koehler.	J. W. Lester, Indian River.	Mar. 15	6,000
McMaster Creek.	Forest.	J. M. Clark, Onaway.	Mar. 17	2,000
Gregg Creek.	Forest.	J. M. Clark, Onaway.	Mar. 17	4,000
Silver Creek.	Forest.	J. M. Clark, Onaway.	Mar. 17	2,000
Gillier Creek.	Forest.	J. M. Clark, Onaway.	Mar. 17	1,500
Davis Creek.	Forest.	J. M. Clark, Onaway.	Mar. 17	6,000
McPherson Creek.	Forest and Waverly.	J. M. Clark, Onaway.	Mar. 17	2,000
Welcher Creek.	Waverly.	J. M. Clark, Onaway.	Mar. 17	8,000
Milligan Creek.	Several.	J. M. Clark, Onaway.	Mar. 22	1,000
Upman's Creek.	Mackinaw.	Chas. F. Davis, Burt Lake.	Mar. 22	4,500
Mill Creek.		E. R. Pierce, Mackinaw.	Mar. 22	
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	6,000
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.	Rudyard.	Chase S. Osborn, Sault Ste. Marie.	May 15	9,000
Grant's Creek.	Superior.	Robert P. Hudson, Sault Ste. Marie.	May 20	7,500
Spring Creek.	Pickford.	Adelor Desormeau, Kelden.	May 20	9,500
Desmeaux Creek.	Pickford.	Dr. John A. Cameron, Pickford.	May 20	7,500
St. Mary's River.		Michigan Fish Commission, Detroit.	May 20	33,000
Clare county:				
South Branch of Tobacco River.	Surrey.	Fuller and Harris, Farwell.	Mar. 10	3,000
North Branch of Tobacco River.	Hayes.	F. A. Fowler, Clare.	Mar. 20	7,500
North Branch of Tobacco River.	Greenwood.	Geo. J. Cummings, Harrison.	Mar. 20	12,000
Smith Creek.	Hamilton.	Geo. J. Cummings, Harrison.	Mar. 20	3,000
Town Line Creek.	Summerfield.	Andrew Hagen, Harrison.	Mar. 20	1,500
Floodwood Creek.	Franklin.	W. E. Green, Harrison.	Mar. 20	3,000
Cedar Creek.	Clare, Grant and Hutton.	W. E. Green, Harrison.	Mar. 20	3,000
South Branch of Tobacco River.	Arthur and Hutton.	A. R. Canfield, Clare.	Mar. 21	7,500
Tobacco River, Clear Creek and other creeks.	Redding.	Wm. C. Cornell, Saginaw.	Mar. 21	15,000
Green and Gishwash Creeks.		Wm. Blue, Temple.	Mar. 21	15,000
Clinton county:				
Lost Creek.	Dallas.	J. B. Miller, Pewamo.	Mar. 1	1,500
Fuller Creek.	Dallas.	J. B. Miller, Pewamo.	Mar. 1	2,000
Jennison Creek.	Eagle.	Fred L. Berry, Grind Ledge.	Mar. 3	2,000
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	18,500
Big Creek.	Maple Forest.	T. E. Douglas, Lovells.	Mar. 21	7,500
North Branch of Au Sable River.	Chester and Maple Forest.	Paul F. H. Morley, Saginaw.	Mar. 21	15,000
North Branch of Au Sable River.	Maple Forest.	W. B. Mershon, Saginaw.	Mar. 21	22,500
Big Creek.	Several.	P. J. Welsh, Lewiston.	Mar. 21	7,500
South Branch of Au Sable River and tributaries.		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 of Brook.	Escanaah.	T. Killian, Escanaba.	Mar. 31	4,500
Inman Brook.	Masonryville and Rapid River.	T. Killian, Escanaba.	Mar. 31	4,500
Ten Mile Creek.	Bark River.	T. Killian, Escanaba.	Mar. 31	6,000
Ford River.	Ford River.	T. Killian, Escanaba.	Mar. 31	9,000
Escanaba River.	Escanaba, Wells and Connell.	T. Killian, Escanaba.	Mar. 31	9,000
Sturgeon River.	Nahma.	T. Killian, Escanaba.	Mar. 31	7,500
Tacoosh River.	Baldwin and Maple Ridge.	T. Killian, Escanaba.	Mar. 31	9,000
Banks Brook.	Wells.	T. Killian, Escanaba.	Mar. 31	4,500
Walker Brook.	Wells.	T. Killian, Escanaba.	Mar. 31	6,000
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.	P. W. Good, Nahma.	April 3	3,000
West Branch of Fish Dam River.	Nahma.	P. W. Good, Nahma.	April 3	3,000
Mallinan Creek.	Nahma.	P. W. Good, Nahma.	April 3	3,000
Ogontz River.	Mason.	W. R. Calloway, Minneapolis.	April 3	3,000
Garden Creek.	Garden.	T. Killian, Escanaba.	Mar. 31	7,500
Scotts Creek.	Several.	W. R. Calloway, Minneapolis, Ind.	April 3	7,500
Thompson River.	Several.	W. R. Calloway, Minneapolis, Ind.	April 3	7,500
Tributaries to Day's River.	Brampton and Masonville.	W. H. Wellsted, Sr., Brampton.	April 15	9,000
Dickinson county:				
Ford River.	Sagola.	Wm. E. Bartlett, Channing.	Mar. 31	7,500
Headwaters of Ford River.	Sagola.	H. M. Bolt, Channing.	Mar. 31	3,000
Blueberry Creek.	Sagola.	H. M. Bolt, Channing.	Mar. 31	1,500
No name.	Waucedah.	J. J. Legendre, Norway.	Mar. 31	3,000
Beaver Creek.	Waucedah.	Dan Vanitvelt, Waucedah.	Mar. 31	3,000
Casity Creek.	Waucedah.	Dan Vanitvelt, Waucedah.	Mar. 31	4,500
Red Dam Creek.	Waucedah.	W. J. Turner, Vulcan.	Mar. 31	3,000
No name.	Waucedah.	W. J. Turner, Vulcan.	Mar. 31	1,500
Black Creek.	Norway.	R. C. Henderson, Norway.	Mar. 31	3,000
Campbell Brook.	West Branch.	T. Killian, Escanaba.	Mar. 31	7,500
Black Creek.	Norway.	F. Copeland, Vulcan.	April 11	3,000
Badwater Creek.	Breitung.	John E. Quarnstrom, Iron Mountain.	May 9	1,500
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. Chilson, Lansing.....	April 13	6,000
Emmet County:				
Carp River.....	Carp Lake.....	O. C. Cope, Carp Lake.....	Mar. 22	12,000
Carp River.....	Carp Lake.....	E. R. Pierce, Mackinaw.....	Mar. 22	6,000
Maple River and tributaries.....	Several.....	W. B. Stimson, Grand Rapids.....	Mar. 22	69,000
Curtis Creek.....	Littlefield.....	Wm. L. Curtis, Petoskey.....	Mar. 22	4,500
Heber Creek.....	Little Trance.....	Wm. L. Curtis, Petoskey.....	Mar. 22	3,000
No Name.....	Friendship.....	Benj. Whittaker, Jr., Harbor Springs.....	Mar. 22	2,000
Tannery Creek.....	Bear Creek.....	Geo. C. Braun, Petoskey.....	Mar. 22	2,000
Bear Creek.....		Geo. C. Braun, Petoskey.....	Mar. 22	12,000
Gladwin county:				
Cedar River.....	Sheridan.....	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. Johnston, 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	1,500
Gimlet Creek.....	Marenisco.....	John E. McNichols, Marenisco.....	April 6	1,500
Six Mile Creek.....	Marenisco.....	Frank Louisell, Marenisco.....	April 6	3,000
Spring Creek.....	Marenisco.....	Lewis Owens, Marenisco.....	April 6	1,500
Petton Creek.....	Marenisco.....	F. A. Ornes, Marenisco.....	April 6	3,000
Headwaters of Maple Creek.....	Marenisco.....	Gustaf H. Markström, Bessemer.....	April 6	4,500
South Fork of Mud Creek.....	Bessemer.....	W. H. Cheney, Bessemer.....	April 6	3,000
Nymen's Creek.....	Ironwood.....	W. F. Roberts, Bessemer.....	April 6	1,500
Black River.....	Wakefield.....	J. S. Rummage, Ramsey.....	April 6	1,500
Jackson's Creek.....	Bessemer and Ironwood.....	Harry Harper, Ramsey.....	April 6	4,500
East Branch of Powder Mill Pond.....	Bessemer.....	Wm. J. Weston, Bessemer.....	April 6	1,500
Coxey's Creek.....	Ironwood.....	Frank Winkowski, Bessemer.....	April 6	1,500
Flink's Creek.....	Ironwood.....	Jas. Campbell, Ironwood.....	April 6	1,500
Clover Creek.....	Ironwood.....	Harry Barr, Ironwood.....	April 6	3,000
Forb's Brook.....	Ironwood.....	Harry Barr, Ironwood.....	April 6	1,500
Clover Creek.....	Ironwood.....	Harry Barr, Ironwood.....	April 6	3,000
Fox Creek.....	Ironwood.....	R. A. Douglas, Ironwood.....	April 6	3,000
East Branch of Ontonagon River.....	Watersmeet.....	Belmont, Waples, Ironwood.....	April 6	3,000
Jones Brook.....	Erwin.....	Mat Fitzsimmons, Ironwood.....	April 6	1,500
McKinney Creek.....	Ironwood.....	Mat Fitzsimmons, Ironwood.....	April 6	1,500
Foster's Brook.....	Marenisco.....	D. E. Sutherland, Sherwood.....	April 6	3,000
Hazel Creek.....	Marenisco.....	D. E. Sutherland, Sherwood.....	April 6	3,000
Rowe's Creek.....	Ironwood.....	D. E. Sutherland, Sherwood.....	April 6	3,000
Hoffmann's Creek.....	Ironwood.....	D. E. Sutherland, Sherwood.....	April 6	1,500
Heaver Creek.....	Ironwood.....	D. E. Sutherland, Sherwood.....	April 6	1,500
Monroe Creek.....	Ironwood.....	D. E. Sutherland, Sherwood.....	April 6	1,500
Tripplett Creek.....	Ironwood.....	F. F. Thalner, Ironwood.....	April 6	1,500
Ryan's Brook.....	Ironwood.....	F. F. Thalner, Ironwood.....	April 6	3,000
Weasel Creek.....	Ironwood.....	Pat Mullins, Ironwood.....	April 6	1,500
Pigeon Creek.....	Marenisco.....	Pat Mullins, Ironwood.....	April 6	1,500
Dandy Brown's Brook.....	Ironwood.....	Jas. Sampson, Ironwood.....	April 6	1,500
Alder Creek.....	Ironwood.....	Jas. Sampson, Ironwood.....	April 6	1,500
Lumm Creek.....	Marenisco.....	Jas. Sampson, Ironwood.....	April 6	1,500
Little Presque Isle River.....	Marenisco.....	Jas. Sampson, Ironwood.....	April 6	1,500
Judges Creek.....	Marenisco.....	Jas. Sampson, Ironwood.....	April 6	1,500
Wellington Branch.....	Bessemer.....	A. D. Johnston, Bessemer.....	April 6	4,500
Tenderfoot Creek.....	Marenisco.....	C. H. Warner, Bessemer.....	April 6	3,000
State River.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	4,500
Johnston Springs.....	Marenisco.....	A. D. Johnston, Bessemer.....	April 6	4,500
Thousands Island Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	3,000
Longford Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	1,500
Crooked Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	1,500
Camp Two Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	3,000
Henderson Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	1,500
Duck Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	3,000
Vogtlin's Creek.....	Watersmeet.....	A. D. Johnston, Bessemer.....	April 6	4,500
Eight Mile Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	3,000
Sand Island Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	9,000
Spring Hill Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	7,000
Six Mile Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	6,000
Hill Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	4,500
Gage's Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	6,000
Water Works Creek.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	6,000
Juniper Thomas Brook.....	Bessemer.....	J. A. Vogtlin, Bessemer.....	April 6	3,000
Big Coon Creek.....	Marenisco.....	J. A. Vogtlin, Bessemer.....	April 6	1,500
Honey Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	3,000
Douglas Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	1,500
Sutherland Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	3,000
Fur Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	1,500
Birch Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	3,000
Little Spring Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	1,500
Nine Mile Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	3,000
Shawmell's Creeklet.....	Bessemer.....	O. F. Stabler, Ironwood.....	April 6	1,500
Lemon Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	1,500
Cedar Creek.....	Marenisco.....	O. F. Stabler, Ironwood.....	April 6	1,500
Henderson Creek.....	Ironwood.....	O. F. Stabler, Ironwood.....	April 6	1,500
Morrison Creek.....	Watersmeet.....	Pat Kelley, Watersmeet.....	April 11	3,000
Hansen Creek.....	Watersmeet.....	N. D. Murphy, Watersmeet.....	April 11	3,000
Camp No. 2 Creek.....	Watersmeet.....	Jas. McCloskey, Watersmeet.....	April 11	3,000
Duck Creek.....	Watersmeet.....	J. D. Vantwood, Watersmeet.....	April 11	3,000
Howards Creek.....	Watersmeet.....	B. H. Darling, Watersmeet.....	April 11	3,000
No name.....	Ironwood.....	N. D. Massie, Bessemer.....	April 11	3,000
Markstrums Creek.....	Ironwood.....	Frank C. Davis, Bessemer.....	April 11	3,000
Tributary to Lake Ruth.....	48-45.....	H. E. Patterson, Bessemer.....	April 11	3,000
		E. W. MacPherran, Marquette.....	May 9	3,000

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Gogebic county.—Continued.			1911.	
Branch of Presque Isle River.	48-14	E. W. MacPherran, Marquette	May 9	3,000
Little Presque Isle River.	Wakefield, Bessemer and Marenisco.	M. M. Riley, Milwaukee, Wis.	May 10	7,500
Cherry Creek.	Wakefield	M. M. Riley, Milwaukee, Wis.	May 10	7,500
Mud Creek.	Wakefield and Marenisco	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 Hughtt, Jr., Chicago, Ill.	May 10	7,500
Clearwater Creek.	T. 44 R. 41 W.	Marvin Hughtt, Jr., Chicago, Ill.	May 10	4,500
Lanford Creek.	T. 44 R. 41 W.	Marvin Hughtt, Jr., Chicago, Ill.	May 10	4,500
Grand Traverse County:				
Sands Creek.	Paradise	R. B. DeFrance, Kingsley	Mar. 16	1,500
Malcolm Kefer 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 Creek.	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
Gray's Creek.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Tader Creek.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Newmanish Spring Brook.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	4,500
Biddlecomb Creek.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	3,000
Mayfield Brook.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 16	1,500
Slaughter House Creek.	Paradise	Kingsley Sportsmen's Club, Kingsley	Mar. 11	3,000
TrIBUTARIES TO LICK LAKE	Green Lake	G. A. Brigham, Buckley	Mar. 18	3,000
East Branch of Anderson Creek.	Mayfield	R. S. Hastings, Traverse City	Mar. 18	22,500
Boardman River.	Garfield, Paradise, Union and E. Bay	C. O. Carver, Traverse City	Mar. 18	9,000
Mitchell, Acme and Williamsburg Creeks.	East Bay, Acme and Whitewater	G. A. Brigham, Buckley	Mar. 18	3,000
West Branch of Anderson Creek.	Mayfield	F. E. Mills, Fife Lake	Mar. 22	3,000
Twenty-two Creek.	Union	F. E. Mills, Fife Lake	Mar. 22	4,000
Parker Creek.	Fife Lake	F. E. Mills, Fife Lake	Mar. 22	3,000
Carpenter Creek.				
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
Soap Creek.	Allen, Littlefield and Butler	L. C. Feighner, Litchfield	Mar. 1	3,000
Headwaters of Kalamazoo River.	Sapio	L. C. Feighner, Litchfield	Mar. 1	3,000
Sand Creek.	Allen and Litchfield	L. C. Feighner, Litchfield	Mar. 1	4,500
McEnelly Ditch.	Litchfield and Scipio	L. C. Feighner, Litchfield	Mar. 1	1,500
Headwaters of Grand River.	Somerset	Mrs. E. McMan, Somerset Center	Mar. 25	4,500
Douglas Creek.	Wheatland	D. J. Douglas, Pittsford	Mar. 25	6,000
Houghton county:				
Fox Creek.	Duncan	Wm. Kroll, Kenton	April 18	3,000
Hope Creek.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	3,000
Lees Creek.	Duncan and Interior	Wm. Kroll, Kenton	April 18	3,000
Beaver Creek.	Duncan	Wm. Kroll, Kenton	April 18	1,500
Stoney Creek.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	4,500
White Creek.	Duncan	Wm. Kroll, Kenton	April 18	3,000
Spring Creek.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	3,000
Spargo Creek.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	3,000
Shane Creek.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	3,000
Jumbo Creek and branches.	Duncan and Iron River	Wm. Kroll, Kenton	April 18	3,000
Smith Creek.	Duncan	Wm. Kroll, Kenton	April 18	1,500
Sturgeon River.	Duncan and Covington	Sidnaw F. and H. Club, Sidnaw	April 19	3,000
Johnson's Creek.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500
Roycroft Creek.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500
Dead Stream.	Duncan and Covington	Sidnaw F. and H. Club, Sidnaw	April 19	3,000
Perch Creek.	Duncan and Covington	Sidnaw F. and H. Club, Sidnaw	April 19	3,000
Little Beaver Creek.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500
Sidnaw Creek.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	1,500
Hill Creek.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	5,000
Southeast Branch of Ontonagon River.	Duncan	Sidnaw F. and H. Club, Sidnaw	April 19	5,000
East Branch of Ontonagon River.	Duncan, Bates and Interior	Sidnaw F. and H. Club, Sidnaw	April 19	5,000
Leveque's Creek.	Laird	Sidnaw F. and H. Club, Sidnaw	April 19	3,000
Six Mile Creek.	Laird	G. W. Starnard, Rockland	April 19	3,000
Branch of Sturgeon River.	Portage	F. W. Kroll, Houghton	April 26	1,500
Sturgeon River Branches.	Portage	Jno. C. Pyrcz, Houghton	April 26	2,500
Sturgeon River (small branches).	Portage	J. T. McCall, Houghton	April 26	2,500
Sturgeon River (small branches).	Portage	Fred Stoyle, Houghton	April 26	2,500
Small branches of Sturgeon River.	Portage	Jeff Alexander, Houghton	April 26	1,500
Small branches of Sturgeon River.	Portage	Paul D. Swift, Houghton	April 26	1,500
Peepsock Creek.	Portage	H. L. Swift, Houghton	April 26	1,500
Pilgrim River.	Portage and Adams	Henry C. Grans, Houghton	April 26	1,500
North Branch of Pilgrim River.	Portage and Adams	H. W. Hart, Houghton	April 26	4,500
Four Mile Creek.	Portage	Chas. A. Maywood, Houghton	April 26	1,500
Coles Creek.	Portage	J. J. Nichols, Houghton	April 26	2,000
South Branch of Pilgrim River.	Adams	John H. Rice, Houghton	April 26	3,000
Pike River.	Portage	Henry J. Rompi, Houghton	April 26	1,500
Murphy's Creek.	Chassell	Dr. P. H. Wilson, Chassell	April 26	5,000
West Branch Silver River.	Laird	Jas. T. Healey, Houghton	April 26	3,000
Otter Creek.	Laird	Jos. Vairo, Alston	April 26	1,500
Silver Creek.	Laird and Chassell	Del Olson, Houghton	April 26	6,000
Bruneau Creek.	Laird and Chassell	Wm. D. Caenley, Houghton	April 26	4,500
West Branch Little Sturgeon River.	Laird	Fred L. Reedham, Houghton	April 26	3,000
North Branch of Little Otter River.	Laird and Adams	J. C. Weissmiller, Hancock	April 26	1,500
Coach's Creek.	Laird	R. Skiff Sheldon, Houghton	April 26	9,000
West Branch of the Otter.	Laird	J. G. Bertrand, Houghton	April 26	3,000
Upper Sturgeon River.	Laird and Duncan	H. W. Fenning, Houghton	April 26	4,500
Alston Creek.	Laird	J. M. Cahoon, Houghton	April 26	6,000
Reservoir or City Water.	Portage	L. H. Atkin, Houghton	April 26	3,000
East Branch of Pilgrim River.	Portage	E. A. Bandin, Houghton	April 26	3,000
Black Creek.	Allouez	H. G. Major, Houghton	April 26	3,000
Sawmill Creek.	Adams	H. Hermann, Laurium	May 6	1,500
		Wm. J. Richards, Painesdale	May 6	1,500

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Houghton county.—Continued.			1911.	
Santee Creek.	Adams and Portage.	Gotleib Wurster, Houghton.	May 6	3,000
Elm River.	Adams, Elm and Stanton.	Joe Paul, Tri Mountain.	May 6	7,500
Grayerat Creek.	Stanton.	J. Albert Smith, Tri Mountain.	May 6	4,500
Salmon Trout River.	Adams.	J. M. Taylor, Tri Mountain.	May 6	7,500
Thirteen Mile Creek.	Adams.	Herman Dahl, Painesdale.	May 6	3,000
Shawmut River.	Elm River.	Louis La Rochell, Houghton.	May 6	6,000
Pearce's Creek.	Schooletcraft.	Ransom Pierce, Lake Linden.	May 6	3,000
Little Rabbit River.	Torch Lake.	Ernest Peck, Hubbell.	May 6	3,000
Big Traverse River.	Schooletcraft.	Carl Krug, Hubbell.	May 6	3,000
Armstrong's Creek.	Schooletcraft.	Sam Jones, Hubbell.	May 6	1,500
Trap Rock River.	Schooletcraft.	G. Kauffman, Hubbell.	May 6	4,500
Little Traverse River.	Schooletcraft.	M. J. Hodges, Hubbell.	May 6	1,500
Hungarian Creek.	Oscoda.	M. J. Harrington, Hubbell.	May 6	1,500
McCallum's Creek.	Torch Lake.	Jos. Wise, P. M. Hubbell.	May 6	3,000
Vine's Creek.	Torch Lake.	A. J. Vine, Hubbell.	May 6	3,000
East Branch Trap Rock River.	Schooletcraft.	Dr. Chas. Rowe, Hubbell.	May 6	1,500
Ravine Creek.	Torch Lake.	Geo. Bark, Hubbell.	May 6	1,500
West Branch Pilgrim River.	Portage.	Geo. Williams, Houghton.	May 6	3,000
Byrt Creek.	Elm River.	A. D. Edwards, Houghton.	May 6	3,000
Stock Creek.	Hancock.	John C. Morris, Houghton.	Mar 6	3,000
Arcadian Mill Creek.	Torch Lake.	R. H. Shields, Houghton.	Mar 6	1,500
Huron Creek.	Portage.	M. L. Barkman, Oscar.	Mar 6	1,500
Oscar Stream.	Stanton.	M. J. Finnegan, Winona.	Mar 6	1,500
Sleeping River.	Elm River.	F. G. Lukkey, Winona.	Mar 6	6,000
West Branch Sleeping River.	Elm River.	R. R. Seiter, Winona.	Mar 6	3,000
East Branch Sleeping River.	Elm River.	J. McCarthy, Winona.	Mar 6	3,000
Misery River.	Elm River.	Chas. Smith, Hubbell.	Mar 6	6,000
Hennes Creek.	Portage.	I. H. Richardson, Houghton.	Mar 6	3,000
Middle Branch Firesteel River.	Elm River.	H. M. Keever, Houghton.	Mar 6	4,500
East Branch Salmon Trout River.	Portage and Adams.	C. F. Fisher, Tri Mountain.	Mar 6	1,500
Pump Station Creek.	Adams.	F. R. Claymowitz, Phoenix.	Mar 6	3,000
Hill's Creek.	Allouez.	F. W. Armstrong, Hubbell.	Mar 6	6,000
West Branch Little Travis.	Schooletcraft.	Edward Marcotte, Hubbell.	Mar 6	1,500
Quinzie Creek.	Oscoda.	Oscar Cuyler, Hubbell.	Mar 6	1,500
Hallie's Creek.	Torch Lake.		Mar 6	1,500
Iron county:				
Deer 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, Amasa.	Mar 31	4,500
New York Creek.	Hematite.	Geo. Premo, Amasa.	Mar 31	3,000
Net River.	Hematite.	Geo. Premo, Amasa.	Mar 31	7,500
Little Hemlock Creek.	Hematite.	Geo. Premo, Amasa.	Mar 31	3,000
Holmes Creek.	Crystal Falls.	Geo. Premo, Amasa.	Mar 31	3,000
Iron River:				
Section 33 Creek.	Iron.			
South Branch of Paint River.	Iron River.	M. S. McDonough, Iron River.	Mar. 31	6,000
North Branch of Paint River.	Stambaugh.	M. S. McDonough, Iron River.	Mar. 31	6,000
Nash's Pond.	Iron River.	M. S. McDonough, Iron River.	Mar. 31	6,000
Sumet Lake Creek.	Iron River.	I. W. Byers, Iron River.	Mar. 31	1,500
Cook's Run.	Iron River.	I. W. Byers, Iron River.	Mar. 31	6,000
Hemlock River.	Iron River.	Mrs. L. A. Charnichael.	Mar. 31	6,000
East Branch of East Branch of Ontonagon River.	Hematite.	Chas. E. Lawrence, Iron Mountain.	April 6	6,000
West Branch of Paint River.	Stambaugh.	G. M. Cornell, Ironwood.	April 6	3,000
Ingham county:				
Columbia Creek.	Aurelius.	W. T. Halcomb, Mason.	Mar. 1	2,000
Willow Creek.	Aurelius.	W. T. Halcomb, Mason.	Mar. 1	1,500
Baldwin Creek.	Onondaga.	Wm. M. Carroll, Onondaga.	Mar. 1	1,500
Low Lake Inlet.	Stockbridge.	Walter Hayner, Stockbridge.	Mar. 1	3,000
Ionia county:				
Pearl Creek.	Boston and Keene.	John Wallington, Saranac.	Feb. 27	1,500
Arnold's Creek.	Boston and Berlin.	John Wallington, Saranac.	Feb. 27	1,500
Hunts Creek.	Easton.	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
Holdon Brook.	Ronald.	John Wallington, Saranac.	Feb. 27	1,500
Brown Brook.	Ronald and North Plains.	Newel Holden, Ionia.	Feb. 27	1,500
Faxon Creek.	Lyons.	H. M. Brown, Muir.	Feb. 27	2,000
Spaulding Creek.	Ionia.	J. B. Miller, Pewamo.	Mar. 1	1,500
Tlobots Creek.	Berlin.	E. T. Ammon, Ionia.	Mar. 1	2,000
Dildine Creek.	Easton.	A. J. Kling, Ionia.	Mar. 1	2,000
Campbell Creek.	Campbell.	Milo Van Slyke.	Mar. 1	2,000
Prairie Creek.	Ronald.	E. A. Rising, Clarksville.	Mar. 3	2,000
No name.	Easton.	John Galloway, Palo.	Mar. 8	6,000
Timberland Creek.	North Plains.	Eliot A. Mellard, Ionia.	Mar. 8	1,500
Ely Creek.		Snyder and Worman, Ionia.	Mar. 22	3,000
Iosco county:				
Hale Creek.	Plainfield.	C. A. Dalzell, Ionia.	Mar. 22	3,000
Smith Creek.	Plainfield.	R. D. Brown, Hale.	Mar. 13	6,000
Van Etten Creek.	Plainfield.	R. D. Brown, Hale.	Mar. 13	6,000
Vaughan Creek.	Plainfield.	J. H. McGillivray, Oscoda.	Mar. 13	1,500
Pickett Creek.	Plainfield.	C. W. Luce, East Tawas.	Mar. 25	6,000
Cold Creek.	Grant and Tawas.	C. W. Luce, East Tawas.	Mar. 25	4,500
Silver Creek.	Wilbur and Baldwin.	C. W. Luce, East Tawas.	Mar. 25	6,000
Gates Creek.	Tawas and Baldwin.	C. W. Luce, East Tawas.	Mar. 25	9,000
Ginley Creek.	Grant.	C. W. Luce, East Tawas.	Mar. 25	6,000
Isabella county:				
Campan Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Fussman Creek.	Nottawa.	Geo. L. Graeger, Mt. Pleasant.	Feb. 28	1,500
Labun Creek.	Nottawa.	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.			1911.	
Zucker Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Phillips Brook.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Tupman Creek.	Nottawa.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Theison Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Simmons Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Ingler Creek.	Gilmore.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Perry Creek.	Gilmore.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Wood's Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Seymore Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	3,000
Stony Creek.	Deerfield.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Coomer Brook.	Fremont.	Geo. L. Granger, Mt. Pleasant.	Feb. 28	1,500
Delo Creek.	Fremont.	John Underwood, Wm.	Mar. 6	3,000
Fuller Creek.	Fremont.	John Underwood, Wm.	Mar. 6	1,500
Spring Brook.	Rolland.	Roger Scott, Blanchard.	Mar. 8	1,500
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	3,000
Humphrey Creek.	Rolland.	Ansel Moody, Blanchard.	Mar. 8	4,000
Skunk Creek and tributaries.	Sherman and Coldwater.	Miles A. Drallett, Weldman.	Mar. 8	4,000
Walker Creek.	Nottawa.	Robert Hystop, Weldman.	Mar. 10	4,500
Headwaters of Coldwater River.	Wise and Vernon.	C. A. Allen, Loomis.	Mar. 10	4,500
Hersey Creek.	Wise.	C. A. Allen, Loomis.	Mar. 10	4,500
Willey Creek.	Chippewa, Coe and Union	J. E. Myers, Shepherd.	Mar. 21	7,500
Loomis Creek or Little Salt.	Lincoln.	M. R. Castel, Shepherd.	Mar. 21	4,500
Potter Creek.				
Figg and Parcher Drain.				
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.	Grass Lake.	B. F. Burgess, Norvell.	Feb. 27	1,500
Grass Lake Creek.	Parma.	C. R. Smith, Grass Lake.	Feb. 27	3,000
Johnson Creek.	Parma.	S. H. Barsdale, Parma.	Feb. 27	1,500
Mackey Brook.	Parma.	S. H. Barsdale, Parma.	Feb. 27	1,500
Showerman Brook.	Parma and Sandstone.	Mark B. Hawes, Parma.	Feb. 27	3,000
Winegar Creek.	Sandstone.	Mark B. Hawes, Parma.	Feb. 27	1,500
Dearing Creek.	Spring Arbor and Concord.	D. F. Moe, Parma.	Feb. 27	3,000
Cutter's Creek.	Parma.	H. D. Abbott, Parma.	Feb. 27	1,500
Wilcox Creek.	Parma.	F. D. Bailey, Parma.	Feb. 27	1,500
Tributaries to Rice Creek.	Concord.	Jay King, Parma.	Feb. 27	3,000
Knowles Creek.	Parma.	Jos. Neidham, Parma.	Feb. 27	3,000
Needham Creek.				
Rives Junction Creek.	Rives.			
West Branch of Kalamazoo River.	Hillsdale.	Geo. E. Beebe, Jackson.	Mar. 1	1,500
Dew Brook.	Horton.	Geo. E. Beebe, Jackson.	Mar. 1	4,500
Wade Creek.	Tompkins.	Geo. E. Beebe, Jackson.	Mar. 1	2,000
Four Mile Creek.	Blackman.	Geo. E. Beebe, Jackson.	Mar. 1	3,000
Crouch Creek.	Summit.	Geo. E. Beebe, Jackson.	Mar. 1	3,000
Headwaters of Grand River.	Liberty.	Geo. E. Beebe, Jackson.	Mar. 1	4,500
Headwaters of Kalamazoo River.	Hanover.	Geo. E. Beebe, Jackson.	Mar. 1	3,000
Snyder's Creek.	Spring Arbor.	Geo. E. Beebe, Jackson.	Mar. 1	4,500
Sandstone Creek.	Sandstone and Blackman.	Geo. E. Beebe, Jackson.	Mar. 1	3,000
Rice Creek.	Parma.	Geo. E. Beebe, Jackson.	Mar. 1	6,000
Willow Creek.	Rives.	Geo. E. Beebe, Jackson.	Mar. 1	6,000
Willow Creek.	Grass Lake and Waterloo.	Geo. E. Beebe, Jackson.	Mar. 1	3,000
Willow Creek.	Hanover.	Geo. E. Beebe, Jackson.	Mar. 1	2,500
Inlet to Brill's Lake.	Levin.	Geo. E. Beebe, Jackson.	Mar. 1	1,500
Inlet to Mud Lake.	Levin.	H. B. Davis, Jackson.	Mar. 1	1,500
Tributary to Sandstone Creek.	Blackman, Summit and Spring Arbor.	H. B. Davis, Jackson.	Mar. 1	1,500
Indian Springs Creek.	Concord.	B. W. Dicer, Jackson.	Mar. 1	3,000
Greenshaw and Kainsdell Creeks.	Hanover.	B. W. Dicer, Jackson.	Mar. 1	1,500
Wheaton and Cooper Creeks.	Hanover.	G. T. Greenshaw, Hanover.	Mar. 1	1,500
Kalamazoo county:				
Payne Creek.		Roland Thorn, Horton.	Mar. 25	9,000
Hinton Brook.	Texas and Antwerp.			
Eagle Creek.	Charleston.			
Stone Brook.	Prairie Ronde.	Geo. H. Murch.	Feb. 24	3,000
Harrison Creek.	Schoolcraft.	D. H. Frazer, Battle Creek.	Feb. 27	1,500
Smith's Creek.	Pavilion.	Henry F. Beekman, Battle Creek.	Feb. 27	2,000
Portage Creek.	Portage.	Wm. H. Peet, Battle Creek.	Feb. 27	2,000
Boles Creek.	Alamo.	P. C. Purcell, Schoolcraft.	Mar. 3	1,500
Stewart Creek.	Schoolcraft.	Geo. W. Smith, Schoolcraft.	Mar. 3	3,000
Frankle's Run.	Schoolcraft.	Robt. B. Cook, Galesburg.	Mar. 3	3,000
Spring Run.	Cooper.	C. L. Davis, Schoolcraft.	Mar. 3	1,500
Cooper Stream.	Cooper.	C. M. Spencer, Kalamazoo.	Mar. 3	4,500
Trout Creek.	Climax and Portage.	E. O. Goldsmith, Vicksburg.	Mar. 3	3,000
Hampton Brook.	Alamo.	E. O. Goldsmith, Vicksburg.	Mar. 3	1,500
Hall's Spring Brook.	Alamo.	Geo. W. Locke, Kalamazoo.	Mar. 3	1,500
Hall's Spring Brook.	Alamo.	Geo. A. Allen, Kalamazoo.	Mar. 3	2,000
Campbell Creek.	Alamo.	Dr. Chas. A. Wise, Kalamazoo.	Mar. 3	2,000
Portage Creek.	Texas, Portage and Kalamazoo.	Dr. Chas. A. Wise, Kalamazoo.	Mar. 3	2,000
Axtel Creek.	Kalamazoo.	Dr. Chas. A. Wise, Kalamazoo.	Mar. 3	2,000
Davis Creek.	Kalamazoo and Pavilion.	N. B. Hall, Kalamazoo.	Mar. 3	2,000
Spring Brook.	Richland.	Henry Hobbs, Kalamazoo.	Mar. 3	4,000
Abram Creek.	Alamo and Otsego.	Henry Hobbs, Kalamazoo.	Mar. 3	2,000
Spring Brook.	Cooper.	Albert Doll, Kalamazoo.	Mar. 3	4,000
Acadia Creek.	Kalamazoo.	Wm. Crispe, Plainwell.	Mar. 3	2,000
Trout Creek.	Alamo.	H. B. Smith, Kalamazoo.	Mar. 3	2,000
Grill Creek.		Edward Kashead, Kalamazoo.	Mar. 3	1,500
No name.	Several.	J. W. Powers, Kalamazoo.	Mar. 25	5,000
Kalkaska county:		A. W. Crane, M. D., Kalamazoo.	Mar. 25	3,000
Rapid River.		A. W. Crane, M. D., Kalamazoo.	Mar. 25	3,000
Rapid River.		L. N. Spring, Elk Rapids.	Mar. 16	8,000
		W. W. Morse, Rapid City.	Mar. 16	8,000

TWENTIETH REPORT—STATE FISHERIES.

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	Schoelcraft	Johnson Vivian, Laurium	May 6	3,000
Gratiot River	Allouez	J. C. Vivian, Laurium	May 6	1,500
Mosquito Creek	Grant	J. C. Vivian, Laurium	May 6	3,000
Upper waters Montreal River	Grant	W. R. Vivian, Laurium	May 6	6,000
Number Two Creek	Houghton and Allouez	Nicholas Linton, Phenix	May 6	3,000
Gratiot River	Houghton	J. C. McCollum, Calumet	May 6	4,500
R. C. Blight Creek	Houghton	R. C. Blight, Eagle River	May 6	3,000
Silver Creek	Houghton	Charles Brown, Delaware Mine	May 6	3,000
Eagle River	Allouez and Houghton	J. E. Daniel, Laurium	May 6	3,000
Tobacco and Betsy rivers	Sherman	Andrew Jackson, J. A. Johnson, Gay	May 6	3,000
Gatiss Creek	Houghton	Wm. Long, Eagle River	May 6	1,500
Jacobs Creek	Allouez and Houghton	Wm. Jackson, Eagle River	May 6	3,000
Old Phoenix Creek	Allouez	T. W. Kaiser, Eagle River	May 6	3,000
North American Creek	Houghton	J. W. Seighman, Phenix	May 6	1,500
Horseshoe Pond	Houghton	Henry Peterson, Phenix	May 6	3,000
Beaver Dam	Grant	John Hepting, Phenix	May 6	3,000
Montreal River	Allouez	Keweenaw R. and G. Club, Mohawk	May 6	9,000
Gratiot River	Houghton	Keweenaw R. and G. Club, Mohawk	May 6	6,000
Eagle River	Allouez	Keweenaw R. and G. Club, Mohawk	May 6	7,500
Trap Rock River	Houghton	Frank Buschell, Lake Linden	May 6	7,500
The White Birch	Grant	C. L. Webb, Laurium	May 6	1,500
Betsey River	Schoelcraft	Phil Furong, Laurium	May 6	3,000
Traverse River				
Kent county:				
Spring Brook	Lowell	U. B. Williams, Lowell	Feb. 27	1,500
Kinyon Creek	Lowell	U. B. Williams, Lowell	Feb. 27	2,000
Koph Creek	Lowell	U. B. Williams, Lowell	Feb. 27	2,000
Baird Creek	Vergennes	U. B. Williams, Lowell	Feb. 27	2,000
Wright Creek	Vergennes and Lowell	U. B. Williams, Lowell	Feb. 27	2,000
Cherry Creek	Vergennes	U. B. Williams, Lowell	Feb. 27	2,000
Walter's Creek and branches	Ada	John Miller, Lowell	Feb. 27	2,000
Honey Creek	Cannon	Harry G. Thompson	Feb. 27	2,000
Bear Creek and tributaries	Nelson, Solon, etc.	Chas. M. Wilson, M. D., Cannonsburg	Mar. 7	6,000
Duke Creek	Spencer	R. E. Shattuck, Sand Lake	Mar. 7	6,000
Maston Creek	Solon	D. M. Boss, Silver Lake	Mar. 7	3,000
Spring Creek	Nelson	David Curtis, Sand Lake	Mar. 7	1,500
Zoppa Creek	Nelson, Courtland and Algoma	Carl Resco, Sand Lake	Mar. 7	3,000
Little Cedar Creek	Courtland	R. B. Cawthorpe, Cedar Springs	Mar. 7	4,500
Big Cedar Creek	Solon	R. B. Cawthorpe, Cedar Springs	Mar. 7	1,500
Stegman Creek	Solon	R. C. Cawthorpe, Cedar Springs	Mar. 7	4,500
Dop Creek	Solon	R. C. Cawthorpe, Cedar Springs	Mar. 7	4,500
Spring Creek				
Beeker Creek	Courtland	R. C. Cawthorpe, Cedar Springs	Mar. 7	4,500
Austin Creek	Courtland	R. C. Cawthorpe, Cedar Springs	Mar. 7	3,000
Chalmers Creek	Courtland and Algoma	Geo. E. Rector, Edgerton	Mar. 7	1,500
Rector Creek	Common	Geo. E. Rector, Edgerton	Mar. 7	1,500
Bear Creek	Tyrone	Chas. Armstrong, Cannonsburg	Mar. 7	3,000
Posts Creek	Oakfield	Arthur Miller, Bailey	Mar. 7	1,000
English Creek	Spencer	Peter Richier, Bailey	Mar. 7	2,000
Finlay Creek	Oakfield	C. L. Gold, Bailey	Mar. 7	1,000
Crinion Creek	Spencer	Freeman Addis, Harvard	Mar. 16	3,000
Butternut Creek	Oakfield	Alonzo Griswold, Cedar Springs	Mar. 16	3,000
Hutchins Creek		Alonzo Griswold, Cedar Springs	Mar. 16	3,000
Livingston county:				
Burnham Creek	Brighton	B. T. O. Clark, Brighton	Mar. 3	1,500
Peache's Creek	Green Oak	B. T. O. Clark, Brighton	Mar. 3	1,500
Stewart Creek	Hamburg	B. T. O. Clark, Brighton	Mar. 3	1,500
Bishop's Creek	Green Oak	B. T. O. Clark, Brighton	Mar. 3	1,500
Beech Creek	Brighton	B. T. O. Clark, Brighton	Mar. 3	1,500
Ore Creek	Hartland, Brighton and Hamburg	B. T. O. Clark, Brighton	Mar. 3	1,500
McDonnels' Creek	Brighton	B. T. O. Clark, Brighton	Mar. 3	3,000
Walker's Creek	Genoa and Hamburg	B. T. O. Clark, Brighton	Mar. 3	2,000
Woodruff Creek	Hartland and Brighton	B. T. O. Clark, Brighton	Mar. 3	3,000
Weichert Creek	Genoa and Hamburg	B. T. O. Clark, Brighton	Mar. 3	4,000
Branch of Ore Creek	Hartland and Osceola	B. T. O. Clark, Brighton	Mar. 3	2,000
Lapeer county:				
Hunter's Creek	Lapeer and Metamora	G. B. Merrill, Oak Grove	Mar. 3	2,000
Miller Creek	Deerfield and Rich			
Carpenter Creek	Mayfield	Mathias Caley, Lapeer	Mar. 14	4,500
Headwaters of Mill Creek	Attica, Arcadia and Goodland	E. J. Thresher, Lapeer	Mar. 14	4,500
		E. J. Thresher, Lapeer	Mar. 14	3,000
		E. J. Thresher, Lapeer	Mar. 14	6,000
Lena wee county:				
North Branch of Evans Creek	Franklin	A. B. Wisner, Chicago	Feb. 27	3,000
Leelanau county:				
Victoria Creek	Solon	Elmer Billman, Cedar City	Mar. 17	9,000
Mossy's Creek	Suttons Bay	D. H. Power, Suttons Bay	May 5	10,000
Lake county:				
Cedar Creek	Elk, Freesoll and Sheridan	Geo. M. Brown, Detroit	Mar. 9	15,000
Danaher Creek	Pleasant Plains	A. H. Morley, Saginaw	Mar. 9	7,500
Bowman Creek	Pleasant Plains and Lake	Geo. Grant, Saginaw	Mar. 9	3,000
Sauble River	Elk	C. Hagerman, Ludington	Mar. 9	15,000
Blood's Creek	Cherry Valley	C. Hagerman, Ludington	Mar. 11	3,000
Pere Marquette River and tributaries	Elk, Freesoll and Sheridan	W. B. Mershon, Saginaw	Mar. 9	22,500
Tank Creek	Cherry Valley	W. R. Humphrey, Saginaw	Mar. 9	3,000
Pere Marquette River	Cherry Valley	Pere Marquette Trout Club	Mar. 9	22,500
Baker Creek	Webber, Cherry Valley and Pinora	Pere Marquette Trout Club	Mar. 9	4,500
Loree Creek	Cherry Valley	C. A. Kantz, Nirvana	Mar. 9	3,000
Sanborn or Farnsworth Creek	Elk, Freesoll and Sheridan	G. W. Baylis, Mt. Pleasant	Mar. 9	6,000
Middle branch Pere Marquette River	Cherry Valley	H. W. Marsh, Manistee	Mar. 9	12,000
Sauble River			Mar. 10	20,000

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Lake county.—Continued.			1911.	
Pine and Little Manistee Rivers.	Ellsworth, Newkirk and Dover.	H. W. Marsh, Manistee.	Mar. 10	37,500
Pine and Little Manistee Rivers.	Ellsworth, Newkirk and Dover.	Geo. Cutler, Luther.	Mar. 10	37,500
Bloody Run Creek and Big Sauble River.	EIK.	Wm. Utter, Peacock.	Mar. 11	15,000
Little Manistee River.	Weber and Elk.	Hon. H. D. Jewell, Grand Rapids.	Mar. 11	37,500
Baldwin Creek.	Pleasant Plains.	Geo. T. Duffing, Baldwin.	Mar. 12	16,500
Danaher Creek.	Pleasant Plains.	Geo. T. Duffing, Baldwin.	Mar. 13	6,000
Sanborn 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
Luce county:				
West Branch of Large River.	Pentland.	W. J. Hanson, Rexton.	April 1	3,000
Headwaters of Tahquamenon River.	Columbus.	H. A. Heidelbrecht, McMillan.	May 15	6,000
Cyphone Creek.	Columbus.	H. A. Heidelbrecht, McMillan.	May 15	3,000
Two Heart Creek.	McMillan.	R. C. Bradley, Newberry.	May 15	10,500
Linton Creek.	48 N. of R. S. W.	W. S. Linton, Saginaw.	May 17	1,500
Murphy Creek.	47 N. R. S. 9, 10 W.	W. S. Linton, Saginaw.	May 17	6,000
Headwaters of Tahquamenon River.	Columbus.	W. G. Fretz, Newberry.	May 17	7,500
Laketon Creek.	Columbus and Lakefield.	H. K. 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 Millecoquin 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	9,000
Little Dead River.	Ishpeming and Eby.	H. A. St. John, Marquette.	April 15	3,000
West Branch of Laughing Whitefish.	Marquette.	H. A. St. John, Marquette.	April 15	1,500
South Branch of Wilson Creek.	Marquette.	H. A. St. John, Marquette.	April 15	3,000
Silver Creek.	Marquette.	H. A. St. John, Marquette.	April 15	1,500
Cherry Creek.	Marquette.	H. A. St. John, Marquette.	April 15	3,000
Big Creek.	Powell.	H. A. St. John, Marquette.	April 15	3,000
Bear Creek.	Marquette.	H. A. St. John, Marquette.	April 15	3,000
Pickerel Lake Creek.	Marquette.	H. A. St. John, Marquette.	April 15	3,000
Reany Creek.	Marquette.	H. A. St. John, Marquette.	April 15	3,000
Yellow Dog Creek and branches.	Powell.	H. R. Harris, Marquette.	April 15	3,000
Alder Creek.	Powell.	H. R. Harris, Marquette.	April 15	3,000
The Pip.	Powell.	H. R. Harris, Marquette.	April 15	4,500
Wilson Creek.	Powell.	H. R. Harris, Marquette.	April 15	4,500
Garlick River.	West Branch.	H. R. Harris, Marquette.	April 15	9,000
Chocolay River and branches.	Humboldt and Eby.	J. D. Spitzer, Ishpeming.	April 15	7,500
W. Branch of the W. Branch of the Escanaba River.	Ishpeming.	Geo. A. Newett, Ishpeming.	April 15	4,500
Deer Creek.	Ishpeming and Negaunee.	Geo. A. Newett, Ishpeming.	April 15	4,500
Wahleman's Creek.				
Ropes Creek.	Ishpeming and Eby.	Geo. A. Newett, Ishpeming.	April 15	7,500
Escanaba River.	Ishpeming, Eby and Humboldt.	Geo. A. Newett, Ishpeming.	April 15	6,000
Mullin's Creek.	Ishpeming.	Geo. A. Newett, Ishpeming.	April 15	7,500
Teal Lake Inlets.	Negaunee.	Negaunee R. and G. Club, Negaunee.	April 15	1,500
Dead River.	Ishpeming and Marquette.	Negaunee R. and G. Club, Negaunee.	April 15	7,500
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.	Negaunee.	Negaunee R. and G. Club, Negaunee.	April 15	3,000
East Branch and Tributaries of Escanaba River.	Forsythe.	G. R. Jackson, Princeton.	April 15	6,000
Bear Creek.	Forsythe.	G. R. Jackson, Princeton.	April 15	3,000
Green Creek.	Tilden, Richmond and Forsythe.	J. I. Kelton, Princeton.	April 15	3,000
Halfway Creek.	Forsythe.	J. I. Kelton, Princeton.	April 15	6,000
Escanaba River.	Republic.	C. W. Munson, Republic.	April 20	6,000
Spruce River.	Ely.	C. W. Munson, Republic.	April 20	6,000
W. Branch Escanaba River.	Republic.	C. W. Munson, Republic.	April 20	12,000
Michiganamme River.	Republic.	C. W. Munson, Republic.	April 20	4,500
Beaver Creek.	Republic.	C. W. Munson, Republic.	April 20	6,000
Midway Creek.	Republic.	C. W. Munson, Republic.	April 20	4,500
Grama Creek.	Republic.	C. W. Munson, Republic.	April 20	6,000
Black River.	Humboldt and Republic.	Peter Dolf, Michiganamme.	April 21	6,000
Spruce River.	Michiganamme.	H. R. Gamble, Republic.	April 21	4,500
Captain's Creek.	Republic.	B. Bengston, Republic.	April 21	3,000
Olsen's Creek.	Republic.	B. Bengston, Republic.	April 21	3,000
Camp 5 Creek.	Humboldt.	B. Bengston, Republic.	April 21	6,000
Trout Falls Creek.	Republic.	B. Bengston, Republic.	April 21	3,000
Cass Creek.	Republic.	B. Bengston, Republic.	April 21	6,000
Hunter's Brook.	Republic.	E. S. Voght, Escanaba.	April 25	4,500
Spruce River.	41-42 R. 24.	C. F. Sundstrom, Michiganamme.	April 26	7,500
Fence River.	Michiganamme and Republic.	C. F. Sundstrom, Michiganamme.	April 26	7,500
Harlow's Creek.	Michiganamme and Republic.	F. G. Jenks, Marquette.	May 10	7,500
Headwaters of Garlic Creek.	Marquette.	J. E. Boll, Marquette.	May 10	7,500
Craig's Creek.	Marquette.	F. H. Begole, Marquette.	May 10	4,500
Tributaries of Chocolay River.	Sands.	C. E. Carr, Marquette.	May 10	6,000
Camp Creek.	Marquette.	J. W. Spear, Marquette.	May 10	6,000
Little Carp Creek.	Chocolay.	J. W. Spear, Marquette.	May 10	6,000
Foster's Creek.	Chocolay.	E. C. Giesregen, Marquette.	May 10	7,500
Nelson Creek.	Chocolay.	E. S. Giesregen, Marquette.	May 10	7,500
Cedar Creek.	Chocolay and Sands.	E. C. Giesregen, Marquette.	May 10	9,000
Silver Creek.	Chocolay.	W. S. Ewing, Harvey.	May 10	7,500
Cherry Creek.	Chocolay.	W. S. Ewing, Harvey.	May 10	9,000
Missaukee county:				
West Branch Muskegon River.	West Branch.	J. F. Stevens, Lake City.	Mar. 18	6,000
Filer Creek.	Pioneer and Bloomfield.	F. H. Reeder, Lake City.	Mar. 18	4,500
Hopkins Creek.	Caldwell and Bloomfield.	C. H. Bostick, Manton.	Mar. 18	7,500
Golden Creek.	Caldwell.	C. H. Bostick, Manton.	Mar. 18	3,000
Chase Creek.	Caldwell and Liberty.	C. H. Bostick, Manton.	Mar. 18	3,000
Morse Creek.	Caldwell.	C. H. Bostick, Manton.	Mar. 18	3,000
Hopkins Creek.	Forest and Bloomfield.	Warron Jones, Lake City.	Mar. 18	6,000
Butterfield Creek.	Butterfield, Elma and Reeder.	L. B. Proctor, Lake City.	Mar. 18	6,000
Mosquito Creek.	Reeder.	Geo. B. Farmer, Lake City.	Mar. 18	3,000
Mosquito Creek.	Reeder and Riverside.	F. M. Nye, Lake City.	Mar. 18	3,000

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Missaukee county.—Continued.				
Taylor Creek.	Butterfield and Aetna.	F. M. Nye, Lake City.	Mar. 18	3,000
West Branch of Muskegon River.	Forest and West Branch.	Henry Plummer, Lake City.	Mar. 18	6,000
Clam River.	Riverside and others.	Hon. C. A. Brott, 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
Gilchrist 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
Milk 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, Elmne 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.	20 T E. and 27 and 28 T W.	Geo. Sachs, Lewiston.	Mar. 21	6,000
Menominee county:				
East Branch Shaky River.	Holmes and Stephenson.	F. H. Schmidt, Swanson.	April 11	6,000
Holmes Creek.	Holmes.	Martin Farrell, Fairborn.	April 11	3,000
Blat Creek.	Holmes.	Geo. Kroehnke, Vulcan.	April 11	3,000
Blat Creek.	Spalding.	Geo. Kroehnke, Vulcan.	April 11	3,000
Cedar River and tributaries.	Spalding.	N. Peterson, Spaulding.	April 11	3,000
Quade Creek.	Spalding.	Chas. J. Quade, Powers.	April 11	15,000
Dirkman Creek.	Spalding.	J. Archibald, Powers.	April 11	3,000
Ten Mile Creek.	Spalding.	C. B. Wheeler, Powers.	April 11	3,000
Wheeler Creek.	Spalding.	C. B. Wheeler, Powers.	April 11	4,500
North Branch Cedar River.	Spalding.	Antoine Gignier, Powers.	April 11	1,500
Hay Creek.	Spalding.	Irving Brim, Powers.	April 11	6,000
Wilson Creek.	Wilson.	A. P. Gillis, Powers.	April 11	6,000
Reed's Creek.	Spalding.	Ed. Ellers, Powers.	April 11	6,000
Big Brook.	Stephenson.	C. P. Walton, P. M. Daggett.	April 11	6,000
Holmes Creek.	Stephenson.	E. Perrigo, Daggett.	April 11	3,000
Big Brook.	Stephenson and Cedarville.	J. Thorpe Stephenson.	April 11	6,000
Camp Seven Creek.	Meyer.	J. H. Loouts, Hermansville.	April 11	3,000
Camp Twenty-five Creek.	Meyer.	J. D. Hayes, Hermansville.	April 11	1,500
Quillard's and Vesper Creeks.	Meyer.	J. D. Hayes, A. J. Kremer, Hermansville.	April 11	3,000
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.	Ferris.	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.	Pierson, Maple Valley, Spencer and Lincoln Lake.	F. E. Shattuck, Sand Lake.	Mar. 7	7,500
Grant Creek.	Pierson.	Alvin R. Brown, Sand Lake.	Mar. 7	1,500
Carpenter Creek.	Pierson.	Wayne Carpenter, Sand Lake.	Mar. 7	1,500
Bruce Creek.	Winfield.	Grant V. Fuins, Howard City.	Mar. 7	4,500
Whitefish Creek.	Reynolds.	J. C. Buck, Howard City.	Mar. 7	3,000
Church Creek.	Winfield.	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.	Reynolds.	W. H. Lovely, Howard City.	Mar. 7	9,000
Randy and Fosal Creeks.	Winfield.	W. H. Lovely, Howard City.	Mar. 7	3,000
Rice Creek.	Pierson and Reynolds.	F. D. Briggs, Langston.	Mar. 8	1,500
Broderick Creek.	Pine.	F. D. Briggs, Langston.	Mar. 8	3,000
West Lake Creek.	Pine.	F. D. Briggs, Langston.	Mar. 8	1,500
West Branch Creek.	Pine.	F. D. Briggs, Langston.	Mar. 8	3,000
Kortes Creek.	Pine.	Jensen Bros., Trufant.	Mar. 8	1,500
Inlet to Muscallonge Lake.	Belydere, Douglas and Day Fairplains.	E. E. Brown, Shioch.	Mar. 8	3,000
Little Penny or Cedar Creek.	Bushnell.	Herbert Edwards, Fenwick.	Mar. 8	1,500
Dixon Creek.	Bushnell.	Freeman Taylor, Sheridan.	Mar. 8	1,500
Castie's Creek.	Evergreen.	Robert Evans, Stanton.	Mar. 8	3,000
Deer's Creek.	Bushnell.	B. L. Goodsell, Vickerbyville.	Mar. 8	7,500
Fish Creek.	Montcalm.	Geo. C. Bower, Greenville.	Mar. 16	4,000
Prairie Creek.	Montcalm.	Henry Paulsen, Gowen.	Mar. 22	3,000
Horton Creek.	Eureka.	F. J. Cole, Greenville.	Mar. 22	3,000
Horton Creek.	Eureka.	F. J. Cole, Greenville.	Mar. 22	3,000
Wilcox Creek.	Montcalm.	E. A. Kempp, Greenville.	Mar. 22	3,000
Shaky Run.	Eureka.	Fred J. Cole, Greenville.	April 13	3,000
Turk Lake Creek.	Montcalm.	Mar. 22	3,000	
Rocky River.	Eureka.	Mar. 22	3,000	
Muskegon county:				
Skeel's Creek.	Holton and Greenwood.	J. A. Gerber, Fremont.	Mar. 6	3,000
Flower Creek.	White River.	J. B. Aveline, Montague.	Mar. 6	4,000
Little Flower Creek.	Montague.	Wm. T. Krol, 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	8,000
Carlton Creek.	Grant and Montague.	Alfred Burland, Whitehall.	Mar. 6	6,000
Streams on Sections 4 and 5.	Fruitland.	Alfred Burland, Whitehall.	Mar. 6	1,500
Birch Brook.	Fruitland.	Alfred Burland, Whitehall.	Mar. 6	1,500
The Millpond Inlet.	Whitehall.	E. D. Magoon, Muskegon.	Mar. 6	1,500
Silver Creek.	Blue Lake and Whitehall.	E. D. Magoon, Muskegon.	Mar. 6	6,000
Duck Creek.	Dalton, Laketon and Muskegon.	E. D. Magoon, Muskegon.	Mar. 6	4,500
Little Bear Creek.	Muskegon.	E. D. Magoon, Muskegon.	Mar. 6	3,000
Little Black Creek.	Fruitland and Laketon.	E. D. Magoon, Muskegon.	Mar. 6	3,000
Green's Creek.		E. D. Magoon, Muskegon.	Mar. 6	3,000

TWENTIETH REPORT—STATE FISHERIES.

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county.—Continued.			1911.	
Big Black Creek.	Muskegon.	E. D. Magoon, Muskegon.	Mar. 6	8,000
Mosquito Creek.	Eggiston.	E. D. Magoon, Muskegon.	Mar. 6	4,500
Clevland Creek.	Blue Lake.	E. D. Magoon, Muskegon.	Mar. 6	4,000
Ryerson Creek.	Muskegon.	E. D. Magoon, Muskegon.	Mar. 6	3,000
Norris Creek.	Ravenna, Sullivan and Fruitland.	E. D. Magoon, Muskegon.	Mar. 6	8,000
Lake Creek.	Casnovia.	Elijah Beards, Sr., Bailey.	Mar. 11	2,000
Crockery Creek and tributaries.	Casnovia.	Elliott T. Slocum, Detroit.	Mar. 11	6,000
Moore's Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Firman's Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	2,000
Barnes Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	2,000
Heard's Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Merkes Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Gilbert's Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Bateman Creek.	Casnovia.	J. O. Fraleigh, Casnovia.	Mar. 11	1,000
Comstock Creek.	Casnovia.	C. L. Gold, Bailey.	Mar. 11	1,000
Cedar Creek.	Holton and Cedar Creek.	S. L. Steele, Holton.	Mar. 23	7,500
Cedar Creek.	Holton.	Richard J. Patelksi, Holton.	Mar. 23	7,500
Wolf Creek.	Ravenna.	H. A. Muzzall, Coopersville.	Mar. 27	3,000
Mecosta county:				
Ryan Creek.	Cifax.	W. H. Redman, Big Rapids.	Mar. 7	6,000
Mack's Creek.	Austin and Mecosta.	F. W. Chilson, Stanwood.	Mar. 7	6,000
Bennett Creek.	Mecosta and Austin.	J. B. Campbell, Stanwood.	Mar. 7	1,500
Clear Brook Creek.	Aetna and Deerfield.	C. F. Barnard, Stanwood.	Mar. 7	1,500
East Branch of Big Creek.	Deerfield.	Geo. F. Haist, Morley.	Mar. 7	4,000
Quigley Creek.	Deersfield.	Isaac Laird, Morley.	Mar. 7	3,000
No name.	Aetna.	Isaac Laird, Morley.	Mar. 7	1,500
Mitchell Creek.	Deerfield.	Wm. Crook, Morley.	Mar. 7	2,000
Horner Creek.	Aetna and Deerfield.	Ira Helms, Morley.	Mar. 7	2,000
Big Creek.	Hinton.	J. D. McManus, Morley.	Mar. 7	5,000
Tributaries to Little Muskegon River.	Hinton.	A. M. Cook, Howard City.	Mar. 7	1,500
Tompkins Creek.	Hinton.	John Wright, Lakeview.	Mar. 8	3,000
Seaton's Creek.	Hinton.	John Wright, Lakeview.	Mar. 8	3,000
Sylvester Creek.	Hinton.	Alex. Tompkins.	Mar. 8	4,500
Scott Creek.	Millbrook and Rottland.	Roger Scott, Blanchard.	Mar. 8	1,500
Decker Creek.	Millbrook.	Roger Scott, Blanchard.	Mar. 8	3,000
Pine River.	Millbrook.	T. D. Pattison, Millbrook.	Mar. 8	4,500
Pine River.	Wheatland.	J. M. Swisher, Remus.	Mar. 8	3,000
West Branch of Pine River.	Wheatland and Broomfield.	J. M. Swisher, Remus.	Mar. 8	1,500
Poney Creek.	Wheatland and Morton.	P. J. Theisen, Remus.	Mar. 8	7,500
Little Muskegon River.	Wheatland.	P. J. Theisen, Remus.	Mar. 8	3,000
Bingen Creek.	Wheatland and Sherman.	P. J. Theisen, Remus.	Mar. 8	3,000
Indian Creek.	Morton.	Geo. Colgrove, Remus.	Mar. 8	1,500
Dead Stream.	Morton.	John Snyder, Mecosta.	Mar. 8	7,500
Little Muskegon River.	Morton and Hinton.	Frank G. Redick, Mecosta.	Mar. 8	3,000
Shingle Bolt Creek.	Morton.	Arthur Royce, Altona.	Mar. 8	3,000
Cold Creek.	Morton.	John O'Brien, Mecosta.	Mar. 9	1,500
Gilbert Creek.	Morton and Wheatland.	Ray Carman, Mecosta.	Mar. 8	4,500
Heck Creek.	Hinton.	Ray Carman, Mecosta.	Mar. 8	3,000
Schrader Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Benjamin Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Brown Creek.	Sheridan.	W. S. Lafin, Barryton.	Mar. 8	2,000
Farmer Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Butts Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Rattail Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Isanhart Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Tanner Creek.	Fork.	W. S. Lafin, Barryton.	Mar. 8	2,000
Paris, Sandberg, Hall's and Herrick Creeks.	Sheridan.	W. S. Lafin, Barryton.	Mar. 8	1,000
Little and Big Buckhorn Creeks and Cherry Creek.	Green.	Michigan Fish Commission.	Mar. 8	5,000
Macomb county:	Mecosta.	Michigan Fish Commission.	Mar. 25	14,500
Stony Creek.	Avon.	Michigan Fish Commission.	Mar. 25	30,000
Silver Creek.	Bruce.	F. Gillespie, Romeo.	Mar. 1	3,000
Smith's Creek.	Several.	F. Gillespie, Romeo.	Mar. 1	2,000
Hilton's Creek.	Washington.	H. W. Bradley, Romeo.	Mar. 1	2,000
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.	Stronach 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
Kaiser Creek.	Bear Lake and Maple Grove.	T. G. Trimble, Manistee.	Mar. 17	6,000
Big Bear Creek.	Springdale and Maple Grove.	T. G. Trimble, Manistee.	Mar. 17	3,000
Cedar Creek.	Springdale.	Roy Marker, Bear Lake.	Mar. 17	15,000
Wells Creek.	Springdale.	Roy Marker, Bear Lake.	Mar. 17	6,000
Little Bear Creek.	Springdale.	Roy Marker, Bear Lake.	Mar. 17	2,000
Green's Creek.	Springdale.	Roy Marker, Bear Lake.	Mar. 17	6,000
Welch Creek.	Cleon and Springdale.	Roy Marker, Bear Lake.	Mar. 17	2,000
Hatch's Creek.	Springdale, Maple Grove and Brown.	E. 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	2,000
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:	Summit and Riverton.	C. F. Lewis, Pentwater.	Mar. 6	3,000
Quinn Creek.	Summit and Riverton.	C. F. Lewis, Pentwater.	Mar. 6	3,000
Dickerson Creek.	Grant.	Hugo Olson, Freesoil.	Mar. 6	1,000
Toal's Creek.	Eden & Custer.	Jerry M. Cuble, Custer.	Mar. 9	3,000
No. One Creek.	Eden & Rivertoo.	D. S. Betka, Scottville.	Mar. 9	5,000
Swan Creek.	Victory & Sherman.	D. S. Betka, Scottville.	Mar. 9	6,000
South Lincoln River.				

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. Sergeant, Fremont	Mar. 7	4,500
Dowling Creek.	Lincoln.	W. D. Sergeant, Fremont	Mar. 7	4,500
Cushman Creek.	Greenwood.	J. A. Gerber, Fremont	Mar. 7	4,500
Minnie Creek.	Bridgeton.	J. A. Gerber, Fremont	Mar. 7	3,000
Williams Creek.	Sherman and Garfield.	J. A. Gerber, Fremont	Mar. 7	4,500
Flander's Creek.	Denver.	Geo. R. Lyons, Hesperia	Mar. 7	1,500
West Branch Martin Creek.	Denver.	Geo. R. Lyons, Hesperia	Mar. 7	4,500
Frey Creek.	Ensley.	David Curtis, Sand Lake	Mar. 7	3,000
Reynolds Creek.	Ensley.	H. M. Gibbs, Howard City	Mar. 7	1,500
Rosey Run.	Ensley.	Jas. Simpson, Sand Lake	Mar. 7	4,500
Simpson Creek.	Croton.	J. Odell Nelson, Howard City	Mar. 7	3,000
Rya Creek.	Brooks and East	S. D. Thompson, Newaygo	Mar. 11	12,000
Bigelow, Coolbough and Pennoyer Creeks.	Grant and Ashland.	A. J. Titus, Grant	Mar. 11	6,000
Post's, Barnum and Isenhart Creeks.		S. D. Bonner, Newaygo	Mar. 11	4,500
Pennoyer Creek.	Monroe.	D. Matheson, White Cloud	Mar. 11	3,000
Kinney Creek.	Monroe.	Geo. E. Whitman, White Cloud	Mar. 11	3,000
Mattison Creek.	Wilson.	Geo. E. Whitman, White Cloud	Mar. 11	3,000
Miller Creek.	Wilcox.	W. S. Barton, White Cloud	Mar. 11	3,000
Five Mile Creek.	T. 16, 12 and 13, 17-18.	C. Hagerman, Ludington	Mar. 11	9,000
Little South Creek.	Wilcox.	Branch Bros., White Cloud	Mar. 11	9,000
White River.	Home.	P. Christensen, Bitezly	Mar. 11	3,000
Tank Creek.	Home.	P. Christensen, Bitezly	Mar. 11	6,000
Little South Branch.	Troy.	P. Christensen, Bitezly	Mar. 11	4,500
Cedar Creek.	Wilcox.	R. C. Eisley, Fremont	Mar. 11	3,000
Mullin Creek.	Sherman.	Fred Daenzer, White Cloud	Mar. 11	1,500
Inlet of Little Robinson Lake.	Wilcox.	W. D. Hopkinson, Big Rapids	Mar. 11	9,000
White River.	Ashland.	C. L. Gold, Bailey	Mar. 11	1,000
Ashland Creek.	Ashland and Casnovia.	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.	Minnroe and Wilcox.	Jas. C. Russell, Woodville	Mar. 23	3,000
Townes Creek.	Goodwell.	Glen 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. 25	50,000
Peas Creek and Pere Marquette River tributaries.				
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
Weatherson Creek.	Springfield.	F. G. Ely, Davisburg	Mar. 1	3,000
Pettibone Creek.	Milford.	F. B. Hatch, Milford	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 Oakwood.	G. R. Chapman, Rochester	Mar. 14	6,000
No name.	Springfield.	J. W. Aurand, Davisburg	Mar. 25	3,000
Oceana county:				
Meyer Creek.	Golden.	Frank T. Sloan, Mears	Mar. 6	1,500
Wright Creek.	Golden.	Frank T. Sloan, Mears	Mar. 6	3,000
Webb Creek.	Golden.	Frank T. Sloan, Mears	Mar. 7	1,500
Craig Creek.	Golden.	Frank T. Sloan, Mears	Mar. 6	3,000
Knapp Creek.	Golden.	Frank T. Sloan, Mears	Mar. 6	3,000
Graff Creek.	Golden.	Frank T. Sloan, Mears	Mar. 6	1,500
Miles Creek.	Golden.	E. A. Post, Mears	Mar. 6	1,500
Silver Lake Creek.	Golden.	E. A. Post, Mears	Mar. 6	3,000
Weaver Creek.	Golden.	E. A. Post, Mears	Mar. 6	1,500
Park Creek.	Golden.	E. A. Post, Mears	Mar. 6	1,500
Harris Creek.	Golden.	E. A. Post, Mears	Mar. 6	1,500
Hunter Creek.	Golden.	E. A. Post, Mears	Mar. 6	1,500
Nelson Creek.	Golden.	E. A. Post, Mears	Mar. 6	3,000
Morley Creek.	Golden.	E. A. Post, Mears	Mar. 6	3,000
Carlson Creek.	Golden.	E. A. Post, Mears	Mar. 6	3,000
De Kay Creek.	Golden.	J. W. Krause, Mears	Mar. 6	1,000
Stoney Creek.	Shelby and Benona.	J. W. Krause, Mears	Mar. 6	3,000
Robinson Creek.	Shelby and Benona.	J. C. Ellis, Shelby	Mar. 6	7,500
Piper Creek.	Shelby and Benona.	E. E. Ellis, Shelby	Mar. 6	4,500
Hobby Creek.	Shelby and Benona.	E. E. Ellis, Shelby	Mar. 6	3,000
Sand Creek.	Otto.	E. E. Ellis, Shelby	Mar. 6	4,500
Tributaries to Beaver Creek.	Leavitt and Colfax.	Chas. Smith, Rothburg	Mar. 6	3,000
Clark's Lake.	Colfax.	E. L. Bunting, Walkerville	Mar. 6	1,500
Freeman Creek.	Leavitt and Colfax.	E. L. Bunting, Walkerville	Mar. 6	1,500
Tributaries to Beaver Creek.	Leavitt.	E. L. Bunting, Walkerville	Mar. 7	3,000
Rackliffe Creek.	Elbridge.	Will Baker, Walkerville	Mar. 6	1,500
Crystal Creek.	Crystal, Weare and Pentwater.	Ira C. Ford, Walkerville	Mar. 6	4,500
Seaman Creek.	Crystal.	O. E. Vine, Walkerville	Mar. 6	1,500
Snigley or Donaldson Creek.	Hart.	Wm. R. Roach, Hart	Mar. 6	3,000
Swears Creek.	Hart and Weare.	R. A. Gasahl, Mears	Mar. 6	1,500
Halberg Creek.	Golden.	R. A. Gasahl, Mears	Mar. 6	1,500
Lambert Creek.	Golden and Benona.	R. A. Gasahl, Mears	Mar. 6	1,500
Richier Creek.	Golden.	R. A. Gasahl, Mears	Mar. 6	1,500
Stafford Creek.	Golden and Hart.	R. A. Gasahl, Mears	Mar. 6	3,000
Cedar Creek.	Weare and Crystal.	R. A. Gasahl, Mears	Mar. 6	3,000
Annelly Creek.	Weare.	C. F. Lewis, Pentwater	Mar. 6	4,500
Dunaw Creek.	Weare and Riverton.	C. F. Lewis, Pentwater	Mar. 6	1,500
Mears Creek.	Weare.	C. F. Lewis, Pentwater	Mar. 6	3,000
South Branch of Cedar Creek.	Weare and Crystal.	C. F. Lewis, Pentwater	Mar. 6	1,500
Pentwater River.	Pentwater and others.	C. F. Lewis, Pentwater	Mar. 6	3,000
Ogemaw county:				
Weideman Creek.	West Branch.	S. D. Montgomery, Grand Rapids	Mar. 6	9,000
Wood's Creek.	West Branch.	John Tolfree, West Branch	Mar. 23	3,000
Mansfield Creek.	Edwards.	John Tolfree, West Branch	Mar. 23	4,000
Crapp Creek.	West Branch.	John Tolfree, West Branch	Mar. 23	4,000
East Branch Tittabawassee River.	Horton.	John Tolfree, West Branch	Mar. 23	4,000
Prieur Creek.	Klacking and Channing.	John Tolfree, West Branch	Mar. 23	8,000
West Branch Rife River.	West Branch.	John Tolfree, West Branch	Mar. 23	4,000
Klacking Creek.	Klacking, West Branch and Churchill	John Tolfree, West Branch	Mar. 23	10,000
Tributaries to Rife River.	Churchill.	Cascalien Bros., Selkirk	Mar. 23	12,000

TWENTIETH REPORT—STATE FISHERIES

Brook Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Ogemaw county.—Continued.			1911.	
Klacking Creek.	Churchill and West Branch.	Carscallen Bros., Selkirk.	Mar. 23	4,000
Johnson Creek.	Richland.	Carscallen Bros., Selkirk.	Mar. 25	6,000
Oyster Creek.	Rose.	O. L. Rakestraw, Lupton.	Mar. 25	3,000
Kindorf Creek.	Rose.	O. L. Rakestraw, Lupton.	Mar. 25	3,000
Ross Creek.	Rose.	O. L. Rakestraw, Lupton.	Mar. 25	3,000
Vaughn Creek.	Rose.	O. L. Rakestraw, Lupton.	Mar. 25	3,000
Crainer Creek.	Richland.	Geo. Eymer, Prescott.	Mar. 25	3,000
Whitney Creek.	Rose.	Geo. Eymer, 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
Cyee Creek and tributaries.	Stannard.	Alex. Turner, Bruce's Crossing.	April 18	4,500
Middle Branch Ontonagon River.	Interior and Stannard.	M. J. Clossey, Trout Creek.	April 18	4,500
McAlpine Creek.	Interior.	M. J. Clossey, Trout Creek.	April 18	3,000
Trout Creek.	Rockland.	John Kohn, Rockland.	April 18	3,000
Davy's Creek.	Rockland.	W. G. Richards, Rockland.	April 19	1,500
Clear Creek.	Rockland.	W. G. Richards, Rockland.	April 19	1,500
Rockland Creek.	Rockland.	W. P. Vogtin, Rockland.	April 19	3,000
Spring Creek.	Rockland.	W. P. Vogtin, Rockland.	April 19	3,000
Landing Creek.	Rockland.	W. P. Vogtin, Rockland.	April 19	4,500
Sucker Creek.	51 and 52.	Henry W. Grams, Houghton.	April 19	7,500
Firesteel River.	Bohemia.	Wm. Brown, Winona.	May 6	3,000
Tributaries to Sleeping River.	48-39.	E. W. MacPherran, Marquette.	May 6	3,000
Two Hundred Fifty Mile Post, Br. of Michigananue.	47-35.	E. W. MacPherran, Marquette.	May 6	3,000
Two Hundred Eighteen and One-half Mile Post.	48-41.	E. W. MacPherran, Marquette.	May 9	4,500
Merryweather Creek.	47-37.	E. W. MacPherran, Marquette.	May 9	3,000
Branch of Trout Creek.				
Osego county:				
Upper Part of Big Stone Creek.	Evart.	Joel Perry, Evart.	Mar. 10	3,000
Cat Creek.	Hersey.	L. A. Moody, Evart.	Mar. 10	4,500
Twin Creek.	Evart, Oscoda and Cedar.	Wm. Ramsey, Evart.	Mar. 10	4,500
Grindstone Creek.	Hartwick and Sylvan.	Wm. Ramsey, Evart.	Mar. 10	4,500
North Branch Chippewa River and Edson Creek.	Orien.	B. C. Grant, Chippewa Station.	Mar. 10	6,000
Highland Creek.	Highland.	C. W. Graves, Dighton.	Mar. 10	4,500
Franz Creek.	Highland.	C. W. Graves, Dighton.	Mar. 10	4,500
Middle Branch Muskegon River.	Highland or Marion.	C. W. Graves, Dighton.	Mar. 17	10,500
Moffett Creek.	Lincoln.	A. M. McLean, Alpena.	Mar. 17	3,000
East Branch of Hershey Creek.	Richmond, Hersey and Lincoln.	J. W. Patterson, Reed City.	Mar. 18	3,000
Hershey River.	Lincoln and Richmond.	Cornell and Carrow, Reed City.	Mar. 18	6,000
McDonald's Creek.	Mentor.	A. W. Auer, Reed City.	Mar. 18	3,000
Blockhouse Creek.		Wm. Ellis, Au Sable.	Mar. 18	3,000
Swain, Johnson and Tributary Branches, also Hershey Stream.	Lincoln.	L. W. Purchase, Orono.	Mar. 20	12,000
West Branch of Glam River.	Riverside, 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
Seazer Creek.	Marion.	Patrick White, Marion.	Mar. 21	3,000
Ghost Creek.	Elmerton.	Patrick White, Marion.	Mar. 21	3,000
East Branch.		Geo. Sachs, Lewiston.	Mar. 21	12,000
Upper South Branch of Thunder Bay River.		J. D. Hawks, Detroit.	Mar. 25	45,000
Otsego 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 Boutill, Saginaw.	Mar. 21	18,000
Pigeon River.	32 N. 2 W.	C. M. Sly, Vanderbilt.	Mar. 23	16,000
Sturgeon River.	Several.	D. M. Sly, Vanderbilt.	Mar. 23	16,000
Headwaters of Pigeon River.	Several.	R. H. L'Hommiedieu, Detroit.	Mar. 25	30,000
Headwaters of Sturgeon River.		R. H. L'Hommiedieu, Detroit.	Mar. 25	30,000
Ottawa county:				
Pigeon River.	Olive.	C. McKinley, West Olive.	Mar. 7	4,500
Presque Isle county:				
Tributaries to Ocqueoc River.	Metz.	H. Horwitz, Hawks.	Mar. 17	3,000
Trout River.	Bellknap and Rogers.	B. G. Larke, Rogers.	Mar. 17	4,500
Black River.	Ocqueoc and Chase.	J. M. Clark, Onaway.	Mar. 17	16,000
Indian Creek.	Ocqueoc and Chase.	N. C. Monroe, Millersburg.	Mar. 17	3,000
Ocqueoc River.	Ocqueoc, Bismarck and Ocqueoc.	W. H. Freers, Millersburg.	Mar. 25	9,000
Little Ocqueoc.		W. H. Freers, Millersburg.	Mar. 25	4,500
Roscommon county:				
Eshern Creek.	Richfield.	D. Procurier, St. Helens.	Mar. 23	3,000
South Branch of Au Sable River.	Penfield and South Branch.	Wm. F. Johnston, Roscommon.	Mar. 23	12,000
Schoolcraft county:				
Thompson Creek.	Thompson.	Benjamin Gero, Manistique.	April 1	3,000
Silver Creek.	Thompson.	Benjamin Gero, 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
Gembering Creek.	Fabius.	Warren Klocke, Three Rivers.	Feb. 24	1,500
Spring Creek.	Lockport.	Amon 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.		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

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

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.	Juniata.	Wm. Vandecar, Caro.	Mar. 14	3,000
Van Buren county:				
Foster's Brook.	Keeler.	W. A. Palmer, Hartford.	Feb. 23	3,000
Two Branches of Hig Creek.	Hartford.	W. A. Palmer, Hartford.	Feb. 23	2,000
Hart and Lamon'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	7,500
West Branch Paw Paw River.	Paw Paw and Decatur.	H. Emory Boll, Paw Paw.	Feb. 23	5,000
Rix Creek.	Antwerp.	H. E. Oswald, Kalamazoo.	Feb. 24	5,000
No name.	Decatur.	Levi Lyle, Decatur.	Feb. 24	3,000
Mattawan Creek.	Mattawan.	D. C. A. Wise, Kalamazoo.	Mar. 3	3,000
Haden Creek.	Almena.	Dr. C. A. Wise, Kalamazoo.	Mar. 3	2,000
South Branch of Paw Paw River.	Almena, Antwerp and Paw Paw.	R. E. Balch, Kalamazoo.	Mar. 3	4,000
Newberry Brook.	Antwerp and Paw Paw.	R. E. Balch, M. D., Kalamazoo.	Mar. 3	4,000
Scott's Creek.	Waverly.	W. L. Scott, Bloomingdale.	Mar. 3	1,500
Mill Creek.	Geneva.	J. T. Tolles, South Haven.	Mar. 3	3,000
Spice Bush Creek.	Geneva, Lee and Casco.	J. A. Gibson, Lacota.	Mar. 3	4,500
Washtenaw county:				
Williams Creek.	Manchester and Shannon.	Wm. Stoneway, Manchester.	Feb. 27	2,000
Schaible Creek.	Manchester.	A. J. Waters, Manchester.	Feb. 27	2,000
Iron Creek.	Manchester.	A. J. Waters, Manchester.	Mar. 27	4,500
South Branch of Paint or Clawson's Creek.	Ypsilanti and Pittsfield.	V. W. Clawson, Ypsilanti.	Feb. 27	3,000
Honey Creek.	Lima 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	1,500
Young's Creek.	Lyndon.	T. I. Clark, Jackson.	Feb. 27	1,500
Wayne county:				
Campbell Creek.	Van Buren and Ypsilanti.	L. Seamans, Belleville.	Feb. 27	6,000
Wexford county:				
Bear Creek.	Slagle.	Michigan Fish Commission.	Mar. 6	30,000
Little Fifer Creek.	Greenwood.	Kingsley Sportsmen's Club, Kingsley.	Mar. 16	1,500
Big Fifer 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	2,000
Hawley Creek.	Hanover.	G. A. Brigham, Buckley.	Mar. 18	4,000
Dean Creek.	Hanover.	G. A. Brigham, Buckley.	Mar. 18	2,000
Silver Creek.	Greenwood.	Herman Marvin, Baxter.	Mar. 18	3,000
Cushion Creek.	Greenwood.	Herman Marvin, Baxter.	Mar. 18	3,000
				1,000
Galena Creek.	Greenwood.	Harman Marvin, Baxter.	Mar. 18	1,000
Sugar Creek.	Coffax and Greenwood.	G. S. Gilbertson, Manton.	Mar. 18	3,000
Harver Creek.	Liberty.	G. S. Gilbertson, Manton.	Mar. 18	3,000
Whitmore Creek.	Liberty.	H. Boswick, Manton.	Mar. 18	1,500
Taylor Creek.	Liberty and Cedar Creek.	H. Boswick, Manton.	Mar. 18	2,500
Cedar Creek.	Greenwood.	H. Bestick, Manton.	Mar. 18	4,500
Buttermilk Creek.	Greenwood.	H. Bestick, Manton.	Mar. 18	3,000
Silver Creek.	Cherry Grove.	H. Tyler, Manton.	Mar. 18	3,000
Wheeler Creek.	Springville.	Henry C. Auer, Cadillac.	Mar. 19	4,500
Jewett Creek.	Springville.	F. D. Winnie, Mesick.	Mar. 19	6,000
Fletcher Creek.	Antioch.	F. D. Winnie, Mesick.	Mar. 21	1,500
Adams Creek.	Antioch.	F. D. Winnie, Mesick.	Mar. 21	3,000
Ster Creek.	Springville.	F. D. Winnie, Mesick.	Mar. 21	3,000
Usewick Creek.	Antioch.	F. D. Winnie, Mesick.	Mar. 21	3,000
Preston Creek.	Springville.	F. D. Winnie, Mesick.	Mar. 21	3,000
Sands Creek.	Slagle.	Michigan Fish Commission.	Mar. 21	1,500
			May 5	10,000
Total.				5,665,000

TWENTIETH REPORT—STATE FISHERIES.

BROOK TROUT PLANTS, 1911.

FINGERLINGS.

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

TWENTIETH REPORT—STATE FISHERIES.

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number
Barry county.—Continued.			1911.	
Fall Creek.	Several.	F. H. Barlow, Hastings.	June 12	9,000
Kelly Creek.	Baltimore.	J. H. Neiss, Hastings.	June 12	4,500
Lichty's Creek.	Baltimore.	J. H. Neiss, Hastings.	June 12	3,000
Horn Creek.	Hope.	Kep Silsbee, Hastings.	June 12	3,000
Powers Creek.	Irving.	C. H. Osborne, Hastings.	June 12	3,000
Tributary to Glass Creek.	Yankee Springs.	C. D. Bauer, Hastings.	June 12	3,000
McCollum Creek.	Hankee 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.	Benzonia.	David E. Burns, Beulah.	June 13	7,500
Berrien county:				
Branch of St. Joseph River.	Oronoko.	W. J. Lucker, St. Louis.	June 1	3,000
Wilson and Gray Creeks.	Oronoko.	J. G. Murdock, Berrien Springs.	June 1	4,500
Leiman Creek.	Benton.	J. W. Isbell, St. Joseph.	June 1	3,000
Pipestone Creek.	Oronoko.	J. W. Isbell, St. Joseph.	June 1	3,000
Loren Creek.	Benton.	J. W. Isbell, St. Joseph.	June 1	3,000
Blue Creek.	Royalton.	J. W. Isbell, St. Joseph.	June 1	3,000
Yellow Creek.	Benton.	C. H. Crest, St. Joseph.	June 1	3,000
Edeson Creek.	Several.	C. H. Crest, St. Joseph.	June 1	1,500
Crystal Springs Creek.	St. Joseph.	A. F. Herring, St. Joseph.	June 1	7,500
Tributaries of St. Joseph River.	New Buffalo.	A. F. Herring, St. Joseph.	June 1	7,000
Hickory Creek.		Wm. J. Shermack, New Buffalo.	June 1	4,500
Spring Brook.				
Branch county:				
Staniford Brook.	Sherwood.	S. W. Lehr, Athens.	May 24	1,500
Spencer Brook.	Sherwood.	Leo E. Wood, Athens.	May 24	1,500
Coldwater River.	Quincy and others.	Jnn. B. Shipman, Coldwater.	May 27	6,000
Mill Creek.	Batavia and Bronson.	C. D. Smead, Coldwater.	May 27	3,000
Mill Creek.	Batavia and Bronson.	C. D. Smead, Coldwater.	May 27	4,500
Hog Creek.	Girard.	F. T. Tappan, Coldwater.	May 27	9,000
Shinneman's Brook, Motts, Hog, Allen and Branch Creeks.	Coldwater and Girard.	F. T. Tappan, Coldwater.	May 27	7,500
Smead's Creek.	Batavia.	F. T. Tappan, Coldwater.	May 27	12,000
Calhoun county:				
Minges Brook.	Battle Creek.	Geo. H. Williams, Battle Creek.	May 24	4,500
Helmer's Creek.	Battle Creek and Newton.	Geo. H. Williams, Battle Creek.	May 24	4,500
Knight's Brook.	Eminet.	L. H. Tower, Battle Creek.	May 24	3,000
Flower Creek.	Eckford.	V. H. Bramble, Battle Creek.	May 24	10,500
Wilder Creek.	Marshall.	S. W. Warren, Marshall.	May 24	7,500
Rice Creek.	Albion.	W. J. Claybourne, Marshall.	May 24	6,000
Mineral Springs Brook.		M. O. Reed, Albion.	May 24	1,500
Bacon Creek.	Battle Creek and others.	W. R. Skellenger, Battle Creek.	May 24	7,500
Nottawa Creek.	Athens and Newton.	F. G. Woodruff, Athens.	May 24	3,000
Pine Creek.	Athens.	J. C. Gaw, Athens.	May 24	3,000
Cass county:				
Spring Run.	Marcellus.	A. L. Maxam, Marcellus.	May 27	1,500
Conklin Stream.	Mostly Marcellus.	B. F. Mikel, Marcellus.	May 27	3,000
Broadhurst Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Tyron Creek.	Wayne and Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
Hatch Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Big Dowagiac Creek.	Decatur, Wayne, Silver Creek and Pokagon.	Fred Phillips, Dowagiac.	June 1	1,500
Gage Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	7,500
Kenny Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Hampton Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Glenwood Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Peavine Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	1,500
Pokagon Creek.	Pokagon.	Fred Phillips, Dowagiac.	June 1	3,000
South Branch of Dowagiac Creek.	Volinia, La Grange, Pokagon and Prairie Ronde.	Fred Phillips, Dowagiac.	June 1	4,500
Miller Creek.	Pokagon.	Fred Phillips, Dowagiac.	June 1	7,500
Little Dowagiac Creek.	La Grange and Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
Ireland Creek.	Silver Creek.	Fred Phillips, Dowagiac.	June 1	7,500
Lyle Creek.	Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
McOmer Creek.	Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
Silver Creek.	Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
Kinzie Creek.	Silver Creek.	Fred Phillips, Dowagiac.	June 1	3,000
Carmen Creek.	Jefferson.	Fred Phillips, Dowagiac.	June 1	3,000
Pine Lake Creek.	Wayne.	Fred Phillips, Dowagiac.	June 1	3,000
No name.	Wayne and Silver Creek.	Fred Phillips, Dowagiac.	June 1	1,500
Centennial Mill Pond.	La Grange and Howard.	Fred Phillips, Dowagiac.	June 1	1,500
Shaw Creek.	La Grange and Jefferson.	R. W. Hain, Elkhart, Ind.	June 3	3,000
Charlevoix county:				
West Branch of Sturgeon River.	Hudson.	C. H. Kimmerle, Cassopolis.	June 3	3,000
North Boyne River.	Boyne Valley.	C. H. Kimmerle, Cassopolis.	June 3	4,500
Boyne River.	Boyne Valley.	C. H. Kimmerle, Cassopolis.	June 3	4,500
Cheboygan county:				
Big Sturgeon River.	J. J. Jones, Indian River.	J. J. Jones, Indian River.	May 25	15,000
Chippewa county:				
Little Munising River.	Pickford.	Dr. J. A. Cameron, Pickford.	June 9	10,000
St. Mary's River at East Neebish Rapids.	Sugar Island.	Chas. Galster, Boyne Falls.	June 11	10,000
St. Mary's River.	Several.	Michigan Fish Commission, Detroit.	June 9	40,000
Clare county:				
Chord Creek.	Grant.	F. C. Sanford, Clare.	June 13	3,000
McKinley Creek.	Sheridan.	F. C. Sanford, Clare.	June 13	10,500
Halstead Creek.	Grant.	F. C. Sanford, Clare.	June 13	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.....	1914. 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..... Herman Vielmette, Loretto..... John Langdon, Loretto.....	May 30 May 30 May 30	5,000 7,500 7,500
Eaton county: Silver Creek..... Saudstone Creek.....	Windsor..... Oneida.....	Freeman G. French, Dimondale..... Fred L. Berry, Grand Ledge.....	June 3 June 7	7,500 9,000
Emmett county: No name..... No name..... Bear Creek.....	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..... Beittner 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
Gogebic county: Outlet of Beaton's Lake..... Outlet of Tenderfoot Lake..... Thousand Island Lakes Inlets..... Wolf Lake Outlet.....	Watersmeet..... Watersmeet..... Watersmeet..... Watersmeet.....	C. M. McDonald, Watersmeet..... C. M. McDonald, Watersmeet..... A. D. Johnson, Bessemer..... A. D. Johnson, Bessemer.....	June 1 June 1 June 1 June 1	5,000 5,000 5,000 2,500
Morrison Creek..... Sargeant'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..... Bessemer..... Bessemer..... Bessemer..... Bessemer..... Bessemer..... Bessemer.....	A. D. Johnson, Bessemer..... M. Hughton, Jr., Chicago, Ill..... M. Hughton, Jr., Chicago, Ill..... J. A. Vogtlin, Chicago, Ill.....	June 1 June 1 June 1 June 1 June 1 June 1 June 1 June 5 June 5 June 5 June 5 June 5 June 5	7,500 7,500 7,500 5,000 7,500 7,500 7,500 5,000 2,500 5,000 5,000 5,000
Black River..... Jackson Creek..... No name..... Sand Island Creek..... No name..... No name..... Gage's Creek..... No name..... Swamp Creek..... Johnson Creek..... Leamane's Creek.....	Bessemer, Wakefield and Ironwood..... Wakefield..... Wakefield and Bessemer..... Wakefield..... 20 N. 46 W..... 36 and 49 W..... 43-46..... Bessemer..... Bessemer..... Ironwood.....	H. E. Patterson, Chicago, Ill..... H. E. Patterson, Chicago, Ill..... G. S. Barber, Chicago, Ill..... W. R. Kulazcurek, Chicago, Ill..... C. E. Holly, Chicago, Ill..... Daniel P. Green, Bessemer..... Daniel P. Green, Bessemer..... Tony, Trier, Bessemer..... C. M. Fraser, Bessemer..... H. P. Rasmussen, Bessemer..... Fred Becker, Bessemer.....	June 5 June 5	5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 2,500 5,000 5,000 5,000
Hillsdale county: Branch of Raison River..... Branch of Raison River..... No name..... Emery Mills Creeks..... Silver Creek Tributaries.....	Somerset..... Somerset..... Somerset and Wheatland..... Hillsdale..... Cambria.....	Wm. Bickford, Jerome..... Wm. Bickford, Jerome..... Frank Carney, Jerome..... W. C. Kemp, Hillsdale..... W. J. French, Hillsdale.....	May 24 May 24 May 24 June 3 June 3	1,500 3,000 4,500 3,000 6,000
Houghton county: Seven Mile Creek..... Small Branch Sturgeon River..... Mud Lake Creek.....	Calumet..... Laird..... Torch Lake.....	Chas. Limbach, Calumet..... Paul D. Swift, Houghton..... Fred Olson, Calumet.....	June 10 June 10	5,000 10,000
Ingham county: Willow Creek..... Sycamore River..... Mud Creek.....	Vevay and Aurelius..... Alaidon.....	C. P. Mickelson, Mason..... C. P. Mickelson, Mason..... C. P. Mickelson, Mason.....	June 3 June 3 June 3	6,000 7,500 6,000
Ionia county: Dickinson Creek..... Perrett's Creek..... Outlet of Woodward Lake..... Outlet of Long Lake..... Dexter Creek..... Morrison Lake Creek..... Arnold Creek..... Prairie Creek with pond..... Knapp Creek..... Speer's Creek..... Nickle Plate Pond.....	Otisco..... Orange..... Orleans..... Orleans..... Boston..... Boston..... Ionia..... Ionia..... Lyons..... Lyons..... Ronald.....	Brinton F. Hall, Belding..... R. W. Benedict, Ionia..... W. H. Angell, Belding..... W. H. Angell, Belding..... J. Wallington, Saranac..... J. Wallington, Saranac..... Andrew Christensen, Ionia..... Chas. Stein, Ionia..... Dr. Weston, Muir..... Dr. Weston, Muir..... C. A. Dalziel, Muir.....	June 7 June 7 June 7 June 7 June 10 June 10 June 10 June 10 June 10 June 10 June 29	12,000 7,500 6,000 6,000 3,000 3,000 3,000 1,500 6,000 3,000 3,000
Osceola county: Van Etten Creek..... Meadow Creek..... Smith Creek..... Vanghn Creek..... No name.....	Oscoda..... Oscoda..... Plainfield..... Plainfield.....	J. H. McGillivray, Oscoda..... Wm. Elliott, Oscoda..... R. D. Brown, Hale..... R. D. Brown, Hale..... C. W. Luce, East Tawas.....	June 9 June 9 June 13 June 13 June 9	3,000 3,000 6,000 9,000 9,000
Iron county: Lower Paint River..... Paint River.....	Crystal Falls..... Crystal Falls and others.....	Arvid Bjork, Crystal Falls..... Arvid Bjork, Crystal Falls.....	June 1 June 1	5,000 7,500

Rainbow Trout Plants, 1911.—Continued.

TWENTIETH REPORT—STATE FISHERIES.

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:				
Rives 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
Cutter Creek.	Concord.	Geo. E. Beebe, Jackson.	May 23	4,500
Headquarters of Grand River.	Liberty.	Geo. E. Beebe, Jackson.	May 23	4,500
Dew Brook.	Horton.	Geo. E. Beebe, Jackson.	May 23	3,000
Leoni Creek.	Leoni.	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.	Spring Arbor.	Geo. E. Beebe, Jackson.	May 23	3,000
Snyder's Creek.	Sandstone and Blackman.	Geo. E. Beebe, Jackson.	May 23	3,000
Sandstone Creek.	Parma.	Geo. E. Beebe, Jackson.	May 23	3,000
Rice Creek.	Summit.	Geo. E. Beebe, Jackson.	May 23	3,000
Crouch Creek.	Waterloo and Grass Lake.	Geo. E. Beebe, Jackson.	May 23	4,500
Willow Creek.	Tompkins.	Geo. E. Beebe, Jackson.	June 23	6,000
Wade Creek.	Concord.	B. W. Dicer, Jackson.	May 24	1,500
Indian Springs Creek.	Hanover.	G. T. Greenshaw, Hanover.	June 3	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.	Pulaski.	L. I. Strait, Hanover.	June 3	1,500
Umfeld Creek.	Hanover and Concord.	F. W. McKenzie, Concord.	June 3	3,000
Tributary of Kalamazoo River.	Norvell.	B. F. Burgess, Norvell.	June 3	3,000
Kalamazoo county:				
Earl's Creek.	Comstock.	H. D. Streator, Galesburg.	May 24	3,000
Stouy Brook.	Schoolcraft.	W. R. Skellinger, Battle Creek.	May 24	4,500
Frakes Creek.	Portage.	A. M. Fellows, Schoolcraft.	May 27	3,000
Wells Creek.		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
Phoenix Dam.	Houghton.	N. Lenten, Phoenix.	June 10	5,000
Montreal River Meadows.	Grant, Eagle Harbor and Sherman.	John Illenich, Calumet.	June 10	7,500
Silver Creek.		Jos. Limbach, Red Jacket.	June 10	7,500
No name.		Geo. Brill, Calumet.	June 10	7,500

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

TWENTIETH REPORT—STATE FISHERIES.

TWENTIETH REPORT—STATE FISHERIES.

Rainbow Trout Plants, 1911.—Continued.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Marquette county.—Continued.			1911.	
Peshekee River.	Michigamme.	Geo. A. Newett, Ishpeming.	June 13	7,500
West Branch Escanaba River.	Ely.	Geo. A. Newett, Ishpeming.	June 13	15,000
Dishro Creek.	Champion.	E. M. Stensurd, Michigamme.	June 13	5,000
Mason county:				
Pentwater 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 G. Club, Fountain.	June 6	15,000
Mecosta county:				
Rattail 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
Butts 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.	Hinton.	W. S. Laffin, Barryton.	June 7	3,000
Seaton Creek.	Wheatland and Broomfield.	Arthur Royce, Altona.	June 7	4,500
Poney Creek.	Hinton.	P. J. Theisen, Remus.	June 7	7,500
Tompkins Creek.	Hinton.	C. W. Vining, Lakeview.	June 7	3,000
Silvester 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. McKibbon, 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, Igglestou 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:				
Brandy Creek.	Winfield.	Dr. J. Odell Nelson, Howard City.	May 27	4,500
Tributaries to Tamarack Creek.	Pierson and Reynolds.	Bur. Collins, Howard City.	May 27	12,000
Fossold Creek.	Winfield.	H. M. Gibbs, Howard City.	May 27	3,000
Whitefish Creek.	Pierson and Reynolds.	S. V. Bullock, Howard City.	May 27	4,500
Indian Creek.	Reynolds.	A. B. Potts, Howard City.	May 27	3,000
Tamarack Creek.	Winfield.	W. H. Lovely, Howard City.	May 27	12,000
Casket Creek.	Crystal.	F. Ashley, Howard City.	May 27	3,000
Black Pine Fish Creek.	Cato and others.	O. D. White, Butternut.	May 29	6,000
Tamarack Creek.		John E. Seat, Lakeview.	June 7	0,000
Other counties:				
Gurnet Creek.	Home.	L. D. Curtis, Edmore.	June 7	6,000
Grinnell Creek.	Cato and Belvidere.	Chesley Faling, Lakeview.	June 7	3,000
Tamarack Creek.	Winfield.	Lynch and Winters, Amble.	June 7	6,000
Horton Creek.	Montcalm.	J. Finch, Gowen.	June 7	6,000
Wabasis Creek.		Brinton F. Hall, Belding.	June 7	9,000
Inlets to Deane Lake.		Wm. Cains, Vestaburg.	June 7	3,000
Corben Creek.	Richland.	J. W. Johnson, Elmhall.	June 7	1,500
Blanchard Creek.	Ferris.	G. E. Brown, Riverdale.	June 7	3,000
Fish Creek.	Richland.	A. E. Clark, Hubbardston.	June 10	7,500
Rossman Creek.	North Plains.	J. B. Haskins, Howard City.	June 12	3,000
Rice Creek.	Cato.	Walter J. Smith, Howard City.	June 12	4,500
Broderick Creek.	Pierson and Reynolds.	F. D. Briggs, Langston.	June 7	3,000
West Branch Creek.	Pine.	F. D. Briggs, Langston.	June 29	6,000
West Lake Creek.	Pine.	F. D. Briggs, Langston.	June 29	6,000
Inlet of Muscalonge Lake.	Maple Valley, Montcalm and Spencer.	Jensen Bros., Trumant.	June 29	6,000
Kortes Creek.	Pine.	F. D. Briggs, Langston.	June 29	6,000
Montmorency county:				
Thunder Bay River.	Barry, Avery, Rust, Williams, Green and Alpena.	J. M. Farrier, Hillman.	June 9	22,500
North Branch of Thunder Bay River.	Montmorency and Long Rapids.	Geo. P. Crowley, Hillman.	June 9	15,000
Muskegon county:				
Crockery Creek.	Ravenna.	C. A. Stauffer, Ravenna.	May 29	9,000
Crockery Creek and tributaries.	Casnovia.	Elliott T. Scium, Detroit.	June 12	12,000
Newaygo county:				
Williams Creek.	Sheridan.	W. D. Sargeant, Fremont.	May 29	4,500
White River.	Several.	W. D. Sargeant, Fremont.	May 29	15,000
Martin Creek.	Denver.	W. D. Sargeant, Fremont.	May 29	4,500
Cedar Creek.	Several.	Wm. Pomeroy, Holton.	June 5	12,000
Brookesser Creek.	Brideton and Sheridan.	Floyd Matthews, Twin Lakes.	June 5	6,000
Crockery Creek.	Casnovia and Muskegon.	C. L. Gold, Bailey.	June 5	9,000
Crockery Creek.	Ashland and Grant.	A. J. Titus, Grant.	June 5	6,000
White River.	Wilcox.	V. S. Barton, White Cloud.	June 5	12,000
Robinson's Lake Outlet.	Sherman.	Chas. Streichhirsch, White Cloud.	June 5	1,500
East Branch Cold Creek.	15-14.	Adelbert Branch, White Cloud.	June 5	3,000
Cold Springs.	Beaver and Monroe.	Geo. R. Lyons, Hesperia.	June 5	6,000
Minersog Creek.	Several.	Geo. R. Lyons, Hesperia.	June 12	3,000
Ryan Creek.		V. A. Brunner, Howard City.	June 12	3,000
Bordan Creek.		H. N. Vandenberg, Howard City.	June 12	3,000
Little South Branch of Pere Marquette River.		Michigan Fish Commission, Detroit.	June 18	30,000
Oakland county:				
Inlet to Deer Lake.	Springfield.	O. N. Gardner, Detroit.	June 10	3,000
Headwaters of Huron River.	White Lake and Springfield.	B. T. Cooley, Clarkston.	June 10	6,000
Stoney Creek.	Oakland, Washington and Shelby.	H. W. Bradley, Romeo.	June 10	16,500
Tanner's Creek.	Oxford and Orion.	C. L. Randall, Oxford.	June 13	3,000
Hummer Creek.	Orion.	Philo Ensley, Oxford.	June 13	3,000
Thirston Creek.	Orion.	A. R. Bellaire, 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.			1911.	
Paint Creek.	Oxford.	R. Marshall, Oxford.	June 13	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	1,500
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:				
Read Creek.	Ferry and Elbridge.	Fred Wright, Hart.	May 29	4,500
North Branch of South Branch of Pentwater River.	Elbridge.	Ray Thompson, Hart.	May 29	9,000
Coldwater River.	Elbridge.	Monroe Hall, Hart.	May 29	9,000
Gene Rouse Creek.	Hart.	L. B. Mitchell, Hart.	May 29	3,000
Cedar Creek.	Elbridge.	Ralph De Vries, Hart.	May 29	6,000
Pentwater River.	Pentwater and Weare.	S. D. Montgomery, Grand Rapids.	May 29	7,500
Pentwater River.	Elbridge, Hart and Pentwater.	Rufus Skeels, Hart.	June 29	9,000
Ogemaw county:				
Detric Creek.	Churchill.	Ed. Struble, Selkirk.	May 25	9,000
Klaaking and Perkins Creeks.	Churchill.	Carscallen Bros., Selkirk.	May 25	6,000
Peach Lake Creek.	West Branch.	John Tolfree, West Branch.	May 25	3,000
Wood's Creek.	West Branch.	John Tolfree, West Branch.	May 25	3,000
Eddy Creek.	21 W. R. 2 E. and 21 W. R. 3 E.	John Tolfree, West Branch.	May 25	6,000
East Branch of Tittabawassee River.	Horton.	John Tolfree, West Branch.	May 25	6,000
Rife River.	Churchill.	Geo. Peter, Selkirk.	May 25	9,000
C. K. Eddy Creek.	Richland.	Geo. Eymar, Prescott.	June 9	4,500
Rife River.	Richland.	Geo. Eymar, 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
Rife River.	Rose, Cumming and others.	D. D. Neal, Rose City.	June 13	16,500
Otsego county:				
Headquarters of Sturgeon River.	Several.	R. H. L'Hommedien, 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
Hersey River above and below Reed City.	Lincoln, Richmond and Hersey.	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

Leelanau county:	Ocqueoc River.	Ocqueoc.	C. Atkins, Millersburg.	June 9	6,000
	Ocqueoc River.	Case.	C. Atkins, Millersburg.	June 9	15,000
	Ocqueoc River.	Belknap and Rogers.	B. G. Lark, Rogers City.	June 9	9,000
	Ocqueoc River.	Belknap and Pulaski.	B. G. Lark, Rogers.	June 9	6,000
Rosecommun county:		T. 21 W. R. 1 W. & T. 21 W. R. 1 E.	John Tolfree, West Branch.	May 25	6,000
Chapman creek.			C. P. Mickelson, Mason.	May 25	4,500
Spring Creek.					
Sanilac county:		Sanilac.	Geo. A. Burgess, Port Sanilac.	June 14	6,000
Leine or Burgess Creek.					
Shiawassee county:		Ovid.	F. D. Cleveland, Shepardsville.	June 10	7,500
Big Maple River.					
St. Joseph county:					
Klinger Lake Inlets.	White Pigeon.	Perry L. Turner, Elkhart.	May 27	3,000	
Inlet to Klinger Lake.	Burr Oak.	Perry L. Turner, Elkhart.	May 27	3,000	
Fish Lake Outlet also Outlet to Hawkins Lake into Fish Lake.	Constantine.	Jas. R. Smith, Burr Oak.	May 27	4,500	
Fawn River.	Constantine.	W. N. Harvey, Constantine.	May 27	6,000	
Mill Creek.	Florence.	W. N. Harvey, Constantine.	May 27	6,000	
Hog Creek or Praine River.	Leonidas and Waukesha.	T. E. Kline, Leonidas.	May 27	7,500	
Bear Creek.	Lockport.	F. R. Jackson, Three Rivers.	May 24	4,500	
Hog Creek.	Lockport.	F. R. Jackson, Three Rivers.	June 3	7,500	
Porigae River and tributaries.	Fabius.	F. R. Jackson, Three Rivers.	June 3	7,500	
Keers Creek		Amon 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.		Willard A. Clawson, Ypsilanti.	May 24	6,000	
Total.					2,404,500

RAINBOW TROUT PLANTS, 1911.

FINGERLINGS.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Cheboygan county: South Twin Lake.....	Koehler.....	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.....	Esbren 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 Sweetwater.....	Hon. G. M. Brown, Detroit.....	July 1	30,000
Mason county: Sauble River.....	Branch.....	C. Hagerman, Ludington.....	July 1	37,500
Muskegon county: Titabute Creek.....	Ravenna.....	A. E. Young, Ravenna.....	July 5	6,000
Cranberry Creek.....	Ravenna.....	S. L. Alberts, Ravenna.....	July 5	6,000
North Branch Crockery Creek.....	Ravenna.....	C. A. Stauffer, Ravenna.....	July 5	7,500
St. Clair county: Belle River.....	China, Cass and others.....	H. C. Radike, 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. Pomeroy, 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.	Alcoosa. 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. Wooten, 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, Benliah.	May 13 May 13	22,000 34,000
Branch county: Kenyon Lake. Lower Lake.	Sherwood. Sberwood.	Leo. E. Wood, Athens. J. C. Gau, Athens.	May 24 May 24	10,000 10,000
Cahoun county: Duck Lake. Nottawassee 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.	Finyd Brown, Marcellus.	May 27	10,000
Charlevoix county: South Arm of Pine Lake.	South Arm.	H. S. Pioney, 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. Whitish 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: Budd Lake. Elbow Lake. Big Long Lake.	Harrison. Franklin. Frost.	Geo. J. Cummings, 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

TWENTIETH REPORT—STATE FISHERIES.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Grand Traverse county: Green Lake. Long Lake. Black Lake. Round Lake. Crooked Lake. Spider Lake. Rennie Lake. Blue Lake. Hogsback Lake. Fife Lake.	Green Lake. Union. Union. Union. Union. Union. Union. Union. Paradise. Fife Lake.	H. H. Olds, Benton. Kingsley Sportsmen's Club, Kingsley. Kingsley Sportsmen's Club, Kingsley. Fred Bechstein, Fife Lake.	May 8 May 12 May 12 May 12 May 12 May 12 May 12 May 12 May 12 May 24	40,000 20,000 18,000 16,000 20,000 20,000 18,000 18,000 14,000 45,000
Ionia county: Jordan Lake.	Odessa and Woodland.	Edwin Shellhorn, Lake Odessa.	May 31	30,000
Jackson county: Spring Arbor Lake. Gillett's Lake. Brill's Lake. Big Portage Lake. Brown's Lake. Ackerson Lake. Wolf Lake. Vandercook's Lake.	Spring Arbor. Leoni. Leoni. Henrietta and Waterloo. Summit. Napoleon. Napoleon and Leoni. Summit.	Geo. E. Beebe, Jackson. Geo. E. Beebe, Jackson.	May 23 May 23 May 23 May 23 May 23 May 23 May 23 May 23	7,500 15,000 7,500 15,000 7,500 7,500 15,000 7,500
Kent county: Schram and Round Lakes.	Oakfield.	Freeman Addis, Harvard.	May 29	10,000
Lake county: Crooked Lake. Sand Lake. Sable Lakes, Four.	Cherry Valley. Elk and Strohach. Elk.	Andrew Loree, Nirvana. Earl Fairbanks, Luther. H. O. Thompson, Peacock.	June 6 June 6 June 6	20,000 20,000 30,000
Leelanau county: Glen Lake. Glen Lake.	Several. Several.	D. H. Day, Glen Haven.	June 13 June 13	40,000 40,000
Lenawee county: Round Lake. Goose Lake. Devil's Lake. Evans Lake.	Rollin. Woodstock. Rollin and Woodstock. Franklin.	W. E. Alchin, Townley. W. J. Baner, Cement City. W. J. Hampton & Son, Manitou Beach. Willard Mitchell, Tipton.	June 3 June 3 June 3 May 24	14,000 14,000 20,000 14,000
Montcalm county: Crystal Lake.	Crystal.	C. W. La Du., Crystal.	May 29	30,000
Montmorency county: Wolf Lake. Long Lake.	Albert Hillman.	Geo. F. Sachs, Lewiston. E. W. Conner, Hillman.	May 11 June 6	20,000 20,000

TWENTIETH REPORT—STATE FISHERIES.

Lake Trout Plant, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Muskegon county:				
Wolf Lake.	Eggleson.	E. D. Magoon, Muskegon.	May 29	16,000
Big Blue Lake.	Blue Lake.	E. D. Magoon, Muskegon.	May 29	16,000
Big Blue Lake.	Blue Lake.	Hon. Fred J. Russell, Hart.	May 29	16,000
Newaygo county:				
Diamond Lake.	Lincoln.	Capt. W. H. Bigelow, Chicago, Ill.	June 5	16,000
Long Lake.	Sherman.	Jacob Kemperman, Fremont.	May 29	16,000
Robinson's Lake.	Sherman.	Chas. Streichthirsch, White Cloud.	June 5	10,000
Oakland county:				
Maceday Lake.	Waterford.	C. C. Craigie, Waterford.	June 10	20,000
Cass Lake.	West Bloomfield.	E. E. Sweet, Detroit.	June 10	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.	Wright.	Dr. E. O. Cilley, Conklin.	May 29	14,000
Spring Lake.	Spring Lake.	Samuel Falls, Spring Lake.	May 29	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. E. 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
Jones Lake.	Hope.	Aaron Chandler, Delton.	May 26	6,000
Mud Lake.	Hope.	Orvid Chamberlin, Cloverdale.	May 26	6,000
Twenty-one Lake.	Hope.	Pete Kingsbury, Cloverdale.	May 26	6,000
Horseshoe Lake.	Hope.	Milan Gibson, Cloverdale.	May 26	6,000
Long Lake.	Hope.	B. Dickinson, Hastings.	May 26	6,000
Head Lake.	Hope.	H. Dickinson, Hastings.	May 26	6,000
Long Lake.	Hastings.	Scott Mc Intosh, Quincy.	May 26	4,000
Belson Lake.	Rutland.	Harry Blake, Hastings.	May 26	4,000
Thornapple River.		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. McOmber, Berrien Springs.	May 25	4,000
St. Joseph River and Power Pond.	Oronoko.	G. O. McOmber, Berrien Springs.	May 25	6,000
Clear Lake.	Buchanan.	A. A. Worthington, Buchanan.	May 25	4,000
Madron Lake.	Buchanan.	J. E. 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:	Ovid.	The Branch County Rod & Gun Club.		
Coldwater Lake.	Coldwater.	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:				
Nottawassee 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
Maynard Lakes.	Eckford.	F. I. Colgrave, Marshall.	May 24	4,000
Rice Creek.	Marengo.	C. E. Gauss, Marshall.	May 24	4,000
Kinney 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. R. Culver, Ceresco.	May 24	4,000
Ceresco Pond.	Battle Creek.	H. Lehman, Ceresco.	May 24	4,000
Lake Gogua.	Marshall.	Ben D. Brockett, Battle Creek.	May 24	4,000
Kalamazoo River Millpond.	Marshall.	F. R. Moses, Marshall.	May 24	6,000
Cass county:				
Magician Lake.	Silver Creek.	F. H. Codding, D. D. S., Dowagiac.	May 25	12,000
Miller Lake.	Marcellus.	C. S. Jones, Marcellus.	May 26	4,000
Shovehead 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 Sheehorn, Lake Odessa.	May 27	6,000

Kalamazoo county:				
Long Lake.	Portage.	Henry Waruf, Kalamazoo.	May 25	4,000
Kimball 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 Benstra, Oshkosh.	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, Oshkosh.	May 25	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. L. 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
Notawa Creek.	Leonidas.	J. L. Damon, Leonidas.	May 24	4,000
Sand Lake.	Notawa.	M. Bowserox, Notawa.	May 24	4,000
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 St. Joseph.	Claude Felker, Three Rivers.	May 26	6,000
Rock River Pond.	Fabius.	C. L. Frey, Three Rivers.	May 26	6,000
Corey Lake.		W. Pulver, Three Rivers.	May 26	6,000
Van Buren county:				
Eagle Lake.	Paw Paw.	Ben Desenbury, 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 Hulng, Kalamazoo.	May 26	6,000
Total.				400,000

TWENTIETH REPORT—STATE FISHERIES.

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. Malott, 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: Beaumont Lake. Lake Ruth. Bella Lake.	Spurr. Spurr. Spurr.	Peter Trndell, Jr., Negaunee. Peter Trudell, Jr., Negaunee. Silver River Rod & Gun Club, L'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, Beulah. 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
Clark county: Fisher's Lake.	Hatton.	G. A. Kleman, Chicago, Ill.	July 3	1,500

TWENTIETH REPORT—STATE FISHERIES.

Clinton county: Park Lake.	Bath.	Myles F. Gray, Lansing.	June 23	1,500
Crawford county: Portage Lake. Twin Lakes. K. P. Lake. Shoepack Lake. Portage Lake.	Grayling. Maple Forest. Maple Forest. 26 N. R. 4 W.	C. P. Mickelson, Mason. Marie Hanson, Grayling. Geo. F. Owen, Lovells. T. E. Douglas, Lovells. Hon. Chas. Blair, Lansing.	June 24 June 24 July 7 July 7 July 27	3,000 3,000 800 800 375
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. Big Umicie Lake. Little Umicie Lake. Silver Lake. Boardman Lake.	Grant and Long Lake. Union. Union. Garfield.	R. B. De France, Kingsley. R. B. De France, Kingsley. R. B. De France, Kingsley. Wm. Saunders, Traverse City. Mich. Fish Commission, Detroit.	June 13 June 13 June 13 June 13 June 27	4,000 4,000 2,000 4,000 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. Pine Lake. Hughes Lake. Park Lake. Dobie Lake.	Meridian. Meridian. Ingham. Meridian. Alaledon.	J. Edward Roe, Lansing. J. Edward Roe, Lansing. Hon. G. E. Sanders, Mason. Hon. G. E. Sanders, Mason. Hon. G. E. Sanders, Mason.	June 14 Aug. 24 June 23 June 23 June 23	4,000 500 1,500 1,500 1,500
Jackson county: Stony Lake. Pleasant Lake. Fay Lake.	Napoleon. Henrietta. Norvell.	M. E. Russell, Napoleon. C. M. Norton, Lansing. Hon. L. W. Watkins, Norvell.	June 23 June 23 June 23	1,500 2,000 2,000
Keweenaw county: Lac La Belle. Gratiot Lake.	Grant.	Jos. W. Selden, Calumet.	July 14	800
Lake county: Sable Lakes. Big Star Lake.	Grant.	Wm. Lyon, Calumet.	July 14	1,000
	Elk.	Wm. Utter, Peacock. Elmer Smith, Baldwin.	June 21 June 21	3,000 4,000

TWENTIETH REPORT—STATE FISHERIES.

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Small Mouth Black Bass, 1911.—Concluded.

County and name of water.	Township.	Applicant or depositor.	Date.	Number.
Leelanau county: Glen Lake. North Bar Lake. Carp Lake. Lime Lake. Leg Lake.	Glen Arbor, Empire and Kasson Empire. Leland, Centerville and Solon. Cleveland. Leelanau.	D. H. Day, Glen Haven. James Dailey, Empire. Albert Mesfay, Provenport. Elmer Billman, Cedar. Gilman M. Dame, Northport.	July 6 July 6 July 6 July 6 July 20	1,000 750 1,000 1,000 475
Lenawee county: Wampler's Lake. Silver Lake. Round Lake.	Cambridge and Norvell. Woodstock. Rollin.	Hon. L. W. Watkins, Manchester. W. H. Harris, Clement City. W. E. Alchin, Townley.	June 28 July 1 July 1	2,000 1,500 750
Mackinaw county: Brevoort Lake.	Brevoort.	Wm. Massey, Jr., Allenville.	July 12	800
Marquette county: Pelleissiers Lake. Strawberry Lake. Lake Michigamme. Gibson Lake. Sundstrom Lake. Fence Lake. Silver Lake.	Sands. Sands. Michigamme. Champion.	Hon. W. S. Ewing, Harvey. Hon. W. S. Ewing, Harvey. Geo. A. Newell, Ishpeming. Geo. A. Newell, Ishpeming. Geo. A. Newell, Ishpeming. Geo. A. Newell, Ishpeming. Geo. A. Newell, Ishpeming.	July 12 July 12 July 12 July 12 July 12 July 12 July 14	800 600 1,000 400 600 400 800
Mecosta county: Rogers Pond. Chippewa Lake. Chippewa River.	Mecosta, Austin, Colfax and Big Rapids. Chippewa Union.	M. E. Darrah, Big Rapids. Chippewa Park Assn., Big Rapids. Palmer & Taggart, Mt. Pleasant.	June 14 June 19 Aug. 2	3,800 3,000 1,000
Monroe county: River Raisin.	Eureka.	C. W. Kimmerle, Monroe.	July 15	1,000
Montcalm county: Baldwin Lake.	Eureka.	R. C. Ecker, Greenville.	June 13	3,000
Muskegon county: Big Blue Lake. White Lake.	Blue Lake. Montague.	Hon. F. J. Russell, Hart. John Hall, Montague.	June 13 June 10	4,000 4,000
Oakland county: Crawford Lake. Green Lake. Cass Lake. Deer Lake.	Bloomfield. West Bloomfield. West Bloomfield. Indenpendence.	Hugh Chalmers, Detroit. W. E. Flander, Orchard Lake. E. E. Sweet, Detroit. Oliver N. Gardner, Detroit.	July 26 July 26 July 26 July 26	750 750 600 600
Osceola county: Hewitt Lake. Big Lake. Strawberry Lake.	Golden. Golden. Golden. Golden. Pentwater.	David A. Tarr, Arcadia. L. P. Munro, M. D., Hart. E. A. Post, Mears. E. A. Post, Mears. C. F. Lewis, Pentwater.	June 10 June 10 June 10 June 10 June 10	3,000 2,000 3,000 3,000 3,000
Ottawa county: Spring Lake. Cove Lake or Stern's Bayou.	Burdette. Orient. Cedar.	Hon. J. M. Perry, Tustin. S. F. Postal, Evart. Wm. F. Ramsey, Evart.	June 10 June 14 June 14	2,000 3,000 2,000
Presque Isle county: Grand Lake.	Spring Lake. Robinson.	Samuel Falls, Spring Lake. Hon. W. H. Clark, Grand Haven.	June 13 June 13	4,000 3,000
Saginaw county: Saginaw River. Saginaw River.	Presque Isle and Krakow. Saginaw. Several.	Jos. E. Kauffman, Presque Isle. W. J. Hunsaker, Saginaw. W. S. Linton, Saginaw.	July 31 Oct. 12 July 7	900 450 2,000
Van Buren county: Three Mile Lake.	Paw Paw.	Wm. M. Kirkwood, Paw Paw.	July 7	1,000
Total.				156,100