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Review of Michigan Trout Fishing

by

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Michigan offers a wide variety of trout fishing: small spring-fed brooks and deep pothole lakes where live the highly colored brook trout, larger rivers, some fishable only by boat or by the knowing wader and in which the wily brown and the acrobatic steelhead-rainbow may test the angler's skill and strength; the Great Lakes and some of the large, deep inland lakes which provide "deep sea" trolling for big, toothsome "mackinaws".

To most anglers streams have the greatest appeal. They like the press of the current against their waders, the problems presented by each new pool and the anticipation of what may be around the next bend.

The experienced angler is generally satisfied with Michigan trout fishing although he would like to see it improved. The kicks come mostly from the beginner who seems to think that when he buys his license and some fishing tackle and travels several hundred miles north he is entitled to his limit of trout on every trip. Trout fishing requires fully as much or more knowledge and skill than golf, and the beginner should not expect to equal or even approach the score of the expert in either sport. Creel census figures from eight representative streams show the following percentage of anglers who had from 0 to 15 trout at the end of the day's fishing.

Number of trout	0	1	2	3	4	5	6	7	8
Percentage of anglers catching the above number	50	14	10	7	5	3	2	2	1

9	10	11	12	13	14	15
1	1	1	1	1.5	1.5	1

(Figures rounded off to nearest unit so that the total does not check exactly).

In the face of such figures one might wonder why trout fishermen persist year after year and why each season finds new recruits to the sport. It can't be the number of fish he catches! Even the expert who is lucky enough to live in the north country or who can get up frequently during the season has his blank days and encounters periods of slow fishing, but his chances of being on the stream when trout are feeding are much better than average. Stream trout fishing is an intriguing challenge to the fisherman's patience, persistence and skill; he is always hoping "to strike it right" or hook the big one that won't get away.

Weather conditions affect trout fishing more than any other factor, especially on streams. High, discolored water coupled with low temperature makes for poor catches and discontented fishermen. This was a major reason for the Commission's recommendation to the Legislature that the opening date be changed from the last Saturday in April to the second Saturday in May and that the season be extended to the second

Sunday in September. If streams now open to fall rainbow fishing (lower portions of Platte, Pere Marquette, Au Gres, Carp, etc.) were left open throughout the year for the taking of this migratory lake run species which is not now being adequately harvested and which, in the proposed season, would be taken in even smaller numbers, there would probably be little objection from fishermen. The violator with the spear, however, would not like the legal competition and surveillance he would receive from anglers.

The summer of 1946 was almost ideal for stream trout fishing. It was relatively cool and dry after a cold, wet spring. Most waters produced better than average fishing. The Rifle River Area (Grousehaven) where complete records of the fisherman's catches are taken yielded 1038 trout as compared with 418 in 1945 when a series of heavy rains in early summer kept the streams high and discolored most of the season. Stocking was not a factor either year as no trout had been planted on the area and the number of trout fishermen was nearly the same each year.

The frequency and quality of pools in a stream is a factor recognized by all trout fishermen. Latest figures from an experimental section of Hunt Creek show an average increase of 120 percent in total yield and 35.5 percent in the average catch per hour in spite of a 64.3 percent increase in fishing pressure in five years after creation of 20 new pools as compared with the figures for three years before improvement. Earlier studies have shown that food and spawning grounds can also be made better by properly designed structures. Perhaps of

even greater importance in some areas is the restoration of stream-side vegetation and the checking of soil erosion.

Environmental improvement as applied to trout streams was first initiated on public waters in Michigan about 1927. Experiments to test its value and to determine proper methods constituted one of the first projects undertaken by the Institute. Before sufficient testing was completed the C.C.C. took over stream improvement and although some good was accomplished, much of this work was done without adequate planning and supervision. Since the legislative act of 1939 which provided funds for stream and lake improvement, more testing of structures has been in progress in various parts of the state. Now that labor and equipment are becoming available the Department expects to greatly expand this activity in 1947. Work will be carefully planned with assistance from local sportsmen's groups and we are confident that by installing the more permanent and more effective structures developed during the war years, real and lasting benefit will result from this activity. By increasing the number of homes (pools) for trout and the food supply, fishermen will have more places to fish and the trout will be better fed and more numerous.

Stream stocking of legal-sized trout just before and during the open season to supplement the catch of wild trout will be continued this season with the goal of one million fish of this size for 1947. This figure was not quite reached in 1946 and may not be possible of attainment without expansion of winter holding pond facilities which constitute a bottle-neck to legal trout production. This is because

most of the trout must be carried over at least one winter in ponds fed by spring water in order to attain legal size. Before a major expansion of our trout stations is undertaken, the Department wants every angler to know what it costs to provide "put and take" fishing by planting legal-sized trout and just what part the hatchery plantings play in contributing to his sport. For this reason all legal-sized trout to be planted in 1947 have been marked by clipping the dorsal or top fin. This year any observant fisherman will know whether his trout are wild or from hatchery stock. The Department wants each fisherman to keep a record of his catch this season and invites comments on the program.

The cost of a legal-sized trout planted in a stream has been variously estimated from twenty cents prior to the war to thirty or thirty-five cents at present prices for fish food, labor, transportation and other items involved. Carefully conducted experiments (68 separate plantings of tagged or fin-clipped trout in sections of 11 different streams) have shown that on the average about one of four brook or rainbow trout and one of eight brown trout planted at a size of 7 inches or larger is recovered by anglers. This means that the actual cost of a hatchery trout in the fisherman's creel is from $1.40 to $2.80 at a base price of $.35. It should be obvious that if the present program is to be maintained or expanded the license fee must be increased.

About one hundred and fifty small lakes, mostly in the northern part of the state have been given trout classification and are open to

fishing only during the trout season. Also by Commission action the daily limit on such lakes has been set at ten trout. The reason for this lower creel limit is that the smaller trout lakes are heavily fished and the stock is depleted too rapidly with the higher limit. It was hoped that this regulation would spread the catch over a larger number of anglers. No objection has come from the trout fishermen because of this action; in fact, many feel that ten is too many and that five would be a better figure.

Trout from lakes are usually larger, more highly colored and heavier for their length than stream trout and are fully as gamy. Many of these lakes are wild and undeveloped and some are still rather difficult of access.

In early days trout lakes were "discovered" by a fish culturist, conservation officer or sportsman who thought they "looked like trout lakes". A few cans of fingerlings were packed in and planted with great expectation. Some plantings succeeded; some failed. Present day fish management takes most of the guesswork out of the process of establishing new trout waters. Lakes are being sounded and mapped and the deeper ones or those having spring feeders are tested late in the summer for temperature, oxygen content and growth rate of fish present. If the bottom waters remain cold and contain at least four parts per million of oxygen and if any warm water fish present are not stunted, a trial planting of fingerling trout is recommended. If stunted panfish are present in otherwise suitable lakes, these must first be removed by chemical means before the trout will thrive. Once trout

are established, annual plantings of fingerlings serve to maintain very satisfactory fishing at relatively low cost. If good spawning streams are present (trout lakes in Michigan generally lack them) natural reproduction is usually adequate.

Unfortunately, fishermen are not always careful in buying or collecting minnows and may dump their buckets in the lake at the end of the day's fishing. A number of fine trout lakes have been ruined by this practice which was the reason that the Conservation Commission has prohibited the use of live minnows in lakes now free of objectionable competitors.

How many of these small lakes are adapted to trout, no one knows. Each year new ones are added to the list through surveys. The program of checking and chemical restoration was nearly stopped by the war, but this summer it will be resumed in a larger scale than ever before. Conceivably, Michigan may have several hundred more of these little lakes to delight the sedentary angler and perhaps relieve the pressure on the streams.

Another "discovery" of importance to trout fishermen has been that many of our larger lakes, even some in the southern part of the state, can produce trout fishing if properly stocked. These are of the deep, clear-water type where fishing for bass, bluegills and other warm-water species has generally not been too good in spite of heavy plantings of these species. Water deeper than forty feet seems to be little used by most lake fish except trout, ciscoes, whitefish and smelt. Planting trout in such lakes is like filling a vacant room in a house.

Although some competition with other species for food may occur in spring and fall, there is little evidence as yet that bass and bluegill fishing is affected by trout planting. Of course we must first be sure that the "vacant room" (the deep, cold part of the lake) has sufficient oxygen in late summer, but this is not a long or very difficult job if the lake has been mapped.

In such lakes, for example Birch Lake, Cass County and Swains Lake, Jackson County, annual plantings of yearling rainbow trout have resulted in returns of about thirty percent, contributing to the catch over a period of about three years in the form of large, fat trout which give a real thrill to anglers who may never have caught trout before. This is another program which will see some expansion as new waters are mapped and tested. Brook trout have generally given poor results in such lakes but brown trout are showing evidence of value, perhaps equal to that of rainbows and will be tested further.

Some of the larger, deeper lakes such as Crystal Lake, Benzie County, and Higgins Lake, Roscommon County have yielded fine returns from experimental plantings of two-year-old lake trout. It seems likely that this type of fishing can be extended.

No discussion of Michigan trout fishing would be complete without mention of the latest war-time development--the special regulation trout pond. To increase the chances for trout fishing in the southern part of the state several former bass and bluegill rearing ponds fed by spring water were stocked with trout and opened to limited fishing under the following rules: Fishing only during the trout season from one hour

before sunrise to one hour after sunset, artificial flies only, no boats or rafts to be used and a daily limit of two trout not less than eight inches. A simple catch record report is also required in order to learn the amount of use of the ponds and the rate of trout removal. In the season of 1946 the total hours of fishing recorded for the seven ponds was 5,295 or 123 man hours of fishing per acre, which was heavy use even though gas rationing was over and travel to the north was again possible. One pond was built last year and two more are to be completed early this spring. This will give a total of ten ponds of this type, all in southern Michigan. On several trout ponds in the north, lower limits will be imposed this coming season in order to spread the catch over a larger number of anglers.

Those who have made a life-time study of trout and trout fishing in various parts of the country pretty generally agree that even with full restoration of the environment and by the use of all other known aids to production, satisfactory public trout fishing cannot be maintained in the future on heavily used waters unless more anglers learn to fish for sport and not meat.

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Captions for Illustrations

1.--Fishing for trout at Birch Lake, Cass County, on opening day (May 15 for this experimental lake).

2.--Normal and dorsal fin-clipped rainbow. All legal-sized trout planted in streams in 1947 will have the dorsal fin missing or only partially regenerated.

3.--A 6 pound, 2 ounce rainbow trout from Gull Lake, Kalamazoo County. Study of the scales showed it to be in its fourth year of life. Photo by Miles D. Pirnie. Courtesy of W. K. Kellogg Bird Sanctuary