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EXAMINATION OF SEVERAL OSCODA COUNTY LAKES THAT ARE

POSSIBLY SUITABLE FOR RAISING BAIT MINNOWS

by

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In the early summer of 1944, Conservation Officer Vern Dockham of Mio (Oscoda County) made a request that the Institute examine several lakes in Oscoda County. The lakes that Mr. Dockham had in mind were all small, shallow lakes that did not contain game fish and were therefore not being utilized by the public. All of the lakes are state owned. Mr. Dockham believed that it might be possible to utilize these lakes for the raising of minnows, thereby relieving the present critical bait minnow shortage in Oscoda County.

On September 4, 1944, we had an opportunity to visit several of these lakes in Oscoda County with Mr. Dockham. Mr. Dockham should be complimented upon his keen interest in fish conservation and for bringing this matter to our attention.

Three Lakes (T. 25 N., R. 4 E., Section 17). Three Lakes, as the name implies, is composed of three separate lakes. The largest lies just a little north of the other two and has an area of about 3 acres and a maximum depth of about 4 to 6 feet. The other two have areas of about one-half an acre each. The lake farthest west is a bog type lake with an extremely soft bottom and a depth of about 2 feet, while the lake to

the east is probably about 4 or 5 feet deep. The north and east lakes are connected during high water but aside from this none of the lakes have either an inlet or an outlet. The water levels are subject to fluctuation according to the amount of precipitation and evaporation. The north and east lakes have sandy shores and mucky bottoms while the lake to the west is surrounded by bog varying in thickness from 1 to 2 feet. It is possible to seine all three lakes. Water lilies, rushes, chara and potamogetons are present in all. Red bellied dace are found in considerable numbers in the north and east lakes. No other species were taken. The lake to the west does not contain any fish. In one shore haul of a 25 foot seine in the north lake we took approximately 500 red bellied dace.

Bird Lake (T. 25 N., R. 2 E., Section 22). Bird Lake has an area of between 3 and 4 acres and is probably not over 3 to 4 feet deep. There is neither an inlet nor an outlet and the lake is subject to considerable fluctuation in water level. A dense growth of chara covers almost the entire bottom but rushes, potamogetons and smartweeds are also present. The bottom is composed of fibrous peat over sand. The bottom is rather soft but it is possible to wade it. If minnows are planted in this lake it may be possible to remove them with seines or by dip nets operated from a boat.

Gopher Lake (T. 25 N., R. 2 E., Section 15). Gopher Lake has an area of approximately two acres and occupies the basin of a pothole. It is probably not over 5 or 6 feet deep. Chara is the dominant type of vegetation but potamogetons and smartweed are also present. Cover in the form of deadheads is plentiful around the shore. The entire shore is composed of sand with muck over sand in water over a foot in depth. The lake is subject to considerable fluctuation. We did not attempt to seine

this lake because we had to walk in over one-quarter of a mile. (There is a road, now blocked with wind falls, that leads to within 100 yards of the lake.) Observations that were made in cruising the entire shore line indicate that fish are not present in this lake. Mr. Dockham reports that years ago perch and bluegills were taken in the lake. Apparently the lake has not been fished for several years because two rafts (still in good shape) were observed on shore way above the present water line and weeds were growing up between the logs.

RECOMMENDATIONS

After examining these lakes the writers are agreed that they be made into minnow lakes as Mr. Dockham suggested. We believe that these lakes could be utilized to better advantage as experimental minnow lakes, at least for the present, rather than for game fish. If these lakes prove satisfactory for this purpose it may be possible that many lakes throughout the state could thus be used for this purpose, thereby relieving the critical shortage of bait minnows. Our reasons for this decision are as follows:

1. These lakes are all probably subject to occasional (if not annual) winter kills.
2. All are small lakes and at best would not produce many game fish and therefore would not provide much fishing.
3. The fact that it takes three to four years to produce a legal game fish (example bluegills) while minnows would reach bait size in from one to two years.

Three Lakes. Red bellied dace are already present in considerable numbers in the north and east lakes. At least 50 red bellied dace should be planted in the west lake sometime in the early spring of 1945 in an effort to establish the species.

Bird Lake. Bird Lake should be stocked with at least 50 red bellied dace obtained from Three Lakes and with at least 50 golden shiners sometime during the early spring of 1945. There are plenty of spawning places in this lake for these two species and it will be interesting to determine how well this combination of minnows does in this lake.

Gopher Lake. Gopher Lake should be stocked with at least 50 golden shiners sometime during the spring of 1945.

Bird and Gopher Lakes should be kept closed to the taking of minnows during 1945 (opened in 1946) in an effort to build up a brood stock and to give us a chance to make additional checks on these lakes and to determine whether the lakes winter kill. Three Lakes could be opened to the taking of minnows in 1945 without restrictions. It is recommended that when possible a minnow^{lake} classification be considered which would open them to the taking of minnows at any time of year. Future investigations may indicate that some restrictions should be placed on these minnow lakes but at present we believe that minnow dealers will not use these lakes for the taking of minnows except in times of critical shortage which usually occurs each year during late July and August. It would be desirable if someone from the Institute could make a check on these lakes in late August in 1945, and in May and August of 1946. It would be appreciated if Conservation Officer Vern Dockham would keep a close check on these lakes in order to determine the extent to which they are used by minnow dealers.

It is entirely possible that these lakes might be subject to winter kill. This is especially true of Bird and Gopher Lakes and possibly of the west lake in the Three Lakes Chain. If this occurs the lakes could again be restocked providing winter kill is not an annual occurrence, and if it is, growth may be rapid enough to produce bait sized minnows in one season.

It is also recommended that each of these lakes be mapped and sounded in order that we may have a more accurate idea of the acreage and depth of each lake. It would also be valuable to conduct a routine chemistry during late August on each lake.

Mr. Vern Dockham also gave us the names of other lakes in Oscoda County which have possibilities as minnow lakes. We did not have time to check these lakes but it is recommended that a routine inspection be made of these lakes in 1945. These lakes are listed as follows:

Hughes Lake, T. 25N., R. 4E., Section 2
Church Lake, T. 25N., R. 2E., Section 16
Dutch Lake, T. 27N., R. 4E., Section 17
Muskrat Lake, T. 27N., R. 2E., Sections 6,7,8
Indian Lake, T. 27N., R. 2E., Section 32
Mack Lake, T. 25N., R. 3E., Sections 4,9,10

Mack Lake, listed above, has been mapped by the U. S. Forest Service. It has an area of 174 acres, a shoreline that is 4.8 miles in length and a maximum depth of just a little over 5 feet. The Forest Service has developed both a picnic ground and a camp ground on this lake. The lake is fairly well developed having at least 7 cabins plus a Ranger Station and a Camp Fire Girls Camp.

According to Mr. Dockham, the lake produces little or no fishing and is filled with stunted perch and bluegills. Mr. Dockham believed that it might be possible to open this lake to the taking of minnows. (Large numbers of minnows were observed in Mack Lake by the writers.) Mack Lake should not be classified as a minnow lake until we have had an opportunity to make an inventory. It is possible that if stunted fish are present, that they could be controlled by introducing other species of fish. It is believed that largemouth bass (if not already

present) and/or northern pike may do well in a lake of this type and would be able to control the bluegill and perch populations. It is therefore recommended that Mack Lake be inventoried as soon as convenient.

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