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cc: Education-Game
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COOPERATING WITH THE
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REPORT NO. 958

PARTIAL FISHERIES SURVEY OF LOST LAKE, OGEMAW COUNTY

by

W. F. Carbine and G. N. Washburn

A request for a partial survey of Lost Lake (T. 21 N., R. 3 E., Section 23), Ogemaw County, was brought to our attention by Mr. H. L. Peterson, District Supervisor of Fisheries Operations, when interested anglers asked that this lake be stocked with trout. We examined the lake on September 5, 1944.

This lake is situated in the southeast corner of the county. It can be reached by the county road that joins Greenwood with Prescott, and taking the township road which skirts Skidway and Bush lakes.

In so far as we were able to ascertain, all of the land surrounding this lake is privately owned. Mr. Fred Callahan who lives on the lake is planning to rent boats another year. At the present time the public is not prohibited. Only three boats were counted on the lake and these were private boats.

We are indebted to Mr. Fred Callahan for the use of his boat and for information about Lost Lake.

Lost Lake is an oval-shaped body of water with a regular shoreline. The drop-off from shore to about 10 to 12 feet is abrupt. The greatest depth was found to be 26 feet in about the center of the lake. Although the lake has the appearance of a pothole lake it is not surrounded by high banks. The shores are wooded and marshy. Many deadheads are present around the lake.

The surface area of the lake was estimated to be about five acres. There is no inlet but in times of high water Lost Lake is connected with Feeding Ground Lake.

The water of Lost Lake is clear and visibility probably extends to a depth of 8 or 10 feet. The bottom appeared to be almost exclusively of fibrous and pulpy peat.

Temperatures and chemical conditions are summarized in the following table.

Depth (feet)	Temperature °F.	Oxygen p.p.m.	Alkalinity (p.p.m.)		pH
			ph-th	MO	
Surface	71	8.6	0.6	200	8.1
10	70				
15	69.5				
17	68.5				
18	66	5.7			
19	63.5				
20	61.5				
21	59.6				
22	58.0				
23	56.3	0.8	0.0	280	7.2
24	55				
25	54.2				
26	53.2				

This information shows the presence of a thermocline from 17 feet to the bottom of the lake. The temperatures in this zone are cold, but oxygen is not sufficient to maintain fish life under about 20 feet. This would mean that during the hottest days of the summer there would just be a narrow band of water (17 to 20 foot depths) that would be suitable for trout.

The water is alkaline (pH 8.1) and very hard (M.O. range - 200 to 280 p.p.m.)

Chara was very abundant in the shallow water and was the only aquatic plant observed.

The following species of fish were reported for Lost Lake: bluegills, largemouth bass, perch (few), northern pike (scarce).

Management Proposals

Because of the limited amount of water available for trout when this examination was conducted it is recommended that one or two checks on temperature and oxygen be made on Lost Lake in mid-July and mid-August next year (1945). At the present time we would hesitate to recommend a planting of trout for this lake. If further examination reveals that the temperature of the upper waters (above the thermocline) remains fairly low during the hottest part of the summer, it would then be possible to stock a limited number of trout. Oxygen determination during July and August may reveal that the oxygen does not disappear from the deeper water until late in August at which time the surface temperatures may be low enough to permit trout to occupy all of the water above the thermocline.

It is also recommended that a good series of scales be obtained from all species of fish present in Lost Lake. No planting of bluegills, largemouth bass, perch or northern pike should be made until growth determinations can be made.

INSTITUTE FOR FISHERIES RESEARCH

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