

see report No. 589

Original: Fish Division
cc: Education-Game
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SUPPLEMENTARY REPORT 589 A.

MANAGEMENT POLICY FOR EAST TWIN LAKE,
MONTMORENCY COUNTY, MICHIGAN

by

Walter Crowe

Further consideration of the problems in connection with the fishing in East Twin Lake makes it necessary to formulate a definite management policy. Management suggestions were made in Report 589. Subsequent investigation has revealed that fishing is not good. Also, there has now come to hand evidence, which, although not as yet conclusive, indicates that the walleye reproduces naturally in East Twin Lake, at least in limited numbers. If this be true, it becomes evident that the walleye is there to stay, and the "pike lake" classification should remain.

Undoubtedly, a lake will support a greater population of non-fish-eating species than it will of such species as the northern pike and the walleye. Examination of scales from East Twin Lake fishes has revealed that the smallmouth bass, pumpkinseed, and rock bass grow rather well. The growth of the walleye is also good, (Report 589). It is possible that the walleye's predation, which is probably considerable, has a beneficial effect on the growth of the Centrarchid species. Since the growth for all species in the lake is at least average, and since the food supply (minnows, crayfish, bottom organisms, and last but not least,

young of game species) is adequate, it might be well to add another game species which, presumably, would do well. East Twin Lake is well suited to the pumpkinseed, judging from the growth of this species in the lake, and there is every reason to believe that the bluegill would do equally well. The bluegill is more prolific and, if successfully introduced, should increase materially the number of desirable fish available to the angler without noticeably affecting the economic balance of the lake. The following management proposals are drawn up.

1. The designation should remain unchanged. The amount of harm done the Centrarchid species by being exposed to fishing during the season when they may not be legally kept is not especially significant. Since the walleye is spawning successfully, at least in limited numbers, this species should not be stocked before 1944. It is at present the dominant species in the lake and is likely to remain as such for some time, even if not stocked. Further attempts to locate spawning areas, supplemented by age determinations, should clarify its position in the lake's economy.

2. About 2,500 bluegills (preferably adults) should be introduced immediately in an attempt to establish the species in the lake. The success of this planting should be carefully followed.

3. Further efforts to learn the success of the Lake Huron smallmouth introduced into the lake (Report No. 728) should be made, and another planting of these should be made in the summer of 1942.

INSTITUTE FOR FISHERIES RESEARCH

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