

Original: Fish Division

cc: Education-Game

Mr. Harold Hughes - 11/15/44

Mr. Carbine

Institute for Fisheries Research

INSTITUTE FOR FISHERIES RESEARCH

DIVISION OF FISHERIES

MICHIGAN DEPARTMENT OF CONSERVATION

COOPERATING WITH THE

UNIVERSITY OF MICHIGAN

ALBERT S. HAZZARD, PH.D.
DIRECTOR

ADDRESS
UNIVERSITY MUSEUMS ANNEX
ANN ARBOR, MICHIGAN

November 15, 1944

REPORT NO. 967

NORTHERN PIKE EXPERIMENT CONDUCTED

AT THE DRAYTON PLAINS HATCHERY, 1944

by

W. F. Carbine

For several years the Institute has attempted to obtain eggs from northern pike at Walled Lake for the purpose of securing further information on artificial propagation, rate of growth, and to determine whether northern pike would be able to control populations of stunted fish (see Institute for Fisheries Research Memorandum No. 151). We were unable to obtain any northern pike for these experiments in 1943.

On the night of March 28-29, 1944, two males and two females were taken in a trap installed on the "Fly" at Walled Lake, Oakland County. These fish were taken to the Drayton Plains Hatchery where the eggs stripped from the only ripe female were fertilized with milt from the two males by Richard Host. After allowing several hours for the eggs to become water hardened, they were placed in a hatchery jar. Spring water was used during the entire hatching process. The eggs fungused badly and none of the techniques usually applied in hatching seemed to have any effect. The eggs started to hatch on April 13 and the hatching process was complete by April 15. The eggs hatched in 18 days at an average water temperature of 45.9° (range 44° to 48° F.).

Because of the abundance of dead and fungused eggs present in the jar, and the delicate nature of the newly-hatched yolk fry, no attempt was made to estimate the number of live fry. All of the fry were placed in hatchery pond 3 on April 15.

We wish to thank Mr. Harold Hughes and his hatchery crew for their help during the course of this experiment.

Pond No. 3 was drained on June 2. In this way Mr. Hughes was able to refill the pond and use it for largemouth bass. A total of 119 northern pike was removed from the pond. These fish ranged in size from 81 to 95 millimeters (3.2 to 3.7 inches) and averaged 88.4 millimeters (3.5 inches). This growth is considered about average for northern pike in Michigan-- about 1.5 millimeters per day during the 51 days since the first eggs started to hatch.

Altogether 34 fish died due to being stranded while the pond was being drained. The remaining 85 fish were planted in Walsh Lake (Washtenaw County--T. 2 S., R. 3 E., Sec. 4). The left pectoral fin was clipped on each fish.

It might be interesting to note at this time that the Waterloo survey party recovered one of these fin-clipped northern pike on August 27. This northern pike was 13.5 inches in length. It was approximately 137 days old (first eggs hatched on April 13) and grew an average of 2.5 millimeters (one-tenth inches) per day.

Walsh Lake will be checked several times in 1945 to determine the growth of the northern pike and bluegills.

INSTITUTE FOR FISHERIES RESEARCH

By W. F. Carbine
Assistant Aquatic Biologist

Report approved by A. S. Hazzard

Report typed by V. M. Andres