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FISH DIVISION

October 15, 1930

Report No. 29

STOMACH AND GULLET CONTENTS OF A GREAT BLUE HERON

(ARDEA HERODIAS)

Specimen in question was collected in Cheboygan County, Michigan, Section 30, Township 35 N. E., on Mulligan Creek on September 24, 1930, by V. H. Cahalane.

Report on this examination is made at the request of Mr. Cahalane.

Stomach and gullet upon examination was found to contain:

- 14 Log Perch (Percina caprodes).
- 8 Black-nosed Dace (Rhinichthys atronasus).
- 1 Predaceous Diving Beetle (Dytiscus).

Expressed in cubic centimeters, <u>Percina</u> amounted to 29 c.c.; <u>Rhinichthys</u> to 14 c.c.; and <u>Dytiscus</u> to .5 c.c. Viewing this isolated case, one would be forced to regard the great blue as innocuous, <u>Percina</u> is a recognized spawn eater; and Dr. Hubbs regards <u>Rhinichthys</u> as a probable spawn eater. <u>Dytiscus</u>, the diving beetle, preys on fish as an adult and in the larval stages. The adult beetle has been known to attack fish up to 6 inches in length and gives much trouble in certain commercial fish enterprises as Gold Fish culture.

Both species of fish concerned in this case are non-game fish but may serve as food for game fish. Their relative abundance and general distribution precludes the Heron as a menace in that direction.

In a recent investigation of 150 great blue heron stomachs by the Biological Survey, only 9 trout and 13 yellow perch were found. But the list of fish enemies is well represented in the great blue's diet. The Survey investigators found such well-known fish enemies included as gars, sticklebacks, darters, carp, suckers, dragon-fly larvae, crayfishes, giant waterbugs, predaceous diving beetles, water snakes, salamanders, and leeches. Their opinion is that under natural conditions the great blue heron does more good than harm from the standpoint of reducing the enemies and fish-competitors of game fishes.

It is the intention of the Institute to make a thorough investigation of the food of the great blue heron in Michigan. A final opinion is of course reserved until the completion of the study.

INSTITUTE FOR FISHERIES RESEARCH

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