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OCT 9 1931
FISH DIVISION

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

October 8, 1931

Report No. 95

IDENTIFICATION OF PLANT GROWTHS IN PONDS OF HASTINGS
HATCHERY

On October 7, 1931, we received for identification a vial containing some plant growths, with this explanation and request:

"The contents of this bottle is a growth of some kind, found in quantities in some of the ponds at Hastings Hatchery, Hastings, Mich.

"We are anxious to know what it is. We are told that bluegills taken from some of the nearby lakes, have these in their stomachs. Address, J. L. Brass, Hastings, Mich. Thanks."

The objects are colonies of algae, called Nostoc. These form irregular globular masses looking like rounded pebbles, but are of a translucent green or greenish brown color. These masses often occur in lakes, sometimes thick enough as to almost cover the bottom. The growth "in quantities" in the hatchery ponds may be due to the fertilizing of the ponds, as most algae grow best in water rich in dissolved organic matter. So far as we know, these algae will not do any harm to the bottom. They will produce oxygen in the day and consume it at night, but unless excessively thick ought not deplete the oxygen supply.

As to bluegills feeding on these plant masses:

The published accounts of the food of this species indicates that it takes in a considerable amount of plant matter, including algae. In the papers consulted this particular alga is not specifically in the stomach contents for the bluegill, though it is for the black crappie. In our opinion, these algal masses, made up most of gelatinous matter, would have low nutritive value, and would not be eaten in quantity by the fish if a sufficiency of other food was available.

Copy to J. L. Brass, Hastings, Mich.

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Garth N. Nye
Director