

copy to: J. L. Bullis

INSTITUTE FOR FISHERIES RESEARCH
UNIVERSITY MUSEUMS
UNIVERSITY OF MICHIGAN
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FISH DIVISION

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Report 239

IDENTIFICATION OF FISHES RECEIVED DECEMBER 19, 1933

On December 19 three jars of fishes were brought down to the Institute for Fisheries Research for identification.

1. Diseased "bluegills" from rearing pond on Sparks Foundation, Jackson.---

These were received partly alive in a two quart jar, labelled as having been taken December 18. The dead ones were all badly fungused, indicating a heavy concentration of fungus spores in the water. The live ones were carefully studied inside and out under low and high magnification, but no definite disease or parasitic infection could be located. One fish showed a large growth on its anal fin, while others showed very small growths on this fin, or ragged tips to the fins. Very likely the cause for the killing of these "bluegills" is a bacterial disease, which might lend itself to control by a copper sulphate bath treatment. It may well be that the chemical conditions of the water in the pond is partly or wholly responsible for the fish deaths.

As the conditions were explained to us, the pond has been operated this year by the Jackson County Sportsmen's Association. Some goldfish escaped into this pond during the summer (one young goldfish was included in the shipment). The pond froze over before the fish were seined out. After the freeze-up the fish have died or fungused. We believe the fungus to be only a secondary infection which enters after the superficial tissues are injured by the bacterial or other pathogenic organism.

Thus we have not been successful in locating the disease organism, in fact can not be sure that the deaths are not due to bad water conditions. We have, however, been more successful in identifying the fish. All of those sent were

pumpkinseed sunfish, not one being a bluegill. It is possible that there are also bluegills in the pond and that the sunfish are the fish which are dying, though this seems rather unlikely. If the fish are all pumpkinseeds, their loss would of course be less serious than if they were bluegills.

2. Sunfish from Emerald Lake, Brooks Township, Newaygo County.—This sunfish waught on flies by Ike L. Bullis of Newaygo in August 1933, was sent in for identification. It is a GREEN SUNFISH (Apomotis cyanellus). This species is fairly common locally through Michigan, sometimes swarming in isolated lakes. Except in the southern counties, it very seldom reaches the legal size for sunfish in our state. It is a rather predacious runt with us, and does not deserve the protection it gets.

3. Fish "from Lake Lansing, brought in Nov. 2, 1933, for identification".—These specimens are brook silversides (Labidesthes sicculus). These 3 to 4 inch fish are full-sized adults of this species, which is our only representative of a marine family of fishes. The adults are rather rare so late in the season, for most of them die after spawning. Very few if any survive the winter as adults. The young live over the winter, then spawn in early summer and die, leaving their own young to carry on the species. It is so delicate that it will not likely serve as good bait, but it is eaten by various game fishes, and is chiefly insectivorous itself. It is therefore a fair forage fish in our lakes.

INSTITUTE FOR FISHERIES RESEARCH

Carl L. Hubbs

Carl L. Hubbs
Director