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INSTITUTE FOR FISHERIES RESEARCH UNIVERSITY MUSEUMS

UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN

FISH DIVISION

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Report 178

A DANGER IN THE USE OF GOLDEN SHINERS AS FORAGE FISH IN BASS PONDS

The experience at some of our hatcheries with the golden shiner, notably at the Dwight Lydell hatchery, has indicated that adult shiners apparently destroy bass fry. At least ponds containing golden shiners, supposedly to produce minnow fry to feed the young of bass, have not yielded anything approaching normal bass production.

This report is written to call attention to a similar and confirming experience at the Manchester, Iowa hatchery of the U. S. Eureau of Fisheries. This is one of the older hatcheries, with a long term of experience in both bass and trout rearing. We are indebted to Superintendent G. H. Gill of the Manchester hatchery, for giving us the information here used, on the occasion of our visit to his hatchery, August 7, 1932.

Last year two ponds allotted to small-mouth bass fingerling rearing were given a supply of adult golden shiners, and many young shiners, before the bass fry were hatched and put in these ponds. This was in accordance with the Eureau of Fisheries, recommendations. From one of these ponds not a single bass fingerling was obtained. From another about 400 were seized in the fall, but that was the approximately number of fingerlings rescued from another place and put into the pond during the summer, when they were surely large enought to escape being eaten by the shiners.

In a third pond several adult bass were allowed to spawn naturally, and were not removed thereafter. From this pond about 7000 fall fingerlings were obtained. This is hardly a good production, but stands in marked contrast to

the failure of the shiner ponds. It is quite probable that the shiners are more destructive of bass than are the adult bass.

These it is true are isolated occurrences, but confirm those experienced in Michigan. The fact that these experiences clash with those of the Bureau of Fisheries at Fairport, Iowa (the experiments at the basis of the Bureau's recommendations) may be due to water conditions. At the Manchester hatchery, as at our Dwight Lydell plant, the ponds are clear. The Fairport ponds are fed by water pumped from the Mississippi, which is soupy with mud. In these ponds the adult shiners may have found difficulty in locating and catching the bass fry.

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