

University Museums,
February 21, 1930.

Institute for Fisheries Research

Report No. 2

Advisability of using goldfish for
live bait

On February 19, we received from Mr. Westerman a request for opinion on the advisability of using goldfish "minnows" as live bait in Michigan. It appears that the production of this form of live bait is being put on a quantity basis.

Like so many fisheries questions, there are advantages and disadvantages to be considered in this problem. No doubt goldfish make very satisfactory minnows, because of their hardiness. Their use would cut down the seining of native minnows, with the attendant use or destruction of some game fish. In parts of the state the conservation of minnows themselves is coming to be a real need.

Probably the primary danger of introducing goldfish is that some will be dumped into the stream ^{or lake} at the end of the fishing. In proper waters, ^{as} the western end of Lake Erie, goldfish have become abundant and reach a length of a foot and more. They are disliked by Americans as a food fish, so that they are not successfully utilized in the commercial fishery. One of the greatest dangers I suppose would be the possible (but not certain) establishment of this inferior species in Saginaw Bay. Here it might become abundant enough to seriously compete

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with marketable fish.

In many inland waters containing predacious game fishes we have reason to predict that the goldfish would either not survive, or would not attain a length of more than a few inches. Where it remained small, it would form a valuable "forage fish" for bass and other game fish. On the other hand it would do some damage as a spawn-eater, just how much we can not say. And in some cases, it might be expected to get the upper hand and overrun the lake.

It is our opinion, based on the observation of the goldfish in its natural waters in Japan, as well as in America, that no dogmatic answer to this question is possible at the present time.

If the introduction of the goldfish minnows is allowed, we would consider it dangerous to allow their sale or use anywhere in the entire Saginaw Bay drainage basin.

It is possible that the dumping of the goldfish minnows into natural waters could be controlled by law or regulation, and by requiring all dealers to post conspicuous notices to that effect on their bait-selling premises.

A point to consider is that even if the introduction of goldfish minnows is prohibited, many may be brought in by Indiana residents driving up to fish in Michigan. Furthermore, local dealers or anglers may raise goldfish within the state, for sale or use as bait. Even aquarium goldfish are sometimes liberated. The first introduction into Lake Erie followed the washout of a pond in which goldfish were being raised. We anticipate that eventually the goldfish will be widespread in Michigan waters whether it is outlawed or not.

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This incomplete answer is the best we can give. We are writing to the Indiana Division of Fish and Game ^{and elsewhere,} requesting a report on their experiences with goldfish in Indiana lakes, which are similar to our southern Michigan lakes. Our northern lakes as a whole would not be suited to the species. We may be able to make some experiments on the effects of goldfish on the game fish or our lakes. Such experiments would be safe if carried on in lakes without outlets.

Carl L. Hubbs.

Carl L. Hubbs
Director.

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Supplement to Report No. 2., on
"Advisability of using goldfish for live bait."

Some further information and opinion has come to hand from Indiana and Ohio, regarding the advisability of using goldfish for live bait. I quote this new material as a supplement to our Report no. 2.

E. L. Wickliff, Chief of the Bureau of Scientific Research, Ohio Division of Fish and Game, reports in letter of March 3, 1930:

"I am not aware as to the extent that goldfish have been used for bait in Ohio during past years. I do know that goldfish have been stocked in our State owned lakes, and a few of them have been caught while others have been seen swimming in the water, but I do not know of any place where they have become abundant."

George Berg, Superintendent of the State Fish Hatcheries, Indiana Division of Fish and Game, writes under date of March 4:

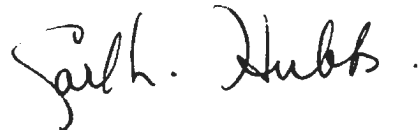
"Goldfish are used for live bait in fishing for bass and crappie in Indiana in a limited way and from reports received from fishermen using them they have proven very satisfactory, being both lively and hardy. The chances of a lake or stream becoming stocked with goldfish which have escaped from the hook, or which have been discarded, are rather remote I believe, nor do I believe that any serious harm to the waters would result if this occurred in a moderate way. I do not know of any of our Indiana waters which have become stocked by this method.

I do know of several streams and lakes which have goldfish in them, but

these waters in all cases have been stocked from some goldfish pond which has overflowed, or had the levees damaged in some way as to allow the fish to escape. None of the waters in which the goldfish are present have been harmed because of their presence, as far as I know, and I believe they are of some benefit in supplying food for the game fishes."

The opinions expressed by Wickliff and Berg are in line with my own ideas. I believe that the danger of establishing goldfish in our inland lakes as a whole is small. But locally they might become a pest, and caution in the introduction of any foreign species is desirable.

We shall keep this question in mind, and report any further information we receive or obtain.



Carl L. Hubbs
Director