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May 24, 1933

IDENTIFICATION OF BULLHEAD FROM OAKLAND LAKE, AND AGE OF A BROOK TROUT FROM SPRING CREEK, OAKLAND COUNTY

Mr. A. T. Stewart, of the Drayton Plains hatchery brought in a large bullhead on May 23 with request that identification be made. The fish, along with a number of others, was caught in nets used to obtain bluegill breeders in Oakland Lake, Waterford Township. Mr. Stewart remarked about the unusually large bullheads caught here. The one fish, which was examined fresh, was 14 1/4 inches (total length) and weighed 1 1/2 pounds. This was Ameiurus nebulosus, usually called "common" or "brown bullhead".

The common names of the bullheads are not well standardized and are rather confusing, since the "black bullhead" (A. melas) is not always blacker than the other species and the "yellow bullhead" (A. natalis) is frequently found to be very dark-colored. The "common bullhead" is undoubtedly the most valuable speciesof the three because of its larger size. The "yellow bullhead" is the most abundant species in southern Michigan. It is distinguished from the other two by white chin barbels and a long anal fin (usually 26 rays). Unfortunately, the species of bullheads were not checked before some fish cultural operations made use of them and the smaller, less valuable species have been introduced into new waters when it was the intention to introduce the larger "common bullhead". For example, the "black bullhead" has now become established in Porto Rico. Perhaps no fish cultural use of bullheads is contemplated for Michigan waters but, if propagation is undertaken, the "common" bullhead is a sufficiently better fish than the other two species to indicate desirability of careful identification of stock. All three species are native to Michigan.

At the same time, Mr. Stewart submitted sample of the scales of a 15 inch brook trout, one pound six ounces, caught by him in Spring Creek, Drayton Plains, on May 21. Several scales were examinedand the age was tentatively read as three winters. The fish would then be of the hatch of early 1930 and have had three full growing seasons and a fraction. Computed fish lengths, based on measurements of the scale to each winter mark, in relation to the scale size and known fish length at time of capture, are as follows: 6.4 inches, 10.7 inches, 13.6 inches, and 15 inches (length at capture). These measurements check very well with the expected growth rate of a brook trout, and the interpretation of the age is probably correct. Brook trout scales, however, do not form a very distinct winter mark and cannot, at present, be read with the same certainty as rainbow trout scales. If an error has been made, it is probable that the age will prove lower than that given. Two of the winter marks are distinct, but the first winter mark is uncertain. The degree of accuracy of the calculated lengths cannot be stated until further work on brook trout scales has been done.

INSTITUTE FOR FISHERIES RESEARCH

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