## NOTES ON FOUR SPECIES OF FISHES FROM OKLAHOMA\*

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During the summer of 1946 some collections of fishes were made from Pennington Creek, Blue River, and Illinois River in Oklahoma. Some of the species represented are of sufficient importance to justify a report at this time.

Amphiodon alosoides (Rafinesque) is here first recorded for Oklahoma although the species has been previously included in unpublished State lists. This listing of the goldeye for Oklahoma is based on specimens taken in the Red River in Texas. On August 25, 1946, a single specimen (O.A.M.C.M.Z. No. 555) 250 mm in standard length was caught by a fisherman in the Illinois River near Tenkillers Ferry on a hook baited with a helgramite and presented to Mr. O'Reilly Sandoz, Oklahoma State Game and Fish Biologist. This streamlined fish, bluish above with silvery sides and belly, has nine developed rays in the dorsal fin, which is farther forward than the pelvic fins. The canine teeth on the tongue are well developed; smaller teeth are present on the jaws. vomer, palatines, and pterygoids. Two small adults from the Hickory Creek arm of Lake Texoma in Love County, Oklahoma, were received from Mr. A. D. Aldrich on April 15, 1947. On May 9, 1947, a 319-mm specimen (O.A.M. O.M.Z. No. 560) was taken by Mr. Delbert Taber from the Chickaskia River at Blackwell, Oklahoma. Still another specimen (O.A.M.C.M.Z. No. 584) collected by Franklin Gustafson at Chickasha below the dam on the Washita River, July 16, 1947, was received from Mr. Kelly DeBusk.

The remaining three species, although previously found in the State, have not been reported since late in the 19th century.

Placopharynx carinatus Cope was reported from the Poteau River by Jordan and Gilbert (1886) and no subsequent reports of the species have been found in the literature. During a survey of the fishes of the Illinois River (Aug. 13 to 27, 1946) eight specimens (49-340 mm in standard length) of the river redhorse were taken. Placopharynx is often confused with species of Maxostoma because of the superficial similarity of the two genera. In all of our specimens there is a very conspicuous dentate pencil-line of melanophores posterior to the scales at the base of the caudal fin. This character is most conspicuous in adults and scarcely noticeable in the 49-mm specimens. The rays of the anal fin are flatter, the lateral line is straighter the lower lobe of the caudal fin is more rounded, and the lips are thicker than in the Illinois River species of Maxostoma; moreover, the lower pharyngeal bone and teeth are greatly enlarged. In older specimens, the odd-numbered teeth, counting from the bottom, are softer, have rounded crowns that appear to be embryonic, and have not grown to the level of the even-numbered teeth which have flat well-worn grinding surfaces. This character suggests the possibility that the teeth are shed alternately and replaced vertically.

Notropis venustus venustus (Girard) was included in the report of Hubbs and Ortenburger (1929) as Notropis cercostigma (Cope) because of specimens taken by Meek (1896). No specimens were taken by the Oklahoma Biological Survey. On July 20, 1946, a single breeding male measuring 94 mm in standard length and having bright-yellow fins, was taken from Pennington Creek at the United States Fish Hatchery near Tishomingo. The last 5 interradial membranes of the dorsal fin are blackened; the third from the last being most intense. There is a large black spot on the base of the caudal fin. Numerous nuptial tubercles on the head and sides reach maximum size and conspicuousness on the head. Scales 7-38-4. The eye diameter is contained 4.7 times in the head.

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Subsequently Mr. A. D. Aldrich presented us with three specimens from Lake Texoma. Six specimens of *Notropis venustus cercostigma*, ranging in size from 39-43 mm, from Black River, Clark National Forest, Missouri, were available for study. These specimens have larger eyes (3.1-3.5 in head) than the Texoma specimens (4 in head). The Black River specimens uniformly have 36 scales in the lateral line while the Oklahoma specimens range from 34 to 38.

Microperca microperca (Jordan and Gilbert) was reported from the Poteau River near Poteau and from Walnut Creek and Kiamichi River at Kiamichi by Meek (1896). Two adults were taken just east of the Blue River Bridge on Highway 99 north of Tishomingo. The least darter is one of the smallest of the fresh-water fishes of North America, reaching about 40 mm in standard length. It prefers small spring-fed brooks or ponds. The specimens have been identified by Dr. Reeve M. Bailey, Associate Curator of Fishes in the Museum of Zoology, University of Michigan, where one of the specimens has been deposited. The other specimen is in the Museum of Zoology, Oklahoma Agricultural and Mechanical College, with the other specimens mentioned in this report. The discovery of this species in Blue River extends its known range about 85 miles westward.

I am indebted to Dr. Carl L. Hubbs for nomenclatorial suggestions and to Dr. Reeve M. Bailey for his identification of *Microperca*.

## LITERATURE CITED

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