

## Two Additions to Oklahoma's Fish Fauna From Red River in Bryan County<sup>1</sup>

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Recent collections of fishes from the Red River in Bryan County, Oklahoma have yielded two species new to Oklahoma's fish fauna. The species are *Signalosa petenensis* (Günther) and *Notropis brazosensis* Hubbs and Bonham. Both species were collected near the mouth of Blue River (T8S,R13E), extending the known ranges of each.

The first specimen of *Signalosa petenensis* was collected by Miller on May 16, 1953, and later, on October 17, 1953, Allan D. Linder and Miller took 26 specimens at the same locality. The specimens varied in standard length from 45 to      mm. and yielded the following meristic data with limits of variation in parentheses: anal rays 22.9 (20-25), total ventral scutes 26.3 (24-27), prepelvic scutes 15.9 (15-16), and postpelvic scutes 10.4 (9-11). In the freshly-killed specimens the dorsum was olive green, the sides and underparts silvery, and the dorsal and caudal fins lemon yellow.

Dr. Reeve M. Bailey of the University of Michigan (personal communication to G. A. Moore) stated that *S. petenensis* was very common at Fulton, Miller County, Arkansas in 1940. Dr. Bailey prefers to unite the genus *Signalosa* with *Dorosoma*. I hesitate to merge the genera since there is need for a revisionary treatment. The most recent revisor of *Signalosa* (7) and others publishing on the genus *Dorosoma* (1,4) have regarded *Signalosa* as generically distinct from *Dorosoma*. Without giving substantiating data Hubbs and Allen (2) indicated that *S. mexicana* and *S. atchafalaya* are conspecific with *S. petenensis* the known emended range of which extends from Florida through the Tennessee River System to the Red River and southward to Guatemala. A series of 19 specimens collected by D. E. Manges in the Tennessee Valley in 1950, was presented to Oklahoma A. and M. College by Gordon E. Hall.

*Notropis brazosensis* was taken in abundance on March 13 and May 16, 1953, by Miller and on October 17, 1953, by Linder and Miller. The specimens agree quite well in all characters treated in the original description (3).

Hubbs and Bonham (3) limited the range of *N. brazosensis* to the Brazos River and adjacent coastwise waters. The presence of *Notropis potteri* Hubbs and Bonham in the Red River was interpreted as "the result of the establishment of escaped bait minnows" (3). Recently, Dr. Frank Cross (personal communication) stated that he has taken *Notropis oxyrhynchus* Hubbs and Bonham in the Red River Drainage in Texas, South Fork of Wichita River, 5 miles north of Benjamin, Knox County. Cross's specimens have been examined by G. A. Moore.

It is interesting that the three species, formerly regarded as largely endemic to the Brazos Drainage of Texas, have also been taken in the Red River System. It is possible that these minnow species have been introduced in the Red River System by way of anglers' bait buckets. However, the close proximity of tributaries of the Brazos and Red rivers, when considered in light of occasional torrential rains, makes one wonder if the species in question did not make their way across the divide. The original collections of fishes from Red River (4,6) were taken in southwestern Oklahoma, where only one of the three species has been taken in small numbers, and near the Oklahoma-Arkansas line where none of these minnows has been taken. Ortenburger and Hubbs (6) and Hubbs and Ortenburger (4) reported 12 and 9 species respectively from their stations.

<sup>1</sup>Contribution No. 229 from the Department of Zoology, Oklahoma Agricultural and Mechanical College, prepared under the direction of George A. Moore. Thanks are due Dr. Frank B. Cross of the University of Kansas, who kindly furnished data on *N. oxyrhynchus*, and to Allan D. Linder for field assistance.

Linder and Miller took 44 species from the Red River in Bryah County, Oklahoma. The collections from the Red River taken by the earlier collectors (4, 6) totaled 19 species from two stations. There are more than 44 species of fishes known from the Red River and it is therefore evident that collectors have failed to take, at any station, all species indigenous to the river. It then can follow logically that *Notropis potteri*, *N. brazosensis*, and *N. oxyrhynchus* may have been naturally distributed from one river to the other and that these species may have been missed by various collectors. This is in no way contradicting the possibility of bait-bucket transfer.

*Notropis bairdi* Hubbs and Ortenburger, until recently discovered in the Brazos River, was thought to be restricted to the Red River System. Cross (1) described the Brazos form as a new subspecies, *N. b. buccula*. The fact that *N. bairdi* is present in both river systems and recognizably different in each, lends strong support to the idea of natural distribution, at least in *N. bairdi*.

#### LITERATURE CITED

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