

NEW RECORDS OF FISHES FROM TWO SOUTHERN OKLAHOMA RIVERS

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INTRODUCTION

Recent collections by the author and students or colleagues at Oklahoma State University have produced records of fish species previously not known to occur in two southern Oklahoma streams, the Blue and Kiamichi Rivers. Both streams are major components of the Red River system and have been collected and reported on extensively; the present records were obtained from the lower reaches of the two streams and suggest that more intensive sampling of such areas may increase the list of species resident to both systems.

Blue River

The spring-fed upper reaches of the Blue River are often clear and relatively cool and have attracted the attention of several ichthyologists. Moore and Rigney (1), Linder (2), and Schenck and Smith (3) reported a total of 50 species from the river, but only two collections were noted from lower portions of the river.

On 31 August 1976, Chris Tooker and I made a collection at the following site on the lower Blue River.

RJM 76-17: Bryan Co; T5S, R9E, intersection of Sec. 6 and 7; on State Highway 22 and 2.5 km west of State Highway 48.

The stream bed there was primarily sand, containing some partially buried tree branches. A small riffle was present at the upper end of the sampling area. Three species taken from the site have not yet been reported for the Blue River fauna. *Ammocrypta clara* is a pellucid darter fairly common over sandy substrates in the Red River west to Bryan Co. (4), *Labidesthes sicculus* is the common silverside found in clearer streams throughout most of eastern Oklahoma (4), and *Noturus nocturnus*, the freckled madtom, also occurs in smaller streams over much of eastern Oklahoma. *Labidesthes* has been reported from both the Muddy Boggy system east of the Blue River by Pigg (5) and from Mill Creek, a tributary of the Washita, by Binderim (6). Pigg (5) reported *N. nocturnus* to be uncommon in both headwaters and near the mouth of the Muddy Boggy; most occurred in riffles at downstream sections of both Muddy and Clear Boggy arms of the river. *Ammocrypta clara* prefers the quiet edges of stream channels and sandy-bottomed backwaters of larger streams. It should be expected to occur in the lower reaches of streams tributary to the Red River where appropriate substrate and habitat are present. The fish assemblage represented by our sample appears to represent a combination of species often common in headwaters (*Etheostoma radiosum*, *Percina* spp., *Notropis boops*) and those more common in base level waters (*N. atherinoides*, *N. stramineus*, *Pimephales vigilax*, hybrid *N. lutrensis* x *N. venustus*, *Ammocrypta*). Previous authors have reported 50 species from the Blue River, but Miller and Robison's (4) estimated range maps suggest that as many as 70 species occur in the Red River and tributaries in the immediate vicinity of the Blue River. I believe that a systematic sampling program of the lower reaches of the Blue River would not only add several additional species to the list of known inhabitants, but would also provide important information on the nature of the ecological conditions prevailing in the lower third of the river — a zone that may be of importance to both headwater and big-river fish species.

Kiamichi River

Pigg and Hill (7) described the River and listed 98 species from the River prior to impoundment of Hugo Reservoir on its lower reaches. Closing of the dam at West Fort Towson has apparently produced some significant changes in the habitats and fish faunas occurring in the river below the dam. These changes will be documented in a later report, but two new additions to the fish fauna, collected recently from be-

low the dam, will be reported on herein. Pigg and Hill (7) suggested that *Notropis potteri*, a common species in the Red River, could be expected to occur in the lower Kiamichi, but they did not collect any specimens in their study. Between 1 September 1976 and 17 December 1977, 78 specimens of *N. potteri* were taken on four different occasions from two sandy-bottomed sites at and 3 km above the State Highway 109 bridge crossing the river north of Frogville. On 15 December 1977, one *Percina shumardi* was collected by George Luker, Robert Tafañelli, Conrad Kleinholz, and the author from a rocky outcrop area occurring at the latter site. *P. shumardi* generally is found over gravel or rubble substrates in deeper riffles and raceways of rivers and larger streams and has been infrequently recorded from the Red River system. Its occurrence in the lower Kiamichi probably reflects presence of the remnants of a population that may have been fairly abundant over hard bottoms when the stream was still free-flowing. Pflieger (8) suggests that the species is relatively tolerant of turbidity; we may expect to encounter it more frequently in the Red River basin when appropriate habitats are sampled during low-flow periods.

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