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RANGE EXTENSION FOR ARCIDENS CONFRAGOSUS (MOLLUSCA: BIVALVIA: UNIONIDAE) IN SOUTHWESTERN TEXAS

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ABSTRACT

The known range of the freshwater mussel Arcidens confragosus (Say) is extended southwestward to the San Marcos River drainage in the Guadalupe River system.

Arcidens confragosus (Say) is a moderate sized freshwater mussel that has been reported from rivers draining into the Gulf of Mexico from Alabama to Texas. It is generally "found in a sand or mud bottom in sluggish water a few feet deep" (Johnson 1980). Shira (1913) reported A. confragosus from Caddo Lake on the Louisiana/Texas border. Strecker (1931) recorded Texas specimens from Skull Creek, Trinity River, Elm Fork of Trinity River, Sabine River, Neches River, Kickapoo Creek, Buffalo Bayou, West Yegua Creek, San Jacinto River, Poe Lake, Angelina River, Chambers Creek, Mussel Shoal Creek and Colorado River. Johnson (1980) listed it from Texas' Sabine River, Neches River, Trinity River, San Jacinto River, Buffalo Bayou, Brazos River and Colorado River. Lake LBJ on the Colorado River was reported as a new west-most record for the species by Murray (1972). Finally, the latest report of localities in Texas (Clarke 1981) includes the Sabine River, Neches River, Angelina River, Trinity River, San lacinto River, Buffalo Bayou, Brazos River, Navasota River and Colorado River. In all of these reports, the Colorado River system is regarded as the western limit of distribution in Texas.

Collections made during the drought of 1980, when many Texas rivers and lakes were at very low levels, produced a number of A. confragosus from various sites around the state. Among these specimens were some found stranded on the mud of an ox-bow lake at Palmetto State Park, Gonzales County. This site is on the San Marcos River, which is part of the Guadalupe River drainage.

Of 11 specimens found, ten were freshly dead paired valves and one was living. In all, the periostracum was dark greenish/brown to black. The nacre was bluish white with some irridescence on the posterior half. The teeth were typical of *Arcidens*, the pseudocardinals

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Table 1. Measurements of ten A. confragosus specimens collected from the ox-bow lake at Palmetto State Park, Gonzales County, Texas.

	Range (mm)	Average (mm)
Length	64.6 - 92.5	80.9
Height	45.0 - 63.0	55.3
Width	29.7 - 42.7	37.1

compressed with the posterior tooth of the left valve being flared and arched. The lateral teeth were vestigial. External sculpture of the shell consisted of nodulous umbos, vertical zig-zags on the disc and fine radiating ridges extending toward the posterior wing. All sculpture was rather subdued and became less distinct toward the margins, a feature which characterizes the subspecies A. c. jacintoensis Strecker, 1931. Table I summarizes the measurements of ten of the specimens.

The Palmetto State Park record extends the range of A. confragosūs westward by an additional major river system, with only the small Lavaca system discharging into the Gulf of Mexico between the mouths of the Colorado and Guadalupe rivers.

Specimens are deposited in the author's collection (CMM 52-2794), the University of Science and Arts of Oklahoma Mollusk Collection (USAO 53-427) and the Ohio State University Museum of Zoology (OSUM 1980:687).

Other bivalves collected with Arcidens confragosus in the ox-bow lake were Anodonta grandis, A. imbecillis, Amblema plicata, Carunculina parva, Lampsilis teres and Corbicula manilensis. One fragment seems to be Cyrtonaias tampicoensis.

I thank Dr. David H. Stansbery for verification-of identification of the Arcidens specimens.

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