NOTE ON THE EXTENSION OF THE KNOWN RANGE OF THE ASIATIC CLAM CORBICULA FLUMINEA (MÜLLER) IN THE

OHIO RIVER.¹ Stein (1962) and Keup et al. (1963) noted the extension of the known range of the introduced pelecypod *Coribucla fluminea* (Müller) as far upstream in the Ohio River as the vicinity of Cincinnati, Ohio. Stein collected shells along the river beach as well as living specimens in algal mats which had been washed up on the shore; she made no mention of having found any living specimens in situ on the river bottom. Keup et al. reported the finding of shells and living specimens at Cincinnati, and described the species as being a significant member of the benthic fauna in the area of their report.

In October, 1962, I collected several hundred shells and 141 living specimens of *C. fluminea* at New Palestine, Clermont County, Ohio, approximately 13 miles upstream from Cincinnati. Subsequently in August, 1963, shells and living specimens of *C. fluminea* were collected at New Richmond and Moscow, Clermont County, Ohio. Both localities are above New Palestine. Moscow, the farthest upstream, is about 25 miles southeast of Cincinnati (Ohio River Mile 441.1). At both New Richmond and Moscow, shells of *C. fluminea* were common, although few living specimens were found; only four living specimens were collected at New Richmond, and only six at Moscow. The abundance of shells at Moscow suggests that the species extends farther upstream than that community.

At all three localities only near-shore collecting was carried out; living specimens were found in about 45 to 60 cm of water. At each locality the species was found most abundantly in sands, silts, and muds which had collected between and beneath gravels composed primarily of rounded very coarse pebbles and small to large rounded cobbles whose greatest dimension ranged up to 200 mm. Occasional specimens were found in sands and silts lacking coarser particles but these were rarities. No specimens were found in algal mats washed up on the shore.

Keup et al. (1963: 20) reported: "Generally, they [C. fluminea] are found in sandy or on sand and gravel areas; however, Ohio River bottom samples with a high percentage of silt have also contained significant numbers." Various authors (Bates, 1962; Ingram, 1959; and Sinclair and Ingram, 1961) reported the occurrence of the species in a variety of substrates in other waterways, including sand, mud, a combination of sand and mud, gravel, and rocks and boulders. Thus, the species

apparently can occur in a variety of sediments.

The New Palestine locality, which was first examined in October, 1962, was reexamined in August, 1963. At the latter time no specimens, either shells or living, were found in near-shore waters, in spite of the abundance of *C. fluminea* at this locality the previous year. Since October, 1962, the depth of the pool stage of the Ohio River at New Palestine has been raised from 12 ft (449 ft above sea level) to approximately 18 ft (455 ft above sea level) by the Markland Dam. Apparently the 10 month interval from October, 1962, to August, 1963, was not sufficient time for *C. fluminea* to colonize the newly inundated areas. At both New Richmond and Moscow the Markland Dam had increased the depth of the pool stage of the Ohio River only 0.4 ft.

I would like to thank the U. S. Army Corps of Engineers, Ohio River Division, Cincinnati, Ohio, for their helpfulness in obtaining data on the recent depth changes

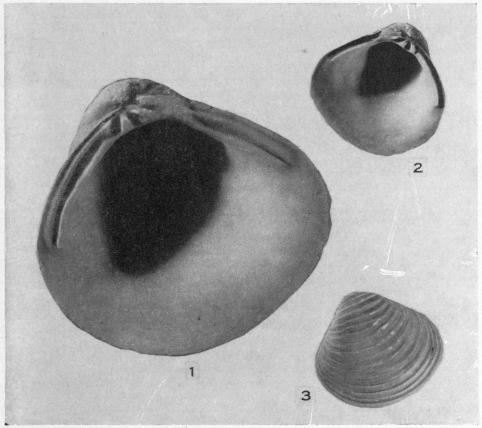
of the Markland Pool of the Ohio River.

The specimens figured herein have been deposited at the University of Cincinnati Museum of Paleontology (U.C.M. nos. 35934–35935).—JOHN POJETA, JR., University of Cincinnati, Cincinnati 21, Ohio.²

¹Manuscript received August 24, 1963.

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Corbicula fluminea, right valve showing dentition, $3.3\times$ (U.C.M. no. 35935). Corbicula fluminea, left valve showing dentition, $1.5\times$ (U.C.M. no. 35935). Corbicula fluminea, exterior of left valve, $1.5\times$ (U.C.M. no. 35934). FIGURE 2. FIGURE 3.

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