

NOTE ON THE OCCURRENCE OF *PANOPEA BITRUNCATA* (Conrad)

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In 1872 Conrad described *Glycimeris bitruncata* (p. 216, pl. 7, fig. 1), referring the species to "*Glycimeris* Klein. H. and A. Adams."* At that time Conrad noted: "This interesting shell was sent to the Academy by Dr. Yarrow from Fort Macon [North Carolina]. I suppose it to be a recent shell on account of its polish, and part of the unaltered ligament remaining. Two specimens were found. It is the only recent species of *Glycimeris* inhabiting the coasts of [eastern] North America. . . ." Conrad's figure of the type specimen, a right valve, reveals that it is somewhat distorted posteriorly, as may be observed from the growth lines on the outer margin of the valve. The specimen here illustrated (text fig. 1) shows, more correctly, the shape of the adult shell.

In the years subsequent to its original description the species has been found, as isolated valves, from North Carolina to Florida and in the Gulf of Mexico from the

* The "*Glycimeris* Klein" of H. and A. Adams (1856, p. 350) is a synonym of *Glycimeris* Lamarck, 1799 (not of Lamarck, 1801, = *Cyrtodaria* Reuss, 1801). Since 1898, when Dall revived the name *Glycymeris* Da Costa, 1778, for the group of species previously referred to the genus *Pectunculus* Lamarck, 1799 (*non* Da Costa, 1778, Veneridae), the name *Glycimeris* Lamarck, 1799, has largely been replaced by *Panopea* (or *Panope*) Menard, 1807. Prior to the publication of the "International Code of Zoological Nomenclature" in 1961, most authors held that *Glycimeris* Lamarck, 1799 and 1801 were both homonyms of *Glycymeris* Da Costa, especially since the latter name had been widely misspelled as "*Glycimeris*." However, Article 56 (a) of the International Code of 1961 specifies that differences of a single letter are sufficient to prevent names entering into homonymy; thus *Glycimeris* Lamarck, 1799, is the correct generic name for the species now almost universally referred to *Panopea*. Concerned with the vast amount of confusion that would ensue in molluscan nomenclature if this change had to be made, the writer and the late Dr. L. R. Cox of the British Museum (Natural History) petitioned the International Commission to use its plenary powers to validate the established and customary nomenclature. This petition, which was published in the "Bulletin of Zoological Nomenclature," vol. 18, pt. 3, p. 184-188, in June, 1961, has to this date not been acted upon by the Commission!

vicinity of Tampa (Dall, 1898, p. 832), and "Crooked Island, off St. Andrews Sound, Calhoun [= Bay] Co., Florida" (Vanatta, 1903, p. 757). Dall (1898, p. 832) notes that it "has not yet been found in a definitely fossil state" and Abbott (1954, p. 454) adds: "Dead valves are rarely found, and I have never seen a live specimen. Possibly extinct."

Recently, while collecting fossils from the diapiric "Mudlump 90" to the west of the entrance to the South Pass of the Mississippi River delta, two specimens with paired valves, plus two separate valves and fragments of at least eight others were secured from the "shell bed" that occurs between "Clay units I and II" (see Morgan, Coleman and Gagliano, 1968, p. 151, 152, and text figs. 8, 9). According to these authors (p. 152) two radiocarbon datings of molluscan and foraminiferal materials from this bed "are comparable and yield an age of 15,500 yr B. P. . . . [and] the fauna suggests water depths of 100-200 ft during the time of accumulation."

The occurrence of this species in the mudlump fauna, while not certainly settling the problem as to whether it is, or is not presently extinct, clearly indicates that, unlike its Pacific coast analogue, *P. generosa* Gould, which occurs in mud in waters of only two or three feet depth (Abbott, 1954, p. 454), *P. bitruncata* is a deep water species. Its deeply burrowing habit would preclude its being taken by the usual dredging or trawling methods, and only under unusual and rare circumstances would it be washed out of the mud and transported to shore by wave or current action. The fact that it does so occur, strongly suggests that it may be a rather abundant element in the deeper, offshore faunas.

The writer wishes to express his great indebtedness to the officials of the Chevron Oil Company who provided plane and helicopter transportation to the mudlump, making it possible to collect the faunas, and especially to Mr. Wilburn H. Akers who made all necessary arrangements.



Figure 1. *Panopea bitruncata* (Conrad). Right valve of largest pair in collection, $\times 0.9$. The shell was broken by movement of the enclosing mud during its diapiric extrusion through the overlying deltaic sediments. Locality TU 977, Mudlump no. 90, off South Pass, Mississippi River delta.

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