

NOTES ON THE FAUNA OF THE CHIPOLA FORMATION – XL
A NEW SPECIES OF THE GENUS *CERITHIUM* (MOLLUSCA: GASTROPODA)

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Since Shirley Hoerle published her paper on the Cerithiidae and Potamididae from the Chipola Formation in *Tulane Studies in Geology and Paleontology* (1972, v. 10, no. 1, pp. 1-22) a new species of *Cerithium* has been discovered by two different fossil collectors. The distribution of this new species is limited to the lower Chipola Formation deposits at Alum Bluff and the lower deposits along the Chipola River. It is relatively common at Alum Bluff but rare along the Chipola River and at both localities it is extremely difficult to collect because drought conditions must exist in order to gain access to the deposits where it is found. Over the intervening years, however, a sufficient number of shell fragments have been collected to allow the investigator to describe this *Cerithium* as a new species.

Family CERITHIIDAE Fleming, 1822
Subfamily CERITHIINAE Fleming, 1822
Genus CERITHIUM Bruguière, 1789

Cerithium Bruguière, 1789, *Encycl. Meth.*
(Vers), v. 1, p. XV (genus without species);
1792, *ibid.*, p. 467.

Type species: *Cerithium adamsonii* Bruguière
(= *Cerithium erythraeonense* Lamarck, 1822), by
virtual tautonymy.

CERITHIUM LOUISAE
Schmelz, n. sp.
Plate 1, figures 1-3

Diagnosis: Shell solid, nuclear whorls absent. Approximately eleven noded teleconch whorls. Five spiral rows of strongly noded costa on body whorl, the first row of nodes transformed into thirteen stout spines, each arching upwards beyond the shoulder. Raised axial ridges crossing sutural ramp and connecting spines to a well-developed, appressed suture. Varix only on body whorl. Each remaining teleconch whorl with a peripheral row of spines and two spiral rows of strongly noded costa. Pillar short, arched. Canal narrow, deep, recurved. Inner lip of aperture with strong callus, edge free; outer lip thickened, arched, with crenulations along edge corresponding to spiral sculpture; at junction with body a moderate sinus and subsutur-

al, elevated ridge developed, entering throat of shell.

Holotype: UF 71293; height 42.1 mm, maximum diameter 21.1 mm.

Type locality: TU 1545, Chipola Formation, Cooter Bluff, sharp westward bend on west bank of Chipola River about 1,000 feet below mouth of Taylor Lake Branch (NW 1/4 Sec. 29, T1N, R9W), Calhoun County, Florida.

Paratype A: UF 71294; height 46.1 mm, maximum diameter 23.0 mm. *Locality:* TU 453, Alum Bluff (lower beds), Apalachicola River (NE 1/4 Sec. 24, T1N, R8W), Liberty County, Florida.

Paratype B: UF 71295; height (incomplete) 18.0 mm, maximum diameter 8.5 mm. *Locality:* TU 453, Alum Bluff (lower beds), Apalachicola River (NE 1/4 Sec. 24, T1N, R8W), Liberty Co., Florida.

Additional unfigured paratypes: Five from TU 453 (two from the Murray collection and three from the Compton collection).

Etymology: Named for Louise Compton, Marietta, Georgia, a longtime collector of Florida fossils, who generously made specimens from her collection of Chipola material available for study.

Discussion: Although no complete specimens of *Cerithium louisae* has been discovered, it is estimated from shell fragments that this species achieved a height in excess of 70 mm and was probably comparable in size to the large Chipola species *Cerithium burnsii*. The deposits in which the new species is found suggest that it lived in shallow tropical waters near coral reefs.

Cerithium louisae is a very ornate and distinctive species whose closest fossil and living counterpart appears to be *Cerithium nodulosum* from the Indo-Pacific. The latter species has been recorded from the Late Miocene deposits of Bikini Atoll in the Marshall Islands, the Neogene of Palau, and from the Plio-Pleistocene of Guam (Houbrick, 1992, p. 134). According to Houbrick (1992, p. 132), and the personal observations of this investigator, *C. nodulosum* is found shoreward of the reef face on intertidal and subtidal rocky shelves.