

PALEONTOLOGICAL NOTE

CENOZOIC VERTEBRATES FROM THE GULF COASTAL PLAIN—I

ANDREW A. ARATA and CRAWFORD G. JACKSON, JR.

TULANE UNIVERSITY AND
UNIVERSITY OF SOUTH ALABAMA

This report notes two small marine Tertiary vertebrate faunas from east-central Mississippi including the first reported Oligocene sirenian from the southeast. Also reported is the second occurrence of a Middle Eocene sirenian from southwestern Alabama.

The Mississippi material is from the Chickasawhay Formation, and the Red Bluff Formation. The Alabama sirenian is from the Gosport Formation. All material is deposited in the Vertebrate Paleontology Collection of Tulane University (TU). Stratigraphic correlation follows Murray (1961) unless otherwise stated. All sirenian material has been turned over for further study to Roy H. Reinhart, Miami University, Oxford, Ohio.

The Chickasawhay material was collected from an exposure along the banks of the Chickasawhay River, approximately 2½ miles south of the town of Waynesboro, Wayne County, Mississippi. The site is approximately 250 feet upstream from the bridge on Mississippi Highway 63 on the northeast bank, below Waynesboro. It is exposed only at low water level. The site appears the same as Station 13388 of Mansfield (1940). Included in this deposit are remains of an unidentified sirenian, sharks, rays, a teleost, and a turtle.

The sirenian is represented by one complete rib (Plate 1, figure 1), more than 25 rib fragments, a partial vertebra (Plate 1, figures 2a, b) consisting of the centrum and parts of the neural arch, and smaller scraps. The complete rib is 326 mm along the outside curve, and averages about 25 mm in thickness. Most of the rib fragments are of the same thickness, although a single piece

(110 mm long) is 40 mm thick. The centrum of the vertebra is 32 mm deep (ventral surface to base of neural canal), 56 mm wide, and 32 mm long (anterior to posterior surfaces). The lot is catalogued as TU 1001.

Associated with the sirenian remains were several identifiable vertebrate elements (TU 1002), including: shark teeth (*Odontaspis* sp.), fragments of ray dental batteries (*Aetobatis* sp.), a catfish spine (Siluroidea), and isolated teeth referable to *Sphyræna* sp. (Mugiloidea). Also associated is a single pleural plate of a trionyhid turtle (Plate 1, figures 3a, b), indistinguishable from that of Recent *Trionyx* of a similar size. A second turtle (?) fragment is not from a soft-shelled turtle, but is otherwise unidentifiable. Associated invertebrate fossils are deposited in the Paleontological Collections of the Department of Geology, Tulane University, Locality 242.

A second unidentifiable sirenian rib fragment (TU 1003) is from the Red Bluff Formation, exposed on the east bank of the Chickasawhay River at Hiwanee, Wayne County, Mississippi. Determination of the fragment as sirenian is made on the basis of the density of the bone. Also identifiable in the same collection are isolated teeth of *Odontaspis* sp. and *Sphyræna* (?). Invertebrate associates from the same deposit are catalogued as Locality 226, Paleontological Collections, Department of Geology, Tulane University.

The Eocene sirenian is also represented by a rib fragment (TU 1004) collected at the Gosport Formation exposure on Little Stave Creek, Clarke County, Alabama, as figured in Russell (1955). Recently, Siler (1964)

EDITORIAL COMMITTEE:

ROY H. REINHART, Department of Geology, Miami University, Oxford, Ohio

HAROLD E. VOKES, Department of Geology, Tulane University, New Orleans, Louisiana

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reported a similar unidentified sirenian rib fragment from the Gosport Formation in Monroe County, Alabama, approximately 40 miles east of the site of the present report. These two Alabama fragments apparently represent the earliest sirenian remains known.

Classically both the Chickasawhay Formation and Red Bluff Formation are considered Oligocene (Mansfield, 1940; Cooke, *et al.*, 1943). Mumma (1965) assigns the Chickasawhay to lowest Miocene. Miocene dugongs (*Hesperosiren*) from the Hawthorn Formation of Florida are well known, though none has been reported from the Suwanee Limestone, the peninsular equivalent of the Chickasawhay (Ray, 1957). The Red Bluff Formation is lowest Oligocene and, as such the sirenian fragment reported represents the first Oligocene specimen from the southeastern United States. Sirenians reported from the western hemisphere Oligocene include a dugong *Caribosiren* (Middle Oligocene, Puerto Rico) and unidentified rib fragments from the Oligocene (?) of Chiapas, Mexico (Reinhart, 1959).

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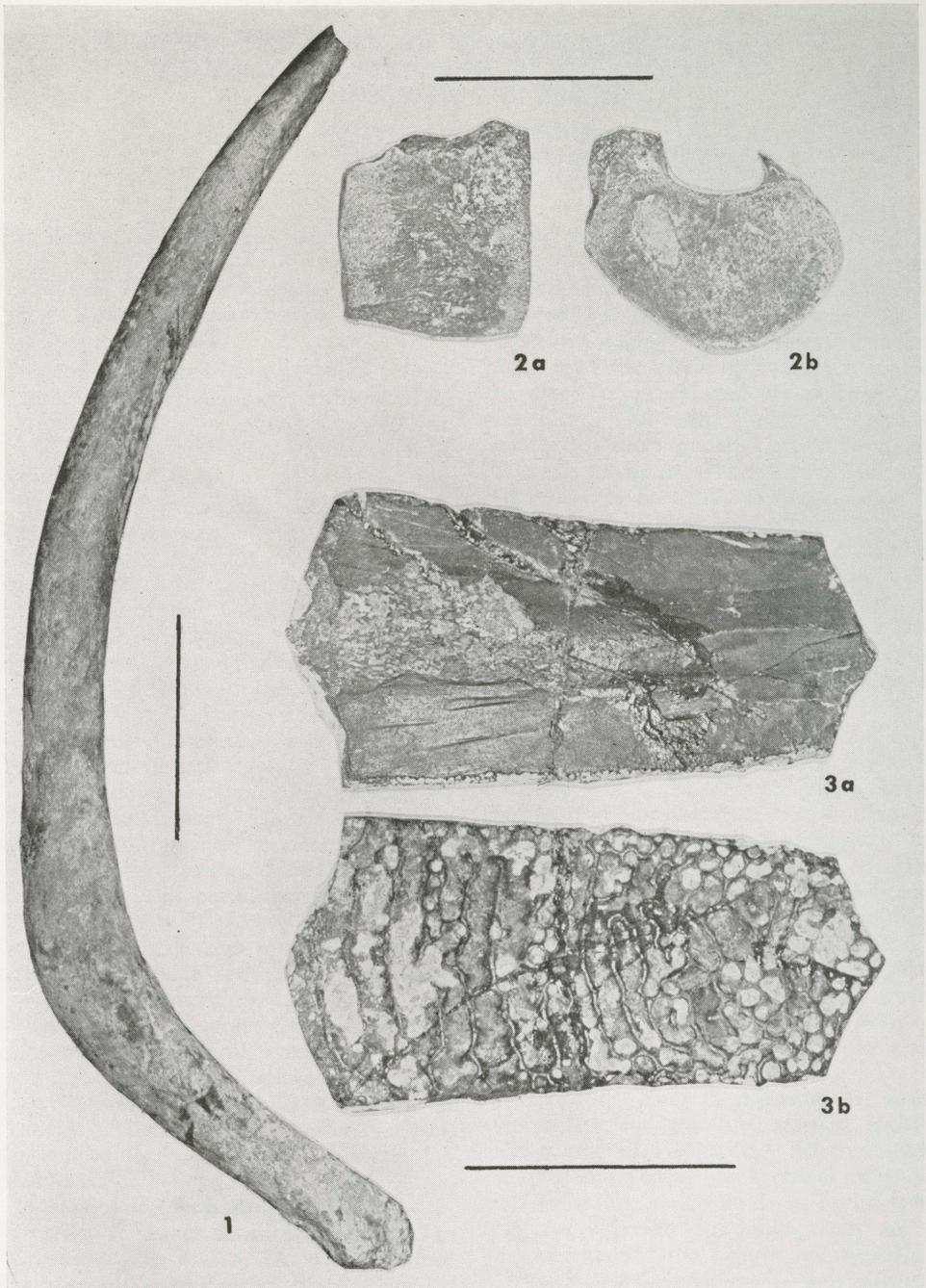


PLATE 1

Vertebrate fossils from the Chickasawhay Formation, Wayne County, Mississippi. 1. Sirenian rib. 2. Sirenian vertebra; a, lateral, and b, anterior aspects. 3. Trionychid pleural element; a, ventral, and b, dorsal aspects. Each scale represents 50 mm.