

ELLIPTIO CRASSIDENS CRASSIDENS (LAMARCK, 1819)
Elephant Ear

SYNONYMY:

- Unio crassidens Lamarck, 1819. (Simpson, 1914:606)
Elliptio niger (Rafinesque, 1820). (Frierson, 1927:25)
Elliptio crassidens (Lamarck, 1819). (F.C. Baker, 1928:131)

CLASSIFICATION:

- Family Unionidae (Fleming, 1828) Ortmann, 1911.
 Subfamily Ambleminae (Rafinesque, 1820) Morrison, 1955.
 Genus Elliptio Rafinesque, 1820.

CHARACTERISTICS: Shell medium to large, subrhomboid to subtriangular, very solid to massive; umbos low to moderately high, sculpture finely trapezoidal; surface of disk free of sculpture except for a few irregular wrinkles on posterior slope of young specimens; periostracum yellowish brown to reddish brown or black, green rays on young specimens; hinge massive, cardinal teeth heavy, lateral teeth very thick; nacre deep purple through bluish-pink to white.

SIMILAR SPECIES: Elliptio dilatata (Rafinesque, 1820) is elongate; hinge short, weak; umbonal sculpture very coarsely trapezoidal; nacre purple, white or orange.

RANGE: Simpson (1914:607) found this species to occur in:

"Mississippi drainage generally; Alabama and Tombigbee rivers; southeast to the Chattahoochee River."

A widespread species not common west of the Mississippi River. The form of the Chattahoochee River is Elliptio crassidens incrassatus (Lea, 1840).

RANGE IN OHIO: The distribution of this species in Ohio seems to be very sporadic. There are records of its occurrence in the Grand River and St. Joseph's River of Lake Erie drainage (although the St. Joseph's record is actually in Indiana). There are also many records from the Ohio River main stem, from the Salt Creek drainage, and from the Muskingum and Scioto River systems. At least up until Sterki's time (1907:392), E. c. crassidens was found in the Scioto River and common in the Ohio River. However, recent records indicate that the range of this species in Ohio has become limited to the Ohio River main stem and to the smaller tributaries of the Scioto

River (such as Big Darby and Big Walnut Creeks). These occasional specimens from small tributaries may be "stragglers" and the Maumee River basin records may be due to the activities of shell dealers. The species is certainly not common in either of these places.

HABITAT: Ortmann (1919:94-95) observed that:

"This is a species restricted to the large rivers. . . Elliptio niger lives preferably in coarse gravel, often among heavy stones, in strongly flowing water, to which habitat it is especially adapted by its heavy, strong shell. Call (1900, p. 510) gives as its habitat 'muddy bottoms', which is not at all true for Pennsylvania."

F.C. Baker (1928:133) found E. c. crassidens to be

"A species of large rivers where it is found on a gravel, stony, or shell bottom in rapid current, in rather deep water, 2 m. or more."

Similarly, Parmalee (1967:31) noted that:

"The Elephant's Ear is restricted to the large rivers. . . Individuals normally inhabit a bottom matrix composed of stones and coarse gravel, in swift current, and at a depth of at least 6 feet."

This species is not restricted to large rivers in the south. We have found it in riffles and runs in less than a foot of depth in Mississippi.

SELECTED REFERENCES:

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- Frierson, Lorraine S.
1927 A classified and annotated check list of North American
Naiades.
Baylor Univ. Press, Waco, Texas, 111 pp.
- Ortmann, Arnold E.
1919 A monograph of the Najades of Pennsylvania. Part III.
Systematic account of the genera and species.
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