



Helisoma anceps (Menke 1830)

two-ridge rams-horn



Taxonomy & Systematics. The Planorbidae is the most diverse family of basommatophoran pulmonates, including hundreds of species in perhaps 30-40 genera worldwide. The gill has been lost, leaving respiration to occur across the entire mantle cavity, as is true for pulmonates in general. The ability of pulmonate snails to enfold an air bubble within this cavity can be seen as an adaptation to the colonization of warm or stagnant freshwaters, where the concentration of dissolved oxygen may be reduced.

Planorbids are hermaphroditic, as is also true for pulmonates in general; typically capable of self-fertilization and laying eggs in circular egg masses with a tough outer covering. But the sinistral, typically planispiral axis of shell coiling, together with other derived aspects of their anatomy, suggests that the Planorbidae may be among the most recently-evolved of the basommatophoran pulmonates.

Helisoma anceps (in our modern understanding) is well characterized and taxonomically stable. But the older literature includes over 25 synonyms, among which are: *antrosa*, *bicarinata*, *latchfordi*, *percarinatum*, *royalense*, *rushi*, and *sayi*.

Habitat & Distribution. Populations of *H. anceps* range from the mountains to the Coastal Plain throughout Virginia and the southern Atlantic drainages, but are especially common in the Piedmont. Elsewhere *H. anceps* ranges throughout most of North America, from western Canada to Florida. It is typically found in waters with at least some current, and more commonly inhabits benthic substrates than its congener *H. trivolvis*. *Helisoma anceps* is also not as typical of rich or eutrophic environments as is *H. trivolvis*, and less commonly found in floating vegetation.

Ecology & Life History. The life cycle of *H. anceps* appears to be annual and semelparous, at least in the better-studied northern populations. *Helisoma anceps* is more a grazer and less a browser of macrophytes than *H. trivolvis*. Like all planorbids, *H. anceps* populations support an ample share of predators, both fish and invertebrate, as well as trematode parasites.

Conservation Status. NatureServe G5/S5 - Secure.

