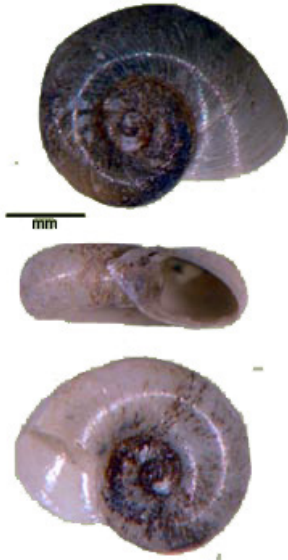




Gyraulus parvus (Say 1817)

ash gyro



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.

Originally described in the genus *Planorbis*, the specific nomen *parvus* has remained taxonomically stable since its transfer to *Gyraulus* in the early 19th century. Dall considered the species sufficiently distinct from other *Gyraulus* that he proposed a "section" *Torquis* to contain it, which Baker considered a subgenus.

Habitat & Distribution. *Gyraulus parvus* populations are widely dispersed in ponds, impoundments, and slow-moving rivers throughout Virginia and the southern Atlantic drainages, especially the lower Piedmont and Coastal Plain. Elsewhere in North America it ranges from Canada to Florida, Atlantic to Pacific. *Gyraulus parvus* seems best adapted to lacustrine environments north of the glacial maximum, however, and its occurrence in our study area is spotty. Although superficially similar to *Menetus dilatatus*, *G. parvus* seems to be restricted to richer environments. *Gyraulus* populations are not typically found in intermittent or temporary waters or swamps.

Ecology & Life History. *Gyraulus parvus* populations have figured in a variety of ecological studies in northern lakes but are not well known in the south. The Canadian population studied by McKillop displayed a simple annual life cycle, with semelparous reproduction. Jokinen characterized *G. parvus* as a "C-D tramp" in New England, found virtually everywhere she sampled. Fish predation on populations of *G. parvus* is well-documented.

Conservation Status. NatureServe G5/S5 - Secure.

