



## *Lyogyrus granum* (Say 1822) squat dusksnail



**Taxonomy & Systematics.** The Hydrobiidae is a diverse group in the worldwide Superfamily Rissoacea - prosobranch gastropods typically small in body size, shallow or even amphibious in their habit, bearing cusps around the base of their median radular tooth. Sexes are separate in almost all cases, eggs being laid singly and attached in a sparse capsule to solid substrates. The penis arises from the neck. Hydrobiids are distinguished from their two sister groups in freshwater, the Bithyniidae and the Pomatiopsidae, by the calcareous operculum of the former and the amphibious life habit of the latter.

*Lyogyrus* is easily confused with several other taxa of plainly-shelled hydrobiids inhabiting southern Atlantic drainages, including *Ammicola*, *Gillia*, and *Somatogyrus*. Penial morphology in the subfamily Amnicolinae is doubly-ducted. Of the three amnicoline genera inhabiting the study area, *Lyogyrus* is distinguished by an operculum that is initially multispiral, becoming paucispiral in adult individuals. Adult shell length about 2 - 3 mm.

Through most of the 20th century, *Lyogyrus* was treated as a subgenus of *Ammicola*, but Thompson and Hershler have recently raised it back to full generic rank. *Lyogyrus retromargo* is a synonym.

**Habitat & Distribution.** The range of *L. granum* is generally given as Atlantic drainages in southeastern Pennsylvania and New Jersey to the headwaters of the Pearl River, Mississippi. Jokinen recently extended that range north to Connecticut. In Virginia, populations seem spottily distributed in ponds or slow rivers of the lower Piedmont and Coastal Plain. Given the diminutive stature of the animals, many populations have likely been overlooked.

**Ecology & Life History.** Jokinen reported an annual life cycle for a population inhabiting a Connecticut pond. The population dynamics of *L. granum* seem unusually “flashy,” especially for a prosobranch. Although we had repeated observations at the Salkehatchie River east of Yemassee, SC, over several years without observing a single individual, in March of 2004 *Lyogyrus granum* suddenly became the most common gastropod at that site.

**Conservation Status.** NatureServe G5/S4 - Secure/Apparently Secure.

