



Amnicola limosa (Say 1817)

mud amnicola

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 spare 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.

By comparison to other hydrobiid taxa, systematic relationships have remained relatively stable in the genus *Amnicola*. *Amnicola limosa* may, however, be confused with several other taxa of plainly-shelled hydrobiids inhabiting southern Atlantic drainages, including *Gillia*, *Lyogyrus*, and *Somatogyrus*. Penial morphology in the subfamily Amnicolinae is doubly-ducted. Of the three amnicoline genera inhabiting the study area, *Amnicola* (s.s.) is distinguished by its relatively thin shell and (entirely) paucispiral operculum. Adult shell length 3-4 mm. VDGIF follows the Turgeon et al. *Amnicola* "*limosus*," preferring the masculine suffix over the feminine "*limosa*."

Habitat & Distribution. *Amnicola limosa* is widespread throughout eastern North America, from Canada to Florida, ranging at least as far west as Utah. Populations are typically found in lentic environments. In Virginia, *A. limosa* is most commonly collected in the slow-moving rivers of the lower Piedmont and Coastal Plain, often on detritus or woody debris. Such waters may be darkened by high concentrations of organic compounds, but are not necessarily acidic. Populations of *A. limosa* are not found in waters that become hot, stagnant, or anaerobic.

Ecology & Life History. Several excellent studies have demonstrated that populations of *Amnicola* are efficient grazers of diatoms and other periphyton. They in turn may be eaten by crayfish and sunfish. *Amnicola* populations generally appear to be annual and semelparous. But dynamics appear to be sensitive to aspects of water chemistry, especially hardness and pH.

Conservation Status. NatureServe G5/S5 - Secure.

