

Fontigens nickliniana (Lea 1838)
watercress snail



amphibious life habit of the latter.

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

Like other members of the hydrobiid subfamily Fontigentinae, *F. nickliniana* bears a rather striking triply-ducted penis. *Fontigens nickliniana* is the most widespread and common of the nine species monographed by Hershler and colleagues. Its shell (3 - 4 mm adult length) is relatively taller than those born by *F. bottimeri* and *F. morrisoni*, and the animal dark.

Habitat & Distribution. This little hydrobiid ranges from Wisconsin through Indiana, Illinois, and Michigan to western New York and south through Virginia, with one extralimital population in central Alabama. Like all members of the genus *Fontigens*, *F. nickliniana* is restricted to springs, spring runs, and streams and pools inside caves. Population densities become rapidly attenuated downstream, as though dependent on constant temperature or some other unique aspect of the spring environment. In Virginia, populations of *F. nickliniana* are typically found on stones, watercress, and other solid substrates, in limestone-rich portions of the Ridge & Valley Province.

Ecology & Life History. We are not aware of any good study on the life history of *Fontigens*. But populations typically seem to maintain high densities year round, as though reproduction might be continuous. *Fontigens nickliniana* seems largely restricted to limestone springs, suggesting a requirement for high calcium concentration or some other correlate of water hardness.

Conservation Status. NatureServe G5/S4S5 - Secure/Apparently Secure.

