



Pleurocera catenaria dislocata (Ravenel 1834)

lapped elimia



Taxonomy & Systematics. *Pleurocera* is a genus in the (primarily North American) family Pleuroceridae - prosobranch gastropods of moderate body size, generally inhabiting shallow waters, males aphyllid. Females can be distinguished by an egg laying groove on the right side of their foot. Most populations are perennial and iteroparous, typically requiring more than a year to mature and living several years. Eggs are affixed to hard substrates singly or in small clusters from spring to midsummer. Pleurocerids are generalized grazers, and where present in high density can have significant effects on energy flow in streams.

Until recently this species has been assigned either to the genus *Goniobasis* or to "*Elimia*." Both of these generic nomina were subsumed under the genus *Pleurocera* in 2011.

Superficially some populations of this subspecies are distinguishable from *P. proxima* only by the presence of faint costae on the apical whorls. But allozyme frequencies confirm a close genetic similarity to *P. catenaria catenaria*. And indeed, some populations inhabiting the Tar/Pamlico and Chowan drainages have sculpture intermediate between *P. catenaria dislocata* and the typical *P. catenaria catenaria*, rendering any distinction subjective. The reduction in shell sculpture typically displayed by *dislocata* populations may be a plastic response to soft substrate.

Ravenel (not Reeve) described *Melania dislocata* from "Dan River, North Carolina," but Goodrich (1942) lowered the nomen to subspecific rank under *catenaria*. Although the decision by Turgeon et al. to promote *dislocata* back to the full species level was neither justified nor justifiable, VDGIF followed. Mitochondrial CO1 and 16S sequence data from an individual sampled from Orangeburg County, SC, were analyzed by Dillon & Frankis.

Habitat & Distribution. Populations of *P. catenaria dislocata* seem restricted to streams of high groundwater content and good flow in the lower Piedmont and upper Coastal Plain. Its distribution is spotty, being recorded from tributaries of the Meherrin/Nottoway and Roanoke in southside Virginia, as well as scattered streams in eastern portions of the Carolinas and Georgia.

Ecology & Life History. Like typical *P. catenaria catenaria*, *dislocata* is not found in acidic waters, and seems positively associated with limestone, or marl deposits where outcropping in the lower Piedmont. But it does not seem as strict in its requirement of rocky substrate, and can be found on bottoms of firm sand and woody debris.

Conservation Status. NatureServe G4Q/SNR - Apparently Secure/Unranked.

