



## *Pleurocera semicarinata* (Say 1829)

fine-ridged 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.

Three populations of *P. semicarinata* were included in the allozyme study of Dillon & Davis - two from tributaries of the upper New River and one from a tributary of the North Fork Roanoke in Montgomery County. The species is quite genetically distinct from *P. proxima* and *P. simplex*, the two other *Pleurocera* species that share its range. Dillon & Frankis included sequence data for the CO1 and 16S mitochondrial genes from a population in Pulaski County, Virginia, as a control in their study of molecular divergence.

**Habitat & Distribution.** The range of *P. semicarinata* was given by Goodrich as "tributaries of Ohio River, Scioto River, Ohio, to Big Blue River, Indiana; Licking River to Salt River in Kentucky; two creeks of Green River of Kentucky." He did not realize that the range of the species also extends up the New River drainage into southern Virginia, down the Blue Ridge scarp to tributaries of the upper Roanoke River, and then north down the Great Valley of Virginia through tributaries of the James and the Shenandoah. The northern limit of *P. semicarinata* seems to be in the vicinity of Waynesboro.

**Ecology & Life History.** Throughout its extensive range, *P. semicarinata* inhabits small, rich, hardwater creeks with rocky bottoms and good flow.

**Conservation Status.** NatureServe G5/SNR - Secure/Unranked.

