



Laevapex fuscus (C. B. Adams 1841) dusky aencylid

Taxonomy & Systematics. The Aencylidae is a small family of small basommatophoran pulmonates, including several dozen species in 6-8 genera worldwide. They are (at least embryonically) sinistral, although their direction of shell coil tends to be obscured by the cap-like or limpet shape of their shells. The gill has been lost, leaving respiration to occur across the entire mantle cavity, as is true for pulmonates in general. But aencylids do not rise to breathe at the surface; their mantle cavity being filled with water throughout their lives. Thus unlike most pulmonates,

they are not especially well-adapted for warm or stagnant waters. Aencylids are hermaphroditic, as again is true for pulmonates in general; often apparently self-fertilizing. They lay eggs in singletons or small clusters with little matrix.

The shells borne by *Laevapex* populations in southern Atlantic drainages vary in outline from elliptical to nearly circular. Those in the latter category have sometime been assigned to the nomen *L. diaphanus*. Genetic studies have recently revealed, however, that *diaphanus* is a junior synonym of *fuscus*, any distinction in shell morphology being attributable to ecophenotypic plasticity.

Habitat & Distribution. This limpet is widespread throughout southern Atlantic drainages and Virginia generally, especially in the Piedmont and Coastal Plain, on rocks and woody debris. Elsewhere *L. fuscus* ranges through North America east of the Great Plains, from Florida to southern Ontario and Quebec. *Laevapex* populations are not as common in rocky streams as are populations of *Ferrissia*, generally seeming to require calmer waters.

Ecology & Life History. Most populations of *L. fuscus* appear to demonstrate annual, semelparous life cycles, although two semelparous generations per year has been documented in New York. The bioenergetic data collected by McMahon suggest that reproductive effort in this species is in line with expectation from adult weight, and hence that their life history strategy is Undifferentiated.

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

