

# Eastern Lampmussel (*Lampsilis radiata*)

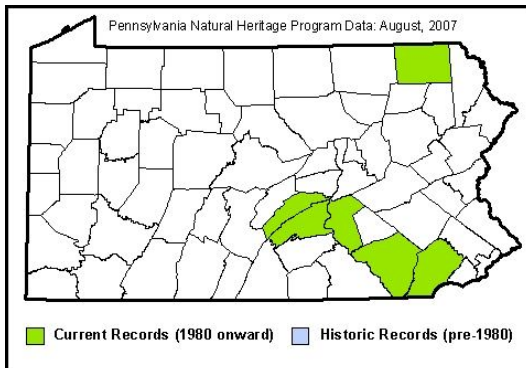
*Freshwater Mussel Species of Concern*  
State Rank: S2 (imperiled), Global Rank: G5 (secure)

## Identification

The eastern lampmussel (*Lampsilis radiata*) is a medium-sized to large mussel, usually up to 100 mm in length. The shell is usually subovate to subelliptical in shape, and the valves are moderately inflated in cross section. The posterior ventral margin of the shell is usually more rounded in mature females (Connecticut DEP 2003, Nedeau 2000, Strayer and Jirka 1997, Cordeiro). The posterior ridge is not well-defined and the posterior slope is arched (Bogan 2002). The periostracum (outer covering) ranges from yellowish-green (juveniles) to greenish-brown (adults) with dark green rays covering the entire surface of the shell. The nacre (iridescent inner shell) is usually white, bluish-white, pink or salmon. Hinge teeth are well developed – the left valve has two pseudocardinal teeth and two lateral teeth, the right valve has two pseudocardinal teeth and one lateral tooth (Bogan 2002, Connecticut DEP 2003, Nedeau 2000, Strayer and Jirka 1997).



photo source: <http://research.amnh.org/biodiversity/mussel/lampsilistgenustext.html>



## Habitat

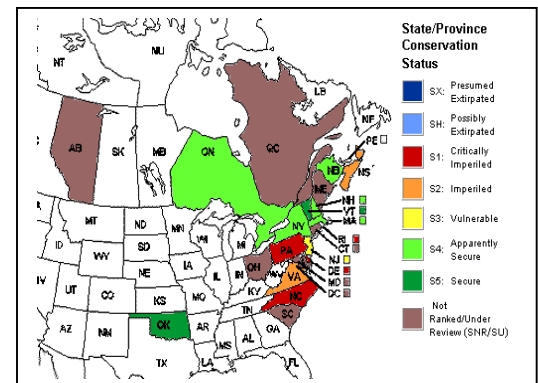
The eastern lampmussel inhabits a wide variety of habitats including small streams, large rivers, ponds, and lakes. It seems to prefer sand or gravel substrates but can be found on many different types of substrate (Connecticut DEP 2003, Nedeau 2000, Strayer and Jirka 1997).

## Host Fish

The eastern lampmussel is thought to use a variety of fish hosts for reproduction, including rockbass, pumpkinseed, bluegill, smallmouth bass, longear sunfish, largemouth bass, white perch, sand shiner, yellow perch, bluntnose minnow, and black crappie (Cordeiro; Nedeau 2000).

## Status

Ranging widely, the eastern lampmussel occurs along the Atlantic coastline from Nova Scotia, Canada to South Carolina, as well as throughout the Great Lakes region from Lake Ontario to Lake Superior (NatureServe 2005, Nedeau 2000, Strayer and Jirka 1997). This species is usually one of the more common ones found during mussel surveys. In an assessment of the conservation status of the freshwater mussels of the United States by the American Fisheries Society (Williams et al. 1993), the eastern lampmussel was listed as currently stable. The state status of the eastern lampmussel is imperiled (S2) (PNHP) due to infrequent occurrences of this species within suitable habitat. More surveys are required to determine the status of this species and other freshwater mussels in Pennsylvania.



The eastern lampmussel is a very stable species throughout its range. This could be due to its ability to survive in many types of habitats and/or wide variety of fish hosts used as prey for larval development. This mussel species will likely continue to play a key ecological role in aquatic ecosystems (Connecticut DEP 2003, Nedeau 2000).

## References

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