

# Eastern Floater

## *Pyganodon cataracta*

### *Freshwater Mussel Species of Concern*

State Rank: S3S4 Global Rank: G5

#### **Identification**

The eastern floater (*Pyganodon cataracta*) is a medium size mussel, often greater than 100 mm long, with a fragile shell. The shell is subelliptical to subovate, and elongate with a broadly rounded ventral margin (Bogan 2002; Connecticut DEP 2003; Nedeau 2000; Strayer and Jirka 1997). The beaks are slightly inflated and project above the hinge line. The beak sculpture consists of five to seven double-looped concentric ridges (Bogan 2002; Strayer and Jirka 1997; <http://research.amnh.org/biodiversity/mussel/pyganodongenframeset.html>). The anterior margin is evenly rounded whereas the posterior margin tapers to a midline point (Bogan 2002). The periostracum (outer covering) is smooth and sometimes has faint green rays. Its color varies from straw yellow to greenish or brownish-black. Hinge teeth are completely absent (i.e.: no indication of swellings along the hinge line). The nacre (inner iridescent coloring) is usually silvery-white or bluish-white (Bogan 2002; Connecticut DEP 2003; Nedeau 2000; Strayer and Jirka 1997).



Photo:

[www.fws.gov/athens/hot\\_issues/Hot\\_Issues\\_2004/release\\_GES\\_04\\_49\\_GP\\_Mussels.htm](http://www.fws.gov/athens/hot_issues/Hot_Issues_2004/release_GES_04_49_GP_Mussels.htm)

#### **Habitat**

The eastern floater exists in a variety of habitat types including small streams, creeks, rivers, ponds, lakes, and marshes. It is usually found in slow moving backwaters or standing waters in fine sand, silt, or muddy substrates (Bogan 2002; Nedeau 2000; Strayer and Jirka 1997). It seems to thrive in nutrient-rich water typical of man-made ponds (Connecticut DEP 2003).



Photo: PA Science Office TNC



Photo: PA Science Office TNC

#### **Host Fish**

Reported fish hosts for the eastern floater include the common carp, bluegill, pumpkinseed, yellow perch, white sucker, rock bass, and the three-spine stickleback (Bogan 2002; Nedeau 2000; Strayer and Jirka 1997; <http://research.amnh.org/biodiversity/mussel/pyganodongenframeset.html>; [www.natureserve.org/explorer](http://www.natureserve.org/explorer)).

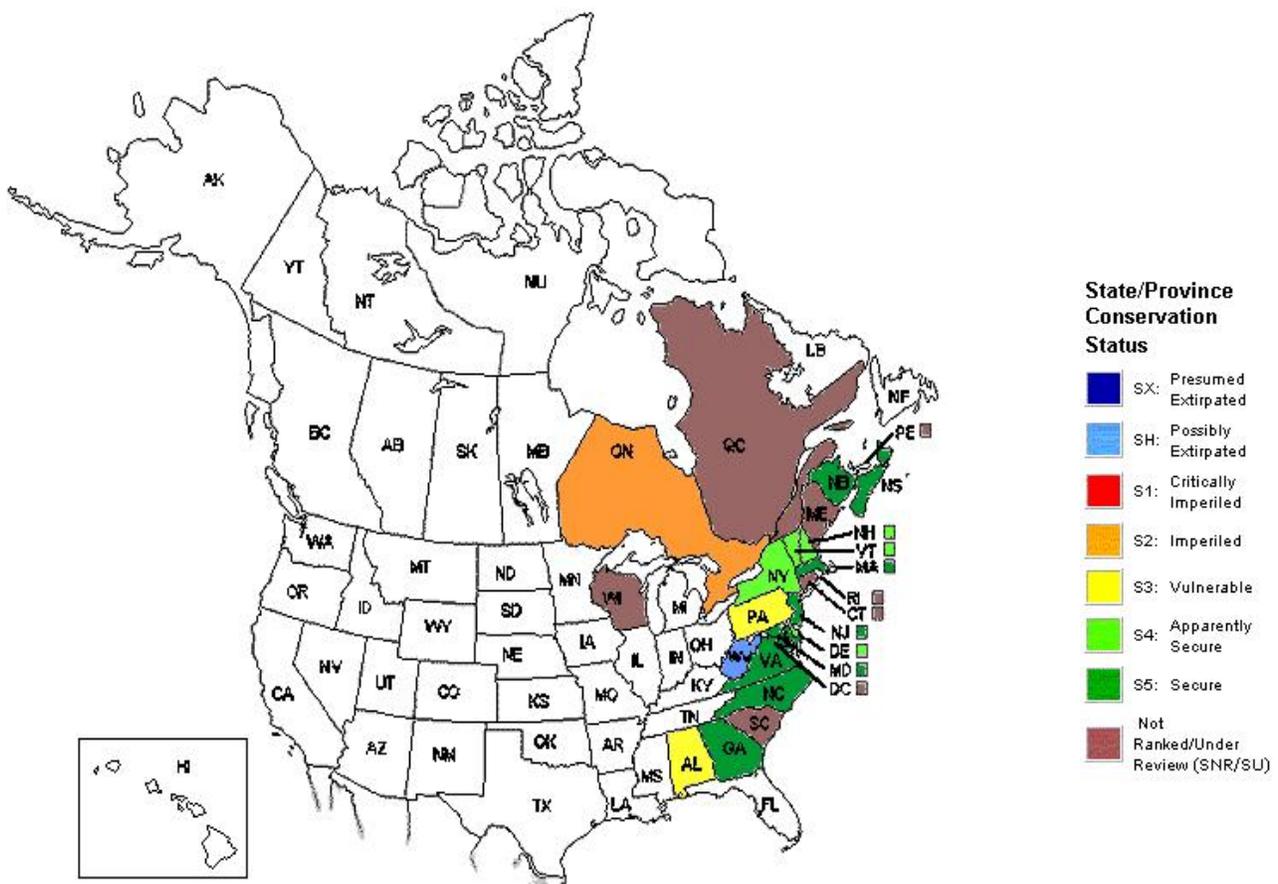
## Status

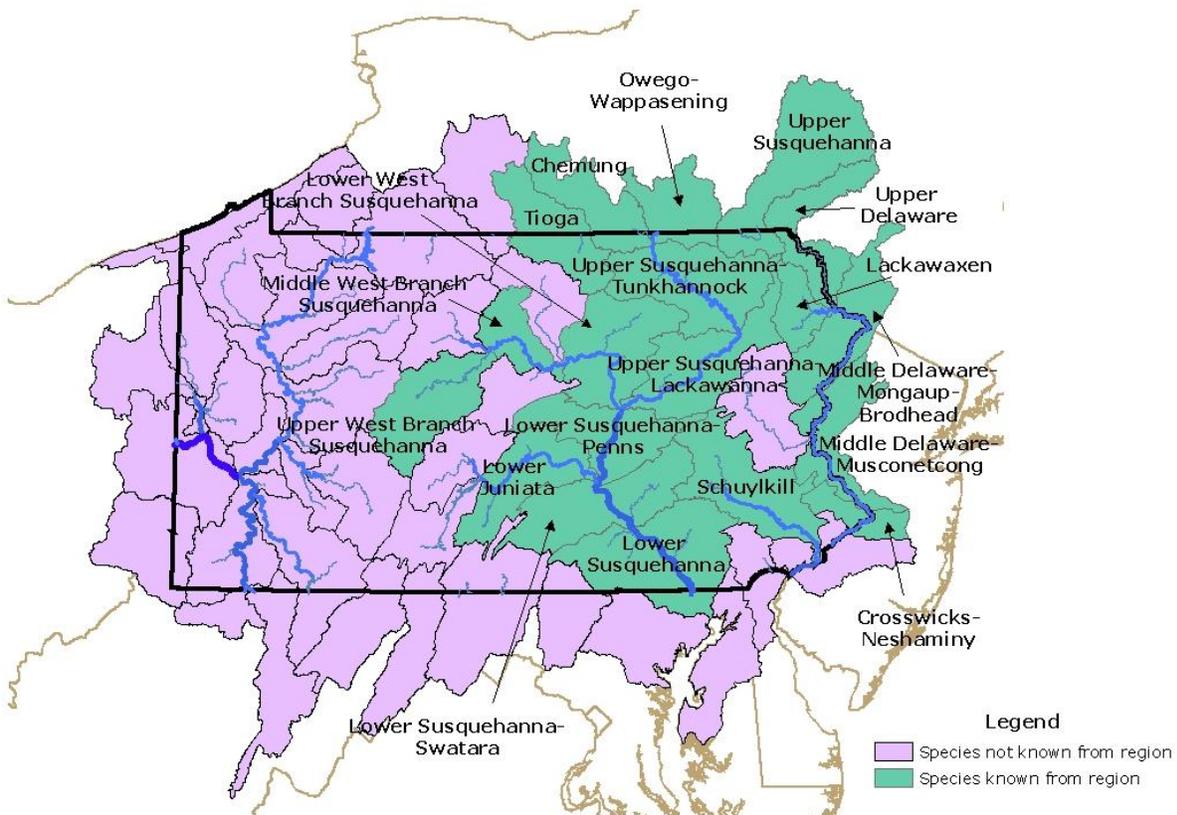
*Pyganodon cataracta* is found in drainages along the Atlantic seaboard from the St. Lawrence River to Georgia. It is widespread throughout the Susquehanna, Delaware, and Hudson River basins, but is less common in the southern portion of its range (Bogan 2002; Nedeau 2000; Strayer and Jirka 1997; [www.natureserve.org/explorer](http://www.natureserve.org/explorer)). In Pennsylvania, *Pyganodon cataracta* is thought to be secure within its range.

Since the eastern floater has a wide environmental tolerance and low host specificity, it is common and widespread throughout most of its range. Because of this, *Pyganodon cataracta* will remain a key indicator of the health of our aquatic ecosystems in the future. However, since it has a relatively thin shell, many predators prefer this species because the shell can easily be broken (Connecticut DEP 2003; Nedeau 2000).

### North American State/Province Conservation Status

Map by NatureServe (July, 2007)





Pennsylvania Natural Heritage Program



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### References

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- NatureServe Explorer: An online encyclopedia of life [web application]. 2005. Version 4.5. Arlington, VA. Website: [www.natureserve.org/explorer](http://www.natureserve.org/explorer).
- Nedeau, E.J, M.A. McCollough, and B.I. Swartz. 2000. The Freshwater Mussels of Maine. Maine Dept. of Inland Fisheries and Wildlife, Augusta, ME.
- New York Metropolitan Region and New Jersey Freshwater Mussel Identification Handbook. Website: <http://research.amnh.org/biodiversity/mussel/pyganodongenusframeset.html>
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