



December 29, 2008

Dr. Douglas J. Austen
Executive Director
Pennsylvania Fish and Boat Commission
P.O. Box 67000
Harrisburg, PA 17106-7000

Dear Dr. Austen,

The Freshwater Mollusk Conservation Society (FMCS) is writing to express our support of the Pennsylvania Fish and Boat Commission's proposed rule to list five mussels (*Epioblasma triquetra*, *Plethobasus cyphus*, *Quadrula c. cylindrica*, *Simpsonaias ambigua*, and *Villosa fabalis*) as Endangered or Threatened in the Commonwealth of Pennsylvania. The FMCS is a non-profit entity whose mission includes education, research, and protection of freshwater mollusks, North America's most imperiled group of animals. Our membership includes individuals affiliated with state and federal government, academia, as well as amateur collectors and citizen scientists.

As you are aware, all of the species proposed for listing have been ranked by the bivalve technical committee of the Pennsylvania Biological Survey as Critically Imperiled (S1) or Critically Imperiled/Threatened (S1/S2). Additionally, these species are ranked globally as either Imperiled (G2) or Vulnerable (G3) (NatureServe 2008). The species proposed for listing meet the criteria that have been developed by the commission for listing threatened and endangered mussels, which are based on the IUCN Red List criteria.

Freshwater mussels are considered one of the most imperiled fauna in North America, with approximately 213 of the 297 recognized taxa considered endangered, threatened or of special concern (Lydeard *et al.* 2004, NatureServe 2008, Ricciardi and Rasmussen 1999, Williams *et al.* 1993). Of the approximately 65 species of freshwater mussels that have been known historically from Pennsylvania, 13 (20%) are considered historic or possibly extirpated. The range of all 13 of these species included portions of the Ohio River system, the same system from which the proposed species are known. Threats to mussels continue today in the Ohio River system, including pollution from oil and gas drilling and acid mine drainage and habitat degradation and loss through commercial dredging for sand and gravel.

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The extraction of glacial aggregates from the rivers eliminates or significantly reduces the sand, gravel and cobble substrate required by many mussel species, including the ones being proposed for listing. The remaining substrates continue to serve as refuges of habitat for mussels. We feel that providing these mussels with listing protection will offer additional safeguards for their remaining habitats in the Allegheny and upper Ohio Rivers, as well as other important occupied streams in Pennsylvania.

We ask that you support the protection and listing of these mussel species in the ongoing effort to conserve and protect our remaining freshwater mussel populations of the waters of the United States. Thank you for all considerations in this matter.

Literature Cited:

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- NatureServe 2008. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available at <http://www.natureserve.org/explorer>. Accessed: February 4, 2008.
- Ricciardi, A., and J.B. Rasmussen. 1999. Extinction rates of North American freshwater fauna. *Conservation Biology* **13**: 1220-1222.
- Williams, J. D., M. L. Warren, K. S. Cummings, J. L. Harris, and R. J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. *Fisheries* **18**: 6-22.

Sincerely,



Steven Ahlstedt, President
Freshwater Mollusk Conservation Society