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Letter to the Editor - Conservation of Freshwater Mussels in Iowa

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LETTER TO THE EDITOR

CONSERVATION OF FRESHWATER MUSSELS IN IOWA—Letter to the Editor

To the Editor:

Freshwater mussels occur in a variety of aquatic ecosystems worldwide but nowhere is mussel species richness as high as is reported in North America. With nearly 300 recorded species in the U.S., mussels are key components of freshwater biodiversity playing a vital role in benthic communities. Ecologically important in biological processing and nutrient cycling, mussels are also an important food item for a variety of mammals including mink, otter, and raccoon. In addition to ecological importance, freshwater mussels have been economically important in the production of cultured pearls.

Early records indicate 55 mussel species were found in Iowa rivers more than a century ago (Drew 1890). Nearly half of the historically known species were believed to be extirpated from the state by the mid-1980's (Frest 1987). Declines in Iowa mussel populations continue today (Poole and Downing 2004). Threats to freshwater mussels are varied including but not limited to commercial exploitation, exotic species introductions (e.g., zebra

mussels), lack of host fishes, and habitat destruction and degradation.

Because of their economic and ecological importance, research is essential to the conservation management of these organisms. The first four papers that follow resulted from presentations at a symposium at the 115th annual meeting of the Iowa Academy of Science in 2003 in Des Moines, Iowa. The papers cover a range of topics from historic and current practices of mussel propagation to changes in aquatic habitats having the potential to impact mussels, thus expanding our understanding of the opportunities and challenges of protecting freshwater mussels today.

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POOLE, K. E. and J. A. DOWNING. 2004. Relationship of declining mussel diversity to stream-reach and watershed characteristics in an agricultural landscape. *Journal North American Benthological Society* 23:114–125.