

# Endangered Mussels get Pumped-up in the Upper Mississippi River

BY DOUG ALOISI, GENOA NFH

**F**ish and Wildlife Service biologists working alongside state (Minnesota, Wisconsin, Iowa and Illinois) and Federal (U.S. Army Corps of Engineers and National Park Service) biologists had the privilege of helping bring a species back from near extinction this past month, with the release of more than 6,500 two- and three- year old Higgin's eye pearlymussels. The Higgin's eye pearlymussel has been on the Federal Endangered Species list since the early 1970s, about the time the Endangered Species Act was established by Congress.



-USFWS

**Tony Sullins of the Twin Cities Field Office holds a handful of Higgin's eye pearlymussels that will be placed into habitat free of invasive zebra mussels.**

The Higgin's eye pearlymussel, although never common in the Upper Mississippi River basin, was dealt a devastating blow with the invasion of zebra mussels into the Upper Mississippi River basin in the early 1990s. This aquatic invasive species typically uses native mussels as substrate to attach and live on, reducing the native mussel's ability to breathe, feed and reproduce. Large historic mussel beds were literally wiped out when population explosions of zebra mussels covered them in layers of over 12 inches deep in some reaches of the Upper Mississippi River. This situation prompted biologists from around the basin to establish a mussel coordination team to search for answers on how to reduce the threat of extinction to the Higgin's eye pearlymussel, and subsequently other species of mussels as an additional benefit.

A major tool in the recovery of this mussel species is propagation. It was found that host fish placed in cages over suitable habitat results in good mussel production and survival, and fish species such as bass and walleye, historically used in propagation programs at the Genoa National Fish Hatchery (NFH), serve as good fish hosts for the Higgin's eye pearlymussel to be able to complete their reproductive cycle. Through these cage culture efforts, over 6,800 two- and three- year old mussels averaging over three inches in size were released from cages into suitable mussel beds with little or no zebra mussel colonization in the Wisconsin, Rock and Mississippi rivers. Propagation efforts have allowed for the production and release of over 35,000 sub-adult mussels in the past two years. Some of these mussels are now actively reproducing in their new homes, completing the loop of recovery for hopefully generations to come.

For further info about the Genoa NFH: <http://www.fws.gov/midwest/genoa/>