



## Freshwater Mussels Receive a New Home

*The Wayne National Forest's proposed Frontier Landing Boat Launch is one step closer to becoming a reality after a successful mussel relocation effort.*



Edward Entsminger scrapes zebra mussels from a native mussel before it is relocated to Grape Island.

Access for pleasure boaters and water rescue personnel is limited in the Ohio River's Willow Island Pool, but Wayne National Forest managers have just completed the planning and initial design for a new Ohio River access facility. The Frontier Landing Boat Launch will offer parking for up to 60 vehicle/trailer units and an easy access 2-lane ramp, along with other amenities like picnic areas and restrooms. The Forest Service has applied for a \$2.5 million grant from the Ohio Division of Watercraft to construct the facility and has been given positive feedback from grant administrators about receiving the funding.

However, before necessary permits can be approved and construction can begin, a freshwater mussel survey is required because two federally endangered mussels, the Pink Mucket Pearly Mussel and the Fanshell, are present in the middle reaches of the Ohio River. The Forest Service must ensure no adverse effects would occur to

these animals if the boat launch facility were to be constructed.

The Forest Service enlisted the help of U. S. Fish and Wildlife Service divers from the Ohio River Islands National Wildlife Refuge (NWR) to survey a 350 foot long area for mussels where disturbance would most likely occur. The dive team was led by Patricia Morrison, a biologist with the NWR who is a nationally recognized expert in freshwater mussel biology and identification. "We do quite a bit of diving around the islands in the NWR, but this project enabled us to learn a little bit more about

the habitat and mussel community away from the immediate island areas", said Morrison.

Five transects were installed across the potential disturbance area to initially assess habitat quality. The divers poked along the bottom of the river down to depths of 30 feet, and emerged with mesh bags full of shells after completion of each transect. Each individual mussel was identified and its length recorded. A total of 14 species were collected along the transects. No Pink Mucket Pearly Mussels or Fanshells were found, but a single Lilliput, a Regional Forester sensitive species, was located.

"Mussels have the funniest names", chuckled Entsminger. "I never knew there were animals called Pimpleback, Three-horn Wartyback, Pistolgrip, or Mapleleaf. I was amazed to learn that the Washboard does indeed resemble a washboard and can grow to the size of a dinner plate".

Each freshwater mussel collected was relocated to Grape Island, one of the NWR's islands closest to the Frontier Boat Launch site. "We will take all of the mussels we collect and release them in areas with excellent habitat quality around Grape Island", explained Morrison. "Historic mussel beds were decimated in the past by water pollution and changes in habitat conditions, so these individuals will help re-establish what we hope will once again be thriving mussel beds in the future".

Before the mussels were released at Grape Island, each was closely inspected for zebra mussel encrustations. "We took each mussel and gently scraped all of the zebra mussels from its shell with a small knife before putting them in a holding bag", reported Edward Entsminger, a Hocking College fish management student enrolled in the Wayne National Forest's Student Temporary Employment Program. "The zebra mussels are non-native invasive species, and they encrust the native mussels. In fact, zebra mussels can suffocate the native mussels if they build up too much around their siphons. Our efforts will give them a bit of an advantage when they are released back into the river".

The divers will be back to the site in September 2007 to clear all remaining mussels from specific areas in the construction area and along the shoreline where rip rap will likely be placed.

"I'm just learning about this project, but it appears to be a win-win project for everyone involved", said Entsminger. "A nice public boat access facility will be constructed on the Wayne National Forest, the U. S. Fish and Wildlife Service will learn new information about the river's mussel community, and mussels found in the proposed construction area will aid in the restoration of the Ohio River's mussel community".

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