Mussel find suggests Delaware River health

Two native species long thought gone are among several found thriving in the busy waterway.

By Kathy Matheson
ASSOCIATED PRESS

Scientists have discovered several uncommon species of mussels in the Delaware River, indicating that the waterway may be cleaner than people think.

The mussels were found between Chester and Trenton, one of the busiest segments of the industrial river, according to Danielle Kreeger, science director at the Partnership for the Delaware Estuary.

Two of the seven species discovered — the alewife floater and tidewater mucket — were previously thought to no longer exist in Pennsylvania and New Jersey, Kreeger said Wednesday.

"These beds of freshwater mussels — when they're naturally dense and abundant like they should be — are very, very important for water quality and human health," she said.

Mussels provide crucial balance to the ecosystem by stabilizing stream beds and filtering out certain types of contaminants and bacteria from the water. But their populations nationwide have been devastated by water pollution and degraded habitats, Kreeger said.

"It's something that not many folks are aware about. They look like rocks," Kreeger told the Associated Press. "But ... they're functioning like natural waste-treatment plants in our streams."

The Delaware River mussels were found over the summer in a joint effort with the Academy of Natural Sciences. Federal scientists with the U.S. Geological Survey confirmed the types of species only in recent weeks.

It was "very, very surprising" to find mussels like this in an urban waterway used by tugs, tankers, and freighters, said Roger Thomas, staff scientist at the academy. "We think it's an exciting discovery."

There could be several reasons for their presence in the Delaware, including better breeding conditions, Kreeger said. Mussels reproduce by having fish carry their larvae upstream, and there could simply be more fish hosts, she said.

"It's not fair to say that conditions have recently improved. But it does say that the Delaware is much cleaner and healthier than many people think it is," Kreeger said.

The mussels in the river are all native species. They are not invasive, like the zebra or quagga mussel, which can wreak havoc by clogging underwater pipes and disrupting the aquatic food chain.

Scientists have spent years looking for mussels in about 40 streams in Southeastern Pennsylvania, Kreeger said, but have found only a single species — the common Eastern elliptio — in just three waterways: the Perkiomen, Brandywine, and Ridley Creeks.

The Eastern elliptio was also found in the Delaware. Two other species discovered — the pond mussel and yellow lampmussel — are considered critically imperiled. Another pair — the creeper and the Eastern floater — are considered vulnerable.

Thomas said scientists hoped to get funding for further research. Eventually, they want to breed and/or transplant mussels to other streams to restore the popula-