

New, bigger barnacle discovered on Florida's east coast

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A bigger barnacle than Florida has seen before has made its way to the state's east coast. Experts aren't sure what the oversized *Megabalanus coccopoma*'s impact will be, but it's been spotted this month in St. Augustine and last year in Port St. Lucie. Environmental officials discovered the jumbo-sized crustacean for the first time in Savannah, Ga., earlier this summer.

The barnacle — known to grow at least as large as a woman's palm — is seen as a potential “fouling” nuisance, because barnacles can cement themselves to everything from boat hulls to intake pipes.

“I think it's fair to say it will have an impact,” said Maia McGuire, a marine extension agent with Florida Sea Grant, a University of Florida-affiliated coastal research and education program.

“Especially for boating, they're a fouling hazard. They tend to have sharp openings and they're a pain to get rid of,” she said.

McGuire identified the interloping barnacle after a friend found about 25 of them attached to the propeller of a St. Augustine boat hauled up from the water in Jacksonville for maintenance.

Experts don't know how the barnacle ended up in Florida. It's native to the Pacific Ocean, from Mexico to Ecuador, but in the last few years has been reported in Brazil, Texas and Louisiana.

Barnacles, arthropods that are related to crabs and lobsters, fix themselves to objects or other animals and wait for food to come to them.

The creatures can hitch a ride to their new destinations by attaching themselves to ship or boat hulls, or their larvae get sucked up in ballast water used to balance large vessels, such as cruise ships.

When ships unload cargo in ports, they take on millions of gallons of sea water to keep them steady as the load lightens.

Ballast-water transport is believed responsible for many invasive species around the globe, such as zebra mussels in the Great Lakes area, and officials estimate ballast-water transport causes an estimated \$10 billion in damage a year.

Since 1999, federal officials have been keeping track through the National Ballast Information Clearinghouse. It is a federal crime for ships not to report ballast-water exchange.

Whitman Miller, the Maryland-based clearinghouse's coordinator, said ships have been better complying with reporting requirements since penalties went into effect in 2004.

For now, the idea is that ships must unload coastal water in noncoastal waters, he said — to keep invasive species from putting down roots in a familiar environment.

In the late 1980s, a jellyfish native to the U.S. called *Mnemiopsis* made it to the Black Sea via ballast water. It literally gobbled up the food supply, Miller said, crushing the local anchovy industry.

“When it comes to invasive species, we export as well as import,” he

said.

Amy Benson, a Gainesville-based fishery biologist with the U.S. Geological Survey, said it's too early to know what the volcano-shaped barnacle's impact will be.

“The current barnacles we have cause problems, and they're much smaller,” she said. “This one is so large, I can see it being a big problem.”

By comparison, most native Florida acorn barnacles are much smaller, only growing about a half-inch in diameter.

In 2002, another invasive species—the Asian green mussel—found its way to northeast Florida. That invasive mussel already plagues the state's Gulf coast, killing native shellfish and covering manmade objects.

Officials say the new barnacle could compete with other sea creatures for food and has the potential to clog commercial intake or drainage pipes.

And at the least, they can cause headaches for boaters. By attaching themselves to hulls or propellers, they cause friction as the boat cuts through the water, slowing it and forcing the engine to guzzle fuel.

Bill Newman, a barnacle expert with Scripps Institute of Oceanography in La Jolla, Calif., said the barnacle landed there during an El Niño event in the early 1980s that temporarily warmed the water.

“It doesn't like the cooler water here, but I bet it likes those warm Florida waters,” Newman said.

The new species may not cause problems, but bears watching, Newman said.

“They’re opportunists,” he said. “It doesn’t dominate any environment, and the natural predators normally catch up with it.”

Source: University of Florida

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