

US tiger shrimp sightings worry scientists

April 27 2012, JANET McCONNAUGHEY , Associated Press

(AP) -- A big increase in reports of Asian tiger shrimp along the U.S. Southeast coast and in the Gulf of Mexico has federal biologists worried the species is encroaching on native species' territory.

The black-and-white-striped shrimp can grow 13 inches long and weigh a quarter-pound, compared to eight inches and a bit over an ounce for domestic white, brown and pink shrimp. Scientists fear the tigers will bring disease and competition for native shrimp.

Shrimp are all bottom feeders, eating detritus and small animals. Bigger shrimp would eat more and these get so big they also eat small shrimp and fish, [marine ecologist](#) James A. Morris said.

Reports of tiger shrimp in U.S. waters rose from a few dozen a year - 21 in 2008, 47 in 2009 and 32 in 2010 - to 331 last year, from North Carolina to Texas.

"That's a big jump," said Pam Fuller, who keeps a federal [invasive species](#) database at the U.S. Geological Survey's Southeast Ecological Science Center in Gainesville, Fla.

And those are just the numbers reported to the government.

"I've had fishermen tell me they have quit bringing them in. They are seeing large numbers in their catch - multiples per night," said Morris, who works at the National Oceanic and Atmospheric Administration's Center for Coastal Fisheries and Habitat Research in Beaufort, N.C.

The increase "is the first indication that we may be undergoing a true invasion of Asian tiger shrimp," he said.

Though tiger shrimp are edible, Fuller said they are not currently farmed in the United States. The last U.S. tiger shrimp farm closed in Florida in 2004, without ever raising a successful crop, according to a USGS fact sheet about the species.

"Nobody knows what happened to their stock. But they have not been commonly caught in the area where that [fish farm](#) was," she said.

She said hundreds were caught along South Carolina, Georgia and Florida after a storm hit a South Carolina shrimp farm in 1988, but none was reported in U.S. waters for the next 18 years. Six were reported in 2006, and four in 2007.

To find out whether last year's increase was a one-time spike or the vanguard of an invasion, the agencies are asking people to keep a wide eye for tiger shrimp, to report where and when they find them, and bring back frozen tiger shrimp to help learn where they're coming from.

Subtle differences in the DNA can indicate whether they have meandered in on ocean currents from the Caribbean or West Africa, where tiger shrimp are farmed, arrived in ballast water of ocean-going ships, or have taken up housekeeping in U.S. waters.

Fuller said she thinks ballast water is the least likely explanation because they're known to be in the wild in areas where they could drift to the United States and because the threat appears widely spread. A map shows most of the reports are from Louisiana, Mississippi, Alabama, Georgia and the Carolinas, with some in Florida and a few in Texas.

"I think it's quite possible they're being swept up from the Caribbean,"

she said. "There are large farms there that appear to be connected directly to the ocean. Some of those were destroyed in hurricanes. We don't know if perhaps a large bunch got loose and swept up here and became established. Nobody knows. That's one reason we want to do the genetic work."

It can be hard to get good data on the shrimp, Morris said. For one thing, shrimp boats often are out for weeks at a time. All but the biggest tigers may go unnoticed, and shrimpers may not remember when and where they were caught.

He said it's also hard to predict their possible effects. Freshwater invasive species have been well studied, but so far lionfish are the only known marine invasive species in U.S. waters, he said.

More information: Map of sightings:

<http://nas2.er.usgs.gov/viewer/omap.aspx?SpeciesID1209>

Native U.S. shrimp: <http://www.fishwatch.gov/seafood-profiles/species/shrimp/group-pages/>

Report tiger shrimp here: <http://nas.er.usgs.gov/SightingReport.aspx>

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Citation: US tiger shrimp sightings worry scientists (2012, April 27) retrieved 20 September 2024 from <https://phys.org/news/2012-04-tiger-shrimp-sightings-scientists.html>

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