

BAN ON IMPORTS

Written by Molly Murray The News Journal

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No state, federal or international laws were broken, when a container filled with 2,000 horseshoe crabs harvested in Thailand arrived at a port in New York bound for the bait market in 2011.

Thousands more horseshoe crabs, harvested in Vietnam, were imported the following year.

But now, state and federal officials are scrambling to close the door on imported horseshoe crabs –three species distantly related to the *Limulus polyphemus* that converges on the shores of Delaware Bay each spring to spawn –amid concerns the imported species could bring a significant human health risk, diseases, parasites or even out-compete the native species, a linchpin in the ecological food web of the bay.

Shorebirds depend on the crab eggs as a food source in their northward migration and weakfish and striped bass feed on the crabs. Commercial conch and eel fishermen use them for bait.

“That’s the life blood of six different shorebird species, stripers and weakfish,” said Collin O’Mara, secretary of the state Department of Natural Resources and Environmental Control.

Late last week O’Mara signed an order banning the possession and use of the three Asian species: *Carcinoscorpius rotundicauda*, sometimes called the mangrove horseshoe crab; *Tachypleus gigas* and *Tachypleus tridentatus*, sometimes called the Japanese horseshoe crab.

“It was a risk we weren’t willing to take,” he said. So much time and effort has gone into rebuilding the native horseshoe crab stock in Delaware Bay, O’Mara said he couldn’t see allowing anything in that might jeopardize its recovery or worse, lead to a decline.

“We’ve seen this before,” he said.

The Delaware Bay oyster population has never fully recovered from two parasites –MSX and Dermo.

Delaware is one of the first states in the region to ban possession and use of the foreign crabs.

“That’s important,” said Glenn Gauvry, president of Ecological Research & Development Group Inc., a Delaware-based, international organization that advocates for horseshoe crabs worldwide.

It was the International Union for the Conservation of Nature, on which Gauvry serves, that brought the imported crab issue to the attention of U.S. regulators earlier this year.

The organization first approached the Atlantic States Marine Fisheries Commission –the regional fisheries management organization that has been overseeing conservation efforts aimed at helping native horseshoe crab stocks recover. Horseshoe crab stocks plummeted amid intense harvest pressures in the late 1980s and early 1990s. The population decline, many scientists believe, had a direct impact on a dramatic drop in some species of migratory shorebirds, most notably the red knot. Shorebirds time their spring migration to Arctic Breeding grounds with the spawning of horseshoe crabs along the Delaware Bay shore. The birds stopover and feed on the pearly, green crab eggs to gain enough weight to fuel their northward migration and sustain them until the Arctic thaw and hatch of insects. Weight gain in Delaware Bay has been directly linked to breeding success in the Arctic.

The International Union members learned of the first shipment of Asian Horseshoe crabs at a conference in Hong Kong in 2011. The initial concern, Gauvry said, was that the three Asian species are also in decline. In addition, there were worries about whether the foreign species could introduce parasites, disease or –if they took hold here –outcompete the native species.

The Atlantic States Marine Fisheries Commissioners realized they had no jurisdiction, said Marin Hawk, who serves as a coordinator for the horseshoe crab management plan.

They contacted the U.S. Fish & Wildlife Service, which oversees the Lacey Act -- the law that regulates importation of exotic species. Federal officials initially thought they could regulate the crab imports through the act.

But in an April letter to the regional fisheries commission they concluded the act didn't extend to horseshoe crabs.

The problem, wrote fish and wildlife Deputy Director Rowan Gould: Horseshoe crabs are in the Arthropod phylum, and as such, aren't listable under the injurious wildlife provisions in the Lacey Act.

“We are unable to prohibit their importation and interstate commerce at this time,” Gould wrote.

A proposal to amend the act so it could cover Arthropods is tied up in congress.

So the fisheries commission passed a resolution that urged states from Maine south to Florida to adopt their own bans on possession and use of the crabs, Hawk said.

Stewart Michels, a Delaware fisheries scientist, said that state officials believe that commercial fishermen in Delaware aren't using the imported crabs.

Michels said there are multiple concerns about the imported crabs not the least of which is a potential human health risk.

One species of the crabs, *Carcinoscorpius rotundicauda*, accumulates a neurotoxin, tetrodotoxin (TTX) that doesn't break down when the animals are frozen or cooked. State officials worry that it could bio accumulate in conch, eel or other fish or shellfish in the region. The toxin is known to kill people who eat contaminated fish and shellfish.

Gauvry said his organization has yet another concern. The Asian species aren't that plentiful in their native region.

"They're not rare but they are in serious decline," he said.

The issue of harvesting Asian crabs for the US bait market was the last thing scientists were expecting, Gauvry said.

From his standpoint, he said there are two key issues: "Now we have an additional stressor on an already declining population of horseshoe crabs in Asia ... and what is it we're bringing into our waters."

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