



## Horseshoe Crab Migration Numbers Appear to be Rising

*Management plan shows promise*

**By Leah Hoenen**

Migrating shorebirds discovered more horseshoe crab eggs on the beach this year than they have in many years, and it's also good news for horseshoe crabs, whose numbers are increasing in Delaware waters.

Department of Natural Resources and Environmental Control biologist Kevin Kalasz said birds arrived and departed when expected, and there were no major storms to disrupt their layover in the Delaware Bay. Shorebirds, including the red knot, which is a candidate for the endangered species list, stop at Delaware Bay beaches, where they feast on horseshoe crab eggs to increase their body weight before flying north to nesting areas.

State officials don't yet have final horseshoe crab egg numbers, Kalasz said, but anecdotal evidence shows there were many more than in previous years.

Because of warm weather, some crabs began spawning in April, and crabs laid eggs in the sand through all of May.

In addition to good weather, Kalasz said, other factors came together for the shorebirds' benefit this year. Kalasz said more than a decade of fishery management is now producing results. In 1998, the Atlantic

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State Marine Fisheries Commission first limited the take of horseshoe crabs, used in bait and medical research, said Kalasz.

Female crabs reach maturity between 10 and 12 years, and males between nine and 10 years, said Glenn Gauvry, director of the Ecological Research and Development Group, so the results of the restrictions are now becoming apparent. He said the number of adult male horseshoe crabs has increased in recent years, and people are finding more molted shells on the beach.

Kalasz said state environmental officials have been seeing more juvenile horseshoe crabs in offshore trawls, showing females who hatched a decade ago survived and are now laying their own eggs.

“We are seeing the first signs of successful management actions with regard to the spawning population of horseshoe crabs,” he said. It will take longer to see if more horseshoe crabs translate to higher numbers of red knots, Kalasz said.

“One good year in Delaware only doesn’t mean an immediate increase,” he said. The birds could reach a healthy body weight in Delaware, only to reach the Arctic and suffer a late winter, like last year, and produce fewer eggs.

They could also run into problems in the Southern Hemisphere, where they live in the winter, he said. The birds need good conditions along their entire migratory path and their nesting grounds for several years before their numbers can increase, Kalasz said. Red knots are long-lived birds that do not produce large numbers of offspring every year.

Gauvry said there are also more horseshoe crabs on the beaches, including at Cape Henlopen, which is unusual. “Things are looking good,” he said.

Delaware has limited horseshoe crab harvesting to 100,000 adult males a year and no females, he said. New Jersey has put a

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moratorium on horseshoe crab harvesting, he said.

"We're a wildlife conservation organization, but we don't support a moratorium and never have," said Gauvry.

"We need to balance all parties, and it appears that the fishery can handle the current catch limit," he said.

The downside of a moratorium is that it drives fishermen to seek their catch elsewhere, said Gauvry. He said New York and Massachusetts are scrambling to implement or tighten their regulations.

"We want to see a more measured approach, like the one Delaware has taken," he said. Gauvry said worldwide, the horseshoe crab fishery has never before been managed. With the Delaware Bay as the first to do so, countries around the world are taking note of the successes as guidelines for their own possible management projects, he said.

"I think history will show Delaware's regulations were pretty much on target," he said.