



June 6, 2009

## Red knots dine well on Del. beaches

Endangered birds may be rallying -- along with horseshoe crabs

By *MOLLY MURRAY*

*The News Journal*

There may finally be good news for the red knot.

Biologists still must analyze data on this spring's shorebird migration through Delaware Bay and the horseshoe crab spawning season, but early indications are that it was a good season for the birds and the crabs.

Now, said Kevin Kalasz, a zoologist with the state's non-game and endangered species program, "We need a few more years like this."

Red knots, the migratory shorebird species that many believe is most at risk, seemed to have little trouble putting on weight -- an indication that crab eggs were in plentiful supply, Kalasz said.

And the aerial surveys of birds in the bay likely missed the peak of migration because of bad weather around May 24, when scientists believed the largest number of birds were in the estuary, he said.

Still, even with missing the peak, the estimated number of red knots at Mispillion Harbor alone was at least 20,000, Kalasz said.

In recent years, the peak number of red knots in the bay has numbered somewhere fewer than 16,000 birds baywide during the annual migration to Arctic breeding grounds.

The birds -- and other migratory shorebird species -- stop over for two to three weeks to eat and put on fat reserves before continuing their northern journey. Red knots need significant weight gain -- they typically weigh about 110 grams when they arrive on our shores and need to weigh 190 to 210 grams when they leave two or three weeks later.

They depend heavily on a diet of protein-rich horseshoe crab eggs. Simply to maintain their weight, they need to eat 13,000 of the pearly-green, pin-head-sized eggs each day. To put on the huge fat reserves for migration and breeding, they need a diet of 24,000 eggs a day.

During this migration, "it appeared there were a large number of eggs on the beach," Kalasz said. "It seems like it was a really good season for the birds."

It also seems like it was a good season for the crabs.

Stewart Michels, a state wildlife biologist, said that researchers will need to look at the spawning count numbers baywide to get a complete picture, but it appears that in key areas, it was a good year.

Michels said he did survey work at Pickering Beach -- an area he has surveyed for several years.

"It was about as good as I've seen there," he said. "It's probably some of the best early spawning I've seen."

Michels said what scientists are seeing could be crabs that are just entering the spawning cycle -- crabs that were protected by strict fisheries management rules that were enacted amid concerns of overharvesting.

Delaware still allows a harvest of 100,000 male-only crabs. New Jersey has a ban on horseshoe crab harvests. Delaware's season opens on Monday.

The crabs are cut into quarters and used as a bait in conch and eel pots and in some other fisheries,

In the early 1990s, millions of crabs were harvested each year -- raising concerns about the possible collapse of the species, a creature that predates the dinosaur and can take a decade to reach sexual maturity.

Michels said survey work also points to a growing pool of juvenile crabs.

"I'm so very encouraged," he said.

This year's good news comes at a critical time. Last year, a late season nor'easter disrupted crab spawning and impacted the birds, as well.

Commercial fisherman Charles Auman said he probably won't be out hand-collecting horseshoe crabs when the season opens. Instead, he said, he'll probably be at his site at Mispillion Harbor, buying crabs from other fishermen.

Auman said he has heard that spawning was good this year.

"I think even in their own surveys, they are realizing there are a lot of crabs."

---