

May 27, 2009

South Jersey shorebirds show signs of improvement

By KIRK MOORE STAFF WRITER

At less than a quarter-pound, each sanderling could easily fit in a coffee cup. But for these shorebirds, it's good to be overweight; their May feast on Delaware Bay gave them enough fuel for the last leg of their annual, hemispheric flight.

"Hitting over 100 grams is very good. Some of these birds can barely fly. So they're in great condition," scientist Larry Niles told Rutgers University students Wednesday, after they helped weigh and tag one of the biggest captures this spring by the Delaware Bay Shorebird Project.

For the first time in a decade, red knots and other migrating shorebirds appear to be finding enough horseshoe crab eggs in Delaware to achieve critical weight gain, Niles said.

"We're extraordinarily pleased with what's happened," said Larry Niles, a biologist with the Conserve Wildlife Foundation of New Jersey and the former chief of New Jersey's endangered species program. "We've had unusually settled weather the last couple of weeks, low onshore winds. So it was a soup of crabs."

The birds have gained weight so fast that researchers anticipate they will lift off this week to head for their summer breeding grounds in the Canadian Arctic, said Amanda Dey, who heads the shorebird effort for the state Department of Environmental Protection.

Bird watchers can now help track shorebirds by reporting re-sightings of tagged birds to a new Web site, www.bandedbirds.org. The site includes a primer on the colored plastic "flags" that researchers use to tag and identify individual birds, with colors and codes that tell when and where the animals were captured and released.

Contributors can later get tagging information about where the bird they saw has been. Some, especially the red knots, are marathon fliers, covering the western hemisphere from Chile to Canada and back in a year. On Wednesday, Niles found a red knot his team had tagged at the tip of South America.

"From Canada all the way down to Tierra Del Fuego, people are looking for these flags," he said.

The birds have had a good time on their Delaware Bay stopover, according to weighing data compiled by the team. In past years many birds failed to reach what researchers considered minimum safe weights to survive the flight north.

But graphs showing this year's weights show many more birds hitting the optimums. Observers have seen much less activity at Stone Harbor on the ocean side of Cape May County, where large numbers of shorebirds congregated in recent springs, and researchers believed they were feeding on mussels to make up for shortfalls in crab eggs.

Weather has been one factor, compared to recent stormy springs like 2008 "with that Mother's Day storm followed by a week of west winds," Dey said. The birds may have benefited from beach replenishment in the Reed's Beach area as well, "and some of the creek mouths have been quite good" for attracting crabs that feed the birds, she said.

In the mid-1990s researchers first tied a decline in red knot numbers to heavy commercial harvesting of horseshoe crabs for use as fishing bait in whelk and eel traps. That led to a tightening of limits on horseshoe crab fishing, and ultimately a harvest ban in New Jersey.

But horseshoe crabs take close to a decade to reach reproductive age, so new growth has been slow in the crab population. Another likely factor is the depressed state of shorebird populations, compared to their halcyon days of the 1980s, scientists and birders say.

"The low number of shorebirds is part of the story because there's not as much demand for eggs as there was when there were three times as many birds," Niles said.

Shorebirds are captured, measured and released every three to four days "to get a running seasonal sample of how the birds are doing," Niles told the student volunteers.

Weighing sampled birds shows how fast they are gaining weight, and banding and tagging birds helps scientists estimate how many survive migration from year to year, he said.

"When birds make it above those weights, they have a better chance of making it to the Arctic," Niles said. "It looks like eggs are the fuel that keeps these populations stable and thriving."