

Red knot shorebirds in decline

Delaware Bay may not be source of problem

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By Kirk Moore



Susan Minton, left, shows Caitlin Luetwiler of the group Defenders of Wildlife how to handle a ruddy turnstone. / Kirk Moore/staff photo

MIDDLE TOWNSHIP — After a couple of years of relative stability, the western Atlantic population of red knot shorebirds are in a nosedive again, and researchers are on Delaware Bay this spring looking for clues.

“We know a lot of birds just arrived yesterday, a few hundred red knots and ruddy turnstones,” scientist Larry Niles said last week, feeling the skinny chest of a newly captured red knot, a robin-sized bird that weighed in at barely 4 ounces, around 110 grams. “He needs to get to 180 grams before he has enough fat to get to the Arctic.”

Nearly 16 years after shorebird researchers raised an alarm over the effects of horseshoe crab harvests on red knots that eat crab eggs, they think thousands of the birds have been claimed by other dangers along their migration route.

Now the federal government might make a decisive move. The red knot is a priority in a new plan by the U.S. Fish and Wildlife Service to deal with a backlog of 250 animal and plant species proposed to be covered by the Endangered Species Act.

“The service will begin working on a listing determination for the red knot” in the federal 2012 fiscal year that begins Oct. 1, Eric Davis of the service’s New Jersey field office wrote in a May 12 letter to people working on the shorebird–horseshoe crab connection.

Conservation groups have tried to get the Western Atlantic red knot subspecies listed since 2006, and the new priority bumps the birds up the list, said Caroline Kennedy of the group Defenders of Wildlife.

But meanwhile, horseshoe crab harvests in other states might be increased when the Atlantic States Marine Fisheries Commission meets later this year, she added. And scientists are concerned because a key crab survey by Virginia Tech lost its federal funding this year and is just halfway toward raising the \$200,000 cost.

Delaware Bay is the big stopover for red knots’ flying north to breeding grounds in Canada, because their migration coincides with the horseshoe crab breeding season that leaves bay beaches littered with nourishing crab eggs. That fattens the birds and gives them energy to push on north and lay eggs, said Niles, chief scientist for the Conserve Wildlife Foundation of New Jersey.

“This is the group that just came in. This is what Delaware Bay is all about,” Niles said as scientists and volunteer assistants examined the cheeping birds. “When they overharvested the crabs and destroyed the egg supply ... the red knot population crashed.”

This month an international research team has been on the beaches, helping wildlife experts with the state Department of Environmental Protection continue building the biggest database ever amassed on shorebirds in a single region.

At Cook’s Beach in Cape May County, Niles and Australian researcher Clive Minton huddled low behind grass clumps, watching birds wheel and alight across the beach, Niles’ finger on the firing switch that would launch a net from mortars hidden in the sand.

“OK, Jerry, start moving those birds down the beach,” Niles’ voice crackled over a radio to an assistant. When the birds were in range, Niles gave a quick countdown – “Three, two, one, fire!” – and the boom of black gunpowder sent a pack of volunteers pounding down the beach to a net crowded with fluttering birds.

Working quickly, they gathered the birds into plastic totes and set tarpulins to cover a work space where the birds would be measured, weighed, checked for disease and released.

“That’s a male turnstone, newly here from South America on his way to the Arctic,” Minton explained, holding a bird up for a videographer.

New Jersey shut down its commercial fishery for horseshoe crabs in 2006, culminating years of cutbacks after the take of crabs for fishing bait was blamed for the red knots’ decline. But after 6,000 birds went missing from their South America wintering grounds, researchers think the problem may be down south, Niles said.

Researchers in Argentina reported toxic red tide algae blooms may have killed some birds before they reached their winter quarters, at the southern tip of the continent at Tierra Del Fuego. The drop in the winter count, to 10,000 birds from 16,000, may show growing dangers to the birds all along the western Atlantic and Caribbean shores, said Niles, a former chief of New Jersey’s endangered wildlife program.

Minton said ruddy turnstones have been declining in counts, too, although that species seemed to be more adept at digging up crab eggs during the scarce times. “These have only gone down in the last five or six years,” he said.

But “the best thing we can do is get more eggs on the beach,” Dey said. “We’re in this holding pattern the last five or six years. In my mind we’ve got to get the crabs recovered quicker.”