THE BLOCK ISLAND TIMES

March 18, 2006

Study: Endangered Species Act effective

Atlantic piping plovers and American burying beetles making comebacks on Block Island

by PIPPA JACK

No endangered species in the Northeast has gone extinct since coming under federal protection, according to a study by an environmental group.

And the longer an animal or plant species is protected under the U.S. Endangered Species Act (ESA), the more likely it is to recover, found a study by the Center for Biological Diversity in Tucson, Arizona.

Many will recognize the bald eagle as one of the most notable success stories for the ESA, soaring from 417 pairs in 1963 to 7,230 by 2003 in the lower 48 states. Last year 562 pairs ranged the Northeast, including Rhode Island.

American Burying Beetle

Closer to home, the Atlantic piping plover and American burying beetle have also made comebacks. Programs for both animals are implemented on Block Island.

The study looked at 53 species in eight northeastern states: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York and New Jersey.

It found that the Endangered Species Act has been remarkably successful in the region.

Population numbers for 93 percent of species listed have stabilized or increased, says the study. Eighty-two percent are meeting or exceeding the timelines established by their federal recovery plans.

It is described as the first outside study of the EPA's effectiveness, and drew on federal, state and university research.

The Atlantic piping plover, a tiny beach dweller, is one of the featured species. When listed in 1985, the shorebird was at a low of 550 nesting pairs, but has since increased to 1,423 pairs.

It is now the most widely protected of the endangered species that inhabit Atlantic coast beaches. Protection plans for the piping plover have helped protect less well-known species, such as the seabeach amaranth and northeastern beach tiger beetle, says the study.

Corrie Heinz has walked Block Island's beaches for the past three years, keeping an eye out for piping plovers, which usually appear in April.

No pairs have managed to hatch eggs successfully so far, Heinz says; a nest with eggs was flooded out last year, and other nests have been abandoned. Heinz fences off sec-

tions of the beach to keep walkers away, and asks people to keep dogs on leashes.

The tiny, carrion-eating American burying beetle is Block Island's star endangered species.

The black-and-orange beetle, known as nature's embalmer, was listed in 1989. The beetle once ranged in at least 34 states, but is now absent from 90 percent of its historic range, "one of the most disastrous declines of an insect's range ever to be recorded," says the report.

Block Island has the last natural population east of the Mississippi, and the program here has helped support a captive breeding facility at the Roger Williams Park Zoo and recovery efforts on Nantucket and Penikese Island.

Scott Comings of The Nature Conservancy helps trap and tag beetles annually as part of a joint effort with the state Department of Environmental Management and U.S. Fish and Wildlife. "They're beautiful," Comings says.

The beetle population is between 1,000 and 2,000, Comings says, and has been on the rise for the past few years, apparently in response to a new technique aimed at helping the beetles breed. Comings and others dig a hole and put a dead quail inside with a captured male and female beetle. They then fill the hole back in. They help about 30 or 40 pairs a year this way, mimicking the beetle's natural reproductive cycle.

The beetles typically drag mid-range carrion underground and coat them in secretions to retard fungal and bacterial growth, says the study. "The beetles then mate and within 24 hours lay eggs in the soil near the carcass," it continues. "White grubs emerge three or four days later and are carried to the carcass. The parents defend the grubs from predators and feed them regurgitated food. In approximately a week, the grubs leave the chamber and pupate into adults.

"The American burying beetle is one of the few non-colonial insects in the world to practice dual parenting."

Many factors on Block Island probably contribute to the beetle's survival here, Comings says, including lower pesticide use, less light pollution, good habitat - they favor grassland or mature forest - and a lack of competition with scavengers like foxes and raccoons. Block Island's pheasant population may also provide carrion.

"It's always a little scary when you're dealing with a single population, and it's nice to have this one doing so well," Comings says.

Nationwide, the beetle is doing well enough that, if trends continue, it might be reclassified in 2012, the study says.

More than 1,300 species are listed under the ESA, which was created in 1973.

This study comes at a time of political upheaval for the EPA. A California legislator is leading an effort to overhaul the act, charging that too few of the listed species have recovered, and that the law unfairly burdens property owners.

Less than 1 percent of the endangered species put on the list since 1973 have recovered enough to be taken off, critics say.

The Center for Biological Diversity study counters that, on average, species will take 42 years to reach recovery levels, and so criticizing the EPA now is premature.

For example, the northern red-bellied cooter, a small pond turtle found in southern Massachusetts, was down to 300 in 1985 but now numbers 3,000. Although the cooter has been on the list for 20 years, the 1/2rst hatchlings have been breeding for only 1/2ve years. A cooter begins to breed at age 14.