

# Wildlife

Winter 2007  
www.njfishandwildlife.com

## Dogged search for rare species

Meet “Bear,” the Endangered and Nongame Species Program’s latest weapon in its ongoing efforts to locate and monitor rare species in the state.

Trained by the Working Dogs for Conservation Foundation in Montana, Bear is a black Labrador-chow-retriever mongrel rescued from an animal shelter. Throughout the U.S. dogs such as Bear are increasingly becoming a popular non-invasive way for biologists to assess species ranging from termites to bears.

Purchased by the Conserve Wildlife Foundation of NJ for use by the program, Bear arrived in New Jersey about 15 months ago. Since then, he has been trained and used in preliminary trials to determine his ability to detect the presence of bobcats, bog turtles and northern pine snakes—all particularly elusive, hard-to-find species.

### The verdict?

“I think Bear’s going to be tremendously useful,” says Gretchen Fowles, a GIS specialist with the program who intends to use the dog this winter to monitor bobcats. “He can detect scat at a much greater rate than a human ever could, he covers a lot of ground and that scat he’s found in the field can, through DNA testing, yield a wealth of information.”

DNA extracted from sloughed off intestinal cells contained in the feces can help biologists determine the number of different individuals and their range—and thus help calculate minimum population numbers. Individual DNA analysis can also provide such valuable information as

physiological stress levels, female reproductive status, sex ratios, paternity and kinship.

Using the dog is much more effective, both in terms of biologists’ time and cost, than trapping and radio-collaring a few individuals, such as the program has done with bobcats. Dogs have also proven to be superior to other non-invasive methods of assessing rare species, such as hair snares or remote-triggered cameras. For example, in 2005 the program conducted a bobcat survey with remote cameras situated at 65 known or some-

what likely bobcat sites in northern New Jersey; only two bobcats were “captured” on film.

In 20 trials in which three to six bobcat scats were placed in known locations throughout an 18,500-square meter area, Bear found 81 percent of the scats.

During this past fall, the dog also found three adult northern pine snakes, two nests with up to 15 hatchlings and nearly 20 shed skins. Surveying for snakes is traditionally very labor- and time-intensive. “You have to put up drift fences and box traps, hope snakes encounter them, and check the

traps at least every other day,” says Dave Golden, senior biologist. “Or you have to capture a snake and put a radio transmitter on it and follow it to a den or other snakes. With Bear, you can get a much quicker assessment of an area with a higher probability of finding pine snakes if they are present.”

After detecting bobcats this winter, Bear is expected to be used to survey for bog turtles in the spring and more northern pine snakes next spring.



*Bear, New Jersey's working dog for conservation.*

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**ENDANGERED AND NONGAME SPECIES PROGRAM MISSION**  
"To actively conserve New Jersey's biological diversity by maintaining and enhancing endangered and nongame wildlife populations within healthy functioning ecosystems."



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## Farewell from the chief

A message from Larry Niles,  
Retired chief of the ENSP

As I was writing this message, I learned that Delaware had imposed a two-year moratorium on harvesting horseshoe crabs, whose eggs are the essential food for migrating shorebirds each spring. With this courageous move, Delaware has joined with the N.J. Department of Environmental Protection (DEP), which this past year boldly banned such a harvest.

After retiring as chief of the N.J. Endangered and Nongame Species Program (ENSP), I could have gotten no better news about our wildlife. The fate of the Delaware Bay shorebird stopover is the window through which the world judges our commitment to conservation, and what it sees must be inspiring. Our shorebird work speaks to an effective partnership that depends upon not just our little program, but also on the Division of Fish and Wildlife and the DEP, as well as most of the state's conservation groups, hundreds of volunteers and communities and schools statewide.

Conservationists around the globe judge us to be strong and effective because of our shorebird project. What they don't realize is that most ENSP projects are constructed the same way. They start with the program's expertise, which is widely shared and disseminated throughout the state government, the conservation community and the public in order to build muscular wildlife protection.

Our Landscape Map is widely recognized as one of the three in the country that outlines habitats important to rare species in a legally defensible way. It is the basis of new rules—unfolding for the past three years—that will help protect habitat. The map is used by the conservation community to target protection and land acquisitions. Our volunteers use it to conduct surveys, and the data they collect makes the mapping even more accurate.

Most of our projects work like this for species as diverse as bald eagles, bog turtles and dwarf wedgemussels. The result: When our Wildlife Action Plan was compared to other state plans, ours was recognized as being among the top 12.

The secret is not just the strong expertise of our committed, hard-working staff, the rock-solid support of the DEP, the state's strong conservation groups or our dedicated volunteers. It is the combination of all of these. That's the successful strategy behind our work on shorebirds and all other rare, threatened or endangered wildlife. It's why our program continues to be one of the country's most successful. I am grateful to have had the chance to help make that success possible.

*After 23 years with the ENSP, including 14 years as its chief, Larry Niles retired on Sept. 1, 2006. He is now the chief biologist of the Conserve Wildlife Foundation of NJ.*



## Schedule ENSP Speakers Bureau

ENSP's Speakers Bureau offers groups and informative, entertaining 30-minute slide presentation on how the ENSP works to protect NJ's endangered and threatened wildlife. To schedule a program for your group, contact Terry at ENSP's Tuckahoe office, 609-628-2103.

## ANNUAL REPORT

Here's our annual review of some of the species monitored and managed by the Endangered and Nongame Species Program:

**BALD EAGLES:** Fifty-nine known pairs, 55 of which were active and 82 fledgings—all record numbers since eggshell-thinning DDT was banned in the 1970s.



**OSPREYS:** This past year's survey counted 400 nests, up from 366 during the last survey three years ago; another post-DDT record.

**SEMPALMATED SANDPIPERS:** Bouncing back from five low years, 81,725 counted on Delaware Bay.

**SANDERLINGS:** Spring Delaware Bay count of 16,740 above long-term average of 14,000.

**ALLEGHENY WOODRATS:** Over two nights, two dozen woodrats captured then released at lone known site below the N.J. Palisades; population appears to be increasing.

**WOODLAND RAPTORS:** Barred owls, red-shouldered hawks and Coopers hawks are increasing slightly statewide.

**BOG TURTLES:** Property owners, including one whose property harbors the state's largest population, are cooperating in increased management efforts to ensure long-term viability.

**LONG-TAILED SALAMANDERS:** Good numbers found at historic sites 15 years after last survey.

**FROSTED ELFIN:** These butterflies found at all three historic sites surveyed.

**BOBCATS:** Sightings increasing, but habitat loss and road kills are also on the rise.

**GOLDEN-WINGED WARBLERS:** Good nesting success but impacted by blue-winged warblers, which compete for habitat and hybridize with them.



**TIMBER RATTLESNAKES:** Stabilizing on Kittatinny Ridge, but in Highlands and Pine Barrens some populations declining due to habitat loss and road kills.

**WOOD TURTLES:** Prevalent in pockets throughout their state range, but nest predation is impacting reproduction.

**BLACK SKIMMERS:** Number of nesting adults increased slightly, to 2,214, but nearly all of them concentrated in just two colonies and productivity was moderate.

**PIPING PLOVERS:** Nesting pairs slightly up, to 116 pairs, but slightly below long-term average and well below 2003 peak of 144 pairs; 0.84 fledged chicks per pair well below what's needed to maintain or increase population. Red fox and laughing gull predation leading cause of nest failure.

**RED KNOTS:** Second lowest count ever of 13,445 knots on Delaware Bay in May almost identical to 2004's record low.

**RUDDY TURNSTONES:** Lowest count ever of 18,435 on Delaware Bay unexplainable; long-term average is 64,000.



**LEAST TERNS:** Number of adults nesting, 1,097, remained near record lows, with poor productivity due to predators and flooding.

**EASTERN TIGER SALAMANDER:** Salamanders could not be found at six of 13 documented or suitable vernal ponds.

## Bringing Back the Meadowlands

Once considered a polluted wasteland, the 30-square-mile New Jersey Meadowlands district is a wildlife-rich urban oasis that is the target of a major habitat restoration effort.



The Empire State Building is visible from the Meadowlands, which harbors state-threatened black-crowned night-herons (inset).

Courtesy Tina Schwejda, Meadowlands Conservation Trust

The Division of Fish and Wildlife's Endangered and Nongame Species Program (ENSP) is one of several governmental agencies and nongovernmental groups engaged in a three-year effort to make the meadowlands friendlier for both wildlife and people.

"Even though it's just five miles from Manhattan, it harbors many state endangered and threatened species and offers recreational opportunities and beautiful open space," says Naomi Avissar, an assistant biologist with ENSP and the Conserve Wildlife Foundation of NJ.

Dozens of state-endangered, threatened or declining animal and plant species, including wood turtles, American and least bitterns, bobolinks, sedge wrens and northern harriers, have been observed. It is a major heronry (including threatened black-crowned and yellow-crowned night-herons), and each fall and winter shorebirds flock to its tidal flats. Besides the division and ENSP, the New Jersey Meadowlands Commission, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, Rutgers University and the Meadowlands Environmental Research Institute have banded together to enhance the meadowlands.

"The commission is dedicated to cleaning it up, and developing more user-friendly public access is a major initiative of Gov. Corzine's agenda to promote urban open space," says Amanda Dey, senior ENSP biologist.

Highlights include:

- Meadowlands Wildlife Action Plan: Part of the statewide wildlife action plan spearheaded by the DEP, Division of Fish and Wildlife and ENSP.
- Conservation officers: To enhance wildlife protection, the Meadowlands Commission is funding two division conservation officers.
- Increased access: ENSP is working with the Meadowlands Commission, Hackensack Riverkeeper and New Jersey Audubon to increase public access while ensuring that ecotourism doesn't affect sensitive wildlife.
- Habitat Restoration: Joint efforts to ensure that replacing invasive *Phragmites* reeds with native plant species such as *Spartina* grasses benefits wildlife.

The U.S. FWS is concerned that removing *Phragmites* could release contaminants locked in the sediments and threaten wildlife that the initiative will attract.

In response, says Dey, "State biologists are working with Rutgers researchers to develop a rigorous monitoring program to make sure any habitat restoration does not cause environmental harm."

For more information, visit <http://www.meadowlands.state.nj.us>; for details of the Meadowlands Wildlife Action Plan, e-mail [Naomi.Avissar@dep.state.nj.us](mailto:Naomi.Avissar@dep.state.nj.us).

# 2007 Women & Wildlife Awards and Art

During March, National Women's History Month, the Conserve Wildlife Foundation of NJ will present the *2007 Women & Wildlife Awards* to two New Jersey women who have excelled in wildlife careers. Please take this opportunity to nominate a woman who has distinguished herself as a wildlife biologist or wildlife rehabilitator. Deadline: January 26, 2007.

Winners will be honored during a reception March 25 at the Prallsville Mills in Stockton.

We are seeking wildlife art and photography to exhibit during the *Women & Wildlife Awards*. The exhibit is open to all artists and photographers. The subject matter should be wildlife naturally found in New Jersey. Artwork/photographs may be submitted as a donation or should be available for sale on the day of the event. The foundation will retain a percentage of the proceeds to advance wildlife conservation in New Jersey.

For *Women & Wildlife Awards* nomination forms or information about the art and photography exhibit, see [www.ConserveWildlifeNJ.org](http://www.ConserveWildlifeNJ.org) or e-mail [Patricia.Shapella@ConserveWildlifeNJ.org](mailto:Patricia.Shapella@ConserveWildlifeNJ.org)

## Wildlife E-Mail Available

The Conserve Wildlife Foundation of NJ launched *Explorations*, an e-newsletter that describes the work of our wildlife biologists, the efforts of the foundation's education team and opportunities to support New Jersey's wildlife. If you would like to be on this list, send an e-mail to Pola Galie at [pola.galie@conservewildlifenj.org](mailto:pola.galie@conservewildlifenj.org)

## In memoriam

Bill McDermott, friend of N.J. wildlife

The entire Endangered and Nongame Species Program was saddened to learn of the passing of a great friend of New Jersey wildlife, Bill McDermott.

Mr. McDermott, 79, who died last June, founded the Friends of the Endangered and Nongame Species Program to provide financial support for the program in the mid-1990s. The group eventually evolved into the Conserve Wildlife Foundation of NJ. The Marmora resident also edited the Friends' newsletter, and the long-time volunteer played an essential role in the 1980s with the hacking of bald eagles, including the raising and releasing of several young birds in Tuckahoe.

Mr. McDermott also was the inspiration for the program's Speakers Bureau—a group of 40 volunteers who provide group lectures to promote the program's work with wildlife throughout the state.

"Bill enjoyed speaking to people," says Terry Terry, public information assistant and the state coordinator for the Speakers Bureau. "He loved the outdoors, he loved wildlife and he loved life."



Bill McDermott

## Citizen Scientists Wanted To Survey Rare Mussels



The Endangered and Nongame Species Program is looking for motivated individuals to

assist with ongoing freshwater mussel surveys. Surveys will be performed during summer 2007 in shallow to mid-sized streams throughout the state. Duties include wading in water with viewing buckets or aquascopes to survey a variety of substrates for live mussels. Volunteers also will search stream banks for shells and perform basic water quality measurements and habitat assessments.

They will attend an initial shell identification class, followed by a field training session before being assigned areas to survey. Since safety is always a concern when working in streams (e.g. slippery rocks, sudden drop-offs and strong currents), it is preferable if volunteers team-up while surveying.

Freshwater mussels are one of the most rapidly declining animal groups in the country. Declines can be attributed to water quality degradation, habitat loss, construction of dams, and introduction of exotic mollusks. In New Jersey, nine out of 12 native mussel species are listed as endangered, threatened or special concern.

If interested in volunteering, please contact Jeanette Bowers-Altman at 856-629-0261 or [jeanette.bowers@dep.state.nj.us](mailto:jeanette.bowers@dep.state.nj.us).



A state-threatened eastern lampmussel.

Courtesy Allen Barlow

## 2006 Conserve Wildlife Foundation Golf Classic

The Conserve Wildlife Foundation of NJ held its seventh annual golf tournament on May 30th at Stanton Ridge Golf and Country Club in Hunterdon County. The hot and humid day didn't deter golfers from hitting the links in support of New Jersey's endangered and threatened wildlife.

In the evening, golfers had an opportunity to bid on a variety of silent auction prizes, including New York Yankees and Mets tickets, McCarter Theatre tickets, a golf vacation for two to Scottsdale, Arizona and a golf trip to Ireland.

### Bald Eagle Title Sponsor Anheuser-Busch "Brewing a Better Environment"

For more than a century, Anheuser-Busch has operated with care and concern for the world's environment and for our precious natural resources.

"We have been a proud sponsor of the Conserve Wildlife Foundation of NJ's Golf Classic for six years and have helped raise more than \$250,000 for projects that preserve and protect New Jersey's rare wildlife," says John Hannafin, general manager, Northeast Region. "It is important to be a good neighbor both to the citizens of N.J. and to wildlife, such as the bald eagle, our national symbol and the trademark of Anheuser-Busch."

To learn more about Anheuser-Busch's environmental efforts, visit [www.abenvironment.com](http://www.abenvironment.com).

**Our thanks to all our sponsors, players, and volunteers who helped make this year's event a great success!**

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*John Hannafin, general manager of the Northeast Region for Anheuser-Busch (left), and Larry Herrightly, chief of Wildlife Management, N.J. Division of Fish and Wildlife, putting.*

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# Conserve Wildlife Foundation News

## Thank You for Supporting New Jersey's wildlife

Message from Margaret O'Gorman, Executive Director

As a nonprofit organization, the Conserve Wildlife Foundation of NJ depends on all our friends, contributors and volunteers. This year your support helped us develop new programs and publications such as the Women & Wildlife Awards and Art and our e-newsletter *Explorations*, as well as welcome new board members, and, most importantly, acquire new members.

To launch our new Kestrel Nest Box Project, Opdyke Lumber of Frenchtown contributed materials to build the boxes and Stockton carpenter Tom Hartman prepared the nest box kits. One hundred young volunteers assembled 180 nest boxes and learned about the American kestrel from Maria Grace, foundation educator.

This year we instituted new wildlife trips for members and friends. Linn Pierson, the wonderful writer behind the PeregrineCam's "Nestbox News," led a hawk-watch day at Palisades Interstate Park and CWF biologist Melissa Craddock hosted a captivating bat talk.

We also participated in New Jersey's 2006 CreatAthon, where graphic artists and printers offer their services pro-bono to non-profits. We emerged the proud owners of a new logo and a membership brochure, which we will begin using in 2007. We are very grateful to Hypno Designs, Idea Lab, CRW Graphics and Burlington Press for their time, creativity and services.

For their dedication to our wildlife, we thank outgoing board members Joanne Brigandi and John Manos and outgoing executive committee members Scott Kobler and Ron Reisman. Our new board members, Chris Sturm and Theresa Lettman, bring enthusiasm and expertise to guide us.

Buster Raff, Joe Delesantro, Margaret Atack-Klewin and Matt Klewin of our World Series of Birding Team, Jim Merritt of the Sedge Island Natural Resource Education Center and many, many more contributed both time and money to keep New Jersey's wildlife in our future. Thank you all.



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