

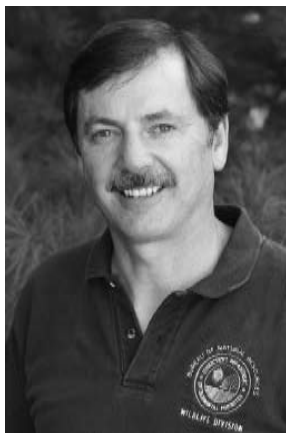
March/April 2008

Connecticut Wildlife

PUBLISHED BY THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF NATURAL RESOURCES • WILDLIFE DIVISION



From the Director



Land use decisions have had and will continue to have a profound impact on the state's biodiversity. As we developed Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS) over the past several years, we recognized that some of the greatest threats to wildlife were due to a lack of information about species and habitats. Conservation actions in the CWCS included recommendations to step up data collection on rare and declining species to better determine their distribution and status, identify locations of important habitats, and make this information available to protect our natural resources by promoting responsible growth. Since the completion of Connecticut's CWCS in 2006, we have been making progress towards these recommendations with projects funded primarily through the U.S. Fish and Wildlife Service's State Wildlife Grants (SWG) Program.

Our efforts to identify and protect some of the rarest habitats in the state got a big boost recently when the Wildlife Division was awarded \$175,000 in support of Governor Rell's Responsible Growth Initiative. Using these funds, the Wildlife Division has developed a project that will provide GIS and field support for statewide digital mapping of key habitats for species of Greatest Conservation Need as identified in the CWCS. These digital maps will contain attribute tables for each site including acreage, vegetative assemblages, and the occurrence of rare species.

An impressive amount of information already exists on some of these habitats, such as Atlantic white cedar swamps, bogs, calcareous fens, and coastal beaches and dunes. Others, such as flood plain forests, pitch pine woodlands, areas of open sand, and trap rock glades are less studied and will require a statewide assessment. Some data are in the form of reports or summaries, while other information exists only in ecologists' notebooks or as dots on a topographic map. Therefore, a lot of aerial photo interpretation and field reconnaissance will be required. By the project's end, the habitat information will be standardized, verified, digitized and contained as a data layer in the Natural Diversity Data Base.

Ken Metzler, an ecologist with more than 25 years of service at DEP, will head up this project for the Wildlife Division in collaboration with staff at DEP and UCONN. Although Connecticut is a small state, it is ecologically diverse and the task of creating a comprehensive "eco-map" is daunting. However, with this funding and Ken's expertise, this project will take us a long way in the right direction. -- Dale W. May

Cover:

Bobcats are sometimes observed throughout Connecticut. See page 16 to read about Division biologist Peter Picone's observation of a bobcat that took advantage of a road killed deer near the Wildlife Division's Sessions Woods Wildlife Management Area in Burlington this past winter.

Photo courtesy of Paul J. Fusco

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Gina McCarthy..... Commissioner
 Edward C. Parker..... Chief, Bureau of Natural Resources

Wildlife Division

79 Elm Street, Hartford, CT 06106-5127 (860-424-3011)

Dale May Director
 Greg Chasko Assistant Director
 Mark Clavette Program Specialist/Recreation Management
 Laurie Fortin Recreation Management Biologist
 Elaine Hinsch Program Specialist
 Brenda Marquez Secretary
 Shana Scribner Office Assistant
 Chris Vann Technical Assistance Biologist
 Kenneth Metzler..... Natural History Survey
 Dawn McKay Natural History Survey
 Nancy Murray Natural History Survey
 Karen Zyko Natural History Survey

Eastern District Area Headquarters
 209 Hebron Road, Marlborough, CT 06447 (860-295-9523)

Robin Blum.....Habitat Management Program Technician
 Ann Kilpatrick..... Eastern District Biologist
 Carrie Pomfrey.....Habitat Management Program Technician
 Paul Rothbart..... District Supervising Biologist
 Jane Seymour..... Belding WMA Steward
 Judy Wilson..... Private Lands Habitat Biologist

Franklin W.M.A.
 391 Route 32, N. Franklin, CT 06254 (860-642-7239)

Charles Bruckerhoff..... EP Safety Representative
 Paul Capotosto..... Wetlands Restoration Biologist
 Michael Gregonis..... Deer/Turkey Program Biologist
 Min Huang..... Migratory Bird Program Biologist
 Howard Kilpatrick..... Deer/Turkey Program Biologist
 Kelly Kubik..... Migratory Bird Program Technician
 Andy LaBonte..... Deer Program Biologist
 Heather Overturf..... Office Assistant
 Winnie Reid..... Secretary
 Julie Victoria..... Wildlife Diversity Program Biologist
 Roger Wolfe..... Mosquito Management Coordinator

Sessions Woods W.M.A.
 P.O. Box 1550, Burlington, CT 06013 (860-675-8130)

Trish Cernik..... Secretary
 Jenny Dickson..... Wildlife Diversity Program Biologist
 Peter Good..... Supervising Wildlife Biologist
 Jason Hawley..... Furbearer Program Technician
 Shannon Kearney-McGee..... Wildlife Diversity Program Technician
 Christina Kocer..... Wildlife Diversity Program Technician
 Geoffrey Krukar..... Wildlife Diversity Program Technician
 Dave Kubas..... CE/FS Program Coordinator
 Lauren Pasniewski..... Clerk
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 Kate Moran..... Wildlife Diversity Program Technician
 Paul Rego..... Furbearer Program Biologist
 James Koert Riley..... District Maintainer
 Laura Rogers-Castro..... Natural Resource Educator
 Laura Saucier..... Wildlife Diversity Program Technician
 Jim Warner..... Facilities Manager

Connecticut Wildlife

Kathy Herz..... Editor
 Paul Fusco..... Media Designer/Photographer

Wetlands Habitat & Mosquito Management Crew
 51 Mill Road, Madison, CT 06443

Steven Rosa..... Mosquito Control Specialist
 Daniel Shaw..... Mosquito Control Specialist



The Federal Aid in Wildlife Restoration Program was initiated by sportsmen and conservationists to provide states with funding for wildlife management and research programs, habitat acquisition, wildlife management area development, and hunter education programs. Connecticut Wildlife contains articles reporting on Wildlife Division projects funded entirely or in part with federal aid monies.



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Forestry and Wildlife Work Together to Help Native Rabbits

Written by Jenny Dickson, Wildlife Diversity Program

The New England cottontail, a northeast species of regional conservation concern, was designated a candidate for federal threatened or endangered status in September 2006 by the U.S. Fish and Wildlife Service. It is the only native cottontail species in Connecticut. The other, the eastern cottontail, was introduced to many of the New England states, including Connecticut, in the early and mid-1900s, primarily by sportsmen groups. It is currently the most common rabbit found in the state. Historically, the New England cottontail was distributed statewide.

Field observations by staff of the DEP Forestry and Wildlife Divisions during summer 2007 at Camp Columbia State Forest in Morris revealed a high rate of use by cottontails. Because habitat conditions in the area matched those favored by New England cottontails, the Wildlife Division decided to investigate which cottontail species was using the area. Live-trapping for rabbits was conducted in April 2007 and the suspicions of biologists and

foresters were confirmed. New England cottontails were found at Camp Columbia. Additional live-trapping efforts are being conducted this winter to learn more about the distribution of New England cottontails and their use of different habitat patches within the state forest.

Habitat loss and fragmentation continue to be key issues in the conservation of this species, both in Connecticut and throughout its entire range. The Forestry Division is in the process of completing a Forest Management Plan for Camp Columbia and would like to address the needs of New England cottontails. Many areas that are suitable for this species are rapidly being lost because of vegetative changes. Habitat management activities are required if this area is to remain suitable for New England cottontails. To help insure that our native cottontails can continue to call Camp Columbia home, the Forestry and Wildlife Divisions received funding from the Con-

necticut Endangered Species/Wildlife Income Tax Check-off Fund to implement habitat management practices on approximately 18-acres within the state forest. It is hoped that habitat management at Camp Columbia will serve as a model for creating and maintaining New England cottontail habitat on private and municipal lands.



Amber Carr, a research assistant for the Wildlife Division, places bait in a live trap at Camp Columbia State Forest in Morris. The trap is intended to capture New England cottontails, which are then fitted with radio transmitters.



Radio telemetry is being used to determine the distribution and habitat use of New England cottontails at Camp Columbia State Forest.

Remember Your "Other Dependents" at Tax Time

Tax time may be a dreaded time for most people, but something good can come out of it. Connecticut taxpayers have the opportunity to "give back to wildlife" by voluntarily donating a portion of their tax refund to the Endangered Species/Wildlife Income Tax Check-off Fund. This special fund supports efforts aimed at helping Connecticut's endangered species, natural area preserves, and watchable wildlife.

So, when filling out your tax form, remember your "other dependents," our state wildlife species, and please donate a portion of your tax refund. Citizens also can contribute directly by sending a check payable to "DEP-Endangered Species/Wildlife Fund" to: DEP, Bureau of Financial and Support Services, 79 Elm Street, Hartford, CT 06106.

Thank you for supporting Connecticut's wildlife!



Monitoring Connecticut Nightbirds

Written by Jeremy Leifert, Wildlife Diversity Program

Photographs by Paul J. Fusco

Due to growing interest on a regional level to better monitor owl and nightjar populations, the DEP Wildlife Division has joined in a coordinated effort with other state and regional agencies to assess the distribution and population health of our nightbirds. In surveys conducted by volunteers and Wildlife Division staff, recordings of owl calls are used to elicit responses from owl species to determine their presence along survey routes. With only a handful of calls to learn, nightbird surveys offer a great opportunity for beginning birders or amateur ornithologists to contribute to ongoing research of populations in our state. Nearly all species encountered in these surveys are identified through their calls. Only rarely do surveyors catch a glimpse of an owl on a moonlit night.

Status of Owls

Population declines of many of Connecticut's owl species are due to habitat loss and fragmentation. Four owl species that currently reside in Connecticut are listed as endangered, threatened, or special concern under Connecticut's Endangered Species Act. The northern saw-whet owl is listed as special concern, the short-eared owl is listed as threatened, and the long-eared and common barn owls are considered endangered due to their extremely small and localized state populations. Because of their status, Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS) identifies these four owls as species of greatest conservation need (GCN). Some of Connecticut's other owl species have been included in the GCN list as

well, including the eastern screech owl, which the CWCS describes as declining and vulnerable. The great horned owl, although common, has been particularly targeted for additional research due to some losses of its preferred habitat.

Connecticut Nightbird Surveys

Each year, the Wildlife Division conducts nightbird surveys to assess the populations of owls and nightjars in our state. Unlike songbirds that are widely monitored and breed in spring, there are much less survey data available for owls in our region due to their winter breeding season, as well as periods of night-time activity for most species. In cooperation with volunteers, approximately one-third of the state is surveyed each winter and again in summer. This ensures that the

Ecology and Life History



Great Horned Owl

Bubo virginianus

Our earliest nesting species, this owl may begin nesting activities as early as January. It is the most recognizable and the largest of Connecticut's owl species. Nesting occurs in a variety of places, although mature forests are preferred for breeding. Foraging most often occurs at night in forest openings, open woods, and edge habitat. Great horned owls have been known to take prey as large as grouse, woodchucks, and skunks.



Barred Owl

Strix varia

A common and year round resident, the barred owl prefers habitats of mature mixed or coniferous forests, and has the most widely heard and recognized calls of all the owl species in Connecticut. Its plumage is most often in a "barred" pattern of gray, brown, and white.



Long-eared Owl

Asio otus

This state endangered species is very secretive and much less vocal than the other Connecticut owls. It nests in mixed conifer groves near open foraging areas. Small mammals, especially meadow voles, make up a large portion of the diet. The long-eared owl occurs throughout most of the Northeast, but is widely scattered and very uncommon.

entire state is surveyed in a three-year period. Upon completion of this three-year cycle, priority areas will be identified for future monitoring efforts.

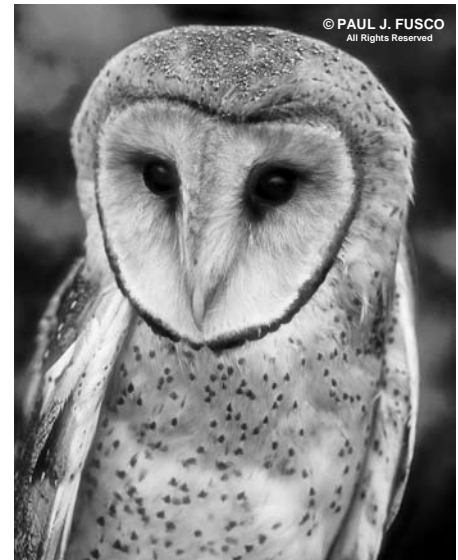
Nightbird Survey Protocol

Every volunteer is assigned a driving route within a reasonable distance from their area of residence. Surveys are conducted by playing recorded owl calls and listening for responses at each of 10 points along the route. Volunteers are asked to begin winter surveys as close as possible to midnight. It generally takes between three to four hours to complete the survey route, as each survey point requires a 15-minute stop. The target species for winter nightbird surveys are any owls that can be identified by a call. The surveys are conducted twice between February 15 and April 30. The protocol is similar for summer surveys, although a shorter recording is played. Each point in

The State Wildlife Grants program provides federal dollars to support cost-effective conservation aimed at preventing wildlife from becoming endangered.

Volunteers are always needed for helping the Wildlife Division conduct nightbird surveys. If you are interested in volunteering or would like more information about nightbird surveys, please contact the Division's Sessions Woods office at 860-675-8130 or send email to shannon.kearney@po.state.ct.us.

the summer surveys requires six-minute stops at each point. Target species for the summer surveys are owls, as well as nightjar species (whip-poor-will, Chuck-wills-widow, and common nighthawk). Summer routes are surveyed twice between May 1 and early July.



Barn Owl

Tyto alba

Although the barn owl is one of the most widely distributed land birds in the world, it is an endangered species in Connecticut. It is often associated with open areas, such as farmland, salt marshes, grasslands, and pastures. Widespread population declines have been occurring due to loss of these habitats. Barn owls will nest in trees, barn lofts, church towers, and nest boxes.



Short-eared Owl

Asio flammeus

This owl is mainly active during dawn and dusk, and it is not as strictly nocturnal as Connecticut's other owl species. The short-eared owl generally lives in open areas, such as marshes and fields. The nest is built on the ground, although often concealed in heavy vegetation. This owl is rare in Connecticut and is not known to breed in the state. The population has been declining throughout the region, mainly due to habitat loss.



Northern Saw-whet Owl

Aegolius acadicus

This owl takes its name from its raspy call sound, which has been likened to the sharpening of a saw. Connecticut's smallest owl and a species of special concern, it measures approximately eight inches long and weighs only four ounces. Saw-whet owls will typically nest in dense upland conifer woodlands or bogs and red maple swamps, using natural cavities in trees or old woodpecker excavation holes. They often will refuse to leave a nest cavity if disturbed.



Eastern Screech Owl

Otus asio

One of the smallest owls in Connecticut, the eastern screech owl will use many types of habitat and is very tolerant of human activities. Breeding season begins in late winter, and nesting occurs in hollow tree cavities and artificial nest boxes. Eastern screech owl populations have been declining throughout their range due to nesting habitat loss.

Help Untangle a Knotty Problem for Wildlife

Written by Jenny Dickson, Wildlife Diversity Program

Monofilament fishing line that enters the environment is a hazard to wildlife. The Wildlife Division receives many phone calls each year about wildlife entangled in fishing line. Birds, such as gulls and osprey, and sea turtles are prone to entanglement in fishing line. Entanglements can cause mortality in wildlife by preventing the animal from flying, moving normally, or feeding.

A simple way to begin reducing this threat to wildlife is the creation of a monofilament recovery and recycling program to increase public awareness about the negative impacts of monofilament fishing line left in the environment. Encouraging anglers and others to dispose of waste monofilament line by providing recycling receptacles helps wildlife by keeping used fishing line out of aquatic habitats and away from wildlife. This simple solution has had success in Florida, North Carolina, Oregon, South Carolina, Texas, and Puerto Rico. The program is also used at a number of National Wildlife Refuges.

The Division's Wildlife Diversity Program received funding from the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund and Wildlife Conservation License Plate sales to begin a monofilament recovery and recycling program in Connecticut. Monofilament receptacles will be constructed and installed prior to the start of the 2008 fishing season. The Wildlife Division will work closely with the Inland and Marine Fisheries Divisions to determine the areas where monofilament receptacles are likely to get the most use. Master Wildlife Conservationists, DEP staff, and other volunteers will empty the receptacles as needed and the used line will be shipped to a recycling center. If you would like to volunteer to monitor a receptacle in your area, please contact the Wildlife Diversity

Discarded Fishing Line Is Dangerous to Wildlife

The DEP Wildlife Division is asking all anglers to keep fishing areas free of debris and fishing line, and to take particular care in disposing of monofilament fishing line. Carelessly discarded fishing line can seriously harm wildlife. Animals can become entangled in, or ingest the line, whereby starvation, strangulation, or deep wounding are possible. Usually, wildlife cannot survive the injuries they sustain from entanglements.

Ospreys and gulls, as well as other birds, collect line for nesting material, causing hazards for their young and themselves. The prevalence of monofilament fishing line can be seen in osprey nests throughout Connecticut. Most nests contain monofilament, balloon ribbons, and/or plastic that have been scavenged, and the birds can easily become entangled in these items.

Most monofilament line is non-biodegradable and can persist in the environment for up to 600 years. Because it is thin and often clear, it is difficult for birds and other animals to see and they often become entangled in it.

To dispose of fishing line, cut it into strands about six inches long before depositing it in a secure garbage container or in one of the new recycling receptacles being funded by the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund and Wildlife Conservation License Plate sales. (It's also a good idea to cut up plastic six-pack rings, which are another danger to wildlife, before disposing of them.)

Although monofilament line is the greatest hazard, hooks, lures, and weights are often left behind at fishing sites and consumed by fish and wildlife, causing serious injury or illness. Help protect wildlife and keep your favorite fishing area clean by properly disposing of your trash. And, if you spot some items that others have abandoned, properly dispose of that, too. It's the responsible thing to do.



Because someone didn't properly dispose of fishing line, this tern ended up swallowing a fish hook, which likely led to a long, slow death for the bird.

Program at the Sessions Woods office (860-675-8130). The more everyone pitches in and helps out, the faster more entanglements can be prevented in 2008!



Online Licensing for Sportsmen Is Now LIVE on the DEP Website!

Go to www.ct.gov/dep/sportsmenlicensing to purchase Connecticut hunting, trapping, and fishing licenses, as well as all required deer, turkey, and migratory bird permits and stamps. The system accepts payment by Visa or Master Card. For calendar year 2008, permits, tags, and stamps will be mailed the next day to customers that make online purchases using their credit card. Starting in 2009, permits, tags, and stamps will be printable from home computers.

Going Digital:

Taking Advantage of Geographic Information Systems to Map State Forests & Wildlife Management Areas

Written by Kate Moran, Wildlife Diversity Program

It's great when a plan comes together. Sometimes that simply requires getting the right people together at the same time. Such was the case when Wildlife Division biologist Jenny Dickson and technician Kate Moran met with folks from the University of Connecticut's NEMO (Nonpoint Education for Municipal Officials) Program to discuss the possibility of computer-mapping of Connecticut's state forests and wildlife management areas. Ever since that first meeting in early 2007, this cooperative effort among the Wildlife Division, Forestry Division, and NEMO has been working like a well-oiled machine.

As part of any forest management plan, there are detailed maps depicting forest stands and tables of data detailing the attributes of each stand. Forest type, age, accessibility, and management prescription are some of the many attributes associated with each stand. The Forestry Division has lots of these maps, hand-drawn, in exquisite detail, the "old fashioned way" -- on paper. Jim Parda, of the DEP Forestry Division, agreed to provide these maps as a basis for the digitization process. This project's goal was to take the paper maps and translate them into a digital format, allowing them to be displayed on a computer while having a live link to all their attribute data.

With these detailed paper maps of state forests and wildlife management areas as a starting point, the technical experts at NEMO guided the translation of the data using Geographic Information System (GIS) software. Going from analog to digital provides more secure storage of the data, easier access and data sharing capabilities, and, most importantly, leverages the hard work put into creating the maps, making it possible to view, filter, query, and summarize forest stands data based on any one of the linked attributes.

Now you may be wondering, "Why does a program called Nonpoint Educa-

tion of Municipal Officials have anything to do with this?" Sounds like an unlikely partner, but when you consider NEMO's mission, it makes a lot of sense.

The NEMO Program is part of the UCONN Center for Land Use Education and Research (CLEAR). It was initiated in the early 1990s with the goal of providing resources, information, and education to land use managers on how to accommodate growth while preserving the character and natural resources of their communities. To this end, NEMO emphasizes the use of GIS, remote sensing technology, and the internet in their training and educational efforts. One of NEMO's very useful tools is the Community Resource Inventory (CRI) website, <http://clear.uconn.edu/projects/cri/>, which is designed to provide land use managers access to statewide GIS data and to allow the creation of mapped inventories of their communities' natural and cultural resources. Plans are underway to incorporate the forest stands data into the CRI website and to develop a web-based user interface. Says John Rozum, Director of the Connecticut NEMO Program, "Connecticut's landscape is nearly 60% forested. Having a better understanding of these forests will help municipalities, land trusts, and private landowners implement management strategies that protect the many environmental services these forests provide." And if that isn't enough, CLEAR can use the forest stands data in refining the analysis and classification of satellite imagery into land cover data that is published on their web site as part of Connecticut's Changing Landscape Project (<http://clear.uconn.edu/projects/landscape/index.htm>).

Jenny Dickson sees the project as an important step in implementing Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS). "Not only will computer-mapping of state forests meet a need identified during the creation of the CWCS, it will also provide an important tool that can be used to help meet other CWCS conservation objectives," said Dickson. "This project will make it possible to rapidly search the statewide forest stands data to locate habitats preferred by

species of greatest conservation need -- a critical first step in implementing conservation efforts."



Jim Parda thinks this project is an excellent example of cooperation. "The forest stand information provided by the Forestry Division will help NEMO to better inform land use managers and CLEAR to better characterize Connecticut's landscape," said Parda. "The Wildlife Division will be able to use forest type data for habitat identification, while the Forestry Division will be able to create high quality GIS maps for planning and decision making." Land use planning, wildlife research, and forest management efforts will all be significantly enhanced, paying dividends well into the future.

It is clear that this partnership was meant to be. By fall 2007, nearly 150,000 acres of forest in Connecticut had been digitally rendered, which pleased and surprised everyone involved. Even so, there is still a lot of work to be done. But, with a recently approved State Wildlife Grant, completing the digitization and implementing the web-based aspects of the project are something we all look forward to.

Acknowledgements go to Jenny Dickson of the Wildlife Division, Jim Parda of the Forestry Division, and John Rozum, NEMO Program Director, for their leadership and vision for this project. For their technical guidance and project management, credit goes to UCONN Assistant Extension Educator Joel Stocker and UCONN Geospatial Technology Specialist Emily Wilson. Lastly, for their endurance and technical capabilities, GIS Assistants Clinton Douglas and Bill Miller deserve recognition and thanks. It doesn't always work out this way, but it sure is great when a plan comes together.

The State Wildlife Grants program provides federal dollars to support cost-effective conservation aimed at preventing wildlife from becoming endangered.

A Deadly Combination

Cats and Dogs and Birds on the Beach

Adapted from the U.S. Fish and Wildlife Service website (www.fws.gov)

A tale of cat or dog versus bird may make an enjoyable cartoon, but the real-life version is deadly serious. When birds encounter cats and dogs, the birds rarely win.

Many people believe that cats and dogs should be allowed to roam free. People introduced domesticated cats and dogs to this country, and as much as we may appreciate them as part of our lives, those animals are not native wildlife or part of a naturally functioning ecosystem. Along the Atlantic coast, cats and dogs pose a serious threat to the continued survival of beach-nesting birds such as piping plovers, least terns, and American oystercatchers.

Two Months of Living on the Edge

Piping plovers are vulnerable to wild and domestic animals as well as human interference while they guard their nests on sandy beaches for a month before eggs hatch. Plovers blend with their surroundings, so it can be difficult for you to see them. Adult plovers will stagger and feign a broken wing to distract predators from their nests and chicks. Unfortunately, the plover ploy backfires when they face predators more nimble than predators in their native environment. The plover may be caught and killed or injured.

After plover eggs hatch, the tiny chicks spend most of the next month foraging for the food needed to gain weight and develop flight feathers. The flightless chicks face myriad challenges and are simply no match for an agile cat or dog that instinctively sees the chick as something to hunt or chase. With the plovers' low population numbers, each tiny chick embodies a precious hope for future recovery of the species.

An Unfair Fight

Cats are natural hunters, and even well-fed cats chase and kill birds. Beach-dwelling birds are not adapted to co-exist with cats. (One or two cats can have a large impact on beach-nesting birds whose young are flightless and living on the beach for the first few weeks of their lives.)

Many dogs are naturally inclined to hunt birds after generations of breeding for that purpose. Unleashed dogs chase birds, destroy nests, and kill chicks. Plovers are so difficult to see on beaches that it is extremely easy to miss seeing a bird that your dog is chasing. Even when they are on leashes, dogs can frighten and kill birds. In a 1993 study, researchers found that the mere presence of pets disturbs piping plovers far more than human presence.

While we cannot tell birds where we want them to nest, we can control cats and dogs.

Protecting Our Environment

We not only have an obligation to protect birds as an important part of our environment, it is the law. The U.S. Fish and Wildlife Service placed Atlantic coast piping plovers on the List of Endangered and Threatened Wildlife in 1986 with a "threatened" designation, meaning that without care the species could face extinction.

The plover's future is so tenuous that for more than 20 years people from local, state, and federal agencies along with dozens of private organizations have provided intensive protection for the birds. They have spent countless hours managing predators and posting nesting areas to protect birds from pedestrians and off-road vehicles. However, continued protection is necessary for the species' survival because the threats, including those from cats and dogs, remain.

Monitoring nests and protecting habitat are only part of the piping plover protection story. Plovers need everyone's help, and vigilant pet owners play an essential role. We need to take advantage of every means to prevent plover deaths if we are to ensure the survival of this bird.

Find out more about the U.S. Fish and Wildlife Service and America's birds at www.fws.gov/birds/.

Learn about Cats Indoors! An initiative of the American Bird Conservancy at www.abcbirds.org/cats/.

Connecticut Piping Plover Facts

- The piping plover is a state-threatened species.
- The state-threatened least tern nests near or among piping plover nests.
- In 2007, 36 pairs of plovers nested along the Connecticut coastline, fledging 69 young. Approximately 147 pairs of least terns fledged only 12 young.
- Individual plover nests are protected by fencing installed by the DEP Wildlife Division and plover and tern nesting areas are marked with string fencing and signs.
- Unpreventable natural events, such as storms, can wipe out plover and tern nests.
- The nesting season is from April to July. Plovers lay up to four eggs, although fewer than two chicks survive to fledging.
- Adult plovers weigh only about 2 ounces and measure 7 inches from beak to tail.
- Plovers feed on marine worms, fly larvae, beetles, crustaceans, mollusks, and other small marine animals and their eggs.
- Find more information at www.ct.gov/dep/wildlife.

What You Can Do

- Respect all shorebird nesting areas that are fenced or posted for the birds' protection.
- Do not approach or linger near shorebirds or their nests.
- Be a responsible pet owner. Keep cats indoors. On beaches where dogs are allowed, keep your pet on a leash. Keep dogs away from nesting areas and areas with young birds.
- Don't leave or bury trash or food scraps on beaches. Garbage attracts predators which may prey upon piping plover eggs and chicks.
- Fly kites a safe distance away (at least 200 yards) from nesting areas. Plovers may think kites are predatory birds and leave their nests unattended.
- Obey local fireworks laws. Fireworks cause stress to adult plovers and their chicks.
- If you live near a beach where piping plovers nest, contact the DEP Wildlife Division (860-424-3011) to find out more about these birds and to offer your assistance.

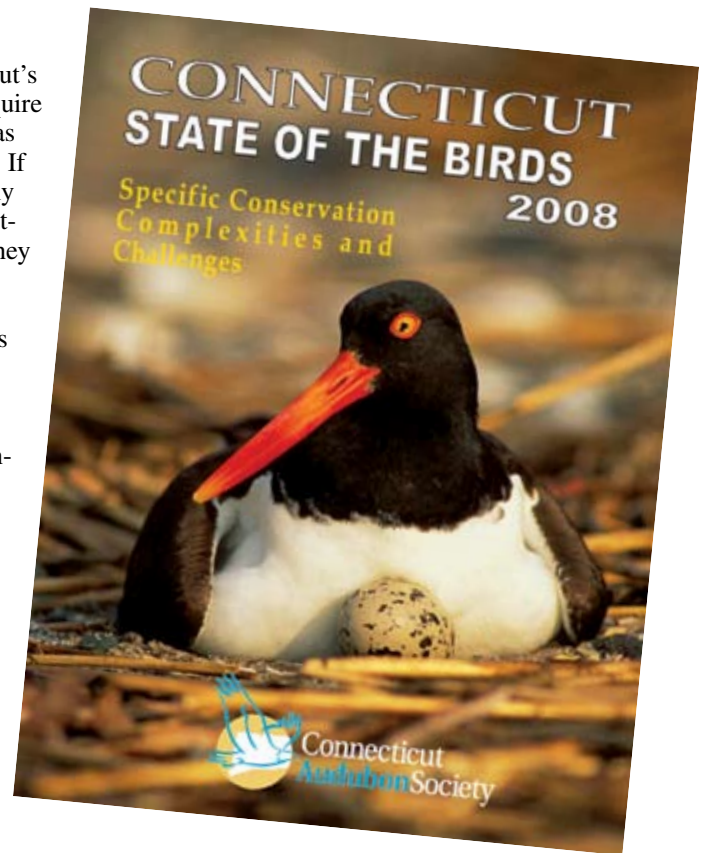
Connecticut Audubon Society Issues 2008 Connecticut State of the Birds Report

Connecticut Audubon Society (CAS) issued their third annual *Connecticut State of the Birds* report in February. It describes possible conservation strategies for six bird species that are in serious trouble -- and for which their Connecticut habitat is critical to their global survival. The species include the saltmarsh sharp-tailed sparrow (state species of special concern), blue-winged warbler (state endangered species), golden-winged warbler, American oystercatcher (state species of special concern), cerulean warbler, and bobolink (state species of special concern). The full report is available on CAS's website, www.ctaudubon.org.

"A common misconception among the general public as well as many environmentalists is that restoring species diversity and conserving wildlife habitat is as simple as buying a piece of land, assuming suitable land is available, and reserving it as a conservation easement or using some other mechanism to permanently prevent development," said Milan Bull, editor-in-chief of *Connecticut State of the Birds*. "However, it is rarely this

simple. Most of Connecticut's threatened bird species require specialized habitats, such as grasslands and shrublands. If these areas are not regularly maintained by mowing, cutting, and other practices, they quickly revert to forested land. Even old-growth forests require ongoing efforts by skilled forest managers to keep them healthy and productive as wildlife habitat. Effective land management practices require substantial investments of both time and money. These commitments need to be carefully considered as part of any habitat protection plan."

Connecticut's grasslands, which support bird species like the bobolink, have shrunk to less than five percent of what they were in 1909.



Connecticut Bird and Habitat Conservation Priorities

Based on findings of its 2006 and 2007 Connecticut State of the Birds reports, which described the effects of habitat loss and human threats on the state's bird populations and habitats, Connecticut Audubon Society has issued five prioritized recommendations:

1. Preserve Grasslands

- Protect existing grasslands from development.
- Provide farmers with incentives to mow after the nesting season.
- Provide farmers with incentives to convert marginal cropland to grassland.

2. Manage Land to Create More Shrublands

- Actively manage public land to increase shrublands.
- Provide incentives to private landowners to create shrublands.
- Encourage utilities to maintain power line cuts as shrublands.

3. Protecting Remaining Beach and Saltmarsh Habitats

- Actively prevent degradation of the limited existing habitat.
- Provide funds for policing during the nesting season.

4. Slow Forest Fragmentation and Stop Deer Overbrowsing

- Use land acquisition to preserve large blocks of unbroken forest.
- Reduce deer populations in impacted forests.

5. Limit Unnecessary Human Threats

- Eliminate feral cat colonies on public lands.
- Promote light awareness programs for major buildings.
- Establish guidelines for lighting on communications towers.
- Support controls on all invasive species.

Many smaller hayfields around Connecticut could likely support healthy bobolink populations. However, farmers would need to delay mowing until the bobolinks have finished nesting. But hay has the highest value when it is cut earlier in the season. A possible compromise: subsidize farmers to "grow" grassland birds on their farms, instead of hay and corn, especially in marginal agricultural areas. This will require payments to farmers to delay haying, which can be costly to implement and monitor. The largest tract of privately owned grasslands in the state is CAS's 670-acre Bafflin Sanctuary in Pomfret. This area is actively managed as grassland habitat with the help of a DEP Landowner Incentive Program grant.

"In the case of the saltmarsh sharp-tailed sparrow," added Bull, "the solution, if any, is far more complex and may be out of our hands on even a regional level, as global warming increases the tidal range." Entirely restricted to saltmarshes, up to one half of the world's saltmarsh sharp-tailed sparrow population resides at least part of the year in southern New England. The native saltmarsh grasses of Connecticut provide a particularly suit-

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Glossy Ibis - A Relative Newcomer to Connecticut

Article and photography by Paul Fusco, Wildlife Outreach Program

Few birds have as striking a silhouette as the ibis. Its long, curved bill is unique among the larger wading birds. Even from a long distance, wildlife observers have little difficulty picking out an ibis feeding in a marsh or flying overhead. The bill shape also gives the ibis a highly regarded place in ancient human culture (see sidebar below), as the ibis is symbolized in legend and mythology.

Ibis are medium sized, long-legged wading birds, closely related to herons, egrets, and storks. They have long necks and long, slender, decurved bills with pointed tips. By probing their bills deep into the mud, sometimes up to their face, ibis can catch fiddler crabs and worms hiding in burrows. They may also catch and eat small fish and insects.

Typically seen in small flocks in Connecticut, the glossy ibis is a highly gregarious bird. In flight, it flies with an out-stretched neck and trailing legs. Ibis have a characteristic flight pattern of rapid wingbeats, alternately flapping and gliding. Flocks fly in V-formation or in



Glossy ibis are typically found in saltmarsh and flooded field habitats in Connecticut.

diagonal lines.

Glossy ibis have dark maroon (purplish), bronzy plumage. In the right light, the plumage has a metallic green gloss. At a distance, it may appear to be all black. During the breeding season, glossy ibis have pale, blue facial skin that is bordered by a thin, white outline of feathers. The eyes are brown.

Distribution

Glossy ibis have a worldwide distribution, occurring in most warm temperate and tropical areas of the world. In the United States, they are found primarily along the eastern seaboard from Maine, south to Florida, and west to Texas. It is thought that the glossy ibis is somewhat of a new arrival from the Old World to the Western Hemisphere, with breeding records for North America unknown before the 1880s. The population has been expanding in the Northeast. In Connecticut, the first documented nesting was from the Norwalk Islands in 1971. The species is at the northern end of its breeding range in southern New England.

Glossy ibis inhabit both freshwater and saltwater marshes. In Connecticut, they are primarily associated with saltwater tidal habitats. On occasion, wanderers may also be found at inland freshwater swamps and flooded fields where they forage for food in shallow water and mud.

Rookeries

Glossy ibis are considered a colonial nesting species. They breed in colonies called rookeries, often in the company of other wading birds, such as egrets and black-crowned night herons. Colonies of herons, egrets, and ibis may number in the hundreds of pairs in Connecticut.

Ibis build their nests in the shrub layer of wooded habitats, mainly on offshore islands. They share the shrub layer with snowy egrets and, in some locations, with little blue herons. Black-crowned night herons and great egrets usually nest higher up in the taller trees.

To be successful, rookeries must remain relatively free from human disturbance and predation. If disturbance

The Ibis in Myth and Legend

Ibis have long played a part in human culture, particularly in the mythology and symbolism of ancient Egypt. The powerful Egyptian god Thoth, the god of wisdom, judgment, magic, and time, was frequently depicted as a human with the head of an ibis. The curved bill of the ibis represents the crescent of the moon, and has an association with wisdom, magic, and time, while in other representations the bill is seen as a writer's scribe. It was Thoth who wrote the "Book of the Dead," and who sat in judgment of the departed. Ibis were venerated at such a level that they were frequently mummified and entombed with the pharaohs. Thoth was seen as the inventor of magic and writing, making him one of ancient Egypt's most influential gods.

or nest depredation becomes too severe, there is a high likelihood that the birds may abandon the rookery and not return to nest there the following year. Raccoons have caused nest abandonment at some of Connecticut's offshore island rookeries in the past. Because of this reason, it is important to protect potential island rookery habitats, as well as active rookery habitats. If one island becomes unsuitable for nesting, the birds need to have an alternate site to go.

Other Ibis Species in CT

Two other species of ibis have been documented on very rare occasions in Connecticut. Each would be well outside of its normal range in our state.

White Ibis

An abundant species in its normal range of the South Atlantic and Gulf Coast area, the white ibis is a rare visitor to this part of the country. It is unmistakable in the field with its all white plumage with black wing tips and bright red to orange legs, bill, and face. Immature white ibis are brown and white.

White-faced Ibis

The white-faced ibis is fairly common west of the Mississippi River. It is very similar in appearance and easily mistaken for its glossy cousin. There are a few things to look for when trying to identify a white-faced ibis that may be in the company of glossy ibis. During the breeding season, the bare skin at the base of the bill is pink to red on the white-faced, compared to light blue on the glossy ibis. White-faced ibis also have a broader white feather border around their bare facial skin which extends behind the eye and under the chin. White-faced ibis have red eyes and reddish legs.

Conservation

Protection of rookeries by the DEP Wildlife Division, in cooperation with the DEP Law Enforcement Division and U.S. Fish and Wildlife Service, is imperative to the conservation of ibis and other colonial nesting birds in our state. Protection efforts undertaken by the Wildlife Division and others include closing access to vulnerable rookeries during the breeding season and placing educational signs in



A rare bird for Connecticut, a white-faced ibis (front) is seen as it forages in a shallow pool. The bird in the back is a glossy ibis. Note their overall appearance is very similar.

sensitive areas that may be visited by people.

People are encouraged to stay away from nesting areas, most of which are fenced off and posted to protect the nesting birds. Shoreline visitors are also asked to not leave behind litter or food scraps, especially near rookeries. Litter and food scraps attract predators, such as raccoons, which can have devastating impacts on bird rookeries.

Ibis, as well as other colonial nesting birds, including egrets, are listed on Connecticut's Endangered, Threatened and Special Concern Species List. Glossy ibis are a species of special concern, meaning they have a restricted range or restricted habitat in the state, or that they are at low population levels.

Offshore islands that are suitable breeding areas for colonial nesting birds, including ibis, are few in Connecticut and need to be protected on a continuing basis to maintain healthy populations of these birds. Wetland protection and ongoing wetland habitat restoration projects are helping provide ibis with the productive foraging areas they need to raise their young.



The white ibis is an abundant species in the southeastern United States.



In Connecticut, glossy ibis nest and raise their young primarily in offshore rookeries that need protection.

Where Have All the Muskrats Gone?

Written by Kathy Herz, Editor

Wildlife biologists in the northeastern United States and eastern Canadian provinces all agree that the region's muskrat population has been experiencing a steady decline over the last decade. What they don't totally agree on is why. There are more theories than answers as to why muskrats are declining and biologists have yet to pinpoint the exact cause (or causes). Concern for the decline recently prompted the Northeast Furbearer Resources Technical Committee (NE-FRTC) to form a subcommittee to examine this issue. NEFRTC is comprised of wildlife biologists from all the northeastern states (including Connecticut) and eastern provinces of Canada.

Biologists, long-time trappers, and wildlife enthusiasts have all noticed a decrease in Connecticut's muskrat population. Muskrats were once commonly seen in marshes and other wetland areas throughout the state. They have also been an important resource for local trappers who harvest the animals for their pelts during the regulated trapping season. There has been a reduction in the number of trappers and trapper effort both in the state and throughout the region. Biologists do not believe that trapping has caused the large-scale decline of muskrats. These animals have a high reproductive potential, as they breed several times a year and produce six to seven young per litter. Even in areas that are not traditionally trapped, muskrat populations have declined.

Muskrat populations are known to suffer from temporary setbacks on the local level, mostly due to disease outbreaks or food shortages. Usually, the populations are able to bounce back because of the muskrat's high reproductive rate. However, biologists believe that muskrats are being impacted by more than just the usual setbacks to population growth.

Although there may be more than one reason for the population decline, those having to do with habitat are at the top of the list, most notably the loss of suitable wetland habitat due to development and the degradation of remaining habitat by pollution and changes in vegetation. Wet-



The muskrat population in the northeastern United States and eastern Canadian provinces has been experiencing a steady decline over the last decade. However, there are more theories than answers as to why muskrats are declining and biologists have yet to pinpoint the exact cause (or causes).

land habitat loss has been documented for decades, and although those lands lost to development cannot be restored, remaining areas can hopefully be conserved. Pollution and its effects on wildlife are a concern, as well, even though there have been statewide efforts to clean up pollution. Vegetation change in wetlands, particularly the spread of the aquatic invasive plant, phragmites, is one issue that needs to be examined more closely as it relates to the decline of muskrats.

Muskrats are most common in wetlands dominated by cattails. They eat the roots and shoots of cattails and use the mature stems for building lodges. Phragmites has displaced native plants in many fresh and tidal wetlands, creating a monoculture of thick vegetation that has low value for most fish and wildlife species, the muskrat among them. Muskrats do not feed on phragmites nor use the plants to build their homes.

Case Study: Quinnipiac Marsh

The Quinnipiac River Marsh provides an excellent example of how the spread of phragmites has affected the local muskrat population. The approximately

900-acre marsh complex is adjacent to a large urban area and located in the towns of Hamden, North Haven, and New Haven. It is the third largest tidal marsh complex in Connecticut and includes salt and brackish marshes, mudflats, and wooded areas.

Muskrat populations at the Quinnipiac Marsh have both benefited and suffered due to changes in vegetation. Before 1900, the marsh predominately consisted of salt-meadow hay grass. After a railroad yard and bridge were built on the lower portion of the marsh, tidal flow was restricted, thereby reducing marsh salinity and making conditions more favorable for cattails. Cattails began to increase and, by the 1920s, had essentially replaced the salt-hay. With the spread of cattails, the marsh became well known for its healthy and growing muskrat population.

In the early 1970s, Harvey Smith and Peter Jordan conducted a study on the productive muskrat population at the Quinnipiac Marsh. At that time, it was noted that the surrounding habitat and the Quinnipiac River were "severely affected

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A Closer Look at the Muskrat

The muskrat is a semi-aquatic rodent that lives along waterways in Connecticut. Native Americans and early settlers used muskrats as a source of food and fur.

Description

The muskrat gets its name from its resemblance to a rat and from the musky odor that is produced by scent glands. With brown fur and partially webbed hind feet, the muskrat can look like a beaver; however, it has a long (8-11 inch) rat-like tail that is scaled, nearly hairless, and somewhat flattened on the sides. Muskrats are also about half the size of a beaver, measuring 18-25 inches long (including the tail) and weighing between two to four pounds. The head is broad and blunt with short ears barely visible above the fur. The muskrat's coat is practically waterproof and is soft, dense, and grayish brown in color. The underfur is covered by long, brown guard hairs which serve to protect the soft underhair from wear. The muskrat is further adapted for its semi-aquatic life with lips that act as valves, closing behind the front incisors so it can easily gnaw underwater.

Habitat and Diet

Muskrats inhabit wetlands with an abundant supply of aquatic vegetation, such as swamps, coastal and freshwater marshes, lakes, ponds, and slow-moving streams. They feed primarily on aquatic plants, including cattails, sedges, water lilies, arrowheads, and duckweeds. Occasionally, they will eat crayfish, snails, mussels, frogs, insects, and slow-moving fish.

Life History

Muskrats have a high reproductive rate, producing up to three litters per year, each with six to seven young. They are polygamous and breeding takes place from late March through July. After a gestation period of 28 to 30 days, the young are born blind, helpless, and almost naked. The young are dependent on the female for about 30 days. They leave the den at about six weeks of age.

Interesting Facts

Muskrats live in or near water most of their lives. They make their homes in bank dens or lodges similar to those of the beaver but smaller in size. Muskrats excavate dens by burrowing into the banks of slow-moving streams with their sharp front claws. The dens are complete with dry chambers and underwater tunnels, and there are ventilation holes which are hidden at the surface by shrubs, branches, and thick vegetation. The lodges, constructed with aquatic plants, brush, and mud, are usually situated on a foundation of brush or a stump or are occasionally built up from the bottom of the wetland. Several small feeding huts that are similar to, but less complex than the lodges, may be constructed within the muskrat's territory. Here, the animal will periodically feed while protected from predators and harsh weather.

Muskrats are active throughout the year and, although mainly nocturnal, are sometimes seen during the day. They are susceptible to cold and wind and spend more time in their dens



during winter. Muskrats are highly territorial and aggressive toward each other, although several may share a lodge during winter. The muskrat's normal home range is usually within 200 yards of its den, although it may travel several miles over land in search of suitable habitat.

Muskrats generally live about one year in the wild, occasionally up to four years. In good habitat and with little competition, muskrats are prolific. However, populations appear to be cyclical in nature and influenced by the availability of food. High populations of muskrats can greatly reduce aquatic vegetation, making the habitat less suitable for muskrats and other wildlife species.

Muskrats can remain underwater for as long as 20 minutes. With their webbed hind feet acting as paddles and their tail as a rudder, they swim at a speed of up to three miles per hour and can even swim backwards. Muskrats also can give a warning slap with the tail, similar to the beaver.

Historically, muskrats have been one of the most commonly trapped animals in Connecticut, and throughout the nation. They are considered an important furbearer resource in terms of the number harvested and economic value. In Connecticut, the muskrat harvest has dropped markedly from over 20,000 more than two decades ago to between 2,000 to 4,000 per year in recent years (see page 14). Connecticut has a legal trapping season and trappers are required to pass a trapping course offered by the DEP's Conservation Education/Firearms Safety Program.

Management of Nuisances

Sometimes muskrats are considered a nuisance if they damage a garden or crops by their feeding activities or if they burrow into dams and dikes. Planting a garden or crops beyond the animal's normal 200-yard home range or enclosing the garden and/or field with fencing can effectively solve some problems. Most often, muskrat damage is associated with burrowing and digging activities that can weaken dikes and dams. The Wildlife Division can offer suggestions on how to reduce muskrat damage to dikes and dams or what techniques can be applied during construction as a preventive measure. A more detailed fact sheet is available on the wildlife section of the DEP's website (www.ct.gov/dep/wildlife) or call the Wildlife Division's Hartford office for more information (860-424-3011).

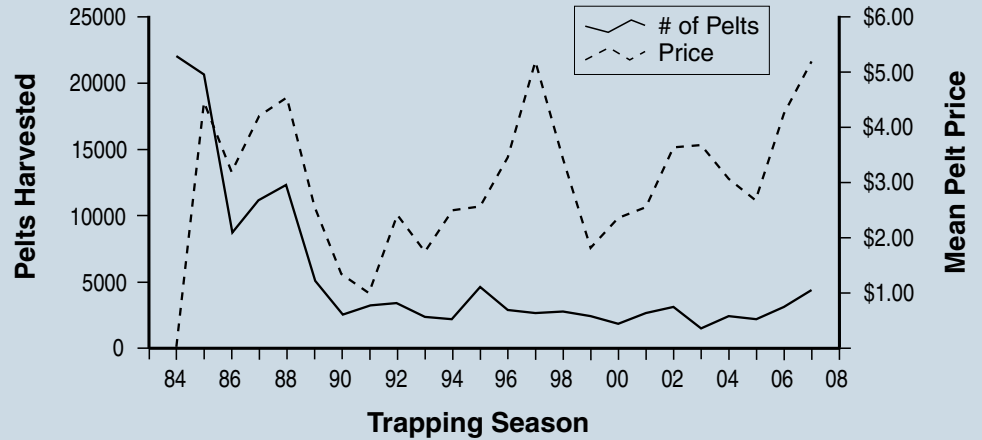
Muskrats

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by man's activities, both through land manipulation and water pollution." With the passing of the Connecticut Coastal Wetlands Act of 1969, Smith and Jordan felt it was important to conduct their study in the early 1970s to document the muskrat population for future comparison. At the time of the study, trapping, which was permitted from November 1 to March 15 with no limit on the take, was the greatest mortality factor for muskrats in the marsh. Dispersal and fighting during the breeding season were considered the next greatest sources of loss, followed by predation. The researchers stated, "muskrats in the Quinnipiac population exhibited neither die-offs from disease nor decline due to overuse of vegetation, even though population density remained well above average for the species."

Fast forward to present time when the marsh complex is still bordered by railroad tracks, major streets, shopping malls, landfills, junkyards, and industrially contaminated sites. Over the years, efforts have been made to improve the water quality of the Quinnipiac River. But, despite these efforts, a habitat change has taken place that is even more difficult to control—the spread of phragmites. Thick stands of phragmites have replaced most of the cattails at the marsh

Connecticut Muskrat Harvest and Pelt Price



Historically, muskrats have been one of the most commonly trapped animals in Connecticut, and throughout the nation. They are considered an important furbearer resource in terms of the number harvested and economic value. In Connecticut, the muskrat harvest has dropped markedly from over 20,000 more than two decades ago to between 2,000 to 4,000 per year in recent years

complex, dominating several locations along the Quinnipiac River. Although muskrats still live in pockets of habitat in phragmites infested wetlands, their numbers appear to be less than in the past. No scientific studies have been conducted on muskrats in the marsh since the 1970s, but observations of muskrats and trapping harvest totals have both declined.

In recent years, the Wildlife Division's Wetland Habitat and Mosquito Management (WHAMM) Program has undertaken projects to restore and en-

hance sections of the Quinnipiac Marsh. Projects have involved the plugging of mosquito ditches, creation of small ponds and new creek channels, and treatment of phragmites with herbicides and mowing.

In the meantime, biologists in the Northeast and eastern Canada plan to watch local muskrat populations and monitor the annual harvest. They hope to determine the cause (or causes) of the muskrat's decline so that measures can be taken to conserve the population.

CT State of the Birds 08

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able nesting environment for this sparrow, and specific saltmarshes between Guilford and Stonington are home to the vast majority of these birds in Connecticut. Surprisingly, their nests are built just above the average high-tide water level and are at risk of destruction from even typical spring tides. Both declining acreage of native saltmarshes and future rising sea levels pose significant threats to this sparrow. The *Connecticut State of the Birds 2008* report recommends improved monitoring of the sparrow population and preserving Connecticut's remaining saltmarshes, especially the higher elevation areas where nesting occurs.

Cerulean warblers are among the fastest declining of all Connecticut's songbirds: the mature forests they need to

breed are disappearing, and their wintering grounds in northern South America are also in danger.

Once a fixture on the eastern shoreline in summer, American oystercatchers are highly sensitive to human disturbance, and a shrinking population is competing with humans for the use of beaches during the breeding season. They are also vulnerable to oil spills, hurricanes, and other catastrophic events. "Connecticut's shoreline is a very slender and dynamic habitat, highly developed and not easily recreated," notes the report.

According to CAS President Robert Martinez, "There are no 'one-size-fits-all' programs or simplistic solutions in the report. The next, difficult steps are to design, fund, and implement action plans that address the problems, including changing human behavior, which is prob-

ably the most difficult challenge of all. But conservation is a 'global' issue that concerns all of us. Right now, in Connecticut, we can and must do something to protect at-risk bird species and disappearing wildlife habitat and the countless plants, insects and other animals that share these same habitats."

Contributing authors for the 2008 Connecticut State of the Birds Report include: Chris Elphick (Assistant Professor at the University of Connecticut and a co-editor of the Sibley Guide to Bird Life & Behavior); Robert Askins (Professor of Biology and Chair of the Biology Department at Connecticut College); Jenny Dickson (wildlife biologist and leader of the DEP Wildlife Division's Wildlife Diversity Program); Patrick Comins (Audubon Connecticut's Director of Bird Conservation for Connecticut); and Greg Hanisek (news editor and author of a nature column at the Waterbury Republican-American).

Celebrate International Migratory Bird Day on May 10

Tundra to Tropics: Connecting Birds, Habitats, and People

Migratory birds travel long distances between breeding and non-breeding sites throughout the Western Hemisphere. In 2008, International Migratory Bird Day (IMBD) will explore the birds that make these fantastic journeys, the habitats on which they depend, and the people who are important to the conservation of birds and their habitats along the way.

International Migratory Bird Day is officially celebrated on the second Saturday in May in the United States and Canada. This year IMBD falls on Saturday, May 10, 2008. In Latin America and the Caribbean, IMBD is celebrated in the fall, when migratory birds have returned to non-breeding grounds. The theme for 2008 is “Tundra to Tropics: Connecting Birds, Habitats, and People. This theme provides the opportunity to recognize important habitats in your area and the groups and individuals that contribute to their protection. Explore what each habitat offers migratory birds, whether it is a place to rest, a nesting site, or a winter home.

The International Migratory Bird Day website (www.birdday.org) provides information on the theme for this year’s celebration, as well as a listing of IMBD events and instructions on how to obtain artwork and other items associated with the event.

Important Facts About Habitat and Birds

(A partial list from the IMBD website, www.birdday.org)

Forests and Grasslands

- Fifty-one percent of all migratory birds in North America spend the winter in Mexico. These birds face the loss of critical overwintering sites due to deforestation with a rate of forest loss estimated at 600,000 to 2.5 million acres per year.
- Nearly 20% of the dry land area on Earth was covered by tropical forests in the 19th century. This figure dropped to less than 7% by the end of the 20th century.
- Most remaining grasslands in the East and Midwest are fragments so small that brown-headed cowbirds and predators can readily parasitize or destroy bird nests.
- Populations of shrubland and grassland birds have had the greatest rate of declines of any groups of birds and many species receive special conservation status in part or all of the region.

Wetland and Riparian Areas

- More than 50% of all wetlands in the contiguous United States have been drained or filled since the time of European settlement.
- The North American Waterfowl Management Plan has protected, restored, or enhanced more than 15 million acres of marshes and forested wetlands in Canada, the United States, and Mexico between 1986 and 1996.

Coast

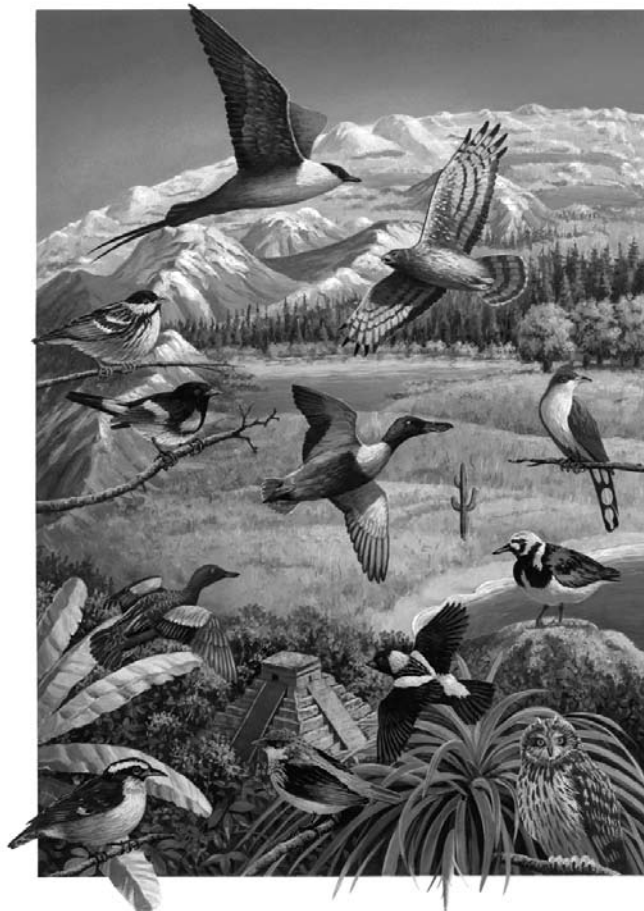
- Of 74 populations of shorebirds breeding in North America, only 12 have population trends that appear to be stable or increasing; the vast majority (84%) are unknown or declining.
- More than half of all original barrier island vegetation and coastal wetlands in the United States have been destroyed or altered, thereby depriving birds important resting and feeding sites during migration.

Arctic

- Exploration of oil, gas, and minerals and construction of pipelines and roads cause physical disturbances and habitat fragmentation to the species that live in the arctic.
- Mining and road development are the primary human factors contributing to habitat loss in the arctic. Fifteen percent of the habitat loss in the area occurs in the valley bottoms, which contain the most productive habitats.

Benefits of Birds

- Many tropical birds and birds that migrate to the tropics during winter are important for the pollination of many valuable species of flowers and trees.
- Birds save the timber industry tens of millions of dollars in timber damage each year by consuming wood boring insects.



Artwork by ELEAZAR SAENZ



Do you have an interesting wildlife observation to report to the Wildlife Division?

Please send it (and any photos) to:

Wildlife Observations
DEP - Wildlife Division
P.O. Box 1550
Burlington, CT 06013

Email: katherine.herz@po.state.ct.us
(photos will be returned if requested)

It's Dinner Time

Written by Peter Picone, Habitat Management Program

It was a normal commute to my job at the Wildlife Division's Sessions Woods Wildlife Management Area in Burlington this past January, except for the flashing lights of a police cruiser and a smashed car. The smashed car was a result of a collision with a deer that was crossing Route 69 near the wildlife area. As I drove past the accident scene, I rolled



down my window and asked a bystander if the deer ran off or if it had died. He indicated that the deer was down but also said he noticed a "cat" in the woods near the road-killed deer. I parked my vehicle to check it out and to my astonishment, I saw a bobcat in a stalking posture heading towards the dead deer. As I observed this from about 20 yards away, the bobcat proceeded to lick blood from the deer's head and began feeding on its neck and shoulder region. I quickly grabbed my digital

camera and took several pictures of this "once in a lifetime" event.

This uncommon wildlife observation leads inquisitive minds to ponder how the bobcat found the road-killed deer so quickly. Was it just a coincidence that the bobcat was in the vicinity of the collision? Did the injured deer vocalize and the bobcat hear it? Did the bobcat smell the downed deer? Had the bobcat been tracking this deer originally and been in pursuit? All are plausible

explanations, but we will never quite know which one is correct.

According to wildlife studies, bobcats prefer preying on rabbits, chipmunks, mice, and birds. However,

if you look further into research conducted on bobcats, they are also known to prey on deer opportunistically during winter. Observing this bobcat feeding on the road-killed deer was definitely a top ten for me. The more I live, the more I realize that Connecticut's forested landscape is full of great wildlife surprises. All we have to do is be out there and find one.

Sessions Woods Public Program Series

The Sessions Woods Conservation Education Center's Public Program Series is a cooperative venture between the Wildlife Division and the Friends of Sessions Woods. Please pre-register for these programs by calling 860-675-8130 (Monday-Friday, 8:30 AM to 4:30 PM). Programs are free unless noted. An adult must accompany children under 12 years old. The Sessions Woods Conservation Education Center is located on Route 69 in Burlington.

Friends of Sessions Woods Annual Meeting, with Live Snake Program, Sunday, April 27, 2008, at 1:00 PM: The Annual Meeting is open to all! Brian Kleinman of Riverside Reptiles will present this year's special program, "Snakes." Brian's program will include live snakes and several species will be in attendance! Learn how snakes locate prey and how they eat and grow. Brian will also talk about our native species and what we can do to conserve their habitat and ensure their survival. A potluck luncheon precedes the presentation. Please bring a side dish to share.

An Introduction to Letterboxing, Sunday, May 4, 2008, at 1:00 PM: Join Friends of Sessions Woods members and Master Wildlife Conservationists Henry and Carol Perrault for an introduction to letterboxing. This unique activity is much like a treasure hunt, with participants obtaining clues and seeking to uncover a hidden box equipped with a special, artistic stamp (often homemade) for marking their notebooks. A wide variety of adventures can be found to suit all ages and experiences. In this program, Henry and Carol will provide a discussion indoors, followed by a hike outdoors to uncover one of the letterboxes hidden at the Sessions Woods Wildlife Management Area.

Children's Program -- Kids and Carson, Saturday, June 14, 2008, at 1:30 PM: Rachel Carson was one of the world's foremost leaders in conservation. Her work as an educator, scientist, and writer revolutionized America's interest in environmental issues. This program will provide activities for children and their caregivers to explore the wonders of wildlife and the natural world. There will be indoor and outdoor activities with Wildlife Division Educator Laura Rogers-Castro. Dress for the weather and meet inside in the exhibit classroom of the Sessions Woods Conservation Education Center.

Surveying CT's Midwinter Waterfowl Populations

Written by Kelly Kubik, Migratory Gamebird Program

Staff from the DEP Wildlife Division conducted the annual Midwinter Waterfowl Survey in early January 2008. This survey is conducted throughout the Atlantic Flyway and is used as an index of long-term wintering waterfowl trends. The Midwinter Waterfowl Survey is the longest running operational waterfowl survey in North America. In Connecticut, the survey is conducted from a low-flying airplane and the entire coastline, the three major river systems (Connecticut, Housatonic, and Thames), and selected inland lakes and reservoirs are censused.

While unseasonably warm temperatures occurred during the 2008 survey, conditions were generally good because prolonged cold weather occurred prior to the start of the survey. Most of the inland water bodies that were surveyed were either completely or partially frozen. This concentrates waterfowl, making them easier to count.

Counts of most puddle ducks, such as the mallard, were above both the short-term (5-year) and long-term (10-year) averages. This year's American black duck count was above the short-term average and similar to the long-term average of this species. Historically, the black duck was the most abundant freshwater duck in eastern North America until the population began to experience a steady decline beginning in the 1950s. It subsequently reached very low numbers during the late 1970s and early 1980s.

The scaup count, comprising both the greater and lesser, was above its short-term average and similar to the long-term average, but still well below the historic wintering numbers that Connecticut once harbored. Declines in scaup numbers throughout the continent continue to be of concern for waterfowl managers. Mergansers (common, hooded, and red-breasted) were abundant in both inland and coastal locations and were above both the short- and long-term averages. Counts for buffleheads and ruddy ducks were below the short-term averages, while goldeneye counts were above.

Numbers of sea ducks counted in Connecticut (eider, scoter, and oldsquaw) were all above the short- and long-term averages for these species. Eiders are not commonly detected in Connecticut during the Midwinter Waterfowl Survey and were detected during the survey for only the third time in the previous 54 years. Sea ducks are the least understood group of waterfowl. They are generally long-lived, have low reproductive potential, and become sexually mature at later ages than most other duck species.

Atlantic brant tallies were above both the short- and long-



P. J. FUSCO

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Large rafts of greater scaup can be seen at some coastal locations during winter.

Connecticut Midwinter Waterfowl Survey Results for Major Species*

Species	2006**	2008	5-year Avg.	10-year Avg.
Atlantic Brant	1,000	1,200	900	600
Black Duck	2,000	2,000	1,400	2,000
Bufflehead	700	600	900	600
Canada Goose	3,000	2,500	3,100	3,000
Canvasback	100	100	100	600
Gadwall	0	100	0	0
Goldeneye	600	800	700	500
Mallard	900	1,200	900	800
Merganser	1,900	1,200	1,000	1,000
Mute Swan	900	800	800	1,000
Oldsquaw	100	300	100	1,000
Ruddy Duck	100	0	200	100
Scaup	4,200	2,900	1,800	2,800
Wigeon	100	100	0	0

* rounded to nearest hundred

** ground survey conducted only for black ducks and brant in 2007

term averages. Midwinter surveys for brant are especially important because the counts are used to set annual hunting regulations, whereas most other hunting regulations for migratory gamebirds are based upon breeding numbers rather than on wintering numbers.

Counts for the invasive mute swan were similar to the short-term and below the long-term averages. Numbers of swans along the Connecticut coast have been fairly stable for the last several years, but are continuing to increase for inland counts based upon Wildlife Division summer swan surveys and National Audubon's Christmas Bird Count.



Donations in Memory of Eagle Volunteer Will Help CT's Eagles

The Wildlife Division is saddened to learn of the unexpected death of John Gallagher from the Sandy Hook section of Newtown. John and his wife Marsha have been volunteer bald eagle observers since 2001 and were generous enough to allow DEP wildlife biologists access through their land to observe and band bald eagles. John will be remembered for his concern for bald eagles, the environment, and for his love of nature.

Memorial donations have been coming in to the DEP Nonharvested Wildlife Fund in John's memory. One friend wrote that "John was fascinated by the bald eagles that nested by his home on Lake Zoar...I know that he wanted to see this program continue and prosper." The Wildlife Division would like to thank all of John's friends and associates who have so generously contributed. The contributions will be used towards bald eagle projects, such as testing blood samples of eagle chicks and buying identifying leg bands and banding equipment. John's passing leaves all who knew him sad and the Wildlife Division staff extends its sympathies to Marsha and the family.

Julie Victoria, Wildlife Diversity Program



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P. J. FUSCO

Still Looking for Weasels

The DEP Wildlife Division has been conducting a statewide survey of short-tailed and long-tailed weasels since spring 2007. This project is investigating appropriate field handling techniques, as well as the distribution and habitat associations of both weasel species in Connecticut. As part of this project, Division biologists are asking for the public's help by reporting observations of weasels (either alive or road-killed). Observations can be reported to Wildlife Division technician Christina Kocer at 860-675-8130 (Monday through Friday, 8:30 AM-4:30 PM) or email christina.kocer@po.state.ct.us.

Report Ruffed Grouse Observations

The DEP Wildlife Division needs help collecting information on ruffed grouse. A research project was launched in 2004 to help provide baseline population data. Whether you are out hunting or hiking, if you observe or hear a ruffed grouse, please report it to the Division. The information needed includes the date, town, specific location, what was heard, and the actual observation. Send this information to Michael Gregonis at the Division's Franklin Wildlife office (391 Route 32, North Franklin, CT 06254; 860-642-7239; or email michael.gregonis@po.state.ct.us).

"Just for Kids" Recognized!

The *Just for Kids* pages in the Wildlife Division's section of the DEP website were recognized by the State of New York as the Elementary Science Program Animal Site of the Month for December 2007. Recognition is given to websites that help students "learn about the creatures that share this planet with us, sites that inspire students to conserve the planet's diversity." The Wildlife Division's Natural Resource Educator, Laura Rogers-Castro, has been writing these pages as wildlife educational pieces for children between the ages of 8 and 12. The pages were published in *Connecticut Wildlife* before being posted to the website.

Opportunities to Volunteer for Wildlife!

Are There Chimney Swifts in Your Chimney?

Chimney swifts are very beneficial neighbors and tenants because they are insectivores that eat mosquitoes, biting flies, termites, and other insects. These "flying cigars" (as they are commonly called because of their short, tubular bodies) appear to be declining across their range, and one possibility for this is the decreasing number of open, available chimneys. It is the DEP Wildlife Division's goal this year to get a better idea of the types of chimneys that swifts use, as well as develop a monitoring protocol. If you have had swifts in your chimney in the

past or have them this year, let us know! We are looking for volunteers to monitor their own chimneys for chimney swift activity. Volunteers from throughout the state are also needed to survey selected chimneys to help identify additional nesting structures.

Nesting Raptors

As in years past, the Division is once again looking for volunteers to help find active raptor nests during spring and summer, as well as help monitor the nests through the fledging of young. If you see any raptor nests on your travels, please contact the Wildlife Division as soon as you can. Information needed is the

species of bird, the structure the nest is located in or on, directions, date seen, and any activity you noticed.

Contact Us and Volunteer!

If you are interested in volunteering or would like to report a nesting site of raptors or chimney swifts, please contact: Shannon Kearney-McGee or Erin Victory, at the Wildlife Division's Sessions Woods office (P.O. Box 1550, Burlington, CT 06013; (860) 675-8130) or send email to shannon.kearney@po.state.ct.us.

Wildlife Calendar Reminders

- January-April Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your Connecticut Income Tax form.
- Late March..... Remove bird feeders from your yard to avoid attracting hungry bears that are emerging from their winter dens. Whenever a bear visits a bird feeder, take the feeder down immediately. To learn more about what to do if you encounter a black bear, visit the DEP's website (www.ct.gov/dep).
- Late April -August... Respect fenced and posted shorebird nesting areas when visiting Connecticut beaches. Also, keep dogs and cats off of shoreline beaches to avoid disturbing nesting birds (See article on page 8 to learn more).
- April 5 **Wild Turkey Hunting Seminar**, from 8:00 AM-1:30 PM, at the Fairfield County Fish and Game Protective Association, 310 Hammertown Road, Monroe. Learn to hunt for the wild turkey in the spring and fall hunting seasons. Specific techniques and safety considerations will be discussed. Please preregister by calling the Wildlife Division's Sessions Woods office at 860-675-8130.
- April 22 Earth Day
- May 10..... **International Migratory Bird Day**. To learn more about this annual celebration, read the article on page 15 and also visit the website at www.birdday.org.

Public Program Series at the Sessions Woods Conservation Education Center (see page 16 for more details on listed programs)

- April 27 **Friends of Sessions Woods Annual Meeting, with Live Snake Program**, at 1:00 PM.
- May 4..... **An Introduction to Letterboxing**, at 1:00 PM.
- June 14..... **Children's Program: Kids and Carson**, at 1:30 PM.

Programs and workshops at Sessions Woods are sometimes scheduled between issues of *Connecticut Wildlife*. To stay informed about fun and interesting programs offered by the Wildlife Division, regularly check the calendar section of the DEP's web site (www.ct.gov/dep) or call the Sessions Woods office during business hours.

Hunting Season Dates

- May 3..... **Spring Turkey Junior Hunter Training Day** (see below).
- May 7-31..... **Spring Turkey Hunting Season**
..... See the 2008 Connecticut Hunting and Trapping Guide for specific season dates and details. The guide is available at Wildlife Division offices, town halls, and on the DEP's website (www.ct.gov/dep).

Spring Turkey Junior Hunter Training Day Is May 3

The spring turkey junior hunter training day provides junior hunters with an opportunity to learn safe and effective hunting practices from experienced hunters. Licensed junior hunters may hunt for turkeys when accompanied by a licensed adult hunter 18 years of age or older. The adult mentor may not carry a firearm. The junior hunter must have a valid spring season turkey permit for state or private land. Those hunting on private land also must have written consent from the landowner. The adult mentor may assist in calling turkeys.



Step Up to the Plate for Wildlife...

... and show your support by displaying a wildlife license plate on your vehicle

There are two great designs to choose from: the state-endangered bald eagle or the secretive bobcat. Funds raised from sales and renewals of the plates will be used for wildlife research and management projects; the acquisition, restoration, enhancement, and management of wildlife habitat; and public outreach that promotes the conservation of Connecticut's wildlife diversity. Application forms are available at DEP and Department of Motor Vehicle offices and online at www.ct.gov/dmv.

Connecticut Wildlife

Subscription Order

Please make checks payable to:

Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013

Check one:

- 1 Year (\$6.00) 2 Years (\$11.00) 3 Years (\$16.00)

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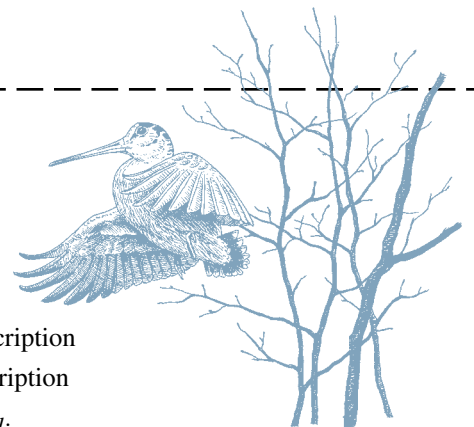
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The glossy ibis is listed as a species of special concern on Connecticut's Endangered, Threatened and Special Concern Species List. The first documented nesting of glossy ibis in the state was from the Norwalk Islands in 1971. The species is at the northern end of its breeding range in southern New England.

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