November/December 2007

Connecticut Wildlife

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BUREAU OF NATURAL RESOURCES • WILDLIFE DIVISION

From the Director

As an article in this issue of Connecticut Wildlife *explains, the Wildlife Division is trying to capture some weasels to learn more about the two species that occur here. Like many species of small mammals, weasels have not been well-studied in Connecticut. We can assume they should be abundant, based upon what we know of their habitat requirements. We have plenty of stonewalls running through the woods that provide cover for chipmunks, mice, and other prey. But we really don't know much about where weasels occur or whether their populations are secure. Projects funded by State Wildlife Grants are designed to fill in the blanks for species like these.*

I have had a couple of interesting encounters with weasels over the years. As a graduate student in Maine, I would occasionally use road-killed deer as bait in my bobcat traps. Early one morning, I approached a deer carcass behind our cabin that I was going to cut up for bait and I noticed a weasel sitting atop it. Not only did it hold its ground as I approached, but it actually assumed a combative posture as if to say, "I don't care how big you are, I was here first." Eventually, we reached a compromise and I shared my roadkills for most of the winter with the feisty little mustelid.

On another occasion, a fellow graduate student and I inhabited a mouse-infested cabin while doing our fieldwork. It was not uncommon in the middle of the night to hear mice scurrying across the cabin. One night the commotion was worse than usual and my cabin mate snapped on the flashlight just in time to spot a mouse hop onto his sleeping bag followed by a weasel in hot pursuit. Both apparently found their way into the sleeping bag judging from human and animal screams that followed. The flashlight was destroyed in the struggle so the drama played out in total darkness.

The fact that I remember these weasel events so vividly is a testament to how infrequently they are seen. They may be all around us and difficult to catch, or they may be scarcer than we think. The only way we will find out is to investigate. Now that the weather is cooler, I am hoping to run a little weasel trap line of my own in hopes of advancing our scientific knowledge and perhaps creating a few more weasel memories.

Dale W. May

Cover:

A belted kingfisher often perches on a branch, often overhanging the water, as it searches for food. From this perch, the kingfisher dives into the water to catch unsuspecting minnows and other small fish, and occasionally crayfish, frogs, and insects.

Photo courtesy of Paul J. Fusco

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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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Nine Peregrine Falcon Nests in 2007

Written by Julie Victoria, Wildlife Diversity Program

Nine pairs of state endangered peregrine falcons nested in Connecticut this past nesting season. Young were produced by six of the nesting pairs; three pairs laid eggs but were unsuccessful in hatching young. The six successful pairs produced a total of 10 chicks this year, two less than in 2006.

Cliffside Nest

Historically, high rocky ledges in towns like Avon, Meriden, or Guilford served as nesting sites for peregrine falcons. But with the widespread use of the pesticide DDT, peregrine falcons began to disappear in the 1920s and 1930s and were completely gone from Connecticut by the late 1940s. Since the late 1990s, when peregrines finally returned to the state to nest, preferred nest sites have been tall buildings and bridges. A pair has attempted to nest on a rocky ledge in New Haven County for the past eight years, but success has been limited by weather conditions. The nest location makes it vulnerable to extreme weather changes during the nesting season. This year, the pair nesting on the rocky ledge laid four eggs, but successfully fledged only one chick. (See article in the July/August 2007 issue of *Connecticut Wildlife* to learn more about this cliffside peregrine nest.)

P. J. FUSCO

Chick Unnecessarily "Rescued"

One of the peregrine pairs nesting in Hartford County produced at least one chick which, unfortunately, was collected by someone who thought it needed to be "rescued." The chick is currently being cared for by licensed rehabilitator Tom Ricardi and should be released back into the wild soon. This past summer, Tom also cared for an injured bald eagle chick from Connecticut that successfully recovered from its injuries and was released in September (see page 6 to learn more).

Due to this unfortunate situation, the DEP Wildlife Division would like to remind Connecticut residents to leave young wildlife in the wild. In situations where young animals are found, it is important to realize that the adult is probably nearby watching and will not return until the "intruder" leaves. Many animals leave their young alone for long periods of time. It is illegal to keep wild animals as pets and raising wildlife for successful return to the wild requires considerable knowledge of appropriate feeding formulas, countless hours of care, and appropriate outdoor caging, in addition to the required state and federal permits. Improper care results in underweight and undernourished animals or animals that are not releasable because they have become too accustomed to being around people. Keep in mind that although it may seem natural to want to provide young, distressed animals with assistance, caring for them may actually do more harm than good.

Other Successful Nests and Banding Efforts

- A second peregrine pair in Hartford County nested on the Travelers Tower and produced one chick. This pair has been well documented through live webcams on the site, launched in 2000 as a collaboration between St. Paul Travelers, the Science Center of Connecticut (now the Children's Museum), and the DEP. Peregrine Watch at Travelers Tower, as the webcam program is known, can be accessed via http://falconcam.travelers.com or through the Children's Museum website at www.thechildrensmuseumct.org. The webcam includes two cameras that provide a live close-up of the falcons' nest, as well as a wider shot of the ledge outside the 21st floor of the Travelers Tower on which the nest box is located.
- A peregrine pair in Middlesex County fledged four chicks, which were banded with the assistance of DEP EnCon Police Officer Bill Myer and Francis Saunders of Providence-Worcester Railroad.
- The pair that nests on the P. T. Barnum Bridge in Bridgeport (Fairfield County) produced at least one chick for the eighth year. Because the Connecticut Department of Transportation (DOT) was not working in the area during the nesting season, DOT personnel were not available to help Wildlife Division biologists reach the nest. Therefore, the chick was not banded.
- A new peregrine pair nested in Fairfield County this year. The nest was observed by several birders who reported seeing two chicks fledge.

The DEP Wildlife Division examined and banded six of the 10 chicks, as has been done with many of the chicks hatched in Connecticut since 1997. Attaching leg bands is a useful tool for wildlife managers because it allows them to trace local movements, estimate population changes, and determine a species' lifespan. The use of leg bands has provided important information to the recovery program for this state endangered species. With a listed population, it is necessary to collect any pertinent data that can be added to the knowledge of this species' life history in Connecticut.

Grassland Habitat Conservation Initiative Update

Written by Jenny Dickson, Wildlife Diversity Program

In fall 2006, DEP Commissioner Gina McCarthy announced a new agency initiative aimed at conserving Connecticut's rapidly disappearing grassland habitats. This initiative was selected as the first statewide action to be addressed as part of the implementation of Connecticut's Comprehensive Wildlife Conservation Strategy. Grasslands were selected as a priority habitat because they provide nesting and breeding locations for 80 species of birds in our state, 13 of which are listed under the Connecticut Endangered Species Act. Grasslands also support a diverse array of other wildlife species, such as meadow jumping mice, smooth green snakes, and the violet dart moth, a threatened species.

P. J. FUSCO

Objectives of the Initiative

To support the Grassland Habitat Conservation Initiative (GHI), the DEP committed $3.2 million for the acquisition of grassland habitat and has set aside an additional $4.5 million for future acquisition. The objectives of the Initiative are to:

- Complete a statewide survey to identify the location and habitat quality of existing grasslands;
- Establish a statewide goal for the number of acres of grassland habitat necessary to maintain diverse populations of grassland-dependent wildlife species in Connecticut;
- Expand efforts to acquire and/or protect grasslands in order to reduce the number of grassland-dependent species listed under Connecticut's Endangered Species Act;
- Make acquisition of wildlife habitat a key priority of the DEP's Open Space Acquisition Plan; and
- Expand efforts to create partnerships and improve exchange of information among state and local officials and private landowners.

State-listed Grassland Birds

Upland Sandpiper
Grasshopper Sparrow
Horned Lark
Vesper Sparrow
Bobolink
Eastern Meadowlark
Savannah Sparrow
American Kestrel
Northern Harrier
Henslow's Sparrow
Barn Owl
Long-eared Owl
Short-eared Owl

First Year Progress

The GHI has made significant progress in its first year. Habitat analysis was conducted in Hartford, Tolland, Windham, and New London Counties and subsequent field surveys helped identify and assess existing grasslands. This effort will continue to be expanded statewide. A total of 548 sites were identified as potential grassland habitat sites. Those sites were prioritized based on size, current habitat type, and surrounding land use. Over the past two field seasons, 239 sites have been visited to verify the suitability of the habitat and to look for grassland bird species which serve as a good indicator group for a wide variety of other wildlife species.

Subcommittees Formed

Four subcommittees have been established as part of the GHI Technical Working Group. They are as follows:

- Incentives and Land Banking;
- Partnerships and Volunteerism: Information Exchange;
- Resource Review; and
- Habitat Conservation Strategy.

In the short time they have been together, these groups have begun exploring ways to provide incentives to landowners to conserve grassland habitats and to provide information to local land managers that will aid in better grassland conservation at the local level.

Reporting Grassland Bird Sightings On-line

In 2007, an on-line reporting system was established through Cornell Lab of Ornithology's e-Bird program to allow Connecticut bird watchers to report sightings of grassland birds and help increase our knowledge of where rare grassland birds may still occur in the state.

Integrating Projects

As part of the effort to integrate the GHI with other programs and initiatives, the DEP's Landowner Incentive Program provided funds to a private landowner in eastern Connecticut to create and manage grassland habitat. The progress of Connecticut's GHI has helped energize efforts to conserve grasslands at the multi-state, New England, and northeast regional levels. A number of new conservation efforts have been formed and many new partnerships have been established to focus on this conservation action.

Working Together

Through the hard work and commitment of the many partners involved in the GHI, a tremendous amount of progress has been made in a relatively short period of time. This dedication is a reflection that the GHI is critical to the preservation of Connecticut's natural resources and wildlife. The initiative will help protect the beauty, charm, and unique attributes that make Connecticut such a special place to live.

For more information on the Grassland Habitat Initiative send an email to: depgrasslandinitiative@po.state.ct.us. Suggested links to websites with more information:

- www.ct.gov/dep/wildlife -- click on "Learn about CT's Wildlife Conservation Strategy."
- www.ctfarmland.org -- Connecticut Farmland Trust

Seeking the Sly Weasel

Written by Jen Keiser and Christina Kocer, Wildlife Diversity Program

Weasels are one of the most clever small mammals that the DEP Wildlife Division has worked with in the implementation of conservation actions outlined in Connecticut's Comprehensive Wildlife Conservation Strategy. This year, the Wildlife Division took on the task of acquiring more information about these sly creatures.

Connecticut is home to two species of weasels that look very much alike, the short-tailed weasel (*Mustela erminea*) and the long-tailed weasel (*Mustela frenata*). The distribution of these dark, ferret-like mammals is not known. Division staff is currently working on a project to investigate live-trapping techniques, distribution, abundance, habitat associations, and accurate identification of both weasel species.

E. VICTORY, WILDLIFE DIVERSITY PROGRAM

Wildlife Division Technician Christina Kocer baits and sets a wooden box trap with the hope that a weasel will be captured in it.

Weasel Facts

Did you know that the weasel is a cousin of the skunk? It is hard to believe when their physical appearances are so different. It is well known that skunks have very pungent-smelling scent glands, but this is a characteristic of weasels as well! Weasels, however, do not have the ability to spray their musk on an unsuspecting agitator like the skunk does.

The long-tailed weasel is the largest of the North American weasels, reaching a length of at least one foot long with a tail that is often equal to the length of its head and body together. The short-tailed weasel is generally smaller than the long-tailed weasel, but is very similar in overall appearance.

Both weasel species have short, soft brown fur covering their backs and white to yellow fur on their bellies. They both have tails that are tipped with black, but the short-tailed weasel tends to have white feet while the long-tailed weasel has brown feet. In winter, only in the northern parts of their range (including Connecticut), both species' coats turn completely white except for the black-tipped tail.

These elusive animals live in open woodlands, woodland edges, fencerows, stonewalls, brush piles, and areas near water. They take shelter in burrows of chipmunks or find a home in a hollow log, rock crevice, stonewall, or even a hole under a stump. A weasel will designate an area outside of the burrow to be its latrine.

Weasels feed on small mammals, frogs, snakes, rabbits, eggs, and even earthworms. Both weasel species will hunt and be active in day or night; however, they are active only for short periods of time (10-45 minutes) before resting for three to five hours.

Live-trapping

This past summer, staff from the Wildlife Division's Wildlife Diversity Program was kept busy trying to catch these elusive and very smart creatures. In preparation for the field season, Master Wildlife Conservationist Susan Gray designed the prototype of a wooden live-trap specifically for weasel trapping. Division staff then constructed several of these traps. Wooden traps were used because previous research indicated that weasels are not as stressed and are less likely to injure themselves while trapped inside. Traps were placed in habitats where weasels are likely to be found (stonewalls, rock crevices, brush piles) and were baited with a variety of different, smelly baits. Unfortunately, no weasels have been caught to date, but trapping will continue into fall and winter.

Information about weasels has been gathered using public weasel sightings and collected roadkills. Because both species look very similar, the only way to get a positive identification is to look at DNA. DNA samples were collected from all specimens and brought to a lab at the University of Connecticut where they were analyzed to determine species. From the 10 samples that have been collected so far, seven have been identified as long-tailed weasels and three as short-tailed weasels. Long-tailed weasel specimens were collected from all over the state; however, all three short-tailed weasels were collected from Litchfield County.

Tracking

In addition to the traps, track tubes

continued on next page

Weasels

continued from page 5

were placed at each trap site. Each track tube was constructed using square PVC fencepost material, cut to a length of 24 inches, with an ink pad secured at each end of the tube and contact paper secured in the center. When an animal passes through the tube, it must first step on the ink pad and proceed across the contact paper, leaving behind its tracks. The tubes were used in this study to document individuals in the area of the traps that were not captured. Many mice have passed through the tubes, and a very curious mink, a cousin to the weasel, has stuck its paws in the tube. However, so far, no weasels have been recorded.

Field Cameras

Field cameras have been set up at some trap locations in an effort to catch sight of a mammal using a track tube. A bird, squirrel, chipmunk, and mouse have all been captured on camera, but the weasels are still at large.

Public Support

In addition to the field work being conducted by the Wildlife Division, the public also was asked to report observations to the Division. Several people have called in weasel sightings and collected roadkills. The data from these sightings and specimens have been documented and will help in determining the range of both weasel species.

Project Still in Progress

Efforts to live-trap weasels are still underway. Once winter snows fall, snow tracking will be conducted in certain areas to verify weasel presence. Weasel sightings from the public are still encouraged and greatly appreciated, as are locations of fresh roadkills or specimens. Fur trappers are asked to submit weasel carcasses for this project as well. For more information, please contact Wildlife Diversity Program Technician Christina Kocer at the Wildlife Division's Sessions Woods office (860-675-8130) or send email to christina.kocer@po.state.ct.us.

This project is funded by the Endangered Species/Wildlife Income Tax Check-off Fund and the State Wildlife Grants program.

Rehabilitated Bald Eagle Chick Released

Written by Julie Victoria, Wildlife Diversity Program

Tom Ricardi will remember the summer of 2007 as the one that kept him busy caring for Connecticut birds of prey. Tom is a wildlife rehabilitator and, since 1975, founder of the Massachusetts Birds of Prey Rehabilitation Center. Tom first became known to the DEP Wildlife Division in 1993 when he was an Environmental Conservation Police Captain with the Massachusetts Division of Fish and Wildlife. At that time, Tom was caring for six adult bald eagles that he was using in a captive breeding program and they had produced a captive-bred chick that needed to be placed in the wild. The age of this chick corresponded with a wild chick born in Connecticut. Therefore, the captive-bred chick was fostered into the nest containing the similar-aged wild chick. Foster chicks had already been successfully placed in nests as part of an eagle restoration program in Massachusetts. The foster chick fledged from the Connecticut nest, but wasn't identified again until May 2005, when a keen observer was able to read the leg band on the now adult bird. This eagle had been nesting in New Hampshire since 2000, but no one had been able to read the band before 2005.

K. ELSISHANS, WILDLIFE DIVERSITY PROGRAM

A young Connecticut bald eagle that had been rehabilitated for an injured wing, pauses briefly after rehabilitator Tom Ricardi (left) opens the cage door. The eagle then took its first flight into the wild.

This year, the Wildlife Division called on Tom to take an immature eagle with a damaged wing. The wing was damaged when the curious young eagle fell out of the nest as the climber started up the tree trunk on banding day. This first time nest for an eagle pair in New Haven County was very small. There was barely any room for the two chicks, especially as they grew in size. Accidents occur naturally in the wild, whether an aggressive nest mate knocks another young bird out of the nest or a chick falls during the fledging or flying stage. In this case, the quick action of veterinarian Dr. Inga Sidor, of the Mystic Aquarium and Institute for Exploration, who immobilized the wing and a prompt car ride for the chick to Tufts University's Cummings School of Veterinary Medicine in North Grafton, Massachusetts, allowed the chick to receive proper medical care. The chick was then released to Tom Ricardi for rehabilitation. Once the young bird's wing was healed, Tom integrated the chick into one of his groups of adult eagles. The eagle was finally released back into the wild on September 20, 2007, on Mt. Sugarloaf in South Deerfield, Massachusetts, along with two other rehabilitated bald eagles. Before the release, Tom mentioned that the Connecticut eagle had healed extremely well and was definitely ready to return to the wild. Despite the fact that none of the rehabilitated eagles had flown long distances before their release, each got into the air without a problem and successfully dispersed. The Wildlife Division would like to thank Tom for his help with our raptor programs over the years. Tom has also been caring for a young peregrine falcon from Connecticut that was removed from its nest site by someone who believed that the bird needed to be "rescued." To learn more, see the article on page 3.

Decline in Black Ducks Has Prompted New Study

Written by Min T. Huang, Migratory Gamebird Program

The quantity and quality of wintering habitat is critical for the maintenance of many species of migratory birds, including the American black duck. Once plentiful along the Connecticut shoreline in fall, winter, and early spring, waterfowl hunters and birders alike have witnessed a steady decline in the number of wintering black ducks. As coastal wetlands have been lost, encroached upon, and otherwise degraded, their value for wintering ducks has diminished and, as a result, fewer black ducks now spend the winter in Connecticut marshes.

In response to the decline in North America's wetlands and associated upland buffers, the North American Waterfowl Management Plan (NAWMP) was implemented in 1986. The population goals of the Plan were to be met through 1) the protection and enhancement of existing wetlands and associated uplands and 2) the management of hunting opportunity. Increasing the capacity of existing wetlands for waterfowl involves manipulating the quality and/or quantity of the wetlands and associated upland buffers in order to increase survival and/or reproduction. These vital rates dictate the population dynamics of a species. Key to meeting NAWMP population goals is an understanding of how waterfowl relate to and use existing habitat and how well birds fare in those habitats. Without this knowledge, acre upon acre of habitat work may be done with no measurable increase in vital rates to the species that are intended to benefit from the work.

One aspect of the black duck annual cycle that is poorly understood is how wintering condition affects survival and subsequent production. Winter condition is largely governed by the amount of food resources available throughout winter and the use of those available resources. Limiting factors, particularly on wintering and staging grounds, that affect black duck population growth are largely unknown. Evidence suggests that habitat condition and availability on wintering grounds influence both reproductive success and survival of most migratory waterfowl.

Loss of coastal wetlands in Connecticut has certainly had a detrimental effect on wintering birds, and development infringement upon remaining wetlands may impact black duck use of the available landscape. Further, wetland restoration efforts in many areas of the state have focused on restoring tidal flow, but with little emphasis on enhancement. Long-term assessments of one marsh, East River Wildlife Management Area in Guilford, where wetland enhancement through the creation of ponds and open water on the marsh was undertaken, indicated heavy use of these "artificial" ponds by black ducks and a four-fold difference in overall duck use of control and experimental units on the marsh. Apart from wetland enhancement and restoration efforts, however, few marshes along the coast have large amounts of open water on the marsh surface. Wintering areas, at least along the coast, that are available to black ducks may be limited. Wintering black ducks, however, use a diversity of habitats in Connecticut. Data that can be used to better inform and guide wetland restoration, specifically targeting black ducks and other species that use similar habitats, are currently lacking.

This upcoming winter, the Wildlife Division's Migratory Gamebird Program is beginning a two- to three-year project to hopefully provide just that information. Program staff will investigate habitat use and energy budgets of wintering black ducks. In addition, estimates of the carrying capacity of various black duck wintering habitats will be developed.

Three study sites have been determined where, each winter, 30 female black ducks will be captured and equipped with radio transmitters. The birds will be followed intensively throughout winter and early spring to determine their use of the available habitat. Researchers will also conduct intensive time budget surveys of both marked and unmarked black ducks in the various habitats that they are using. Finally, there are plans to collect monthly benthic and vegetation samples from habitats that black ducks are using and randomly chosen habitats to determine the amount of food available to ducks, and the depletion rate of those food resources throughout winter and spring.

This project is funded by the State Wildlife Grants program. Stay tuned to future issues of *Connecticut Wildlife* for project updates.

P. J. FUSCO

Once plentiful along the Connecticut shoreline in fall, winter, and early spring, waterfowl hunters and birders alike have witnessed a steady decline in the number of wintering black ducks.

Northern Metalmark Habitat Restoration

Written by Jeremy Liefert, Wildlife Diversity Program

The northern metalmark (*Calephelis borealis*) is a small butterfly with a wingspan of approximately one inch. It often lands upside down under leaves, like a moth, with its wings spread flat to expose the brown coloration on top of the wings. It rarely perches with its wings folded up to expose the striking orange and gray-flecked underwing. This butterfly uses forest habitats with openings, often with limestone outcrops. It is dependent on one host plant, roundleaf ragwort (*Senecio obovatus*), which the butterflies (adults) lay their eggs on and the caterpillars (larvae) feed on.

Range and Status

The northern metalmark has a relatively wide range, from western Connecticut along the Appalachian Mountains to West Virginia and west to Ohio and Indiana, as well as parts of Missouri, Arkansas, and Oklahoma. Within this wide range, the metalmark is considered uncommon due to low instances of limestone soils and forests needed for the larval host plant. The northern metalmark is listed as endangered on Connecticut's Endangered, Threatened, and Special Concern Species List. Habitat fragmentation, overbrowsing by deer on butterfly nectar sources, and loss of roundleaf ragwort due to the spread of invasive plants are the primary reasons for this species' endangered status in Connecticut and the declining population across its entire home range.

Habitat Restoration

Currently, the northern metalmark is only found at a handful of sites in Litchfield and Fairfield Counties. At a site in Fairfield County, the larval host plant has been slowly succumbing in recent years to the spread of invasive plants, particularly autumn olive (*Eleagnus umbellata*). In late September 2007, DEP Wildlife Division staff worked in conjunction with the Connecticut Butterfly Association, The Nature Conservancy, Audubon Connecticut, and local volunteers to remove the invasive plant cover and facilitate the continued existence of roundleaf ragwort at this site. The work party spent a few hours pulling out as many autumn olive and other invasive plants by hand as possible. Larger plants were cut and the stumps painted with herbicide to prevent regrowth.

With landowner cooperation, short-term goals have been established for this site. One or more additional work days will be needed to clear invasive plants while attempting to maintain low impact to the existing roundleaf ragwort in the area. Also, nectar sources may be made available during the metalmark's flight period (June through mid-July) in the form of potted plants, such as New Jersey tea (*Ceanothus americanus*) and milkweeds, like butterfly weed (*Asclepias tuberosa*).

Future goals have also been identified for this site. Securing funding to continue invasive plant eradication activities would ensure the northern metalmark's future at this location. Secondly, a thorough census of the metalmark's presence at the site should be conducted in 2008 to determine if the management activities were successful.

L. SAUCIER, WILDLIFE DIVERSITY PROGRAM

Resource Assistant Jeremy Leifert places pulled autumn olive in a pile during removal at a northern metalmark site in September 2007. The removal of this invasive plant will allow the potential spread of roundleaf ragwort, which is the larval host plant of the northern metalmark, an endangered butterfly in Connecticut.

Great Backyard Bird Count: February 15-18, 2008

Millions of novice and accomplished bird watchers can make their fascination with nature add up for science and for the future during the 11th annual Great Backyard Bird Count, led by Audubon and the Cornell Lab of Ornithology. During February 15–18, 2008, anyone can count birds from wherever they are and enter their tallies online. These reports create an exciting real-time picture of where the birds are across the continent and contribute valuable information for science and conservation. Observers count the highest number of each species they see during at least 15 minutes on one or more of the count days. Then they enter their tallies on the Great Backyard Bird Count website at www.birdcount.org. For more information on how to participate, including identification tips, photos, bird sounds, maps, and information on over 500 bird species, visit www.birdcount.org.

Protection Efforts Continue for Piping Plovers & Least Terns

2007 was a good year for Connecticut's nesting piping plovers, with an increase in productivity. Piping plovers, along with least terns, nest on sandy beaches, but only a limited number of sites are available due to current shoreline development and recreational use. Both shorebirds are classified as threatened species in Connecticut; the piping plover also has been listed as federally threatened since 1986.

Thirty-six pairs of piping plovers nested along the Connecticut coastline during the 2007 breeding season, one pair less than last year. The number of young that fledged (reached flying stage) was 69. In 2006, 79 young plovers fledged.

The DEP Wildlife Division also monitors the nesting activities of least terns. These small shorebirds are colonial nesters and are usually found near or among piping plover nests. Approximately 147 pairs of least terns nested in the state this season, similar to the 144 pairs that nested in 2006. The number of young fledged increased to 59. In 2006, only 12 young least terns fledged.

P. J. FUSCO

The number of least tern fledglings increased in 2007, although the number of breeding adults continues to be a fraction of what it once was.

Threats to Nesting Birds

Every year, piping plovers and least terns face an uphill battle when it comes to trying to nest and raise young in a habitat that also attracts large numbers of people. Having to contend with the pressures of development and recreational activities of humans, the shorebirds often face natural impacts as well. The Wildlife Division, along with the help of many dedicated volunteers, attempts to protect nesting areas as much as possible and also inform beach visitors about the plight of the birds.

Division biologists use specific and carefully researched procedures to protect nesting plovers and terns. Initially, beaches designated as breeding grounds are fenced off with string to discourage people and dogs from disturbing birds in the area. Educational signs also are posted around these areas. When individual plover nests are located, a wire "exclosure," with a top net, is erected around each nest. The exclosure is designed to keep dogs, house cats, skunks, raccoons, weasels, foxes, and avian predators from reaching the eggs. Due to the flight patterns of least terns, individual nest fencing is not an effective technique for them. Consequently, walkers, anglers, and dogs often disturb these birds.

Piping plovers return to Connecticut from their wintering grounds in March and begin nesting in April. Recreational use of shoreline areas usually increases at the start of the nesting season and human disturbance often prevents nesting plovers from attending their eggs and young. Human litter also attracts predators to beach areas, further hampering nesting success.

Least terns return to Connecticut by May and begin nesting in late May/early June, a time when beach areas receive heavy recreational use. This year, many least tern nests were washed out by full moon high tides. Subsequent renesting by the adults had limited success. The biggest disappointment is the low number of least tern pairs that nested in the state. This species is a regional nester and the number of least terns observed throughout the southern New England/New York region has remained stable since 1990. However, 147 pairs is below the average of the past five years in Connecticut. It is hoped that the repeated poor success that this species is experiencing doesn't cause the adults to abandon Connecticut beaches as a nesting site in the future.

Thanks to Volunteers

The Wildlife Division appreciates the cooperation of those who respected the fenced and posted areas during the nesting season. Also appreciated is the invaluable assistance provided by volunteers from the U.S. Fish and Wildlife Service Stewart B. McKinney National Wildlife Refuge (coordinated by Ava Kahn and summer intern Maggi Sliwinski), as well as from the Division's Master Wildlife Conservationist Program, The Nature Conservancy, and Connecticut Audubon Society. Thanks to the education efforts of the volunteers, beach visitors and dog owners at several sites were very cooperative. The Division encourages volunteer assistance and plans to continue public education next year. Volunteers are being sought to assist with public education efforts next summer at nesting beaches in the West Haven, Stratford, and Milford. For more information, contact Julie Victoria, at the Franklin Wildlife Management Area, 391 Route 32, North Franklin, CT 06254, or send email to julie.victoria@po.state.ct.us.

Winter Shorebirds of the Connecticut Coastline

Article and photography by Paul Fusco, Wildlife Outreach Program

Every fall, dozens of species of shorebirds can be found migrating in large and small numbers through Connecticut on their way south. They are headed for the warmer climates of South America, the Caribbean, and the southeastern United States to spend the winter. Many make tremendous journeys from the high arctic of North America to the southernmost regions of South America.

Shorebirds moving through Connecticut in the fall include species from the plover and sandpiper families. They may total over 40 species, including those that are commonly found here and those that seldom visit but have been documented in our state.

By the time winter sets in, the number of regularly occurring shorebird species in Connecticut dwindles to five or six. None of these are found in high numbers, although flock sizes are variable. Some species are well adapted for spending winter along the frigid New England shoreline, while other species are represented by only the hardiest individuals.

Dunlins undergo a dramatic transformation in appearance from the stunning rusty brown topside and black belly of the breeding season to the soft and subdued brownish gray of their winter plumage.

Sticking It Out

During winter, with most inland wetlands frozen over, shorebirds are limited to coastal habitats where tides keep food sources available. Even during the coldest stretches of January, the intertidal zone can be a reliable place for these birds to find food. Some will pluck food morsels from the surface, while others use their bill to probe into wet sand.

The shorebirds most likely to be found in Connecticut during most, if not all, winters include the following six species, which are all hardy birds:

Ruddy Turnstone

Ruddy turnstones are chunky, with shortish, orange legs and a short, but stout, bill. In breeding plumage, they have a white belly, bold black bib with black facial markings, and a rusty patterned back. In winter, their plumage is mainly brown with a white belly and it shows a similar pattern to the breeding plumage. Turnstones are about the size of a robin, as are sanderlings, dunlin, and purple sandpipers.

Mainly a marine species, ruddy turnstones are usually found in coastal habitats. They can be observed foraging on sandy and stony beaches and rocky shorelines where they show their typical behavior of rooting through seaweed, shells, and stones like a little bulldozer. The angled bill is used to turn over stones and other beach debris to get at the food beneath. Ruddy turnstones typically feed on small crustaceans, mollusks, and insects. During spring migration on the Atlantic coast, turnstones rely heavily on horseshoe crab eggs to fuel their journey.

Sanderling

Sanderlings with winter plumage are pale gray above and snow white below. They have a bright rusty patterned head, neck, and back during the breeding season.

Another marine species, the sanderling is rarely found away from ocean beaches. It is the familiar sandpiper seen on beaches up and down the Atlantic coast. Its typical feeding behavior is well known. As waves spill onto the beach, sanderlings will chase the retreating water, feeding in the wet sand until the next wave comes in, at which point the little birds will deftly run away from the water and foam, only to turn and feed again as the water moves away. Their main foods are small mollusks and crustaceans, including sand fleas. They also rely on the eggs of horseshoe crabs in spring.

Sanderlings can gather in very large flocks in the Northeast during winter. While some flocks in Connecticut may number in the hundreds or even more, sanderlings may be found in much larger flocks at other northeastern sandy beaches during winter. Some of those places include beaches on Cape Cod and the south shore of Long Island.

Dunlin

Another species that may be found in very large flocks is the dunlin. It also prefers sandy beaches during winter, where it feeds on crustaceans, mollusks, marine worms, and other small invertebrates. In Connecticut, dunlins frequently occur in mixed flocks with sanderlings

By looking closely, a purplish iridescence can be seen in the plumage of the purple sandpiper, giving the bird its name.

and purple sandpipers. Dunlins and sanderlings are our most common winter shorebirds.

Dunlins are rusty red with a black belly during the breeding season, but in winter their plumage is grayish brown with a gray wash across the breast. They have a long bill that is drooped toward the tip.

Purple Sandpiper

Purple sandpipers can be found in wave washed rocky habitats, such as rocky shorelines, jetties, and breakwaters. Here, as the waves crash in, they forage for small invertebrates and shellfish among the barnacles and slimy seaweeds that coat the rocks. In Connecticut, purple sandpipers are usually found in small numbers at specific locations that have the right habitat.

Purple sandpipers are dark, chunky birds with short, yellowish orange legs and an orange base to the bill. The dark head, neck, and back are offset by heavy streaking on the flanks and a white belly. In the right light, a purple iridescence can be seen in the plumage on the back.

Greater Yellowlegs

Greater yellowlegs are long-legged waders with a long, slightly upturned bill. As their name implies, they have bright yellow legs.

While the greater yellowlegs is a cold tolerant species, it is not seen in large numbers during winter in Connecticut. Usually, it will be in small groups of two to six individuals in shoreline marsh or pond habitat that has remained ice free. Because those habitats are frequently covered with ice in winter, yellowlegs can be hard to find in the state at that time of year. The western coastal areas of the state are the most likely areas to have overwintering greater yellowlegs.

Black-bellied Plover

Usually found in small, loose flocks during winter on the Connecticut shoreline, black-bellied plovers are one of our larger shorebirds. In winter, their striking black breast, belly, and face feathers of the breeding season will have molted into white, giving them an overall drab gray appearance. In all plumages, their black axillary feathers (wing pit) are diagnostic field marks.

With the temperature hovering around zero and ice forming in the salt water at the mouth of a river, a greater yellowlegs stands with its legs submerged to keep them warmer than the air. Few of its kind will tolerate such extreme conditions.

Ruddy turnstones consume a variety of invertebrates, including an occasional mussel.

Black-bellied plovers are wary and generally unapproachable, sounding off an alarm call that warns other plovers and shorebirds of approaching danger. Their flight call, "*tee-oo-wee,*" is a drawn out whistle that has a distinctive mournful and wild quality.

Foraging in the intertidal zones of saltmarshes and mudflats, plovers feed primarily on marine worms, small crabs, and other invertebrates. They hunt by vision in a "run-stop-pluck" style, a typical characteristic of the plovers.

Winter flocks of sanderlings sometimes number hundreds of individuals along the Connecticut shoreline.

Occurring Less than Regular

In mild winters, some shorebird species may be observed in Connecticut that are not here during typical winters. These birds include winter rarities, holdovers, or early migrants. Among these species are killdeer, American oystercatcher, willet, long-billed dowitcher, Wilson's snipe, and American woodcock. Snipe and woodcock make use of seeps, or small patches of snowmelt that can be an important feeding habitat in late winter when most other areas are encrusted with snow and ice.

Shorebirds are a highly migratory and wide ranging group of birds. Many species are on one continent during one season and on another continent in another season. It is not uncommon for such wide ranging birds to sometimes get off course and end up somewhere where they aren't supposed to be. Even in winter, there is always the chance that an unusual shorebird could show up here, especially if the winter is mild.

In winter, the black-bellied plover may be missing it's namesake jet black breast and belly color, but it's plumage may also be rife with beautifully intricate feather patterns.

Best Places

The best places to find wintering shorebirds in Connecticut are coastal open spaces and park properties. Because these birds may move around so much, depending on food supply and weather conditions, it may require some effort to travel to the places where shorebirds are most likely to be found in winter.

They may be tough to find, but when they are found, winter shorebirds are a treat to watch. Their plumages are clean, crisp, and subtle in color, but rich in delicate pattern. Their behaviors are interesting as they forage and scuffle over tidbits of food. The flocks are inspiring to see as they fly in absolute tight unison. With their long, pointed wings built for speed, the birds dip and climb, bank and wheel. First flashing their bright, gleaming underside, then quickly twisting to show their darker topside, the flock disappears against the gray waters of Long Island Sound.

Purple sandpipers may be particularly hard to find, but they will normally be associated with areas of rocky habitat at places like Harkness Memorial State Park in Waterford and the rock jetties of Hammonasset Beach State Park in Madison. Yellowlegs will tend to be in unfrozen areas of the marsh habitat rather than in seaside habitat, like the other species.

Most of the shorebirds will frequent beaches and marshes where there is a plentiful food supply, which may fluctuate from year to year at a given location. Some of the more dependable areas include Griswold Point and the mouth of the Connecticut River in Old Lyme, Hammonasset Beach State Park, Sandy Point in West Haven, Milford Point and nearby marshes in Milford, Long Beach and surrounding marshes in Stratford, and Cove Island Park in Stamford.

The Winter Bottleneck of Food Availability

Written by Peter Picone, Habitat Management Program

As the arctic cold fronts spill down into southern New England, we are reminded of the seasonal changes that occur. Wildlife species, especially songbirds, have co-evolved over thousands of years with the changing seasons. With these changes come shifts across the landscape in the availability of food for wildlife. Food sources for songbirds are at a premium when the weather conditions turn cold. Local wintering songbirds that haven't moved south or are in the process of migrating south, stop to feed on the berries of native trees, shrubs, and vines that are persistent and available late into winter. Connecticut's diverse native flora provides seasonal food and cover for wildlife. Some examples of native persistent berry producers of Connecticut are: winterberry (*Ilex verticillata*), mapleleaf viburnum (*Viburnum acerifolium*), black chokeberry (*Aronia melanocarpa*), red chokeberry (*Aronia arbutifolia*), American holly (*Ilex opaca*), Virginia creeper (*Parthenocissus quinquefolia*), red cedar (*Juniperus virginiana*), common juniper (*Juniperus communis*), Northern bayberry (*Myrica pensylvanica*), and pasture rose (*Rosa carolina*).

Winterberry

Winterberry is a shade-tolerant shrub with red berries that become raisin-like by winter. The berries are eaten by non-migratory birds, like the wild turkey, as well as by migratory songbirds, such as the hermit thrush, during fall and spring migration.

The persistent berries of plants such as winterberry can readily be seen in the forest understory or along woodland edges. When out in the field looking for winterberry, you may notice that not all plants have berries on them. That is because winterberry is a dioecious plant with male flowers on one plant and female flowers on another. Only the female plant produces berries. This is important to know when purchasing winterberry for wildlife habitat enhancement. One male plant in proximity to several female plants is recommended for pollination.

Winterberry also forms dense thickets, providing cover for birds like the American woodcock. Dense thicket-forming shrubs, like the winterberry, are valuable for providing cover for predator avoidance.

American Holly

Some plants can provide both winter food and cover at the same time. An example is the American holly. Dioecious like the winterberry, American holly is also an evergreen that provides important cover for wildlife during winter. Unlike the cultivated holly varieties that have soft leaves, the American holly has leaves with sharp points, which provides added protection for songbirds that are feeding on the persistent red berries.

Whether you are a habitat manager in charge of hundreds of acres or a backyard habitat enthusiast with small acreage, diversifying seasonal food and cover for wildlife is important. You can enhance winter food and cover for local and migratory wildlife species just by adding winter persistent berry producers to your landscape plantings.

Food sources for songbirds are at a premium when the weather conditions turn cold. Many of the birds will feed on the berries of native trees, shrubs, and vines that are persistent and available late into winter.

To learn more about creating backyard wildlife habitat, order the Wildlife Division's helpful guide, *Enhancing Your Backyard Habitat for Wildlife*. Send a check for $3.00 (payable to the Urban Wildlife Program) to the DEP Wildlife Division, P.O. Box 1550, Burlington, CT 06013. Contact the Division's Sessions Woods Office for more information (860-675-8130 between 8:30 AM-4:30 PM, Monday through Friday).

P. PICONE, HABITAT MANAGEMENT PROGRAM

The persistent berries of plants such as winterberry can readily be seen in the forest understory or along woodland edges.

FROM THE FIELD

Volunteers Needed for the Midwinter Eagle Survey

The DEP Wildlife Division is looking for volunteers to assist with the 2008 Midwinter Bald Eagle Survey in Connecticut.

Bald eagles migrate south from the northern states during winter to areas of open water where they are able to catch fish, their main food item. Cold weather conditions, which keep most waterways to the north covered with ice, mean that higher numbers of eagles will be counted in Connecticut. Each year since 1979, volunteers from private conservation organizations, the DEP, and the general public have helped conduct the Midwinter Bald Eagle Survey by recording all eagles seen at areas traditionally used by the birds and at areas of suitable wintering habitat.

The 2008 survey period target date is Saturday, January 12, from 7:00 AM–11:00 AM. During the 2007 survey, 62 bald eagles (42 adults and 20 immatures) were recorded statewide. The Midwinter Bald Eagle Survey is not a complete census of the entire wintering population in Connecticut, but an index of the species' use of Connecticut, which can be compared year to year. The survey is conducted nationwide during a target time period and coordinated by the U.S. Department of the Interior, U.S. Geological Survey, Forest and Rangeland Ecosystem Science Center at the Snake River Field Station in Oregon.

If you would like to participate in the 2008 survey, please email your name and mailing address to Wildlife Diversity Program biologist Julie Victoria (julie.victoria@po.state.ct.us).

Julie Victoria, Wildlife Diversity Program

Volunteer for Wildlife

Do you have time to volunteer for the Wildlife Division? Are you interested in learning about wildlife and teaching what you have learned to others? If so, why not apply for the Master Wildlife Conservationist Program (MWCP)? The MWCP is a 40-hour volunteer training program sponsored by the Wildlife Division at the Sessions Woods Conservation Education Center in Burlington. Classes are presented primarily by Wildlife Division staff and cover topics such as: wildlife management, Connecticut specific wildlife issues, ecology, forestry, and interpretation. Individuals interested in attending the program series need to complete an application form. Class size is limited to 20. The program will begin in March, but applications must be returned by January 1, 2008.

Upon completion of the classes and passing the examination, volunteers are required to provide 40 hours of service the next year and 20 hours each subsequent year to remain in the program. Volunteer service can include, leading wildlife-related walks, presenting programs, habitat enhancement at wildlife management areas, and assisting biologists with research projects. Other wildlife conservation projects initiated by candidates in their own town, such as conservation commission-related work, are also considered valid volunteer service.

If you would like an application or more information, please contact Natural Resource Educator Laura Rogers-Castro at 860-675-8130 (Monday-Friday from 8:30 a.m.-4:00 p.m.) or laura.rogers-castro@po.state.ct.us.

Laura Rogers-Castro, Outreach Program

Shepaug Eagle Observation Area

Opens December 26

The Shepaug Eagle Observation Area, in Southbury, will be open to the public on Wednesdays, Saturdays, and Sundays, from December 26, 2007, through March 12, 2008, from 9:00 AM to 1:00 PM -- strictly by advance reservation. All individuals and groups wishing to visit the site to view eagles must make a reservation for a particular date, as there will be a limited number of visitors allowed per open day.

Beginning in early December 2007, reservations for the Shepaug Eagle Observation Area can be made on Tuesdays through Fridays, from 9:00 AM-3:00 PM, by calling 1-800-368-8954.

Volunteers Needed

Volunteers are needed at the Shepaug Eagle Observation Area, in Southbury, to assist and provide information on bald eagles to visitors. Shepaug is open from December 26, 2007, to March 12, 2008, on Wednesdays, Saturdays, and Sundays. Interested individuals are asked to attend a volunteer training session on December 1, 2007, from 9:00 AM to 1:00 PM, at the FirstLight Power Resources office in New Milford. For more information, contact the Connecticut Audubon Coastal Center at Milford Point (203-878-7440).

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.

Emergency CWD Regulation Now Permanent

Recently, the Secretary of State filed a regulation regarding the importation and possession of deer, moose, and elk carcasses and parts to prevent the introduction of chronic wasting disease (CWD) in the state. This regulation had previously been implemented under an emergency status and is now permanent. The regulation states that no person shall import or possess whole carcasses or parts of any deer, moose, or elk from wild or captive herds from other states or Canadian provinces where CWD has been confirmed, including, but not limited to, Colorado, Wyoming, Utah, New Mexico, Montana, South Dakota, Kansas, Minnesota, Wisconsin, Illinois, Nebraska, Oklahoma, New York, West Virginia, Alberta, and Saskatchewan. Any additional states and provinces where CWD is confirmed will be published in the Connecticut Hunting and Trapping Guide and on the DEP's website (www.ct.gov/dep). The provision does not apply to meat that is de-boned, cleaned skullcaps, hides, or taxidermy mounts. CWD is a fatal disease of deer, moose, and elk that is similar to mad cow disease in cattle and scrapie in sheep.

Attend the 9th Annual Eagle Festival on February 16-17, 2008. It's been declared the "Largest Birding Event in North America! Details available by calling 860-767-0660 or check Connecticut Audubon's website: www.ctaudubon.org.

Between Land & Water: Life Stories of Connecticut's Amphibians

A new video DVD entitled *Between Land & Water: Life Stories of Connecticut's Amphibians* provides a view of local frogs and salamanders in their native habitats that has never been available before. Videotaped entirely in Connecticut, *Between Land & Water* documents the life cycles of native amphibians over an entire season. Beginning with the thawing of vernal pools in early spring, this video documentary follows native frog and salamander species to depict key aspects of amphibian life cycles, including spring migrations, calls, and mating seasons, and developmental phases from larval forms to metamorphs to adults.

Videotaped and narrated by naturalist Brian Kleinman, *Between Land & Water* also describes aspects of vernal pool, stream, and woodland habitats upon which amphibians rely, as well as the animals' roles within native ecosystems.

Insightful and informative, this DVD provides a valuable new resource for educators, libraries and museums—and for parents and families. It makes familiar calls, such as those of spring peepers, gray tree frogs, or American toads into invitations to explore native wildlife and habitats.

Review by Hank Gruner, Herpetologist, Project Coordinator, Connecticut Amphibian Monitoring Project, & Vice President of Programs at the Connecticut Science Center, Hartford: "The seasonal approach crams in tons of information about the biology, habitat use and natural history of these animals. Viewers get a broad education in amphibian biology and up close and personal with the many diverse native species…

"Hopefully this documentary will be the eye-opener that catches people's attention and inspires them to go out and learn about frogs and salamanders. It's a treat to see the diversity of Connecticut's amazing amphibians, both in appearance as well as in biology, in such an intimate manner!

To view clips from the DVD, visit http://www.cttrips.com/pages/BLWclips.html. Information on ordering is also provided on the website.

Annual Deer Summary Posted on Website

P. J. FUSCO

With the advancement in technology, increased access to the Internet, and rising printing costs, the Wildlife Division is making some changes. For the first time, the Annual Deer Program Summary booklet will only be available via the DEP's website. Unlike the past 25 deer summaries, which have been printed in hard copy, the 2006 Annual Deer Program Summary and all future summaries will only be available on the DEP's website. To view the most current summary, visit the Wildlife Division's website (www.ct.gov/dep/wildlife) and select "Wildlife Publications" under the featured links section.

Online Sportsmen Licensing Coming Soon!

In 2008, Connecticut sportsmen will be able to purchase fishing, hunting, and trapping licenses directly over the Internet. In addition to licenses, sportsmen will also be able to buy the special permits and tags needed to hunt species like deer, turkeys, pheasants, and waterfowl. To purchase a license online, you will first have to register for a Connecticut Conservation ID. A Connecticut Conservation ID is a unique number that is assigned for the online purchase of all hunting and fishing licenses, permits, and tags. In the future, this number will also be used when purchasing licenses or permits at town clerks and sporting goods stores.

After registering, you will be presented with a menu to select the various licenses and permits you wish to purchase. Throughout the entire process, all entered data (credit card information, as well as all your personal information) will be encrypted. After completing the transaction, you will be able to print the license and a transaction receipt right on your own printer. An email confirming your transaction also will be sent to the email address specified in your registration.

We are hoping that this new Online Sportsmen Licensing System will be a great convenience to sportsmen. Throughout the year, we will be improving the system and adding new features. The DEP has contracted with a vendor, Outdoor Central, to develop and run Connecticut's Online Sportsmen Licensing System. Outdoor Central, located in Nashville, Tennessee, designs, develops, maintains, and supports web-based permitting systems exclusively for state wildlife and park agencies. When the system is ready to go live, the DEP will issue a news release making the announcement. Sportsmen will be able to access the site from a link on the DEP's website, www.ct.gov/dep.

New Year's Resolutions for Wildlife!

Here are a few suggestions to do something for Connecticut's wildlife this year:

- Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2007 Connecticut income tax return.
- Renew your subscription to *Connecticut Wildlife* or give a subscription to a friend.
- Hang a birdfeeder in your yard.
- Give a birdfeeder as a gift.
- Plant a native plant in your garden.
- Attend a wildlife event (see back page for some ideas).
- Donate to a wildlife conservation organization.
- Buy a Connecticut Duck Stamp.
- Volunteer with the Wildlife Division or conservation organization.
- Start recycling, if you don't already.

The Search for the (Not So) Common Nighthawk . . .
and Other Urban Aerial Acrobats

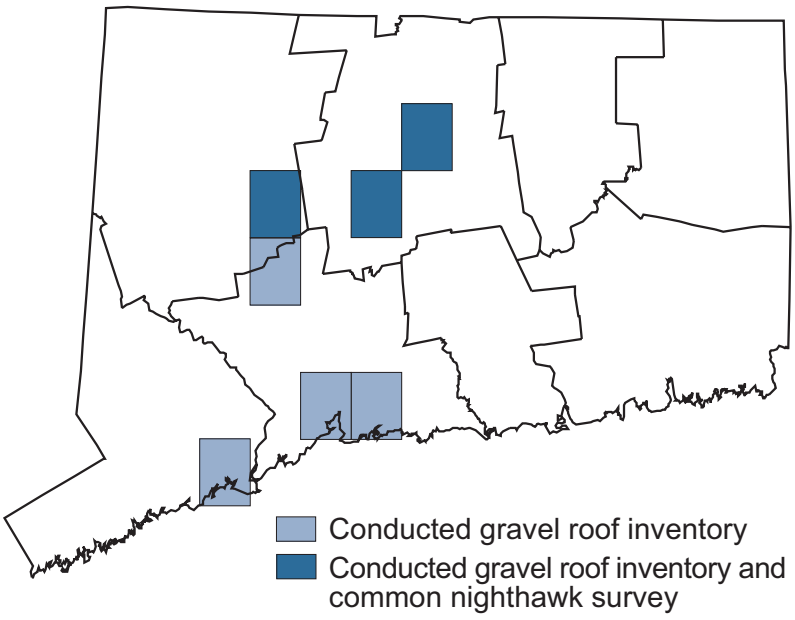
Written by Shannon Kearney-McGee, Wildlife Diversity Program

Recently, staff from the DEP Wildlife Division's Wildlife Diversity Program led a working group at the Northeast Coordinated Bird Monitoring Workshop to develop a regional monitoring program for urban birds. The Northeast region, extending from Maine to Virginia, contains some very large urban areas and high human densities, including New York City, coastal Connecticut, Hartford, Providence, and Boston. Although urban areas are often thought of as "nonhabitat" for most birds, species in this focus group have adapted to use artificial man-made structures for nesting, such as chimneys (chimney swift), gravel roofs (common nighthawk), building ledges and bridges (peregrine falcon), barns or abandoned buildings (barn owl), concrete/stucco surfaces (cliff swallow), and public works reserves of sand and gravel (bank swallow).

Rationale for this current monitoring program is based primarily on population declines of two aerial insectivores, chimney swift and common nighthawk, across the region. Aerial insectivores are birds that spend the majority of their time in the air, as opposed to perching on a branch, and consume entirely insects. Chimney swift populations are known to be declining across their entire range, which in the United States is limited to the area east of the Rocky Mountains. The Maryland Breeding Bird Atlas documented a 66% decline in the number of survey blocks with breeding common nighthawks. In New York, nighthawks seem to be missing from almost every urban area where they bred in the early 1980s. Recently, our neighbors in Canada listed both of these species as federally endangered. The current population declines may be due to a decline of food sources as a result of pesticide use, stress during migration, and, surprisingly, even the loss of their man-made nesting structures.

Although there is evidence of a decline in the populations of chimney swifts and common nighthawks, there have not been any coordinated efforts by the Northeast region to monitor and manage their populations. It is not only important for the birds' populations that they are monitored and managed, but also important for the urban environment. Many of these birds contribute significantly toward insect and pest control in urban areas. This function is important when considering public health in urban areas where zoonotic and vector-borne diseases, like West Nile Virus, are most common.

2007 Common Nighthawk Surveys and Nesting Habitat Inventory of Historical Nesting Areas



Connecticut Populations

As part of the implementation of conservation actions in Connecticut's Comprehensive Wildlife Conservation Strategy, Wildlife Diversity Program staff is taking a closer look at chimney swifts and common nighthawks. Although common nighthawks migrate through Connecticut in large numbers in spring and late summer, breeding common nighthawks are listed as endangered on Connecticut's Threatened and Endangered Species List. This status means the statewide estimate is less than five nesting pairs. Searches for breeding common nighthawks in 2005 and 2006 were unsuccessful. In an attempt to locate breeding pairs in 2007, Wildlife Diversity Program staff targeted historically occupied areas. An inventory of potential gravel roof nesting sites was conducted in these areas. The number of gravel roofs in the survey blocks ranged from four to 41. Higher numbers of gravel roofs imply more nesting opportunities for common nighthawks. Staff then began to check these roofs for common nighthawk presence. Unfortunately, once again, no breeding nighthawks were detected.

Although more "common" than the nighthawk, chimney swifts appear to be declining quickly. Breeding populations of chimney swifts were surveyed by DEP staff during the breeding seasons in 2006 and 2007. Survey results from 2006 estimated a statewide population of about 8,000 breeding pairs. This is a steep decline from an estimate of 22,000 pairs in the mid-1980s!

What Can We Do?

Loss of urban nesting habitat is a unique management challenge, but also an opportunity! These birds have demonstrated their ability to successfully breed in artificial structures in close proximity to human populations, even dense human populations in urban environments. It may be possible to stabilize or even increase their populations simply by managing and monitoring artificial structures in areas where access to existing structures is now being lost.

continued on page 18

Wildfires Out West!

Written by Christina Kocer, Wildlife Diversity Program

The DEP maintains a roster of agency staff and personnel from local fire departments who have been certified to fight forest or wildfires. The DEP is also responsible for organizing the Connecticut Interstate Fire Crew (CIFC) when the state is asked to participate in fighting fires in other areas of the country. CIFC firefighters are part of a reciprocal aid program that is operated by the U.S. Forest Service. All CIFC firefighters are required to complete an extensive training program, with a yearly renewal requirement, that begins with a physical stamina test, before becoming eligible to work on any wildfire.

Connecticut Interstate Fire Crew standing in front of a giant Sasquatch statue in the town of Happy Camp, California. The crew was stationed there while assigned to the Elk Complex Fire, in Klamath National Forest.

Left to right, top row: Eric Pelletier – New Hartford, Will Hochholzer (DEP) – Colchester, Joe Burnham – Lebanon, Christina Kocer (DEP) – New York State, Tony Flamio – Farmington, Dave Shatas – Plymouth, Chris Renshaw – Tolland, Dave Stygar (DEP) – Lebanon, Craig Nolan – New Britain, Sara Radacsi (DEP) – West Hartford, Mike Shaw (DEP) – Torrington, Dave Montemerlo – Windsor Locks. Left to right bottom row: Tom Bourret (DEP) – Killingworth, Olney Knight – Scotland, Tom Nosal (DEP) – Middletown, Andy Marchesseault – Sterling, Al Waterman – Moosup, Thomas Varanelli – Harwinton, Rick Solari – Avon, Jim Bender (DEP) – Lebanon (Crew Boss)

Busy Summer for Firefighters

The Connecticut Interstate Fire Crew was kept busy for another summer due to western fires. The first crew was called out to northern California in mid-July to fight a fire that was blazing in Modoc National Forest. The 20-person crew was led by Jim Bender, of the DEP Fisheries Division, and included firefighters from the DEP, as well as personnel from local fire departments throughout the state. The Connecticut crew contributed many long hours of hard work to extinguish the blaze that began due to a lightning strike. When all was said and done, the Fletcher Fire, as it was named, burned a total of 8,121 acres, encompassing many acres of private and national forest lands in northern California and southern Oregon.

Once the Fletcher Fire was finally under control and hand crews were no longer needed, the Connecticut crew received word that help was needed at another fire in Klamath National Forest. This fire was also caused by a lightning strike. Once there, the crew was assigned to the Little Grider fire, one of the many blazes that made up the Elk Complex Fire. Adding to the challenge of firefighting, Klamath National Forest is rumored to be the steepest national forest in California! The crew spent the final days of their two-week assignment traversing the steep and rugged terrain, searching for hotspots and extinguishing any remaining flames. This long-lived fire was 90% contained at the time this issue went to press and had burned 17,684 acres (www.inciweb.org).

T. NOSAL / DEP OIM

Crew members hard at work extinguishing a hot spot at the Fletcher fire, Modoc National Forest, California.

About a week after the first crew returned to Connecticut, a second crew was assembled and called out to fight a fire in the Upper Peninsula of Michigan, known as the Sleeper Lake Fire. This 20-person crew was led by Mark Blazejak, from the DEP Parks Division, and again included firefighters from throughout the DEP, local fire departments, as well as one firefighter from Rhode Island and two from Vermont. The Connecticut crew spent the entire two-week assignment battling this active fire. The Sleeper Lake Fire burned an estimated 18,185 acres.

Additional Connecticut firefighters were also deployed to western fires on individual assignments. Their assignments sent them to fires in Montana, Georgia, Arizona, and Idaho and included work in Incident Command, Field Observation, Helicopter Crew, and Radio Operator.

The author, who is a wildlife technician with the DEP Wildlife Division, was a member of the first crew to be deployed in July 2007.

Give a Gift of Wildlife this Holiday Season!

The DEP Wildlife Division has unique and affordable holiday gift ideas for children and adults with an interest in nature:

Connecticut Wildlife Magazine: A subscription is the perfect gift for any wildlife enthusiast. Each recipient will receive a note card informing them of your gift. Just fill out the form on the last page and send it in. We'll take care of the rest.

Wildlife License Plate: Show your support for wildlife by purchasing a wildlife license plate for your vehicle or a friend or family member's 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 can only 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.

Wildlife gift givers can also take a trip to the Division's Sessions Woods Conservation Education Center in Burlington to do some shopping in person. The Friends of Sessions Woods (FOSW) maintains a book cart with a selection of wildlife and nature-oriented books. Some of the selections include *Amphibians and Reptiles in Connecticut*, *Connecticut Venomous Snakes*, *Connecticut Walk Book* (both East and West versions), *Field Guide to Animals in Vernal Pools*, DEP Fisheries Division's *Guide to Lakes and Ponds in Connecticut*, *Native Shrubs for Landscaping*, *Nature Walks in Connecticut*, and *Wild Flowers and Winter Weeds*. Books range in price from $3.00 up to $42.25. The FOSW is a volunteer organization that supports projects and programs that enhance the value of the Sessions Woods Conservation Education Center as a resource for education, research, and the enjoyment of nature. The Education Center is located on Route 69 in Burlington, and is open on Mondays through Fridays (except holidays), from 8:30 AM until 4:00 PM. For directions or more information, please call the office at (860) 675-8130 during office hours.

Building Shelter for Bluebirds

As it has for the past 20+ years, the DEP Wildlife Division is offering bundles of rough-cut lumber to groups, free-of-charge, for building bluebird nest boxes. The Division will provide rough-cut wood, nest box plans, and fact sheets to Connecticut schools, scout and 4-H groups, nature centers, conservation commissions, and similar civic organizations as part of the Bluebird Restoration Project.

The wood can be reserved by **organized groups only** on a "first come, first serve" basis beginning on November 1, 2007. Group leaders should send a postcard to the Wildlife Diversity Program, P.O. Box 1550, Burlington, CT 06013-1550. Requests must include the following information: group leader's name, group name, mailing address, daytime phone number, and number of bundles requested (limit 2). Each bundle of wood yields approximately 15-20 nest boxes. Please be aware that the lumber comes as planks and all groups will be responsible for cutting the wood to the correct size.

All requests must be received by January 1, 2008. Only one request per group will be accepted and participants will be mailed notifications by late January. When notified, groups will be responsible for picking up their wood at the Sessions Woods Wildlife Management Area, located on Route 69 in Burlington. Groups should be able to pick up wood by the end of January. Any reserved wood that is not picked up by the end of March will be reassigned to groups on the waiting list.

Groups that decide to participate in this project will be expected to construct, erect, and monitor the bluebird boxes throughout the nesting season (March-July). To be eligible to participate in future years, an annual report of box usage will need to be sent to the Wildlife Diversity Program. If your group cannot commit to following the project through to completion, please do not reserve lumber.

Although lumber is only available for groups, individuals interested in aiding Connecticut's bluebird population may obtain a bluebird fact sheet with nest box plans, box location tips, and nest box survey cards by writing to the Wildlife Diversity Program or checking the DEP's website at www.ct.gov/dep/wildlife.

Nighthawk

continued from page 16

Regarding nesting opportunities for chimney swifts, plans are currently in place to develop artificial nest structures that can be easily and cost-effectively placed in the urban environment to replace lost chimney habitat. As a cooperative partnership between the University of Connecticut and the DEP, this project will also identify the characteristics of the chimney swift's urban habitat that are most important to the species' breeding success. This knowledge will guide management decisions about where to place chimney swift towers so as to effectively stabilize or increase chimney swift populations. Testing of new structures will begin in spring 2008.

The newly developed regional monitoring protocol is statistically designed to address whether or not these new structures are helping to slow or stop the decline of the chimney swift. The DEP Wildlife Division will be looking for volunteers to assist with monitoring. Interested individuals should contact Shannon Kearney-McGee at the Division's Sessions Woods office to be placed on a contact list (shannon.kearney@po.state.ct.us or 860-675-8130).

This project is funded by the State Wildlife Grants program.

Wildlife Calendar Reminders

Dec. 1 ..... Volunteer training session for those interested in helping at the Shepaug Eagle Viewing Area in Southbury (see page 14 for more information).

Dec. 26-Mar. 12 ..... Shepaug Bald Eagle Viewing Area open for the 2007-2008 viewing season (see page 14 for more information).

January-April ..... Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2007 Connecticut Income Tax form.

Jan. 12 ..... Midwinter Bald Eagle Survey (see page 14 for more information).

Feb. 17-18..... **9th Annual Connecticut River Eagle Festival**, presented by the Connecticut Audubon Society, will be held in Essex. A complete guide to the Eagle Festival on the Connecticut River, listing boat tours, programs, and events, can be obtained from Connecticut Audubon by calling 1-860-767-0660. To find out more about the festival, visit Connecticut Audubon's website at www.ctaudubon. org.

Hunting Season Dates

Nov. 14..... Opening day for deer shotgun/rifle season.

Nov. 24..... Opening day for deer shotgun season on state land (B season) and state land no-lottery season.

Dec. 5 ..... Opening day for deer muzzleloader season.

Jan. 15-Feb. 15 ..... Special late Canada goose season in the south zone only.

..... See the 2007 Connecticut Hunting and Trapping Guide for specific season dates and details. The 2007-2008 Migratory Bird Hunting Guide contains information on duck, goose, woodcock, rail, and snipe seasons. Both guides are available at Wildlife Division offices, town halls, and on the DEP's website (www.ct.gov/dep). The 2008 Connecticut Hunting and Trapping Guide will be available by mid-December.

Sessions Woods Conservation Education Center Public Program Series

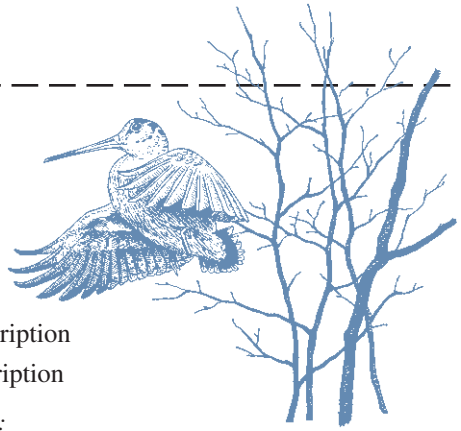
The Sessions Woods Conservation Education Center's Public Program Series is a cooperative venture between the DEP Wildlife Division and the Friends of Sessions Woods. The programs are held at the Sessions Woods Conservation Education Center located on Route 69 in Burlington. Interested individuals and families can 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.

Grassland Habitat Conservation Initiative, December 5, 2007 (Wednesday) at 7:00 PM: Join Wildlife Division Technician Geoff Krukar for a slide show presentation on Connecticut's latest initiative to conserve grassland habitat for wildlife. Grassland habitats provide critical breeding and nesting grounds for approximately 80 bird species in our state. These lands also support numerous mammals, amphibians, reptiles, and invertebrates. Geoff will provide an overview of grassland habitats and describe some of the wildlife species that can be found in those areas.

Moose in Connecticut, January 9, 2008 (Wednesday) at 7:15 PM: In Connecticut, the first sighting of a moose cow with calves was reported in 2000. How many moose are now found in Connecticut? Where have they been seen and what makes good moose habitat? What is the home range for an adult moose? These questions and more will be answered by DEP Wildlife Division Biologist Howard Kilpatrick during a slide show presentation.

Children's Program--Wildlife Tracks, February 9, 2008 (Saturday) at 1:30 PM: Learn about wildlife tracks indoors with Natural Resource Educator Laura Rogers-Castro of the Wildlife Division and then head outside for a short walk to look for animal signs. Children also will make a wildlife track to take home. An adult must accompany all children!

CORRECTION: In the September/October 2007 issue of Connecticut Wildlife, the map was not printed with the article, "Birding by the Light of the Moon." The map was to show where summer night birds were detected during a survey. Contact Shannon Kearney-McGee of the Wildlife Diversity Program if you are interested in that information or have any questions (860-675-8130 or shannon.kearney@po.state.ct.us).



P. J. FUSCO

One of the more plentiful species of shorebirds that can be found in Connecticut during winter is the sanderling. Sanderling flocks frequent sandy beaches where they forage for invertebrates, including marine worms and small shellfish.

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