November/December 2006

Connecticut Wildlife

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BUREAU OF NATURAL RESOURCES ● WILDLIFE DIVISION

From the Director

There is a turf war underway in Connecticut's suburbs. On one side is the homeowner, with deed in hand, his family, children, and pets. On the other is the coyote, a highly adaptable predator, with no legal claim to the land, but a strong territorial instinct. As development encroaches upon wildlife habitat and as coyotes expand into populated areas, conflicts arise. Coyotes appear in broad daylight, cats disappear, dogs are attacked, people become concerned for their safety, and phone calls and letters pour in to the DEP. This is happening town by town and neighborhood by neighborhood.

In most cases, public education could go a long way towards preventing these conflicts. First of all, people need to understand the basic biology of coyotes and some of their physical and behavioral characteristics. It is important to know that coyotes have developed a complex social structure based upon dominance. Quite simply, this means that coyotes will behave boldly when they think they are the boss and submissively when they know they aren't. Coyotes are instinctively wary of humans and there are many common sense steps that people can take to reinforce this avoidance.

However, if coyotes are allowed to become comfortable in human settings, if they associate people with rewards rather than danger, they may grow increasingly bolder. Once the fear factor is gone, the coyote learns that life in the suburbs may be easier than life in the woods. Food is plentiful; whether it is due to the concentration of rodents around the bird feeder, the compost pile, pet food left outside, or pets themselves. It appears that coyotes attack cats because they like to eat them. Dog attacks, on the other hand, seem to be related more to establishing dominance over other canids within "their" territory, which may include several hundred or thousands of acres encompassing many backyards.

Coyotes are so well-established throughout the state that pet owners are advised to closely supervise pets when they are outdoors, especially at night. While many people are concerned about threats that coyotes may pose to humans, the incidence of aggressive behavior towards humans is extremely rare. On occasions where DEP has documented aggression, such as a coyote attacking a leashed dog or a coyote continuing to approach a person at close range despite being discouraged, we work closely with local authorities and landowners to address the problem as effectively as possible within practical and legal limitations. However, removing coyotes from populated areas is often complex and difficult. Therefore, we must adapt our behavior to theirs.

Dale W. May

Cover:

Connecticut's regulated beaver trapping season opens on December 1. Some beavers are harvested because they have caused problems for landowners (see page 16).

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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New England Cottontail Named Candidate for Endangered Species Act Protection

The U.S. Fish and Wildlife Service (USFWS) has designated the New England cottontail (*Sylvilagus transitionalis*; NEC) as a candidate for Endangered Species Act protection. The announcement was published in the September 12, 2006, Federal Register as part of the annual Candidate Notice of Review, an appraisal of the list of plants and animals that may warrant protection under the Act. The announcement serves as a response to a petition requesting protection under the Act filed in 2000. The USFWS has completed a comprehensive review, known as a 12-month finding, and determined that there is sufficient scientific data to propose protecting the NEC as endangered or threatened throughout its range. However, the USFWS is precluded from beginning work immediately on a proposal to provide protection under the Act because its limited resources must be devoted to other, higher priority actions. When a warranted but precluded finding is made for a species, the USFWS classifies it as a candidate.

"Placing the New England cottontail on the candidate list gives us an opportunity to work with partners and citizens to take conservation measures before the species is given full federal protection," said Marvin Moriarty, Northeast regional director for the USFWS. "This species is an important part of New England's natural heritage, and we all have a responsibility to preserve and protect it."

The NEC is a medium- to large-sized rabbit and is one of two species within the genus *Sylvilagus* occurring in New England. NECs are considered habitat specialists because they are dependent upon early successional habitats typically described as thickets. The species is the only endemic cottontail in New England. The eastern cottontail was introduced to many New England states, including Connecticut, in the early 1900s, primarily by sportsmen's groups. New England and eastern cottontails are almost identical in appearance, so differentiation can only be reliably done through DNA analysis or examination of the skull. Historically, the NEC ranged from southeastern New York (east of the Hudson River) north through the Champlain Valley, southern Vermont, the southern half of New Hampshire, southern Maine, and south throughout Massachusetts, Connecticut, and Rhode Island.

NEC historic range has declined by approximately 75% since 1960. Due to destruction or modification of its habitat and possibly from competition with the non-native eastern cottontail, available habitat has been reduced to small, disconnected patches of young forests. Today, the NEC is found in eastern New York and in several counties in Connecticut, Rhode Island, western Massachusetts, southern New Hampshire, and southern coastal Maine. However, the populations that occur in these states are relatively small and isolated. The NEC once occurred in Vermont, but has not been reported there since 1971.

The primary threat to the NEC is ongoing destruction and modification of its remaining habitat through natural succession processes and alteration related to human development and other activities. Isolation of occupied patches of habitat by areas of unsuitable habitat, as well as predation, appears to be resulting in local extirpation of the NEC from small patches. Based on current land uses in the region, the loss of about two percent of its current range per year is expected to continue. Additional threats may include competition for food and habitat with eastern cottontails and large numbers of native white-tailed deer, and inadequate regulatory mechanisms for protecting the habitat.

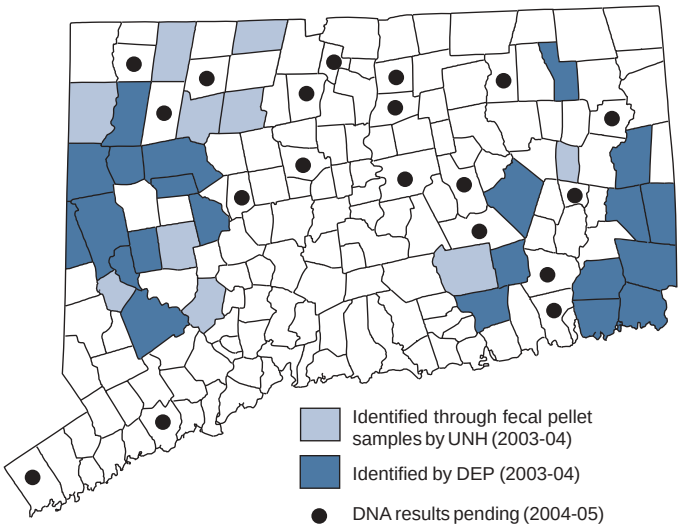
Because there has been a lack of information on the distribution of NECs, the DEP Wildlife Division has been conducting a study since October 2000 to assess the distribution of the species in the state. In addition, the University of New Hampshire (UNH) conducted a regional study throughout New England that examined the current distribution of NECs. Data from these studies were used by the USFWS in their decision to list the species as a candidate for Endangered Species Act protection.

Over the course of the New England cottontail study, the Wildlife Division collected cottontail specimens from hunter harvest, roadkills, public donations, and live-trapping efforts. Pelage (fur) characteristics were noted and DNA samples or skulls were collected from all cottontail specimens. Previous studies indicate that eastern cottontails typically have a white spot on the forehead and NECs typically have a black spot between the ears. Species identification was confirmed by examining skull sutures or conducting DNA analyses. The UNH study focused on identifying the presence of NECs by examining the DNA composition in rabbit droppings.

The DEP Wildlife Division has documented NECs in 22 different Connecticut towns. In addition, the UNH study found NECs in 10 additional towns. The studies have shown, so far, that the distribution of NECs in Connecticut is relatively good (see map). This winter, the Division will continue to search for NECs in towns with limited or no data.

Connecticut's New England cottontail study has been funded by the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund, Wildlife Conservation Restoration Program, and State Wildlife Grants.

Distribution of NECs collected in Connecticut from October 2000 to May 2005



Red Knot on Candidate List for ESA Protection

Every year the U.S. Fish and Wildlife Service (USFWS) releases an updated Candidate Notice of Review, which is an appraisal of the candidate species list detailing those plants and animals that may warrant protection under the federal Endangered Species Act. In September 2006, the USFWS announced that 10 species have been removed from the candidate list and seven species have been added to the list since the last review in May 2005. The seven newly-listed species include the New England cottontail (see page 3) and the red knot, a shorebird that migrates along the Atlantic Coast.

The red knot (*Calidris canutus rufa*) is a small, russet-colored shorebird about the size of a robin. Biologists have identified six subspecies of red knot and three of them occur in the Western Hemisphere. The subspecies known as *rufa* makes one of the longest distance migrations known in the animal kingdom as it travels between breeding areas above the Arctic Circle and wintering areas that are primarily in southern South America (Tierra del Fuego). With a wingspan of 20 inches, red knots fly more than 9,300 miles from south to north every spring and repeat the trip in reverse every autumn. They migrate along the Atlantic Coast of the United States, where they may be found from Maine to Florida, including Connecticut. The Delaware Bay area (in Delaware and New Jersey) is the largest known spring migration stopover area, with far fewer migrants congregating elsewhere along the Atlantic coast. The concentration in the Delaware Bay area occurs from the middle of May to early June, corresponding to the spawning season of horseshoe crabs. The knots feed on horseshoe crab eggs, rebuilding energy reserves needed to complete migration to the Arctic and arrive on the breeding grounds in good condition.

P. J. FUSCO

Red knots make one of the longest migrations. They travel along the Atlantic Coast, where they may be found from Maine to Florida, including Connecticut.

Red knots migrate in larger flocks than do most other shorebirds. They break their spring and fall migrations into nonstop segments of 1,500 miles or more, ending at stopover sites called staging areas. Flocks of red knots converge on staging areas along the entire Atlantic coast. Red knots are faithful to these specific sites, stopping at the same location every year.

Surveys at wintering areas in South America and Delaware Bay during spring migration indicate a substantial population decline in recent years. The increase in taking of horseshoe crabs for bait in commercial fisheries that occurred in the 1990s may be a major factor in the decline of red knots. Since 1999, a series of timing restrictions and substantially lower harvest quotas of horseshoe crabs have been adopted by the Atlantic States Marine Fisheries Commission, as well as New Jersey and Delaware. The reductions in commercial harvest since 1999 are substantial: 726,660 horseshoe crab landings for bait were reported in 1999 in Delaware and New Jersey, compared to 173,777 in 2004. However, it's not known whether horseshoe crab populations will rebuild or how long a lag time there may be in increased availability of eggs, as horseshoe crabs need eight to 10 years to reach sexual maturity. In 2004, availability of horseshoe crab eggs on principal shorebird foraging beaches increased over recent years. However, the number of knots has been much lower than in the past and the trend in abundance is not improving despite a reduction in horseshoe crab landings since the late 1990s.

Other identified threat factors to red knots include habitat destruction due to beach erosion and various shoreline protection and stabilization projects that are impacting areas used by migrating knots for foraging, the inadequacy of existing regulatory mechanisms, human disturbance, and competition with other species for limited food resources. Also, the concentration of red knots in the Delaware Bay area and at a relatively small number of wintering areas make the species vulnerable to potential large scale events in those areas, such as large oil spills or severe weather.

Information for this article was provided by the U. S. Fish and Wildlife Service. To learn more about the red knot and other candidates for ESA listing, go to www.fws.gov.

What Are Candidate Species for Endangered Species Act Listing?

Candidate species are plants and animals for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information on their biological status and threats to propose them as endangered or threatened under the Endangered Species Act (ESA), but for which development of a proposed listing regulation is precluded by other higher priority listing activities.

What protection does the ESA provide to candidate species?

Candidate species receive no statutory protection under the ESA. However, the USFWS encourages the formation of partnerships to conserve these species because they are, by definition, species that may warrant future protection under the ESA.

What is the advantage of conserving species that are already candidates or proposed for listing?

Early conservation preserves management options, minimizes the cost of recovery, and reduces the potential for restrictive land use policies in the future. Addressing the needs of species before the regulatory restrictions associated with listed species come into play often allows greater management flexibility to stabilize or restore these species and their habitats.

Beware of Moose on Connecticut Roadways

DEP to Participate in Study of Moose Behavior in New England

In the wake of two recent car accidents involving moose in northwestern Connecticut, the DEP urges drivers in that part of the state to use extra caution. In August, a 500-pound moose was struck and killed in Goshen and, in September, a 700-pound bull moose was struck and killed in Barkhamsted. "As the moose population expands its range and increases in Connecticut, the frequency of moose-vehicle collisions is expected to rise," said Dale May, Director of the DEP Wildlife Division.

Since 1995, the DEP has documented 13 accidents involving moose on state roadways. "While none of these accidents have resulted in a human fatality, the sheer size of a moose (up to 1,000 lbs.) presents a serious threat to life and property when on a roadway," May stated. During the same 11-year time interval, Massachusetts has documented 243 moose-vehicle accidents and one human fatality. In states like Maine and New Hampshire, where moose populations are well established, the risk of a human fatality is much greater. On average, Maine experiences three human fatalities and New Hampshire experiences one human fatality each year due to moose-vehicle collisions.

Connecticut's moose population continues to grow steadily and the DEP estimates that more than 100 currently reside in the state, primarily in the northern towns where most of the moose-related accidents have occurred. However, individual moose can travel long distances, which means they will continue to expand southward into populated areas where vehicle traffic density is much higher. As a consequence, the likelihood of hitting a moose on Connecticut roadways is expected to increase in southern portions of the state.

The DEP Wildlife Division plans to participate in a regional research project to study the growth, distribution, and movements of moose in southern New England. This study is being initiated because little information is available about the region's moose population and concerns exist about highway safety and moose impacts on forest regeneration. "Beginning this winter, the Wildlife Division plans to capture moose and fit them with radio collars that can be tracked by satellite," said Wildlife Division biologist Howard Kilpatrick. The University of Massachusetts and Massachusetts Division of Fisheries, Wildlife, and Law Enforcement will be using similar methods in Massachusetts.

The DEP requests that anyone observing a moose in Connecticut report the sighting to the DEP Wildlife Division, at 860-642-7239, or send an email (Andrew.Labonte@po.state.ct.us).

Tips For Driving in Moose Country

- **Stay alert, especially around dawn, dusk, and after dark when moose are most active. Because moose are six feet tall at the shoulders, vehicle headlights typically will not show any "eye shine" from a moose.**
- **Use caution during spring (May-July) and fall (September-November). Moose are most active during these months.**
- **Driving within the posted speed limit will lessen the severity of an accident if you do collide with a moose or deer.**
- **Use high beams whenever possible to improve visibility, and wear your seat belt.**

Remember Your "Other Dependents" at Tax Time

Tax time may be a dreaded time of year for most people, but something good can come out of it. Since 1993, Connecticut taxpayers have had the option 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 areas preserves, and watchable wildlife. Since the inception of the tax check-off, a number of projects have been funded in the areas of habitat restoration, inventory, monitoring, and education. A listing of these projects, with descriptions and contact information, can be found on the DEP website, at www.ct.gov/dep. The list includes bat hibernacula protection, a New England cottontail study (see page 3 of this issue), least shrew inventory and habitat assessment, heron and egret rookery protection, barn owl management, wood and bog turtle studies, statewide botanical field surveys, a dragonfly/damselfly project and website, shortnose sturgeon assessment, and the development of wildlife viewing areas, to name a few.

P. J. FUSCO

Wood turtle

So, when you get to those last few lines of your Connecticut income tax form, remember your other dependents, our state wildlife species, and 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.

Recent Rabid Coyote Incident Is a Reminder for Precautions

In October, incidents involving a rabid coyote made the newspaper and television headlines. The coyote had attacked two people in the town of Washington and was killed a few days later in the same general vicinity by a man who defended himself when the coyote approached. The animal was taken to the Department of Public Health lab where tests confirmed that it had rabies, as suspected. While the DEP could not be entirely certain the coyote killed and tested was the same one involved in the attacks, it is believed to be because it was killed in the area of the attacks, it exhibited similar behavior, and it matched a description provided by one of the victims.

"While it is not uncommon for coyotes to become comfortable around people and bolder, it is uncommon for them to be aggressive towards humans," said Dale May, Director of the DEP Wildlife Division. "The rabies diagnosis explains the abnormal behavior exhibited by this coyote."

Paul Rego, a Wildlife Division biologist said, "Rabies is a disease that can affect a wide variety of mammals, but species such as raccoons, foxes, and skunks appear to be more susceptible to it than others. Coyotes appear to be not as susceptible to the strain of rabies currently found in Connecticut. This is only the fourth documented case of rabies in a coyote in the state since 1991, as compared to nearly 4,300 documented cases in raccoons over the same time period." Raccoons are the major carriers of rabies in Connecticut and the leading cause of the spread of the virus among wildlife and domestic animals. The "raccoon strain" of the rabies virus entered Connecticut in 1991 and has been "cycling" within the raccoon population.

Connecticut residents enjoy a variety of outdoor activities and should not be discouraged from participating in these activities because of the presence of rabies in some mammal populations. Residents are reminded and urged to take the following precautions:

- ***Avoid contact with all wild or stray domestic animals, especially those that are behaving abnormally or appear sick or disoriented.***

Never attempt to pet, feed, approach, or handle these animals. Enjoy wildlife from a safe and healthy distance.

- ***Be a responsible pet owner.***

Vaccinate your pets and maintain regular vaccinations. Vaccinated pets provide a safe buffer between rabies in wildlife and rabies in your home. Most exposures by rabid wildlife involve dogs and cats. You are far more likely to be exposed to rabies from your own pet, than from a wild animal. If an unvaccinated pet is exposed to a rabid animal, it will have to be quarantined for six months at a facility away from home or euthanized. Do not leave pets alone outside or allow them to roam. Keep them indoors at night and feed them indoors as well.

- ***Notify local officials about sick-acting wildlife.***

If local officials cannot respond and the animal is still a threat, DEP can be contacted for emergency response at (860) 424-3333. Symptoms of rabies include lack of coordination, stumbling, disorientation, paralysis, convulsions, unusually friendly behavior, tameness, extreme lethargy, unprovoked aggression, and unusual vocalizations. Observing an animal in daytime, with the absence of other symptoms, does not indicate rabies and it is not a reason to have an animal destroyed. Be aware also that just because an animal is sickly, does not necessarily mean that it has rabies. Often, animals appear sick from factors other than rabies, such as other diseases, parasites, or injury.

- ***Know what to do if you or your pet is exposed to rabies.***

People and animals are usually exposed to rabies by being bitten or getting saliva in a mucous membrane or open wound. If the suspect animal can be captured, it can be tested to determine if it was rabid. Capture, contain, or monitor the location of the wild or stray animal if it can be done safely. Do not attempt to separate fighting animals.

If you believe a domestic animal has been exposed to rabies, handle it with rubber gloves, wash its wounds with soap and water, and isolate it from people and other animals. Contact a veterinarian or animal control officer for advice on treatment of the pet and confinement requirements.

If a person is possibly exposed, capture or contain the animal for testing as outlined above. Wash wounds vigorously for five minutes. Visit a physician or emergency clinic as soon as possible. Report the incident to the local health department or the state Department of Public Health.

- ***Practice animal proofing around your home or yard.***

Limit the access of wild animals to food and shelter by capping chimneys, securing garbage or pet food, repairing attic louvers, closing off access to crawl spaces under porches, and trim trees near buildings. Information about rabies also can be found on the DEP website at www.ct.gov/dep.

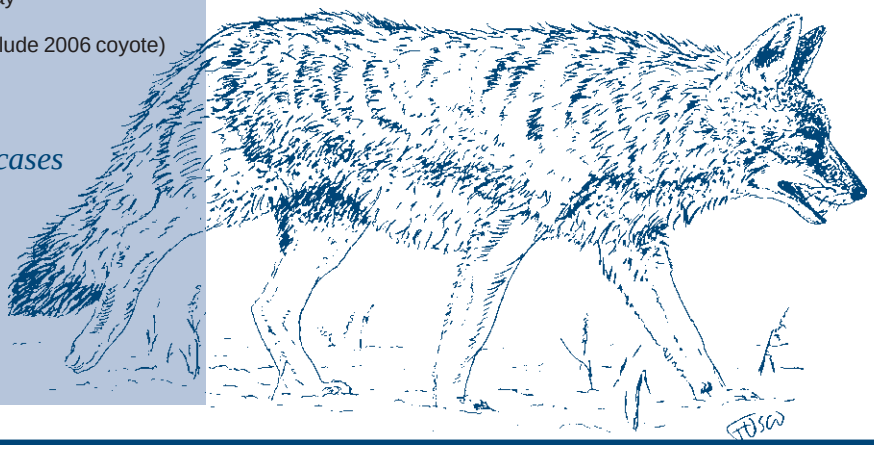
Rabies cases confirmed by the Department of Public Health from 1991-2005

Wild animal cases

4297 raccoons
1095 skunks
63 foxes – red and gray
53 woodchucks
3 coyotes (doesn't include 2006 coyote)
3 bobcats
2 deer
1 otter

Domestic animal cases

98 cats
15 cattle
7 dogs
8 horses
4 goats
3 sheep
1 rabbit
1 ferret



2006 Saw Too Many Mosquitoes & Nine Cases of WNV

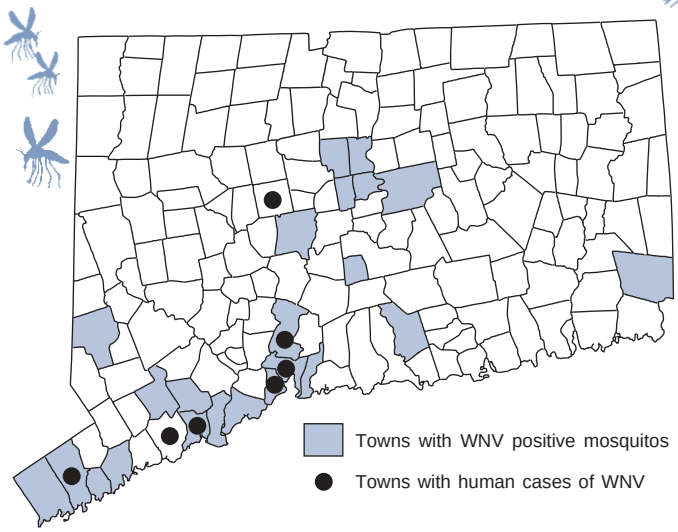
Written by Roger Wolfe, Mosquito Management Program

When this year began, we knew it would be an active mosquito season, but we had no idea what was in store. As you may recall, Connecticut had a very wet, cool spring. As a result, there was a bumper-crop of spring mosquitoes. These "spring, floodwater mosquitoes" came from eggs that were laid the previous fall and overwintered as eggs. The eggs were flooded as snow melted and water tables rose in the spring. As the water warmed up, these eggs hatched into larvae and eventually emerged as adult mosquitoes, just in time for Memorial Day weekend. By early summer, the number of calls from concerned and annoyed homeowners was considerably higher than in recent years.

In a "normal" year, as wet weather subsides with the onset of summer, vernal pools and wet woods dry up and mosquito numbers (hence, the number of complaints) decrease. However, this year, as the summer temperatures increased, the rain kept falling and vernal areas stayed wet. As a result, other mosquito species (mainly *Culex* species that do not overwinter as eggs but as adults) began laying their eggs on these water surfaces (several species of *Culex* are involved in West Nile virus amplification and transmission). The rain in June, coupled with hot temperatures in July, accelerated viral amplification that led to the first isolation of West Nile virus (WNV) in mosquitoes in Connecticut during the last week of June, weeks earlier than WNV isolations found in the past. The situation only escalated from there. Light traps maintained by the Connecticut Agricultural Experiment Station (CAES), especially in the West Haven/New Haven area, had consistently high numbers of WNV-positive pools of *Culex* mosquitoes. The first human case of WNV was reported by the Department of Public Health (DPH) in the third week of August from the city of New Haven. Within the next week, four additional human cases (including the death of a 75-year-old woman) were reported within three miles of the first human case.

Because of this rapid onset of human cases in a relatively small area, and indications that further risk of WNV transmission was and would continue to be high, the state's Mosquito Management Program, in conjunction with the West Haven and New Haven Health Departments, felt that more active intervention was needed. On September 6, the DEP's Wetland Habitat and Mosquito Management (WHAMM) Program, in coordination with their contractor, All Habitat Services, applied larvicides and adulticides on approximately 100 acres of parks, cemeteries, and open space in the West River corridor. Because of the locations of virus activity and the species involved, and through map and ground reconnaissance, it was decided that by selectively spraying and creating a barrier between the wetlands and the neighborhoods and spraying adulticide within the barrier, the mosquitoes could be contained within this area, preventing them from traveling into neighboring areas. By using this barrier spray approach, spraying within the neighborhoods was avoided, thereby further minimizing any human exposure to the pesticides used. Also, larviciding within this zone would reduce continued emergence of *Culex* mosquitoes. To complicate this situation, a few days after the initial treatment (in which there was a rapid decline in the number of mosquitoes trapped), the area

West Nile Virus Activity in Connecticut, 2006



received several inches of rain that not only expanded already wet areas for *Culex* but also flooded new areas that set off a large brood of the floodwater mosquito, *Aedes vexans.* Later in September, as mosquito numbers started to rise again, the WHAMM Program was prepared to spray. However, weather conditions were not optimal and virus activity was beginning to subside. By the end of summer, there were a few other isolated human cases of WNV in other towns (bringing the statewide total to 9), but through control efforts and diligent public education (stressing personal protection) by state and local health departments, there were no further human cases in this epicenter of WNV activity.

To summarize the events of this year, by late October, the CAES had trapped, counted, and processed over 197,000 mosquitoes. From this collection, the CAES isolated 216 WNV-positive pools of mosquitoes: 116 from West Haven and 25 from New Haven alone! In total, there were nine human cases of WNV reported from Bridgeport, Bristol, Fairfield, Hamden, New Haven (3, including 1 death), Stamford, and West Haven (see map). This compares to the nationwide total (as of mid-October) of 3,135 human cases, including 642 cases in Idaho.

The CAES also identified two isolations of Eastern Equine Encephalitis (EEE) virus in the bird-biting mosquito, *Culiseta melanura,* in trap sites in Stonington and Woodbridge. Fortunately, these were single isolations and the mosquito species involved feeds on birds. Therefore, no follow-up control measures were required. However, nearby, in Massachusetts, over 159,000 acres in the Plymouth and Bristol County areas were aerially sprayed in August because of EEE activity in mosquitoes there. This area of Massachusetts was still reeling from EEE activity in 2005 in which four humans were diagnosed with the disease, two of whom died. Also, in 2005, New Hampshire

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Busy Field Season for the Habitat Management Program

Written by Paul Rothbart, Habitat Management Program

The goal of the DEP Wildlife Division's Habitat Management Program is to provide habitat diversity for maintaining stable, healthy, and diverse wildlife populations throughout Connecticut. The benefits of a successful program include wildlife diversity, healthy ecosystems, and improved opportunities for wildlife-based recreation. Although the bulk of the program's activities occur on state land, the new Landowner Incentives Program, along with the ongoing U.S. Fish and Wildlife Service's (USFWS) Partners Program, provides resources to conduct habitat activities on private land as well.

During the upcoming year, management activities will continue to emphasize early successional habitats. Such habitats are rapidly declining due to loss of farmlands, development, and the absence of fire within the landscape. Wildlife species that use early successional habitats (young forests, old fields, grasslands) include woodcock, ruffed grouse, indigo buntings, blue-winged warblers, northern orioles, rufous-sided towhees, turkeys, bluebirds, American goldfinches, deer, bats, bobolinks, savannah sparrows, and eastern meadowlarks. It is essential to manage remaining early successional habitats to ensure abundant and diverse wildlife populations throughout Connecticut.

Wildlife Habitat Incentives Program

Over the past several years, the Habitat Management Program has relied upon funding provided through the U.S. Department of Agriculture's (USDA) Wildlife Habitat Incentives Program (WHIP). WHIP was the first USDA Farm Bill program specifically developed to address wildlife resource needs on non-federal land throughout the country. Since the program's inception in 1998, the Wildlife Division has developed 33 contracts which provided $402,263 in funding and resulted in the enhancement or maintenance of approximately 904 acres of critical wildlife habitat on DEP properties throughout Connecticut.

The Division was fortunate to have received over $680,000 in WHIP grants this year to conduct specific habitat restoration and enhancement activities. Eighteen new contracts have been developed at 13 different state areas that will enhance 559 acres of wildlife habitat through a variety of management practices (i.e., warm season grass plantings, prescribed burning, mowing, heavy-duty drum cutting/mulching operations, treatment with selective herbicides, specialized wetland low ground pressure spraying and mowing/mulching equipment, and the reclamation of a dam and water control structure).

A significant portion of the activities will target non-native invasive plants, including autumn olive, multiflora rose, asiatic bittersweet, tartarian honeysuckle, tree of heaven, and phragmites. Most practices will occur on state wildlife management areas (WMAs), but some are planned for important habitats located in state parks and forests. Specific locations that will receive management treatment during a six-month period include Simsbury WMA (Simsbury), Barn Island WMA (Stonington), Verkades Property (Harkness State Park, Waterford), Pachaug State Forest (Voluntown and Sterling), Naugatuck State Forest (Hunter's Mountain, Naugatuck), Housatonic River WMA (Kent), Bear Hill WMA (Bozrah), Goodwin State Forest (Hampton), Higganum Meadows (East Haddam), Mad River Flood Control Area (Winchester), Echo Farm State Park (Moodus), Belding WMA (Vernon), and Nathan Hale State Forest (Coventry).

Conservation Reserve Program

Another program under the USDA's Farm Bill umbrella that the Wildlife Division uses is the Conservation Reserve Program (CRP). The Division presently has seven contracts totaling 103 acres under this program. Sites include Robbins Swamp WMA (Canaan), Pease Brook WMA (Lebanon), Bartlett Brook WMA (Lebanon), Spignesi WMA (Scotland), and Bloomfield Flood Control Area. These contracts provide funding to establish and maintain warm and cool season grass plantings, as well as riparian grass/shrub buffers, to help ensure that early successional habitat is managed to benefit wildlife, in addition to reducing potential soil erosion and serving as a buffer to sensitive streams and wetlands.

Landowner Incentive Program

The Wildlife Division continues to work towards implementation of its Landowner Incentive Program (LIP) grant. After receiving 113 applications during the first open application period, the Division awarded funding through a competitive ranking process to 56 projects involving 36 different landowners. LIP provides technical and cost-share assistance to landowners for habitat management projects to restore, protect, reclaim, enhance, maintain, and create early successional and wetland priority habitats for species at-risk on private lands.

Projects awarded funding included tidal and freshwater marsh invasive plant

Thanks to the Connecticut Waterfowl Association

The Connecticut Waterfowl Association (CWA) has been a conservation partner with the Wildlife Division for many years. The organization's mission is "To preserve, reclaim and enhance wetland and wildlife habitat in the state of Connecticut in a manner that promotes the wise use of our natural resources and the progress of society." Cooperative projects between the Wildlife Division and CWA have included outreach programs, youth hunting program participation, assistance with the statewide wood duck nest box program, and funding assistance to the Division for equipment and habitat enhancement projects.

CWA recently provided funding that enabled the Division to extend five Conservation Reserve Program contracts with the U.S. Department of Agriculture. These renewed contracts cover 65 acres of habitat at Robbins Swamp WMA (Canaan), Bartlett Brook WMA (Lebanon), Pease Brook WMA (Lebanon), and Spignesi WMA (Scotland). These contracts will help ensure that habitat is managed to benefit wildlife, as well as reducing potential soil erosion and serving as an herbaceous buffer to streams and wetlands.

The Division extends its thanks to CWA for its cooperation on this valuable conservation project and looks forward to many future partnerships that will benefit habitat and the species that use these sites.

control, old field restoration, wet meadow mowing, seedling/sapling forest creation, warm season grass plantings, and ecotone management. All of these projects directly support species at-risk, like the blue winged warbler, hognose snake, New England cottontail, savannah sparrow, Eastern meadowlark, saltmarsh sharp-tailed sparrow, and seaside sparrow, by improving the quality and quantity of priority habitats vital to their survival.

All LIP projects require a 25% non-federal match, which can be met through landowner funds, in-kind services provided by the landowner, and/or funding from a third party. LIP funds are paid directly to the state approved contractor, and **not** to the landowner. The Division is currently working with landowners to draft and approve LIP Landowner Agreements for each project, which specify what practices will be implemented in what habitats, match amounts, seasonal restrictions, project timetables, and landowner/DEP responsibilities. Several projects are planned for implementation in 2006.

LIP has already accepted applications for a second round of funding. For more information, please see the LIP section of the DEP website at www.ct.gov/dep or call the DEP's Eastern District Headquarters at 860-295-9523 (Monday through Friday, from 8:30 AM-4:30 PM).

Ongoing Maintenance Activities

Although WHIP and LIP are priority tasks for the 2006 field season, the Habitat Management Program will continue to conduct various activities, such as:

- *Providing old field and access mowing on approximately 350 acres at WMAs.*
- *Enhancing existing Americans with Disabilities Act access to hunting and recreational opportunities at Babcock Pond and Bear Hill WMAs using funding grants from the Trails Program.*
- *Maintaining the interpretive trails at Sessions Woods WMA through a Trail Program grant.*
- *Completing new parking areas at the Housatonic River, Goshen, and Zemko Pond WMAs.*
- *Acquiring agency funding to make emergency access repairs to the High Rock Range in Naugatuck State Forest. This site provides countless hours of public recreational shooting opportunities and serves as a Conservation Education/Firearms Safety Program facility.*
- *Conducting maintenance at inland marshes, including vegetation control via mowing and herbiciding, and management of water levels to maximize wetland wildlife values and minimize human public safety conflicts. The Connecticut Duck Stamp Program has funded a seasonal position to help complete this task.*

P. J. FUSCO

Don Anderson (left), from the DEP's Wetland Restoration Unit, and Paul Rothbart, from the Wildlife Division's Habitat Management Program, oversee the removal of autumn olive at the Mad River Flood Control Area in Winchester. Autumn olive is a non-native, invasive shrub that displaces other important wildlife plants.

The Wildlife Division extends its appreciation to all its conservation partners who continue to help make these management projects a reality. Special acknowledgment is extended to the Natural Resources Conservation Service, U.S. Fish and Wildlife Service, Connecticut Chapter of the National Wild Turkey Federation, Connecticut Waterfowl Association, Connecticut Forest and Parks Association, and other DEP Units, including Support Services, Parks, and Forestry.

NWTF Assists with Warm Season Grass Project

The Wildlife Division recently completed a seven-acre warm season grass planting at Babcock Pond WMA in Colchester. This site is part of a 20-acre early successional habitat area located within the 1,500-acre WMA. The Connecticut Chapter of the National Wild Turkey Federation (NWTF) provided funding for field preparation (herbiciding) and the purchase of a seed mix containing big bluestem, little bluestem, and indian grass. A truax no-till fluffy seeder was used in the planting. This specialized piece of equipment is required for seeding the fluffy warm season grass species. It was donated by NWTF to the Wildlife Division several years ago and has been used on state and private lands throughout Connecticut.

Warm season grass fields provide excellent turkey brood habitat, serve as nesting sites for grassland birds such as bobolink, and provide a diversity of flowering plants used by butterflies and a myriad of insects.

The CT Chapter of the NWTF has been a conservation partner with the Wildlife Division for many years and has assisted with outreach programs and habitat projects, and was instrumental in the restoration of turkeys to Connecticut. The Division extends its thanks to the organization for its cooperation on this valuable conservation project and looks forward to many future partnerships that will benefit habitat and the species that use these sites.

High Spirited Dynamos - Titmice in Connecticut

Article and photography by Paul Fusco, Wildlife Outreach Program

Two of the most common backyard birds in Connecticut are members of the titmouse family. The black-capped chickadee and the tufted titmouse are perhaps the species most familiar to people who enjoy feeding or watching birds. Their sometimes noisy chatter and inquisitive nature make them backyard favorites.

Both species are small birds. At six inches in length, the tufted titmouse is the largest member of the family, while at five inches, the black-capped chickadee is one of our tiniest birds. Chickadees are basically gray above and white below. They have a black cap, black bib, and white cheeks. Tufted titmice are gray above and white below with a wash of rust on their flanks. They sport a gray crest on top of the head. In both species, the sexes are similar in appearance.

All titmice have strong legs and feet that they use to cling onto twigs and foliage, sometimes hanging upside down as they forage. Titmice have short, strong bills that they use for gleaning insects and spiders from foliage and for digging and prying into bark crevices. Among the insect food they eat are caterpillars, moths, and beetles. Chickadees and titmice also will eat fruits of berry-producing woody plants, including sumac, poison ivy, bayberry, blueberry, blackberry, serviceberry, and mulberry.

In winter, chickadees eat seeds from conifer trees and egg masses of moths, spiders, and beetles. They consume a great many insect pests that may be injurious to forests and agricultural crops. Some of those insects include moths, wood borers, aphids, weevils, plant lice, scale insects, and many beetles. Tufted titmice will consume mast during fall and winter in the form of various seeds and nuts. The nuts include both acorns and beechnuts, which titmice break apart by holding the nut with their feet and striking it repeatedly with their strong bill.

Behavior

Titmice are well known for their highly active and acrobatic behavior. They are constantly on the move, flying from tree to tree and shrub to shrub. Their feeding style has them hanging from branches and tree trunks in apparently awkward positions, including upside down, sideways, and everything in between.

While they are highly coordinated when feeding, chickadees and titmice are weak and fluttery in flight. They have short, rounded wings that are good for flying in tight spaces, and for short distances. They are usually always close to cover, which they use to escape from the assaults of the sharp-shinned hawk.

In winter, these birds roam the woods in small, loose bands that may include chickadees, titmice, nuthatches, kinglets, and woodpeckers. All benefit from locating shared food sources, as well as from each other's eternal watch for predators.

Black-capped chickadees and tufted titmice are basically non-migratory. However, they may move southward in some winters, most likely because of food shortages.

Black-capped Chickadee

Black-capped chickadees prefer to live in deciduous and mixed forests, as well as wooded suburban areas, including backyards and parks. Although in some years they may move southward, black-capped chickadees are considered to be year-round residents in Connecticut. They are one of our most common birds, frequently a favorite among backyard bird enthusiasts. Their "*chick-a-dee-dee-dee*" call is easily recognized.

For such tiny creatures, black-capped chickadees have a remarkable tolerance for cold. Within their range, winter can be brutal with stretches of bitterly cold temperatures. Chickadees must eat large amounts of food at this time of year to maintain their body heat, and will continually come to a food source, such as a backyard feeder with sunflower seeds. Not usually eating at the feeder, they will come in, grab a seed, and carry it off to consume in the protection of cover. Chickadees also will cache seeds, maybe

Chickadees frequently assume acrobatic positions while foraging, including hanging upside down.

hundreds of them in a single day, scattering them about their local area in bark crevices, cavities and other hiding places. Studies have shown that chickadees may actually grow new brain cells during winter to help them remember where they have hidden their food.

Along with titmice, chickadees have up to 30% more body feathers in winter than in summer. They use their plumage to stay warm by fluffing out their feathers, creating an insulating layer that protects their body from the cold. At night, chickadees will roost singly or huddled together in small groups, using tight cavities or thick conifer cover to protect them from the elements.

The tufted titmouse is a southern bird that has expanded its range into the northeast, including New England and southern Canada, over the past 60 years.

Chickadees cannot store enough fat to hold a normal body temperature through cold winter nights. To compensate for this, they typically go into a state of torpor, or short-term hibernation, where their body functions slow down to conserve energy. Their heartbeat and breathing rates are reduced as their body temperature falls by 10 to 20 degrees. This state of torpor requires less energy for the chickadee and allows it to sustain itself during frigid conditions.

Tufted Titmouse

Originally a southern bird of deciduous woodlands, the tufted titmouse has significantly expanded its range northward in the latter half of the last century. Based on data from annual National Audubon Society Christmas Bird Counts, the tufted titmouse has gradually increased from a primary range in the Mississippi and Ohio River valleys in the early 1900s, to being found in Connecticut (1940s), upstate New York and Ontario (1950s), and Vermont and Maine in the 1970s.

Tufted titmice have taken advantage and benefitted immensely from backyard bird feeding and the winter temperature moderations that come with suburbanization. The species has seemingly adapted well to development, and joins a list of other southern songbirds that are relative newcomers to the northeast, including northern mockingbird and Carolina wren.

Other Titmouse Species

There are 14 species of titmice in North America, including bushtits, chickadees, titmice, and verdin. While we have two species in Connecticut, there are two others that are found nearby. The boreal chickadee can be found slightly to our north. It is a bit larger than the black-capped chickadee and has a brown cap. As its name implies, the boreal chickadee is normally found only in boreal conifer habitat. Its range extends down from Canada through northern Maine and the higher elevations of New Hampshire, Vermont, and New York. There are very few records of this species in Connecticut, all from winter.

To our south is the Carolina chickadee. At first look, it is virtually identical to the black-capped, but its song and range are different. The range of the Carolina chickadee extends from the south into mid-New Jersey, but there are no records of this species occurring in Connecticut.

Attracting Titmice to Your Yard

Titmice nest in tree cavities within woodlots and forests. The cavities may be natural cracks, knotholes, or old woodpecker holes. The birds may also excavate holes in rotting tree stubs. Both black-capped chickadees and tufted titmice will use nest boxes for nesting and winter roosting.

Titmice and chickadees are frequent visitors at backyard feeding stations. The best foods to provide for them are sunflower seeds, safflower seeds, suet, peanuts (unsalted), and peanut butter. Peanuts are relished by tufted titmice. Carrying a peanut with their bill, titmice will fly off with it to a secluded perch, where they can work on opening the shell in a location free of disturbance from other birds.

Titmice and chickadees will use almost any type of bird feeder, but those with some kind of large bird excluder are best. Tube feeders with a small mesh wire cage around it work well to limit the larger and more aggressive blue jays and grackles from monopolizing the food. Platform feeders also are good as they usually have plenty of room for multiple birds to come in and get food.

Good Year for Piping Plovers, Not So Good for Least Terns

Written by Julie Victoria, Wildlife Diversity Program

The dreary and rainy spring of 2006 will be remembered as possibly the best year to date for piping plover breeding activities. Least terns, unfortunately, had a poor year with a marked decrease in the number of pairs returning to the state and poor productivity. Both of these shorebirds are state threatened species and the piping plover also has been listed as federally threatened since 1986.

Thirty-seven pairs of piping plovers nested along the Connecticut coastline during the 2006 breeding season, three pairs more than last year. The number of young fledged (reached flying stage) hit an all-time high of 79. The consistent number of piping plover chicks fledged since 1986 is encouraging and reflects the success of aggressive management by the DEP Wildlife Division, along with the help of volunteers. Each spring, attempts are made to locate and erect protective fencing around all piping plover nests. Thanks are extended to the research assistant and intern that worked on the project this field season: Brian Pafford and Crystal Baird-Martowski. Brian's position was funded through federal aid from Section 6 of the Endangered Species Act.

The least tern is a communal nester with the piping plover and the Division also monitors its numbers. Approximately 126 pairs of least terns nested in the state this season, a decrease from the 246 pairs in 2005. The number of young fledged hit an all-time low of 11. 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 and least terns prefer to nest on sandy beaches, but only a limited number of sites are available due to current shoreline development and recreational use. Why did the plovers do so well and the least terns so poorly this year? Piping plovers return to Connecticut from their wintering grounds in March and begin nesting in April. Mammalian and avian predators, attracted to beach areas by human litter, hamper nesting success, as do human disturbances which keep the birds off their nests, preventing them from attending eggs and young. The rainy weather kept people off the beach early in the plover nesting season and their eggs were able to hatch without disturbance. Unfortunately, least terns return to Connecticut by May and begin nesting in late May/early June. A storm in early July washed out many least tern nests and 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, 126 pairs is below the average of the past five years in Connecticut and 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.

P. J. FUSCO (2)

Least terns had a very poor nesting season with a marked decrease in the number of pairs returning to the state and poor productivity.

The Wildlife Division appreciates the diligent efforts of the volunteers who monitored the beaches and the cooperation of those who respected the fenced and posted areas during the summer nesting season. Volunteers are being sought to assist next summer with public education efforts at several nesting beaches in the West Haven, Stratford, and Milford areas. For more information about being a volunteer, email Wildlife Division biologist Julie Victoria (julie.victoria@po.state.ct.us).

A juvenile piping plover (left) and an adult plover forage on a mud flat along the Connecticut coastline as the tide recedes.

Native Plant Profile

Sambuca anyone? No, not the drink … the wildlife food

Written by Peter Picone, Habitat Management Program

The plant genus name *Sambucus* is actually derived from the Latin word "Sambuce," which means flute. Crude flutes can be created from elderberry stems because of their easily hollowed out cores. Two native elderberry shrubs are found in Connecticut. They are the common elderberry (*Sambucus canadensis*) and red elderberry (*Sambucus racemosa*). Distinct differences between the two readily help differentiate them. First, the blossom of the common elderberry is flat and rounded, whereas the red elderberry blossom is steeple- or cone-shaped. Common elderberry blossoms are displayed in a flat cluster that looks like a giant Queen Anne's lace flower, while the red elderberry's blossom is shaped like a lilac blossom. The second easily discernible difference is between the fruits of the two plants and when they ripen. The purple-black fruits of the common elderberry ripen in September while the bright red berries of the red elderberry begin to ripen in late June to early July. Because the bark and leaves of both elderberries are very similar, the differences in the blossoms and berries are better identifying characteristics.

Songbirds, including robins and catbirds, have been observed feeding on ripening red elderberries in early summer. The red elderberry fruits ripen in mid- to late June, along with native red mulberries and black raspberries. In Connecticut, red elderberry can be found growing in localized forest edges of higher elevations, especially along seepy, rocky outcrops or in swampy edges of fields. A good location for observing songbirds feeding on red elderberries is along Route 179 in Canton on the west slope of a rocky hillside that overlooks the Farmington River.

The common elderberry is more easily found and, just as its name implies, it is "common" throughout Connecticut. A songbird observed frequently in patches of elderberry is the common yellowthroat, which uses shrubby thickets and gleans insects feeding in and around the common elderberry.

Both elderberries have a warty stem that has well hidden buds, making them appear somewhat lifeless in winter. The canes of the elderberries tend to die back and then resprout vigorously by the end of spring. Elderberries do best when planted in moist soil conditions, especially around ponds, streams, and seeps. They respond well if they are pruned back every few years so as to restore their vigor.

American Wildlife and Plants: A Guide to Wildlife Food Habits lists about 35 wildlife species in Connecticut that have been documented to feed on the native elderberries. Learn to appreciate native Connecticut shrubs, such as the common and red elderberries, and plant them on your property to diversify the habitat and provide valuable food and cover for wildlife. The difference in the timing of when the native elderberry fruits ripen is valuable to know, especially when creating a habitat plan which includes a variety of seasonal fruits for wildlife.

P. PICONE

The bright red berries of the red elderberry begin to ripen in late June to early July and are eaten by several songbird species, like robins and catbirds.

Learn More About Native Plantings for Wildlife

The Wildlife Division has two publications that can provide more information on native plants for wildlife. The *Connecticut Native Tree and Shrub Availability List* helps homeowners and landowners find names of Connecticut nurseries that carry native planting stock for wildlife habitat enhancement. This 12-page booklet can be found on the Wildlife Division's section of the DEP website (www.ct.gov/dep) or obtained by calling the Division's Sessions Woods office (860-675-8130).

The other helpful publication is *Enhancing Your Backyard Habitat for Wildlife*, a 28-page, colorful and practical guide for those interested in making their backyards more attractive to wildlife. The cost is minimal ($3.00). To order a copy, please send your name, address, and a check (payable to DEP Urban Wildlife Program) to the DEP Wildlife Division, Urban Wildlife Program, P.O. Box 1550, Burlington, CT 06013.

Mosquitoes,

continued from page 7

had seven human cases of EEE, including two deaths, which were the first diagnosed human cases that state had ever seen.

We can never predict from year to year what the mosquito season will be like, despite the media looking for a preseason forecast or the occasional office parlay. But, hopefully, in an effort to prevent human health outbreaks, we can learn from the past, look for long-term trends, use new technology for surveillance and control as it becomes available, and be better prepared when (not if) these arboviruses emerge.

Field Archery Range Improvements Completed

Nye Holman State Forest Eagle Scout Project

Major repairs to the field archery range located in the Nye Holman State Forest in Tolland were completed this past summer. The range improvement effort was completed in June by Eagle Scout candidate Jarod Swanson, in partial fulfillment of scouting's highest rank of achievement. Jarod and volunteer members of Boy Scout Troop 2 from Tolland accomplished the leadership service project. Troop members contributed a total of 351 hours of labor to bring the project to completion. Jarod recently completed all the requirements to earn the rank of Eagle Scout, which was presented to Jarod at a ceremony held by the Boy Scouts of America's Connecticut Rivers Council.

According to Dale May, Director of the DEP Wildlife Division. "This project was sorely needed and greatly appreciated."

"Jarod and his fellow scouts should be extremely proud of their accomplishment, which shows a tremendous amount of work, planning, and coordination put into a task that will provide a unique recreational shooting opportunity for many years to come," added David Kubas, Coordinator of the DEP's Conservation Education/ Firearms Safety (CE/FS) Program.

M. CLAVETTE

The photograph shows a typical archery target (right) with the target frame built by Eagle Scout Jarod Swanson. The structure to the left is a bow rack used to hold bows of people waiting to shoot the next target.

The Nye Holman Archery range has been available for general public use since the 1980s and involves a walking course of free-standing archery targets that extend through a variety of wooded terrain and field conditions. A separate practice area is included to allow shooters to practice their skills before entering the walk-through course. For many years, the range was maintained through the voluntary contributions and efforts of a local archery club, which has since become inactive. The range, which is the only range of its type that exists on public land in Connecticut, was in dire need of repairs to once again make it functional for various members of the public. The Boy Scout project involved complete reconstruction and placement of 17 wooden target stands, trail improvements, and repainting of course directional signs and yardage markers. A new entrance sign and course map were created and installed. Repairs to a footbridge that crossed a small brook also were made following the flooding that occurred in October 2005. DEP Parks and Forest Recreation Supervisor, Marilyn Aarrested, who oversees operations in the Shenipsit, Nye Holman, and Nipmuck State Forests, provided coordination for the project.

Supplies and materials used in the project were provided by the DEP Wildlife Division, using federal funds allocated to Connecticut's CE/FS Program. Federal funds available to the states through the Federal Aid in Wildlife Restoration Act (commonly referred to as the Pittman-Robertson Act) are derived from a federal excise tax on firearms, ammunition, and archery equipment. Connecticut receives a special allocation of federal funding that can be used for the construction, operation, maintenance, and enhancement of public target and shooting ranges.

The archery range at Nye Holman State Forest is available for general public use during daylight hours, seven days per week, except when posted for special events. Archers are restricted to target field points on arrows. Broad head hunting-type arrows are strictly prohibited to preserve the longevity of the targets.

Building Shelter for Bluebirds

Once again, the DEP Wildlife Division is offering bundles of rough-cut lumber to groups for building bluebird nest boxes. For more than two decades, the Division has offered 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 starting in November 2006. Group leaders should send a postcard to the Division's Wildlife Diversity Program, P.O. Box 1550, Burlington, CT 06013. 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, 2007. Only one request per group will be accepted and participants will be notified in late January. Groups will be responsible for picking up their wood at the Sessions Woods Wildlife Management Area on Route 69 in Burlington.

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

DEP Announces Grassland Habitat Conservation Initiative

The DEP recently announced a new initiative aimed at conserving grassland habitat in order to protect critical nesting and breeding grounds for birds and other wildlife species. This initiative was selected as the first major statewide action to be addressed under Connecticut's Comprehensive Wildlife Conservation Strategy (CWCS), which is a federally approved and funded strategy for wildlife management and conservation projects. Grassland habitat is identified in the CWCS as a priority habitat because it provides nesting and breeding grounds for 80 bird species in our state, 13 of which are listed under the Connecticut Endangered Species Act. This habitat also supports an abundance of other wildlife, including mammals, reptiles, amphibians, and invertebrates.

P. J. FUSCO

"Connecticut already has a strong reputation for conserving essential habitats," said DEP Commissioner Gina McCarthy. "Through Connecticut's Open Space Program, the Farmland Preservation Act, and the Community Investment Act, we have established a solid framework for protecting and preserving natural resources and the beauty of Connecticut, as well as the species that depend on these habitats. The Grassland Habitat Conservation Initiative strengthens our efforts to achieve these objectives with a specific focus on a vital habitat which is in decline."

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

- Complete a statewide survey to identify the location and quality of existing grasslands and lands suitable to create grasslands;
- Establish a statewide goal for the number of acres of grassland habitat necessary to maintain a diverse population of grassland bird species throughout the state;
- Expand efforts to acquire and/or protect grasslands in order to reduce the number of state threatened and endangered grassland bird species;
- Make acquisition of wildlife habitat a key priority in the revision of the DEP's Open Space Acquisition Plan; and
- Expand efforts to create partnerships and, hence, improve the dissemination of information among state and local officials and landowners.

"Grassland habitat is in serious decline throughout the state, especially in the Connecticut River Valley, from the Hartford area north to the Massachusetts state line, where most of the prime habitat is located," said Edward Parker, Chief of the DEP's Bureau of Natural Resources. "This valley is the primary migratory corridor for grassland bird species that return to the state each spring to breed and rear their young. These lands also are under intense land development. The Department looks forward to working with a broad based group of partners to conserve grassland habitat."

"Birds are essential to the complex ecosystems of agriculture," noted F. Philip Prelli, Commissioner of the Connecticut Department of Agriculture. "Conserving their habitat helps to ensure adequate pasture land for our farmers, as well as preserve the beloved rural character of the state. This initiative will strengthen our existing efforts and complement the successful programs that we have in place. The Department of Agriculture looks forward to working with the DEP and other partners involved in this very worthwhile endeavor."

Conservation actions to address grassland decline will be coordinated with key partners, including the U.S. Fish and Wildlife Service, U.S. Department of Agriculture, Natural Resources Conservation Service, other state agencies (including the Departments of Agriculture, Economic and Community Development, Transportation, and the Office of Policy and Management), Connecticut Audubon, Connecticut Ornithological Association, Audubon Connecticut, The Nature Conservancy, Connecticut Farmland Trust, Connecticut Farm Bureau, Working Lands Alliance, Trust for Public Land, The Wildlife Management Institute, sportsmen's conservation organizations, and municipalities.

In addition to partnerships, the initiative calls for the creation of a Leadership/Policy Committee comprised of state agency heads or their designees to provide direction to agency staff, foster support for the initiative, and assure a coordinated effort. A Technical Working Group will be created, consisting of state, federal, and local agencies, landowners, academia, agricultural interests, and open space advocates to enhance communication and the exchange and dissemination of information that will help target future acquisitions.

FROM THE FIELD

Volunteer for the Midwinter Bald Eagle Survey

The 2007 Midwinter Bald Eagle Survey will be held in Connecticut on Saturday, January 13, 2007, from 7:00 AM to 11:00 AM. The purpose of the survey is to monitor the status of bald eagle wintering populations in the contiguous United States by estimating national and regional count trends, overall and by age class. Each January, several hundred individuals count eagles along standard, non-overlapping survey routes.

Participating in the Midwinter Eagle Survey is simple and no birding skill is necessary. However, the weather can be cold, so dressing warm is a must. Volunteers are assigned an area and asked to bring binoculars or a spotting scope if they have one. Eagles are inactive and conserving energy most of the day during cold weather. They usually feed during mid-morning if there is open water and the weather isn't harsh. Therefore, volunteers are looking for birds flying, soaring, feeding, or loafing on perches.

Those interested in volunteering for the 2007 Midwinter Bald Eagle Survey should send a postcard with your name and mailing address to: Julie Victoria, Franklin Wildlife Management Area, 391 Route 32, North Franklin, CT 06254. You will receive an information packet about the survey in December.

8th Annual Eagle Festival, February 17-18, 2007

The Connecticut Audubon Society will present the 8th Annual Eagle Festival in Essex on February 17-18, 2007. 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 1-800-714-7201. To find out more about the Festival, visit Connecticut Audubon's website at www.ctaudubon.org.

P. J. FUSCO

Shepaug Eagle Observation Area

Opens December 27

The Shepaug Eagle Observation Area, in Southbury, will be open to the public on Wednesdays, Saturdays, and Sundays from December 27, 2006, through March 14, 2007, 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.

Starting December 5, 2006, reservations for the Shepaug Eagle Observation Area can be made Tuesday through Friday, from 9:00 AM to 3:00 PM, by calling 1-800-368-8954.

Volunteers Needed

Volunteers are needed at the Shepaug Eagle Observation Area to assist visitors and provide information on bald eagles. The Observation Area is open from December 27, 2006, to March 14, 2007, on Wednesdays, Saturdays, and Sundays. Interested individuals are asked to attend a volunteer training session on December 2, 2006, from 9:00 AM to 1:00 PM, at the Northeast Generation Services office in New Milford. For more information, contact the Connecticut Audubon Coastal Center at Milford Point (203-878-7440).

Build Up Your Knowledge of Beavers

Connecticut's beaver population has expanded in both numbers and range over the last several decades. Along with that expansion has come an increase in problems between beavers and people. To help deal with these problems, the DEP Wildlife Division provides technical assistance in methods to alleviate problems and maintains a list of volunteer beaver trappers who will trap nuisance beavers.

In 2004-2005, approximately 900 beavers were harvested during the regulated trapping season. About 53% of those beavers were harvested to resolve nuisance problems. Beaver complaints rose from approximately 200 per year in the early 1990s to 300 per year in the late 1990s and have subsequently declined.

If you want to learn about what to do to resolve beaver problems, or if you just have an interest in knowing more about these interesting animals, the Wildlife Division has published a fact sheet on beavers, as well as the booklet "Beavers in Connecticut; Their Natural History and Management." Copies of these publications can be obtained from the Division's Sessions Woods office or on the DEP website (www.ct.gov/dep).

Connecticut Youth Hunters Participate in Survey

In an effort to determine what factors may affect the participation of youths (ages 12-17) in hunting, the DEP Wildlife Division mailed survey questionnaires to over 1,000 Connecticut youth hunters in 2005. Over 80% of the youth hunters who were sent surveys returned them.

A preliminary assessment of survey returns indicated that of the almost 700 youths that graduated from the Connecticut Conservation/Education Firearms Safety Program in 2005, eight out of 10 youths purchased a hunting license and seven out of 10 purchased a license and hunted during their first year. There was a greater tendency for younger youths (ages 12 and 13) to take the course and hunt their first year than for older youths (ages 14-16). The most popular species hunted by youths included deer (62%), pheasants (52%), squirrels (23%), turkeys (18%), rabbits (11%), and ducks (10%).

Further analysis of the data will look at what types of incentives may increase youth participation in hunting, what factors act as roadblocks, and what youth hunters liked most about hunting. A detailed analysis of the survey results will be provided in an upcoming issue of *Connecticut Wildlife*.

No Trespassing Means Do Not Trespass

When walking on the beach you see a sign that reads **PLEASE STAY AWAY FROM BIRD NESTING AREAS,** or while boating you see a sign on an offshore island that reads **DO NOT ENTER BIRD NESTING AREA,** or in the woods you come up to a sign reading **Special Use Permit Required NO TRESPASSING**. It seems simple enough to know what these signs all mean -- they mean "keep away."

The DEP Wildlife Division appreciates the cooperation of those who respect fenced and posted areas. It takes time and personnel to post and fence areas to protect wildlife and habitat and the Wildlife Division doesn't do it needlessly. No one likes to go to a favorite recreation area and see these signs; however, the signs are necessary to keep various wildlife species an important part of Connecticut's biodiversity.

So why do some people ignore these signs? The excuses or reasons usually begin with: "I'm not hurting anything. I'm just taking a photograph, …or walking my dog, …or adding this species to my bird list…" What these people are not considering is that they will not be the only contact this animal will have with humans or predators during the course of the day, and the cumulative effect can be deadly for the animal.

This request may sound like a broken record, but the Wildlife Division is requesting the continued help of Connecticut's concerned citizens. If you see violators, please contact the **DEP's TIP Hotline (1-800-842-HELP)** or local authorities to report your observations.

Julie Victoria, Wildlife Diversity Program

Volunteer for Wildlife

Do you have time to volunteer for the DEP 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. 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 to allow for field experiences, in addition to formal classes.

Upon completion of the classes and passing the examination, volunteers are asked 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, also are considered valid volunteer service.

The next program series is slated for spring 2007, beginning in March and ending in May. Applications for this series will be mailed in late November, along with a tentative class schedule noting dates and times. Most classes take place at the Sessions Woods Conservation Education Center in Burlington. 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 AM-4:00 PM) or laura.rogers-castro@po.state.ct.us.

Laura Rogers-Castro, Outreach Program

Give a Gift of Wildlife this Holiday Season!

***Connecticut Wildlife* Magazine**

A subscription to *Connecticut Wildlife* 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 back of this issue, send it in to the DEP Wildlife Division, and we'll take care of the rest.

The Wildlife Observer

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)

Goldfish for Lunch, Anyone?

Tina Delaney, a DEP employee based at the DEP Headquarters in Hartford and a Master Wildlife Conservationist for the Wildlife Division, had a surprising wildlife encounter at Bushnell Pond in Hartford in late August 2006:

"Even those of us that work in downtown Hartford are presented with opportunities to observe nature, if you are paying attention.

It was the great blue heron that first caught my eye, standing motionless in the waters of Bushnell Pond, blending in with the grayish blue stonewall. I wasn't surprised to see him there. The pond offers the type of food a great blue loves…fish. But what flew over the pond at that moment was a surprise--an osprey landing on the very top corner of the YMCA building! This "fish hawk," once near extinction, has made an incredible comeback. You normally see ospreys at their nesting platforms along the Connecticut shoreline. So to see it in downtown Hartford was truly amazing!

At that moment, the decision was made to get my camera and come back, hoping the two birds would still be there. When I returned, much to my surprise, not only were the heron and the osprey still there, but a snowy egret had joined them. All three "fish eaters" were there at the same time watching each other's techniques in trying to catch the BIG one. Neither the public walking by nor me clicking away with my camera kept any of them from their goal of getting a good meal at the park. As you can see from the picture, it was the osprey, that got the BIG one."

Six Peregrine Nests this Year, Not All Successful

Written by Julie Victoria, Wildlife Diversity Program

Every year the DEP Wildlife Division, with the help of volunteer observers, monitors known nesting pairs of state endangered peregrine falcons. This year, six pairs of peregrines nested in the state and successfully fledged chicks. However, the pair that has traditionally nested at the Travelers Tower in Hartford did not nest in 2006 and one other pair was not successful.

The volunteer observers who watched the peregrine nests kept track of when eggs were laid and when they hatched. Once the chicks were old enough, biologists accessed the nests to examine and band the young. The Wildlife Division has been placing leg bands on young peregrines since 1997, when Connecticut documented its first successful peregrine nest since the 1940s. This year, biologists were able to examine and band 12 chicks from five of the nests. The nest of a pair in Hartford County was inaccessible so the number of chicks that fledged from that nest could not be determined.

DEP - WILDLIFE DIVERSITY PROGRAM (2)

Wildlife Division biologist Howard Kilpatrick removes one of five chicks from a nestbox at a power plant in Milford so that it can be examined and fitted with identifying leg bands.

A pair in Middlesex County fledged three chicks, which were banded with the assistance of EnCon Police Officer Bill Myer and Francis Saunders of the Providence-Worcester Railroad.

A pair that nests on the P. T. Barnum Bridge in Bridgeport produced chicks for the seventh year. Three chicks were banded with assistance from Jon Fronte (labor foreman). Thanks are extended to Mary Baier of the Connecticut Department of Transportation and Edward Paulick (DMJM & Harris, Inc. Party Chief) for allowing the Division the opportunity to band the birds.

The big news comes from a nestbox that was put up in 2002 in the Devon section of Milford at an NRG power plant along the Housatonic River. Five chicks hatched from the nest this year! How common are five peregrine chicks in one nest? Nests with five eggs are not common; however, almost every state on the East Coast has recorded one or more nests with five eggs. There was even a nest with six eggs documented in New York! But, very often, all five young do not make it to flying stage. The Wildlife Division is pleased to report that all five of the Devon chicks fledged. Before they fledged, the chicks were banded with the assistance of Wildlife Division biologist Howard Kilpatrick and Joe McKenzie of NRG.

Historically, peregrine falcons used nest sites on high rocky ledges in towns like Avon, Meriden, or Guilford. However, peregrine nesting activity began to decline in Connecticut in the 1920s through 1930s. Nesting peregrine falcons completely disappeared from the state in the late 1940s and remained absent until 1997. In 1997, a pair of peregrines successfully nested on the Travelers Tower (this also was the site of the last known nesting in the 1940s). Since that time, the number of nesting pairs has grown in the state, but all have chosen man-made structures for nest sites, such as building ledges and bridges. However, that changed this year when a pair nested on a rocky ledge in New Haven County and produced one chick. That chick also was examined and banded by the Wildlife Division.

Five peregrine falcon chicks hatched and fledged from a nestbox at an NRG power plant along the Housatonic River in the Devon section of Milford.

Wildlife Calendar Reminders

Dec. 27-Mar. 14 .... Shepaug Bald Eagle Viewing Area open for the 2006-2007 viewing season (see page 16).

January-April ..... Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2006 Connecticut Income Tax form (see page 5 for more information).

Jan. 13 ..... Midwinter Bald Eagle Survey -- Volunteers are needed (see page 16).

Feb. 17-18 ..... 8th Annual Connecticut River Eagle Festival (see page 16 for more information).

Hunting Season Dates

Sept. 15-Dec. 30 ... Deer bowhunting season on state land bowhunting only areas and private land in deer management zones 11 and 12.

Nov. 15-24 ..... Deer shotgun season on state land (A season)

Nov. 15-Dec. 5 ..... Deer shotgun/rifle season on private land.

Nov. 25-Dec. 5 ..... Deer shotgun season on state land (B season) and state land no-lottery season.

Dec. 1 ..... Beaver trapping season opens.

Dec. 6-30 ..... Deer bowhunting season on private land (deer management zones 1-10).

Dec. 6-19 ..... Deer muzzleloader season on private and state land.

Dec. 20-30 ..... Second portion of the deer bowhunting season on state land.

Jan. 2-31, 2007 ..... Extended deer bowhunting season on private land in deer management zones 11 and 12. A 2007 deer permit and private land consent forms for 2007 are required.

Jan. 15-Feb. 15 ..... Late Canada goose hunting season in the south zone.

..... See the 2006 Connecticut Hunting and Trapping Guide for specific season dates and details. The 2006-2007 Migratory Bird Hunting Guide contains information on duck, geese, 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 2007 Connecticut Hunting and Trapping Guide will be available by mid-December.

Step Up to the Plate for Wildlife...

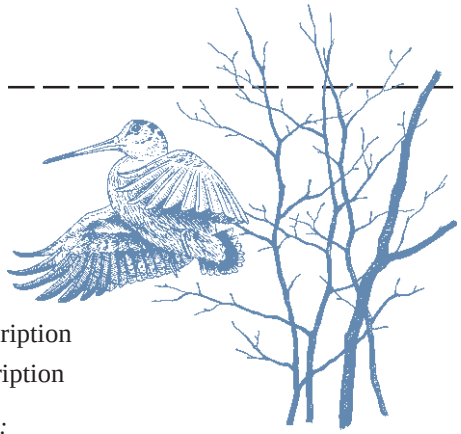
and show your support by displaying a wildlife license plate on your vehicle.

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



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P. J. FUSCO

Waterfowl hunters have several opportunities to harvest Canada geese in Connecticut. There is an early season in September, a regular season, and a late season in the south zone. Consult the 2006-2007 Migratory Bird Hunting Guide for specific season dates and hunting zones. The guide is available at DEP offices, town halls, and on the DEP website (www.ct.gov/dep).

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