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Connecticut Wildlife

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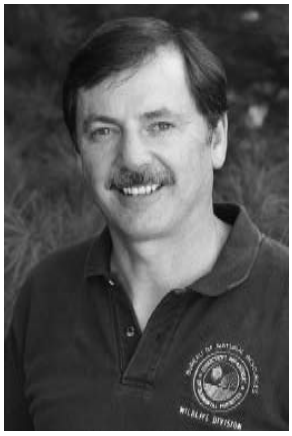
BUREAU OF NATURAL RESOURCES • WILDLIFE DIVISION

From the Director



Lately, I have taken to hunting with an older fellow. This man is a conservationist in every sense of the word. He is well-educated and well-traveled, but would likely say his favorite place to be is on a marsh with his dog when the ducks are flying. He has a deep passion for waterfowl and a lifetime of contributions to habitat protection. Because duck hunting is ingrained into the fabric of his life, he can truly be called a waterfowler.

On the other hand, I grew up hunting grouse, woodcock, and pheasants over an English setter. I have bought a Duck Stamp every year for nearly 40 years and, when the opportunity presents itself, when ducks are flushed incidentally to my main quarry, I will take a shot. If I am able to harvest one or two ducks per season, I consider myself fortunate. Because I hunt ducks, I am a duck hunter. But, I don't meet the standard of a waterfowler.

Waterfowlers prefer ducks to deer, turkey, or any other game. They pray for bad weather because that is what moves the birds. The pre-dawn cold, wind, and rain that leaves most people grateful for an extra blanket on the bed is the call to the marsh for the waterfowler. They get geared up, train their Labradors, practice their calls, and touch up their decoys in preparation for the fall season, which is the highlight of their year. And, they care about the ducks they hunt.

Without ducks there can be no duck hunting. This truth is self-evident. More than a century ago, when the duck populations were nearly wiped out by market hunting and unethical practices, the North American waterfowler was born. Their passion and their monetary contributions led to the establishment of refuges, the protection of breeding areas, and laws and regulations that allowed waterfowl populations to recover. Federal and state agencies were created to administer waterfowl hunting seasons based upon scientific data collected through research funded by hunters. And, conservation organizations, such as Ducks Unlimited and the Connecticut Waterfowl Association, have made invaluable contributions to the welfare of waterfowl.

I think about these things when I am in the marsh with my hunting partner and his dog. Chances are, if the ducks come, they are coming from a place that waterfowlers helped to save. The goal is to have abundant duck populations far into the future. Because of people like him, it's happening.

Dale W. May

Cover:

In November 2007, the Wildlife Division began a study investigating habitat use and energy budgets of black ducks wintering on the Connecticut coast. The article on page 6 gives an update on the progress of this project.

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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Increased Hunting Opportunities

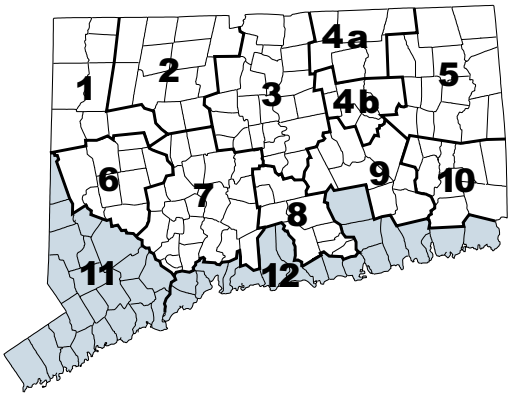
Written by Howard Kilpatrick, Deer Program

The DEP Wildlife Division has been working towards stabilizing and reducing overabundant deer populations. Deer management zones 11 (southwest Connecticut) and 12 (shoreline towns) have been the focus of efforts to stabilize deer population growth. Deer management efforts in these two zones have been hampered by limited access to relatively small parcels of private property for hunting and many large parcels of protected open space that have been closed to hunting. This situation, combined with limited use of firearms due to the 500-foot discharge law and public concerns about hunting safety, has made deer management a challenge in these zones.

Since 1995, hunting regulations have been modified to increase hunter opportunities and efficiency at harvesting deer in the two zones. Some examples include: replacement antlerless tags, earn-a-buck program, extended seasons, January bow season, and use of bait. These changes, along with efforts by town officials to enlist open space to deer management, have resulted in significant progress towards population stabilization. However, more work is needed in terms of educating residents about the ramifications of "not managing deer" and the benefits of increasing hunter harvest.

To further increase hunter harvest, the Wildlife Division has submitted a regulation proposal that would allow bowhunters to use crossbows on private lands in zones 11 and 12 during the January archery deer season. Bowhunter participation and harvest are relatively low during the January season. Crossbows are easier to operate than bows, especially during cold weather, and their use would increase hunter success and participation. Several northeastern states, including Maryland and Pennsylvania, have recently legalized crossbows for managing suburban deer populations. A survey of homeowners in Greenwich found that a majority of landowners supported the use of crossbows to increase the deer harvest.

Connecticut Deer Management Zones



Crossbows provide a safe and efficient tool for removing additional deer from areas where deer are overabundant.

It is important to provide hunters with the tools they need so that the deer population can be managed. If hunting cannot be used to adequately manage deer populations, then communities will be left with more costly and less practical management options that aren't effective at the landscape level.

Building Houses for Bluebirds

The Wildlife Division is once again offering bundles of rough-cut lumber to groups free-of-charge 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. Providing nesting locations has helped the bluebird increase its numbers across the state.

The wood for building nest boxes can be reserved by organized groups **only** on a "first come, first serve" basis. Twenty-five weathered bundles of wood that are left over from last year are available immediately at the Sessions Woods Wildlife Management Area (WMA), located on Route 69 in Burlington. Another 50 new bundles will be available by January 2009. Group leaders should call Wildlife Division technician Geoffrey Krukar at 860-675-8130 to make a reservation. Requesters will be required to provide the following information: their name, group name, mailing address, daytime phone number, and number of bundles requested. Each bundle of wood yields approximately 15-20 nest boxes. Please be aware that the lumber consists of planks, therefore all groups will be responsible for cutting the wood to the correct size.

Only one request per group will be accepted and participants will be mailed information packets that contain box designs, directions to the pick up location, and claim tickets. When notified, groups will be responsible for picking up their wood at the Sessions Woods WMA. Arrangements to receive lumber at other state-owned facilities can be made on a case-by-case basis.

Groups that 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.

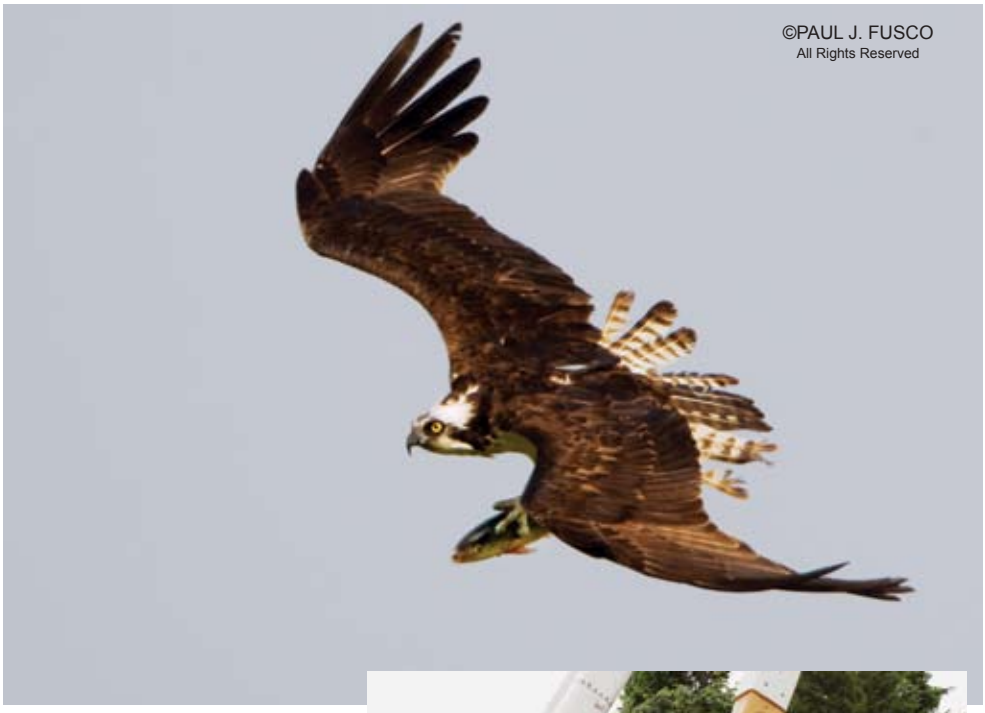
Although lumber is only available for groups, individuals interested in aiding Connecticut's bluebird population may obtain a bluebird fact sheet with nest box plans, box location tips, and nest box survey cards by contacting the Wildlife Division's Sessions Woods office or visiting the wildlife section of the DEP website (www.ct.gov/dep/wildlife). Survey cards for reporting box use and location are part of a statewide network that helps monitor bluebird population trends.

Groups that participate in the Bluebird Restoration Project will be expected to construct, erect, and monitor the bluebird boxes throughout the nesting season (March-July).

Ospreys Still Soaring Along Connecticut's Coast

Connecticut's osprey population was in trouble in the 1960s when it was determined that pesticide contamination was causing osprey eggshells to weaken, resulting in nest failures due to cracked eggs. By 1974, only nine active osprey nests were recorded in Connecticut. However, with the banning of the pesticide DDT in 1972 and the placement of artificial nest platforms along the coastline, osprey populations have made a remarkable recovery.

Over the years, numerous volunteers have monitored the platforms, reporting their observations and the number of young produced in nests to the Wildlife Division. Efforts have also been made to place identifying leg bands on some of the young ospreys. The recovery of leg bands helps biologists track where the young birds migrate, where they eventually have nests of their own, and how long they live.



P. J. FUSCO (4)

Wildlife Division biologist Julie Victoria set out this year to place leg bands on some of the young osprey hatched in Connecticut. She is continuing the work started by the late Jerry Mersereau, a longtime Wildlife Division volunteer and bird bander (the Sept./Oct. 2004 and May/June 2005 issues of *Connecticut Wildlife* contain more information about Jerry). On a warm, sunny day in late June, Julie and several volunteers visited nine osprey nests. The group started out at the Millstone Power Station in Niantic, which had six active osprey nests. Three of the nests were accessible and three young were banded (two young in one nest were too small to band). The other six nests visited by the group were located in Stonington and Mystic, where a total of 13 additional young ospreys were banded.

Thanks are extended to the volunteers who helped out: Hank Golet (a longtime volunteer from the Bald Eagle Study Group); Greg Decker (Biologist from the Millstone Environmental Lab); Cathleen Balantic, Lynette Gardner, and Susan Gonzalez (Millstone Environmental Lab); Meg Nieman from the Environmental Management Department of Northeast Utilities; and the operators of a bucket truck provided by Connecticut Light & Power.

Top: An adult osprey flies overhead while workers access an osprey nest to temporarily remove the young ospreys for banding. Middle: Greg Decker, a biologist from Millstone Environmental Lab, hands an osprey chick that has just been banded to volunteer Hank Golet so that it can be returned to its nest. Above: Hank Golet holds an osprey chick, as does Greg Decker (left).

State Threatened Piping Plovers Produce 102 Chicks

Written by Orla Molloy, Wildlife Diversity Program

P. J. FUSCO

Newly hatched piping plover chicks are extremely vulnerable to predation and disturbance by dogs and people along Connecticut beaches.

Piping Plovers

Connecticut had one of the most successful piping plover breeding seasons since record keeping began in 1986. The last fledglings from 2008 headed south shortly after Labor Day. This breeding season hosted 41 plover pairs, up from 36 in 2007, and yielded 102 fledglings, up considerably from 69 in 2007. This is the first time since the monitoring program started in 1986 that Connecticut has turned out over 100 fledglings!

Piping plovers used Connecticut beaches from Stratford to Waterford for the 2008 nesting season. Plovers had the greatest breeding success at Long Beach in Stratford, Sandy Point in West Haven, Griswold Point in Old Lyme, and Harkness State Park in Waterford. Long Beach yielded 14 fledglings, up two from 2007. Sandy Point generated 20 fledglings, doubling that of last year. Griswold Point produced 10 fledglings, up from four just the year before. Numbers at Harkness State Park increased from 10 fledglings in 2007 to 17 fledglings in 2008.

The piping plover is a state and federal threatened species that is protected under both the federal and Connecticut Endangered Species Acts. Seasonal staff for the Wildlife Division, along with 43 volunteers, monitor breeding pairs, beginning in April and May, at established nesting sites. As soon as breeding pairs are observed at nesting beaches, string fencing is put up to act as a buffer to discourage people from entering such areas and disturbing the birds. Bright yellow signs reading "Keep Away" and "No Dogs Allowed on Beach" are also posted. When nests are found with a total of four eggs (3 eggs, in some cases), a wire fence exclosure is put around the nest and mesh netting is placed over the top. The exclosure helps prevent depredation from foxes, dogs, raccoons, cats, and avian predators, such as gulls and herons, but it does not prevent the breeding pair from entering or exiting at their leisure through the small openings in the fencing.

Plovers face many challenges when deciding to nest on Connecticut beaches. Human disturbance played a critical role this year in the failure of nests. Plovers are by nature skittish birds. In order to have a successful nest, they need to have as little disturbance as possible. If they are continuously flushed off their nest, they will not incubate their eggs or might even abandon incubated eggs. This was the case in Milford this past summer. There was blatant disregard for the nesting pair when beer cans and empty cases were found on top of the exclosure!! Overnight parties were being held on this beach, causing the breeding pair to abandon their nest. This unfortunate situation could have been prevented had people respected the buffer zone. Overnight policing at the site might also have prevented the problem. Sunbathers and photographers at Griswold Point caused the abandonment of two plover nests due to their close proximity to the string fencing.

A major concern is the loss of suitable breeding habitat for plovers. Plovers need sandy and vegetation-free beaches for successful nesting. Most Connecticut beaches are inundated with beachfront communities, causing the degradation of critical habitat for plovers. Some pairs have been forced to nest below the high tide line, making them vulnerable to wash outs. Two nests this season failed due to wash outs. Some pairs are forced to nest closer to each other or even in areas with vegetation, which brings a higher risk for predation. Three nests failed this year due to depredation.

Least Terns

The 2008 least tern nesting season was not as triumphant as the plover's this year. Although least terns are not federally threatened, they are state threatened and should be considered important in conservation efforts. Least terns are colonial nesters with colonies that can reach into the hundreds. Of the 252 pairs of terns that nested on Connecticut's beaches in 2008, only 76 chicks fledged. However, the number of terns within the state, as well as the number of fledges, did increase from last year's 147 pairs and 59 fledglings. Same as with piping plovers, Long Beach, Sandy Point, and Griswold Point had the greatest breeding success.

Least terns face similar obstacles as piping plovers. They have to contend with depredation, loss of suitable habitat, wash outs, and human disturbance. Disturbance plays a key role in the failure of colonies. Like the piping plover, nesting least terns will abandon their nests if kept off for a prolonged amount of time. Depredation in tern colonies is difficult to prohibit due to the flying nature of this bird. Colonies are roped off with string fencing, but exclosures cannot be placed around individual tern nests as a preventative measure against depredation.

2008 has delivered some of the highest breeding numbers to date for both of these species. The nesting season might not have been so successful had it not been for the wonderful help from the many volunteers and the staff of the U.S. Fish and Wildlife Service's Stewart B. McKinney National Wildlife Refuge, plus monitoring and public awareness conducted by Wildlife Division seasonal staff. Thanks are extended to all who helped this year.

Funding for this project was provided by Section 6 of the Endangered Species Act, which provides grants to states and territories to support participation in a wide array of conservation projects for species on the federal list of threatened and endangered species, as well as for species that are candidates or have been proposed for listing.

Wintering Black Duck Study Enters into a Second Year

Written by Min Huang, Migratory Gamebird Program

In November 2007, the Wildlife Division began a study investigating habitat use and energy budgets of black ducks wintering on the Connecticut coast. This study should also help in estimating the carrying capacity of various black duck wintering habitats and provide needed information on where black ducks spend their time. In conjunction with the determination of habitat use, the study will also quantitatively assess time and energy budgets of black ducks in these respective habitats and quantify available food resources throughout the wintering and spring staging period. This information will better inform wetland restoration work in not only Connecticut, but throughout the Atlantic Flyway.

From November 2007 through January 2008, 34 hen black ducks were captured with the use of swim-in traps and rocket nets. All hens were fitted with radio transmitters. Radio telemetry equipment was used four times a week to pinpoint locations for each bird. As was expected, contact was lost with some (13) of the radio-tagged ducks. Based on the timing, eight of the 13 birds presumably left the state and went further south. These birds were lost during two extreme cold snaps. The other five birds likely left the state and started moving north to the breeding grounds, as contact was lost in early and late March. A total of 7 birds were residents, as they were still alive and in the state at the end of April.

Apart from the ducks that left the state and two that moved some distance, the other radio-tagged birds did not move much from where they were captured. One duck captured in Stratford relocated to Greenwich, where it stayed throughout winter and spring and presumably nested on one of the offshore islands in Greenwich Harbor, likely Great Captains Island. The other bird that moved an appreciable distance was originally caught in Guilford and then moved to Durham, where it spent several weeks before moving back to the original capture site. In April, the duck moved back to Durham, where she likely attempted to nest.

Another aspect of the study is to quantify time and energy budgets of wintering birds. Time budget surveys were conducted at each of the study sites at least four times a week. As one might expect, black ducks spent the majority of their time feeding, followed by sleeping and loafing. Winter is a time of hardship for ducks, and the least amount of time spent moving around, the more energy they conserve and the more fat reserves that can be built up for nesting. The ducks spent over 37% of their time either loafing or sleeping. An additional 35% of their time was spent foraging.

C. ROCKWELL / FOR MIGRATORY BIRD PROGRAM

A radio transmitter is placed on a hen black duck as part of a wintering black duck study. The radios are attached with harnesses that are adjusted to fit each individual bird. Once the ducks are equipped and before being released, they are held for a while to insure that the radio is not interfering with any of their activity.

Food available to wintering ducks was estimated by taking 15 core samples and 15 sweep samples from each study site each month. (Core samples are mud/vegetation samples that are taken with a metal corer. Sweep samples are taken from the water column and emergent vegetation with the use of a modified fine mesh net.) These samples were screened for invertebrates and seeds. As expected, there was depletion of available resources over the course of winter. There was a clear decline from November through March in the biomass of invertebrates in the samples. The seed biomass is still being sorted out, but it is likely that the trend will be similar. All samples will be analyzed to determine the nutritive value of each invertebrate and seed. This data will help researchers construct time and energy budgets for the black ducks to determine how well they are faring throughout the winter in these habitats.

The final piece of the puzzle is to determine whether black ducks are using all available habitat on the coast, or if there are factors that preclude the birds from using certain areas. Weekly surveys of 25 marshes were conducted along the coast to gauge black duck use. These data, along with radio telemetry results, should provide information on areas that are used by black ducks and areas that are not. The next step will be to determine what factors might cause black ducks to avoid certain areas.

The Wildlife Division currently has funding in place to cover two years of work on this project. It is hoped that additional funding may be secured to extend the project into a third year.

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

Funding from the Federal Aid in Wildlife Restoration Program is derived from an excise tax on firearms and ammunition that is paid by sportsmen.

Fewer Acorns Found During 2008 Mast Survey

Written by Michael Gregonis, Deer/Turkey Program

Knowledge about mast is important because its availability can influence productivity of squirrels, deer, bears, wild turkey, ruffed grouse, and many other wildlife species. Mast is a word often used by biologists, although many people may not know what it is. In general, mast is the nuts and berries produced by trees and shrubs. There are two categories: hard mast (e.g., acorns, beech nuts) and soft mast (e.g., blueberries, wild cherries, raspberries).

States from Maine to West Virginia are participating in a cooperative research project focused on the mast production of white and red oak groups. The results of the project will be a single online database available to wildlife biologists and the public for the purpose of tracking annual hard mast productivity. The goal of the survey is to gather regional information regarding hard mast production, which will aid in the management of wildlife species in northeastern United States. The Wildlife Division joined this regional effort in 2007 and initiated a field study to assess hard mast production in each of Connecticut's 12 deer and turkey management zones (see zone map on page 3). This information, in conjunction with ongoing acorn abundance assessment from the deer hunter survey, will assist in gaining knowledge of annual acorn productivity throughout Connecticut's oak forests.

At 11 of 12 study sites, 25 trees from the white oak group (e.g., white, chestnut, swamp) and red oak group (e.g., red, black, pin, scarlet) were selected for sampling. At one site, 50 trees were selected from the red oak group because of the limited number of white oaks available for sampling. Sample trees were numbered and marked with white paint indicating species from the white oak group and red paint for the red oak group. Marking the trees with paint and a metal numbered tag assists with locating each tree on an annual basis.

To assess annual hard mast productivity, the crown of each tree is scanned visually for 30 seconds with binoculars to detect the presence or absence of acorns. Surveys are conducted from August 15 to September 1, and all trees are assessed to determine the proportion of sample trees that have mast, providing an index of productivity (see table).

A productivity scale of 0 (scarce) to 6 (abundant) was used to rank mast abundance at the regional and statewide levels. The statewide index for 2008 was 2.4, whereas during 2007 the index was 3.9. This year's index indicates that statewide acorn abundance was scarce to moderate. On a regional basis, acorn abundance ranged from a high of 4.2 in zone 10, to a low of 1.4 zone 9. The mast index fell into the scarce to moderate category in the remaining management zones.

The mast information will also be used to predict productivity in some wildlife populations and the deer harvest. Past research has shown that in years with high acorn abundance, more food is available for some wildlife species (e.g., tree squirrels), creating conditions that enhance survival and increase production of young the following year. From information reported on the annual deer hunter survey, it was found that in years of low acorn abundance the deer harvest increases. This increase in harvest is attributed to increased movements by deer from feeding to bedding areas and longer foraging periods in fields. Acorn mast is very important to many wildlife species and can affect population fluctuations and impact vulnerability to hunting pressure.

Connecticut Hard Mast Survey, 2008

Zone	Location	Percent Acorn Abundance		Total Percent Acorn Abundance	Research Mast Index
		White	Red		
1	Housatonic WMA	16	56	36	2.2
2	Sessions WMA	20	64	42	2.5
3	Scantic River SP	0	54	54	3.2
4	Belding WMA	60	36	48	2.9
5	Yale Forest	28	28	28	1.7
6	Aldo Leopold WMA	28	56	42	2.5
7	Sleeping Giant SP	36	36	36	2.2
8	Cockaponset SF	32	24	28	1.7
9	Hurd SP	28	20	24	1.4
10	Franklin WMA	84	56	70	4.2
11	Huntington SP	24	32	28	1.7
12	Barn Island WMA	28	60	44	2.6
Mean					**2.4**

Give a Gift of Wildlife this Holiday Season!

The DEP Wildlife Division has unique and affordable holiday gift ideas for those with an interest in wildlife:

Connecticut Wildlife Magazine: A subscription is the perfect gift for any wildlife enthusiast. Each recipient will receive a postcard informing them of your gift. Just fill out the form at the back of the magazine and send it in with your payment. We'll take care of the rest.

Wildlife License Plates: Show your support for wildlife by purchasing a license plate for your vehicle featuring a bald eagle or bobcat. Funds raised from sales and renewals of the plates are **only** used for wildlife research and management projects; habitat projects; 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 visit the Division's Sessions Woods Conservation Education Center to shop from a selection of wildlife and nature-oriented books contained in a book cart sponsored by the Friends of Sessions Woods. Sessions Woods is located at 341 Milford St. (Rt. 69), in Burlington, and is open Mon.-Fri. (except holidays), from 8:30 AM until 4:00 PM. For more information, please call Sessions Woods at 860-675-8130.

Is It a Decline in Chimneys or Swifts?

DEP Biologists Work Regionally to Answer this Question

Written by Shannon Kearney-McGee, Wildlife Diversity Program

What do chimneys and insects have in common? They are the two critical ingredients needed for chimney swifts to breed in Connecticut. Chimney swifts are named because of their innovative adaptation in the face of urbanization. Many people recognize them as resembling a "flying cigar." They once nested in old hollow trees, but luckily, chimneys were an adequate replacement as these trees were removed from the landscape.

You may have noticed that these "flying cigars" around your chimney are becoming more rare. Current U.S. Geological Survey (USGS) Breeding Bird Survey data and Partners In Flight population estimates indicate that more than a half million swifts will be lost this year. This population decline of four percent a year is alarming. The estimated declines have prompted DEP Wildlife Division biologists to cooperate with other state wildlife agencies and organizations to develop Chimney Watch, a regionally coordinated effort to monitor chimney swifts. Biologists want to understand why the birds are declining and what can be done to stop the decline. The first question Chimney Watch aims to answer is whether or not suitable nesting chimneys are limited. This research question stems from the observation that many chimneys are being capped and new building construction includes chimneys that are structurally inadequate for chimney swift nests. Chimney Watch monitoring will quantify how many chimneys are suitable for chimney swift nests and how many of these suitable chimneys are actually occupied by nesting swifts.

This past season, DEP biologists implemented Chimney Watch in Connecticut. Staff inventoried 13 randomly selected locations to determine chimney availability. Chimney availability was determined from exterior observation and, if chimneys were capped, they were not considered available. At inventory locations, the density of available chimneys ranged from three to 600 per square kilometer. Towns with inventories are illustrated in the accompanying figure. All sites reported at least 25% of the chimneys as "available." Randomly selected available chimneys from the inventory locations were then surveyed for swift occupancy and none of the selected chimneys were occupied by swifts. Swifts were observed flying in the vicinity of only four of the survey blocks. From opportunistic conversations with homeowners, observers were made aware that some of these chimneys had historical swift nesting, but the swifts were not using the chimneys this year.

Results from chimney inventories and swift surveys are cause for concern. Biologists are now trying to understand why none of the Connecticut chimneys were occupied. One explanation could be that chimneys that were described as available might actually be unsuitable for swifts. It is unlikely, however, that all of the chimneys were unavailable. Another explanation for lack of chimney swift detection could be blamed on the survey method. Biologists had volunteers test the method on known occupied chimneys. Birds were detected at all known chimneys.

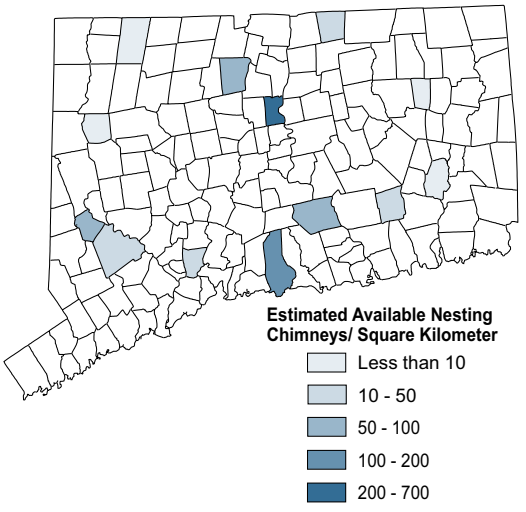
Biologists are also considering the possibility that swifts are declining despite the presence of available nesting chimneys. Larger roosting chimneys may be limiting their population numbers. Chimney swifts breed in Connecticut and throughout eastern North America, but they migrate to the Amazon Basin of South America to spend the winter. Along the course of their migration the swifts congregate in large groups and use large, older chimneys as roosts. These types of chimneys are most commonly seen in older schools or factory buildings in Connecticut. Roosting groups can number as few as a couple of swifts or larger with thousands of swifts! If swifts cannot locate suitable roosting structures along their migration route, they may perish in large numbers from exposure on cold evenings.

Connecticut, in cooperation with regional efforts, has also been keeping track of chimney swift roost chimneys. This year staff and volunteers checked 16 roosting chimneys for activity. Only five chimneys were active, and swifts numbered less than 100 at these roosts. In past years, some of these roosts had hundreds of birds. The inactive chimneys are disturbing because only one chimney had actually been capped.

Chimney Watch monitoring is still in its pilot phases; however, these chimney vacancies, combined with other observations, are beginning to point to systematic declines in chimney swifts that may be caused by more than just changes in chimney availability. Wildlife rehabilitator Jayne Amico of The Recovery Wing reported rehabilitating only 19 chimney swifts this year. This is less than half the number rehabilitated in 2005. In neighboring New York and Massachusetts, where breeding bird atlases have been recently updated, chimney swifts are showing substantial declines. In Canada over the past 20 years, declines of chimney swifts seem to correlate with declines in other aerial insectivores like the common nighthawk and whip-poor-will. These shocking 30-50% declines have resulted in federal listing in Canada for both the chimney swift and common nighthawk.

Explanations for the decline of aerial insectivores as a group are directed at their food source. Factors that may affect their food source could include pesticide use anywhere in their breeding or wintering grounds, water pollution which could affect insects that have an aquatic stage, homogenization of vegetation through invasive species encroachment, or possibly unusual weather fluctuations. Because bird breeding cycles have evolved to maximize food for their young, changes

Available Chimney Density



in the weather or plant composition could change the peak hatch timing and abundance of insects, which could then result in inadequate food availability for the young.

Developing a new monitoring program that assesses the effect of food availability on chimney swift populations is more difficult than testing the hypothesis that chimneys are limiting swift populations. Artificial nesting structures are fundamental in answering both questions. If chimneys are limiting, artificial nesting structures will serve as a replacements for disappearing chimneys. Artificial nesting structures will also allow biologists to directly measure chimney swift growth rates, feeding rates, and nest success in order to understand if food is limiting. The Wildlife Division is cooperating with the University of Connecticut to develop a suitable artificial nesting structure.

If chimney swift population declines are not being driven by nesting structure limitations, it will indeed be more difficult to conduct management to intervene. It won't be as easy as putting up new nesting structures. Management may need to be conducted at the habitat level. However, by linking monitoring to specific management activities, biologists will be able to gauge which activities will best help revitalize swift populations.

How You Can Get Involved

- Help is needed to monitor and report nesting and roosting chimney swifts. If you know of a roosting location, please report it to the Wildlife Division's Sessions Woods office (860-675-8130) or send an email to wildlife technician Shannon Kearney-McGee (shannon.kearney@ct.gov). If you have swifts in your chimney, you can help the DEP test their monitoring techniques by monitoring your nesting swifts. Contact Shannon to get involved. If you don't have any nesting swifts, but want to participate in Chimney Watch, the regional chimney swift monitoring effort, contact Shannon to get involved and find out more at http://coopunit.forestry.uga.edu/distribution/CHSW/. You can also take part in "A Swift Night Out," a continental effort to monitor chimney swifts at roosting sites by reporting your count numbers to www.chimneyswifts.org.
- Maintain your chimneys! It is good for your home and your swifts! Proper maintenance is crucial for any chimney whether it is to be used by chimney swifts or for winter fires. Wood fires produce flammable creosote residue that coats the inside of a chimney. If left unattended for more than a single season, this material will build up and the entire layer may ignite with catastrophic results. A resulting chimney fire will spew burning cinders onto the roof and surrounding structures. The intense heat of such a fire may also cause permanent damage to a chimney. In most cases, an annual cleaning will keep the chimney walls clean and safe for swifts and homeowners alike.

Unlike creosote buildup, swift nests in chimneys do not cause a fire hazard. By keeping the chimney free of creosote build-up, homeowners help assure successful nest building and decrease the chances of the nest falling before the birds have fledged. Chimney sweeping should be conducted before the swifts return from their wintering grounds in South America. The best time to clean a chimney is in mid-March.

An estimated decline in the chimney swift population has prompted Wildlife Division biologists to cooperate with other state wildlife agencies and organizations to develop Chimney Watch, a regionally coordinated effort to monitor chimney swifts.

- If you have a metal flue, you need to cap your chimney. The inside of a chimney must be made of stone, firebrick, or masonry flue tiles with mortared joints to be suitable for swifts. These materials provide enough texture for the birds to cling to the walls. Metal chimneys are unsuitable. Swifts and other animals that enter a metal flue will fall to the bottom and be unable to climb the slippery walls.
- What if a chimney swift nest falls to the bottom of a chimney? Keeping a chimney clean and the damper closed will diminish the chance that a nest will fall into your home. When the damper is open during heavy summer rainstorms, swift nests can be dislodged from the insides of chimneys and very young swifts may fall into the fireplace where the adults cannot care for them. If this happens, it would be ideal to return the swifts back into their parents' care. This may take considerable innovation, but some solutions have included placing the nest in a wicker basket on the smoke shelf just above the damper or lowering a basket with the swifts from above. If it is impossible to return the nest to the chimney, you should contact a wildlife rehabilitator. Swifts are notoriously difficult to rehabilitate and you should not try to care for the birds yourself. In Connecticut, Jayne Amico of The Recovery Wing in Southington specializes in chimney swift rehabilitation.

To see answers to frequently asked questions about Chimney Watch, go to www.chimneyswift.org. For more information about the cooperative project with the University of Connecticut, go to **http://hydrodictyon.eeb.uconn.edu.eebedia.index.php/Chimney_Swifts_in_Connecticut**.

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

Outlaw Gangs in the Neighborhood

Article and photography by Paul Fusco, Wildlife Outreach Program

One of our most familiar songbirds, the blue jay is a very common breeder and migrant in Connecticut. Blue jays can be found statewide all year round. They are a common backyard bird, always full of energy and always curious. They are feisty and noisy as small, roving flocks announce their presence in the backyards and neighborhoods across the state. Jays also have a reputation of being bullies, thieves, and robbers.

Description

Blue jays are members of the Corvid family of songbirds. The group includes jays, magpies, crows, and ravens. All members of the family are among the most intelligent of birds. Large for a songbird, blue jays are a little bigger than a robin.

Blue jays have long, rounded tails and short, rounded wings. They are blue above, pale gray below, and boldly patterned with black and white markings in the wings and tail. Their black necklace is another diagnostic field mark. One of the blue jay's most distinguishing features is its crest, which is raised when the bird becomes agitated.

Blue jays have a heavy, black bill that is used to crack apart nuts and acorns. While holding down the nut with its feet, a jay will peck at the nut with the tip of its lower bill until it is able to break away pieces to swallow.

Range

Ranging from southern Canada, south to the Gulf Coast, and from the Atlantic coast to the Rocky Mountains, blue jays are primarily birds of eastern North America. Blue jays are expanding their population somewhat in the western part of their range, which includes southern Alberta to Washington. According to Breeding Bird Surveys, blue jay populations appear to be stable to slightly declining in the eastern part of their range.

Blue jays are typically found in deciduous, coniferous, and mixed forest habitats, especially along edges and in areas with large mast producing trees. They were once more of a rural forest bird than they are now. Over the years they have adapted well, moving into urban areas, suburban backyards, and park lands.

Migration

Some blue jays migrate out of the northern part of their range in the fall, while others stay put. While they are considered to be migratory, not all individuals migrate and not all that migrate do so each year. Younger birds may be more likely to migrate, but even adults that overwinter in northern areas may migrate in following years.

On some fall days, when conditions are right, jays can be seen migrating in large, loosely organized flocks. Typically, the best locations for observing the fall movement would be along the coast at places like Lighthouse Point Park in New Haven, one of Connecticut's premier fall migration hotspots. Lighthouse Point is a natural migrant trap in that southbound birds get funneled along the coast toward the park. The fall migration spectacle at Lighthouse Point is not only good because of the large numbers of birds (especially hawks), but also the viewing situation is optimal, with a wide viewing perspective and frequently low-flying birds.

Blue jays will readily take peanuts at backyard bird feeders.

Behavior

When small flocks of blue jays show up in backyards, their bold, noisy, and raucous nature can be likened to that of an outlaw gang. Blue jays are aggressive toward other smaller birds at food sources, and they are known to depredate

Blue jays migrate in small, loose flocks in the fall.

Are Blue Jays Really Blue?

The answer is yes, and no.

Bird feathers derive their color in two ways — either through pigment or structural characteristics. Most blue feathers do not get their color from pigment.

The blue color in the jay's feathers is structural, in that the color results from the refraction and reflection (scattering) of blue wavelengths of light due to the design of the feather, particularly within the feather barbs. This part of the feather is made up of three layers — a clear outer layer, a cellular middle layer that is filled with air, and a black melanin-rich bottom layer. When light hits the outer layer, it passes through to the air-filled layer where blue light is scattered and all but blue light is mostly absorbed. Any light that gets through to the melanin layer is completely absorbed there. The result is that only the blue light is reflected back for us to see.

This means that blue jay feathers will always retain their brilliant blue in any light, and will never be bleached or damaged by sunlight or by water as would happen over time if the color was derived from pigment.

the eggs and chicks of other birds during the nesting season.

Blue jays make a wide variety of calls that may have diversities in pitch, tone, and inflection. Some calls may be harsh and piercing, while others are delicate and musical. The typical blue jay call is a loud "*jay-jay*" or "*jeer-jeer*," which makes other birds aware of their presence. When given in a faster cadence, their calls become a warning call to other birds that danger is near. The bell-like "*tull-ull*" and "*whee-delee*" are two of the more distinctive calls. These calls are associated with early courtship and male dominance. The *tull-ull* call is also directed at predators. Jays frequently alert other birds with their loud alarm calls whenever danger presents itself in the form of a hawk or a cat.

Blue jays will often scatter birds at a feeder by screaming like a hawk as they fly in. Jays often mimic the calls of hawks, including red-shouldered, red-tailed, broad-winged, and osprey. The reason they do this is unknown, but the practice serves them well when they are looking to dominate backyard feeders by intimidating other birds.

One well-known trait of the jay is its mobbing behavior. When a jay finds a hawk or a sleeping owl, it sounds a "call to arms" signal to other jays within hearing distance. In a short time, a screaming mob of jays will come together and harass the raptor, driving it from tree to tree. By following the noise, a hiker or birder can sometimes catch sight of a rare bird being pestered.

The bold color and markings of the blue jay seem to be a good fit to its bold and raucous behavior.

Food

The normal blue jay diet includes a wide range of food. Jays eat invertebrates, seeds, acorns and other nuts, fruits, suet, and small vertebrates. Mast, such as acorns and nuts, are a favorite. Jays will cache (hide) acorns and other nuts, many of which will sprout when forgotten and left uneaten. This makes blue jays an important factor in the regeneration of oaks, beeches, hickories, and formerly of chestnuts.

Backyard bird feeding enthusiasts can accommodate blue jays by providing peanuts along with seed offerings. The peanuts (unsalted) can either be chopped pieces or whole in the shell. Blue jays relish them.

Conservation

Based on data from the U.S. Geological Survey, National Audubon Society Breeding Bird Surveys, and Christmas Bird Counts, blue jay populations in Connecticut are estimated to have declined by as much as 69% over the past 40 years. The reasons for the decline are unclear, and likely the result of a number of factors, some of which may include habitat loss, pesticides, and disease. These kinds of declines have not just been experienced by blue jays, but also by many other common species of birds.

Since first appearing in New York in 1999, West Nile virus (WNV), a mosquito-borne virus, has taken a dramatic toll on many bird species. Members of the Corvid family, including blue jays and crows, have been particularly susceptible to the virus. In some East Coast areas, the crow population has plummeted by over 50%. Dramatic declines in blue jay numbers have also been seen. Over the last few years, blue jay populations have been recovering from the initial impact of WNV.

Blue jays remain one of our most common and visible birds. They are known for their bold color, bold markings, and their bold disposition. Blue jays are always full of life and vigor, making them one of Connecticut's most charismatic natural residents.

Seeking the Endangered Indiana Bat

Written by Geoffrey Krukar, Wildlife Diversity Program

The state and federally endangered Indiana bat (*Myotis sodalis*) formerly had a range that stretched from the Midwestern United States south to Florida and northeast through New England, including Connecticut. However, as the population of Indiana bats declined range-wide in the mid-1900s, this species became increasingly difficult to find in Connecticut. The Indiana bat was considered extirpated from the state by the late 1950s. The only confirmed record of an Indiana bat in Connecticut since then is of one individual detected during a hibernaculum survey conducted by the Wildlife Division in 1997.

Recent research indicates that Indiana bats appear to be increasing throughout their northern range. In other states (Vermont, New Jersey) where Indiana bats were believed to be extirpated, biologists have discovered hibernating and breeding populations of the bats.

Understanding that Indiana bats can migrate long distances across state lines, the New York Department of Environmental Conservation (NYDEC), in partnership with the U.S. Fish and Wildlife Service, Vermont Fish and Wildlife Department, Connecticut Wildlife Division, and others, led multi-state telemetry studies in 2001, 2005, and 2007 on female Indiana bats as they emerged from hibernation and began migrating to summer roosting sites. In all three instances, bats were tracked to within a few miles of the New York-Connecticut border and, in 2001, one bat was followed right to the border before the signal was lost. Assuming that migrating bats will stay on straight-line flight paths until they reach their summer sites, it is highly likely that some Indiana bats hibernating in New York are traveling to Connecticut to raise pups.

J. DICKSON / WILDLIFE DIVERSITY PROGRAM

Wildlife Division technician Geoffrey Krukar (right) and research assistant Amber Carr put the final touches on one of the harp traps used to capture bats as they emerge from their underground hibernation sites.

G. KRUKAR / WILDLIFE DIVERSITY PROGRAM

The Indiana bat project yielded new location information for breeding red bats, such as this pregnant female. Red bats are a species of special concern in Connecticut.

Based on research projects conducted in New York and the likelihood that some Indiana bats do spend the summer in Connecticut, the Endangered Species/Wildlife Income Tax Check-off Program committee granted funding for a one-year project to search for these bats. The project was split into two parts, sampling bats during spring emergence from hibernacula and sampling bats in their summer habitats.

Spring Emergence

Bats are difficult to sample because of their nocturnal foraging habits, potentially large home ranges, use of echolocation to detect traps and nets, and ability to avoid capture by flying around or over most trapping devices. Every spring between late March and early May, bats in Connecticut and other neighboring

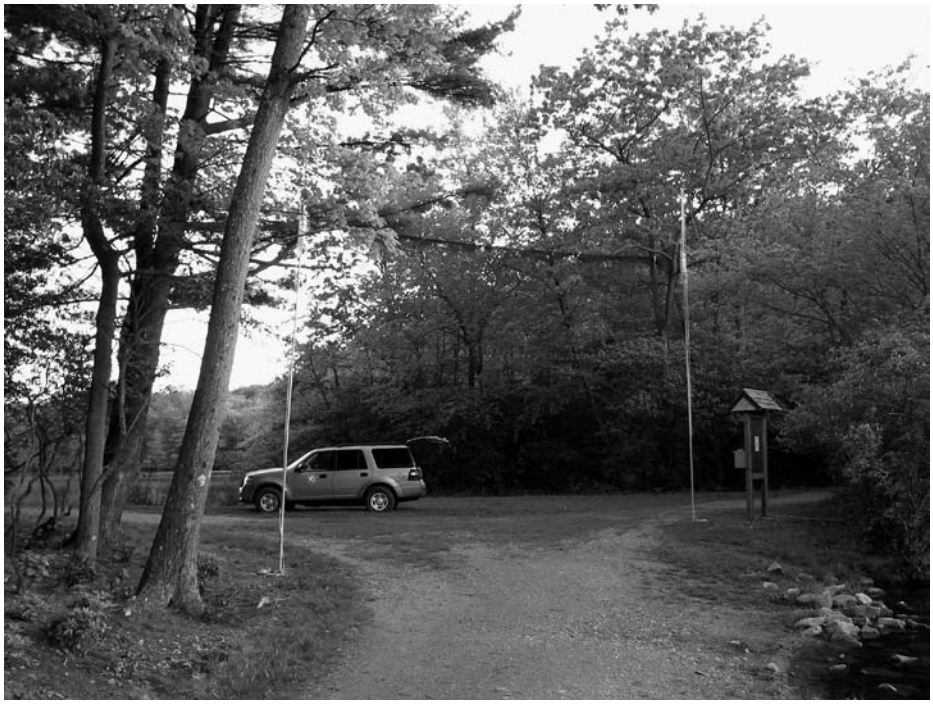
states leave their hibernacula to disperse across the landscape to their summer breeding grounds. At this time, many bats can be quickly captured by placing a harp trap at the entrance of the hibernaculum. The funneling effect of the mine, cave, or aqueduct forces the bats into the trap.

In late April, bats were trapped at three hibernacula in Connecticut. A total of 71 individual bats were captured. The three species identified were little brown bat (*Myotis lucifugus*), northern long-eared bat (*Myotis septentrionalis*), and eastern pipistrelle (*Perimyotis subflavus*). Although no Indiana bats were documented, the biological information collected will aid Wildlife Division staff in monitoring more common species of bats.

Summer Habitat

Trying to select where to sample for Indiana bats in the Connecticut landscape presented the challenge of searching for a "needle in a haystack." Researchers hoped to increase the probability of capturing Indiana bats in the state by focusing survey efforts in areas of suitable habitat along known migration trajectories of these bats from New York. In 2005 and 2007, NYDEC staff was able to obtain good information about summer habitat and landscape characteristics around the Indiana bat roost trees (all roost trees were less than 300 meters in elevation and within 800 meters of a water source). To reduce the size of the "haystack," a predictive model was created by inserting the habitat information from New York into ArcGIS mapping software. Through the use of this model and software, two large areas were identified in Connecticut as matching the habitat criteria and being on the same migration trajectory as the bats in New York. Collis P. Huntington State Park in Redding and Bennett's Pond State Park in Ridgefield were selected as the study sites.

The two parks were then divided into grids. To ensure that all of the available habitat would be surveyed, individual grids were then randomly selected to determine the order for the survey. All grids were sampled at least once but several were sampled twice throughout the season. The actual trapping location within each grid was decided on-site by selecting an area that would logically yield the most captures of bats. Often these areas were along wooded roads, trails, or stream corridors where the bats could be funneled by thick surrounding vegetation into fine-threaded mist nets.



G. KRUKAR / WILDLIFE DIVERSITY PROGRAM

This triple high mist net set allowed for sampling in areas with a high tree canopy. The nets are raised up the poles with ropes and pulleys.

Although bats can detect the net, they are less likely to do so while traveling familiar pathways between roosting locations and food or water resources. The key to successful captures is to fill all available airspace along those pathways with netting. A newly purchased, triple-high net set allowed for sampling in areas where the tree canopy was too high for traditional single-high nets.

The surveys began in late May and continued through mid-August. On average, 8.3 bats (range 0-24 bats) were captured per night. Again, no Indiana bats were detected but four other species (big brown bat (*Eptesicus fuscus*), little brown bat, northern long-eared bat, and red bat (*Lasiurus borealis*) were captured. Data were collected for each animal, including weight, reproductive status, sex, age, and overall condition. Additionally, each bat was fitted with a metal wing band prior to release. The wing bands display a unique sequence of numbers that allow for identification of individuals if they are ever recaptured.

Conclusions

Although no Indiana bats were found, the surveys did produce positive findings. The red bat is a species of special concern in Connecticut because of a general lack of solid information about its population. The new locations of red bats recorded during this project will enhance understanding of where this species occurs in the state. Also, the biological data collected from all five species during both spring and summer surveys provide a good baseline for comparison with future years to determine any changes in overall population health. Additionally, it directly addresses some of the major conservation actions and research needs outlined in Connecticut's Comprehensive Wildlife Conservation Strategy.

More in-depth analysis of this project's data is on-going. It may be possible to calculate the probability of detection for some of the bat species in Connecticut. This could prove to be a valuable tool for determining the minimum number of mist-netting nights required to establish presence/absence with a 95% certainty. Knowing this information will allow researchers to more efficiently sample an area and make sound conclusions.

While this project serves as a good start, more research definitely is needed to determine whether Indiana bats are present in Connecticut during the summer months. Additional efforts should focus on refining the predictive model and widening the search area. Also, the use of acoustical monitoring equipment should be incorporated into Indiana bat sampling to determine if the bats are present at survey locations but avoiding capture. Much remains to be done.

This project is being funded by the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund.

Introducing the National Archery in the Schools Program

Written by Elaine Hinsch, National Archery in the Schools Program Coordinator

P. J. FUSCO

On the third day of the National Archery in the Schools Pilot Program, Basic Instructor Trainers Walter Moore (left) and Jason Henry conducted a class for a group of physical education teachers.

The DEP, with the support of the Department of Education, has embarked on a new endeavor – the National Archery in the Schools Program (NASP) – which has generated a lot of excitement among Connecticut's high schools. NASP promotes education through student participation in the life-long sport of archery and supports DEP Commissioner Gina McCarthy's "No Child Left Inside" initiative. The focus is to teach International style target archery in physical education classes in a safe, educational setting with a curriculum designed and written by teachers to meet national physical education standards. NASP includes sections on safe use of equipment, archery techniques, and archery history, along with information on mental concentration and self-improvement and a special section on teaching students with disabilities. NASP offers all students, regardless of ability, the opportunity to participate in a sport that helps build self-esteem. Educators nationwide have reported that NASP "engages the unengaged" and inspires students to greater achievement in school.

A 2004 study of the National Archery in the Schools Program, undertaken by Responsive Management of Harrisonburg, Virginia, concluded that students who participated in the program in their physical education classes liked school better. Improvements in behavior and attendance at school overall were also reported.

The DEP Wildlife Division recently provided coordination and support to implement a two-year pilot project in Connecticut. Under NASP, Basic Archery Instructor Trainers and Basic Archery Instructors are certified. Connecticut's first pilot training program was held over three days in April 2008 at RHAM High School in Hebron. Thirteen people successfully completed the program and became certified as NASP Basic Archery Instructor Trainers and are thereby qualified to teach the program and certify Basic Archery Instructors. The Division was pleased to have a group of well-qualified professionals, some in the field of archery and others who brought their teaching experience.

Ten Connecticut high schools participated in the pilot program and, on the third day of training, 20 more people joined the group to be trained as NASP Basic Archery Instructors. The Instructor Trainers from the pilot program will teach the new instructors, who will then go back to their schools and implement NASP within their physical education curriculum.

Upon completion of the training program by the 10 pilot schools and with their approval to teach the National Archery in the School Program as part of their physical education curriculum, the DEP provided each school with training and archery equipment which valued more than $3,000. Funding for the NASP pilot program was provided by Connecticut's Federal Aid in Wildlife Restoration Program CE/FS Section 10 allocation.

To date, nine of the 10 pilot schools have already conducted classes in 2008 and the others intend to conduct classes in the spring of 2009. The DEP will be conducting the second pilot training program in spring 2009. Interested high schools should have the superintendent of schools, principal, a physical education teacher, or special education teacher contact the Wildlife Division by January 12, 2009, at 860-424-3011 or email NASP coordinator Elaine Hinsch at elaine.hinsch@ct.gov. For more information about the NASP, visit the website at www.nasparchery.com.

The Wildlife Division would like to offer a special thank you to RHAM High School for allowing the school to be used for three-day training.

CT Schools Selected for the National Archery in the Schools Pilot Program

Bullard-Havens Technical High School, Bridgeport

Brookfield High School, Brookfield

Lewis S. Mills High School, Burlington/Harwinton

H.H. Ellis Technical High School, Danielson

Glastonbury High School, Glastonbury

Ella T. Grasso Southern Technical High School, Groton

RHAM High School/Regional School District, Hebron

Naugatuck High School, Naugatuck

New Milford High School, New Milford

Lyman Hall High School, Wallingford

Success for Roseate and Common Terns at Falkner Island

Falkner Island, a crescent-shaped island located in Long Island Sound south of Guilford, is the site of the largest common tern and roseate tern colony in Connecticut. The island is part of the U.S. Fish and Wildlife Service (USFWS) Stewart B. McKinney National Wildlife Refuge. According to the USFWS, the 2008 nesting season for both common and roseate terns (state and federally endangered) could be deemed successful. More common tern nests were recorded in the yearly census than in 2007. Although overall numbers for roseate terns continued to decline this year, overall fledging and nest success rates were higher than in previous years. The high success rate of fledglings this year may be due, in part, to constant predator control by the USFWS and especially to the lack of predation observed on any roseate nest.

Forty pairs of roseate terns nested in 2008, successfully fledging 23 chicks. Although this number is notably lower than in previous years, the total fledging rate is markedly higher at 67%. A total of 2,062 common tern nests were recorded in the 2008 yearly island census.

Daily monitoring of the colony and constant predator control have been beneficial to the reproductive success of these birds. The island was protected throughout most of the day, leaving little to no room for predation to occur.

Banding was a great success this year. The amount of banded birds this season will allow for more effective monitoring in the future and will provide more information about the terns' movements and reproductive success.

The 24-hour presence of monitors on the island prohibited the public from coming onto the island and disturbing the colony and destroying nests or chicks. Further presence on the island should be encouraged next nesting season. The few visitors that did come to the island were cooperative and left knowing more about the habitat on the island and why it is important for people to stay away during the nesting season.

This information was provided by staff of the Stewart B. McKinney National Wildlife Refuge.

P. J. FUSCO

These common terns have gathered to feed near the U.S. Fish and Wildlife Service boat docking area on Falkner Island in Long Island Sound.

Volunteer for Wildlife Conservation

Written by Laura Rogers-Castro, Outreach Program

Are you interested in learning more about wildlife management and sharing this new knowledge with others? Then, you may want to submit an application for the next Master Wildlife Conservationist Program (MWCP) series. The MWCP is an adult volunteer training program sponsored by the Wildlife Division. The program consists of 40 hours of classroom study on topics such as the history of wildlife conservation; ecological principles; population ecology; interpretation; deer management; nuisance wildlife; wetland restoration; and black bear management. Most of the classes are held on weekdays at the Wildlife Division's Sessions Woods Conservation Education Center in Burlington.

Once candidates complete the classes and pass the final exam, the Wildlife Division asks that they perform 40 hours of volunteer service, in the field of wildlife conservation, during the next year and 20 hours each subsequent year to remain in the program. Volunteer work focuses on outreach efforts, such as manning Wildlife Division booths at fairs and festivals and presenting wildlife-related programs in schools and libraries or at community events. The volunteer commitment can also be completed by assisting with research efforts, such as banding Canada geese or monitoring the Connecticut shoreline for piping plover and least tern nesting success.

The good news about the MWCP is that the classes are free. However, only 20 candidates are selected for each program series. Suitable candidates include individuals with a strong interest in wildlife conservation, commitment to volunteer service, and willingness to teach others. Volunteers will learn a great deal about wildlife, but the Division is not necessarily seeking individuals solely for the intent of continuing education purposes.

The next MWCP series is slated to begin in late March 2009 and will continue into early May. Application packets will be mailed in November and candidates will be selected by mid-January. If you have the time and think you could contribute to the education of Connecticut residents on wildlife issues, please contact Laura Rogers-Castro at 860-675-8130 (Monday-Friday, 8:30 AM to 4:30 PM) or e-mail laura.rogers-castro@ct.gov.

The Search for the Elusive Weasel Continues!

Written by Christina Kocer, Wildlife Diversity Program

Success! There really are weasels in Connecticut! After almost two years of extensive efforts, Wildlife Diversity Program staff has finally captured the elusive weasel!

Two species of weasels reside in Connecticut, the short-tailed weasel (*Mustela erminea*) and the long-tailed weasel (*Mustela frenata*). Both weasel species are small, long and thin with short, soft, brown fur covering their backs and white to yellow fur on their bellies. Like their cousin the striped skunk, weasels possess pungent scent glands. However, unlike skunks, they are unable to spray their scent on an unsuspecting agitator. Weasels are often confused with mink, another Connecticut species. But, weasels are considerably smaller, have white bellies and a black-tipped tail, and, in the northern part of their range, they may turn completely white in winter. Weasels are voracious hunters, often taking over the dens and burrows of their small mammal prey.

S. VAN DE BURG / WILDLIFE DIVERSITY PROGRAM

Wildlife Division Research assistants Patrick Mule' (left) and Patrick Deane collect biological information from a weasel that had been captured in a live trap during survey efforts.

In early 2007, a project was initiated to study the distribution and abundance of weasels throughout Connecticut. This project used live-trapping and tracking techniques, in conjunction with the collection of road-killed and trapper harvested animals, to document presence, obtain basic body measurements, and collect tissue samples from animals throughout the state. Because short-tailed and long-tailed weasels look very similar, DNA samples were collected to make an accurate species identification. The collected tissue samples will be brought to a lab at the University of Connecticut for genetic analyses later this winter.

Based on experiences in the field, many modifications were made since the project began. Until recently, data were limited to collecting specimens from trappers and roadsides or searching tirelessly for tracks as trapping methods were refined. During the winter of 2008, a wooden live trap was redesigned and, with the help of Wildlife Control Supplies in East Granby, a PVC skunk trap was also redesigned to make it more suitable for weasel captures. Small, squirrel-sized, wire box traps were also used for trapping this year. New trapping locations were chosen based on countless phone calls from the public reporting sightings and road-kills. To date, seven unique individuals have been captured at six different sites. All three of the trap types have proven successful in capturing these clever and elusive species. So far, at least 15 road-killed individuals have been collected and the Wildlife Division will be looking for more road-kills as the project continues into the fall and winter. If you see a road-killed weasel or if your pet deposits one on your doorstep, please contact Wildlife Division technician Christina Kocer at the Sessions Woods office (860-685-8130) or by email at christina.kocer@ct.gov as soon as possible. If you are willing, please wrap it in a plastic bag and put it in a freezer – we will come and pick it up!

P. DEANE / WILDLIFE DIVERSITY PROGRAM

Jen Kaiser, a research assistant for the Wildlife Division, visually examines a weasel to assess body condition.

The Wildlife Division would like to thank the private landowners who allowed access to their property and Hard Rain Farm, in Burlington, for providing fresh bait for this project.

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

Non-native Invasive Plant: Mile-a-minute Vine

Written by Peter Picone, Habitat Management Program

If you haven't yet seen the nasty invasive, non-native mile-a-minute vine (*Persicaria perfoliata*), it's a good thing because you don't want to encounter the ugly barbs that are on the long stems. This relatively new invader to Connecticut has been found in a few towns, most recently at Quinnipiac River State Park in North Haven. A small patch of mile-a-minute vine was found when a winter habitat enhancement project for saw-whet owls was being staked out at the park. Unfortunately, further reconnaissance revealed a more extensive infestation along adjacent forest edges and a gas pipeline right-of-way. The Wildlife Division, in cooperation with the DEP Parks Division, Connecticut Department of Transportation, and the Connecticut Agricultural Experiment Station, pulled by hand and applied herbicide to some of the mile-a-minute vine at the end of the summer.

Controlling or managing mile-a-minute vine is a challenge because of its thorny barbs and ability to grow over six inches a day. Because it grows so rapidly, the vine can overtake native plant communities. Once established, it becomes a virtual green vegetative blanket. As an annual, the vine reseeds itself every year and the seeds can remain viable in the soil for at least 5 years. Fortunately, a local and concerned volunteer group called Mad Gardeners, Inc., has been tracking and removing an infestation in the New Milford area for several years.

This vine has the potential to become a mainstay of Connecticut's landscape if we don't take collective action against it. Hope remains that through early detection and rapid response, mile-a-minute vine can be eliminated before it gets a bigger foothold in the state. Hopefully, for the sake of Connecticut's natural habitats, it doesn't become as common as the invasive oriental bittersweet (*Celastrus orbiculatus*) or common barberry (*Berberis thunbergii*).

P. PICONE / HABITAT MANAGEMENT PROGRAM (2)

Mile-a-minute vine has elongated, branched stems that are covered with small spines and can have a reddish color. The leaves are simple, alternate, triangular, and 1"-3" wide. A very distinct saucer-shaped bract encircles the stems at each node. The metallic-blue colored fruits ripen from September to November.

Any observations of mile-a-minute vine should be reported to the University of Connecticut (donna.ellis@uconn.edu) or Mad Gardeners (knelson151@sbcglobal.net). Your assistance in reporting locations of this vine could make a difference before it spreads to more towns in Connecticut.

Students Encouraged to Enter the Junior Duck Stamp Contest

The Connecticut Waterfowlers Association (CWA) is sponsoring the U.S. Fish and Wildlife Service (USFWS) Junior Duck Stamp Art Contest for Connecticut and is encouraging junior artists to submit Duck Stamp art work for the 2009 contest. The Federal Junior Duck Stamp Conservation and Design Program is a dynamic arts curriculum that teaches wetlands and waterfowl conservation to students in kindergarten through high school. The program incorporates scientific and wildlife management principles into a visual arts curriculum with participants completing a Duck Stamp design as their visual "term papers." The contest begins each spring when students submit their artwork to a state contest. Students are judged in four groups according to grade level: Group I: K-3, Group II: 4-6, Group III: 7-9, and Group IV 10-12. Three first, second, and third place entries are selected for each group. A "Best of Show" is selected by the judges from the 12 first-place winners regardless of their grade group. Each Best of Show is then entered into the national Junior Duck Stamp Contest. The first place design from the national contest is used to create a Junior Duck Stamp for the following year. Junior Duck Stamps are sold by the U.S. Postal Service for $5 per stamp. Proceeds from the sale of the stamps support conservation education, and provide awards and scholarships for the students, teachers, and schools that participate in the program. The 2009 contest information is available on the USFWS website (www.fws.gov/juniorduck/ArtContest.htm). Artwork must be submitted by March 15, 2009, to the Connecticut Waterfowlers Association, c/o Chris Samor, 29 Bower Hill Rd., Oxford, CT 06478. To learn more about the Connecticut Waterfowlers Association, visit the organization's website at www.ctwaterfowlers.org.

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, or email: katherine.herz@ct.gov

Is Connecticut Wildlife *for the Birds?*

To the Editor:

I thought you might like these pictures. This past June, a northern oriole flew into our picture window. I went outside to see if it was hurt and found it lying on the ground under the window. I got a cup of water and picked up a magazine from the coffee table. I dripped water on the bird and fanned it with the magazine. He began to show some signs of life but didn't move well. I didn't want any cats to get at the bird, so I lifted it up with the magazine and put it down on our patio table. It was still stunned so I left it there. My husband got the camera and took a picture. The bird eventually started to move and after about 30 minutes, it flew away. I didn't realize until I looked at the picture later that I had picked up *Connecticut Wildlife* to use.

Patricia Schwarm, East Hampton

Staredown Between a Deer and Bobcat

To the Editor:

I have been a subscriber to *Connecticut Wildlife* magazine for a few years. I thought you might like some shots of a bobcat and deer that I managed to catch on June 20, 2008, at 7:30 AM. The two of them just seemed to be ignoring each other for about a minute until the cat started to turn back to the woods and the deer then followed – slowly with lots of snorting and hoof stomping. The deer then picked up its pace through the woods for a couple hundred feet. I shot the photos from an elevated deck about 120 feet away, so the shots are a little fuzzy.

Garry Nesbitt
Ridgefield

Photo Enforces Message About Dangers of Fishing Line

To the Director, Dale W. May:

H. GOLET

I just received the September/ October 2008 issue of *Connecticut Wildlife*. The photograph on page 6 felt like a stab to my heart when I saw the osprey hanging from the nest! In reading the well-written article by Kathy Herz, I feel the wrong people are hearing her message. I believe most of your readers are responsible individuals who are likely to pick up their "trash." I think the photo and article should be in newspapers and other publications ... especially ones that fishermen read and possibly on flyers sent out to marinas and businesses who sell fishing equipment and boats.

A few years ago we saved our resident male osprey from near death when he became tangled in a fishing line, complete with a sinker! We felt very fortunate that we were able to remove the line and save the bird.

We read every article in *Connecticut Wildlife*, always interesting and informative. Thank you.

LaVerne C. Atkinson
Clinton

Wildlife Calendar Reminders

Dec. 7 ..... **Fall Bird Walk**, at the Sessions Woods Conservation Education Center in Burlington, starting at 8:00 AM. Burlington resident and bird enthusiast Laura Spitz will lead this two-mile walk suitable for all levels of bird watching ability Participants should bring binoculars and wear appropriate shoes for hiking. Call the Sessions Woods office (M-F, 8:30-4:30; 860-675-8130) to preregister.

Jan. 11 ..... **Adult Workshop-Bears of North America: A Virtual Trip into their World**, at the Sessions Woods Conservation Education Center in Burlington, starting at 2:00 PM. Master Wildlife Conservationist Gary Melnysyn has traveled throughout North and Central America photographing and documenting wildlife in its natural habitat. Gary will visit Sessions Woods to provide a virtual tour into the lives of bears. He also will provide several tips on successful nature photography. Participants can visit www.fiddleheadfoto.com to preview some of Gary's photos. Call the Sessions Woods office (M-F, 8:30-4:30; 860-675-8130) to preregister.

Jan.-April ..... Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2008 Connecticut Income Tax form.

Feb. 14-15..... **10th 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. 19..... Opening day for deer shotgun/rifle season.

Nov. 29..... Open day for deer shotgun season on state land (B season) and state land no-lottery season.

Dec. 10-23 ..... Deer muzzleloader hunting season.

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

..... Consult the 2008 Connecticut Hunting and Trapping Guide for specific season dates and details. The 2008-2009 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 2009 Connecticut Hunting and Trapping Guide will be available by mid-December.

Shepaug Bald Eagle Observation Area

The Shepaug Eagle Observation Area, in Southbury, will be open to the public on Wednesdays, Saturdays, and Sundays, from December 27, 2008, through March 11, 2009, 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 on December 9, 2008, 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.

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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A great blue heron graces a Connecticut marsh on a frosty winter morning.

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