

# From the Director

"There are some who can live without wild things, and some who cannot." Why does Aldo Leopold's simple statement resonate so powerfully with so many? I suspect it is because those who share Dr. Leopold's admission understand that wildness is truly a

requirement for life as we enjoy it. It is a core value. I can't tell you how many people are afflicted by this wildlife "condition," but I suspect it is a minority. I wish there were more.

Four hundred words, more or less. That is what it has taken to compose the "From the Director" column every two months for the past 15 years. In my first one, back in September 1994, I pledged a commitment to science and professionalism and endeavored to keep readers informed of current issues. However, I found it nearly impossible to address those subjects without interjecting some personal experiences; storytelling if you will. At first, I tried to repress these emotional and scientifically inappropriate impulses, but I came to realize that I was trying to convey more than facts and information. I have concluded that the unique cultural and spiritual importance of wildlife makes it acceptable to introduce passion into the discussion.

So while reading about land stewardship, research, management, and the status of various species of wildlife, you read stories about my grandfather, father, wife, children, and our farm. I apologize to those family members and others, living and deceased, who were written about without their permission. However, if we are going to be good stewards of wildlife, we need to celebrate these deep personal connections with it. As readers of this column, I suspect you each have cherished stories and I encourage you to share them liberally.

As I end my career at the DEP, I reflect on 12 years as a biologist followed by 15 as the Director of the Wildlife Division. Certainly there were triumphs and tragedies with many more chapters waiting to be written. But the memory I will cherish the most was the opportunity to work day to day and shoulder to shoulder with people who care passionately about what Dr. Leopold called the "wild things." I can't begin to list them all here, but will remember them forever.

Thank you for the honor and the privilege of working at the DEP's Wildlife Division for the past 27 years. Please join me in supporting all of the dedicated, passionate professionals who will maintain our wildlife heritage. They have my deepest respect.

Dale W. May

# Cover:

A cerulean warbler sings from a perch in a Connecticut forest. To read more about this beautiful and uncommon species, see page 10.

Photo courtesy of Paul J. Fusco

What happened to the March/April 2009 issue? See page 19 for details.





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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



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# **New Estimates for Deer Densities in Fairfield County**

Written by Howard Kilpatrick, Deer Program

Aerial surveys have been used to estimate deer populations in different regions of the country. Since 1974, aerial deer surveys have been used in Connecticut to track trends in the deer population. As new information becomes available over time, the methods have been and will continue to be modified to improve the usefulness of the data. In the past, aerial deer surveys have been viewed primarily as trend data rather than exact deer counts. Over time, deer counts could trend upward or downward, suggesting that the population is increasing or decreasing. The exact deer count was viewed as only a minimum count because some deer are concealed in vegetation and not counted during aerial surveys.

### **Correction Factor**

Scientific studies published in peer-reviewed journals have evaluated the accuracy of aerial survey counts to develop a correction factor to account for those not counted, due to being concealed by vegetation. Collectively, five of these studies calculated correction factors 11 times. The average correction factor for these studies was 2.1. A correction factor of 2.0 means that you need to double your deer count to correct for deer concealed in vegetation during the aerial deer survey. For example, if 30 deer/square mile were observed, then that number should be multiplied by a correction factor of 2.0 to estimate actual deer densities at 60 deer/square mile  $(30 \times 2 =$ 60 deer/sq. mile).

# Changes in the Survey

In 2009, the DEP Wildlife Division discontinued the statewide aerial deer survey to focus on developing a better estimate of the deer population in deer management zone



In 2009, the Wildlife Division discontinued the statewide aerial deer survey to focus on developing a better estimate of the deer population in deer management zone 11 in Fairfield County. Zone 11 has the highest deer population in the state.

(DMZ) 11 (Fairfield County). Based on reported deer-vehicle accidents, complaints by homeowners and local officials, and past aerial survey data, DMZ 11 had the highest deer population in the state. In the past, three 10-mile long transects were flown in a helicopter to count deer and estimate deer densities per square mile. This year, the number of transects increased from three to six and each transect was flown four times to increase the sample size and estimate variability in deer densities.

#### **Deer Density Estimates**

The average deer density observed in DMZ 11 was 30.9 deer/square mile. Average deer densities observed among all

transects were similar. Based on research conducted in Connecticut and elsewhere, it is reasonable to use a correction factor of 2.0 on the observed deer count to estimate actual deer densities. Actual deer densities in DMZ 11 are estimated at 61.8 deer/square mile.

Deer densities that exceed 10-20 deer per square mile can have negative impacts on natural plant communities. High deer densities also are linked to high incidences of deer-vehicle accidents and human cases of Lyme disease. The Wildlife Division will continue to educate the public about the importance of deer management, as well as modify the hunting season structure to increase deer harvest rates in DMZ 11.



# Observed and Estimated (Corrected) Deer Density Estimates for Deer Management Zone 11 (Fairfield County), January 2009.

Avg. Deer	Transect					90%		
per Sq. Mile	1	2	3	4	5	6	Overall	Confidence Range
Observed	31.8	33.8	29.8	34.8	31.8	24	30.0	26.9-34.8
Corrected	63.6	67.6	59.6	69.6	63.6	48	61.8	53.9-69.7

P. J. FUSCC

# **DEP Biologists Make Historic Moose Capture**

Written by Andrew LaBonte, Deer Program

Currently, little information exists about moose at the southern extent of their range in the Northeastern states. During the winter of 2007, a cooperative project was launched between the DEP, University of Connecticut, and Northeast Wildlife Damage Management Cooperative to evaluate public opinions about moose and moose management and to capture and collar moose to evaluate movements, habitat use, and survival of Connecticut moose. Moose, whose existence in the state was essentially nil since the 1700s, began showing up in Connecticut around the early 1900s and in more frequent numbers by the late 1990s. Currently, the state's moose population is estimated at 100, based on population modeling and moose sighting reports from the public.

One of the greatest challenges to the success of this project is being able to capture moose. As the largest land mammal in the Northeast, a moose may occupy an area in excess of 10 square miles, which can make locating, capturing, and monitoring, with the use of traditional methods, all the more challenging. To aid in monitoring efforts, the DEP received financial assistance from the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund to purchase several collars equipped with a Global Positioning System (GPS) that uses satellites to collect location data and store the information until it can be remotely downloaded.

Female moose were initially targeted for the study due to the likelihood that they would stay in the same area as compared to males, who may wander extensively during the breeding season. The plan was to use moose sightings from the public to help locate moose for capturing. However, sightings have been limited and reports were not always immediate. A further aid in locating moose has been the use of a helicopter during winter, when there is snow cover, providing the greatest opportunity to spot the large, black-colored animals against the white background. Although a moose, whose size resembles that of a large horse, should easily be seen from the air, canopy cover from the coniferous forests makes spotting the animals extremely dif-



Deer Program biologist Andrew LaBonte with the first moose captured and collared as part of a cooperative research project studying moose movements, habitat use, and survival in Connecticut.

ficult if they are not out in the open.

During the first winter of the project (2007), capture conditions were marginal due to poor snow conditions. Only a single moose was observed during three of four flights. All observations were concluded to be of bull moose and no capture attempts were initiated. During winter 2008, a single bull moose was observed during one helicopter flight and a cow and calf were observed on three of four flights. Ground capture attempts were initiated on two occasions with the aid of volunteers, DEP staff, and the helicopter. Unfortunately, the moose quickly left

the area and were unable to be captured. With expectations of capturing a moose dwindling, biologists decided that it would be beneficial to put a collar on any moose, not just females, and it would be best to attempt to tranquilize moose from the helicopter.

From 2008-2009, overall sightings of moose by the public were down 20% from the previous year as were the number of moose/vehicle accidents, providing little expectation that any moose was ever going to wear a radio-collar. However, in January 2009, the first flight to locate a moose proved successful. A large bull moose was observed and several attempts were made from the helicopter to immobilize the animal. Unfortunately, this capture attempt did not result in a collar going on a moose.

History was finally made on January 30, 2009. While flying near the Hartland/ Barkhamsted line, a group of three moose was spotted. A cow with a calf was bedded down along with another antlerless moose on the edge of a steep hillside. As the helicopter flew over, the cow and calf headed off into an area with increased forest canopy while the other moose went a slightly different direction into a less forested area. The decision was made to pursue the single animal. While hovering at treetop level, a single dart was fired from the gun and hit the moose. The moose did not appear to be startled by the impact of the dart and stood stationary for approximately 10 minutes while the drugs took effect. As the helicopter pilot and Wildlife Division biologist Andy Labonte (who shot the tranquilizer dart) celebrated their accomplishment, they watched as the moose put its head down and then began to position itself to lie down. From the helicopter, the ground crew was contacted and informed of the news via cell phone. Fortunately, a suitable site to land the helicopter was nearby and Andy was able to get out and pursue the moose. He hiked approximately a half mile through the woods, following the noise of the helicopter which had returned to circle the moose from the air. As soon as the ground crew arrived, they placed ear tags (#2) and a radio-collar on the moose and collected measurements from the animal.

The moose turned out to be an antlerless bull and, based on its length, it weighed approximately 816 pounds. Once the moose was processed, it was given a special drug to assist in its awakening and left alone to recover. The moose was checked on several hours later and it appeared to be alert and recovered.

On March 11, 2009, under less than optimal flying conditions, two moose were observed from the helicopter in Hartland. One of the moose appeared to have a healed broken leg, likely from being hit by a motor vehicle, and was, therefore, not targeted for capture. The other moose was targeted and immobilized. The moose turned out to be a female calf and, based on its length, weighed approximately 456 pounds. The calf was fitted with a GPS radio collar and ear tags (#176). After the moose was administered a drug reversal agent, it surprisingly followed the crew through the woods and had to be chased off.

Both moose are being monitored on a weekly basis and the first few months of data from the bull have been downloaded and will be posted on the DEP website (www.ct.gov/ dep) in the near future.

With the completion of this year's helicopter capture efforts, a total of eight

Connecticut.

encouraged to call the Wildlife Division's Franklin Wildlife office at 860-642-7239 or the Sessions Woods office at 860-675-

N26NE



Deer Program biologist Andrew LaBonte and Northeast Helicopter pilot

Andrew Putnam preparing for take-off and aerial pursuit of moose in Hartland,

First female moose that was captured, collared, and ear-tagged in Hartland, Connecticut

moose were observed (3 bulls, 2 cows, and 3 calves) during six flights. Moose will be captured opportunistically until next winter, when more active capture efforts will begin again.

Anyone who observes a moose is

8130 as soon as possible. Moose sightings may also be reported on the DEP website at www.depdata.ct.gov/wildlife/ sighting/mooserpt.htm.

# **Monitoring Moose Movements Through Public Sightings**

#### Written by Andrew LaBonte, Deer Program

In April 2009, the DEP established a link on the DEP website to allow residents to report moose sightings. Within the first month of operation, the DEP received reports of moose in Barkhamsted, Burlington, Hartland, New Hartford, and Stafford, none of which were out of the ordinary. However, several web reports of a moose in unexpected towns like Avon and Simsbury were made, with additional reports coming in via telephone and email. On May 16, 2009, a female moose was photographed using a crosswalk in Farmington. With another destination in mind and wise judgment in crossing the road, the moose continued on its journey south. During the week of May 18, several reports of a moose in New Britain came in from the public, indicating that the moose that had been reported in the towns mentioned above had made a wrong turn.

During spring (May-June), when cow moose (females) are preparing to give birth, offspring from the previous years are often displaced and head off to establish their own area of residency. This is this time that the DEP periodically receives reports of moose in areas not conducive to their wandering. Dispersing moose often head south through the state, crossing many busy highways. Dispersal of these young moose is guaranteed; however, the outcome of their survival is not. During the past nine years, dispersing moose have ended up in Hartford, Old Lyme, New Canaan, Fairfield, and Waterbury. Fortunately, for the safety of the moose and the citizens of the state, the moose in Hartford and Old Lyme were captured and successfully relocated. The outcome for the moose that ended up in New Canaan was less than desirable, as it was killed by an unfortunate motorist on the Merritt Parkway, who also suffered substantial injuries. The two additional moose that ended up in Fairfield and Waterbury were euthanized due to public safety concerns as their proximity to busy highways during peak traffic hours likely would have resulted in a similar outcome as the New Canaan moose.

When at all possible, the DEP attempts to capture and relocate dispersing moose. However, when moose end up in highly populated areas, such as New Britain, it requires a lot of effort and coordination to ensure the safety of the moose and the public.



This photo of a moose using a crosswalk to cross a road in Farmington was captured by Master Wildlife Conservationist and DEP employee Tina Delaney this past May. The moose eventually made its way to New Britain where it was immobilized by DEP personnel.

On May 21, with cooperation between DEP Wildlife Division biologists, DEP ENCON police, and the New Britain police, the moose in New Britain was successfully immobilized under less than ideal temperatures. A team of 10-12 DEP staff transported the 550-pound moose from the woods to the back of a pickup truck with the aid of a large cargo net. With help and the generosity of local residents, the moose was iced and cooled with water to minimize heat stress. The moose was then transported and released at a location in northern Connecticut with good moose habitat.

As Connecticut's moose population continues to increase, it is expected that more moose will find their way into urban areas and will require intervention. Anyone who observes a moose in urban areas is encouraged to contact the Franklin Wildlife office at 860-642-7239, Sessions Woods office at 860-675-8130, or the DEP emergency dispatch line at 860-434-3333. All other sightings can be reported via the DEP website at <u>www.depdata.</u> <u>ct.gov/wildlife/sighting/mooserpt.htm</u>.

# **Turtles and Roads Are a Bad Combination**

Recent research suggests that some turtle populations are declining, in part, because of car and turtle collisions on the numerous roads that dissect the landscape. In Connecticut, hundreds of turtles, particularly eastern box turtles, are killed on roadways every spring and summer. Box turtles have becomes so rare in the state that they are a species of special concern on Connecticut's Threatened and Endangered Species List.

You can help by watching for turtles that are crossing roads. If possible (without jeopardizing your safety), help turtles across the road in the direction they were headed before they are struck by cars.

In the case of snapping turtles, it is recommended that you do not handle them at all. Snapping turtles can be heavy and slimy, making it difficult to hold on to them. They should never be picked up their tails as this can damage the vertebral column and tail, not to mention the person who is in danger of being bitten by an angry turtle. However, do not be alarmed if a snapping turtle lays its eggs in your yard. Once the eggs are laid, the female turtle will return to the waterbody she came from. When the eggs hatch sometime in September, the hatchlings will only be about the size of a quarter.

To learn more about some of the turtles found in Connecticut, visit the wildlife section of the DEP website at <u>www.</u> <u>ct.gov/dep/wildlife</u>.

# White-Nose Syndrome Devastates CT's Hibernating Bats

#### Written by Christina Kocer, Wildlife Diversity Program

This past winter, visits to Connecticut's hibernacula, caves and mines where bats hibernate, revealed devastation. The syndrome known as White-Nose Syndrome (WNS) that had been documented in its early stages at two locations in Connecticut during 2008 intensified at those sites and was documented at one additional site in 2009. The dismal scene observed during routine surveys this winter was one of bats clinging to structures, exposed to the elements outside the hibernacula. Inside the hibernacula, bat carcasses littered the floors while fungusengulfed bats clung to the walls.

Overall, 80%–95% of the bats that had been hibernating at two of the three affected sites in years past were gone in the period of one year. This same scene repeated itself throughout the Northeast, affecting hibernating bats in New York, Massachusetts, Vermont, New Hampshire, New Jersey, Pennsylvania, and south into Virginia and West Virginia. Many of the bats seen in Connecticut during summer spend their winters hibernating in these neighboring states. The ramifications of this dramatic loss in numbers will be evident this summer as far fewer bats will be out consuming night-flying insects.

Discovered in New York in 2007, WNS was named for the characteristic white fungus that can appear on the noses, ears, and wing membranes of hibernating bats. It is unknown if the fungus is causing the death of the bats or is simply a symptom of an unknown, underlying disease or other health issue. Bats affected by WNS have been documented coming out of hibernation early, flying outside during the coldest months of winter, often during the day, and ultimately starving to death. There is no indication that humans are susceptible to the fungus.

Little brown bats have been the most severely impacted species throughout the Northeast region but all cave-dwelling species have also been impacted, including species common in Connecticut, such as the northern long-eared, eastern pipistrelle, and to a much lesser degree, big brown bats. The federally endangered Indiana bat has suffered dramatic declines already and, as WNS spreads, the survival of other rare species, including Virginia big-eared bats and gray bats, is also

threatened. Because bats are long-lived species with low reproductive rates, there is no doubt that WNS will have major long-term impacts on the biodiversity and ecosystems of our state, as well as throughout the Northeast region.

Connecticut biologists are working closely with other affected states, federal agencies, such as the U.S. Fish and Wildlife Service (USFWS) and U.S. Geological Survey, as well as several research institutions to learn more about WNS and determine its cause. This summer, considerable work will be conducted in the affected Northeast region,

as well as throughout the unaffected south and Midwest regions, to better understand how WNS affects summer bat colonies. To aid in this effort, the DEP Wildlife Division is collecting information about unusual bat behavior. If you currently have bats living near vour home, have had bats in



A mane of fungus engulfs one bat while another bat roosting nearby appears to be free of the white fungus that is a common characteristic of White-Nose Syndrome. Although the fungus is not visible on the one bat, it is impossible to know if this bat is healthy.



An eastern pipistrelle is clearly overwhelmed with the fungus associated with White-Nose Syndrome. All species of cave dwelling bats in the Northeast, such as the eastern pipistrelle, have been affected by this still poorly understood affliction.

the past, or know someone who has bats living nearby, please contact Wildlife Division technician Christina Kocer at (860) 675-8130 or at christina.kocer@ct.gov.

The U.S. Congress plans to hold special subcommittee hearings in June about WNS. States and many conservation organizations are requesting federal funds to help solve the WNS mystery before it is too late. To learn more about WNS and its impacts, visit the USFWS website at www.fws.gov/northeast/white nose.html or the National Wildlife Health Center website at www.nwhc.usgs.gov/disease\_ information/white-nose syndrome.

# Federal Aid Project Spotlight: Waterfowl Population Studies

The management of waterfowl populations is complex due to the variety of species, and the interstate and international cooperation necessary to manage these migratory birds and their diverse habitats. Waterfowl abundance is dictated by a number of factors, such as breeding habitat condition, winter severity, and available food resources. The dynamic nature of migratory waterfowl populations requires annual monitoring of breeding and wintering populations. Yearly monitoring efforts are useful in assessing various population management practices, determining habitat use, and establishing harvest regulations.

Due to these research and monitoring needs, the DEP Wildlife Division has been conducting annual surveys to determine trends in the distribution and abundance of wintering and breeding waterfowl in the state. As part of this ongoing study, Division biologists conduct the Midwinter Waterfowl Survey, Breeding Waterfowl Survey, and Nesting Mute Swan Survey. Data on wood duck nesting success are obtained from checking nest boxes on state land every winter. This waterfowl monitoring project is possible due to financial support from the Federal Aid in Wildlife Restoration Program. Established in 1937 with the support of sportsmen, the federal aid program provides funding to state wildlife agencies for wildlife management and research, habitat acquisition, wildlife management area development, and hunter education. Proceeds are derived from an excise tax on the sale of sporting firearms, ammunition, and archery equipment.

### Midwinter Waterfowl Survey

Winter migratory waterfowl populations are surveyed by conducting the Midwinter Waterfowl Survey. This survey is coordinated by the U.S. Fish and Wildlife Service (USFWS) throughout the Atlantic Flyway. Survey results are used as an index to wintering populations and provide relative information on distribution and habitat use. The survey area covers the entire Connecticut coastline, three major river systems (Housatonic, Connecticut, and Thames), and a sample of inland reservoirs within a 10-mile radius of the coastline. In cold winters, the Connecticut portion of the survey adequately monitors black ducks,



District Maintainer Koert Riley (left) and seasonal research assistant Eric Pelletier check a wood duck nest box at Shade Swamp Wildlife Management Area in Farmington. Nest box checks help in determining the yearly nesting success of wood ducks.

diving ducks, and Atlantic brant, but is less valuable for mallards and Canada geese because a disproportionate percent of these species spend the winter in nonsurveyed inland areas. The data from this survey are used in the development of management plans and harvest recommendations. The continued utility of the Midwinter Waterfowl Survey has been questioned by some biologists. However, until the USFWS decides to suspend the survey, Connecticut and the other flyway states will continue to conduct it.

# **Breeding Waterfowl Survey**

This statewide survey is another cooperative effort with the USFWS. It was designed to index mallard breeding pair numbers, but has evolved to provide the population data that drive the Eastern Mallard Adaptive Harvest Management models. These models are used to prescribe duck hunting seasons (season length and bag limits) in the Atlantic Flyway. This survey is less precise at the state level but it is the best tool for monitoring trends in distribution and abundance and for managing waterfowl populations in the state (see page 12 to learn more about the 2009 survey).

# Nesting Mute Swan Survey

Mute swans continue to expand throughout inland portions of Connecti-

cut. To better document this expansion, a nesting survey is conducted in May. The state is divided into 146 plots which are surveyed from the air (fixed wing airplane or helicopter). Due to time and budget constraints, a three-year survey rotation for inland plots was developed. Coastal plots are surveyed every year. Since its inception in 2003, this survey has provided information on the distribution of a non-native species that has an impact on habitat used by native wildlife.

# Wood Duck Box Checks

Nest boxes have contributed to the recovery of wood ducks throughout their range. Box use and productivity can be used as an index to local breeding populations. In 2002-2003, an intensive assessment of existing wood duck boxes on state lands was conducted. Based on the results, a survey protocol was developed that targets an annual sample size that consists of all state land boxes in the western portion of the state (115) and a sample of 280 boxes in the eastern portion. Boxes are checked every year in winter, when there are safe ice conditions. A standard data form is completed at each site after all boxes are thoroughly checked, cleaned, and new nesting material added. Wood duck productivity is determined by documenting the number of egg membranes found in each box.

8

#### Buy a Connecticut Duck Stamp and Help Conserve Wetlands and Wildlife!

Sportsmen who hunt waterfowl are required to purchase a \$10 Connecticut Duck Stamp every year. However, you don't have to be a waterfowl hunter to buy a Duck Stamp. Anyone interested in the conservation of wetland wildlife, such as waterfowl and waterbirds, and their habitats can help by purchasing one.

By state statute, proceeds from the sale of Connecticut Duck Stamps can only be used for the development, management, preservation, conservation, acquisition, purchase and

maintenance of waterfowl habitat and wetlands; the purchase or acquisition of recreational rights or interests relating to migratory birds; and the design, production, promotion, and procurement and sale of the prints and related artwork.

# Local Artist Designs 2009 Connecticut Duck Stamp

#### The 2009 Connecticut Duck

Stamp features an American black duck illustrated by Clint Herdman, a wildlife artist from Beacon Falls. Clint possesses a lifelong interest in art and wildlife, especially



waterfowl. His inspiration comes from the years he has spent in the field enjoying the outdoors and nature photography. He prefers the medium of graphite and loves the challenge of bringing a subject to life with the contrast of black and white. Clint also is an avid waterfowl hunter and fisherman.

> To date, the sale of stamps (and collector art prints from 1993 through 2003) has generated over \$1.2 million for wetland conservation in the state. As a result, the Wildlife Division has been able to use these funds to enhance or restore over

1,700 acres of wetlands, mostly on state-owned wildlife management areas. Projects have been conducted at 45 sites statewide. The Duck Stamp fund is vital because it often serves as a match for federal funds that the DEP receives through various grant programs, such as the North American Wetland Conservation Act.

Waterfowl hunters who pay for their stamp at town halls or online (<u>www.ct.gov/dep/sports-</u>

menlicensing) can request a copy of the actual stamp by contacting DEP License and Revenue, 79 Elm Street, Hartford, CT 06106. Individuals or stamp collectors who wish to purchase a stamp to sup-

port wetland habitat and waterfowl conservation should send a check for the number of stamps desired (\$10 each) with your mailing information to DEP License and Revenue and the stamps will be mailed to you.

# **2009 Federal Junior Duck Stamp Contest** *CT Best in Show Awarded to High School Student from Orange*

Young Connecticut artists recently competed in the Junior Duck Stamp competition sponsored by the Connecticut Waterfowlers Association (CWA). Members of CWA judged the 110 entries received this year and chose, as Best of Show, an acrylic painting of a mallard by Connie Chen, from Orange. Connie, a student at the Bob Boroski School of Art, competed in Group IV, which includes high school students in grades 10-12. Connie's painting will go on to compete in the national Junior Duck Stamp Contest. Connie's painting of a pair of ruddy ducks was chosen as the Best of Show in the 2008 competition.

The Federal Junior Duck Stamp Conservation and Design Program (JDS) was first recognized by Congress in 1994 when the Junior Duck Stamp Conservation and Design Program Act was enacted. The 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 JDS design as their visual "term papers." Preparation for the JDS contest and involvement in the program requires students to think about and understand the fundamental principles of anatomy and environmental science. The program also provides an opportunity for students to learn science and express their knowledge of the beauty, diversity, and interdependence of wildlife, artistically.

The JDS 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 firstplace 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 each. Proceeds support conservation education and provide awards and scholarships for the students, teachers, and schools that participate in the program.

More information about the Junior Duck Stamp Program is on the U.S. Fish and Wildlife Service website at <u>www.fws.</u> <u>gov</u>. To learn more about the Connecticut Waterfowlers Association, visit the organization's website at <u>www.ctwaterfowlers.org</u>.

# **Forest Conservation and the Cerulean Warbler**

Article and photography by Paul Fusco, Wildlife Outreach Program

In the world of neotropical migrants, there is a little bird facing a huge problem. The tiny and most beautiful cerulean warbler is fast losing its habitat and the ability to maintain its population. Since the 1960s, surveys have shown that the bird is losing ground at a rate of over four percent per year, which has resulted in a population reduction pushing 80% during that time period. It is declining faster than any other warbler species, and if this rate of steep decline continues, the species' actual existence is in serious trouble.

The cerulean warbler is a member of the *Dendroica* (tree dweller) genus of the wood warbler family. Wood warblers are small birds with thin pointed bills. They are highly active and most are brightly colored, especially the males. At a little



Smaller than a sparrow, male cerulean warblers have dazzling blue and white plumage. They are more frequently heard than seen, as they spend most of their time high in the forest canopy.

under five inches in length, ceruleans are one of the smaller species in the warbler family. Their tails are shorter than other *Dendroica* warblers and they have long primary wing feathers, which are visible when the bird is at rest. Long primaries are indicative of a bird that migrates a long distance.

# Forest Fragmentation and Degradation

Neotropical migrants are birds that live in the tropical areas of the New World (Central and South America, and the Caribbean), but migrate to North America for the breeding season. These birds make incredible journeys each year to take advantage of the massive food supply (mainly insects) that become available during the time they raise their young. Many species of neotropical migrants are dependent upon large forested habitats to reproduce successfully. The loss and/or degradation of forest habitats can adversely affect the populations of these birds, many of which have been declining for decades.

Habitat loss and forest fragmentation are the primary causes for the decline of warblers, tanagers, thrushes, and other neotropical migrants. When large forest blocks are chopped into smaller pieces by roads and development, populations of these birds experience tremendous stress. Forest fragmentation opens a path into the forest for nest predators, cowbirds, and human disturbance. On a population level, the birds cannot withstand being squeezed into smaller and less desirable space without being affected in a negative way.

Not only are neotropical migrants losing habitat on their North American breeding grounds, but they are also losing habitat in their Latin American wintering areas. Habitat conservation and ecologically sound forest management practices are critical for the survival of neotropical migrants like the cerulean warbler. The male cerulean warbler is deep azure blue above and white below. It has a narrow blue/black band across its upper breast and prominent streaks down its sides and flanks. The female is blue/green above and whitish below, with a whitish eyebrow stripe and diffuse streaking on the sides and flanks. Both sexes show bold white wing bars and white tail spots.

### **Range and Habitat**

The current breeding range of the cerulean warbler is within the eastern deciduous forests of North America. The range extends from Arkansas and Tennessee, north to eastern Minnesota, southern Ontario and New York, and as far east as Connecticut and Delaware. The core breeding range is primarily west of the Appalachians, in the mature forests of the upper Ohio River valley, Cumberland Plateau, and the Allegheny region. Historically, cerulean warblers were most common in the bottomland flood plain forests of the Mississippi Valley region. Those forests are no longer there. Suitable forest habitats in the Mississippi, Missouri, and parts of the Ohio River valleys have also been lost due to intensive cutting and conversion to farmland.

Over the past century, the cerulean's breeding range has slowly expanded to the north and east. Colonization into the Northeast has not offset the large population declines in the midwestern regions. In the Northeast, breeding was first established in southwestern Quebec in the 1950s, in Connecticut in 1972, Rhode Island in 1986, and in Massachusetts in 1989.

In order to get to its breeding grounds, the warbler must migrate from its wintering range, which is in northern South America. In its wintering range, the cerulean warbler inhabits mid-elevation montane valleys in the eastern slopes of the Andes Mountains in Venezuela, Colombia, Ecuador, and Peru. This little bird has a migration that is among the longest of any warbler. Its spring migration is a marathon that takes the bird across the Gulf of Mexico on a perilous journey of over 2,500 miles before it arrives at the eastern forests of North America

The cerulean warbler requires large tracts of old growth deciduous forest with an open understory. The forest canopy must be mainly closed, but still have sporadic openings. Forests that have well defined layers and large, taller trees extending above the surrounding canopy are favored. Forested areas with rivers, streams, and/or swamps nearby are best. Even though the species is fairly widespread in its breeding range, it is uncommon and its distribution is local and patchy throughout the range.



Cerulean warblers are fairly common to uncommon and local throughout their range.

## **Behavior**

Ceruleans are difficult to see as they are usually found high in the canopy of tall, broad-leafed deciduous trees. Here, they can be spotted as they hop from branch to branch or take short flights among the treetops, flashing their white tail patches, as they forage for their primary food, insects and spiders. Caterpillars are often the food most sought after.

Cerulean warblers are typically associated with several tree species in the forest, including sycamore, silver maple, red maple, ash, and cottonwood. Where they are found in dryer upland areas, they are associated with oaks and hickories. Keeping with its penthouse routine, nests are typically built on a fork of a horizontal branch at a height of between 30 and 90 feet, making nest behavior observations somewhat difficult.

The best way for a birder or a biologist to locate this species is to learn to recognize its song in the forest. It sings a rapid buzzy song of *zray*, *zray*, *zray*, *zray*, *zreeee*, with a distinctive higher pitch at the end. The song is somewhat similar to that of the black-throated blue warbler (which is slower) and the northern parula (which lacks the distinctive higher pitch at the end).

# **Conservation**

The cerulean warbler has a lot going against it. Its habitat is being lost and degraded on its breeding grounds due to forest cutting and land management activities. At its wintering grounds, it is losing habitat to forest clearing for conversion to agriculture for growing such products as coffee and cacao. In addition, the cerulean warbler requires large, unbroken forest for breeding, and it endures a long migratory journey every spring and fall. It is not surprising that the bird is rapidly declining.

In Connecticut, the cerulean warbler is found in a few widely scattered locations during the breeding season. Parts of the upper Housatonic River Valley and the lower Connecticut River Valley usually have small colonies of breeding pairs every year. The birds may also be found at a few other more isolated locations in the southwestern and northeastern parts of the state. Interestingly, as the cerulean warbler has been declining due to habitat loss in its traditional breeding range, it has also been slowly expanding its range to the Northeast. As the species increases its presence in the Northeast and, as our forests continue to mature, Connecticut may be becoming more of an important part of the birds' range for the future.

# What About Shade Grown Coffee?

It so happens that the wintering habitat of the cerulean warbler is a great place for farmers to grow coffee. The humid, mid-elevation broad-leafed forests of the eastern slopes of the Andes have just the right conditions for coffee and other crops, including cacao, to grow. Large scale coffee plantations can have a landscape altering affect on the native ecosystem, with a potentially devastating impact on forest habitat.

Coffee is originally from Africa and has been grown in Latin America for the past 200 or so years. Traditionally, coffee has been grown as a shade plant, below the overstory of native trees, because it was never tolerant of full sun. But in recent years, new strains of coffee have been developed that are sun tolerant, and farmers are able to increase their yield by planting sun grown coffee. The problem for birds is that sun grown coffee requires the clearing of the forest canopy and mid-layers, which provide habitat for millions of birds. Once cleared, the plantations become biologically void. Sun grown coffee also requires the heavy use of chemical fertilizers, fungicides, and pesticides.

Shade grown coffee, on the other hand, retains the forest canopy and structure, providing habitat for millions of birds, including the cerulean warbler. Shade coffee plantations have a great diversity of native trees and other plants growing among the coffee shrubs, which helps to provide habitat for wildlife, as well as to retain regional biodiversity.

Consumers have the power to help protect migratory birds that winter in Latin American forests by buying shade grown coffee instead of ecologically destructive sun grown coffee. The Smithsonian Migratory Bird Center has developed a certification program for designating "Bird Friendly" coffee. By supporting bird friendly coffee plantations, consumers can make a difference in bird conservation every day. They would also be supporting the traditional way of life for many farmers in Latin America.

# **Annual Breeding Waterfowl Survey Completed**

#### Written by Kelly Kubik, Migratory Gamebird Program

Staff from the DEP Wildlife Division conduct the annual spring breeding waterfowl survey in April. Each state in the Atlantic Flyway from Virginia north to New Hampshire participates. This survey is part of the Northeast Breeding Waterfowl Survey coordinated through the Mallard Committee of the Atlantic Flyway Council's Migratory Gamebird Technical Section. It began experimentally in 1989 and became operational in 1991. Specifically designed to index mallard breeding pair numbers, the survey has evolved to provide the population data that drive the Eastern Mallard Adaptive Harvest Management (AHM) models. These models are used to prescribe duck hunting seasons (season length and bag limits) in the Atlantic Flyway.

In Connecticut, this ground survey targets 56 randomly selected, one-square kilometer plots of varying habitat types. Because these plots are randomly selected, they fall on both public and private property. The sample plots are distributed within three ecological strata in the state: Litchfield highlands, central lowlands, and coastal salt

marsh. The salt marsh stratum was added in 1993 because it was not well represented by the statewide random plot selection. Therefore, six random plots were established within this stratum. This particular habitat type is very important to black ducks and these plots provide an index to black duck coastal breeding numbers.

The water tables of many of the wetlands within the survey plots were replenished by early spring rains. Habitat changes associated with beaver activity continue to be noted on some plots. Beaver dams were breached in some areas, creating low water conditions for nesting waterfowl. Beavers were also noted to have significantly raised the water level of a historically productive pond, resulting in reduced waterfowl counts for that plot this year. Even though these types of habitat changes are inevitable over the years, they are one of the major factors that affect breeding waterfowl numbers.

A drake index (drakes/pairs+drakes) was calculated for each species to determine if survey timing was appropriate. A high drake index indicates good survey timing. It shows that the nesting of local ducks has begun and most migrants have moved north to their breeding grounds. Conversely, a low index shows the survey was conducted too early and paired migrants may still be present. An index between 0.50 and 0.75 is indicative of a well-timed survey.

Mallards continue to dominate the survey in Connecticut.

#### **Connecticut Breeding Waterfowl Pair Results for Major Species**

Species	2009	2008	Five-Year Average
Black Duck	241	228	369
Canada Goose	9,620	9,851	10,598
Mallard	18,112	17,936	17,263
Wood Duck	5,946	10,550	8,387



A total of 9,620 pairs of Canada geese were estimated during the 2009 breeding waterfowl survey. These results demonstrate a two percent decrease from the estimate in 2008 and a nine percent decrease from the five-year average.

The mallard estimate for 2009 was 18,112 pairs. This is a one percent increase from 2008 and a five percent increase from the five-year average. The mallard drake index was 0.62, indicating proper survey timing for this species. Mallards are very adaptable birds that will regularly nest in a variety of different landscapes and are very tolerable of human disturbance.

The Canada goose estimate for this year was 9,620 pairs, representing a two percent decrease from the previous year and a nine percent decrease from the five-year average. Connecticut's liberal resident Canada goose hunting seasons are having an impact on goose populations, particularly in those areas where hunters have access to the birds.

The wood duck estimate for 2009 was 5,946 pairs. This is a 44% decrease from 2008 and a 28% decrease from the fiveyear average. The previous two years had the highest recorded breeding pair estimates for wood ducks in Connecticut since the inception of the survey. If these two years are excluded from the data set, then this year's count is a 14% decrease from 2006 and less than a one percent decrease from the 2002-2006 average. The wood duck drake index was 0.38.

Similar to last year, black ducks were not observed in any inland plots this year. The breeding black duck estimate was 241 pairs. This represents a five percent increase from 2008 and a 38% decrease from the five-year average. These fluctuations in black duck breeding pair estimates are likely attributed to

ever changing habitat conditions and particularly to the secretive nature of this species. The black duck drake index for this year was 0.47.

The breeding waterfowl survey has helped in the establishment of three important databases that were previously unavailable to waterfowl managers: regional waterfowl population estimates; regional mallard breeding pair estimates; and a trend index to determine long-term population changes.

# **Children's Wildlife Booklet Available**

Written by Laura Rogers-Castro, Outreach Program

Are you an educator or know someone who is? The Wildlife Division has compiled a selection of "Just for Kids" pages from *Connecticut Wildlife* magazine and produced a booklet called *Exploring Connecticut's Wildlife at Sessions Woods*. Printing of the booklet was made possible by the Friends of Sessions Woods (FOSW) through a grant from the late Paul Newman and the Newman's Own Foundation.

Newman's Own, Inc., produces items such as salad dressings, popcorn, salsa, and pasta sauces. The Foundation donates all profits and royalties from the sale of these products, after taxes, for educational and charitable purposes. It has given over \$250 million to thousands of charities worldwide since 1982. Grant applications are by invitation only and the Friends of Sessions Woods was invited to submit a grant proposal from a board member. This very useful gift will enhance the educational experience of children visiting the Wildlife Division's Sessions Woods Wildlife Management Area in Burlington.

Sessions Woods features "Just for Kids" pages on topics such as forests, fields, beaver marshes, vernal pools, wildlife, and bird watching. There are coloring pages on the wood duck, black bear, blue-winged warbler, wild turkey, and ruby-throated hummingbird. A few activity pages are included. For example, "Habitat Hunt," which is similar to a scavenger hunt, can be completed at Sessions Woods or any natural area. A special feature of the booklet is a four-page color insert with beautiful wildlife photographs taken by Wildlife Division photographer, Paul Fusco. The cost of printing the insert was paid for by the FOSW.

The best news about the booklet is that it is free to educators and children while supplies last! Of course, the best use of the booklet is before or after a group takes a field trip to Sessions Woods. Any school or scout group can visit Sessions Woods, but small groups (less than 25) have an option for a free, guided program as well. The Newman's Own Foundation also provided some funding for bus transportation



to Sessions Woods,

particularly for school groups visiting from some of Connecticut's larger cities. For additional programming information or to obtain copies of *Exploring Connecticut's Wildlife at Sessions Woods*, please contact Laura Rogers-Castro at 860-675-8130 or <u>laura.rogers-castro@</u> <u>ct.gov</u>. The booklet is most suitable for children in grades 3-8, but select pages can be used by any age.

Exploring Connecticut's Wildlife at

# **Den Visits Reveal Bear Productivity**

Written by Paul Rego, Furbearer Program

Again this past winter, Wildlife Division biologists located and examined denned female black bears to assess reproduction and cub survival. Sixteen sows wore radio collars that allowed biologists to trek through the winter forests and pinpoint the locations the females chose to ride out the winter months. The dens also serve as maternity "rooms" for the females and "nurseries" for the cubs that are born in January in the middle of the denning period. The following winter, the females once again share their dens with their offspring, now yearlings, that were born the previous winter.

A denning bear can quickly rouse and run off if disturbed. Therefore, biologists quietly approach to within six to 12 feet of the bear and use a syringe mounted on a pole to inject an immobilizing drug into the bear. Yearlings, which can weigh between 30 and 100 pounds, must be similarly sedated. Cubs, which weigh four to eight pounds, can be handled without sedation. The drugs usually give biologists more than an hour to examine the bears and take measurements.

All 16 sows were accompanied by offspring, 11 had new cubs and five had yearlings. This is not unusual because all of the sows are older than three years, the age when black bears can first give birth. An average of 2.1 cubs was found in the new litters. Fourteen yearlings were expected to be found in six of the litters based on the number of cubs observed in the 2008 den checks. Ten yearlings were actually found, indicating that over 70% of cubs survived their first year. The reproduction and survival observed this past winter were very similar to levels documented in den checks over the last six years and show the potential for continued rapid growth of the population.

Female bears choose a variety of settings for dens. In Connecticut, sows commonly den under or next to fallen trees or brush piles. The sow and off-

spring may be almost entirely concealed or the slash may provide about as much cover as a ragged umbrella. More than half of the dens located this past winter were associated with brush or fallen trees. It is not uncommon for bears to make a bed of leaves and twigs and lay, curled like a sleeping dog, on the ground with little or no shelter, exposed to all of winter's snow, ice, wind, and rain. These nests are often next to large trees which may serve as an emergency escape from danger - even four-month-old cubs can climb well. Three sows checked this year used nests next to large trees. Even less common in Connecticut but observed regularly in the southeast are dens in hollow trees. No tree dens were found this winter. One sow slept underground in a den she excavated, perhaps by enlarging the burrow of a smaller animal, such as a fox or woodchuck. There seems to be no shortage of potential den sites in most Connecticut woodlands.

# Funding Provided to Demolish Long Beach Cottages First Step in Protecting Critical Habitat for Piping Plovers and Least Terns

In April 2009, Congresswoman Rosa L. DeLauro announced that \$909,000 was committed for the Barrier Beach Restoration on Long Beach West through the American Recovery and Reinvestment Act. This funding will allow for the demolition and cleanup of the 41 abandoned cottages on Long Beach West in Stratford. Plans to remove the cottages also involve demolition and restoration of the site that will provide an important natural place for the community to enjoy, as well as protect critical wildlife habitat. This is an important step in the town of Stratford's work to sell the property to the U.S. Fish and Wildlife Service to become part of the Stewart B. McKinney National Wildlife Refuge.

UL J. FUSCO

The removal of abandoned cottages and the planned restoration of the barrier beach at Long Beach West

in Stratford will help provide critical nesting habitat for the state threatened least tern (above) and the state

Progress on the

Barrier Beach Resto-

ration Project is the result of a strong private-public partnership that includes the support of the Town of Stratford; the Connecticut Department of Environmental Protection; the U.S. Fish and Wildlife Service, Coastal Program; the National Fish and Wildlife Foundation; the Trust for Public Land; and Audubon Connecticut

"At long last we will finally be able to not only demolish and clean-up the cottages on Long Beach West, but we will also be able to begin to restore this habitat. With no access for firefighters and other first responders, these cottages have been a threat to public safety and a liability for Stratford," said DeLauro. "It is my hope, that by taking these important steps we will also move closer to selling the property to the U.S. Fish and Wildlife Service for the agency to manage and I will continue to work with the city, the residents and the Fish and Wildlife Service to make this happen."

This project represents an important preservation and restoration of a coastal barrier beach that constitutes 20% of all

barrier beaches in Connecticut.

and federally threatened piping plover.

"It is good news that stimulus funds are being provided to the U.S. Fish and Wildlife Service's Coastal Program for the removal of abandoned cottages on Long Beach West. These funds, in addition to those that the state and other partners are making available, will allow us to take down these cottages, restore valuable public access to a beautiful stretch of Long Island Sound shoreline, and restore a barrier beach habitat for a variety of threatened and endangered species. This project is a great example of how local, state, and federal government agencies, along with non-profit partners, can work together to protect our natural coastal areas and improve both public safety and our quality of life," Connecticut Governor M. Jodi Rell said.

Long Beach West is a critical nesting area for the state and federally threatened piping plover and the state threatened least tern. Many traditional nesting beaches for these birds have been lost to development or are impacted by disturbance from beach visitors.

"This funding under the President's Recovery Act would enable the removal of dilapidated cabins and restoration of natural conditions on Long Beach West. In addition to providing an economic boost to local communities, this project supports the Fish and Wildlife Service's ongoing efforts to conserve fish and wildlife resources and quality outdoor experiences for future generations," said Sharon Marino, from the U.S. Fish and Wildlife Service.

The Barrier Beach Restoration project on Long Beach West represents a priority need identified by the U.S. Fish and Wildlife Service through its capital planning process or existing plans. The agency worked through a merit-based process to identify and prioritize projects before finalizing the project list by ensuring the investments met the criteria put forth in the Recovery Act: namely, that a project addresses the Department's highest priority mission needs; generates the largest number of jobs in the shortest period of time; and creates lasting value for the American public.

# Taking Conservation into the FutureState Wildlife Grant Project: Researching Native Bee Pollinators

The need for information on native pollinators is urgent. Agriculturalists and scientists alike are reporting rapid and serious declines of pollinators nationwide. Habitat loss and degradation, pesticide use, and introduced diseases have all contributed to the decline of native solitary and bumble bees and the familiar managed European honey bee. Two bumble bee species that are important crop pollinators, the rusty patched bumble bee and the yellow-banded bee, have not been seen in the eastern United States in over a decade. There is growing concern that a number of North American native bee species are sliding toward global extinction. In an effort to address these serious and immediate conservation challenges, a tremendous amount of data on Connecticut bees has been collected and evaluated starting in 2007 through a State Wildlife Grant-funded collaborative project with the University of Connecticut. To date, over 6.900 records of individual bees have been entered into a statewide database. All occurrence data on bees, including GPS location coordinates, are entered into the American Museum of Natural History's Bee Database and are available at https://research.amnh.org/pbi/locality/. The records are also uploaded on a regular basis to Discover Life (http:// www.discoverlife.org/), where they can be mapped and the records can contribute information for regional and national pollinator conservation efforts.

As a result of the inventory and assessment project, four bees have been proposed for state listing (1 endangered and 3 special concern species). Unfortunately, the three special concern species are thought to be extirpated from the state, and it may be too late to take



Habitat loss and degradation, pesticide use, and introduced diseases have all contributed to the decline of native solitary and bumble bees (pictured above) and the familiar managed European honey bee.

action on their behalf. When the listing update is finalized in 2009. Connecticut will become the first eastern state in North America to provide legal protection for its bee pollinators through the state's Endangered and Threatened Species Act. Conserving native pollinators that are experiencing serious declines is important to both the biodiversity of Connecticut and the state's economy. To learn more about the conservation of native pollinators, visit the website of the Xerces Society at www.xerces.org/pollinator.

# What Is the State Wildlife Grants Program?

The State Wildlife Grants (SWG) Program provides federal grants to all states to benefit wildlife and their habitats, with the goal of preventing species from becoming endangered. Funds are appropriated annually and must be used for projects that improve the conservation of species identified as those of Greatest Conservation Need (GCN) within a state's Comprehensive Wildlife Conservation Strategy (CWCS). Connecticut's CWCS, which was completed in 2005, was the culmination of a comprehensive two-year planning effort that included input from a variety of species experts, conservation groups, and other stakeholders. SWG projects have greatly benefitted knowledge of the distribution and abundance of GCN species in Connecticut and the factors limiting their populations. This information is critical to future conservation efforts.

# **Opportunities to Volunteer for Wildlife!**

### Chimney Swifts in the Chimney?

Chimney swifts are beneficial neighbors and tenants because they are insectivores that eat mosquitoes, biting flies, termites, and other insects. These birds appear to be declining across their range, and one possibility for this is the decreasing number of open, available chimneys. It is the DEP Wildlife Division's goal to get a better idea of the types of chimneys that swifts use, as well as develop a monitoring protocol. If you have had swifts in your chimney in the past or have them this year, let us know! We are looking for volunteers to monitor their own chimneys for chimney swift activity. Volunteers from throughout the state are also needed to survey selected chimneys to help identify additional nesting structures.

### **Nesting Raptors**

The Division also is looking for volunteers to help find active raptor nests, as well as monitor the nests through the fledging of young. If you know of any raptor nests, please contact the Division. Information needed is the species of bird, the structure the nest is located in or on, directions, date seen, and any activity you noticed.

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

# **Update on Bald Eagle and Peregrine Falcon Nests**

Every year, several dedicated volunteers and Wildlife Division staff monitor all of the bald eagle and peregrine falcon nests located in Connecticut throughout the nesting and fledging seasons. Division biologists also attempt to visit all of the nests to place identifying leg bands on the young birds before they fledge.

So far this year, the volunteers and Wildlife Division biologists have been monitoring 18 pairs of bald eagles, of which 15 are actively nesting. Ten pairs of peregrine falcons are currently nesting as well.

Stay tuned to *Connecticut Wildlife* to learn if these state endangered birds of prey have a successful nesting season.



County	# Pairs of Bald Eagles	# Pairs of Peregrine Falcons
New Haven	<i>2 active</i> 1 inactive	2 active
Hartford	5 active 1 failed	2 active
Middlesex	3 active	1 active
New London	2 active 1 territorial	2 active
Litchfield	2 active	
Fairfield	1 active	3 active

# Keep Your Distance from Eagle and Peregrine Nests

All of the bald eagle nests, except for one, are located on private land. The nest on state land is posted closed during the nesting season. Most of the private lands where nests are located are posted. Whether they are posted or not, TRESPASSING IS NOT WELCOMED. Nests are patrolled by DEP ENCON Police Officers. According to Connecticut State Statutes, disturbance of a bald eagle nest is prohibited and a "no access area" for nests is 700 feet. Any person who violates this statute is subject to a fine and/or possible imprisonment.

# Attention Upland Bird Hunters: 2009 Pheasant Season Is On!

Written by Laurie Fortin, Recreation Management Program

Thanks to the efforts of sportsmen statewide, the pheasant stocking program will occur during the 2009 hunting season. With a growing deficit in the state budget, some changes will be made to the program, but overall it will remain similar to efforts made in past years. One major change this year is that pheasant tags will not be available from the town clerks. Instead, tags can be purchased online or at the town clerks' offices and then the tags will be mailed to hunters. Hunters wishing to purchase tags over the counter will need to go to one of several DEP offices. The offices that are expected to sell tags over the counter are the DEP Headquarters in Hartford (79 Elm Street), Sessions Woods Wildlife Management

Area (WMA) in Burlington (341 Milford Street), Western District Headquarters in Harwinton (230 Plymouth Road), Eastern District Headquarters in Marlborough (209 Hebron Road), DEP Marine Headquarters in Old Lyme (33 Ferry Road), and Franklin WMA (391 Route 32). Office hours and directions to these facilities are available on the DEP website (www. ct.gov/dep; click on "Contacts" at the top of the page).

For the first time in over 10 years, the pheasant program saw an increase in tag sales during the 2008 season. This increased revenue will allow the DEP Wildlife Division to buy approximately the same number of birds in 2009 as was purchased in 2008, despite increased administrative costs and an increase in the price of birds. Highlights of this upcoming season will include the continuation of stocking efforts at high quality areas three days a week, occasional Saturday stockings statewide, and the potential opening of two new areas – John Minetto State Park in Torrington, which will be handicap accessible, and Suffield WMA, which is a 500-acre grassland area that was recently purchased.

Interested hunters should check the DEP website at <u>www.ct.gov/dep/hunting</u>. The projected stocking schedules should be posted sometime this summer, along with any additional updates about the program.

### Online Licensing for Sportsmen Available on the DEP Website

Go to <u>www.ct.gov/dep/sportsmenlicensing</u> to purchase Connecticut hunting, trapping, and fishing licenses, as well as all required deer, turkey, and migratory bird permits and stamps. The system accepts payment by VISA or MasterCard.

# **Great Park Pursuit at Sessions Woods**

The Great Park Pursuit (GPP), The Connecticut State Parks Family Adventure, is a central element of Connecticut's nationally recognized No Child Left Inside initiative. The game takes registered Connecticut families to seven different state parks and forests in May and June. The GPP kicked-off on May 9 at Squantz Pond State Park, in New Fairfield, and will conclude on June 20, with a day of activities followed by a family campout. Some of the events are guided by DEP staff and volunteers on specific Saturdays, while other activities are "self-guided" and families can visit these locations anytime during the seven-week contest period. At each location, teams are asked to complete at least one activity that highlights the vast opportunities in Connecticut's state parks and forests, such as hiking, canoeing, fishing, and more.

The DEP Wildlife Division's Sessions Woods Wildlife Management Area, in Burlington, was the site of





Top: Master Wildlife Conservationists Henry and Carol Perrault lead a bird walk along a trail at Sessions Woods for Great

Park Pursuit families. Above: Master Wildlife Conservationists man a table with a wildlife quiz that tests the knowledge of families.

Right: Scott Heth, from Audubon Sharon, shows a live barred owl to participants in the Great Park Pursuit. Scott also brought a kestrel, turkey vulture, and screech owl. the second guided event for GPP families on May 16. Wildlife Division and GPP staff, Master Wildlife Conservationists, and members of the Friends of Sessions Woods organized several activities that centered on a theme of birds to provide an opportunity for families to learn about birds and also explore the wildlife management area. Activities included bird walks, wildlife habitat walks, build a bluebird box, make a bird nest, storytelling, make a turkey call, ducks and decoys, and live hawks and owls, to name a few. According to comments families posted on the No Child Left Inside website (<u>www.NoChildLeftInside.org</u>), the event at Sessions Woods was enjoyable and many hoped to return to the area in the future to see more of the natural features and take advantage of the educational opportunities.



The CT State Parks Family Adventure

# The Wildlife Observer

### Finding a Rare Spring Salamander

*Connecticut Wildlife* reader, Pete Vertefeuille, has had articles and photographs published in *The Hampton Gazette*. He recently wrote to tell us about a unique wildlife observation he made during a spring wildflower walk in April 2008.

"During an annual wildflower walk in early springtime, we visited a particular place that is sort of unique -- a habitat that is in a fairly high elevation and contains a fragile ecosystem.

As I was crossing a brook, something bright caught my eye. To my left and partly behind a boulder there was what appeared to be an amphibious creature belly-side-up in the brook. I took a closer look at what appeared to be a huge salamander that was a bright salmon color. It was between six to six-and-ahalf inches long. I had no idea what species it was. Fortunately, I had my camera handy and took enough photos for proper identification later on. Because I had nothing to collect the dead salamander in, I left it behind.

After arriving home, I searched the Internet to try to identify the salamander. I also sent a photo of the animal to the Audubon Society to see if someone could help with the identification. Finally, I came across what appeared to be the likeness of my treasured find. The northern spring salamander seemed to fit the picture near perfectly.

Within a day, I received an email from Hank Gruner, Vice President of Programs at the Connecticut Science Center in Hartford who is also an authority on reptiles and amphibians. Hank had been forwarded a copy of my email and photo and he was anxious



to see the salamander to make a proper identification.

When Hank and I finally met, he shared more information than I was able to find on the Internet. The northern spring salamander is listed as threatened on Connecticut's Endangered and Threatened Species List. Its habitat is cool, shaded mountain brooks or springs at high elevations, wet areas under logs and stones, or under leaves in the forest. It may reach to around five to seven inches in length and its life expectancy is unknown but greater than five years. The spring salamander feeds on insects, earthworms, other smaller salamanders, spiders, and small frogs. The salamander breeds from October throughout the winter. It is one of 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

three salamanders that are found in streams in Connecticut; the other two are the northern dusky salamander and the northern two-lined salamander. Connecticut's spring salamander population has become threatened because of impacts to its wetland habitat and the degradation of water quality due to nearby development and the clearing of trees.

For perhaps a couple of hours or so, I watched Hank slowly raise flat rocks from the bed of the tiny brooks, as he tried not to stir up silt. We both anticipated finding the spring salamander somewhere along the way. Our hopes were mixed, as in one moment it seemed like we would finally discover a specimen and, in the next moment it appeared chances were becoming slim since this species is nocturnal. No matter what happened, our time in the woods was quiet and peaceful, and filled with hope. Hank gladly answered all my questions as we moved along.

We finally approached the place where the dead salamander was submerged in the brook. Hank examined and confirmed it as a spring salamander. After he collected the specimen, we went back to our search, following the meandering brook. We kept this momentum going until the brook turned into a swampy area and we decided to head back. On the way out of the woods, Hank talked about coming back with a few other people who are authorities on the salamander. They would have a better chance of discovering a live spring salamander then one person searching alone."



# Update on the "Hanging" Osprey

The September/October 2008 issue of *Connecticut Wildlife* contained a photograph of a dead adult osprey dangling from its nest after becoming entangled in discarded fishing line. This stark and disturbing photograph was taken by Hank Golet, a member of Connecticut's Bald Eagle Study group who is also actively involved in monitoring ospreys. Since its publication in the magazine, the image has stirred our readers to write about their experiences of finding other birds wrapped in fishing line and kite string. The DEP Fisheries Division also used the photograph in the 2009 Connecticut Angler's Guide to encourage anglers to dispose of their fishing line and litter properly.

After taking the photograph last year at the Roger Tory Peterson Wildlife Area in Old Lyme, Hank removed the dead osprey and found that it had an identifying leg band. The number on the band (#788-38468) was submitted to the U.S. Fish and Wildlife Service's Bird Banding Lab for identification. It was determined that the osprey had been banded by the late Jerry Mersereau, a longtime Wildlife Division volunteer and bird bander, on June 28, 1999, at Groton Utilities in Groton.

Report turkey brood sightings to the Wildlife Division! To participate in this research of Connecticut's turkey population, contact Wildlife Division biologist Mike Gregonis at 860-642-7239 or <u>michael.gregonis@ct.gov</u> to obtain the brood survey protocol and data sheets.

# What Happened to the March/April 2009 Issue of Connecticut Wildlife?

We were unable to publish the March/April 2009 issue due to the state budget situation, which resulted in restrictions on the printing of publications. Fortunately, we are able to continue publishing *Connecticut Wildlife*, starting with this May/June issue. To compensate for the "lost" issue, all of our readers who should have received the March/April issue will have their subscriptions extended by one issue. For example, if your subscription is set to expire in July/August 2009, it will now expire in September/ October 2009. We apologize for any inconvenience this delay may have caused and we look forward to continuing to publish a magazine dedicated to informing you about Connecticut's wildlife resources. Please feel free to contact us with any questions and concerns by calling or writing the Sessions Woods office or sending email to the editor at <u>katherine.herz@ct.gov</u>.

# Wildlife Calendar Reminders

- June-August............Respect fenced and posted shorebird nesting areas when visiting Connecticut beaches. Also, keep dogs and cats off of shoreline beaches to avoid disturbing nesting birds.

- July 4 ......While viewing fireworks displays at Connecticut coastal areas, respect fenced and posted shorebird nesting areas and offshore heron and egret rookeries.

### Programs at the Sessions Woods Conservation Education Center

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Programs are a cooperative venture between the Wildlife Division and the Friends of Sessions Woods. Please pre-register by calling 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM). Programs are free unless noted. An adult must accompany children under 12 years old. No pets allowed! Sessions Woods is located at 341 Milford St. (Route 69) in Burlington.

- August 12 ............Nature Walk for Young Children, starting at 9:30 AM. Children, ages 4 to 7, and their caregivers are welcome to join Master Wildlife Conservationist and Wildlife Division staff member Lauren Pasniewski for an easy walk at Sessions Woods. Participants will learn about plants and animals while having fun outdoors. Parents will discover interesting facts about wildlife and new ways to increase the observational skills of their children.
- August 15 ......Butterfly Walk at Sessions Woods, starting at 10:30 AM. Interested in learning about butterflies and invertebrate conservation? Join Wildlife Division Educator Laura Rogers-Castro for an introductory walk focusing on butterfly identification. Participants also will learn about using native plants to create butterfly habitat.

600

*Correction:* In the January/February 2009 issue of Connecticut Wildlife, Machimoodus State Park (page 18) was mistakenly identified as being in Haddam. The park is actually located in East Haddam.

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The 2009 moose crew from left to right: Seasonal Research Assistant Paul Lewis, Seasonal Research Assistant Bill Embacher, Wildlife Division biologist Michael Gregonis, Wildlife Division technician Jason Hawley, Wildlife Division biologist Andrew LaBonte, and Seasonal Research Assistant Alex Johnson.