

May/June 2008

Connecticut Wildlife

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BUREAU OF NATURAL RESOURCES • WILDLIFE DIVISION



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From the Director



Every five years, biologists from the DEP and experts appointed to taxonomic advisory committees review and update the state list of endangered, threatened, and special concern species. We are involved in that effort now and anticipate a regulatory public hearing on the new list later in 2008. Like other states, we endeavor to preserve Connecticut's biodiversity by directing attention to the most imperiled species and habitats within our borders. This model of state responsibility, combined with the federal Endangered Species Act, has worked well under the fairly stable environmental conditions of the past half century.

However, as evidence mounts that our climate is warming at an accelerating rate, we must question whether it is feasible, or even possible, to save everything that is here today. Even under the most moderate climate projections, we will experience changes in temperature and precipitation patterns that will significantly alter wildlife habitats. We will have to forecast in a changing environment and be strategic in where we work. We will have to recognize what is possible and what is not.

Tackling a complex, global issue like climate change and projecting decades ahead into an uncertain future certainly takes the wildlife profession outside of our comfort zone. However, we cannot afford to wait for certainty before taking actions to preserve species and maintain genetic diversity. We can't prevent the changes caused by global warming, so we must adapt to them by taking management actions based upon the best data and then monitoring the success of those actions. We will likely have to abandon the state-by-state approach to species protection and adopt a range-wide view to identify strongholds and core habitats. This will require an increased level of sharing responsibilities between the states, the federal government, conservation partners, and private landowners.

Climate change is certainly not a new phenomenon. Only 12,000 years ago (the blink of an eye in geologic time frames), Connecticut was buried under a sheet of ice. However, the projected "rate" of change is what is alarming. Will species have the time to adapt as habitats change and ecological function is disrupted? Can responsible human actions slow or reverse the rate of these changes that are already in motion? For everyone's sake, let's hope they can. In the meantime, the solid history of collaboration by state wildlife agencies and the public will be put to the test.

Dale W. May

Cover:

The Wildlife Division is currently conducting a study to determine what characteristics of a wetland (e.g., size, depth, location, vegetation) dictate whether marshbirds, like the clapper rail, use them or not (see article on page 12).

Photo courtesy of Paul J. Fusco

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May Is Rabies Awareness Month

May 2008 has been proclaimed Rabies Awareness Month because rabies is an important health issue that can affect all warm-blooded mammals, including humans and pets. This fatal viral disease is primarily transmitted by the bite of infected mammals, but it may also be transmitted through a scratch or when saliva or central nervous system tissue (i.e., brain, spinal cord) from a rabid animal gets into an open wound or mucous membrane (eyes, nose, or mouth). Rabies is not transmitted through contact with urine, feces, blood, or scent glands.

Symptoms of rabies in animals vary, but they often include changes in behavior, such as unprovoked aggression, unusual friendliness, paralysis, lack of coordination, excessive drooling, disorientation, and aimless daytime wandering. However, healthy nocturnal animals, such as raccoons, are sometimes active during the day, and this behavior should not in itself be reason to believe an animal is sick.

In 1991, Connecticut experienced an outbreak of rabies in wild animals and the disease has cycled naturally with minor resurgences every four to five years. Raccoons are the primary carrier and most commonly affected animal. However, rabies cases in other wild and domestic animals, such as skunks, woodchucks, foxes, bats, cats, dogs, horses, sheep, and cows, have been reported. Squirrels, rabbits, and mice are seldom affected, and birds, fish, reptiles, amphibians, and insects do not get this disease.

Rabies Prevention Measures

Residents can minimize the risk of exposure to rabies by taking the following precautions:

- Vaccinate pets and livestock against rabies. **Unvaccinated pets represent the greatest risk of rabies exposure to humans and are frequently the link between rabid wildlife and people.** If an unvaccinated dog or cat is exposed to a rabid animal, it must be euthanized or removed from the home and quarantined for six months. Do not allow pets to roam freely. Closely supervise pets, feed them indoors, and confine them at night. If your pet is exposed to a suspected rabid animal, wear gloves when handling it or treating its wounds. Contact a veterinarian for advice. A police officer, animal control officer, or Nuisance Wildlife Control Operator (NWCO) can help identify, capture, or destroy the suspect animal for testing.
- Avoid contact with wild or stray animals. Report animals with suspicious behavior to a police or animal control officer. Never feed, pet, or handle wild animals or strays. It is illegal to keep any wild animal as a pet, and doing so will increase the risk of exposure to rabies and other diseases. To discourage wildlife from living in or around your home, cap chimneys, screen crawl spaces, and repair openings into buildings. Secure potential food sources (garbage, pet or livestock food, and birdseed).

Symptoms of Disease in Wild Animals

Abnormal behavior or any change in behavior in animals may indicate the presence of rabies or other nervous system diseases.

The following symptoms may indicate the presence of rabies in mammals:

- Unprovoked, aggressive behavior
- Lack of fear/unusual friendliness
- Aimless wandering/disorientation
- Shaking, tremors, convulsions
- Partial or complete paralysis
- Lack of coordination/difficulty moving
- Daytime activity for nocturnal animals, if accompanied by one or more of the above symptoms.

What You Should Do . . .

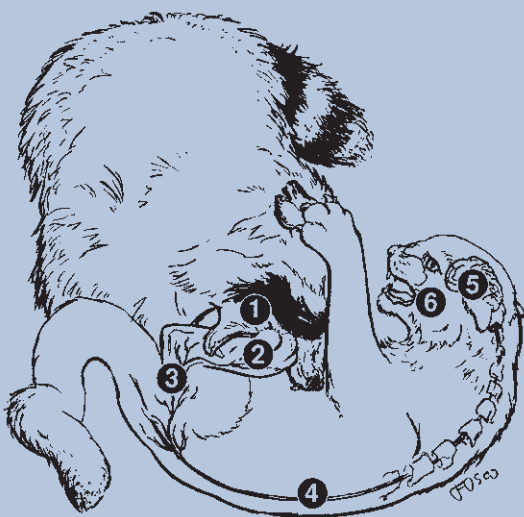
If Your Pet Is Exposed:

- Don't try to separate the animals when fighting.
- Wear gloves when handling your pet.
- Contact your veterinarian.
- Report the incident to local health officials and the animal control officer.
- Capture/contain biting animal, if it is safe to do so.
- Keep all others away.

If You Are Exposed:

- Don't panic -- you can be treated.
- Wash the wound with warm water and soap for at least 10 minutes.
- Contact your physician and report the incident to health officials.
- Capture/contain the biting animal, if safe to do so. Contact the police, animal control officer, or DEP.
- Keep all others away.

The Cycle of the Rabies Virus



- 1 Exposure
- 2 Incubation
- 3 Virus Replication
- 4 C.N.S. Spread
- 5 Clinical Rabies
- 6 Virus Shedding

- If you are bitten, scratched, or think you have been exposed to rabies, wash the exposed area thoroughly with soap and warm water and contact your doctor or emergency clinic immediately. If possible, without further risk of exposure, capture or destroy the wild animal without damaging its head, and immediately report the incident to a police or animal control officer. If you are unable to contact local authorities, call the DEP at 860-424-3333 for guidance. Treatment for rabies exposure is 100% effective if given promptly and it consists of a series of six relatively painless injections over a one-month period.

Bad News for Bat Conservation

Written by Jenny Dickson, Wildlife Diversity Program

An emerging challenge to wildlife conservation is impacting the Northeast. New York and its New England neighbors of Vermont, Massachusetts, and Connecticut have seen white fungus appear on the noses, ears, and wings of thousands of hibernating bats. This fungus has been a noticeable indicator of what is being called white-nose syndrome (WNS), a mysterious condition that has been responsible for the deaths of tens of thousands of bats in our region. New York, Vermont, and Massachusetts have seen thousands of bats emerging from hibernation in the dead of winter, starving and critically dehydrated. Many of these bats have made desperate flights during daylight hours searching in vain for the insects they normally feed on or lapping at snow to get moisture. Most have not survived.

Connecticut documented WNS at two hibernaculas (sites where bats sleep away the winter months) in Litchfield County in early March. The Connecticut bats had visible fungus growth on their faces and wings, but did not exhibit the early emergence or high mortality seen in neighboring states. New York first reported seeing a strange white fungus on hibernating bats in 2007. Surveys conducted last year of Connecticut's sites by the Wildlife Division's Wildlife Diversity Program did not reveal the fungus. It is believed that this is the first year of WNS in the state. What biologists are observing in Connecticut's bats is consistent with what New York reported last year.

Biologists throughout the entire Northeast region have been diligently monitoring all bat hibernaculas in an effort to determine the spread of WNS. Bats that have succumbed to WNS have been examined by wildlife pathologists in many states and a variety of academic and federal institutions. Despite these intensive efforts, answers to this mysterious killer have not been forthcoming. Theories ranging from pathogens to pollutants to pesticides and even to climate change are being examined. It also unknown if the fungus is causing the deaths or is symptomatic of a disease.

Upon learning of the discovery of WNS in Connecticut, DEP Commissioner Gina McCarthy said, "The discovery of this syndrome in Connecticut reminds us just how interconnected our environment is. Nature does not recognize geopolitical boundaries so we must remain aware of what is going on in the states around us."

While laboratory research continues, biologists throughout the Northeast have been trapping bats as they emerge from hibernation. Critical data on bat weights and overall health are being collected. Fortunately, the bats examined in Connecticut have been well within normal weight ranges and have been behaving normally. Warm spring weather and the early appearance of many insects should provide the bats with ample food to help them fatten up after a long winter.

What does all this mean for Connecticut's bats? Biologists are not completely sure, but the news is not good. While Connecticut's hibernaculas were not as severely impacted as sites in other states, it's important to remember that our winter-



These hibernating little brown bats were photographed in a Connecticut hibernacula in March 2008. The one on the left shows the distinctive white fungus around the nose that is an indicator of white-nose syndrome.

ing populations are relatively small. Many of the bats that call Connecticut home during summer spend the winter in New York, Massachusetts, and Vermont. With New York estimating mortality at severely impacted sites at over 85% and Vermont and Massachusetts also reporting very high mortality, the ripple effect could be catastrophic.

One species for which this news is especially grim is the federally and state endangered Indiana bat. Recovery efforts for this species had made tremendous strides in the Northeast. As New York's Indiana bat populations continued to grow, neighboring states began to benefit. Connecticut documented the Indiana bat's return to hibernaculas in low numbers in the mid-1990s. Recent cooperative, regional research projects confirmed Indiana bats summering just over our border in New York. Wildlife Diversity Program staff had planned to survey areas along the New York border this summer in an effort to document the return of this endangered bat to its historic summer home in Connecticut (see article on page 16). Instead, bat biologists are now wondering how many of these bats were able to simply survive.

Connecticut will continue to work with other state wildlife agencies from Vermont to Virginia and beyond and with the U.S. Fish and Wildlife Service, U.S. Geological Survey, several major universities, and conservation organizations, such as Bat Conservation International and the Northeastern Cave Conservancy, to solve the mystery of WNS. This is a wildlife conservation challenge of amazing complexity and scale. The future of many bat species in the Northeast and the ecosystems that rely on them hang in the balance.

To learn more about white-nose syndrome, visit the U.S. Fish and Wildlife Service's website at:

www.fws.gov/northeast/white_nose.html.

New Dog Leash Regulations in Effect for Wildlife Management Areas

Written by Kathy Herz, Editor

Dog walkers at state wildlife management areas (WMAs) will soon be seeing signs posted at parking areas and along trails informing them of a new regulation regarding leash requirements. The regulation reads: **“Dogs must be on a leash no longer than seven (7) feet and under the control of their owner or keeper. The person responsible for the dog must hold the leash at all times. The provisions of this subsection shall not apply to the proper use of dogs while in the act of hunting or the training of dogs for the specific purpose of hunting, however all dogs may be prohibited on any area or during any time period when so posted by the Department.”** This new regulation enables DEP Environmental Conservation Police Officers to enforce the leash requirements by issuing tickets to anyone who allows their dog to roam off the leash at state wildlife management areas (state parks and state forests already have leash laws in effect). The only exception will be during the fall hunting season when unleashed dogs can be used in the act of hunting, but only if they are under the control of the hunter.

Why the New Regulation?

There are probably going to be a lot of unhappy dog owners once the new signs go up and particularly when some people are issued a ticket. However, there are many important reasons why this regulation had to be put into place.

Wildlife management areas have been set aside primarily for the conservation of wildlife populations and their habitat. Public use of these areas is a benefit, but not the main reason for their existence.

From a wildlife managers perspective, dogs should not be allowed to run free on property that has been set aside specifically for the conservation of wildlife. Free-roaming dogs do not stay on the trail like their owners, but wander off into the surrounding forests, fields, and wetlands. There is no doubt about it, and there is scientific evidence to support it – dogs are a threat and a disturbance to wildlife, even when restrained on a leash. During a study conducted in Australia, researchers found that “dog walking led to a 35% reduction in the number of bird species and a 41% reduction in overall bird num-

bers” compared to results found in areas where no one, both dogs and people, had recently walked. (It was also found that people walking along trails caused some disturbance, but less than half that caused by people walking dogs.)

Dogs are perceived by wildlife as predators. Ground nesting birds are heavily distressed by dogs and may abandon or lose their nests if constantly disturbed. They also are susceptible to undue stress and may suffer injuries from unleashed dogs. Many populations of ground nesting birds, which nest at WMAs, are in long-term decline on a regional basis. Dogs also will chase wildlife, including their helpless offspring.

Owners often allow their dogs to swim in wetland areas at WMAs, such as streams, ponds, marshes, and vernal pools. Waterfowl and waterbirds (i.e., herons) that use these areas are usually frightened away from their nests. Dogs wading through vernal pools and marshes have a negative impact on these important amphibian breeding sites. Egg masses left behind by wood frogs, spring peepers, and various species of salamanders can be destroyed. In addition, the pathways that dogs and their owners have created to gain access to these wetlands have destroyed important riparian habitat and caused significant erosion.

Along with the impacts on wildlife, dog walkers who don't follow the leash rules should consider how their free-roaming dogs affect other users of the property. Many people come to WMAs to

hike and enjoy the outdoors and do not appreciate being approached by an unleashed dog. The dog may jump on them and even ruin their “wildlife experience.” Some people are afraid of dogs and may feel that they can't go to certain areas if they know dogs are running free. In addition, the dog walkers who do follow the leash rules may not appreciate being approached by an unleashed dog as their dog may feel threatened and there could be conflicts. Also, all dog walkers lose if dogs, leashed or not, are prohibited from specific areas due to the actions of persistent offenders.

State wildlife management areas are public resources that are available for certain outdoor recreational activities. However, there must be rules for everyone to follow so that all uses can coexist and that the main purpose for WMAs can be met – the conservation of wildlife populations and their habitat. It is hoped that all users of WMAs respect these special areas and help conserve them for future generations to enjoy.

Dogs Must Be Leashed at All Times.



- Leashes may not exceed 7 feet in length.
- Leashes must be held at all times.
- Dogs being used by licensed hunters in the act of legal hunting for small game and waterfowl are exempt.

State of Connecticut Regulations Sec. 26-16-1 and Sec. 26-16-3a.

Violators subject to ticketing and fines.



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A new regulation requires that all dogs at state wildlife management areas must be on a seven-foot leash that is held by the person responsible for the dog. This leash requirement protects wildlife populations and their habitat.

CE/FS Program Coordinator David Kubas Retires

In 1982, the DEP Wildlife Division (then called the Wildlife Bureau) was embarking on a new initiative to provide hunter education to the state's sportsmen and women. The fledgling Conservation Education/Firearms Safety (CE/FS) Program was just beginning when David Kubas was hired as the Western District Coordinator for the program. Twenty-six years later, as Dave prepares to retire from the Wildlife Division, the CE/FS Program continues to be a highly rated program that was recently recognized by the International Hunter Education Association as meeting or exceeding national standards in hunter education.

The Program flourished under the direction of the original staff members who coordinated it. After the first Hunter Education Coordinator, Frank Disbrow, transferred to Boating Safety in the early 1990s, Dave and Eastern District Coordinator Bob Kalinowski continued to run the program under the direction of Assistant Director Peter Bogue. When both Pete and Bob retired from State service in 2003, Dave took over as CE/FS Program Coordinator for the whole state.

Before coming to the CE/FS Program, Dave spent 14 years as a teacher for 4th to 9th grade students. He brought

his teaching experience and his love and knowledge of wildlife and the shooting sports to his new job. He set right to work, helping to recruit and train volunteer instructors and assisting in the development of a policy and procedure manual, classroom materials, and exams. He also provided in-service training for instructors and worked with instructors of various nationalities to develop hunter education courses in Polish, Portuguese, and Spanish. In addition, Dave had an important role as a hunting review team leader, assessing safety aspects of hunting on state-owned properties.

Over the years, Dave developed strong professional relationships with many of the 314 volunteer CE/FS instructors and several of the instructors have become close, personal friends. At Dave's retirement gathering, which was attended by DEP staff, friends, and many CE/FS instructors, one instructor (also a former teacher) stated that "education lost a good guy when Dave came to the CE/FS Program and now the program is losing a good guy." He also stated, and other instructors agreed, that Dave was always there to help them. Former Assistant Director Peter Bogue added that "Dave was very dedicated to the program." At

the retirement gathering, Dave was also presented with a plaque from the Connecticut Trappers Association for his dedicated years of service.

The CE/FS instructors demonstrated their respect and admiration for Dave at the recent Instructor Recognition Dinner in March when his upcoming retirement was announced. Dave will never forget how, after the announcement, the entire audience, approximately 400 people, rose to give him a sustained standing ovation. About the ovation, Dave said, "Thrilling and humbling at the same time, it was almost overwhelming for me to behold. I am grateful to have had the pleasure to work with this outstanding group of people for this past quarter century."

Although the majority of his responsibilities revolved around the CE/FS Program, Dave was also involved with other Division projects over the years. During the late 1980s and early 1990s, Dave worked with former Division Director Paul Herig on the development of the Sessions Woods Conservation Education Center. Dave was involved with the early stages of planning for the education center and was the on-site construction coordinator when the facility was built. As the Wildlife Division liaison for the Americans with Disabilities Act (ADA), Dave also was involved with making sure that Division services, programs, and facilities were ADA compliant and meeting the needs of Connecticut's disabled citizens. Taking those efforts one step further, Dave was a founding member and secretary of the Connecticut Sportsmen with Disabilities.

Dave feels fortunate to have been involved with the early evolution of the Wildlife Division and CE/FS Program in the modern era. When he first started, the Division staff was so small that everyone could meet in the director's office. Today, the staff numbers over 50 (including seasonals). Either way, he feels that the dedication and enthusiasm of the staff has not waned. Dave will always remember the camaraderie and enjoyment of the whole staff working together on projects, especially in his early days when the Sessions Woods Conservation Education Center was just getting off the ground. Of course, Dave is now looking forward to retirement and the Wildlife Division staff wishes him well while he enjoys traveling, photography, woodworking, gardening, cooking, and time with family.



Retiring Hunter Education Coordinator David Kubas with his wife, Evelyn, at the 2008 Conservation Education/Firearms Safety Instructor Recognition Dinner.

Volunteer CE/FS Instructors Recognized

Written by David Kubas, CE/FS Program Coordinator

In March 2008, Connecticut's Conservation Education/Firearms Safety (CE/FS) Program honored its volunteer hunter safety instructors at the Annual Awards and Recognition Dinner. This year's event marked the 26th anniversary of the CE/FS Program. Since the program's inception in 1982, 118,009 students have graduated from one of the three programs: firearms, bowhunting, and trapping. The 314 volunteer instructors honored at this event donated 12,235 hours during 2007 to conduct 149 courses for 3,566 students.

During the dinner, two instructors were recognized from each of the firearms, bowhunting, and trapping programs who have made exceptional contributions during the past year. Awards for firearms hunting were presented to Emmett Lyman and Robert Kostick. Bowhunting awards were given to Markus Muhlhauser and Mark Hall. Trapping awards were given to Robert Kukuck and Randall Stevens. The prestigious "Award of Merit" was given again to instructors Lawrence King and Francis Wasylink for their outstanding efforts in teaching classes and their participation in other activities directly related to the CE/FS Program. Frank and Larry have earned this award for the past several years.

Guy Gagnon and Waketta Speh both received the Coordinator's Award. Guy was chosen by CE/FS Program Coordinator David Kubas in recognition of his unique contributions and 40-year tenure with hunter education. Waketta was recognized for her enormous efforts in coordinating a joint event involving the U.S. Sportsman Alliance Trail Blazer Program, Boy Scouts of America, and the CE/FS Program where nearly 8,000 youngsters were exposed to the shooting sports.

This year, two Junior Assistants were given the "Distinguished Junior Assistant Award." Siblings Samuel and Amanda Bonardi were recognized for their gener-



Award recipients at the 26th Annual CE/FS Recognition Dinner: (front row, l to r) David Kubas (CE/FS Program Coordinator), Jim Cummings, Robert Villanova, John Wolcheski Jr., John Wolcheski Sr., Waketta Speh, Robert Kostick, Robert Kukuck, Jeff Wolcheski, Mark Clavette (CE/FS Program Administrator), Charles Bruckerhoff (CE/FS Program); (second row, l to r) Daniel Dzioba, Dennis Lovallo, Lawrence King, Amanda Bonardi, Mark Hall; (third row, l to r) Robert VanBibber, David Doebrick, Stephen Silva, Frank Wasylink, Guy Gagnon, Samuel Bonardi; (back row, l to r) Scott Smith, Randy Stevens, Jules Perrault, Emmett Lyman, Paul Hiller.

ous contribution of time and enthusiasm while helping out their father, firearms instructor Samuel Bonardi.

For the second year, an award recognizing the efforts of an entire teaching team was given to two groups. Plaques listing all members of the team were given to the Groton Sportsman Club and Wallingford Rod and Gun Club. These two teams collectively donated 878 instructional hours in 2007. The Groton Sportsman Club team members are: Marvin Curland, Daniel Dzioba, Jeffrey Rathbun, Robert Smith, Scott Smith, Thomas Sharps, Waketta Speh, Warren Speh, Raymond Thiel, and Robert VanBibber. The Wallingford Rod and Gun Club team members are: Robert Kostick, John Wolcheski, Sr., John Wolcheski, Jr., Jeff Wolcheski, Robert Wolcheski, Mark Fowler, and Jules Perreault. The DEP Wildlife Division continues to appreciate the dedication of the volunteer instructors who donate their time and expertise to educate aspiring sportsmen and women.

To recognize partners for their contribution and support to the CE/FS Program, teaching facility awards were given to Center Sports of Columbia and Hiller Sports of Norwalk. Likewise, Torrington Fish and Game Club and East Windsor Sportsman Club were recognized for their long-time commitment to providing quality teaching sites for the program. The Eagles Club Aerie #588 of Norwalk and Cabela's received the award given to organizations for their support of the CE/FS Program and sportsman development.

During the dinner, Dee Blanton, Wildlife Program Chief of the U.S. Fish and Wildlife Service's Division of Wildlife and Sport Fish Restoration, gave a summary of a recent peer review of the CE/FS Program that was requested by Program Coordinator David Kubas. The report reinforced the fact that Connecticut has a solid hunter education program that meets or exceeds the standards set by the

continued on next page

Black Bear Den Visits Continue to Reveal High Survival

Written by Jason Hawley, Furbearer Program

In February and March 2008, DEP Wildlife Division biologists continued efforts to estimate rates of reproduction and survival in Connecticut's black bear population by locating winter dens of 12 radio-collared females. Cubs are typically born in January and will den with the sow during the next winter. Therefore, comparing the number of yearlings present to the number of cubs found the previous year provides the one-year survival estimate for cubs.

Six of the radio-collared sows produced new litters of cubs, averaging 2.5 cubs per sow (a total of 15 cubs). Five of the collared sows had yearlings with them from the previous year's litter. The remaining sow, a five-year-old, was found without any offspring, and has yet to produce a litter of cubs. Most Connecticut sows produce their first litter at four years of age.

Five collared sows that had been followed last year could no longer be studied because three collars malfunctioned, one sow was shot illegally, and one was struck by a vehicle. Biologists were able to determine the fate of three cubs from one of these sows through sighting reports. All together, the fate of 11 cubs from 2007 was documented. Nine of these 11 cubs were confirmed as yearlings in 2008. This year's rate of cub survival (82%) and rate of reproduction



J. HAWLEY, FURBEARER PROGRAM

Black bears often make a den in a location that provides little shelter from the elements. The sow usually wraps around and covers the nursing cubs, providing most of the protection from the harsh winter weather.

(2.5 cubs/sow) are similar to those of previous years.

Other interesting observations from this year's research included a sow with three cubs in an undetected den less than

20 yards from a backyard deck and one sow that produced a litter of two cubs at three years of age. This is only the second time a three-year-old sow with cubs has been documented in Connecticut.

New Publication: "Freshwater Mussels and the Connecticut River Watershed"

This 150-page full-color book by Ethan Nadeau of Biodrawiversity is extensively researched, written for a non-technical audience, and beautifully illustrated. It covers the 12 freshwater mussel species that occur in the Connecticut River watershed, as well as most species that occur in Atlantic coastal drainages from the mid-Atlantic to the Canadian Maritime Provinces. The Connecticut River Watershed Council (CRWC) is offering single copies of the book for free to those willing to pick them up at the Greenfield (MA) or Middletown (CT) offices. A shipping fee of \$5.00 is charged for any mailed copies. Please contact CRWC at www.criver.org or (413) 772-2020 ext 207 to request a copy. The book was produced cooperatively by Biodrawiversity LLC (www.biodrawiversity.com) and the Connecticut River Watershed Council. It was published with financial assistance from the following river interests and organizations: New Hampshire Fish and Game, Vermont Department of Environmental Conservation, The Nature Conservancy, Massachusetts Natural Heritage and Endangered Species Program, New Hampshire Charitable Foundation, Connecticut River Joint Commissions, Connecticut Department of Environmental Protection, Tighe & Bond, The Northeast Utilities System, and The Emily Hall Tremaine Foundation.

CE/FS Instructors *continued from page 7*

International Hunter Education Association. Several recommendations were made by the review team to enhance the program, and these suggestions will be

studied and, if possible, implemented.

Not only were instructors presented with plaques, but so was CE/FS Program Coordinator David Kubas who received a handsome plaque recognizing his 26-year commitment to the Program. Wildlife Division Director Dale May and Program

Specialist Mark Clavette both spoke of Dave's accomplishments and announced his upcoming retirement. After the announcement, the entire audience, approximately 400 people, rose to give Dave a sustained standing ovation. (See page 6 for more on Dave's retirement.)

Wolves Not Expected to Return to Connecticut

Written by Jason Hawley, Furbearer Program

The howl of a wild wolf has not been heard in the forests of Connecticut for nearly 200 years. Prior to the arrival of European settlers, as many as 200 wolves may have roamed within the borders of our state. Because wolves occasionally preyed on domestic livestock, which early settlers depended upon for survival, a state bounty system was created for the destruction of any and all gray wolves in Connecticut as early as 1647. This bounty system was still active in 1808, paying \$10 for an adult wolf and \$5 for a pup. Human persecution, loss of habitat, and the decimation of the deer herd led to the steady decline of wolves in Connecticut. In 1786, the last known pack of wild wolves was hunted down and killed by a group of 80 men in Norfolk. The last confirmed lone wolf in Connecticut was shot near Bridgeport in 1839, and then the state was void of a top predator.

With the wolf extirpated from Connecticut and most of eastern North America, the coyote, an extremely adaptable western prairie species, began to expand throughout the midwestern United States and eastern Canada. As coyotes dispersed, they encountered a few scattered wolves. Wolves will occasionally interbreed with coyotes when other wolves are not available. By the time the coyote had infiltrated the northeastern United States, it had partially hybridized with the last remaining wolves, resulting in a larger version of the western coyote, known as the eastern coyote. While the eastern coyote is larger than the western coyote, they are still considered the same species. The eastern coyote is much more adaptable to humans than the native wolf was. In fact, coyotes are thriving in Connecticut.

Wolf Killed Recently in Massachusetts

On October 14, 2007, a large canid was shot and killed in Shelburne, Massachusetts, after a number of lambs were injured or killed on a sheep farm. Biologists from the Massachusetts Division of Fisheries and Wildlife were called to the scene and, upon close inspection, determined that the animal was much too large to be a coyote, yet it did not appear to be a pet dog. In fact, its physical appearance was consistent with that of a gray wolf. Officials sent the carcass to the federal genetics laboratory in Oregon for testing to determine the origin of the wolf-like animal. The results of the genetic tests released in early March 2008 revealed that not only was it a wolf, it was genetically consistent with the eastern gray wolf (*Canis lupus lycaon*), a subspecies of gray wolf confined to the Great Lakes region of North America. The eastern gray wolf is the subspecies that most scientists believe to be native to New England.

This young, male, eastern gray wolf weighed 85 pounds and was estimated to be between two and three years old. There is no way to say for sure that this was not a captive wolf released somewhere in New England, but most captive wolves are typically a western subspecies of gray wolf, which are more common than the eastern subspecies. The range of the eastern gray wolf extends from northern Wisconsin north and east into Ontario and Quebec, and as far south and east as the St. Lawrence River. West and north is the range of the larger northern gray wolf.



Wolves Face Several Barriers

It has been estimated that the northern forests of New York, Vermont, New Hampshire, and Maine could potentially support a wolf population numbering in the hundreds. But there are many barriers preventing wolves from ever reaching this available habitat. If this young wolf truly did disperse from Canada via the shortest possible route into Maine or New Hampshire, it would have crossed several paved roads, eight miles of the St. Lawrence River (a shipping lane which is kept open in winter), and a four-lane highway, and then traveled nearly 300 miles south through both developed and undeveloped tracts of land to where it was shot in Massachusetts. In addition, heavy trapping occurs within and along the edge of eastern gray wolf range in Canada. The resulting high rate of mortality keeps suitable wolf habitat open nearby for young dispersing wolves. There is no need for these wolves to disperse long distances if they can readily locate available habitat close by.

There may also be genetic barriers preventing the recolonization of wolves in New England. Recent genetic research has shown that as eastern gray wolves disperse south and east from established wolf range in Canada, they readily interbreed with the more numerous eastern coyote. The resulting wolf-coyote hybrid is referred to as a "tweed wolf." The further these animals are found from established wolf range, the more coyote-like they become as a result of interbreeding. This would likely be the fate of any wolves that disperse into New England. It is also unclear which species or subspecies of wolf is native to New England. Most geneticists believe that the eastern gray wolf subspecies is native to New England, while others believe that the red wolf, a different species all together, is native to New England.

Clearly the odds are stacked against even one wolf dispersing into New England. In order for wolves to reestablish a viable population, many wolves would have to survive a gauntlet of obstacles. And, that does not appear likely in the foreseeable future.

The Upland Sandpiper in Connecticut

Article and photography by Paul Fusco, Wildlife Outreach Program

One of the more unusual shorebirds found in Connecticut is the upland sandpiper, a species that is normally seen far from the shoreline and seldom found near wetlands. The heart of the upland sandpiper's range is the tall and short grass prairies of the Midwest and West, where the species is in its true element and is fairly common. It frequently favors areas that have rocks or fence posts that serve as elevated lookout perches.

However, in Connecticut, the upland sandpiper is very rare, with only two known breeding locations in the entire state. It is listed as a state endangered species. Low population numbers, coupled with the need for grassland habitat, make the upland sandpiper a bird on the edge of extirpation in the state.

Grassland habitat is one of the most threatened habitat types in Connecticut due to impacts from development and forest succession. There are very few areas in Connecticut that are suitable for the upland sandpiper to successfully breed and raise young. The only property that is both suitable and somewhat protected is Bradley International Airport, where grasses that are managed along the runways benefit both airport operations and the sandpipers. It is at Bradley

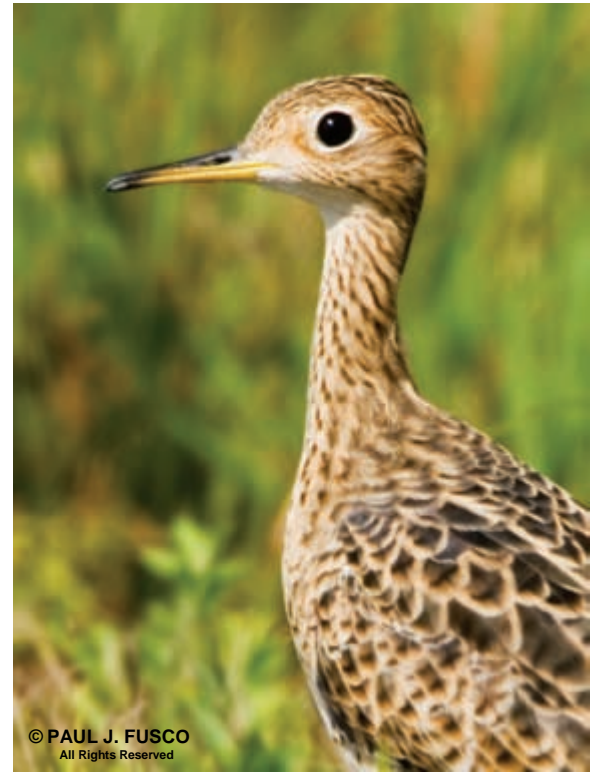
Airport where upland sandpipers do well enough to maintain their presence in our state.

Description

Upland sandpipers are dove-sized shorebirds with long legs and a long, thin neck. Their head is smallish and pigeon-like with large, brown eyes. They have long, pointed wings and a tail that is proportionally longer than most other shorebirds' tails. The brown plumage is heavily marked with chevrons and streaks, giving the birds a cryptic appearance that blends into their surroundings.

Walking among clumps of grasses, upland sandpipers forage by sight. Bobbing their head as they go, they methodically pluck insects off of plants and the ground. Some of their favorite foods are grasshoppers, including locusts and crickets.

In the courtship flight of the upland sandpiper, both sexes fly over the territory, circling high in the sky on shallow, fluttering



Upland sandpipers have large brown eyes, a small head, and a long thin neck.

wing beats as they call with a melodious whistle, *whip-wee-ee-you*. At times, a bird will land on a perch and hold its wings high above its back for a few seconds and then sing again.

Migration

Upland sandpipers breed from southern Maine, west through southern Canada and the Great Plains, and north through Alberta into eastern Alaska. They are long distance migrants, wintering in southern Brazil, south central Argentina, and parts of Chile. Like most shorebirds that breed in North America, upland sandpipers migrate in spring, primarily straight "up the gut" of the Great Plains before dispersing to their breeding areas. In fall, the migration is more spread out, with smaller numbers of birds moving down the Atlantic coast. In Connecticut, the peak of the fall migration is from late July through August. Generally, adults pass through about two weeks before juveniles. Most "uppies" are gone from North America by the middle of October.

During migration, upland sandpipers use a number of man-made habitats,



Adult plumage of the upland sandpiper is brown, marked with extensive barring and chevrons. Note that upland sandpiper tails are much longer than the tips of the primary feathers.



Juvenile upland sandpipers are brown with crisp buff feather fringes on the back, scapulars, and coverts. In all ages, upland sandpipers have a yellowish bill and yellow legs.

including cultivated fields, sod farms, pastures, and airports. In agricultural areas, upland sandpipers are especially beneficial where their diet includes a wide diversity of harmful insects. Along with consuming large numbers of grasshoppers and locusts, upland sandpipers are known to eat weevils (including cottonboll), leaf beetles, wireworms, click beetles, cutworms, army worms, bill bugs, grubs, moths, ants, spiders, snails, and flies, including horseflies and their larvae.

Conservation

As with many other shorebird species, the upland sandpiper has a long and storied history in this country. Still trying to regain its former numbers after the days of market hunting (primarily the late 1800s), the upland sandpiper faces the continuing threats of habitat loss and a changing environment.

Upland sandpipers are considered a “Conservation Priority” species by the Western Hemisphere Shorebird Reserve

Network. This group is a conservation cooperative made up of scientists from around the Americas that has devised a strategy with species specific plans for the conservation of shorebirds. The group’s data indicate that upland sandpipers are one of North America’s most imperiled shorebirds, due to population declines.

Part of the difficulty in maintaining a population of upland sandpipers in Connecticut is that the birds require such a large tract of grassland habitat for breeding. At a minimum, the grassland size required is 150 acres. There are few suitable sites of that size in Connecticut. Over the past 10 years, the state population of upland sandpipers has fluctuated, but averages at a relatively stable eight to 12 breeding pairs. The population stability is due, in large part, to the steady habitat situation at breeding locations, especially Bradley International Airport.

The upland sandpiper was historically more common in the Northeast during colonial times, when forests were cleared

and agriculture was the way of life. Today, the landscape is different, with succeeding forests reclaiming the land and suburban development eating up unprotected open space, leaving little habitat for this species, not only in Connecticut, but in the entire Northeast region. Thus, upland sandpipers are in serious decline in our area.

Still, there are places where “uppies” can be seen in Connecticut. While the breeding area at Bradley Airport is off-limits to the public, other places reliably have upland sandpipers during migration. The open fields at Hammonasset Beach State Park in Madison, the short grass fields around Sikorsky Airport in Stratford, and the open fields bordering the salt marshes at Sherwood Island State Park in Westport are used by upland sandpipers as stopover sites during migration. It is possible for the birds to show up at almost any large, open country habitat but, in Connecticut, the flocks would be few in number.

Assessing the Distribution of Secretive Marshbirds

Written by Min T. Huang, Migratory Gamebird Program

Photographs by Paul J. Fusco

Over 74% of Connecticut's original wetlands have been lost, which is a greater percentage than any other state in New England. Exacerbating this decline is the fact that freshwater wetland regulations are interpreted and enforced by individual towns, leading to much variability in the enforcement of existing wetland laws. Further, existing wetlands continue to be degraded by adjacent development and invasive species. As a result, many of the species dependent upon high quality wetlands are declining. One such suite of birds is the marshbirds. Currently, American bitterns, common moorhens, and pied-billed grebes are listed as endangered in Connecticut. Nesting populations of black rails and king rails are also listed as endangered. Least bitterns are a state threatened species.

Hindering the DEP Wildlife Division's ability to effectively conserve these species is the lack of information about their current distribution or habitat use. No data exist on productivity, as well. Identification and protection of important wetland habitat for these species is based on knowledge of both historic and current distribution, and the habitat use of the species.

The Wildlife Division has conducted



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The Wildlife Division is currently conducting a research project to identify where breeding marshbirds, like this Virginia rail, exist and how that compares with historic distributions.

two years of research to identify where breeding marshbirds exist and how that compares with historic distributions. More importantly, the Division wanted to determine what characteristics of a wetland (e.g., size, depth, location, vegetation) dictated whether marshbirds used them or not. Another goal was to esti-

mate nesting success, which is the true measure of habitat quality. Freshwater and tidal wetland habitats were identified using a Geographic Information System (GIS). A total of 47 sites were selected for surveys. These sites were classified as low, moderate, or high probability detection sites depending on wetland size,



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The least bittern is a state threatened species.



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The pied-billed grebe is an endangered species in Connecticut.

known vegetation characteristics, and relative geographic isolation. Callback surveys were then conducted to determine presence/absence at each site. Targeted species included American bittern, black rail, clapper rail, common moorhen, king rail, least bittern, pied-billed grebe, sora, and Virginia rail. Once target species were detected, the site was re-visited within two days to search for nests. Nests were monitored until they either hatched or failed. Vegetation was also quantified around each nest.

Surveys were conducted at 13 coastal marshes and 34 inland wetlands, totaling 9,419 acres. Based on the location of survey points and the distance that survey calls could be heard, over 5,800 acres of the total wetland acreage were surveyed during the two years of research. Targeted marshbirds were detected in a variety of wetland habitats. Surveyed sites varied in size, isolation from other wetlands, management regime, and location (fresh or tidal water). Detection of birds varied by habitat and quality. However, birds were detected in every high probability site. Additionally, 58% of the sites that were classified as moderate probability detection sites had targeted species. Low probability sites did not contain birds, except for Pine Acres Lake in Hampton.

Relative densities of targeted species indicate that clapper and Virginia rails (0.49 individuals/100 acres of wetland) were the most common of the rail species. Soras (0.04) were relatively rare, as were pied-billed grebes (0.05). Common moorhen density (0.03 individuals/100 acres of wetland), king rail (0.01), least bittern (0.01), and American bittern (0.02) densities were also low. Black rails were not detected.

Where good habitat existed, breeding rails were detected. At freshwater sites, breeding rails were detected in wetlands with at least 30% robust emergent vegetation (typically cattails) and that were greater than seven acres in size. However, most breeding rails were found in wetlands larger than 35 acres. Pickerelweed was another emergent plant that could be considered an “indicator” of whether or not a marsh had a high probability of

having nesting rails. Along the coast, rails were detected in virtually every marsh surveyed. Detections in coastal marshes, however, were exclusively in areas devoid of the invasive plant, phragmites.

Intensive nest searches were conducted at each marsh where detections occurred. Four active Virginia rail nests and one active sora nest were found. Two of the Virginia rail nests successfully hatched, while the other two and the sora nest were depredated. In addition, three old nests from previous breeding years were found.

Nesting Virginia rails used sites with more than 1.5 feet of water and a high percentage of cattail, grass, and sedge. The sample size was too small, however, to determine any true preferential choice from other areas of the marsh. The one sora nest located was in a pure cattail stand in 2.5 feet of water. The Wildlife Division plans to conduct more targeted studies of rail nesting success and habitat preference in the near future.

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



A juvenile clapper rail searches for food in a mudflat along Connecticut's coastline.



The sora was a rare find during nesting surveys.



A Virginia rail feeds on a large crustacean it caught in a Connecticut marsh.

Division Welcomes New Staff Member at Sessions Woods

The DEP Wildlife Division recently hired Lauren Pasniewski as a Clerk at its Sessions Woods office in Burlington. In addition to answering the many phone calls received at Sessions Woods, Lauren will be involved with the Conservation Education/Firearms Safety (CE/FS) Program. She will process paperwork associated with CE/FS classes and issue hunter education certificates, as well as interact with many of the 314 volunteer CE/FS instructors.

Lauren comes to her new position with plenty of experience and knowledge. She has worked as a seasonal office assistant at Sessions Woods since 2005, and before that she was a seasonal research assistant for the Division's ongoing New England cottontail project. In between her seasonal positions as an office assistant, Lauren also gained valuable experience working with least terns and piping plovers in Cape Cod, Massachusetts. Lauren's other job experiences include working on a western gray squirrel project in Washington, a research assistant position with the Connecticut Agricultural Experiment Station, seasonal positions at Mt. Tom State Park, and volunteer assistance with the Division's Deer Program. She also graduated from the University of Connecticut with a Bachelor of Science in Natural Resource Management. The Wildlife Division staff is pleased to have Lauren on board!



T. CERNIK

National Mosquito Awareness Week -- June 22-28

The week of June 22-28, 2008, has been declared the 12th annual "National Mosquito Control Awareness Week" by the American Mosquito Control Association (AMCA). AMCA, an international organization of nearly 2,000 public health professionals, has been dedicated to preserving the public's health and well-being through safe, environmentally sound mosquito control programs since 1935.

During "Mosquito Week," AMCA's goal is to educate the general public about mosquitoes and the important service provided by mosquito control workers throughout the United States and worldwide. Information on the mosquito life cycle and tips on how to eliminate mosquito egg-laying sites around homes will help citizens reduce the numbers of mosquitoes in their own neighborhoods.

The DEP plans to launch a new website for Connecticut's Mosquito Management Program in June to coincide with National Mosquito Awareness Week. Stay tuned to the DEP website (www.ct.gov/dep) to learn more.

Mosquito Control Starts at Home

- If possible, schedule your activities to avoid the times when mosquitoes are most active – usually dawn and dusk.
- Avoid shaded areas where mosquitoes may be resting.
- When mosquitoes are active, wear light-colored, loose-fitting long-sleeved shirts and long pants while outdoors.
- Use insect repellents properly. DEET, Picaridin and Oil of Lemon-Eucalyptus are proven to be the most effective. Use repellents only as directed on the label.
- Mosquitoes are relatively weak fliers, so placing a large fan on your deck or patio can provide an effective low-tech solution.
- Use yellow lights for outside lighting.
- Check door and window screens for holes and tears that mosquitoes can use to enter your home. Put 16-mesh screening or hardware cloth over bathroom and other vent outlets on your roof.
- Eliminate all standing water on your property. Don't forget to remind your neighbors, too. Their mosquitoes may also be your mosquitoes.
- Even the smallest of containers (bottles, buckets, overturned garbage can lids, etc.) that can collect water can breed hundreds to thousands of mosquitoes. Mosquitoes don't need much water to lay their eggs.
- Keep pools clean and chlorinated.
- Avoid water collecting on pool covers.
- Dispose of any tires. Thousands of mosquitoes can be bred from water in discarded tires.
- Drill holes in the bottom of recycling containers.
- Clear roof gutters of debris.
- Clean pet water dishes regularly.
- Empty water that has collected in children's toys left outdoors.
- Repair leaky outdoor faucets.
- Change the water in bird baths and plant pots at least once a week.
- Canoes, boats, and wading pools should be turned over when not in use.
- Plug tree holes and stumps.
- Fill in or drain puddles and ruts in your yard.
- Keep shrubbery and weeds trimmed.

Source of information: www.mosquito.org

Wild Turkey Brood Survey Continues for Another Year

Written by Michael Gregonis, Deer/Turkey Program

The second annual wild turkey brood survey was completed in August 2007. Brood surveys are conducted to assess annual fluctuations in wild turkey populations. Volunteers and DEP staff were requested to report turkey sightings, categorized by total hens, total poults, and total number of hens with poults. These observations were analyzed to obtain an annual productivity index and to evaluate recruitment into the fall population. By evaluating recruitment over time, biologists can quantify change and trends in Connecticut's statewide populations.

In total, the Wildlife Division received 405 wild turkey observations from 116 cooperators in 2007. Volunteers and DEP staff reported sightings of 2,660 individual turkeys comprised of 731 hens, 1,900 poults, 20 gobblers, and nine unknowns. Sixty-three percent of all hens were observed with poults. The mean statewide brood size (total number of poults/total number of hens) was 2.6, an increase over 2006 (1.7). This increase in mean brood size indicates that productivity was higher in 2007, with more young birds through the summer brood rearing period. The survey also suggests that Turkey Management Zones 1 and 5 had the highest productivity and zones 3, 6, and 11 had the lowest. Although wild turkey productivity was higher in 2007 than in 2006, based on other states' literature, statewide turkey productivity remains toward the



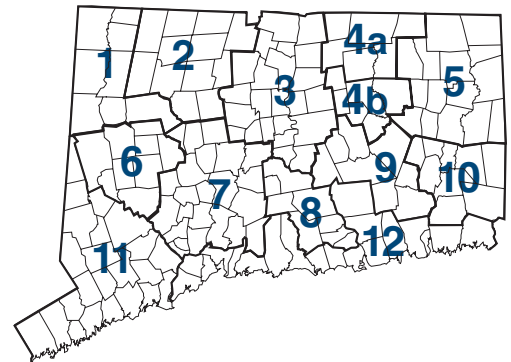
P. J. FUSCO

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lower end of the wild turkey annual productivity spectrum.

The Wildlife Division continues to conduct the annual brood survey. Those interested in participating in this research should contact Wildlife Division Biologist Michael Gregonis at 860-642-7239 or by email at michael.gregonis@ct.gov to obtain the survey protocol and data sheets.

Turkey Management Zones



2007 Brood Survey Results: June 1 - August 31

Zone	1	2	3	4A	4B	5	6	7	8	9	10	11	12	Total
Observations	23	85	65	36	16	27	6	46	8	22	14	22	35	405
Hens	41	162	119	63	27	51	13	62	14	34	29	59	57	731
Poults	136	420	213	187	75	198	23	188	37	107	63	104	149	1,900
Gobblers	0	0	14	4	0	0	0	2	0	0	0	0	0	20
Unknowns	0	0	0	0	0	0	0	8	0	1	0	0	0	9
Birds observed	177	582	346	254	102	249	36	260	51	142	92	163	206	2,660
Hens w/brood	28	92	53	51	24	39	7	40	5	28	22	32	40	461
Mean brood size	3.3	2.6	1.8	3	2.8	3.9	1.8	3	2.6	3.1	2.2	1.8	2.6	2.6
Hens w/poults	68.3%	56.8%	44.5%	81.0%	88.9%	76.5%	53.8%	64.5%	35.7%	82.4%	75.9%	54.2%	70.2%	63.1%

Surveys collected: 116

Sightings: 405

Total hens/Total poults: 1:2.6 (731:1900)

Hens/poult: 1:4.1 (461:1900)

The Wildlife Division needs your help with turkey brood surveys.

Indiana Bat Study Initiated

Wildlife Division Technician Geoffrey Krukar is leading a project to assess the status of the federally endangered Indiana bat in Connecticut. The Indiana bat disappeared from Connecticut in the 1950s. However, the species was observed hibernating in the state in the mid-1990s, but has not been confirmed as a summer resident. Recent multi-state telemetry studies suggest that the Indiana bat may have indeed returned to Connecticut. This new project seeks to confirm that suspicion by using harp traps and mist nets to sample for bats at specific locations in western Connecticut. Netting sites were selected by creating a predictive model using information about habitat and landscape characteristics around known Indiana bat roost locations in the lower Hudson River Valley in New York. Field work began in April and is expected to continue into August. Documenting the presence and location of Indiana bats is an important first step towards conserving this species. Financial support for this project comes from the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund.

Geoffrey Krukar, Wildlife Diversity Program

New England Purple Martin Working Group Formed

The New England Purple Martin Working Group was recently created as a subgroup of the Northeast Partners in Flight Working Group. Comprised of representatives from state agencies, Audubon groups, and the Purple Martin Conservation Association, the working group set a goal of restoring purple martin populations in New England. Purple martin colonies have been declining across New England and the bird is listed as threatened in Connecticut. Documenting where martin colonies still exist and educating the public about how to attract and care for martin colonies is critical. Purple martins are entirely dependent upon human-made nesting structures in this part of their range. If you know of any active or recently active purple martin colonies, please contact a member of this working group. Connecticut's representatives are Geoffrey Krukar (DEP Wildlife Division, 860-675-8130; geoffrey.krukar@ct.gov) and Milan Bull (Connecticut Audubon Society; 203-259-6305; mbull@ctaudubon.org).

Geoffrey Krukar, Wildlife Diversity Program

Results for the 2007 Fall Turkey Season

Hunters reported harvesting 208 birds during the 2007 fall wild turkey seasons. Overall, permit issuance declined while harvest increased from 2006 to 2007.

Firearms hunters reported harvesting 165 birds on private and state lands, representing a 51% increase from the 109 birds harvested in 2006. The harvest included 42 adult males, 44 adult females, 32 juvenile males, and 47 juvenile females. Overall, 2,769 firearms permits were issued and 120 hunters took at least one turkey for a four percent success rate. Private land hunters (2,088) harvested 146 birds and state land hunters (681) harvested 19 birds. Fall firearms hunters reported taking at least one bird from 66 of Connecticut's 169 towns (39%). The highest harvests were recorded in Lyme, New Hartford, and Woodstock (6 birds each). The highest state land harvest occurred at Tunxis State Forest (4). Turkey management zones 2 (28 birds) and 5 (23 birds) reported the highest zonal harvest (see map on page 15).

Archers reported a harvest of 43 birds, representing a 65% increase from the 26 birds taken in 2006. The harvest included 10 adult males, 12 adult females, 8 juvenile males, and 13 juvenile females. Overall, 1,957 archery permits were issued and 35 hunters took at least one turkey for a 1.8% success rate. Wild turkeys were taken in 33 of Connecticut's 169 towns (20%) during the archery season. Lyme reported the highest harvest with five birds. On state land, archers harvested one bird each from the following areas: East Swamp Wildlife Management Area, Meshomasic State Forest, Naugatuck State Forest, and Pachaug State Forest. Turkey management zones 12 (10 birds) and 5 (7 birds) reported the highest zonal harvest.

The increase in the fall harvest likely resulted from hens having had greater success with nesting and brood rearing. Annual brood survey results also showed an increase in turkey productivity (see article on page 15). Higher wild turkey productivity increased the availability of young birds, which are more vulnerable to hunter's calls. Fall turkey hunting continues to be a challenge that avid turkey hunters look forward to each year.

Michael Gregonis, Turkey Program

Programs Scheduled for Connecticut Audubon Society Center at Glastonbury

The Connecticut Audubon Society (CAS) has several interesting programs planned at its Center at Glastonbury for the upcoming summer months. In June and July, look for nature walks and campfire programs. Various youth programs and a mushroom presentation are scheduled for July. Contact the CAS Center at Glastonbury for a complete list of events at 860-633-8402 or visit the CAS website at www.ctaudubon.org/visit/glastonbury.htm.



P. J. FUSCO

Observations of Nesting Raptors Wanted

In an effort to gain more information on nesting raptors, the Wildlife Division would like to hear about any hawk or owl nests you come across. The information needed includes: the nesting species, the location (note the nearest crossroads or property name), the date the nest is found; and your contact information. To report a nest, please contact the Wildlife Division's Sessions Woods office at 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM) or send email to shannon.kearney@ct.gov (type "raptor nests" in the subject heading). There is a log form that is needed to report your information.

Don't wait until the last minute! Sign up for a Conservation Education/Firearms Safety course today. Check the DEP website (www.ct.gov/dep) for class times and locations or call the Wildlife Division at 860-642-7239 or 860-675-8130.

Wood Duck Nest Box Update

The winter season of 2007-2008 produced relatively strong ice in the northwestern part of the state, and staff and volunteers from the DEP Wildlife Division were able to clean and replace wood duck nest boxes at over 62 sites in 20 towns. About 160 wood duck boxes were searched for, replaced, and cleaned in the western half of the state. In addition, new nest box location maps were created using a Geographic Information System (GIS).

The wood duck, one of the most strikingly beautiful North American ducks, is present in Connecticut from March to November. This duck exhibits short, broad wings and large eyes, making it able to fly through trees and branches in the freshwater wooded swamps, marshes, ponds, and rivers they inhabit.

Over the years, the Wildlife Division has undertaken a number of efforts to help restore, monitor, and enhance Connecticut's wood duck population. Wood ducks are cavity nesters that do not excavate their own holes. Therefore, artificial nesting boxes have been placed at favorable sites throughout the state. Staff and volunteers annually check each nest for presence of down, shells, egg membranes (representing a successful fledge), and whole eggs, and then replenish the box with wood shavings because wood ducks do not carry their own material for a nest. The wood duck has been known to nest up to a mile away from a water body. The hen incubates her eggs for 30 days. When hatched, the hen will call out her young and lead them to the brood-rearing habitat where they will grow.



J. K. RILEY, HABITAT MANAGEMENT PROGRAM

Resource Assistant Kristen Ponak checks and cleans out a wood duck nest box. Clean wood shavings are placed in the box to provide a nest for a wood duck hen.

Once in danger of disappearing in the early 1900s, the wood duck now has a viable population in Connecticut, thanks to the efforts of volunteers, sportsmen, and the Wildlife Division.

Kristen Ponak, Resource Assistant

2008 Federal Junior Duck Stamp Contest

Connecticut 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 125 entries received this year and chose, as Best of Show, an acrylic painting of ruddy ducks 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.

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 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.

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



This spectacular photograph of a red-shouldered hawk was taken by Kevin Montgomery in February 2008: *"I was walking my dog in my New Milford neighborhood when I noticed a beautiful hawk in a tree not far from the roadway. Since I was not far from my house, I hurried back to exchange the dog for my camera. I live in a hilly section of town, so the terrain often slopes downward from the road. Because of this, I have a much closer view of the tree line than if the ground was flat. The hawk was about 10 feet up in the tree, but almost at eye-level from the road. He posed for several shots before deciding to take up residence in a different tree. It was extremely exciting to capture such a striking being in its natural habitat on film. This picture now graces the wall of my den."*

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



Conrad Boudreau of Vernon sent in this interesting photograph of a fisher raiding a suet feeder. The photo was taken in October 2006. Conrad wrote the following about his observation: *"My house property borders a large tract of woods that stretches from Interstate 384 in Bolton, northward to Valley Falls park in Vernon . . . There is plenty of wooded habitat both north and south of this tract, and it is easily crossed into and out of by all sorts of wildlife."*

More readers wanted!

Share Connecticut Wildlife magazine with friends, family, and neighbors.

Students Study Freshwater Mussels

Two 10th grade biology students, Macy O'Hearn and Illena Anger, from Lyman Memorial High School in Lebanon, recently completed a project that delved into and researched a particular aspect of life science. In mid-November 2007, they went to a spot above and below the Scotland Dam in Scotland to investigate the effect the dam was having on freshwater mussel populations in the Shetucket River. Their project was chosen by their biology teacher, Mrs. Kelly Ennis, to compete at the 2008 Connecticut Science Fair, where it received second honors and consideration for several "special awards."

Project Abstract in the format for the Connecticut Science Fair: The purpose of the study to be conducted was to find out if the Scotland Dam played a role in the size of freshwater mussel populations in the river on either side of the dam. The hypothesis for this experiment was, "If mussel populations are tallied on either side of the Scotland Dam, then data will prove there are more mussels upstream of the dam." A drive was taken to a spot on either side of the Scotland Dam to do a half-hour bucket survey to see how many mussels were to be found on each side. An area of 12 by 1.5 meters was surveyed. The number of mussels found was recorded and the dead ones were collected. Then, to the best of our ability, we identified the species of each mussel found. The results showed that the dam does affect the number of mussels in the Shetucket River, but not in the way we had hypothesized. No mussels were found above the dam, but 21 mussels were found below the dam, which was an unexpected outcome because it had been thought that the slower moving current downstream would cause the population to diminish. The results of this experiment give a somewhat better understanding of the effect of dams on the populations of freshwater mussels. Although sources of error were made in this experiment, the results show that dams clearly have an effect on mussel populations up and downstream. Further experimentation in this area would yield more accurate results.

Wildlife Calendar Reminders

- May-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.
- Herons and egrets are nesting on offshore islands in Long Island Sound. Refrain from visiting these areas to avoid disturbing the birds.
- Dispose of fishing line in covered trash containers or specially marked recycling receptacles. Improperly discarded fishing line is a hazard for wildlife.
- June 7..... **National Trails Day.** For information on events in Connecticut, visit the Connecticut Forest and Parks website at www.ctwoodlands.org.
- June 22..... **Duck Day**, at the Livingston Ripley Waterfowl Sanctuary (see below for more information).
- July 4..... While viewing fireworks displays at Connecticut coastal areas, respect fenced and posted shorebird nesting areas and offshore heron and egret rookeries.

Public Programs at the Sessions Woods Conservation Education Center

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

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

Duck Day at Livingston Ripley Waterfowl Conservancy, June 22

The Livingston Ripley Waterfowl Conservancy (LRWC) in Litchfield will host its third annual Duck Day on June 22, 2008, from 10:00 AM to 4:00 PM. This event is a family-oriented day of waterfowl and wildlife activities, including hands-on activities, fly-tying, birdwatching, birds of prey demonstrations, guest speakers, and much more! Dozens of environmental organizations, including the DEP Wildlife Division, will be on hand. For more information, visit LRWC's website at www.lrws.org or call (860) 567-2062. The Livingston Ripley Waterfowl Conservancy is located on Duck Pond Road in Litchfield.

Online Licensing for Sportsmen Available on DEP Website

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



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A state threatened least tern feeds its well-camouflaged young. Every year, efforts are made to protect these beach nesting birds from disturbance and predation. Please respect fenced and posted nesting areas by staying away from nests and restraining dogs and cats.

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