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Connecticut Wildlife

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BUREAU OF NATURAL RESOURCES • WILDLIFE DIVISION

Eye on the Wild

New Subscription Rates for 2010

As you are probably aware, budget constraints have been affecting state government, and the Wildlife Division has not been immune. In addition, printing and mailing costs have been steadily rising over the years for Connecticut Wildlife*, yet we haven't raised the subscription price since 1995. Starting in 2010, the price will go up minimally to $8 for one year, $15 for two years, and $20 for three years. However, even though the cost is increasing for subscribers, you will actually be getting more.* Connecticut Wildlife *magazine will now be printed in full color, with more photographs and improved layouts. We believe that the magazine is still a great bargain and it will continue to provide wildlife information that is pertinent to our state.*

There is an opportunity for current subscribers to extend their subscriptions at the lower rate before the prices increase in 2010. Just fill out the coupon on page 19 and send in your payment to have your subscription extended for up to three years. Renewal notices sent out in 2010 will reflect the new price.

Please feel free to contact us if you have any questions about your subscription. You can call the Sessions Woods office (860-675-8130; Monday-Friday, 8:30-4:30) or email katherine.herz@ct.gov.

Making Bird Feeding Safe for Birds

Winter is the perfect time to take up a very popular activity – feeding and watching birds from the comfort of your own home. Getting started is easy. Buy a feeder or two, regularly stock them with seed to attract various birds, and sit at your window and wait for the birds to come. However, your responsibility doesn't stop there. Once you make a commitment to feed birds, you also have to make sure that you are keeping the visiting birds safe from disease, predators, and window strikes. The article on page 8 provides some tips for taking those extra steps to protect feeder birds. My motivation for including the article in this issue stems from my own concern about birds visiting the feeders in my backyard. Window strikes were becoming too common and I dreaded hearing each "thump" as a bird struck one of the windows. Last winter, I tried using falcon silhouettes, but there were still too many window strikes. This year, I did some research and decided to try a few different methods. Right now, I'm using a combination of hanging ribbons and UV static decals placed on the ***outside*** *of the windows. My research revealed that the decals are most effective if placed on the outside of windows. I was able to purchase the decals at a local bird supply store, but they also are available on the internet. So far, the decals and ribbons seem to be making a difference. Another motivation for the article was an increase in disease reports to the Division late last winter of salmonellosis in pine siskins visiting thistle feeders and even some reports of finch eye disease. The steps for trying to prevent disease are actually very easy and not too time-consuming. Next challenge, what to do about the neighborhood cats that are hanging around my bird feeders . . .*

Kathy Herz, Editor

Cover:

Due to the new system that requires hunters to report their deer harvest via the DEP website or by telephone, a running tally of the 2009 archery deer harvest can be viewed at www.ct.gov/dep/hunting.

Photo courtesy of Paul J. Fusco

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The Federal Aid in Wildlife Restoration Program was initiated by sportsmen and conservationists to provide states with funding for wildlife management and research programs, habitat acquisition, wildlife management area development, and hunter education programs. Connecticut Wildlife *contains articles reporting on Wildlife Division projects funded entirely or in part with federal aid monies.*

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State-land Habitat Projects Continue Despite Cuts to WHIP

Written by Paul Rothbart, State Lands Management Program

The 2009 field season for the Wildlife Division's State Lands Management Program has been challenging but extremely productive and rewarding. The goals of the program are to create the habitat diversity required to maintain stable, healthy, and diverse wildlife populations throughout Connecticut and to maintain and enhance the properties through boundary marking, proper signage, and creating public access for improved wildlife-based recreational opportunities.

During the past season, management activities continued to emphasize early successional habitats, which have been identified in Connecticut's Comprehensive Wildlife Conservation Strategy as priority habitat types in need of conservation and active management to assure abundant and diverse wildlife populations. Additionally, this need and associated management have been brought to the forefront through the Wildlife Division's participation with the Connecticut Woodcock Council and a regional initiative to restore areas essential for the New England cottontail. These declining habitats (i.e., young forests, old fields, grasslands) are critical to a large array of species, including American woodcock, New England cottontail, ruffed grouse, indigo bunting, blue-winged warbler, northern oriole, rufous-sided towhee, wild turkey, bluebird, American goldfinch, deer, bats, bobolink, savannah sparrow, and eastern meadowlark.

Over the past decade, the principle funding source for state land habitat activities has been through the U.S. Department of Agriculture's Wildlife Habitat Incentives Program (WHIP). This valuable program was the first Farm Bill conservation program specifically developed to address wildlife resource needs on non-federal lands. Through 2008, the Wildlife Division had received $1,752,288 via WHIP grants, resulting in the development of 81 contracts encompassing 1,868.65 acres. Projects have included warm and cool season grass establishment, riparian native tree and shrub plantings, water control structure replacement/enhancements, aspen/young forest regeneration, and old field enhancement/non-native plant management targeting invasive species, such as autumn olive, multi-flora rose, asiatic bittersweet, tartarian honeysuckle, and tree-of-heaven. Management practices included brush mowing, heavy-duty brush and tree removal with specialized equipment (i.e., brontosaurus, fecon mower, and feller buncher), prescribed burning, no-till fluffy grassland seedings, and selective herbiciding.

P. J. FUSCO

Tree harvesting operations at Roraback WMA are part of an early successional habitat initiative funded in partnership with the Connecticut Woodcock Council, Wildlife Management Institute, and Beardsley Zoo.

Unfortunately, commencing in 2009, the state, along with municipal governmental entities, are no longer eligible for funding via WHIP. Although this is obviously a tremendous blow to the Wildlife Division's current funding opportunities, contracts are still in place for several years into the future, which will provide continued management while new partnerships and opportunities to conduct critical habitat practices are developed.

State Land Projects – April to September 2009

Early Successional Stage Forest Habitat Creation	**Total: 24 acres**	**Native Warm Season Grass Planting**	**Total: 12 acres**
Spignesi WMA	Scotland	Tunxis State Forest	Hartland
Roraback WMA	Harwinton	Machimoodus State Park	East Haddam
Bear Hill WMA	Bozrah		
		Brush Mowing of Old Fields/Grasslands	**Total: 250 acres**
Herbicide Treatment of Non-native Invasive Plants	**Total: 270 acres**	Tunxis State Forest	Hartland
Tunxis State Forest	Hartland	Centennial State Forest	Easton, Weston, Redding
Mad River Flood Control Area	Winchester		
Roraback WMA	Harwinton	Roraback WMA	Harwinton
Quinnipiac River State Park	North Haven	Flaherty Management Area	East Windsor
West Rock State Park	New Haven	Higganum Meadows WMA	Haddam
Simsbury WMA	Simsbury	Bear Hill WMA	Bozrah
Flaherty Management Area	East Windsor	Mad River Flood Control Area	Winchester
Nipmuck State Forest	Union	Skiff Mountain WMA	Sharon
Machimoodus State Park	East Haddam	Goshen WMA	Goshen
Talbot WMA	Scotland	Simsbury WMA	Simsbury
Cockaponset State Forest	Haddam		
Pachaug State Forest	Voluntown	**Prescribed Burning**	**Total: 48 acres**
Barn Island WMA	Stonington	Pease Brook WMA	Lebanon
Pease Brook WMA	Lebanon	Verkades State Park	Waterford
Bear Hill WMA	Bozrah	Higganum Meadows WMA	Haddam

What's the Story Behind the Ear Tags on Bears?

Written by Paul Rego, Furbearer Program

If you have seen a bear in Connecticut, particularly in the northwest portion of the state, there is a chance that you also may have noticed tags on its ears. About 2,700 bear sighting reports were received by the Wildlife Division in 2008 and, in more than one fifth of those, the reporter noticed ear tags on the bear.

DEP WILDLIFE DIVISION FILE PHOTO

A biologist uses special pliers to attach ear tags to a drugged bear.

J. HAWLEY, FURBEARER MANAGEMENT PROGRAM

Sighting reports with details on the unique ear tag numbers and/or letters help document the movements of bears.

A common misconception is that if a bear is tagged, it must have been a problem bear, and a bear with two tags (one in each ear) was caught on two different occasions because it was causing problems. In reality, every bear receives a tag in each ear the first time it is handled. Most tagged Connecticut bears were not caught as problem bears but, rather, as part of a project researching the state's population. Bears removed from urban areas and those caught at problem sights also are tagged.

A. MACHEN, FURBEARER MANAGEMENT PROGRAM

In 2006, both female and male bears were marked with pink ear tags. This young sow also was fitted with a radio collar so that biologists could track her movements and find her winter den site.

Bears observed with only one tag have somehow lost a tag, possibly due to fighting with another bear or snagging it on brush. Rarely, a bear may lose both tags and, therefore, appear as if it had never been handled. Large male bears are more likely to lose tags as compared to females and smaller males. Boars probably do more fighting and bull their way through thicker brush.

The tag color used to mark the bears is changed each year. For example, a bear with red tags was handled in 2007, one with yellow tags was handled in 2008 and one with white tags was handled in 2009. Each of the colored tags has a two digit number and/or letter code. The second digit indicates the year, while the first indicates the sequence in which it was caught ("1" through "9" then "A" through "Z"). Thus a bear with ear tag "2-9" would be the second bear handled in 2009, and a tag with "B-8" would be the eleventh bear handled in 2008.

Ear tags help biologists track bear movements and dispersal. Bears tagged in Connecticut have traveled as far as Vermont. Bears tagged in New York, Massachusetts, and even Pennsylvania have shown up in Connecticut. The ramblings of individual bears through multiple towns have been revealed via sightings with tag information. Tags also can reveal whether individual bears have a propensity for problem behavior. Approximately 150 bears have been tagged in Connecticut since 2001. Research bears have been caught and tagged in Barkhamsted, Hartland, Colebrook, New Hartford, and Burlington.

One Bird in Hand Tells More than Two Singing in the Bush

Written by Shannon Kearney-McGee, Bird Program

For the second season, Wildlife Division staff spent spring nights chasing the phantom call of the whip-poor-will in an effort to capture the noisy little singers. The whip-poor-will is easily identified by its distinctive call, heard most often at dusk or dawn, along woodland edges – "*whip-poor-will*!" There are very few, however, who can claim to have ever seen this phantom caller.

Whip-poor-wills are elusive ground nesting birds that are often heard and not seen. Unlike most songbirds, they are active only at night, hiding by day among the branches of trees or nesting, perfectly camouflaged, in leaf litter on the forest floor. In Connecticut, whip-poor-wills are a state species of special concern, and, regionally, they have been disappearing from the New England landscape. In an effort to understand the species' decline and how remaining habitat can be managed, the Division tracked individual birds with the use of radio telemetry equipment to determine which habitat features are most important for Connecticut's breeding whip-poor-wills.

To assess which management activities might be most beneficial for the birds, staff focused on a study site where there were a variety of different management practices, including burning, cutting, and powerline right-of-way clearing, as well as areas with natural wind and fire disturbance.

Calling birds were located in late April and early May. Mist nets for capturing whip-poor-wills were set up between mid-May and the end of June. Two birds, one male and one female, were captured and fitted with radios. Both birds were found in managed shrubland habitat. The female was adjacent to an eight- to nine-year-old clearcut and the male was captured in a forest stand that had undergone a final shelterwood cut in 2007. Clearcuts of approximately eight to nine years of age often consist of sapling size trees that are the same age. The structure created by these young trees resembles an early successional shrubland. The final shelterwood cut had a mixture of upland hardwood species that were even-aged saplings, again resulting in an early successional shrubland. The shrubby habitat created by these forest cuts is typical of areas statewide where whip-poor-wills are often heard singing, and it is not a surprise that the birds were captured from these managed areas.

The two whip-poor-wills with radio transmitters were tracked by staff and volunteers during their night-time activity periods. Night-time activities included foraging for invertebrates, singing, or incubating eggs and young. The radio transmitter allowed the confirmation of the female's nesting location. This female, however, did not move much, and no foraging range information was collected from her movements.

The male bird was more active at night, allowing for the determination of 22 foraging locations. The foraging home range for the male was then calculated. Surprisingly, the male did not seem to forage in the same area where it was heard singing. The foraging range was concentrated in mature old growth, consisting primarily of chestnut oak. This area had steep and rugged terrain with exposure to natural disturbances, such as wind and other weather elements. The chestnut oak habitat also was more reminiscent of pitch pine/scrub oak communities in Cape Cod and New Jersey where whip-poor-wills are more numerous. This type of habitat is quite different from the managed shrubland areas with a variety of vegetation species, sandier soils, and increased overstory cover. These differences may result in a preferred invertebrate community from which to forage, or increased protection from predation while foraging. This more natural foraging habitat also is rare in Connecticut and may help explain why whip-poor-wills are uncommon.

This disparity between the singing location and the foraging location for a male whip-poor-will reinforces radio tracking research results from Massachusetts, where a similar contrast between singing and foraging habitat was found on the Massachusetts Military Reservation on Cape Cod. Foraging whip-poor-

continued on page 7

P. J. FUSCO

Whip-poor-wills are elusive ground nesting birds that are often heard and not seen. Unlike most songbirds, they are active only at night, hiding by day among the branches of trees or nesting, perfectly camouflaged, in leaf litter on the forest floor.

This project was completed with funds from the State Wildlife Grants Program and with the assistance of the following staff and volunteers: Jeremy Leifert, Patrick Bukowski, Shannon Kearney, Christina Kocer, Patrick Deane, Sarah Van de Berg, Laura Saucier, Nicki Hall, Larry Fischer, Katelyn Hope, Stephen Pelletier, Nicole Azze, Corrie Folsom, Laurie Fortin, Jen Pacelli, Rebecca Schwart, and the University of Connecticut Summer Ornithology Course of 2009.

State Wildlife Grants

High-tech Moose Traversing Connecticut

Written by Andrew LaBonte, Deer Program

J. VEALE, DEER PROGRAM

Deer Program Resource Assistant Bill Embacher with the 700-pound bull moose captured in Southbury and relocated to northwestern Connecticut in September 2009.

Anyone who observes a moose in **urban areas** *of Connecticut should contact the Division's Franklin Wildlife office at 860-642-7239 or Sessions Woods office at 860-675-8130 during office hours (Monday through Friday, 8:30 AM-4:30 PM), or DEP Emergency Dispatch (860-434-3333) after hours. All other observations can be reported on the DEP website at www.ct.gov/dep/wildlife.*

Since initially capturing two moose during winter 2009 as part of a moose research project, Wildlife Division staff members have been tracking moose movements on a weekly basis. The technological advances in tracking equipment (GPS collars) have allowed the Division to use satellites to record the locations of the moose every three hours. The GPS devices placed on the Connecticut moose search for satellites and download location, elevation, and temperature data, and emit a VHF signal on specific days of the week. The VHF signal allows an individual with a hand-held receiver and antenna to locate the animal in the field if they are in close proximity (approximately 2 miles line-of-sight). Once the animal is located, a hand-held computer with a special antenna can be used to download the data from the collar to the computer, but only at a distance of 300 yards or less. Moose, with home ranges that can exceed 10 square miles, can be difficult to locate in the hilly terrain of northwestern Connecticut.

Tracking the High-tech Moose

The adult bull moose (#2) captured in the Hartland/Barkhamsted area has ventured on several occasions into Massachusetts for a day or two, but has never traveled south of the area where it was originally captured. Since January 2009, a total of 705 GPS locations have been recorded. The acquisition rate of the GPS was low (<50%) when leaves were on the trees, but it is expected to increase now that the leaves have dropped from the trees.

In late September and early October, when moose begin to rut, two attempts were made to locate the bull and determine if he was courting a cow. On October 2, the bull was observed bedded with a large cow (approximately 1,000 pounds, based on the size of the bull) and a calf. Biologists were able to get within close range of the calf, but were unable to get near enough to the cow to capture it as well. Another attempt was made to locate the bull on October 5. Unexpectedly, while searching for the collared bull, another small, rogue bull passed close by, but did not provide an opportunity for capture.

The female calf moose captured in March was monitored up until late May. The calf stayed in the general area where she was captured. However, in late May, her VHF signal was no longer audible. Based on a report received through the DEP website, a resident on the Connecticut/Massachusetts border observed the collared calf later that week heading north. Several attempts were made throughout Connecticut and Massachusetts to locate the collared calf;

however, her whereabouts at this time are unknown.

Capturing a Wayward Moose

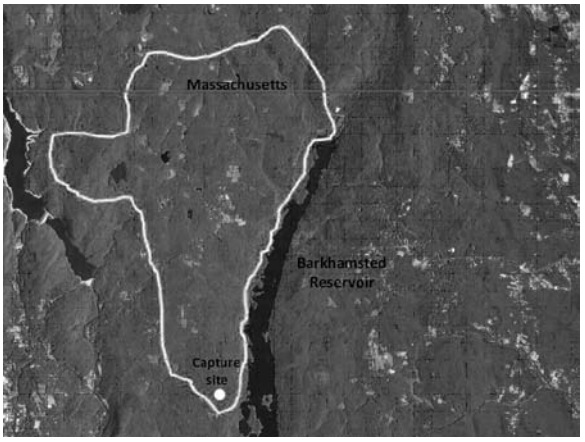
On September 9, 2009, a moose sighting was received via a phone call regarding a young bull on Route 8 near the water treatment plant in Winsted. Six additional website reports and a few phone calls about a young bull came in over the next two weeks from Watertown and Middlebury. Reported sightings indicated the moose was near Interstate 84. DEP staff was prepared to immobilize the moose at the earliest opportunity to prevent the possibility of a moose-vehicle collision. On September 25, the moose was observed in an office park, 150 yards north of Interstate 84 in Southbury. DEP Environmental Conservation Police officers arrived on the scene and warned motorists and onlookers of the potential concerns regarding the moose. The DEP Tranquilization Team was fortunate to immobilize the moose in a safe location. The Team and several local police officers carried the bull from the woods to the back of a pick-truck where it was prepared for transport. Coordinated efforts between local police, ENCON police, and Wildlife Division staff were critical to the successful relocation of this animal.

This five-point bull, which had traveled over 20 miles in roughly five days, was estimated to weigh about 700 pounds, based on body measurements. It was fitted with a GPS collar and ear tags (#6). The moose was transported to northern Connecticut. Since its relocation, the moose's whereabouts have been unknown. However, in early November, a forester found the GPS collar while working in Grandville, Massachusetts, just over the Connecticut border. The collar appeared to have malfunctioned and, unfortunately, the information stored in the collar cannot be accessed until it is returned to the manufacturer.

During late September/early October, the Department received two reports of another bull in Washington. Two days later, a motorist reported hitting the moose on Interstate 84 on the Danbury/Bethel line. Neither the motorist nor the moose suffered any injuries. The moose continued to travel further into Bethel that day, but surprisingly turned northward back across Interstate 84 that evening. The following morning, the moose was observed heading north through Southbury, Roxbury, and Woodbury. It is noteworthy that this is the first documentation in Connecticut of a dispersing moose changing its direction of travel. Typically, dispersing moose continue to travel southward until they are either struck by a motor vehicle or captured and relocated.

B. EMBACHER, DEER PROGRAM

A bull moose captured in Southbury in September 2009 browses on vegetation after being relocated to northwestern Connecticut. The animal was marked with a radio collar and ear tags before it was released.



This map depicts the area in northwestern Connecticut and part of Massachusetts in which bull moose #2 traveled after being captured in January 2009 along the Barkhamsted Reservoir.

It is expected that as Connecticut's moose population continues to increase, more moose will find their way into urban areas and require intervention. The capture, collaring, and monitoring of moose in Connecticut is an ongoing project between the Department, University of Connecticut, and the Northeast Wildlife Damage Management Cooperative, with additional assistance from the Metropolitan District Commission. This project should help us better understand moose movements, habitat use, and survival of Connecticut moose.

Anyone who observes a moose in **urban areas** of Connecticut should contact the Division's Franklin Wildlife office at 860-642-7239 or Sessions Woods office at 860-675-8130 during office hours (Monday through Friday, 8:30 AM-4:30 PM), or DEP Emergency Dispatch (860-434-3333) after hours. All other observations can be reported on the DEP website at www.ct.gov/dep/wildlife.

Whip-poor-will Project

continued from page 5

wills in Massachusetts also used mature forests. The results of the Massachusetts study combined with Connecticut's also demonstrate that radio tracking was vital for the discovery that the bird was using mature forest habitat for foraging as opposed to the shrublands in which it sang. As a result of this research, management recommendations for this species will now consider the structure of the surrounding forest, in combination with shrubby openings, to meet both the early season courtship and singing requirements as well as the later season foraging requirements.

Provide a Safe Environment When Feeding Birds

Now that winter is here, many Connecticut residents are actively feeding and watching birds in their yards. Feeding birds can be as easy as putting up a window feeder filled with sunflower seeds to maintaining several styles of feeders and offering a variety of food types so as to attract a wide diversity of birds. However, there is more to bird feeding than just putting up a feeder and supplying food. It also is important to provide a safe feeding environment for the birds that you invite to your feeders.

Keep Feeders Clean

When selecting a feeder, keep in mind that it should be easy to refill and clean. Feeders and feeding areas should be cleaned often throughout the cold months. A poorly maintained feeder can spread diseases among birds. To prevent the spread of disease, feeders should be cleaned about once every two weeks by scrubbing in hot, soapy water, and then sanitized by being dipped into a one part bleach, nine parts water solution. Let the feeder dry thoroughly before refilling. It also is important to shovel or rake up seeds hulls that fall on the ground beneath feeders on a regular basis. This material should be disposed of properly (e.g., bagged for garbage disposal).

The use of weatherproof feeders that protect the seed from getting wet is suggested. Use only clean, dry bird seed and discard seed that becomes moldy. Keeping seed in a waterproof container helps prevent mold from spoiling the seed. In wet weather, put out only enough seeds that can be consumed in several hours.

If you have a bird bath, be sure to flush the water every day.

While these measures won't entirely solve the problem of bird diseases, they can help to slow down their spread.

Bird Diseases

Even if you are diligent about keeping your feeders and feeding areas clean, you should always be on the lookout for sick birds. If you observe sick birds, thoroughly clean your feeders and leave them down for at least a week.

There are a few common diseases, with varying symptoms, that may be affecting birds at your feeders:

- **Aspergillosis:** A potentially fatal bird infection, aspergillosis is caused by a fungus that grows in wet bird seed. Symptoms include difficulty breathing, emaciation, and increased thirst.
- **Salmonellosis:** The spread of salmonellosis has been linked to bird feeders, causing widespread deaths in the Northeast. Symptoms are not always noticeable and some infected birds may not show any signs of sickness, but can spread the infection to other birds. Salmonellosis is transmitted through fecal contamination of food and water by sick birds.
- **House Finch Eye Disease:** This disease was first documented in 1994. Infected birds have red, swollen, runny, or crusty eyes. In extreme cases, the eyes may be swollen shut. Some infected birds may recover, but many die from starvation, exposure, or predation. The disease mainly affects house finches, although American goldfinches, evening grosbeaks, and purple finches also have been affected.
- **Avian Pox:** This virus can be spread by direct contact with infected birds or contaminated surfaces (like feeders), and by ingesting contaminated food or water. Infected birds usually have wart-like growths on the featherless parts of the body, such as around the eye, beak, and on the legs and feet. Another form of avian pox, which is not as common, causes plaques to develop on the mucous membrane of the mouth, throat, trachea, and lungs. Infected birds have difficulty breathing and feeding.

Predators at Bird Feeders

Many feeder watchers are dismayed when they observe one of their visiting birds being preyed upon by free-roaming cats or raptors. Predation by cats is not a natural situation and should not be tolerated. The best solution is to keep house cats indoors and let them watch birds through the windows. If neighborhood cats are hanging around your feeders, try to talk to your neighbors about their free-roaming cats and explain why cats should be kept indoors.

Predation by hawks, on the other hand, is part of the natural predator-prey relationship. Plus, observing a Cooper's or sharp-shinned hawk flying over your feeders may be a big enough thrill to overshadow the realities of predation. However, it is important to provide thick cover (shrubs, conifers, brush piles) near the feeders for protection. If a hawk becomes a regular visitor to your feeding area and scares feeder birds away, take down the feeders for a few days, and hopefully the hawk will move on.

Prevent Window Strikes

It has been estimated that millions of birds are killed each year from striking windows on buildings and homes. Unfortunately, window strikes are a common cause of death associated with feeders. Studies have shown that one out of every two strikes results in death. Birds involved in collisions may die instantly, be injured and die eventually from their injuries, or be taken by a predator as they recover. If you feed birds, you should make a commitment to reduce the chance for window strikes as much as possible.

Research has shown that bird feeders placed within three feet of windows reduces or eliminates the number of fatalities from window strikes. Birds leaving feeders placed close to windows are not able to gain enough momentum to cause serious injury if they hit a window. Placing feeders at least 30 feet away from windows can be helpful in reducing collisions as well.

It also is important to break up reflections in windows or reduce their transparency. Several options are available and you may have to experiment to see which ones work best:

- Decals of any shape and size can be helpful. These can include falcon silhouettes or spider web designs. Several decals should be placed on the window to break up the appearance of the window. The use of UV reflective static cling decals is becoming more popular. These special decals are placed on the **outside** of windows and, although transparent to humans, reflect a solid blue (ultraviolet) image to birds. A good number of these small UV static cling decals need to be placed on larger windows. These decals are available commercially through the internet or at bird feeding supply stores. Although not 100% effective, the decals seem to make a difference in reducing bird strikes at windows.
- Another option is to use physical barriers at windows near feeders, such as commercial window screens, awnings, garden netting, or insect screening.
- Hanging several ribbons or streamers, spaced apart, in front of windows has had some success. The ribbons break up

American goldfinches tend to concentrate at thistle feeders, increasing the possibility of disease transmission.

the reflection and movement in the wind may also be a deterrent.

- You can use blue painter's tape or a yellow highlighter marker to make a grid on the outside of windows. The highlighter is less visible to humans, but appears to keep birds from striking windows. The painters tape works well, also, but will definitely be a source of questions to anyone who sees your windows.

In some cases, when a bird strikes a window, it is probably just stunned and will eventually fly away when it recovers. In this situation, you should carefully pick up the bird, with gloved hands, and place it in a safe area away from cats and other predators. It should fly away shortly. If it does not fly away and it appears to be more seriously injured, you should seek the assistance of an authorized wildlife rehabilitator.

Dealing with Sick or Injured Birds

No matter how hard you try to keep your feeders and feeding area safe, you will probably find sick and/or injured birds. What do you do in such a situation? First of all, you need to remember that it is illegal for any person, other than a state-authorized wildlife rehabilitator, to care for wildlife. If you think a bird (or any other animal) needs help, you should contact a wildlife rehabilitator that is authorized to care for sick, injured,

P. J. FUSCO (2)

This house finch displays symptoms of finch eye disease – red, crusty, swollen eyes.

or orphaned animals with the intent of returning them back to the wild. The Wildlife Division maintains a list of rehabilitators on the DEP website (www.ct.gov/dep/wildlife). Most birds are protected by federal and state laws and these volunteers have the necessary permits for handling protected birds.

The Mount Vernon Songbird Sanctuary, a non-profit organization based in Southington, is an authorized rehabilitator that specializes in caring for small migratory songbirds. The sanctuary offers some excellent advice on its website (www.mvssanctuary.org) about what to do if you find a sick or injured bird. In the case of a bird exhibiting disease symptoms, you should make every effort to catch it. A sick bird is usually found on the ground, in the same position for long periods of time, quite often near a bird feeder or bird bath.

In the case of injured songbirds, you should look for broken wings, broken legs, wounds, head trauma, or spinal trauma. Observe both wings. Are they positioned evenly, or is one wing drooping lower than the other? Is the bird standing on both legs or is one leg held up because the bird cannot bear weight on it? Is a leg dangling uselessly? These symptoms may indicate a break. Missing or matted areas of feathers are signs of a wound, the result of being caught by a cat or other predator. Cat bites can be fatal if not treated with antibiotics. (The Sanctuary recommends that any bird that has been handled by a cat be rescued.) Head and spinal trauma can be caused by colliding with a window or being hit by a car, resulting in a bird being found on the ground stunned and unable to fly.

In these situations, use gloves to gently place the bird in a ventilated box with a towel, keeping it warm and away from people and pets. Nothing should be put in the bird's mouth or container. An authorized rehabilitator should be contacted immediately so that the bird can be brought to them for care.

For More Information

There is a wealth of information available about bird feeding and safety at bird feeders. The following websites were used as reference and you may also consult them for more detailed information:

Cornell Lab of Ornithology: www.birds.cornell.edu
Project FeederWatch: www.birds.cornell.edu/pfw/
National Bird Feeding Society: www.birdfeeding.org
American Bird Conservancy: www.abcbirds.org

The Little Snowbird

Article and photography by Paul Fusco, Wildlife Outreach Program

Every fall in Connecticut, there is a little gray bird that suddenly becomes very common all across our state. Woodlands and forest edges in parks and backyards are sometimes inundated with them. They are familiar favorites among many backyard birders, while others dread the sight of them. The little birds are dark-eyed juncos, sometimes referred to as "snowbirds." Those that dread the "snowbirds" do so because the juncos are harbingers of the cold and snowy days of fall and winter that are soon to come. They get the name "snowbird" from their plumage coloring of "gray skies above, and snow below."

This adult male slate-colored junco shows the striking dark gray upper plumage set against a white belly and pink bill.

Description

Juncos are small sparrows that are distinctly marked with drab shades of gray, brown, and white. They have a pink bill, plain gray head and breast, white belly, and white outer tail feathers. Females and immature birds have duller plumage than males.

The typical junco song is a cheery, musical trill, "*tililililililili*." Simple and slow, the trill may vary up or down in pitch, and a series of multiple pitches may be joined together to form one continuous song. Listen in late winter for the junco song, as it is most frequently sung before pair formation and breeding.

There are five subspecies of dark-eyed junco – the slate-colored, Oregon, pink-sided, white-winged, and gray-headed races. All are basically similar in appearance. One, the white-winged, has a restricted range, breeding only in the Black Hills of South Dakota.

Female juncos are duller than males and have brownish tones in their upper plumage.

Range

Of the five subspecies, only slate-colored juncos are normally found in the eastern United States. They are very common and widespread in open wooded habitats.

Slate-colored juncos breed in cool coniferous and mixed woodlands, along a broad swath of northern North America from Alaska, across Canada to New England, and south along the Appalachian highlands. It is estimated that two-thirds of the junco population breeds in the broad band of boreal forest that extends from Newfoundland across Canada and Alaska, to the Bering Sea. In winter, juncos move south, ranging from southern Canada, to every state in the United States, but are absent from extreme southern Florida, southern Texas, and the desert southwest.

Slate-colored juncos are uncommon breeders in Connecticut. Breeding occurs in mature conifer forest habitat in northwestern and, to a lesser extent, in northeastern parts of the state. Juncos tend to favor areas with little undergrowth and somewhat of a rocky or sloped surface.

Nests are built on the ground, often in a depression and hidden under vegetation or against a log, rock, or upturned tree root. The cup-shaped nest is made of grass, moss, rootlets, and little twigs, with a lining of fine grass, feathers, and hairs. Young birds have well-developed legs and feet. This allows them to run before they can fly in order to escape from nest predators. Slate-colored juncos typically raise two broods per year.

Behavior

Juncos prefer to forage on the ground,

where they scratch the surface for seeds. They often can be seen using a "double-scratch" method where they hop forward, and then kick the ground backwards with both feet to expose food. In summer, they also will consume insects, including caterpillars, beetles, and ants. Ragweed, chickweed, and crabgrass are among a long list of grass and weed seeds that juncos eat.

Winter flocks often consist of five to 40 individuals. Social structure within the flock establishes a pecking order in which dominant birds (usually adult males) attempt to maintain a small foraging territory. Rivals are warned away by the prominent display of the white outer tail feathers. If displays don't settle a dispute, a fight may ensue in which two birds will kick and claw at each other. Sometimes the combatants will face off while rising up into the air.

This slate-colored junco exhibits an uncommon variation of white wingbars that may be noteworthy but not prominent.

Males juncos generally spend the winter farther north than the females and immature birds. By enduring harsher winter conditions, mature males will gain the benefit of being closer to the best breeding territories in spring. The most favorable territories will be claimed by the birds that get back to the breeding grounds the fastest.

In winter, flocks feeding on the ground may be sent diving for cover at the sight of a sharp-shinned hawk coursing toward them. In such situations, juncos will give a sharp call note and flash their white tail feathers to signal other members of the flock to the danger.

Members of a flock regularly sound a "*tsip*" call, used to keep in contact with one another while the flock forages within their regular feeding area. At night, flocks will roost together, frequently in a conifer that affords them shelter from cold and protection from predators.

Conservation

Slate-colored juncos are widespread and abundant. They have adapted well to human development, and have taken advantage of the proliferation of backyard bird feeders all across the country. The best seed to offer juncos at feeders is a combination of black oil sunflower, white millet, and nyjer thistle. Because juncos prefer to feed on the ground, it is best to spread some seed on the ground to accommodate them. Ground seed also can be provided by allowing spillage from a pole mounted feeder.

Thick cover should be near any food source. By placing seed near cover, juncos will have a route to escape from hawks and other predators. A distance of six to 12 feet between food and cover works well to give the birds enough space to become aware of any threats and to quickly escape.

Despite having an abundant population and a wide range, dark-eyed juncos have declined at a rate of two percent per year according to breeding bird surveys during the 1980s and 1990s. The species is heavily dependent on the boreal forest zone of North America. This huge region is still largely intact, but it is facing increasing pressures from industrial development and logging interests. Millions of acres of boreal forest are clearcut each year, primarily for paper products.

Not only is the boreal forest zone an important breeding habitat for dark-eyed juncos and many other birds, but it also is a globally important carbon storage zone, one of the world's best natural defenses against increased global warming. Carbon storage is a natural process where plants absorb carbon from the atmosphere, thus helping to reduce the rate of global warming. The rich mosaic of forests, lakes, wetlands, peat, and tundra in the boreal zone hold a large percentage of the planet's carbon. The beneficiaries of responsible and sustainable forest management and large scale protections of the boreal forest would not only include the little slate-colored junco, but likely the planet itself.

There Are Many Races of Dark-eyed Junco

In Connecticut, the slate-colored race of dark-eyed junco is the only regularly-occurring junco to be found. In other parts of the United States, there are four other subspecies of dark-eyed junco, including gray-headed, Oregon, pink-sided, and white-winged juncos, all of which have smaller breeding ranges than the slate-colored.

Gray-headed juncos breed in the southern Rocky Mountains from Nevada to Colorado, and northern Arizona and New Mexico.

Oregon juncos breed from California north to British Columbia, and east to parts of Idaho and Montana.

Pink-sided juncos breed in the central Rockies from Montana to Arizona.

White-winged juncos have the most limited breeding range, and are found only in the Black Hills of South Dakota.

Unfavorable Weather Took Its Toll on Nesting Plovers & Terns

Written by Orla Molloy, Wildlife Division Resource Assistant

The 2009 piping plover nesting season began with high aspirations of achieving greater numbers than that of last year's 102 chicks. Human disturbance, predation, and Mother Nature, however, had different plans for the Connecticut coastline.

Sandy beaches are imperative for the survival of the state and federally-threatened piping plover. This shorebird prefers to make its nest in high, dry sections of beach that contain little to no vegetation and are away from the water. Piping plovers return to Connecticut from their wintering grounds in late March and early April to begin nesting. At this time, DEP staff, along with U. S. Fish and Wildlife Service staff and volunteers, scout shoreline beaches in search of these birds. In these early months, male plovers make their territories and defend them from intruders by hunching their backs and running after trespassers. When a mating pair is formed, the male makes several depressions (scrapes) in the sand. The female then evaluates the scrapes to find the one that is most desirable for laying eggs. She also may line the nest with broken shells to help camouflage it.

P. J. FUSCO

The 44 pairs of piping plovers that nested along the Connecticut coastline this past summer laid 202 eggs, but only fledged 74 chicks, down 25% from 2008 when 102 chicks fledged.

Once a good nesting site is established, the courting rituals begin. The pursuit consists of loud vocalizations, with the males puffing their chests and performing what many call a "can can" dance. Females will lay one egg every other day until there are four eggs. However, if the first nest fails, renest attempts may only have two to three eggs. Both male and female plovers participate in the incubation of the eggs.

Protecting Nesting Areas

Once pairs designate a breeding location, the Division uses string fencing as a buffer to discourage people from disturbing the birds. Bright yellow signs stating "Keep Away" and "No Dogs Allowed on Beach" also are posted. When nests are found with a total of four eggs (in some cases three eggs), a wire fenced exclosure is put around the nest and mesh netting is placed over the top. The exclosure helps prevent predation from foxes, dogs, skunks, raccoons, cats, and avian predators such as gulls and herons. However, it does not inhibit the breeding pair from entering or exiting. The wire exclosures have proven to be a valuable tool in providing higher hatching success where predators and human disturbance is high. The beaches, on average, are assessed twice a week for nesting activity.

Disturbance, Predation, and Weather Hamper Success

Every summer, piping plovers and state-threatened least terns struggle to maintain their nesting sites, putting great effort into establishing nests and laying eggs. Although human disturbance and predation are the usual culprits in nest failures, Mother Nature threw in its own twist this season. The unseasonable weather in June took a toll on plover and tern numbers. Twenty-six of the 30 days in June had continuous rainfall. Nesting plover and tern pairs were forced to incubate eggs or brood young in the unseasonable weather with mixed results. Although small, piping plovers are relentless when caring for eggs and broods. They will withstand the elements to ensure hatching success. Unfortunately, the constant rainfall and high tides washed out many nests.

Piping Plovers

The 44 pairs of piping plovers that nested along the Connecticut coastline this past summer laid 202 eggs, but only fledged 74 chicks, down 25% from 2008 when 102 chicks fledged. Some nest sites had unique problems, such as at Long Beach in Stratford where thieves made it difficult to keep the barriers up as they pilfered the wooden stakes used to cordon off the nesting areas. Wooden stakes are often pulled up and used as firewood on beaches. The constant theft of these stakes interfered with the security of Long Beach's nesting pairs. The number of plover fledglings from Long Beach fell

from 14 in 2008 to 10 in the 2009 season.

Beaches from Groton to Westport were used for nesting. They included Long Beach in Stratford; Milford Point, Cedar Beach, Laurel Beach, and East Broadway Beach (all in Milford); Sandy Point (West Haven); Hammonasset Beach State Park (Madison); Griswold Point (Old Lyme), Harkness State Park (Waterford); and Bluff Point Coastal Reserve (Groton). For the first time since DEP conservation efforts began, a pair was reported nesting at Sasco Hill Beach in Fairfield.

Piping plovers have many predators, including foxes, rats, dogs, raccoons, skunks, night herons, and gulls. A pair at Laurel Beach in Milford made three efforts to successfully nest. The first nest was not able to be protected by an exclosure before it was lost to predation. An exclosure was erected for the second nesting attempt; however, a predator (most likely a skunk) dug around and underneath the exclosure and took the plover eggs. Fortunately, these losses occurred early enough in the season that the pair was able to renest a third time and eventually fledge two chicks.

Nesting success for plovers at Harkness State Park decreased by 50% from last year. Only nine fledglings were recorded by Denise Bouchard, a DEP Parks patrolman.

Multiple plover pairs from across the state exhibited a change in their normal behavior when they began nesting in dunes and among beach vegetation. Traditionally, plovers prefer open, sandy areas because they provide better viewing for predators. Why the change? Is it because of the continuous loss of their beach nesting habitat? Could it be that human disturbance is less intrusive farther inland? Are these birds being forced to adapt to ever-changing breeding grounds? These are questions that will hopefully be answered with the continued monitoring of this species.

P. J. FUSCO

Only 11 least terns fledged this year from Connecticut beaches, a very dismal number. Of the eight sites in the state where least terns have routinely nested, chicks only fledged from two sites – Griswold Point and Hammonasset Beach State Park.

Terns Abandon Sandy Point

For the past 20 years, Sandy Point has been the site of the largest least tern colony in the state. It also plays a vital role for piping plovers. This year, Sandy Point was more of a ghost town than a vibrant and flourishing colony. The area was submersed with high water levels that flooded into the colony, causing undesirable breeding grounds for terns, black skimmers, oystercatchers, and plovers alike. The vigorous tern colony that once existed there had been completely eliminated. The flooding also had a negative effect on piping plovers. Normally, plovers need distance (approximately 30 feet) between their nests to ensure success. Plovers that would normally nest on the lagoon side of the point were forced to compete with each other for limited habitat on the ocean side. Adult plovers were actually seen attacking other adults over territory. To make matters worse, a brush fire was started at Sandy Point, right next to a nesting pair. This disturbance caused the adult to abandon its nest and eggs. These mishaps and habitat changes caused plover numbers to plummet at this site to almost one-half of last year's results (12 fledglings in 2009 compared to 20 fledglings in 2008). These changes also may be the reason why least terns didn't nest at Sandy Point at all. In 2008, 80 pairs of least terns nested at Sandy Point.

Least Terns

In 2009, 98 pairs of least terns nested on Connecticut beaches, fledging only 11 chicks. Of the eight sites in the state where least terns have routinely nested, chicks only fledged from two sites – Griswold Point and Hammonasset Beach State Park. These numbers are down considerably from just one year ago. In 2008, 252 pairs of least terns produced 76 fledglings. During one visit to Long Beach in Stratford, approximately 60-70 least terns were counted. When the site was monitored a few days later, the birds were gone and the nests were destroyed. The nests had washed away when the high tides reached abnormally elevated levels.

Thanks Extended

Efforts to protect and monitor piping plover and least tern nesting areas would not be possible without the assistance provided by volunteers, interns, and private landowners. The Division would like to thank all the private landowners who consented to having exclosures on their properties. Their cooperation allowed for the success of multiple nests. Thanks are also extended to Vanessa Lester, a University of Massachusetts student and U.S. Fish and Wildlife Service intern, and Denise Bouchard and Joel Stocker whose assistance was invaluable. The Division also would like to recognize the Master Wildlife Conservationists and other volunteers who worked hard and spent countless hours monitoring these shorebirds, purely because of their passion for wildlife and conservation.

Funding for the Piping Plover Recovery Project is provided by Section 6 of the federal Endangered Species Act.

Nesting Terns Holding Strong at Falkner Island

Since the 1960s, Falkner Island, a small, crescent-shaped piece of land just off the coast of Guilford, has been the site of the largest common tern and roseate tern colonies in Connecticut. This 4.5-acre island was once owned by the U.S. Coast Guard until it became part of the U.S. Fish and Wildlife Service's (USFWS) Division of Refuges in 1985. It is now considered part of the Stewart B. McKinney National Wildlife Refuge.

The roseate tern colony on the island is part of a northeastern regional population that nests at various sites along the coastlines of Maine, Massachusetts, Connecticut, and New York. This breeding population was declared endangered by the USFWS in 1987. With the passage of Connecticut's Endangered Species Act in 1992, the roseate tern also was listed as state endangered. The common tern is considered a Connecticut species of special concern. Because of the endangered status of roseate terns, their productivity is continuously monitored at Falkner Island, as well as at other breeding sites in Massachusetts and New York.

The 2009 roseate and common tern nesting season was considered successful. The daily presence of the biological team at Falkner Island and constant monitoring of the tern colony, as well as proactive predator control, all contributed to the colony's reproductive success.

This year's annual census demonstrated that the number of common terns nesting on the island had increased compared to last season. However, the overall fledge rate remained identical to that of the previous year. During the 2009, 2,311 nests were recorded. This is an increase of 249 nests in comparison to the 2008 census results.

There also was an increase in the number of roseate tern nests, as well as in the number of roseate chicks that fledged. A total of 38 roseate tern chicks are presumed to have fledged. This number is much higher than the 23 recorded roseate tern fledglings of 2008 and is the highest number documented for the past three years. The increased nest success may be due to higher prey concentrations, predator control efforts, and the lack of observed predation on roseate nests.

P. J. FUSCO (2)

The crowning glory of Falkner Island is the white octagonal lighthouse that has four-and-a-half foot thick base walls and a red Victorian dome that rises 94 feet above sea level. Built in 1802, it is the second oldest lighthouse in Connecticut and it is listed on the National Register of Historic Places.

(Left) Falkner Island has the largest breeding roseate tern colony in Connecticut. Roseate terns are listed as federal and state endangered species.

Due to the efforts of the biological team based at Falkner Island, 186 roseate and common terns were fitted with leg bands. Banding allows for a more efficient method of monitoring the movements and reproductive behaviors of the common and roseate tern populations on the island.

Thank you to Richard Potvin of the U.S. Fish and Wildlife Service for providing the tern nesting season results for 2009.

Mosquito Testing Revealed EEE in Connecticut in 2009

Written by Roger Wolfe, Mosquito Management Program

When this year began, we could have predicted that it would be an active mosquito season, but we had no idea what was in store. As you may recall, Connecticut had a very wet, mild spring. As a result, there was a bumper-crop of spring mosquitoes. "Spring, floodwater mosquitoes" hatch from eggs that were laid the previous fall. After overwintering, the eggs are then flooded as snow melts and water tables rise in spring. As the days grow longer and the water warms up, these eggs hatch into larvae and eventually emerge as adult mosquitoes, usually just in time for Memorial Day weekend.

To add to the already high population of spring mosquitoes, red maple/white cedar swamps stayed wet throughout the summer. This habitat is home to a mosquito known as *Culiseta melanura*. *Culiseta spp.* primarily feed on birds. However, recently, through blood meal analysis at the Connecticut Agricultural Experiment Station (CAES), this mosquito has been found to also feed on mammals, including humans. In addition, *C. melanura* is known to be the driving force for amplifying eastern equine encephalitis (EEE) in the wild bird population. This year, *Culiseta* populations were high and stayed high well into fall.

As part of Connecticut's Mosquito Management Program, the CAES began trapping and testing mosquitoes in early June for EEE, West Nile virus (WNV), and other mosquito-borne diseases. Mosquito traps were set at 91 sites throughout the state and attended by staff every 10 days on a regular rotation. Two trap types are used at all trapping stations: 1) a CO^2-baited CDC Light Trap, designed to trap host-seeking adult female mosquitoes (all species); and 2) a Gravid Mosquito Trap, designed to trap previously blood-fed adult female mosquitoes (principally *Culex* spp.).

By mid-October, the CAES had trapped, counted, and processed over 289,243 mosquitoes – kudos to the folks behind the microscopes! From this collection, 33 WNV-positive pools of mosquitoes were isolated. There also were 118 EEE isolations which encompassed the eastern half of the state and, by late summer, parts of Fairfield County as well (check the Mosquito Management Program website at www.ct.gov/mosquito for final numbers). This was a remarkably high amount of EEE activity and, with several weeks of warm weather still anticipated, there was need to be concerned for the public's health.

In mid-September, Governor M. Jodi Rell convened a meeting in Hartford with members of the Mosquito Management working group, the Commissioners of Environmental Protection, Public Health, and Agriculture, the Director of the CAES, and the state Director of Homeland Security. This group had a conference call with 55 local health officials to update them on the situation, relay the risk involved, and inform them of plans to get through the season, hopefully without any human infection of EEE. Connecticut did not have a confirmed human case of EEE, although horse and non-native bird deaths were reported.

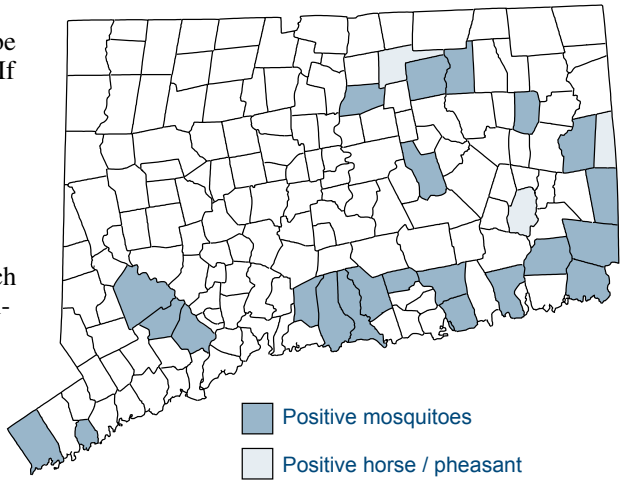
The CAES increased its trapping efforts, press releases were announced through various media, and parks and public areas were posted to warn visitors to avoid exposure to mosquitoes and use repellents, especially at dusk when mosquitoes would be most active. Some towns opted to spray (adulticide) for mosquitoes on their public lands, but the DEP did not. Because the virus was so widespread, it was logistically unfeasible at the state level to spray, short of an aerial application which was not recommended at the time.

West Nile virus and EEE are bird viruses that are naturally present and amplified in the wild bird population. Wild birds have a natural immunity to these viruses and normally aren't affected. On the other hand, non-native or exotic birds (e.g., emus, ostriches, pheasants) do not have these built-in immunities and can be very susceptible to these diseases. If these penned birds become sick or die (especially in large numbers), they can act as effective sentinels to alert health officials that a virus is present in the area. This was the case in September when a number of dead pheasants from the Norwich area were analyzed at the Connecticut Veterinary Medical Diagnostic Laboratory at the University of Connecticut and confirmed to have EEE. Soon after, the virus was isolated from a flock of pheasants in Ellington. With the help of Wildlife Division staff, additional announcements were sent out to pheasant breeders, game clubs that stock birds, hunters, and other outdoorsmen to be on the lookout for sick birds and to take precautions against mosquito bites when in the field.

In early October, diagnostic results confirmed EEE in a horse that died in Plainfield a few weeks earlier. Although unfortunate, it was not surprising considering the amount of virus activity that was present in the area for several weeks prior. Furthermore, this high level of EEE activity was not just confined to Connecticut. There were confirmed horse cases in New Jersey, Rhode Island, Maine, and Massachusetts. A three-year-old girl from New Hampshire became ill from EEE and a 70-year-old man from upstate New York died in September from EEE after being bitten by an infected mosquito. Although the risk of contracting EEE from an infected mosquito is very low, the mortality rate is over 50% in humans and over 90% in horses. In short, when EEE is prevalent, it should not to be taken lightly. You should heed all precautions being given by health officials.

The mosquito season cannot be predicted from year to year. However, to help prevent human health outbreaks when these arboviruses emerge, we can learn from the past, look for long-term trends, be better prepared, and use new technology for surveillance and control as it becomes available.

2009 Eastern Equine Encephalitis Activity



2009 Midwinter Bald Eagle Survey Yielded 80 Eagles

The weather was clear and cold but not cold enough to stop 227 volunteers from observing 98 survey areas during the 2009 Midwinter Bald Eagle Survey, which took place on January 9-10. Survey numbers collected from the volunteers revealed that 80 bald eagles were counted – 48 adult and 32 immatures. Eagles were observed at 20 of the survey locations.

Thanks are extended to all of the volunteers for their time and efforts to survey the eagles.

P. J. FUSCO

Volunteers are needed for the 2010 Midwinter Bald Eagle Survey, which will be conducted in early January. A total of 80 eagles were counted during the 2009 survey.

Volunteers Needed for the 2010 Midwinter Bald Eagle Survey

The Wildlife Division is looking for volunteers to assist with the 2010 Midwinter Bald Eagle Survey in Connecticut. The 2010 survey period target date is Saturday January 9, from 7:00 -11:00 AM.

Bald eagles migrate south from the northern states during winter to areas of open water where they are able to catch fish, their main food item. Cold weather conditions, which keep most waterways to the north covered with ice, mean that higher numbers of eagles will be counted in Connecticut.

Each year since 1979, volunteers from private conservation organizations, the DEP, and the general public have helped conduct the Midwinter Bald Eagle Survey by recording all eagles seen at areas traditionally used by the birds and at areas of suitable wintering habitat.

The Midwinter Bald Eagle Survey is not a complete census of the entire wintering population in Connecticut, but an index of the species' use of the state, which can be compared from year to year. The survey is conducted nationwide during a target time period. The purpose of this survey is to monitor the status of bald eagle wintering populations in the contiguous United States by estimating national and regional count trends, overall and by age class.

If you would like to participate in the 2010 survey, please contact Wildlife Division biologist Julie Victoria by email only (julie.victoria@ct.gov) and provide your name and mailing address.

2009 Midwinter Bald Eagle Survey January 9-10, 2009

Location	Adults	Immatures
Connecticut River*	16	10
Housatonic River	6	9
Lake Gaillard	1	0
Lake Saltonstall	1	1
Candlewood Lake	7	5
Farmington River	0	1
Quinnipiac River	2	0
Pomperaug River	1	0
Barkhamsted Reservoir	1	0
Groton Reservoir	2	0
Congamond Lakes	2	0
Knowlton Pond	0	1
Quinebaug River	1	0
Alexander's Lake	1	2
Morris Reservoir	1	0
Thames River	2	2
Aspetuck Reservoir	1	0
Naugatuck River	0	1
Burlington Hatchery	2	0
Easton Reservoir	1	0
Total	**48**	**32**

Statewide Total = 80 Bald Eagles

**Old Saybrook to Massachusetts line*

Midwinter Bald Eagle Survey Results 1979-2009

	Immature	Adult	Unknown	Total
1979	--	--	--	20
1980	--	--	--	11
1981	--	--	--	26
1982	18	13	0	31
1983	18	17	0	35
1984	17	22	0	39
1985	14	24	0	38
1986	22	18	0	40
1987	15	18	0	33
1988	23	28	1	52
1989	30	58	0	88
1990	53	23	0	76
1991	31	27	0	58
1992	34	27	1	62
1993	31	29	1	61
1994	46	29	0	75
1995	40	26	0	66
1996	83	45	0	128
1997	64	50	0	114
1998	20	29	0	49
1999	27	33	0	60
2000	37	35	0	72
2001	43	34	0	77
2002	20	33	1	54
2003	45	31	1	77
2004	41	50	1	92
2005	25	20	1	46
2006	19	44	3	66
2007	20	42	0	62
2008	32	49	0	81
2009	32	48	0	80

Tree-of-Heaven's Name May Be Endearing, But the Tree Is Not

Written by Peter Picone, Habitat Management Program

Tree-of-heaven (*Ailanthus altissima*) is a non-native invasive tree that was imported to North America in the late 1700s from Asia. It was imported with good intentions because of its use as an ornamental and in the silkworm industry. However, what was not known about the species was its propensity to reproduce and displace native plants as it escaped into the forests and fields of New England and other areas.

Tree-of-heaven is able to grow well in most temperate climates throughout the world. Because of its ability to grow quickly to a height of 70 feet or more and clone itself and disperse its prolific seeds, tree-of-heaven has become a vigorous, non-native invasive that competes for sunlight, space, and nutrients to the detriment of Connecticut's native plants. To make matters worse, the tree produces allelopathic chemicals which are concentrated in the roots and young sprouts. These chemicals inhibit the survival of native plants in areas where tree-of-heaven is established. Tree-of-heaven is flourishing in North America, especially because there are no natural enemies (insects, pathogens, disease) in this region to keep it in check.

P. PICONE (2), HABITAT MANAGEMENT

Tree-of-heaven overtops staghorn sumac at Simsbury Wildlife Management Area in Simsbury.

Identifying Tree-of-heaven

This deciduous tree has smooth stems with pale gray bark and twigs that are light chestnut brown, especially in the dormant season. It has large compound leaves that are alternate and have smaller leaflets. Tree-of-heaven is dioecious, meaning that male and female flowers occur on separate plants. Female trees can be identified by the winged fruits containing a single seed that are seen hanging from the branches in fall.

Elimination at State WMAs

Tree-of-heaven has been found growing, in increasing frequency, at state wildlife management areas (WMA). Two habitat management projects aimed at eliminating tree-of-heaven have been implemented at Housatonic River WMA in Kent and Simsbury WMA in Simsbury.

At Housatonic River WMA, a female patch of tree-of-heaven was invading a field and forest edge. The seeds were not only dispersing into the field, but also falling into the Housatonic River and being transported downstream. The river's sandy shoreline is a prime area for tree-of-heaven seeds to sprout and take hold. To eliminate this invasive tree, small saplings were pulled up by hand while the larger stems (8 inches in diameter and smaller) were chopped up using a brontosaurus drum-chop mower. Trees that were too large for the brontosaurus mower were girdled using a chain saw and then the herbicide Glyphosate was applied to the grooves. Follow-up herbicide treatments to stump sprouts and runners were done for two growing seasons.

Tree-of-heaven has been girdled by a chain saw and hatchet and treated with a herbicide at the Housatonic River WMA in Kent.

Several satellite populations of tree-of-heaven also were killed using girdling and herbicides on the 500-acre Housatonic WMA. Currently, at the area, no seeds are being produced and more than 98 % of the trees have been removed.

At Simsbury WMA, a one-acre patch of large trees adjacent to the Farmington River was managed using the same techniques. A smaller patch that was found shading out staghorn sumac along a field edge was managed using girdling and herbicide.

Invasive non-native plants and animals are second only to habitat loss as the largest threat to biodiversity. A list of invasive non-native plants found in Connecticut is available on the University of Connecticut Plant Science Department's website (www.hort.uconn.edu/CIPWG/invplantsCT09commonname.pdf). This list was compiled by the Connecticut Invasive Plant Working Group.

FROM THE FIELD

Subscription Price to Increase in 2010 – Magazine to Go Full Color

As you are probably aware, budget constraints have been affecting state government, and the Wildlife Division has not been immune. In addition, printing and mailing costs have been steadily rising over the years for *Connecticut Wildlife*, yet we haven't raised the subscription price since 1995. Starting in 2010, the price will go up minimally to $8 for one year, $15 for two years, and $20 for three years. However, even though the cost is increasing for subscribers, you will actually be getting more. *Connecticut Wildlife* magazine will now be printed in full color, with more photographs and improved layouts. We believe that the magazine is still a great bargain and it will continue to provide wildlife information that is pertinent to our state.

There is an opportunity for current subscribers to extend their subscriptions at the lower rate before the prices increase in 2010. Just fill out the coupon on the next page and send in your payment to have your subscription extended for up to three years. Renewal notices sent out in 2010 will reflect the new price.

Please feel free to contact us if you have any questions about your subscription. You can call the Sessions Woods office (860-675-8130; Monday-Friday, 8:30-4:30) or email katherine.herz@ct.gov.

Nature Drawing Classes for Students & the Public

School groups and the general public have the opportunity to attend "Nature Drawing" classes at the Wildlife Division's Sessions Woods Conservation Center in Burlington. Artist Judy Bird will teach Nature Drawing to small groups (25-50 students), coupled with a wildlife-related presentation by the Division's Outreach Unit staff. There is no charge for this program as long as funding is available. If you are a teacher and would like to enhance your science and/or art curriculum with a guided program at Sessions Woods, please contact Natural Resource Educator Laura Rogers-Castro (laura.rogers-castro@ct.gov or 860-675-8130).

A "**Nature Walk and Drawing Workshop**" will be held for the general public at Sessions Woods on Saturday, February 6, 2010, from 1:00 to 3:00 p.m. (Snow date is February 7). Pre-registration is required for this free program. (Call 860-675-8130, Monday through Friday, from 8:30 AM-4:30 PM.) Sessions Woods is located at 341 Milford Street (Route 69) in Burlington.

"Bears" Coming to a Library Near You

What is it about bears that attract a crowd? Ask Master Wildlife Conservationist Felicia Ortner if she has the answer. Felicia has spent the past year traveling throughout the state presenting programs on black bears and transporting a tabletop display board about bear management from one Connecticut library to another. Over 30 libraries have hosted bear programs and the display board since the beginning of 2009.

The tabletop display board was purchased by the Friends of Sessions Woods. Wildlife Division Outreach Program staff designed the display. It features photos and results of bear research conducted by the Furbearer Program over the past several years. Libraries in Connecticut are able to show the display for two weeks. Demand from the various libraries throughout the state has been keeping Felicia busy. Interest in bears never seems to wane. The Division receives numerous requests for black bear presentations throughout the year. Having a skilled presenter and bear enthusiast in Felicia has proven to be very helpful in getting the Division's science-based information out to the public. The Division would like to extend its appreciation to Felicia for all her efforts with this initiative.

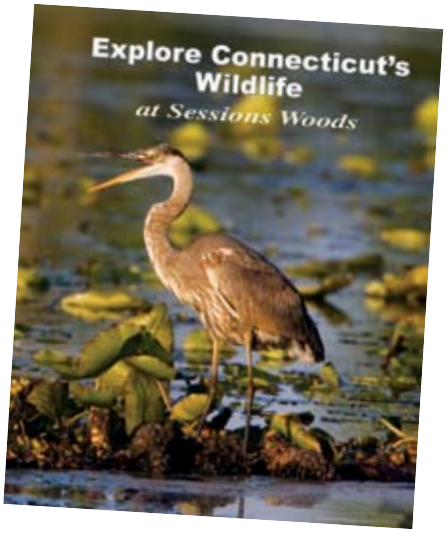
Laura Rogers-Castro, Outreach Program

Become a Master Wildlife Conservationist

The next Master Wildlife Conservationist Program (MWCP) training program for adults is slated to begin in late March 2010 and will continue into early May. This free program consists of 40 hours of classroom study on topics such as the history of wildlife conservation; ecological principles; population ecology; interpretation; wildlife management; nuisance wildlife; and wetland restoration. Most of the classes are held on weekdays at the Wildlife Division's Sessions Woods Conservation Education Center in Burlington.

Once candidates complete the classes and pass the final exam, the Division asks that they perform 40 hours of volunteer service during the next year and 20 hours each subsequent year.

If you think you have the time and commitment to assist the Division as a Master Wildlife Conservationist, contact Laura Rogers-Castro (860-675-8130; laura.rogers-castro@ct.gov) to obtain an application packet. Candidates will be selected by mid-January.



Two Special Gifts from Newman's Own

The Friends of Sessions Woods has been fortunate to receive two grants over the past two years from the Newman's Own Foundation. Each grant supports the efforts of the Wildlife Division's Outreach Program by providing funding for educational programs and publications. Newman's Own, Inc., was founded by the late actor and philanthropist Paul Newman. The company produces items such as salad dressings, popcorn, salsa, and pasta sauces. Newman's Own Foundation donates all net royalties and profits from the sale of these products, after taxes, for educational and charitable purposes. Paul Newman and the Foundation have given over $280 million to thousands of charities worldwide since 1982. The Friends of Sessions Woods was invited to submit a grant proposal from a past Friends board member. Newman's Own Foundation only accepts grant proposals from invited applicants.

The first grant, received in 2008, was a $5,000 gift to provide funding for printing a wildlife activity booklet for children called *Exploring Connecticut's Wildlife at Sessions Woods* (see the May/June 2009 issue of *Connecticut Wildlife*). To date, over 2,100 booklets have been provided to various schools, libraries, Scout groups, and Nature Centers throughout the state. The 2008 gift also included a "transportation fund" to be used by inner city schools to pay for bus transportation to Sessions Woods for a guided program. Three schools from the Hartford area have used the transportation funding for field trips to Sessions Woods.

The second grant, received earlier in 2009, is a $7,500 gift to reprint the wildlife activity booklet; enhance the "transportation fund;" and provide funding for a series of "Nature Drawing" classes with Artist Judy Bird at Sessions Woods. The Friends of Sessions Woods and the Division are very grateful to the Newman's Own Foundation for providing these wonderful opportunities that enhance the educational offerings at Sessions Woods.

Laura Rogers-Castro, Outreach Program

Wildlife Calendar Reminders

Programs at the Sessions Woods Conservation Education Center

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.

Dec. 30 ..... **Children's Program: Wildlife Tracks & Signs**, starting at 10:00 AM. Learn about wildlife tracks indoors with Natural Resource Educator Laura Rogers-Castro and then head outside for a short walk to look for animal signs. Children also will make a wildlife track to take home. An adult must accompany all children. Meet in the small classroom in the exhibit area at Sessions Woods.

Jan. 20 ..... **Bear Aware**, starting at 6:30 PM. Connecticut is home to several hundred black bears. What do we know about the state's black bear population? Where are most bears seen in Connecticut? What do you do if you see a bear? Join Wildlife Division biologist Paul Rego as he discusses the history of bears in our state, research activities, and current management practices.

Feb. 6 ..... **Nature Walk and Drawing Workshop**, 1:00 PM-3:00 PM. Natural Resources Educator Laura Rogers-Castro will lead an interpretive walk focusing on Connecticut's wildlife and the conservation of wildlife habitat. Artist Judy Bird will teach a nature drawing class focusing on personal observation and expression of nature. Rain date is February 7.

March 3 ..... **Wildlife Tales**, starting at 6:30 PM. When the European settlers arrived in Connecticut, which mammals did they encounter? How have habitats changed since the first settlers arrived in the 1600s to the present? Are coyotes native to Connecticut? What is the wild turkey and fisher connection? Join Natural Resource Educator Laura Rogers-Castro for this indoor presentation to learn about some of the wildlife species found in Connecticut.

Hunting Season Dates

Sept. 15-Dec. 31 ..... State Land Bowhunting Only Areas

Dec. 9-22 ..... Deer muzzleloader season on state land.

Dec. 9-31 ..... Deer muzzleloader season on private land.

Jan. 15-Feb. 10 ..... Special late Canada goose season in the south zone only.

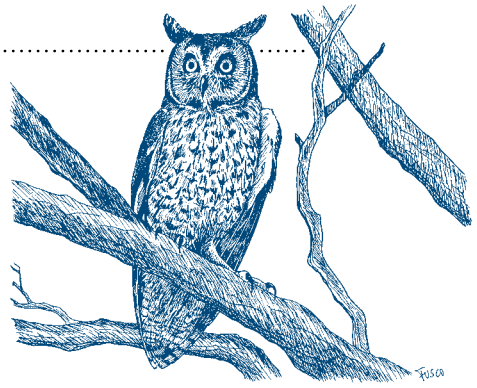
..... Consult the 2009 Connecticut Hunting and Trapping Guide for specific season dates and details. The 2009-2010 Migratory Bird Hunting Guide contains information on duck, goose, woodcock, rail, and snipe seasons. Both guides are available at Wildlife Division offices, town halls, and on the DEP website (www.ct.gov/dep/hunting). The 2010 Connecticut Hunting and Trapping Guide will be available by mid-December.

Shepaug Bald Eagle Observation Area

The Shepaug Bald Eagle Observation Area, in Southbury, will be open to the public on Wednesdays, Saturdays, and Sundays, from December 26, 2009, through March 17, 2010, from 9:00 AM to 1:00 PM — strictly by advance reservation. All individuals and groups wishing to visit the site to view eagles must make a reservation for a particular date, as there will be a limited number of visitors allowed per open day.

Beginning on December 8, 2009, reservations can be made on Tuesdays through Fridays, from 9:00 AM to 3:00 PM, by calling 1-800-368-8954.

Due to the new system that requires hunters to report their deer harvest via the DEP website or by telephone, a running tally of the 2009 archery deer harvest can be viewed at www.ct.gov/dep/hunting.



Coupon and prices expire on 12/31/2009

Connecticut Wildlife

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