

Connecticut Mildlife Ville V

PUBLISHED BY THE CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF NATURAL RESOURCES ● WILDLIFE DIVISION



From the Director

THAT STREET

This issue of Connecticut Wildlife provides an overview of activities the Wildlife Division was involved in during 2008. I would like to thank the Wildlife Division staff for the enthusiasm and professionalism that they

bring to their work each day. It is contagious! I also want to recognize the efforts of DEP staff from other Divisions, hundreds of volunteers, and many conservation and sportsmen's organizations that have benefitted Connecticut's wildlife in 2008. We have been busy and productive and buoyed by your support.

Unfortunately, our conservation successes of the past year have been overshadowed by a fiscal crisis that will increasingly affect each of us during 2009. As the economy heads in the wrong direction, we will have fewer resources to do our job in the coming year. The work of protecting our natural resources will be more challenging and we will have to be innovative to accomplish the most important tasks. However, we should be heartened by the fact that some of the greatest conservation successes were achieved during the Great Depression, such as the passage of the Pittman-Robertson Act, the establishment of the federal duck stamp, and the acquisition of thousands of acres by the State of Connecticut for parks, forests, and wildlife.

Throughout the real estate boom years of the 1980s and 1990s, many people worried that unplanned development was harming our agricultural and natural resources. Some communities imposed short-term moratoriums on development, simply to allow time to assess the impacts. Now, this economy is essentially allowing us to do the same thing. We need to take advantage of this lull to take stock of what we have and what we need to do to maintain our natural resources for future generations.

In his essay "The Land Ethic," Aldo Leopold espoused a state of harmony between men and land in which the ecological values of land were considered as well as the economic ones. As society recognizes that our economy is directly related to the health of our finite natural resources, the need for this balance becomes obvious. Our quality of life should not conflict with the conservation of our natural resources; rather it is dependent upon them. Hopefully this perspective is reflected when our economy recovers. The terms (sustainability, responsible growth, carbon footprint, ecological conscience) already exist and our long-term welfare is contingent upon putting these concepts into practice.

Dale W. May

Cover:

The health of Connecticut's white-tailed deer herd is assessed by the collection of biological data from hunter harvested deer at check stations across the state.

Photo courtesy of Paul J. Fusco

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The Year in Review 2008

CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION - BUREAU OF NATURAL RESOURCES - WILDLIFE DIVISION

This "Year in Review 2008" provides a summary of the many accomplishments and responsibilities of the DEP Wildlife Division.

Species Research and Management

Nongame Birds

With the help of fencing and other protection efforts, 41 pairs of groundnesting piping plovers (state and federally threatened) fledged 102 young and 252 pairs of least terns (state threatened) fledged 76 young. Trained volunteers monitored several beaches and distributed educational materials to beachgoers. Fireworks permit applications (21) were reviewed for impacts to piping plovers.

Of the 10 documented pairs of peregrine falcons (state endangered), 9 nested. Two of the pairs failed and the chick count could not be determined for 2 others due to inaccessibility. Of the 5 accessible pairs, 18 chicks fledged and 9 were banded.

Seventeen breeding pairs of bald eagles (state endangered) attempted to nest in the state in 2008. Thirteen of the pairs successfully fledged 21 chicks, of which 13 were banded by biologists.

During the 2008 Midwinter Bald Eagle survey, 345 volunteers counted 81 bald eagles—49 adults, and 32 immatures.

Winter night bird surveys were conducted on 28 routes using a species specific callback. Surveyors detected 4 northern saw-whet owls, 6 eastern screech owls, 69 barred owls, 3 long-eared owls, and 17 great-horned owls. Summer night bird surveys, designed to detect whip-poor-wills and breeding saw-whet owls, were completed along 21 routes. Surveyors detected 18 whip-poor-wills and 7 saw-whet owls. Survey efforts are also combined with other states to monitor night birds regionally.

A pilot investigation was conducted in the summer to determine whip-poor-will habitat preference and prey availability. Whip-poor-wills were captured and radio tagged, and calling surveys and invertebrate sampling were conducted. Locations of calling birds will be overlaid onto



Beachgoers continue to inadvertently impact beach nesting birds, especially terns. Here, a family enjoys a morning picnic while fishing. However, they are too close to a least tern nesting colony. The string fencing in the photo delineates the nesting area. Birds that nest close to the fence line are kept away from tending their nests by people that linger too close, and, as seen in the photo, by fishing gear extending into the colony. Food on the beach close to active nesting colonies will attract nest predators like gulls and raccoons.

forest stand maps to determine habitat preferences.

2008 was the fifth and final season of the Woodland Raptor Surveys. Callback recordings were used to detect sharp-shinned hawks, Cooper's hawks, northern goshawks, broad-winged hawks, red-shouldered hawks, and red-tailed hawks. Volunteer citizen scientists monitored raptor, raven, and owl nests for activity and nesting success. Sixty-six raptor nests, 10 raven nests, and 8 owl nests were reported.

Monitoring of shrubland habitat nesting species continued. Between May 15 and July 15, avian point count surveys were conducted by Division staff and volunteers at 24 sites in early successional habitats, such as old fields, shrublands, woodland edges, and powerline right-of-ways.

A pilot monitoring program, Chim-



Least tern at its nest on a Connecticut beach.

ney Watch, was implemented. The goal of this regional program is to assess chimney swift limiting factors, including nesting structure availability. Nesting chimney availability was assessed for 13 randomly selected survey blocks around Connecticut. Nine blocks were surveyed for chimney occupancy by swifts. No

White Nose Syndrome Found in Connecticut Bat Hibernacula



During 2008, one of the most significant wildlife conservation crises in decades slowly emerged from the cold Northeast winter. White-nose Syndrome (WNS), a mysterious condition named for the visible white fungus appearing on noses, ears, and wings of hibernating bats was a noticeable indicator of something causing the deaths of tens of thousands of bats in our region. In New York, Vermont, and Massachusetts, bats were coming out of hibernation in the cold of winter, starving and extremely dehydrated. These bats made futile daytime attempts to find insects and tried to eat snow to get moisture. Few survived. Affected bats were found at two sites in Litchfield County, but Connecticut bats escaped the early emergence and high mortality rates (80-100%) seen in neighboring states. Findings were consistent with what was observed in New York in 2007 and may mark the first year of WNS in Connecticut. Work continues across the country to find the cause, however it still remains a mystery. As 2008 drew to a close, reports of bats once again awakening early and futilely hunting the winter skies were being received in Connecticut and New York. Hopefully, recent lab findings and additional winter studies will lead to a solution in 2009.

chimneys were occupied and swifts were observed in only 4 survey blocks. Chimney swift migration roosts also continue to be located and mapped.

The search continued for breeding barn owls (state endangered). Two pairs were documented in 2008, and only one pair produced chicks.

In 2007, the Wildlife Division began erecting kestrel nest boxes in appropriate habitat to provide more nest sites for this falcon that usually uses natural tree cavities. More boxes are slated for installation in 2009. In 2008, a kestrel pair successfully used and fledged chicks from a nest box installed by the Division.

Annual grassland bird surveys on state-owned properties continued in 2008 when 20 sites throughout the state were surveyed 3 times between April 15 and July 15.

Grassland Habitat Conservation Initiative

The third year of field surveys for Connecticut's Grassland Habitat Conservation Initiative began in May and continued through mid-August. The project, which initially focused on Hartford, Tolland, Windham, and New London Counties, was expanded into Fairfield, Litchfield, Middlesex, and New Haven Counties. As in previous years, land

cover data and soil maps were used to identify all grasslands with sandy soil types above 50 acres. Visits were conducted for the largest sites in each county. Field observers collected data, including current habitat conditions, bird species detected, current management practices, and potential for future surveys. Information collected from the 802 sites to date has allowed the ranking of the areas in order of priority for conserving grassland habitats across Connecticut.

White-tailed Deer and Moose

Health of Connecticut's deer herd and changes in hunting pressure are assessed by collecting biological data from hunter harvested deer at check stations. Division staff collected biological data from about 2,000 deer during the 2008 shotgun/rifle deer hunting season.

A deer management plan implemented for the Bluff Point Coastal Reserve (Groton) has reduced and maintained the deer herd to about 20 per square mile. In January 2008, 12 deer were removed from the reserve by the DEP to maintain the population. All deer removed were donated to Hunters for the Hungry and distributed to area food shelters.

The Division received a grant from the U.S. Department of Agriculture to conduct surveillance for chronic wasting disease (CWD) in Connecticut's deer population. Tissue samples were collected from about 600 vehicle-killed and hunter-harvested deer and all tested negative for CWD. Surveillance efforts will continue in 2009.

The Division received a grant from Connecticut's Endangered Species/Wild-



Deer Program biologist Andy Labonte successfully tranquilizes a distressed deer in a Trumbull neighborhood so that he can remove a plastic spool from the deer's hoof.

life Income Tax Check-off Fund and the Northeast Wildlife Damage Management Cooperative to examine the state's moose population. The cooperative 2-year study being conducted with the University of Connecticut was intended to focus on home range size, habitat use, movements, causes of mortality, and public perceptions about moose. Efforts to capture moose have been limited, but a more intensive effort will be conducted in January 2009. Opinion surveys about moose and moose management were mailed to more than 2,000 residents across northern Connecticut, with a 31% response rate. A detailed analysis will be completed soon. Hunter opinion surveys about moose and moose management were sent to 30 town clerks for distribution in January, April, and October, and will be mailed to nearly 800 Connecticut hunters in January 2009. The data from this study will assist the DEP in developing a comprehensive moose management plan. In 2008, there were 36 reported moose sightings and 1 documented moose vehicle accident in Connecticut.

Indiana Bat Project

An Indiana bat research project was conducted with funding from Connecticut's Endangered Species/Wildlife Income Tax Check-off Fund. The Indiana bat is a state and federally endangered species that has only been confirmed in Connecticut at one location since the 1950s. The project sought to document new records of Indiana bats at 2 locations in western Connecticut. Seventy-one bats of various species were captured in 3 nights of harp trapping in April. Another 166 bats comprising 4 different species were captured over 20 nights of mist-netting from late May to mid-August. No Indiana bats were captured.

Wild Turkey

During the 2008 spring hunting season, 6,617 permits were issued and 1,558 turkeys were harvested. The spring harvest was comprised of 65.3% adults, 34.2% juveniles, and 0.5% bearded hens.

Brood surveys provide an index of annual productivity for the state's turkey population. Survey cooperators reported 224 turkey observations, including 448 hens—118 with broods, and 330 without broods. The 2008 brood index of 2.2 was lower than the 2007 index of 2.6. Brood survey information indicates that turkeys had lower productivity in 2008 than 2007.



Connecticut holds three different turkey hunting seasons: the spring season in May, and the fall archery and fall firearms seasons.

Ring-necked Pheasants

During the 2008 fall hunting season, 14,742 adult ring-necked pheasants were purchased for release on 44 state-owned, state-leased, and permit-required hunting areas. The Division continues to use volunteers to assist with stocking on several public hunting areas.

Waterfowl

During the annual check of wood duck nest boxes on state land, data forms were completed at each site and 130 boxes were checked, cleaned, and replenished with new nesting material. Overall, 80% (104) of the boxes were classified as being in good condition and 72 of the boxes had been used by wood ducks.

During annual pre-season duck banding operations, 923 ducks were captured and banded, which included 857 mallards, 27 black ducks, 37 wood ducks, 1 blue-wing teal, and 1 pintail. All captured ducks were aged, sexed, and banded with a metal leg band before release. Banding data provide information on migration patterns, survival rates, and distribution of harvest and also help to assess the vulnerability of different age and sex classes to harvest.

Canada geese were banded during the molting period at 43 sites located throughout the state. A total of 1,037 adults and 756 local (hatch year) birds were captured. Another 512 previously banded geese were also captured.

Annual surveys were conducted for breeding waterfowl, breeding swans, breeding marshbirds, woodcock, and midwinter waterfowl.

Due to the Wildlife Division's concern about the inland expansion of mute swans, a statewide breeding survey was initiated in 2004. This survey covers the entire coastline, selected portions of

Local Artist Illustrates 2008 CT Duck Stamp

The Wildlife Division was honored that the 2008 Connecticut Duck Stamp, which featured a pair of common goldeneyes, was illustrated by Burt Schuman, a wildlife artist from Rocky Hill. Burt is a graduate of the Parsons School of Design, in New York, and a member of the Society of Animal Artists. His artwork has been shown in numerous art shows, including the New England Wildlife Art Expo where his work was awarded best in class and show and second best of show.





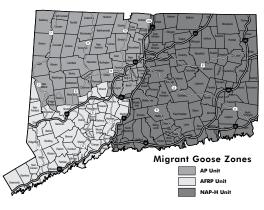
American woodcock were captured and fitted with small radio transmitters. Radio-tagged birds were monitored and the resulting data were used to develop home range estimates, habitat use models, and survival rate estimates for Connecticut 's woodcock population

the three largest river systems, and 43 randomly selected inland plots. This swan specific survey provides more precise estimates of breeding mute swan numbers than the breeding waterfowl survey. The 2008 estimate of 1,120 total swans was similar to the estimated 1,128 in 2007. Despite some flooding along the coast and major rivers at the time of the survey, 28% of all coastal pairs were on nests. The higher stability of inland water levels was evident due to the greater proportion of pairs on nests (77 %) in freshwater nesting locations.

During the Atlantic Flyway mid-summer mute swan survey, 1,012 swans were counted, which is similar to the 2005 estimate of 1,043 swans. Seventy-one broods were observed with 225 cygnets.

2008 marked the second year of a research project to investigate time and energy budgets and available food resources for wintering Atlantic brant. This project will provide important information to guide management of wintering

Migrant Goose Zone Map



habitats for Atlantic brant. Data are currently being analyzed.

As part of a wintering black duck study, 34 radio transmitters were placed on hen black ducks. Time budget surveys of black ducks also were conducted at least 4 times a week at each of the study sites, and monthly food availability sampling was conducted at the study sites and at 3 coastal wildlife management areas.

Canada goose harvest zones are continually refined as new data are received and analyzed.

In 2008, Connecticut established a new Atlantic Flyway Resident Population (AFRP) hunt zone with an 80-day season and a 5-bird per day bag limit. This should help reduce the goose population in the southwest portion of the state where the majority of nuisance problems exist.

In 2006, the U.S. Fish and Wildlife Service transferred much of the responsibility of administering resident Canada goose control from the federal government to individual states. Connecticut developed an agricultural depredation program that allows for the take of geese between May 1-August 31 with the use of

legal firearms (i.e., shotgun with non-toxic shot). Decoys or calls cannot be used. Permit holders are required to submit a report of their activities to the Wildlife Division by September 30. Nine of the 13 farmers who received permits in 2007 had their permits renewed in 2008. Seven other farmers requested information about the program in 2008 and 4 completed applications. Permits were issued to farmers in 12 towns in 6 counties.

Technical advice was provided to town health departments, school and recreational facilities, and numerous landowners to assist in solving nuisance waterfowl problems.

American Woodcock

2008 was the third year in which 10 survey routes were used statewide as an index to woodcock population and habitat status. The average number of woodcock heard per stop in 2008 was 0.20, and not significantly different from the previous 2 years. Since 2003, when surveys were first initiated on these routes, there has been no significant change in the total number of birds heard, and the number heard on each individual route has been fairly consistent. However, there has been a gradual decline in birds heard along certain routes where development has increased and land uses differ.

Avian Influenza

The targeted surveillance of mi-



Volunteers and Wildlife Division staff banded almost 1,800 Canada geese during the molting period at 43 sites located throughout the state. Long-time volunteer Mike O'Leary (left) places a band on a goose, while Wildlife Division biologist Min Huang reads a leg band number. Master Wildlife Conservationist Dave Zabel records data while Wildlife Division technician Kelly Kubik (right) determines the sex of a goose.

gratory birds for Asian H5N1 (avian influenza) continued in 2008. Species targeted for testing included resident Canada geese, mallards, American black ducks, greater scaup, long-tailed ducks. Atlantic brant, semi-palmated and least sandpipers, dunlins, sanderlings, and black-bellied plovers. Samples are being obtained across the state and throughout the migration and wintering periods. In 2008, Connecticut was tasked with collecting at least 800 samples from live and hunter-killed birds. To date, over 780 samples have been collected. More emphasis has been placed on obtaining samples from mortality events, as these may provide the best probability of detecting Asian H5N1. A list of high priority sites to monitor for mortality events was compiled based on the distribution of backyard poultry flocks, commercial poultry operations, and migratory bird concentration areas. Weekly surveys were conducted at these sites.

Weasel Study

The statewide survey for shorttailed and long-tailed weasels continued through the fall of 2008. The goal of the project is to record the distribution and abundance of both species within the state. Unlike last year, when only one trap type was used, three types of live traps were used in 2008, including wooden box traps, tube-shaped traps made from PVC pipes, and small Havahart® traps. Ten weasels (5 males, 5 females) were captured at 8 of 13 study sites. The traps were placed adjacent to stone walls that were located near open fields, water sources, and, occasionally, conifer stands.

The Wildlife Division appreciates the efforts of those residents who collected 17 road-killed weasels. A tissue sample was collected from each weasel for genetic testing to help determine where each species is found in the state.

Small Game

During 2008, 109 cottontail rabbits were examined to determine distribution of New England (NEC) and eastern cottontail (EC) rabbits throughout the state. The Division obtained samples from roadkills (17), livetrapping (85), hunter harvest (6), and other means (1). Of the 109 examined, 86 were EC, 20 were NEC, and 3 were unknown. Since this research was initiated in 2000. 1,324 samples have been collected. Among all methods of collection,



Mosquito Management

Connecticut's Mosquito Management Program is a collaborative effort involving the DEP Wetland **Habitat and Mosquito Management (WHAMM)** Program, CT Agricultural Experiment Station (CAES), Department of Public Health (DPH), Department of Agriculture, and the University of Connecticut **Department of Pathobiology and Veterinary** Science. The WHAMM Program provides technical assistance to municipalities and homeowners on mosquito biology and control options and performs operational mosquito control on state-owned properties. CAES maintains 91 mosquito trap locations throughout the state from June through October to monitor the mosquito population and track mosquito-borne pathogens like West Nile virus (WNV) and eastern equine encephalitis (EEE) that can cause disease in humans, birds, and animals. In the 2008 season, 211,496 mosquitoes comprised of 38 different species were trapped and tested. From those, 191 WNV isolations were detected in 9

different species. Most of these isolations were from traps in lower Fairfield and New Haven counties. No EEE isolations were identified in 2008.

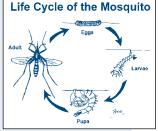
The DPH reported 8 human cases of WNV, none of which were fatal. It was determined that 1 infection was acquired out-of-state while the individual was traveling. The ages of those infected ranged from 12-87 years (median age: 49). According to the National Centers for Disease Control and Prevention, as of October 21, 2008, there were 1,141 human cases of WNV reported throughout the United

States, including 25 deaths. Since 1999, there have been 69 human cases of WNV in Connecticut, 3 of which were fatal.

In June, during National Mosquito Control Awareness Week, the Connecticut Mosquito Management Program announced a new website (www.ct.gov/mosquito), which provides current information on the state's program and informative links to



Top: Seasonal technician Malcolm Hill (left) and Mosquito Control Specialist Steve Rosa inspect marshes for mosquito larvae at Rocky Neck State Park in East Lyme. Above: Mosquito larvae collected in a sample.



Human Cases of WNV Infection in Connecticut, 1999-2008

other state and national sites on mosquito biology and control.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Total
Total Cases	0	1	6	17	17	1	6	9	4	8	69
Acquired in CT		1	6	17	15	0	5	8	4	7	63
Deaths		0	1	0	0	0	1	1	0	0	3
Age Range (median)		62	37-89 (68)	24-81 (45)	6-85 (55)	78 78	34-83 (62)	41-81 (63)	48-78 (67)	12-87 (49)	6-89 (56)



Amber Carr, a seasonal research assistant for the Wildlife Division, sets a live trap at Camp Columbia State Forest in Morris. The trap is intended to capture New England cottontails, which are then fitted with radio transmitters and released.

79% of samples were EC, 8% were NEC, and 13% were unconfirmed.

During the 2007-2008 small game

hunting season, an estimated 4,714 daily permits and 578 season permits were issued for hunting on permit-regulated

areas. Extrapolated survey data indicated that hunters took an estimated 3,976 trips on the various areas. Based on data obtained from the Permit-regulated Hunting Area Surveys, overall harvest indices for ruffed grouse, woodcock, cottontail rabbit, and gray squirrel show a declining trend.

Ruffed grouse population data were collected from observations and drumming surveys. A total of 46 sightings were reported from 18 towns, bringing the total to 202 sightings since 2005. Drumming surveys were conducted in April. Grouse were heard on 8 of 12 routes and 22 unique drumming males were recorded. The survey route that produced the highest number of birds was in Barkhamsted, with 5 unique drummers heard.

Invertebrates

A study examining the effects of lake drawdown on invertebrate communities entered its second year. This study is in conjunction with a larger project being conducted by the University of Connecticut and DEP Fisheries Division. A total

of 295 samples were processed, yielding 5,048 individual invertebrate specimens. The first 3 months of samples (April-June) contained noticeably less specimens than samples collected in 2007.

All known major sites where Puritan tiger beetles (state endangered, federally threatened) are found were visited so that a count of adult beetles could be conducted. In addition, suitable habitat was surveyed as part of a long-term effort to determine additional locations of viable Puritan tiger beetle populations. The decline of this beetle may be attributed to loss and degradation of its sandy beach habitat due to human activities. In years past, Puritan tiger beetle larvae have been translocated from a Connecticut site and transported to Massachusetts to augment that state's declining population. However, beetle larvae were not translocated to Massachusetts in 2007 and 2008.

The Wildlife Division continued its involvement with restoration of two northern metalmark butterfly sites in western Connecticut. Five work parties were organized by Dr. David Wagner, of the University of Connecticut and the Connecticut Butterfly Association, and The Nature Conservancy to clear out nonnative invasive plant species from both sites. Autumn olive and buckthorn had grown so prolifically throughout the sites that they shaded out the larval host plant for the metalmark butterfly, roundleaf ragwort. This state endangered butterfly is considered to be declining in many parts of its range. Preferred habitat is open meadows, barrens, and streamsides near shale or limestone outcrops where roundleaf ragwort grows. In July, both sites were surveyed for the presence of northern metalmark butterflies.

Several rivers were surveyed for the presence of freshwater mussels. Six of the 12 native freshwater mussels species found in Connecticut are listed as special concern, threatened, or endangered. Survey results are currently being tabulated.

Signs detailing state regulations concerning horseshoe crabs and closed areas were prepared and erected at 3 locations on the coast.

Reptiles

The nineteenth field season of a long-term bog turtle (state endangered, federally threatened) study to survey historic and new locations for the presence or absence of suitable habitat and/or turtles was completed. The decline of bog turtles may be attributed, in small part, to col-

Keep This from Happening Again



Fishing Line Receptacles

With funding provided by the Endangered Species/Wildlife Income Tax Check-off Fund, monofilament fishing line recycling receptacles are being constructed for placement at popular fishing areas along the shoreline. The receptacles are close to completion and will be installed over the winter.



Report Bobcat and Fisher Sightings

Reported sightings of bobcats continued an increasing trend. The 200 sighting reports received was the greatest 12-month total yet recorded. Bobcats continue to be observed most frequently in towns west of the Connecticut River.

Although fisher are well established throughout the state and a trapping season has been instituted, the Wildlife Division still seeks sighting reports from the public. Fisher sightings and harvests are most frequent in towns east of the Connecticut River.



lection pressure but mainly to the loss of habitat. No bog turtles were found at any new or historic sites.

The second year of a study on wood turtle populations in Fairfield County was completed. Wood turtles (state species of special concern) are declining throughout their range. Habitat loss and fragmentation are a concern in Fairfield County, which has the highest human population in the state. Visual surveys were conducted for wood turtles in and along rivers and streams. Biological data were collected from all individuals and carapaces were notched for identification purposes. Baseline data on wood turtle populations will continue to be collected through the 2009 field season.

Black Bears

Winter dens of 12 radio-collared female black bears were inspected in February and March to examine reproduction. Six of the sows had litters of

CT's Endangered Species List to Be Revised

The Connecticut Endangered Species Act, passed in 1989, recognizes the importance of the state's plant and animal populations and the need to protect them from threats that could lead to their extinction. The overall goal of the legislation is to conserve, protect, restore, and enhance any endangered or threatened species and their essential habitat. The DEP began revising Connecticut's Endangered, Threatened and Special Concern Species List for 2009. The DEP is

mandated to review this list every 5 vears. This process is an intensive one that brings committees of taxonomic experts together to discuss the contents and proposed changes to the list.



The blue-spotted salamander is a Connecticut threatened species.
PHOTO BY P. J. FUSCO

cubs, with an average of 2.2 cubs per litter, and 5 sows denned with yearlings born during the previous winter. The first year survival of cubs was estimated at close to 80% based on the number of yearlings present compared to how many cubs were present the year before.

Seventeen previously untagged bears were captured, which included 2 yearlings tagged at their winter den, 9 caught while trying to recapture research bears, and 6 captured at problem sites.

Bear sighting reports continued to increase rapidly. From October 2007 through September 2008, 2,759 bear sightings and 375 cases of property damage were reported to the Wildlife Divi-

sion. During this period, 6 bears were killed by vehicles and 2 bears that were originally tagged in Connecticut were killed by vehicles in other states.

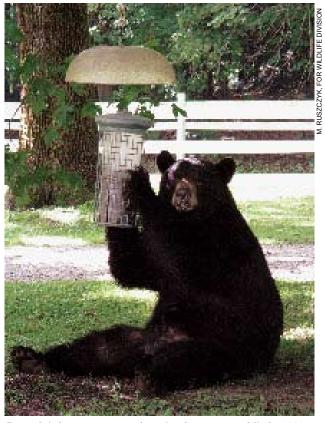
Three bears were killed by property owners and 3 with histories of problem behavior

were captured and euthanized.

Furbearers

Wildlife Division staff devotes a considerable amount of time and effort responding to calls and emails with questions and concerns about furbearer spe-

cies. Concerns about coyotes, especially in southern towns,



Bear sighting reports continued to increase rapidly in 2008. From October 2007 through September 2008, 2,759 bear sightings and 375 cases of property damage were reported to the Wildlife Division.

and foxes have become very frequent in recent years.

Trapping and hunting harvest totals for beaver, river otter, mink, red fox, gray fox, coyote, and fisher were determined through pelt tagging. Trapping harvest totals for muskrat, raccoon, skunk, opossum, and weasel were estimated from a trapper questionnaire. Season harvest totals for most species and harvests by trappers and hunters decreased slightly from levels in the 2006-2007 season. Trappers harvested 1,095 beavers and 214 fishers. Although the number of coyotes harvested dropped, the proportion taken by trappers remained high following a 3-year old regulation change that allows

Breeding Rail and Secretive Waterbird Surveys

A total of 47 marshes were surveyed in 2003 and 2004 to assess breeding rail and secretive waterbird distribution. Based upon those survey data, 10 marshes (5 salt marsh, 5 freshwater) were chosen to serve as barometers of habitat condition and breeding population status of these bird species.

Callback surveys were employed in 2008 to determine the presence/absence of rail and waterbird species at each study site. Targeted species included American bittern, black rail, clapper rail, common moorhen, king rail, least bittern, pied-billed grebe, sora, and Virginia rail. All of these species, except for the sora and Virginia rail, are on Connecticut's List of Endangered, Threatened, and Special Concern Species. Nine of the index marshes were surveyed. Data from one site, Stewart B. McKinney National Wildlife Refuge, were not usable due to observer error. Of the 8 marshes with reliable data. targeted species were detected in 6. All of the targeted species, except for the common moorhen, king rail, and black rail, were detected.



The American bittern is a rare migrant and uncommon nester in Connecticut.



The loss of deep water marshes with emergent vegetation is a threat to common moorhens.



DEP Environmental Conservation Police Officer Ed Yescott (left) and seasonal research assistant Alex Johnston take a measurements of an immobilized black bear. This 600-pound male bear was discovered hibernating under a house deck in Bloomfield. The bear was immobilized so that measurements and data could be collected and the bear could be marked with ear tags.

Mapping Key Wildlife Habitats

Although Connecticut's Comprehensive Wildlife Conservation Strategy lists 12 habitat types that offer shelter and food resources for species of greatest conservation need (GCN), scientists know little about the statewide distribution and ecological health of these habitats. Kenneth Metzler, an ecologist with the DEP's Natural History Survey has partnered with Daniel Civco, director of the Center for Land Use **Education and Research, and David** Wagner, professor of Ecology and **Evolutionary Biology at the University** of Connecticut, to provide geographic information system (GIS) and field support for a statewide habitat mapping project. Sarah Zwetsloot, a research assistant stationed at DEP, is providing GIS expertise.

The project will result in a digital map showing the distribution and extent of key habitat types important to GCN species, along with information about habitat size, condition, and associated vegetation. This information, which will become part of Connecticut's Natural Diversity Data Base, will be used to review the environmental status of the habitats and to set priorities for site management and conservation.

The habitat mapping project will help to create a database showing the distribution of key habitats, such as Atlantic white cedar swamps, bogs, calcareous fens, sand barrens, brackish and freshwater tidal marshes, coastal dunes, and sea-level fens. This effort will determine the locations and relative conditions of key habitats that are essential to the conservation of GCN species that inhabit them.

land trapping for coyotes. On an annual survey, trappers reported that 60% of the beavers and 66% of the coyotes they trapped were taken to resolve problems. Trapping has been valuable in directly resolving beaver conflicts and managing the beaver population.

Trapping is allowed on 68 state land units, primarily state forests and wildlife management areas. For the 2007-2008 season, 48 trappers purchased 96 permits for trapping these parcels. Approximately 20% of the statewide harvest is taken on state land.

Carcasses of river otter (63), fisher (41), bobcat (16), and black bear (5) were examined to determine reproductive status, age, and diet.

Year in Review, continued on page 14

Connecticut and Massachusetts Partner to Preserve 450-acre Property Important to Grassland Birds

Connecticut Governor M. Jodi Rell and Massachusetts
Governor Deval Patrick recently announced the preservation
of approximately 450 acres of land straddling the Connecticut
and Massachusetts border. Comprising 254 acres in Southwick,
Massachusetts, and 196 acres in Suffield, Connecticut, the
property will be managed jointly by the two states as habitat
for a variety of migratory birds and other species. This effort
demonstrates cooperation between states, private conservation
groups, and business. Grassland habitats are under intense
development pressure, especially along the Connecticut River
corridor. This purchase helps ensure that both states retain
enough suitable land to continue attracting important migratory
bird species, which are a part of the biodiversity in the region.

The Conservation Fund, a national organization dedicated to preserving land and protecting natural resources, facilitated the \$4.4 million purchase, working with the two states and former property owner Swedish Match Co. – the successor to Culbro Tobacco and General Cigar. A former tobacco farm, the new two-state Wildlife Management Area comprises approximately 450 acres of mostly meadow and is ideal habitat for endangered birds. With the land deal complete, the states will begin enhancing habitat for upland sandpipers, grasshopper sparrows, eastern meadowlarks, and savannah sparrows. The Wildlife Management Area also will likely attract a variety of mammal, rentile amphilian and invertebrate species. Watlands on the pro-



The new two-state wildlife management area will provide important nesting habitat for grasshopper sparrows.

reptile, amphibian, and invertebrate species. Wetlands on the property already harbor a sizeable great blue heron rookery.

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CT and MA have identified the need to protect grassland birds, like the eastern meadowlark, through their State Wildlife Action Plans.

This site is among the most promising areas in southern New England to establish a viable nesting area for state-endangered birds, such as upland sandpipers and grasshopper sparrows. Its large size, well-drained soil conditions, existing vegetation structure, and the fact that grassland birds are nesting there already combine to make this site perfect for ensuring the continued presence of these unique creatures. Grasslands are one of the top priority habitats recognized by Connecticut's Comprehensive Wildlife Conservation Strategy. This acquisition provides the most significant protection of important grassland habitat in our time and it promises to protect not only threatened and endangered bird species, but a host of other plants and animals dependent upon this unique environment.

The Connecticut River Valley – especially from the Hartford area north into Massachusetts – includes grassland areas that serve as prime nesting and breeding grounds for more than 80 bird species. Thirteen of these species are listed under Connecticut's Endangered Species Act, eight of which breed in the Connecticut River Valley. In Massachusetts, the state's Endangered Species Act protects eight grassland bird species – five of which breed in the Connecticut River Valley. As these grasslands have become attractive to residential and commercial developers, both states have made preserving this habitat a priority. Both Connecticut and Massachusetts have identified the need to protect grassland birds through their respective State Wildlife Action Plans.

Connecticut formally adopted a Grassland Habitat Conservation Initiative to protect critical grassland areas in 2006, while the Massachusetts Division of Fisheries and Wildlife uses a variety of tools and initiatives to manage and restore the Commonwealth's grassland habitats as part of Governor Patrick's \$50 million annual commitment to land conservation. This recent purchase mitigates the loss of grasslands elsewhere along the Connecticut River corridor.

The Massachusetts Division of Fisheries and Wildlife spent six weeks this past fall removing 27 miles of wire, 3,000 tobacco poles, and tobacco shade tenting from the Southwick land to restore the former tobacco fields to open meadows for wildlife. The Division is also moving to repair damage from illegal ATV use on the property and to curtail future illegal ATV trespass. Citizens are asked to report ATV violations in Massachusetts to the Environmental Police at 1-800-632-8075; violations in Connecticut can be reported to the DEP Encon Police at 1-800-842-HELP. In

Connecticut, similar efforts are underway on the Suffield portion of the property to address the remaining wire, poles, and shade netting, and to undertake removal of debris and demolition and removal of structures that are unsafe or no longer needed. In addition, DEP Wildlife Division biologists have begun collecting information on the variety of species that live in this unique habitat complex. As knowledge of wildlife use of the area increases, a management plan will be implemented to enhance the fields, forests, and wetlands to benefit species from native bees to musk turtles to great blue herons to upland sandpipers and more.

The Great White Owl

Article and photography by Paul Fusco, Wildlife Outreach Program

The snowy owl – the great white owl of myth and legend – makes its appearance in New England sporadically and in low numbers during most winters. In some winters, when there is a food shortage in the Arctic, snowy owls will show up far south of their normal wintering range and in unusually large numbers. When this happens, it is generally referred to as an irruption year. In irruption years, the owls may be found in strange and unexpected locations, such as on the rooftops of homes and in shopping center parking lots.

Irruptions happen on a cyclical basis, brought about by a crash in the small mammal (primarily lemmings and Arctic hares) population in the Arctic. The cycle happens every five or so years. During the fall, in most years, there is somewhat of a southward nomadic movement of snowy owls that may include most of the population. The southward movement becomes an "irruption" when numbers are high and distance traveled is greater than normal.

Irruptions can also occur in years of high prey populations when owls successfully raise large numbers of young. In these years, most of the southbound snowy owls will be young-of-the-year that disperse after the breeding season.



Snowy owls are birds of the high-rolling and coastal Arctic tundra. They are heavy-bodied, powerful predators that primarily feed on a variety of small mammals and birds.

Most irruption years, snowy owls are experiencing some level of malnutrition before they leave arctic and subarctic areas. By the time they get to Connecticut, many are in a weakened condition. The southward movement is toughest for young birds which are likely still learning to hunt efficiently. The lucky ones

find a good location with a plentiful food supply, but many are not so lucky and end up severely undernourished. Many will die from starvation.

Range and Habitat

Snowy owls are at home on the arctic tundra, between the tree limit and where perpetual snow and ice dominate the land-scape. When they come into our region, they are typically found in wide open habitats, such as beaches, marshes, agricultural fields, and airports. They can sometimes be seen on the ground resting or hunting from a slightly elevated perch, such as driftwood logs, dunes, and small knolls. In Connecticut, snowy owls frequently use rock jetties along the shoreline for daytime roosting and nighttime hunting. Most of the jetties are loaded with Norway rats, which are an excellent food source.

The normal range of snowy owls includes the circumpolar Arctic regions of the northern hemisphere. The breeding range extends well into the Arctic Circle. One can't help but wonder where the owl that sits on a Connecticut jetty came from. It is in such a new



A snowy owl hunts for prey as it perches atop a rock jetty along the Connecticut shoreline.

and different environment than where it has lived most or all of its life. Did it fly south from Greenland or Baffin Island? Has it ever seen people before? How long did it take it to get Connecticut? In any case, it would have been a long and arduous journey for the bird. The closest point to the Arctic Circle from Connecticut is over 1,500 miles.

Description

Snowy owls are among the largest and most powerful of owls. They are heavy-bodied, white, tuftless, and have bright vellow eves. Their white plumage is marked with black or brown barring that varies according to age and sex. Adult males can be almost pure white; females have darker markings, and immature owls are the most heavily marked. Males are smaller than females. A thick, heavy underlayer of down feathers keeps the owls' bodies warm and dry in the worst of arctic conditions. The feet are heavily feathered to the tips of the toes, another protection from extreme cold. Snowy owls have long, broad wings that are rounded at the tips. Their flight is strong, steady, and, like all owls, silent. They will often glide low to the ground or low over water for long distances. When viewed from a distance, snowy owls appear to look like a plastic grocery bag or a bleach bottle on the landscape. Without snow on the ground they can be fairly easy to see. But, when there is snow, the owls become almost invisible against the white background of winter.

Behavior

Snowy owls are strong and aggressive predators. They take a wide variety of prey, including many kinds of mammals and birds. Their diet includes lemmings, hares, mice, rats, voles, ground squirrels, ptarmigans and other grouse, ducks, sea birds, sandpipers, crows, gulls, and fish. Of these, lemmings, hares, and ptarmigans are among the most frequently preyed upon.

Snowy owls are usually shy and wild by nature. They typically do not allow close approach. In its preferred habitat of wide open spaces, an owl will sit on a prominent perch that offers a commanding view of its realm. From there it will keep a watchful eye for potential danger and scan for prey. Snowy owls have few enemies, but their most vulnerable time is when they are nesting. Danger may come in the form of an Arctic fox or golden eagle that may attempt to rob the nest of eggs or young. But, interloper beware, snowy owls are extremely aggressive in defending their nest.

Being from the Arctic, where the time of daylight varies greatly, snowy owls may be active by day and/or night. Southward flights generally occur at night, but some movement may

happen by day. Hunting activity is frequently at night, including dawn and dusk, but also may occur in daylight. Daytime hunting activity during winter may be an indication that a bird is stressed for food.

Conservation

Snowy owls are protected under the Migratory Bird Treaty Act in the United States. In Canada, protection is afforded by individual Provincial laws. Alaska hunting regulations do allow state residents to harvest snowy owls in certain areas of the state provided that the birds are used for food or clothing, and no bird or part of a bird may be sold or offered for sale.

Drastic fluctuations in the population are part of a regular cycle for these birds. Their numbers are directly tied to food availability, as is their success in raising young. When lemming populations are high, snowy owl numbers will grow. When their prey experiences a population crash, owl numbers will also drop. Historically, the natural life cycle dynamics of owls and prey have had little to do with man-made events, but the effects of global warming may prove to be a different challenge in the coming years. As the Arctic's ecosystem changes due to rising temperatures and melting ice, the future of snowy owls, lemmings, and a host of other arctic wildlife will be determined.



Outside of the breeding season, snowy owls are nomadic birds that often move great distances in search of food, especially in irruption winters.

Owls in Myth and Legend

As a symbol of the far north, the snowy owl is the subject of many legends in folklore and culture. They are seen as creatures of wisdom and power, and as protectors from evil. Some also believe them to be agents of demons, death, and sickness.

In many cultures, owls are messengers of the gods. They have the power to see what is unseen, and to see through deception. Owls in some cultures are said to be able to sense those with magical powers, and also detect the good or evil in people.

According to legend in parts of Russia, snowy owls are made to stay behind while other birds migrate south as punishment for their deception. In parts of Africa, owls are believed to be evil and are referred to as "witchbirds."

In traditional Sioux Indian culture, the snowy owl is admired as a creature that symbolizes bravery and possesses special powers. While, in Apache culture, owls are viewed as the embodiment of the dead and as the most feared of all creatures.

Owls have been a part of human myth and legend for as far back as humans themselves. One of the earliest known human cave paintings in France illustrates a family of snowy owls. It is easy to see why owls have developed such prominence in magic and legend of native cultures. Owls are active during the night, they can see in the dark, they have strange sounding vocalizations, and their flight is completely silent and stealthy. Also, unlike most other birds, and similar to humans, they have binocular vision. With their eyes positioned on the front of the head, they have a somewhat human attribute that helps give rise to superstitions and legends.

Conservation Education/ Firearms Safety Program

The 302 volunteer instructors in the Conservation Education/Firearms Safety (CE/FS) Program contributed 12,321 hours of service to teach 4,019 students in 147 hunting safety courses. Student enrollment has been increasing slightly over the past several years, with the largest gains seen among the bowhunting classes. Courses were presented on firearms hunting (80), bowhunting (62), and trapping (5). Three supplemental coyote land trapping courses were given to 75 trappers who completed the trapping education course or its equivalent and wish to trap coyotes on private land.

The firearms hunting home study course continues to grow in popularity. In 2008, 9 courses were offered, allowing 172 students to complete most of the program at home. The Internet version (www.IHEA.com) was the most popular with both students and instructors. Fewer than 10 students took the workbook-based home study course. Both versions still require the student to attend an 8-hour field day that is comprised of 4 instructional topics, a field course, live firing, and an exam. A daytime



In 2008, David Kubas (left) retired as CE/FS Program Coordinator after 26 years of service. Dave came on board when the CE/FS Program was just beginning. Lawrence (Larry) King (right), a long-time volunteer CE/FS Instructor, was presented with a prestigious "Award of Merit" in 2008 and in previous years for his outstanding effort and participation in the program. The CE/FS Program lost a valuable and dedicated volunteer instructor when Larry passed away suddenly in July 2008.



Archery in the Schools Program Started

Wildlife Division staff provided coordination and support to implement a 2-year pilot project of the National Archery in the Schools Program (NASP) in an effort to promote student education and participation in the sport of archery. The program is designed to teach international-style target archery and involves a standardized curriculum using trained instructors who will act as trainers for teachers. All equipment kits and training materials to implement NASP in 10 pilot schools for the first year were purchased using section 10 funding from the Federal Aid in Wildlife Restoration Program. Training for teacher-trainers and staff from participating schools was held in March 2008. Program evaluation is continuing and, pending favorable results, equipment kits will be purchased for 10 additional schools in the second year of the project. The Division will provide ongoing coordination with instructors, participating schools, and additional school systems as the program develops.

firearms course taught by CE/FS instructors was hosted by Cabela's in East Hartford. This course, which met the needs of students who are unable to attend nighttime classes, was in high demand and filled to capacity quickly.

The Glastonbury Public Shooting Range in Meshomasic State Forest continues to be popular among shooting enthusiasts. The range was operational for its third full season. Public use remained high, with an increase of 18% in overall use from 2007. The range provided opportunities for 2,198 shooters using pistol, rifle, shotgun, and air gun during the 68 days of operation. Clay target shooting is not allowed. Four seasonal employees, who are trained as Range Safety Officers, currently staff the facility. The range is open free-of-charge for public use on weekends from April through November. It is also available to CE/FS firearms hunting instructors, on request, for use in conducting the live fire component of the hunting safety course. All operational costs of the range are funded through the section 10 allocation of the Federal Aid in Wildlife Restoration Program.

The High Rock Range in Naugatuck State Forest and the Wooster Mountain Shooting Range at Wooster Mountain State Park (Danbury) continued public operations through cooperative agreements with two shooting organizations.

Outreach and Education

The Wildlife Division's Outreach Program published 6 issues of *Connecticut Wildlife* magazine, prepared press releases on wildlife topics, and assisted in the production of several publications, including the annual deer and turkey summaries and wildlife fact sheets. Most of these publications are posted on the DEP website (www.ct.gov/dep/wildlife).

The 8th Master Wildlife Conservationist (MWC) Program series was completed by 23 participants at the Sessions Woods Conservation Education Center. MWCs assist the Wildlife Division with public programs and wildlife projects. Seventy-five MWCs provided over 3,700 hours of volunteer service in 2008. Also, MWCs and Division outreach staff presented 119 programs to various school, scout, civic, and general public audiences. Programs held at Sessions Woods included interpretive hikes and presentations on wildlife ecology and management, habitat dynamics, and wildlife natural history. Wildlife displays were manned at 15 public events, including the Hunting and Fishing Expo, Sharon Audubon Festival, and Nature Day at White Memorial Conservation Center in

Litchfield.

The Wildlife
Division participated
in "Bring Your Child
to Work Day" at
DEP Headquarters in
Hartford and with the
DEP's Seasonal Interpreters Training at
Kellogg Environmental Center in Derby.

A new initiative to further educate northwest Connecticut communities on black bear issues was implemented this past fall with the assistance of MWC Felicia Ortner and the Connecticut Library Consortium. A new, traveling bear display

board was fabricated for this purpose, with funding provided by the Friends of Sessions Woods (FOSW).

FOSW co-sponsored an Eagle Scout project for the Sessions Woods Conservation Education Center. Steven Bagley, a Boy Scout from Troop 23 in Burlington, raised money and organized a native plant landscaping project. Native plants attractive to wildlife were purchased

Friends of Sessions Woods

The Friends of Sessions Woods (FOSW) continues to support and enhance the educational efforts of the Wildlife Division at the Sessions Woods Conservation Education Center in Burlington. FOSW was instrumental in the receipt of a \$5,000 grant from the Newman's Own Foundation for the printing of a workbook for use by children



visiting Sessions Woods. FOSW also contributed to the enhancement of the workbook by designating additional funds for the creation of a 4-page color insert highlighting common animals of Sessions Woods. The Newman's Own Foundation grant also allowed funding for bus transportation to Sessions Woods for students to participate in wildlife presentations.

FOSW received a grant from the Main Street Community Foundation, Inc., to purchase waterfowl taxidermy mounts and a display case for Sessions Woods. FOSW provided a 50% match to the grant. The project is well underway with a generous donation of 12 mounts from Connecticut Waterfowl Association member Mark Hintsa.

and planted outside the wildlife viewing window in the center's exhibit area. Bird feeders were also installed. The land-scaped area has become a hotbed of wildlife activity and a focal point of visitors to the Conservation Education Center.

The Wildlife Division provided rough-cut lumber to 24 groups for the construction of bluebird nest boxes. These groups, comprised of scout troops,

school groups, senior centers, nature centers, and others, built and set up approximately 800 nest boxes across the state. The groups monitored the boxes for bird use and returned annual reports to the Division.

Division staff participated in Yale Peabody Museum's BioBlitz held in Stratford at the end of May. Cosponsored by Connecticut's Beardsley Zoo, the BioBlitz brought together teams of scientists from across the region in an attempt to document as many species of living organisms as possible within the boundaries of Stratford's open spaces during a 24-hour period. The teams were organized into groups of taxonomic experts. Wildlife Division staff was charged with searching for freshwater mussels and mammals. Streams and impoundments were searched for freshwater mussels until sundown. Mist nets were then used to capture bats late into the night at Roosevelt Forest. All of the hard work paid off as a total of 914 species of plants and animals were recorded in Stratford.



Master Wildlife Conservationist (MWC) Dick Ronalter (left) shares his expertise on Connecticut's wildlife with visitors to Gillette Castle State Park in East Haddam during a "No Child Left Inside" event sponsored by the Connecticut DEP. Several MWCs participated in various "No Child Left Inside" events throughout the year.

Partnership to Create Woodcock Habitat Demonstration Areas

A framework has been established by the DEP and the Connecticut Woodcock Council to partner on an initiative involving management of early successional forest habitat on state and private lands and educational outreach that will benefit such species as the American woodcock, New England cottontail, and blue-winged warbler. Several coordination meetings and project selection site visits involving the development of demonstration areas have already occurred. Current partners include the Wildlife Management Institute, Connecticut Woodcock Council, The Nature Conservancy, Salem Land Trust, and DEP.

The vision is to foster public appreciation and understanding of early successional habitat and what can be done to maintain and enhance this habitat in Connecticut. The ultimate goal is for municipal planners and conservation commissions to gain knowledge about early successional habitat and begin thinking about areas within their towns and adjacent towns where this habitat can be either maintained or created. Hopefully, towns will begin working with nongovernmental organizations, such as The Nature Conservancy, local land trusts, and the DEP, to plan and implement projects.

Roraback WMA (Harwinton) has been selected as the first state-owned site to be developed as a woodcock demonstration area. A forest inventory was completed on 1,976 acres in preparation for the development of a detailed plan and implementation of the first habitat enhancement project.



Certified forester and Wildlife Division research assistant Jack Berlanda collects forest measurements and other data as part of a forest inventory conducted at Roraback WMA in Harwinton. The inventory is part of the preparation for a detailed plan on the development of a woodcock habitat demonstration area at Roraback WMA.

Habitat Management

State Land Management

The goal of the Wildlife Division's State Lands Management Program is to provide habitat diversity required to maintain stable, healthy, and diverse

wildlife populations throughout Connecticut and to maintain boundary marking, signage, and public access for wildlife-based recreation.

Management activities in 2008 continued to emphasize early successional habitats (i.e., young forests, old fields, grassland habitat). These declining habitats have been identified in Connecticut's

Comprehensive Wildlife Conservation Strategy as priority habitats in need of conservation and active management to assure abundant and diverse wildlife populations throughout Connecticut. Wildlife species that use early successional habitat include woodcock, ruffed grouse, indigo buntings, blue-winged warblers, northern orioles, rufous-sided towhees, turkeys, bluebirds, American goldfinches,

bobolinks, savannah sparrows, eastern meadowlarks, deer, and bats.

The Wildlife Division has been fortunate to receive funding through the USDA's Wildlife Habitat Incentives Program (WHIP), which was the first Farm Bill conservation program specifically developed to address wildlife resource needs on non-federal lands. Through 2008, the Wildlife Division has received \$1,752,288 in WHIP grants, resulting in the development of 81 contracts encompassing over 1,868 acres. This included 20 new contracts providing \$370,818 to conduct habitat management on 244 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 like 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, feller buncher), prescribed burning, no-till fluffy grassland seedings, and



Habitat management activities in 2008 continued to emphasize early successional habitats (i.e., young forests, old fields, grassland habitat). These declining habitats are important to a diversity of wildlife species, including the American woodcock.

selective herbiciding.

By combining WHIP funds with staff commitments from the Wildlife, Support Services, Parks, and Forestry Divisions, this past field season was extremely productive. Approximately 1,082 acres of early successional habitat enhancement practices were completed at 59 sites throughout the state. Projects ranged in size from a 4.3-acre meadow mix planting at Belding WMA (Vernon) to 150 acres at the Flaherty Management Area (East Windsor).

The 282-acre Belding WMA in Vernon was donated to the State of Connecticut in 1982 by Max Belding to be managed by the Wildlife Division. Using funding obtained through WHIP, a 4.3-acre wildflower meadow was established; competing trees were removed as the first step in regenerating pitch pine on 3 acres; invasive shrubs were removed in 4 fields; and over 700 native shrubs were planted. Brush mowing occurred on 20 acres to enhance early successional stage habitat. Annual bird, amphibian, and mast surveys were conducted, and the Belding Pond dam was repaired.

The State Lands Management Program continues to administer 7 Conservation Reserve Program contracts that involve the maintenance of grassland sites for a period of 10 years at Robbins Swamp WMA (Canaan), Pease Brook WMA (Lebanon), Bartlett Brook WMA (Lebanon), Spignesi WMA (Scotland), and Bloomfield Flood Control Area. The Program also oversees 52 agricultural agreements on approximately 1,324 acres, allowing farmers to use stateowned agricultural lands when properly managed and in the context of overall wildlife management goals.

Comprehensive 10-year management plans were developed for Talbot WMA (Scotland) and Goshen WMA, covering over 1,446 acres, to provide direction in managing their habitats over the next decade.

Staff members review various Department and outside proposals and provide guidance to assure that impacts to wildlife are minimized and potential benefits are secured. Staff was involved with a variety of reviews in 2008:

- Wildlife input on 4 forest management plans comprising 3,614 acres;
- Enduro reviews (2);
- · Land acquisition reviews: and
- Reviews of agency proposals (12), including boat launches, access roads, trails, and facility development.

Creating Roosting Habitat for Connecticut's Smallest Owl

The northern saw-whet owl is a Connecticut species of special concern. It hunts for its food of white-footed mice under the darkness of the night. Many are amazed upon learning that Connecticut's smallest owl spends part of the winter in the state, roosting in select dense evergreens in close proximity to its hunting areas. Dense evergreen cover helps create a microhabitat for these little owls by providing thermal cover that reduces the negative effect of the cold winter elements. This cover also helps conceal the owl from avian predators during daylight.

The Wildlife Division received a Wildlife Habitat Incentives Program (WHIP) grant to restore evergreen habitat at a saw-whet owl winter roosting site on state property in New Haven County. As the forests grew older, the owls' winter refuge of red cedars began to disappear because they were overshadowed and out-competed by the taller oaks, hickories, and maples. This led to a decline in

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evergreen presence and vigor, resulting in a decrease of the owls' winter habitat.

The Division recently completed the first phase of restoring and enhancing the evergreen habitat by clearing competing overtopping hardwood trees, thereby releasing and invigorating the remaining evergreens. This was accomplished through the use of a drum style mowing/mulching machine known as a "brontosaurus" mower. This mowing apparatus basically chomps, grinds, and mulches competing vegetation to ground level. Habitat managers consider the brontosaurus as one of the best tools to help restore habitat conditions.

The second phase of the project involves planting new evergreens in clusters near former roosting areas. In spring 2009, evergreens, such as red cedar and white spruce,

will be planted in the areas cleared by the brontosaurus mower. The evergreens will also be protected from damage by deer browsing with deer-proof fencing. The Wildlife **Division is** grateful to the partners that helped facilitate this habitat restoration

project,

WHIP.

especially the

DEP Parks

Division and



This photograph depicts the results of daylighting evergreens with the use of a brontosaurus to improve habitat conditions for wintering Northern saw-whet owls. Daylighting refers to the cutting and release of vegetation along areas within a forested habitat for the purpose of increasing sunlight on the forest floor.

Operational activities included:

- Boundary posting of 27 miles at Roraback WMA, Bishops Swamp WMA (Andover), Bartlett Brook WMA, and Babcock Pond WMA (Colchester).
- An upgrade of 2.5 miles of access roads at the Flaherty Management Area, Cockaponset State Forest (Haddam), Sugarbrook WMA (Plainfield),
- Sessions Woods WMA, and Nipmuck State Forest (Union).
- Routine maintenance activities at key public access locations on 35 WMAs. Activities included mowing, herbiciding, painting gates, staining wooden signs, replacement of informational signs, and general site clean-up.
- Maintenance at 17 inland marshes,

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P. PICONE, HABITAT MANAGEMENT PRC





(Left) Several acres of a former 9-acre gravel excavation site at Machimoodus State Park in Haddam will be planted with warm season grasses in spring 2009 using a Truax no-till seeder. (Right) In preparation for the planting, scattered trees and shrubs were removed from the area using a tracked excavator with a heavy-duty, drum-style mowing head (brontosaurus), and the ground was re-contoured using a John Deere 650 bulldozer in September 2008.

including vegetation control via mowing and herbiciding and management of water levels to maximize wetland wildlife values and increase public safety.

Machimoodus State Park WHIP Project

In September 2008, Phase I of a native grassland creation project was completed at the 300-acre Machimoodus State Park (Haddam). The park lies above Salmon River Cove near the Connecticut River and contains a diversity of habitats, including approximately 130 acres of softwood forest, 90 acres of hardwood forest, 40 acres of grassland, and 18 acres of wetlands with 5 small manmade ponds and 1.2 miles of stream. To further enhance the property's value to grassland-dependent wildlife, non-native invasive plants, primarily tree-of-heaven, and regenerating hardwood and softwood trees were removed from a former 9-acre gravel excavation area using a brontosaurus. Stumps were removed and the site was re-contoured using a bulldozer.

Phase II, to be completed in spring 2009, will involve planting the area with a mix of native warm season grasses (predominately little bluestem) using a Truax no-till seeder. Follow-up herbicide applications may be needed where invasive plants were removed. Long-term maintenance will involve rotational mowing every 2 to 3 years. Prior to the initiation of this project, another WHIP grant was used to remove autumn olive and other undesirable woody plants that had begun to invade grassland areas on

the property. Approximately 31 acres of grassland habitat were reclaimed using a combination of heavy equipment (brontosaurus and tractor-mounted brush hog) and follow-up herbicide treatments. These management activities will result in valuable grassland bird and butterfly habitat and provide excellent bird watching opportunities.

Landowner Incentive Program

The Landowner Incentive Program (LIP) continued to restore, create, and manage habitat for species at-risk in Connecticut by carrying out a variety of projects in concert with private landowners. Eleven projects were implemented in 2008 and, to date, 21 projects have been completed or have had one or more phases conducted. Despite an uncertain future due to the elimination of funding at the federal level, LIP staff has been busy working with landowners to carry out previously approved projects that were awarded funding.

Connecticut's Comprehensive Wildlife Conservation Strategy has identified a lack of management of private land as one of the major threats to the state's wildlife. LIP provides the means for a wide variety of private landowners, land trusts, sportsmen's groups, and non-governmental agencies to actively manage habitat for a variety of rare or declining species at-risk and those considered to be of greatest conservation need (GCN). Projects focus on early successional and wetland priority habitats, along with natural imperiled communities, that support these at-risk and GCN species.

East Glastonbury Fish and Game Club: This past spring, LIP partnered with the East Glastonbury Fish and Game Club to create early successional habitat on the Club's 400 acres of primarily mature forested property in Marlborough, adjacent to a large section of Meshomasic State Forest. The Club was interested in increasing early successional habitat to benefit declining species, as well as to improve hunting cover for upland game.

A 7-acre opening already existed on the property which was composed of scattered areas of seedling/sapling growth, a few apple trees, and some small stands of pole-sized trees, all intermixed with varying densities of grassy herbaceous growth. This opening was surrounded by mature forest, composed of mainly low value hardwoods. LIP funded a 5.6-acre whole tree harvesting operation that removed all trees in designated areas around the existing opening, along with pole-sized trees in the opening. Specialized forestry equipment was used to accomplish the task efficiently and effectively. Under LIP, staff is responsible for hiring state approved contractors, overseeing the project, securing any necessary state permits, and developing recommendations with input from endangered species biologists for state-listed species that occur on or near the project site. Landowners appreciate the high level of technical assistance because they have neither the time nor expertise to carry out the projects on their own.

All projects require a 25% non-federal match, and most landowners provide in-kind services, such as brush mowing or herbiciding. The East Glastonbury Fish and Game Club is following up on the project by controlling non-native invasive plants. This effort will help native shrubs and valuable trees (apple, white oak, aspen) to become re-established after the completion

of whole tree harvesting operations.

This project resulted in the enhancement of approximately 12 acres of early successional habitat. A wide variety of early successional dependent species, such as woodcock, ruffed grouse, chestnut-sided warbler, blue-winged warbler, indigo bunting, eastern towhee, field sparrow, prairie warbler, and eastern box turtle were found on site and will benefit from the project. The project will also indirectly benefit the state endangered timber rattlesnake by creating potential foraging and basking habitat. Meshoma-

sic State Forest is home to these reptiles.

Phragmites Control: Six

new projects to treat non-native, invasive phragmites and restore tidal marsh habitat got underway in 2008 and two ongoing projects received follow-up herbicide treatment. LIP partnered with the Tidelands Program of the Connecticut Chapter of The Nature Conservancy

(TNC) to treat stands of phragmites that are still persistent, despite past treatment, in the important tidal and brackish marshes of the Lords Cove area of the Connecticut River and the lower Lieutenant River. TNC considers the lower Connecticut River Tidelands Area (which encompasses the watershed from Cromwell south) as "one of the last great places." The area was



A log skidder drags bundles of trees that were cut down to create and enhance early successional seedling/sapling habitat at the East Glastonbury Fish and Game Club in Marlborough to benefit species at-risk.

recognized as containing "Wetlands of International Importance" under the Ramsar Convention in 1994. The Connecticut River is a major migratory route for waterfowl, shorebirds, raptors, and passerine birds, many of which are considered at-risk and GCN species. The river provides important finfish and shellfish areas, especially for anadromous fish, such as the state threatened Atlantic sturgeon. The Lords Cove area provides critical habitat and supports plant and animal species at-risk.

The Lieutenant River, which enters the Connecticut River at Old Lyme, also

to forest and wildlife habitat management. LIP has worked in coordination with the DEP Support Services and Forestry Divisions and UCONN Extension to develop and maintain wildlife habitat demonstration areas at Goodwin State Forest in Hampton since 2005. In 2008, early successional habitat areas were treated using a backpack sprayer to selectively control invasives. These demonstration areas are used during the COVERTS workshop to highlight habitat management for species at-risk and are regularly used for a variety of other educational outreach efforts.



The Connecticut Chapter of The Nature Conservancy and the Wildlife Division are working in partnership under the Landowner Incentive Program to continue to treat stands of invasive phragmites (background) that remain a threat to the restored, native, healthy vegetation (foreground) in the Lords Cove area of the Connecticut River. The restored vegetation provides critical habitat for a wide variety of wildlife.

supports a number of plants considered at-risk, in addition to providing important fresh and brackish saltmarsh wildlife habitat.

Education: LIP also provided classroom and field instruction with other natural resource professionals at the multi-day 2008 COVERTS workshop, which is held for selected landowners with a strong interest and commitment Unfortunately, no new applications for LIP projects are being accepted at this time due to the elimination of future program funding. Staff are exploring various options to keep this important private lands program viable in Connecticut.

Technical Assistance

Nuisance Wildlife

The Wildlife Division receives thousands of phone calls involving human/ wildlife conflicts every year. The majority of these calls concern "urban" wildlife species that take advantage of the shelter and food found around homes and businesses. Although common wildlife comprise a majority of the calls, the diversity of Connecticut's wildlife and the capacity of some species to adapt to living "with" people have given rise to many other conflicts. Some of the more serious conflicts involve resident geese fouling lawns and ponds; turkey vultures roosting on homes and defecating on roofs and driveways; red and gray foxes denning under sheds in backyards; and coyotes attacking and killing pets, to name a few. Recommendations for controlling wildlife damage and identifying permanent solutions to prevent repeated damage are routinely provided to the public. Information is also provided on animal behavior.

The Nuisance Wildlife Control Operator (NWCO) Program licensed 331 individuals in 2008 who provide service to an estimated 5,000 residents annually. NWCO reports indicate that most homeowner complaints involve problems caused by common "urban" species, such as gray squirrels, raccoons, skunks, woodchucks, and bats. In addition to these routine species, the Division issued over 60 special permits for the control of certain mammals identified as Special Permit species and of some migratory birds. The control of Special Permit species, such as muskrats, coyotes, and foxes, requires qualified NWCOs to use advanced trapping methods, equipment, and safety protocols not generally used or allowed in urban settings. NWCO Special Permits are also issued, in conjunction

A Celebration for Wildlife Rehabilitators

In November 2008, the Connecticut Wildlife Rehabilitator's Association (CWRA) held its 20th anniversary meeting at the White Memorial Conservation Center in Litchfield. During the meeting, Wildlife Custodians who have excelled in their knowledge and experience of rehabilitating wildlife gave presentations and shared their thoughts about the future of their profession. In addition, the DEP Wildlife Division acknowledged 8 wildlife rehabilitators who have served as volunteer Wildlife Custodians in our state for 25 years or more. The following facilities and individuals were acknowledged:

Hungerford Park, New Britain – 35 years
Denison Pequotsepos Nature Center, Stonington – 34 years
Earthplace, Westport – 33 years
Victoria Magaraci, Watertown – 31 years
Wanda Anderson, Preston – 30 years
Audubon Sharon, Sharon – 29 years
Karin Leili Bauer, Woodbury – 27 years
Skip Hilliker, East Hampton – 25 years

Although Connecticut adopted regulations in 1949 allowing for permits to be issued to Wildlife Custodians, it was not until 1982 that permits were issued on an annual basis. Since then, the state has implemented additional application and training requirements with assistance from the CWRA. Today, there are 256 wildlife rehabilitators in the state who care for nearly 13,000 sick, injured or orphaned animals each year! These individuals serve as volunteers of the state and spend their own time and money to assist wildlife in need.



Wildlife Custodians who have volunteered to rehabilitate sick, injured, or orphaned wildlife for 25 years or more were acknowledged by the Wildlife Division at the Connecticut Wildlife Rehabilitators Association's 20th anniversary meeting. Pictured (from l to r) are Jim Meany from Earthplace, Erin O'Connell from Audubon Sharon, Skip Hilliker, and Wildlife Division biologist Laurie Fortin.

New Dog Leash Regulations for Wildlife Management Areas

In 2008, a new regulation went into effect that requires all dogs at state wildlife management areas (WMAs) to be on a 7-foot leash that is held by the person responsible for the dog. The 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 WMAs (state parks and state forests already have leash laws in effect). Several tickets have already been written to date. This leash requirement protects wildlife populations and their habitat.

with federal Migratory Bird Depredation Permits, when the control of protected migratory birds, such as Canada geese, woodpeckers, gulls, or turkey vultures, is required to prevent severe property damages or resolve public health and safety issues.

In fall 2008, the Wildlife Division launched a new

outreach initiative to help communities with increasing coyote complaints. Two Regional Coyote Workshops, designed specifically for community officials, including animal control officers, police officers, town leaders, and representatives, were conducted in 2008. Both workshops were well attended and benefited local officials through an improved understanding of DEP recommendations and services for the prevention and control of coyote problems. These workshops also will

benefit the Wildlife Division through improved communication and local assessment when evaluating coyote problems in some communities.

Wildlife Rehabilitation

The Wildlife Division responds to calls from the public regarding sick, injured, and orphaned wild animals. The Division does not have the resources to provide care for these animals. Therefore, it relies on a network of volunteer wildlife rehabilitators that consists of private individuals, staff at nature centers, and local veterinarians who have the proper training, as well as the appropriate facilities to house wildlife species until they can be returned to the wild. There are 231 individuals authorized to care for animals in need. Of that group, 3 are authorized to care for orphaned fawns and 39 have specialized training and authorization for handling rabies vector species (RVS; skunks, raccoons, foxes). In addition, 58 individuals have federal permits to care for migratory birds. In 2007, wildlife rehabilitators cared for 12,877 animals, which included 8,055 birds, 4,607 mammals (of which 106 were fawns and 469 were RVS), and 215 reptiles and amphibians. A total of 8,888 of the animals cared for were released back into the wild.

Nuisance Beaver Management

Beaver complaints have remained consistent over the past 3 years, with a slight increase in 2008. Human/beaver conflicts are aggravated by the loss of suitable beaver habitat and an increase in development. Concerns involve the cutting of trees; flooding of roads, septic systems and structures; increase in standing water; increase in mosquitoes; threats to fish and aquatic flora; potential encounters in recreation areas; and potential spread of diseases. Most of these concerns can be addressed with basic information on beaver behavior and the majority are deferred until the regulated

Online Licensing Made Available for Sportsmen

Early in 2008, sportsmen were able to purchase hunting, trapping, and fishing licenses, as well as all required deer, turkey, and migratory bird permits and stamps, on the DEP website (www.ct.gov/dep/sportsmenlicensing). Payments could be made by Visa or Mastercard. The new online licensing system was an instant success.

WHAMM Program Restores Habitat

The Wetland Habitat and Mosquito Management (WHAMM) Program assisted the Town of Fairfield by using its low ground pressure excavation equipment to clean debris and sediment from several tidal ditches to restore tidal flow and drainage to low-lying areas.

The Program also mowed 268 acres of heavy brush and overgrown meadows to restore grassland habitat on several tracts of land in state-owned wildlife management areas. These projects were funded by the Natural Resource Conservation Service's (NRCS) Wildlife Habitat Incentive Program (WHIP).

Phragmites on 978 acres were sprayed with herbicides and the dead canes were mowed on 55 sites throughout the state. These projects were funded by the Landowner Incentive Program (LIP), NRCS (WHIP and Wetland Reserve Program), Ducks Unlimited, and the Avalonia and Old Saybrook Land Trusts.

An infestation of Japanese knotweed (a non-native, invasive plant) was controlled on 4 acres as part of a dune restoration project (funded by NRCS WHIP funds) at Harkness Memorial State Park (Waterford).

The WHAMM Program is partnering with Ducks Unlimited and private landowners to restore the 100-acre Little River tidal marsh in New Haven and North Haven.

With funds generated through these various projects, the WHAMM Program has been able to purchase a MarshMaster® amphibious tracked vehicle and a smaller Argo® amphibious tracked vehicle, and is in the process of purchasing a Piston Bully® low ground pressure tracked mower to aid in habitat management efforts.



Seasonal technician Adam Hendrick (spraying) and Mosquito Management Program coordinator Roger Wolfe conduct second year herbiciding of phragmites at Barn Island WMA in Stonington.

Nuisance Beaver Management Program 2008

District	Phone Advice	Field Inspections	Total # Complaints	NWCO Permits Issued	Volunteer Authorizations Issued
Eastern	68	47	115	4	27
Western	78	52	130	12	12

Deer Damage Permit Program 2008 (Jan. 1-Oct. 31)

	Inspections		Office Reviews			
District	Daylight	Jacklight	Total	Daylight	Jacklight	Total
Eastern	40	3	43	7	4	11
Western	38	0	38	6	3	9

trapping season. Some issues involve health and safety concerns and can be addressed with out-of-season trapping under specific statutory authorization. All beaver activity is dealt with either by tolerance measures or trapping.

The regulated beaver trapping season begins December 1 and ends March 15. There is no relocation of beaver in the state. The number of nuisance beaver complaints received from private landowners in 2007 was 245. When problems from state land sites are added, the number falls within the historical range of 250 to 300 per year.

Commercial Deer Damage

The Deer Damage Permit Program addresses crop damage by the large deer population found in Connecticut. The permits allow for the harvest of deer outside of the regulated deer hunting season, specifically to protect commercial crops and assist commercial farmers. The farmer or applicant must have an actual or potential gross annual income of \$2,500 or more from the commercial cultivated production of grain, forage, fruit, vegetables, flowers. ornamental plants, or Christmas trees. Once the farmer qualifies, Wildlife Division staff (with the cooperation of the DEP Law Enforcement Division) must inspect the crops for actual damage by deer. Reviews are conducted periodi-

Funding for Wildlife

Federal Aid in Wildlife Restoration Program: Many of the projects described in this annual report are funded by sportsmen's dollars, either through the purchase of licenses, permits, and hunting equipment. The Federal Aid in Wildlife Restoration Program provides funding for wildlife management and research, habitat acquisition, wildlife management area development, and hunter education programs. Funds for this program are provided through an excise tax on the sale of sporting firearms, ammunition, and archery equipment.

State Wildlife Grants: This program provides federal dollars to support costeffective conservation aimed at preventing wildlife from becoming endangered. A nonfederal match requirement assures local ownership and leverages state and private funds to
support conservation. Projects supported by State Wildlife Grants restore degraded habitat,
reintroduce native wildlife, develop partnerships with private landowners, and collect data to
find out more about declining species.

Endangered Species/Wildlife Income Tax Check-off Fund: This fund was created in 1993 by the State Legislature to allow Connecticut state income taxpayers to voluntarily donate portions of their tax refund to support efforts aimed at helping Connecticut's endangered species, natural area preserves, and watchable wildlife.

Connecticut Migratory Bird Conservation Stamp (Duck Stamp) Program: This program was initiated in 1993. The revenue generated from the sale of Connecticut Duck Stamps is a vital tool for the continued conservation of the state's wetlands and migratory bird resources.

Wildlife Conservation Fund: Connecticut residents who purchase wildlife license plates support this fund which helps the Wildlife Division undertake wildlife research and management projects that emphasize wildlife species of greatest conservation need.

cally to monitor commercial status and to determine potential safety hazards due to new developments in an ever-growing state. Once permits are awarded to an applicant, they are valid through October 31 of that year. After October 31, farmers are expected to use the regulated hunting seasons. All laws and regulations of the regulated hunting season apply to the use of crop damage permits.

The Division typically responds to between 70 to 100 deer damage complaints a year. In 2008, 71 complaints were processed and 63 required site inspections.

Farmers with deer damage should contact the DEP's Eastern District Head-quarters (860-295-9523 ext. 141), or the Sessions Woods office (860-675-8130) to set up a field inspection.

Education Initiatives at Belding WMA



Fourth grade students from a Vernon elementary school participate in a science curriculum workshop at Belding WMA in the fall of 2008.

The 282-acre Belding Wildlife Management Area in Vernon was donated to the State of Connecticut in 1982 by Max Belding. The DEP Wildlife Division is responsible for the management of the diversity of habitats found at the area and for conducting ongoing research and inventories. The area also serves as part of the Wildlife Division's outreach efforts. Nineteen off-site programs on wildlife ecology and habitat management were conducted at local schools, public libraries, and the Tolland County Agricultural Center; 321 people participated in these programs.

A formal agreement was developed with the Vernon School System to use Belding WMA as part of the third and fourth grade science curriculum. In May, 288 third graders from all 5 Vernon elementary schools visited Belding WMA over 7 days for field trips to learn about habitats and wildlife. Fourth graders returned in the fall for 6 more days of field trips. Eight additional outreach initiatives were conducted involving University of Connecticut students, Rockville High School students, Junior Gardeners, Boy Scout badge work, and general interpretive walks.

Wildlife Calendar Reminders

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

Programs at the Sessions Woods Conservation Education Center

These 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.

Hunting Season Dates

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

Shepaug Bald Eagle Observation Area

The Shepaug Eagle Observation Area, in Southbury, is open to the public on Wednesdays, Saturdays, and Sundays through March 11, 2009, from 9:00 AM to 1:00 PM — **strictly by advance reservation**. All individuals and groups wishing to visit the site to view eagles must make a reservation for a particular date, as there will be a limited number of visitors allowed per open day. Reservations can be made on Tuesdays through Fridays, from 9:00 AM-3:00 PM, by calling 1-800-368-8954.

The Connecticut River Eagle Festival, sponsored by Connecticut Audubon and originally scheduled for February 2009, has been CANCELLED.



Step Up to the Plate for Wildlife...

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

There are two great designs to choose from: the state-endangered bald eagle or the secretive bobcat.

Funds raised from sales and renewals of the plates will be used for wildlife research and management projects; the acquisition, restoration, enhancement, and management of wildlife habitat; and public outreach that promotes the conservation of Connecticut's wildlife diversity.

Application forms are available at DEP and Department of Motor Vehicle offices and online at www.ct.gov/dmv.

Connecticut Wildlife

Subscription Order

Please make checks payable to:

Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013

Check one:	,	3 ,
1 Year (\$6.00)	2 Years (\$11.00)	3 Years (\$16.00)
Name:		
Address:		
City:	State:	

Zip: ______ Tel.: _____

Check one: Renewal New Sub			
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Gift card to red	ıd:	•	



A flock of white-winged scoters flies over Long Island Sound in late winter on the way back to breeding grounds in Canada and Alaska.

Bureau of Natural Resources / Wildlife Division Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

STANDARD PRESORT U.S. POSTAGE **PAID** BRISTOL, CT PERMIT NO. 6