

Connecticut Wildlife

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



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From the Director

As is customary, the January/February edition of Connecticut Wildlife summarizes the Wildlife Division's accomplishments over the previous year. The staff has been involved in an impressive array of activities in the fields of wildlife and habitat management, research, conservation education, and technical assistance. Connecticut is blessed to have a skilled professional work force dedicated to sustaining our wildlife heritage. We are proud of what we are doing and hope you enjoy reading about it. We appreciate your support.

Certainly, our greatest challenge is the continuing destruction and fragmentation of habitat. As long as a plot of land is worth ten times as much for development as it is to remain a farm or forest, wildlife and habitat will be compromised. Up until now, we have relied upon land acquisition programs, easements, and the purchase of development rights as tools to protect open space. However, the use and availability of these tools has been limited and they are simply not enough. Connecticut residents are rightly concerned that economic pressures are rapidly changing the character of our countryside.

Just like wildlife, humans need a place to live. In addition, our economy depends heavily upon the pillars of construction and development. We should not stand in the way of progress, but we need to do a better job of guiding it. Most importantly, we need to reward and provide incentives to those who keep the land in a condition that benefits the public good. Perhaps some of the revenues needed to fund a landowner rewards program could be generated by collecting fees from those who profit from the development of raw land. Whatever the mechanism, significantly more needs to be done to balance development and open space across our landscape.

One of the Wildlife Division's roles is to assist land-use decision makers by providing the best available scientific information regarding the occurrence of natural resources. This technical assistance is an ongoing process as we continue to accumulate data and disseminate information, particularly on the most vulnerable wildlife species. We recognize this as a priority and will endeavor to help towns and landowners identify important wildlife habitats that should be considered when planning for sustainable development.

Dale W. May

Cover:

Many species of birds feed on the berries of red cedar, including yellow-rumped warblers. See the article on page 17 to learn more about red cedar.

Photo courtesy of Paul J. Fusco

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



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The Year in Review 2005

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

This "Year in Review 2005" provides a summary of the many accomplishments and responsibilities of the DEP Wildlife Division.

Research/ Monitoring

The DEP Wildlife Division applied for and received a grant for \$90,000 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. The University of Connecticut is currently analyzing results from the tissue samples. Because CWD was documented in New York in 2005, special emergency regulations were passed that prohibit the importation of deer or elk carcasses from states with CWD. Hunters who hunt deer or elk in known CWD states can only bring back de-boned meat, thoroughly cleaned hides, skullcaps, and

taxidermy mounts. The Division has devised a response plan to develop strategies for preventing the spread of CWD into Connecticut and for managing CWD if it is found within the state. Surveillance efforts for CWD will continue in 2006.

Division staff collected biological data from deer taken by hunters to assess deer herd health during the 2005 shotgun/rifle deer hunting season. Data are used to annually assess changes in herd health and hunting pressure in Connecticut's 12 deer management zones.

The U.S. Fish and Wildlife Service (USFWS) is evaluating the status of New England cottontails in the Northeast. As part of this assessment, the Wildlife Division has been actively collecting specimens from hunters, roadkills, and livetrapping by the DEP. From October 2000 to May 2005, 948 specimens were collected and identified. Among all specimens collected, nine percent were New England cottontails, 82% were eastern cottontails, and nine percent could not be identified based on DNA analysis or skull morphology. New England cottontails have been identified from 22 towns. The Division will continue collecting data on the distribution of New England cottontails in 2006.

The fourth and final year of a resident Canada goose study was completed in 2005. A total of 1,821 geese were captured at 54 sites throughout the state. Yellow neck collars were placed on 500 geese. The estimated resident population is close to 30,000. Over 4,000 separate observations of geese with yellow neck collars were collected during the four year study. All of this information was catalogued and geo-referenced. The data will be used to examine movement patterns and distribution of geese across Connecticut.

Dabbling ducks were livetrapped during summer and fitted with leg bands. A total of 871 ducks were caught, which included 808 mallards, 45 black ducks, six mallard-black duck

hybrids, eight wood ducks, two blue-winged teal, one green-winged teal, and one pintail.

Work continued on an American woodcock project. The data showed that woodcock normally are present where suitable habitat exists. It also was strikingly apparent that woodcock habitat is continually being lost to development. It is encouraging that woodcock were found in some places where they were not expected to be found. This indicates that habitat may indeed be the limiting factor for woodcock in Connecticut. The Division will continue to run 10 surveys annually to serve as a statewide index. Part of the research involved trapping and radio marking 26 woodcock. The radio telemetry data are currently being analyzed, and biologists are working to secure the necessary funding for two more years of telemetry work.

Staff inspected 411 wood duck nest boxes on state land. No differences were detected in productivity or nest box use from 2004.

An assessment of the distribution of breeding black ducks was completed in 2005. Twenty-one inland marshes were surveyed by helicopter. No black ducks were detected in



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P. J. FUSCO (2)

The fourth and final year of a resident Canada goose study was completed in 2005. A total of 1,821 geese were captured at 54 sites throughout the state.



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The Wildlife Division received a grant to conduct surveillance for CWD in the deer population.

State Wildlife Grants Fund More Bird Surveys

With the hiring of new staff and the availability of State Wildlife Grant funding, the Wildlife Division was able to undertake an ambitious effort to survey a number of different bird populations. These surveys are long overdue and will provide important baseline information for future management projects.

any of the inland marshes surveyed. Results indicate that breeding black ducks are extremely rare in inland Connecticut. Human disturbance during the breeding season may be a critical factor. A possible validation of this hypothesis is the persistence of breeding pairs along the coast. Many of the coastal wetlands are much more insulated from human disturbance. It is only in these coastal marshes where breeding black ducks are consistently found.

The Division initiated a study of distribution, abundance, and activity of wintering waterbirds in Long Island Sound (LIS). Systematic ground surveys of LIS were conducted from November 2004 through April 2005. Boat and aerial surveys were conducted along transects. A total of 104,128 birds, comprising 41 species were observed over the course of the survey. Rare species, such as Eurasian wigeon, king eider, northern gannet, and razorbill were observed.

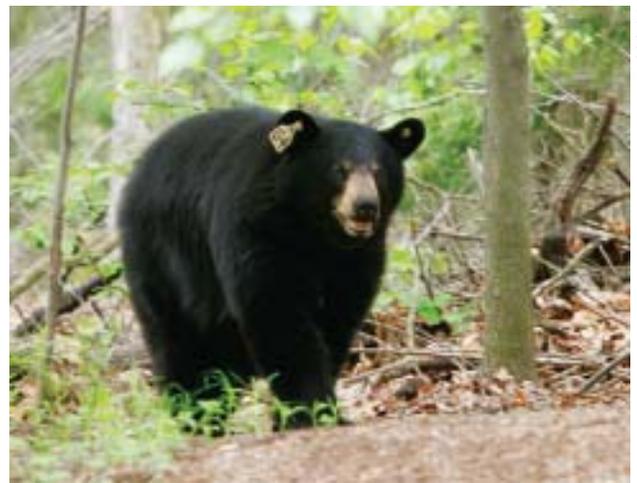
Research on the distribution and abundance of wetland birds continued in 2005. Surveys were conducted at 16 marshes to detect the presence of various rail species and other waterbirds. Over the course of two years, 46 marshes have been surveyed. The targeted species were black rail, king rail, sora, clapper rail, Virginia rail, American bittern, least bittern, pied-billed grebe, and

Small game hunter surveys were distributed to 19 town clerks. Hunters who purchased a firearms hunting license were asked to complete a survey about their hunting activities, specifically grouse hunting. Thirty-three percent of the hunters had hunted grouse in the past five years. Grouse hunters annually flushed an average of 3.4 grouse and 34% reported harvesting at least one bird in Connecticut during the 2003-2004 grouse season. Hunters reported harvesting grouse in 74 of Connecticut's 169 towns over the past five years. The highest harvest was reported in Suffield and Torrington. A question about grouse observations was included on the 2005 spring turkey hunter survey. According to the results, 217 hunters saw or heard grouse in 81 towns. The top five were Hartland (9), Sharon (9), Barkhamsted (7), Goshen (7), and Salisbury (7).

Callback surveys were conducted between May 15 and June 15, 2005, to determine the population distribution of golden-winged warblers. Surveys were conducted in early successional habitats most likely to contain breeding golden-winged warblers. Five male golden-winged warblers and one hybrid male Brewster's warbler were observed at five sites among two towns.

Information on distribution of whip-poor-wills and common nighthawks was compiled from records kept by the DEP Natural Diversity Database. Data are currently being analyzed to identify clusters of whip-poor-will activity. Preliminary analysis indicates that clusters may be associated with forested land that occurs in sandy soil substrate.

Connecticut also participated in pilot point transect surveys for whip-poor-wills. Twenty-five roadside survey routes, as well as three off-road routes in state forests were visited once, either in June or July. Whip-poor-wills were detected on only one of the road survey routes and one of the state forest routes. Preliminary results indicate that whip-poor-will populations are localized in clusters throughout the northeast region, and that these clusters were missed by most of the randomized roadside survey routes. Plans



P. J. FUSCO (3)

Complaints regarding black bears increased during 2005 and originated almost exclusively from northwestern towns.

are in place to modify survey protocols to focus upon predicted whip-poor-will hotspots.

As part of a preliminary breeding status assessment, four historical common nighthawk nesting sights were visited during July to search for evidence of current nesting. No breeding common nighthawks were detected.

Callback surveys using a great-horned owl vocalization were conducted to assess the breeding status of Cooper's hawks, sharp-shinned hawks, northern goshawks, broad-winged hawks, red-shouldered hawks, and red-tailed hawks. Surveys were conducted around the state six times during April to July 2005. Data is being analyzed to determine a preliminary distribution of nesting woodland raptors. Analysis will include a distribution map of survey effort by staff and volunteers, species sightings, and confirmed breeding locations.

As part of a new chimney swift project, historic and potential migration roost sites were surveyed. Towns with reported chimney swift activity or historic roost locations were searched for active roosts. Once an active roost was located, surveyors counted swifts entering the roost. Counts were conducted



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The 216 pairs of state-threatened least terns that nested along Connecticut's coastline fledged 70 young. Depredation of chicks has been a problem.

common moorhen. In 2005, target species were detected at 11 of the 16 sites.

Waterfowl surveys conducted in 2005 included the breeding waterfowl, breeding swan, Atlantic Flyway summer swan, and the midwinter waterfowl surveys.

During 2005, distribution and relative abundance of ruffed grouse populations were assessed by conducting drumming routes, small game hunter surveys, and spring turkey hunter surveys. Division staff and volunteers conducted grouse drumming surveys on 30 randomly selected, five-mile routes between April 15 and May 7. Grouse were heard drumming on only two routes in Redding and Colebrook. A visual observation was recorded in Voluntown.



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Fifteen young peregrine falcons fledged from five nests; one nest failed and one pair only exhibited territorial behavior and did not produce any eggs.

Wetland Habitat Projects Completed in 2005

The Bluff Point Culvert Project in Groton was completed in June 2005. This project involved the removal of three culverts and the replacement of larger 24-inch diameter culverts to allow more tidal flow. Also, a 200-foot open channel was excavated to another marsh. Funding was provided by Save the Sound, USFWS, National Resource Conservation Service WRP, Connecticut Duck Stamp Program, and the DEP.

The Davis Pond Water Control Structure Project in East Lyme was completed in July 2005. It involved the installation of two water control structures with 18-inch diameter culverts. The culverts will allow salt water to enter into the pond during certain time periods. Funding was provided by the USFWS and DEP.

The Lynde Point Marsh Restoration Project in Old Saybrook was completed in December 2005. Approximately 40,000 cubic yards of spoils were removed from 10 acres that had been filled in during the 1950s. The spoil material was graded on an adjacent site and made into a five-acre warm season grass area. Funding was provided by the USFWS National Coastal Wetlands Conservation Grant, Ducks Unlimited through NOAA, Borough of Fenwick, Lynde Point Land Trust, CT Corporation Wetland Restoration Partnership, USFWS Partners for Wildlife, and DEP.

The invasive plant, *Phragmites*, was controlled on 501 acres throughout the state. The DEP was responsible for 211 acres, while Ducks Unlimited (DU) funded work on 290 acres with a grant from the USFWS North American Wetlands Conservation Grant. DU was responsible for sites at Ayers Point in Old Saybrook and Back River and Upper Island in Old Lyme. Over 65 sites were investigated and sprayed with herbicide and mowed, if needed, to control *Phragmites*. Some of the sites were treated five years ago and required no spraying. Control efforts for *Phragmites* usually begin the day after Labor Day and continue until December 30.

once in August and once in September 2005. Twelve towns, including six historic and six potential sites, were surveyed for roosts. Three active roosts were located. Counts from active roosts ranged from 50 to more than 200 birds, depending on date and location.

A new early successional nesting avian species survey was initiated. During June and July, avian point count surveys and habitat measurements were conducted at 35 different properties in early successional habitats, such as grasslands, shrublands, woodland edges, and powerline right-of-ways. These surveys were conducted primarily on stateland and were designed to assess the distribution of common species as well as many GCN-listed (greatest conservation need) grassland and shrubland birds. Habitat measurements, including vegetation and landscape level characteristics, were taken at each of the survey points.

It was determined from a literature review that standard survey techniques would not be effective for detecting and monitoring barn owls. Sighting information was requested from the public through various birding organization meetings. Historic and potential barn owl nesting locations were searched for active breeding pairs. Breeding barn owls were detected at two locations. Nest locations were documented and regurgitated pellets were collected from each of the nesting sites. Pellet contents are currently being analyzed. Additionally, barn owl nest boxes around the state were monitored for activity. No barn owl boxes were active. Plans are in place to erect and monitor additional nest boxes in

and 89 species were identified, five of which were considered target grassland species. The five target species detected were bobolink, eastern meadowlark, field sparrow, northern bobwhite, and savannah sparrow.

In April 2005, the Division participated in a cooperative radio telemetry study of Indiana bats in New York. The Indiana bat is a state and federally endangered species. Female bats (20) were fitted with radio transmitters and tracked to locate their summer roosting sites. One bat came to within eight miles of the Connecticut border. Data from this study are still being collected and analyzed.

Ten pairs of bald eagles attempted to nest in the state; 14 young eagles fledged from eight of the nests. One nest failed and one pair was only territorial and did not lay eggs. During the Midwinter Eagle Survey in January, 46 bald eagles were counted (20 adults, 25 immature eagles, 1 unknown).

Seven pairs of peregrine falcons attempted to nest. Fifteen young peregrines fledged from five nests; one nest failed and one pair only exhibited territorial behavior and did not produce any eggs.

Shoreline nesting locations for state and federally threatened piping plovers and state

suitable habitat along the Connecticut coastline.

Field surveys for grassland dependent birds were conducted. All points were surveyed at each site twice. The first survey took place in the first two weeks of June and the second took place prior to July 15. All grassland areas surveyed in 2004 were assessed to determine their suitability as grassland bird habitat. Twenty-three sites were established statewide for the 2005 survey. Sixty-one points were surveyed

threatened least terns were fenced for protection. Thirty-four pairs of piping plovers fledged 55 young, while 216 pairs of least terns fledged 70 young. Forty-four pairs of state-endangered roseate terns that nest on Falkner Island in Long Island Sound fledged 36 young.

During the 15th field season of surveying for bog turtles, two historic sites were visited and no bog turtles were spotted. One new site was investigated, but no turtles were found there either.

An entomologist was contracted by the USFWS Silvio O. Conte National Wildlife Refuge, and assisted by the Wildlife Division, to monitor adult and larval populations of Puritan tiger beetles. These rare beetles are only found in New England at two areas on the Connecticut River—one in Connecticut and one in Massachusetts.

In August 2005, construction on the Route 151 bridge in Moodus over the Salmon River required the replacement of the bridge supports. This activity could have threatened the existence of small populations of two state-listed freshwater mussel species, the tidewater mucket and the eastern pearlshell. An environmental consulting firm was hired by the construction company to relocate the mussels downstream prior to construction. Workers identified and moved 245 mussels of eight different species. Additionally, 15 individuals of the two state-listed species were marked with dental adhesive and tags for future identification.



Division staff collected biological data from deer taken by hunters to assess deer herd health during the 2005 shotgun/rifle deer hunting season. In this photo, MWC Bill Sahlmann (right) assists Wildlife Division Technician Andy Labonte with the collection of data.

In June, Division staff participated in BioBlitz, one of the largest science-based events that occurs in Connecticut. BioBlitz was hosted by the Center for Conservation and Biodiversity and Connecticut State Museum of Natural History. It is a biological inventory of an area in Connecticut in which scientists race to identify as many species as

possible in a 24-hour period. This year, 170 scientists from the University of Connecticut, DEP, and many other organizations explored a 2.5-mile radius around the CREC Two Rivers Magnet Middle School in East Hartford. Wildlife staff sampled mammals by mist-netting for bats, setting up track pits for small mammals, and searching for mammal signs. Staff also presented talks on bears, coyotes, bobcats, and bats, as well as led a small mammal tracking expedition for the general public. During the BioBlitz, 1,791 plant and animal species were identified.

Sightings of black bears, bobcats, and fishers were recorded as an index of population levels and distributions. Bear sightings remained at nearly the same level as in 2004. At least nine bears were killed by vehicles, the same as in 2004. The winter dens of 13 radiocollared female bears were inspected. Nine of the sows were expected to have newborns. Of those nine, six had newborns with an average of 1.8 cubs per litter. The poor acorn crop in 2004 probably led to lower reproduction. Bobcat and fisher sightings decreased slightly from 2004 but were at levels seen in recent years. The majority of bobcat sightings come from western Connecticut while the majority of

1,701 pelts were tagged, which remained near the levels seen in recent years.

Trapping permits (91) were issued on 47 of the 83 state land parcels. State land harvests are generally 10-20% of the statewide harvest totals.

Carcasses of 55 river otters were examined for age and reproductive information. Reproductive indices for this sample were similar to those observed over previous seasons. Twenty-five coyotes, 38 fishers, and 17 bobcats were examined for age and reproductive information, as well as food habits.

Despite drought conditions throughout most of the summer, Connecticut had its share of mosquitoes and, although there was no Eastern Equine Encephalitis (EEE) virus activity in Connecticut this year, West Nile virus (WNV) was prevalent. The Connecticut Agricultural Experiment Station tested over 111,700 mosquitoes in 2005 (considerably lower than recent years due to drought) and detected 34 isolations of WNV from five different species of mosquito.

These isolations were found in eight towns throughout lower Fairfield and New Haven counties. Wildlife Division staff, in conjunction with the Department of Public Health (DPH) and local health departments, followed up on 703 dead bird sightings and collected dead birds for WNV testing. The DPH tested 75 dead birds that were collected from 14 towns. Twenty-one birds (including 17 crows, 3 blue jays and 1 sharp-shinned hawk) tested positive for WNV. There were six confirmed human cases of WNV, including the death of an elderly man in New Britain. The other cases were reported from Stamford, Darien, Fairfield, Simsbury, and

East Haven. Those who were afflicted exhibited WNV symptoms from late August through September, with most cases reported too late in the season to provide effective mosquito control. This is consistent with virus activity in years past, demonstrating that the risk is highest in late summer and early fall. The six human cases of WNV in 2005 compares to only one case in 2004 and 17 cases in 2003. There have been 48 reported human cases, including two deaths since 1999 when WNV was first detected in Connecticut.

Management

The Division continues to work with towns in evaluating and implementing deer management activities on a local level,

Federal Aid Enhances Hunter Education Opportunities

Extensive range renovations and reconstruction were completed at the Glastonbury Public Shooting Range, located in Meshomasic State Forest. This project was made possible due to federal funds earmarked for the enhancement of Connecticut's Hunter Education Program and public shooting opportunities. These federal funds were derived from excise taxes on sporting arms and equipment. Renovations consisted of the construction of a 10 position covered shooting station, a separate spectator building, access improvements, and enhanced handicapped accessibility. The range was staffed by seasonal range officers and operated on weekends during limited hours through November 2005. The range will reopen in April 2006 following closure for the winter period. A project to rebuild a field archery range, located in the Nye Holman State Forest in Tolland, was initiated using the services of a local Boy Scout Troop and Eagle Scout candidate. Materials for the project were purchased with federal hunter education funds.

especially in more developed areas of the state, such as Fairfield County. In recent years, use of bait during the hunting season and issuance of free replacement antlerless tags have been used to increase deer harvest rates in Fairfield County and the shoreline towns. In 2005, a new "earn-a-buck" program was initiated in these areas to provide hunters additional incentives for harvesting antlerless deer (females). After hunters harvest three antlerless deer, they are reissued a free replacement antlerless tag and a free either-sex tag for harvesting an additional buck. The Division has worked with many towns in Fairfield County in evaluating and assisting with the development of deer management programs at the local level.

A deer management plan developed and implemented for the Bluff Point Coastal Reserve in Groton has reduced the deer herd from about 222 deer per square mile to about 20 deer per square mile. In 2005, nine deer were removed by sharpshooters to maintain the deer population at acceptable levels.

Residents of the Mumford Cove community in Groton were surveyed to assess their opinions and experiences with deer in their community. Mumford Cove historically had a deer population of around 80 deer per square mile and many residents complained about the size of the herd. The community voted to implement a controlled deer hunt in 2000 to reduce the population to about 10 deer per square mile. Hunters using bait and replacement tags have maintained the population at low levels from 2001 to 2005. Of 120 surveys mailed, 109 were returned. Preliminary results indicated that an overwhelming majority of residents were pleased with the results of the deer management program and that cases of Lyme disease in the community have dropped

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The completion of several wetland restoration projects along Connecticut's coastline improved habitat for waterfowl and waterbirds, like this great egret.

fisher sightings originate from eastern Connecticut.

Licensed trappers were surveyed to determine furbearer harvest levels, trapper activity levels, the amount of trapping to resolve problems, the incidence of mange in trapped animals, and to gather information on the sightings of bears, bobcats, and fishers. Furbearer harvests remained near the level seen in the 2004 trapping season. Over half of the 900 beavers harvested were taken to resolve problems, as well as nearly 25% of the coyote and raccoon harvests. Trappers indicated that beavers, coyotes, and fishers are more abundant than five years ago while muskrats and raccoons are less abundant.

Pelt tagging was used to obtain harvest numbers for six furbearer species. A total of



Due to a change in regulations, coyote land trapping training was offered for the first time to trappers who wish to take part in the newly established coyote land trapping season.

substantially.

During the 2005 spring turkey hunting season, 7,050 hunters harvested 2,016 wild turkeys. Birds were harvested from 150 of 169 Connecticut towns. Spring turkey hunters generated \$98,700 in permit sales and an additional \$1,131,431 in turkey hunting related expenses.

An analysis of the September resident Canada goose season extension was conducted to determine if it had any impact on migrant goose populations. Band recovery data and harvest estimates were examined, and goose surveys were conducted as part of the evaluation. The September goose season and the extension to the end of September have resulted in increases in hunting opportunities and the harvest of resident geese. At the same time, the extended season posed minimal impact to migrant geese.

A survey was sent to duck hunters to assess their eating habits of the ducks they harvest and to determine if the consumption of ducks poses any risk towards human health. Ducks will be collected from various parts of the state and tested for contaminants. Once that data is collected, the risk, if any, to duck hunters and their families can be assessed. The eating habits of duck hunters and their families also play a large role in the assessment of risk.



A new parking area, along with an informative sign, were established at Housatonic River WMA.

Wildlife assessments were conducted at East River Wildlife Management Area in Guilford to determine the impact of a wetland restoration project completed six years ago.

A project proposal was developed for the restoration and refurbishment of water control structures at three inland impoundments.

The Wildlife Division's habitat management goal continues to be the enhancement and diversification of early successional stage habitats on wildlife management areas (WMAs). Funding comes from a

variety of sources, such as the Federal Aid in Restoration Program, USFWS Ecosystem Branch, Natural Resource Conservation Service's Wildlife Habitat Incentives Program (WHIP), and the DEP. Several projects on state land were directed at meeting this goal.

Old fields and grasslands were brushmowed at 12 WMAs, totaling 388 acres (Goshen, Simsbury, Skiff Mountain, Cromwell Meadows, Roraback, Bear Hill, Flaherty, Babcock Pond, Higganum Meadows, Charter Marsh, Nod Brook, and Bartlett Brook). Fifty-eight acres of early successional habitats were restored/enhanced through prescribed burning at Bartlett Brook, Higganum Meadows, Naugatuck State Forest, and Shenipsit State Forest.

A contracted brontosaurus (drum style mower/mulching machine) was used on three sites (Harkness State Park, Higganum Meadows, and Housatonic River WMA) to restore 45 acres of old field/grassland habitat. One thousand acres of agricultural-early successional stage habitat were maintained through the administration of 50 agricultural agreements.

Thirty-three acres of native warm season grasses (big bluestem, little bluestem, indian grass, switchgrass) were planted at Quinebaug WMA. Contract herbiciding was used at Roraback and Skiff Mountain WMAs to control invasive plant species within 48 acres of old field/grassland habitat.

Vegetation was treated with a combination of brush mowing, manual cutting, and herbiciding at 17 impoundments on state land as a strategy for maintaining

structural integrity of the earthen dikes. Beaver debris was removed from 12 sites where beaver activity was interfering with water level management.

A survey was mailed to all youths that purchased turkey hunting permits during the 2005 spring season. The survey was designed to assess participation in the youth turkey hunting day and to identify potential ways to increase opportunities for youth hunting. Of 313 surveys mailed, 274 were returned. In January 2006 the Division plans to mail a similar survey to youths that purchased deer hunting permits, as well as to youths that graduated from a Conservation Education/Firearms Safety course in 2005.

Public access for small game hunting was secured through renewals or new agreements with 27 landowners, totaling 3,285 acres.

During the fall hunting season, 19,142 adult ring-necked pheasants were purchased



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The Wildlife Division annually receives numerous requests for information and assistance regarding nuisance wildlife problems or "orphaned" animals. Many of the requests are referred to Nuisance Wildlife Control Operators or volunteer wildlife rehabilitators.

for release on 54 state-owned, state-leased, and permit-required hunting areas. Cooperative sportsmen's clubs also released pheasants at seven public hunting areas. The Wildlife Division continues to use volunteers to assist with stocking efforts on several public hunting areas.

For the second straight year, the Wildlife Division was awarded a National Shooting Sports Foundation, Hunting Heritage Partnership Grant to support youth hunting initiatives and hunter retention. The 2005 grant was awarded for the purchase of pheasants for private sporting organizations that host youth pheasant hunter training events. Grant funding enabled the sponsorship of 25 events statewide. Most of the events were held on October 8, the state-designated "Junior Pheasant Hunting Day." Adult instructors are able to mentor junior hunters in safe upland hunting practices on a one-to-one basis.

The falconry regulations approved by the Connecticut General Assembly's Regulation



Wildlife Division Director Dale May spoke at a dedication ceremony held at Belding WMA in Vernon that honored Maxwell Belding and his family for their generosity.

Review Committee were subsequently approved by the USFWS on June 15, 2005, thereby allowing Connecticut to implement its first ever falconry permits. In 2005, the DEP administered 14 falconry examinations and conducted inspections of eight falconry facilities. All eight facilities were approved, and Connecticut now has eight active falconers, seven in the apprentice class and one in the general class.

The Division strives to provide safe, well posted, and accessible entry to WMAs for management, law enforcement patrol, and permitted uses by the general public. To help accomplish this goal, five WMA entrance signs were installed at Kollar, Eight Mile River, Belding and Zemko Pond WMAs, and at Glastonbury State Forest. Such signs provide maps, general hunting information, federal aid funding recognition, and brochures on habitat management activities and safety guidelines for hikers, hunters, and horse users. One vandal resistant gate also was installed to control access at Zemko Pond WMA. Several WMA entry ways were maintained by herbiciding parking areas, mowing entrance ways, painting gates and signs, and replacing regulatory signs. A total of 3,500 feet of access roads were re-

graveled, 7,000 feet of roads were regraded, and two parking areas were established at Housatonic River and Goshen WMAs. Boundaries also were posted on six WMAs totaling 28 miles.

Technical Assistance

Wildlife Division staff members spend a considerable amount of time responding to the continuous flood of requests for general wildlife information and help in resolving wildlife problems

and concerns. Many of the problems involve common wildlife that are well adapted to living near people, such as coyotes, foxes, geese, deer, raccoons, skunks, and beavers. For problems involving beavers, deer, bears, and geese, on-site inspections and assistance in resolving severe agricultural, ecological, or public health and safety damages are often required. Complaints regarding black bears increased during 2005 and originated almost exclusively from northwestern towns. Complaints included 115 cases of bears visiting or damaging birdfeeders, four reports of bee hive damage, 19 reports of raided garbage, 15 cases of livestock or pet attacks, seven cases of damage to buildings, and two home entries. These numbers should be viewed as a sample because many problems are not reported. Staff set live traps for bears at nine problem sites and responded to five cases of bears in urban areas. Tranquilizer team members also responded to five situations for possible moose tranquilization. The Division processed 115 deer damage complaints and 275 beaver complaints requiring 103 on-site deer damage inspections

and 96 beaver inspections.

Technical advice on solving nuisance waterfowl problems was provided to town health departments, school and recreational facilities, and landowners. Numerous federal goose depredation permit applications were reviewed and commented upon.

The Division regulates Nuisance Wildlife Control Operators (NWCOs) who provide commercial wildlife control services to persons seeking help in resolving common wildlife problems. In 2005, there were 302 licensed NWCOs and 59 individuals completed NWCO training.

Each year the Division responds to hundreds of calls from the public regarding sick, injured, and orphaned wild animals. Because the Division does not have the resources to provide care for these animals, it relies on a network of volunteer wildlife rehabilitators that consists of private individuals, staff at nonprofit 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 243 individuals authorized to care for animals in need. Of that group, five individuals are authorized to care for orphaned fawns and 37 are recognized as having the specialized training and authorization for handling rabies vector species (RVS; skunks, raccoons, and foxes). In addition, 66 individuals have federal permits to care for migratory birds. In 2004, wildlife rehabilitators cared for 11,412 animals, which included 7,433 birds, 3,847 mammals (142 of which were fawns), 132 reptiles and amphibians, and 535 RVS. Approximately 7,472 of the animals cared for were released back to the wild.

Division staff reviewed 57 land acquisition proposals, one proposed land use change, and 32 municipal open space acquisition grant applications. Staff also participated in the development of 20 forestry management plans and the review of 10 DEP internal project proposals.

Through ongoing funding provided by the USFWS Partners Program, habitat enhancement was accomplished on three private land parcels totaling 30 acres.

The Landowner Incentive Program (LIP) provides technical guidance and financial cost sharing to landowners willing to work cooperatively with the Wildlife Division to undertake projects on their land benefiting at-risk species of plants and animals and their supporting habitats. LIP can provide up to 75% of the cost of a project, with a 25% non-federal match required. Funding for this program has

Searching for Shrews

A project to assess the status and distribution of the least shrew along coastal Connecticut was conducted this year. The least shrew is a species of regional conservation concern, as well as Connecticut's only state-endangered mammal. A number of volunteers helped Division staff conduct this survey at 11 sites along the coastline during the summer and fall of 2005. Only two of the 11 sites produced any shrew captures, with only one site producing captures of the least shrew. Efforts to learn more about least shrews will continue in 2006.



This least shrew was captured during a research project and given water before being released.

R. MAZUROSKI

A New Classroom and Pavilion for Sessions Woods

The Division's Sessions Woods Conservation Education Center in Burlington continues to be a destination for school and scout field trips and the general public. A new classroom has been completed in the building through funding by the Friends of Sessions Woods and a grant from the Main Street Community Foundation and the Merriman Family Fund. Visitors can enjoy hands-on materials and a quiet space for reading wildlife-related materials or viewing films and videos. A pavilion was recently completed by students from Oliver Wolcott Technical School in Torrington to provide outdoor space for programs. The pavilion was funded by a grant awarded to the Friends of Sessions Woods from the Clinton S. Roberts Foundation.



Students from Oliver Wolcott Technical School in Torrington attach shingles to the roof of the pavilion they built at the Sessions Woods WMA in Burlington.

ceremony was held in August to honor Maxwell Belding and his family for their generosity.

The 330 volunteer Conservation Education/Firearms Safety (CE/FS) instructors donated 13,479 hours of service to graduate 3,961 students from 151 courses (firearms-83, bowhunting-63, trapping-5). The home study version of the CE/FS firearms course continued to be offered

as an alternative for students who are unable to attend the traditional classroom course.

Five home study courses were

held, with 72 students completing the program.

Due to a change in regulations, coyote land trapping training was offered for the first time to trappers who wish to take part in the

been made possible through a grant from the USFWS. Applications were accepted for LIP projects for the first time this year. The Division received 117 applications during the open application period (70 from landowners, four from corporations, nine from sportsmen's clubs, 17 from land trusts, seven from non-governmental conservation organizations, and six from various other private groups). Inspections are currently being conducted for projects deemed eligible.

Education and Outreach

The fifth Master Wildlife Conservationist Program series provided training to volunteers that then assist with outreach and research efforts initiated by the Wildlife Division and other environmental organizations. There are currently 54 active MWCs who contributed 2,400 volunteer hours in 2005.

The Division organized displays and exhibits at 18 public events, including fairs in

Hartford, Woodstock, Madison, Essex, Sharon, and Westport. The Woodstock Fair, with over 250,000 attendees, continues to be the largest event for the Division.

Division staff and volunteers presented at least 140 wildlife programs to school and scout groups and the general public. Topics included wildlife management and conservation issues, emphasizing federal aid projects. Twenty-five of the presentations were given to over 800 attendees regarding habitat, nonnative invasive plants, and the development of educational trail systems. The Division also participated in the Cooperative Extension Service's Coverts Program.

Presentations were given to town officials in Middlesex, New Haven, and New London Counties regarding Canada goose management. The Division also hosted the winter meeting of the Atlantic Flyway Council

Technical Section in Mystic.

In 2005, the Belding Charitable Trust provided funding to monitor wildlife populations, manage habitat, and provide environmental education at the Belding WMA in Vernon. A butterfly garden was planted by the Vernon Garden Club, an interpretive trail was developed, and educational programs on habitat were provided to school groups and the public. Wildlife surveys were conducted to monitor response to future habitat management. A

newly established coyote land trapping season which runs from December 1, 2005, through January 31, 2006. Coyote land trapping may only occur on private property (minimum of 10 acres) by trappers who have the land trapping certificate of completion and specific permission from the landowner to land trap coyotes. Six courses of the specialized training were offered prior to the beginning of the season. In the future, land trapping training will be an optional extension of the regularly scheduled CE/FS trapping education courses.

Major exterior renovations were completed at the Division's Franklin facility, which is used extensively by the CE/FS Program.



Historic and potential barn owl nesting locations were searched for active breeding pairs and breeding barn owls were detected at two locations.



Results of a breeding black duck survey indicate that breeding black ducks are extremely rare in inland Connecticut. Human disturbance during the breeding season may be a critical factor.

P. J. FUSCO (3)

Short Range Divers - The Bay Ducks

Written by Paul Fusco, Wildlife Outreach Program

Bay ducks are a tribe of diving ducks that breed primarily in northern boreal forest, tundra, and prairie pothole regions of Canada and the western United States where most nest on the ground. They migrate to large lakes, sheltered bays, and coastal inlets for the winter. They never winter out to sea. Bay ducks are members of the diving duck family, which are split into three groups, bay ducks (*Tribe Aythya*), sea ducks, and mergansers (both *Tribe Mergini*).

Like all diving ducks, bay ducks have a lobed hind toe, which separates them from dabbling ducks, such as mallards. Bay ducks have legs set far back on their bodies, giving them expert swimming ability underwater. They frequently inhabit deeper water than dabbling ducks, but not as deep as the sea ducks. When feeding, they will dive from the water's surface, using their legs to swim underwater as they forage.

All diving ducks, including bay ducks, have a smaller ratio of wing size to body size than dabbling ducks. When taking flight, diving ducks need to run across the water's surface to gain enough



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Connecticut's greater scaup population has experienced a dramatic population decline over the last 50 years.

speed to get airborne. Dabbling ducks typically use their legs and feet to "jump" straight into the air to take off.

Male bay ducks have dark rumps and breast plumage. Their heads are either iridescent or reddish in color. Bay ducks do not have a speculum (brightly colored iridescent secondary feathers in the wing). When seen in flight, bay ducks have a variably two-toned appearance of the wings. All females in the bay duck tribe have brownish plumage.

Many bay ducks winter in Connecticut, typically in large flocks called rafts, in the sheltered waters of harbors, estuaries, and tidal ponds. They feed primarily on aquatic plants, although scaups consume more mollusks than the other bay ducks. Five species of bay ducks are found in Connecticut.

Canvasback

An uncommon winter visitor to Connecticut, the canvasback may be found at tidal marshes and coastal bays that have a plentiful food supply in the form of aquatic vegetation. Large numbers of canvasbacks winter in the mid-Atlantic region to our south.



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Ring-necked ducks have a dull chestnut colored collar that is almost impossible to see in the field.

Bill shape and profile are important factors in identifying bay ducks. Canvasbacks have a long sloping forehead and black bill which are diagnostic in separating this species from the similarly plumaged redhead.

Canvasbacks have rapid wing beats and are known for their fast flight. Most duck hunters consider them a challenge.

Redhead

Very common in their breeding range of the interior mountain wetlands of western North America, redheads rarely overwinter as far east as New England. Historically, redheads were abundant breeders in the Great Plains. Their numbers have declined because their habitat has been lost to agriculture. Although redheads are rare in Connecti-



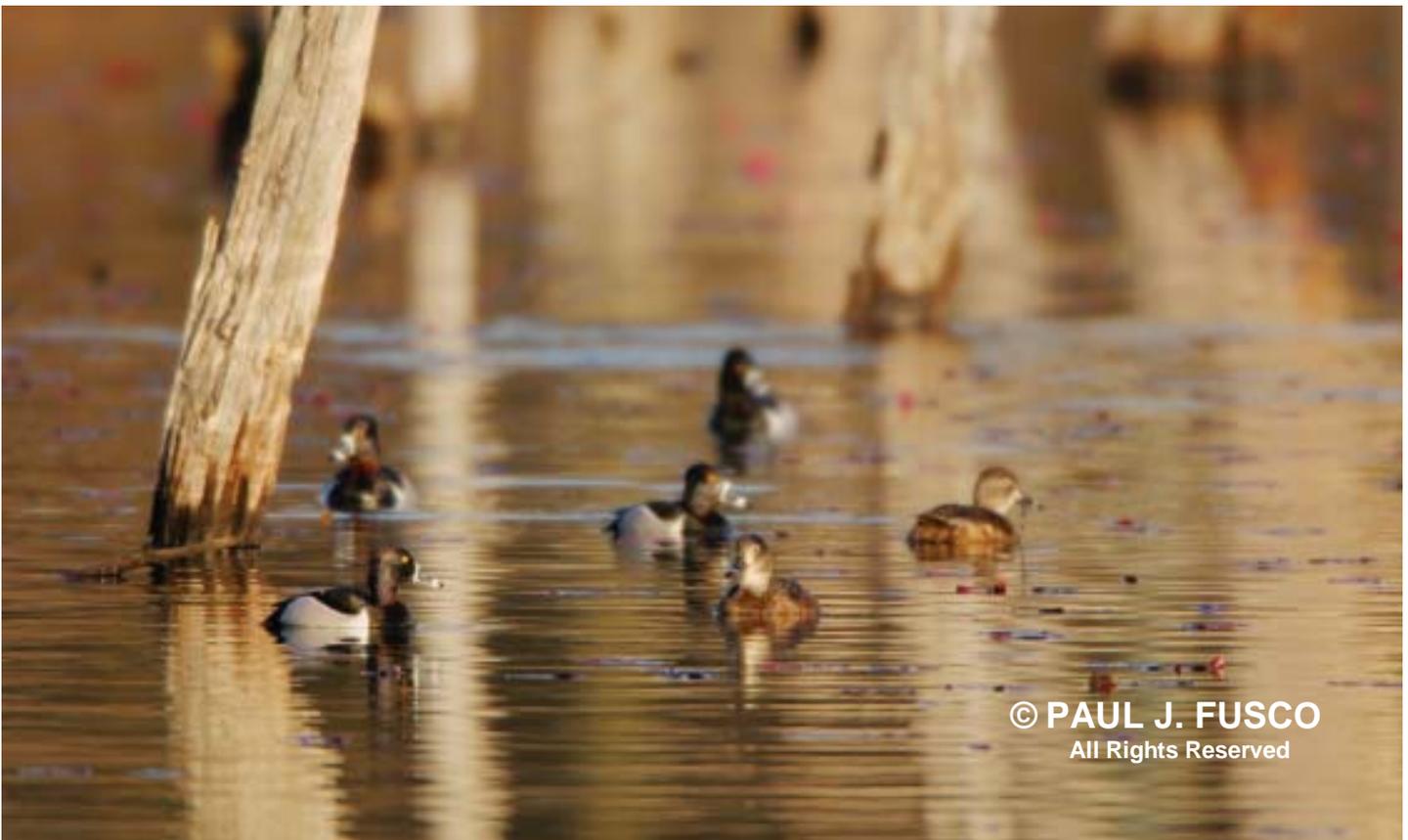
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Canvasback drakes have a brownish-red head, black breast, and pale flanks and back, while females are brown.



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Lesser scaup prefer shallow freshwater ponds, but can sometimes be found in tidal areas in Connecticut during winter.



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Ring-necked ducks are frequently found in wooded ponds, such as beaver impoundments, during early spring.

cut, they do occur with regularity in small numbers. Some of the most likely places for redheads to show up are at coastal tidal ponds, sheltered harbors, or major rivers.

Redheads often fly in tight formations, low over the water. They have rapid wing beats and fly with little dodging or flaring.

Ring-necked Duck

Ring-necked ducks are associated with forested wetlands and ponds more than the other bay ducks. They are most plentiful in Connecticut during spring when wooded ponds and beaver impoundments are thawing out from winter.

Many people think the ring-necked duck should be named ring-billed duck because of the conspicuous white ring on the otherwise dark bill. The namesake neck collar is extremely difficult to see in the field. Ring-necked ducks have a rapid and agile flight pattern.

Greater Scaup

Once abundant winter visitors, which are now much less common, greater scaup have been experiencing a serious population decline. They breed in northern latitudes of Canada and Alaska,

and migrate to the northeastern United States for the winter. According to DEP surveys, the population in Connecticut numbered in the tens of thousands as few as 10 years ago. In 2004, only 1,900 were recorded in winter surveys. Large rafts of greater scaup can reliably be seen in New Haven Harbor and surrounding areas of Long Island Sound from Norwalk to Branford during winter. Researchers have been studying greater scaup to find out why their numbers have dropped significantly.

Greater scaup frequently feed on thin-shelled mollusks in Long Island Sound. Small surf clams are among their favorites.

Lesser Scaup

Lesser scaup are at home in the Canadian prairie pothole region where they breed in small ponds and marshes with shallow water. They prefer fresh water in winter, while their close relative the greater scaup is often found in open salt water. Sometimes, a few individuals will be found mixed in with large rafts of



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Redheads have a pale gray bill that is tipped with black.

greater scaup along the coast. In Connecticut, lesser scaup are not as common as greater scaup.

Lesser scaup have a short white wing stripe through the secondary feathers, with the primaries being dark gray. Greater scaup have a longer white wing stripe that goes through the secondaries and most of the primaries.

Head shape is a field mark that will help in identifying the scaups. The greater has a rounded or slightly flat head profile, while the profile of the lesser is more pointed toward the rear of the crown.

Early Successional Habitat Avian Surveys: Determining Statewide Distribution for Shrubland Nesting Birds

Written by Shannon Kearney-McGee, Wildlife Diversity Program

During June and July, the DEP Wildlife Division coordinated avian surveys in early successional habitats, such as grasslands, shrublands, woodland edges, and powerline right-of-ways. These surveys were conducted on primarily state-owned land and were designed to assess the distribution of common species, as well as many grassland and shrubland birds listed as species having "Greatest Conservation Need" (GCN). Greatest Conservation Need species may be endangered, in decline regionally or statewide, or lacking data on their population status. In order to guide land protection efforts, habitat management, and future research, the Wildlife Division needs to track population trends for these birds and identify areas where they may still be relatively abundant.

Targeted GCN species included yellow-billed and black-billed cuckoos, alder and willow flycatchers, prairie warbler, golden-winged warbler, yellow-breasted chat, eastern towhee, and brown thrasher. Surveys were conducted by Wildlife Division staff, with the help of volunteers, at 35 properties around the state. The total number of all species recorded for each property ranged from 11 to 47, with an average of 29 different species. Many GCN-listed species were detected during the surveys. The total number of GCN-listed species that were recorded for each property ranged from a low of four to a high of 21, with an average of 13 different species. The most commonly observed GCN species included gray catbird, eastern towhee, veery, and blue-winged warbler. Two of the most important GCN species, the golden-winged warbler and the sedge wren, were detected during the surveys.

Early Successional Habitat Avian Surveys were efficient for detecting common, vocal birds, such as gray catbird and eastern towhee. However, additional surveys and alternative methods should be used to more adequately determine the distribution and habitat requirements of some of the more elusive species. For example, brown thrashers sing more

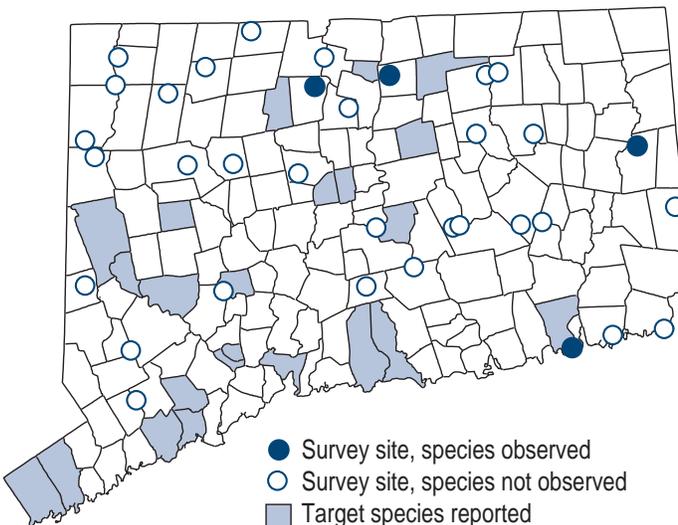


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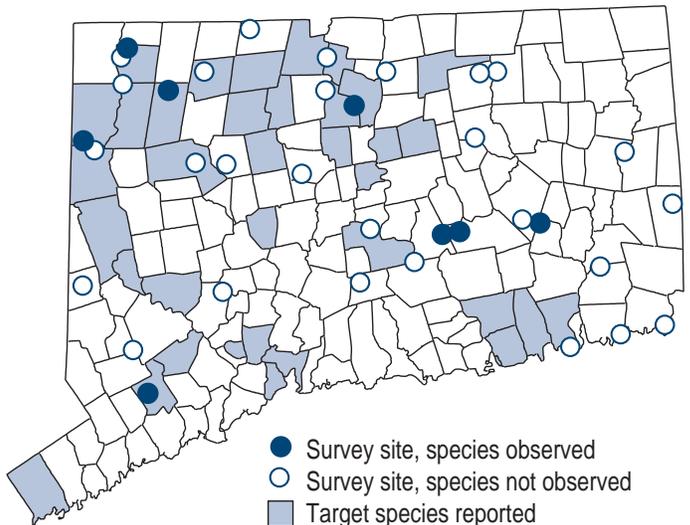
P. J. FUSCO

Early successional habitat birds, like the black-billed (above) and yellow-billed cuckoos, were the focus of a recent bird survey.

Brown Thrasher



Black-billed Cuckoo



actively in May, and may be better detected if an additional survey period was added in that month. Other species may alter their vocalizations by time of day. For example, the willow flycatcher may vocalize similarly to the alder flycatcher at dawn, resulting in a possible incorrect identification during early morning surveys. These flycatchers may require a survey that occurs later in the day. Extremely rare species, such as yellow-breasted chat, olive-sided flycatcher, and northern parula, may deserve more directed survey efforts that focus upon their specific habitat characteristics. Additionally, species like yellow-billed and black-billed cuckoos have mobile distributions that correlate highly with available food. These populations should be monitored and mapped along with insect outbreaks.

Because the surveys only occur on state-owned land, the Wildlife Division is seeking additional information about sightings on private land. If you have any information on GCN-listed early successional nesting species on your property or from other locations, please contact Shannon Kearney to report your sightings (shannon.kearney@po.state.ct.us; 860-675-8130).

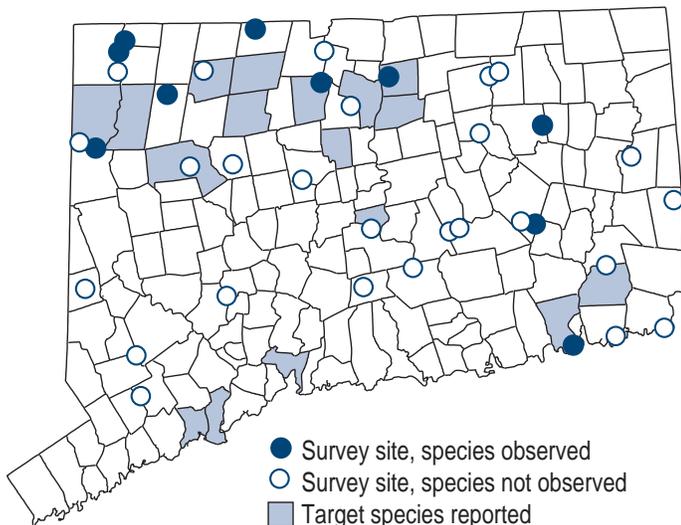


Early Successional Habitat Avian Surveys were efficient for detecting common, vocal birds, such as eastern towhee (above) and gray catbird.

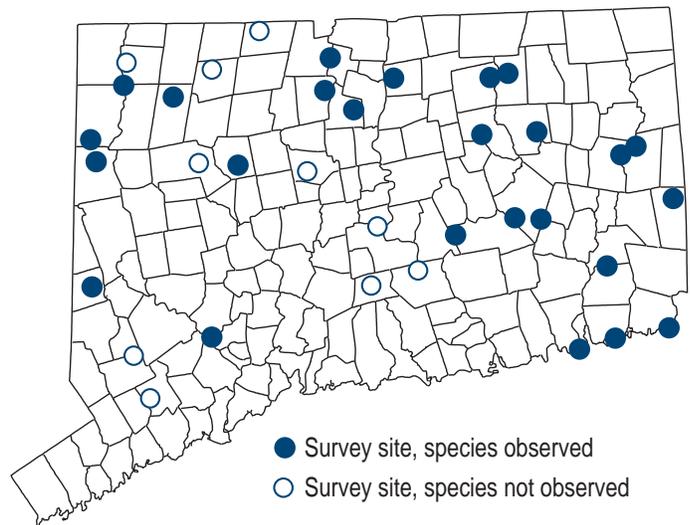
The full list of GCN species is available online at the DEP's website: www.ct.gov/dep.

The State Wildlife Grants program provides funds for conservation efforts aimed at preventing wildlife and fish populations from declining, reducing the potential for these species to be listed as endangered. In order to access these grant funds, Connecticut was required to develop a Comprehensive Wildlife Conservation Strategy (CWCS) that focuses on the "species of Greatest Conservation Need." This includes those species that are deemed rare, imperiled and those for which status has not been established. Look for more information on Connecticut's CWCS in future issues of Connecticut Wildlife.

Alder Flycatcher



Eastern Towhee



Going Squirrely Over Tree Squirrels

Adapted from Connecticut DEP Wildlife Division species information sheets

Most Connecticut mammals are not readily observed unless you make an effort to find them or you see one by chance. However, the gray squirrel is one mammal you can count on seeing regularly. Gray squirrels have always been numerous throughout the state, preferring to inhabit hardwood forests. However, as some woodlands have been cleared for houses, agriculture, and industry, gray squirrels have been able to adapt and disperse, becoming quite at home in residential yards and urban parks. Their antics, as they search for food or raid birdfeeders, can provide hours of viewing enjoyment. They also

can make pests of themselves by taking shelter in houses or becoming unwelcome guests at birdfeeding stations.

Because the gray squirrel is so commonly seen, few people realize that another tree squirrel makes its home in Connecticut. The red squirrel's reliance on hardwood/coniferous forests limits its distribution in the state. However, it is considered a common Connecticut resident and has been through the years. The red squirrel population has declined somewhat with the cutting of white pine in the past and the elimination of other conifers (mainly as a result of disease) in some areas of the state.



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Common throughout Connecticut, the gray squirrel adapts to just about any kind of habitat.

Gray Squirrel

The gray squirrel is the largest of the Connecticut squirrels. Individuals can weigh between one to one-and-a-half pounds and measure from 16 to 21 inches. The broad, bushy tail is about the length of the head and body combined. Gray squirrels can come in different colors. Silver-gray is the most common, followed by shades of brown. The belly is usually white. There also are pure white and pure black squirrels, but both are variations of the gray squirrel.

Gray squirrels eat a variety of mast (hard fruit), including acorns, hickory nuts, beechnuts, and butternuts, along with berries, mushrooms, maple seeds, and some field crops, such as corn. They also will readily take advantage of sunflower seeds and other foods offered at backyard bird feeders. Populations of gray squirrels can change dramatically in just a few years, depending on the food supply (see sidebar).

The mating season is in late winter and spring. After a 44-day gestation period, female gray squirrels give birth to a litter of two to seven young. The young are



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This black squirrel is just a color variation of the gray squirrel.

blind and helpless at birth but are weaned and somewhat independent at eight to 10 weeks of age. A second litter is usually born in July. The nest is often in a tree cavity or constructed of leafy branches in the treetops. These leaf nests also are used for temporary protection against inclement weather and predators.

Gray squirrels are active year-round but need tree cavities for shelter during harsh weather. In the fall, they gather and bury, at random, a winter food supply. This food supply is usually recovered as needed, by sniffing the ground until a buried nut is found.

These tree-dwelling rodents are agile climbers and jumpers. They have keen senses of sight, smell, and hearing and are alert, nervous, and wary, especially on the ground. When danger is near, gray squirrels quickly retreat to the safety of the trees. They are somewhat sociable and can tolerate other squirrels nearby.

Gray squirrels are a popularly hunted small game species in many parts of the United States, including Connecticut. Consult the current *Connecticut Hunting and Trapping Guide* for hunting guide-

lines and information. (The guide is available at Wildlife Division offices, town halls, or on the DEP website at www.ct.gov/dep.)

Red Squirrel

The red squirrel is small, about half the size of the gray squirrel. It measures from 11 to 14 inches long and weighs approximately seven ounces. Its bushy tail is somewhat slender and almost as long as the length of its head and body combined. The coat of the red squirrel is a rusty, reddish-brown in summer, turning slightly grayer in winter, and the underside is white. In summer, a black stripe is pronounced along its sides, separating the white underside from the reddish, upper body. Both males and females are about equal in size.

Typical red squirrel habitat is mixed hardwood and coniferous forests, with the presence of spruce, hemlock, pine, or fir trees. Red squirrels will nest in ground burrows, tree cavities, and leaf nests. These tree-dwelling rodents are agile climbers and jumpers. They are active year-round but will take shelter during harsh weather. With their keen senses of sight, smell, and hearing, red squirrels are alert, nervous and wary, especially on the ground. When danger is near, they quickly retreat to the safety of the trees.

Red squirrels feed on a variety of nuts, fruits, insects, mushrooms, and seeds, although the green seeds of cone-bearing trees are preferred. In the fall, red squirrels will store nuts and seeds for the winter in piles in the ground, under logs, or at the base of trees. These piles are known as middens. Sometimes they will bury their food at random just as the gray squirrel does. Red squirrels also are known to “tap” sugar maple trees to harvest the sugar in the sap. They actually bite into the tree trunk, causing the sap to flow out on the trunk where they can lick it up.

Mating takes place in late winter and spring. About a month after mating, three to six young are born blind and helpless. Second litters have been reported in southern parts of the red squirrel’s range, but are uncommon in Connecticut. The young red squirrels develop slowly and may remain with the female throughout the summer.

Red squirrels are unsociable, highly territorial, and aggressive. They will not tolerate their own or other squirrel species in their territories. They also can

be very noisy and are sometimes nicknamed “chatter boxes.”

Squirrel Problems

Most complaints about squirrels are from homeowners with squirrels in their houses. Usually these complaints concern the presence of gray squirrels. Squirrels will readily take up residence in a building if access to sheltered areas, such as eaves and attic crawl spaces, is available. Gnawing, scratching, and pattering sounds, in early morning or daylight hours, usually signal

the presence of squirrels. Balls of torn insulation, cardboard, and dried leaves and twigs may pinpoint nests, but nests

continued on next page



The smaller red squirrel is not as commonly seen as the gray squirrel. It also is unsociable, highly territorial, and aggressive.

Hey - Where Are All the Squirrels?

In the fall, the Wildlife Division is usually fielding calls from Connecticut residents complaining about too many squirrels -- too many squirrels raiding bird feeders, too many squirrels raiding gardens, and too many squirrels getting into attics. This fall, however, the calls and emails were from people asking what happened to all of the squirrels. Some were wondering if there is a disease going around that is wiping out populations. Others were speculating that predators like coyotes and fishers are the culprits.

There is actually a simple and more likely explanation to the recent drop in Connecticut’s squirrel population. Squirrel populations are subject to large fluctuations in size. These fluctuations are closely associated with food availability. When food is readily available, squirrels have good survival and reproductive rates, and populations rise. Conversely, when food is scarce, mortality increases and reproductive rates drop. If food isn’t readily available, squirrels have to travel farther looking for food. When they have to travel farther, they become more vulnerable to predators and accidents, such as being hit by cars. Squirrels lacking good nutrition also are more prone to death due to disease and harsh weather. Those squirrels that do survive are in poor shape and have lower reproductive rates. So, populations crash. These boom or bust cycles are typical of many small mammal species.

For quite a few years, Connecticut had relatively high squirrel populations. This is because the oak trees in Connecticut’s forests had been producing large crops of acorns for several years. Acorns are the single most important food source that dictates the population health of Connecticut’s squirrel populations. Squirrels depend heavily on acorns to build up fat reserves that help them survive the winter. But in the fall of 2004, the acorn crop in most areas of Connecticut was quite poor. The DEP has been polling deer hunters about their perceptions of the acorn crop since 1993. In 2004 most hunters rated the acorn crop as scarce, the lowest recorded since the poll was initiated. Squirrels had a hard time finding food that fall. Those that did make it through the winter were probably in poor shape and had fewer young this past breeding season. It may take a couple of years for the squirrel population to rebound. Reports from the field indicate that the acorn crop this year was a little better than last year, but was still relatively low. Hickory nuts, another important food, were plentiful this fall. So, some squirrels should have been in fairly good shape going into winter. If they get through the winter, the females may have two litters with up to seven young in each litter. The population will start to rise again. If there is a good acorn crop next year, the population will continue to rise. And, in a couple of years, people will be calling and asking what to do about all the squirrels.

Squirrels

continued from previous page

and young may be totally concealed within eaves or wall spaces. Squirrels in house eaves and attics can damage insulation and electrical wiring and should be removed.

When blocking holes to prevent squirrels and other animals from gaining access, be sure that none are trapped

inside. Adults can cause severe damage by chewing to regain entrance to reach their young. If chewing persists, heavy, half-inch wire mesh can be temporarily placed over the problem area.

Trimming shrubs and vines and pruning overhanging tree limbs that are growing close to homes may discourage squirrels from entering houses.

Squirrels are highly excitable and can cause severe damage if trapped inside a building.

When frightened, they tend to run around a room, knocking over anything in their way. By quickly and quietly opening a door or window to the outside and leaving the room, you will give the squirrel its best chance to escape.

To free a squirrel

trapped in a chimney, lower a heavy rope down the chimney to provide a means for the animal to climb out.

The livetrapping of squirrels, using metal box traps (at least 2 feet long for gray squirrels), is often the most effective way to remove them. Place traps, baited with apple chunks, peanut butter, or various nuts, in heavily traveled routes or on rooftops, along porch railings, or within the attic. Once trapped, squirrels should be released as soon as possible.

Another major complaint about squirrels is the disruption they may cause at bird feeders. Feeders should be placed in an area where squirrels cannot gain access to them, far away from shrubs and overhanging tree branches. Mounting the feeder on a metal pole at least six feet high and attaching a metal, cone-shaped baffle to the pole will help prevent squirrels from reaching it. Hanging feeders are not recommended since squirrels will climb down the hanger wire or will shake the wire until the food falls to the ground.

For more information on the management of problem squirrels or for a referral to a licensed Nuisance Wildlife Control Operator, contact the Wildlife Division's Hartford office (860-424-3011) or visit the DEP website (www.ct.gov/dep).

P. J. FUSCO



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This white squirrel is yet another color variation of the gray squirrel.

Think Spring and Schedule a Visit to Sessions Woods to Learn About Wildlife!

Are you a Scout leader or teacher in Connecticut? Did you know that wildlife-related programming is available for small groups at Sessions Woods? The Wildlife Division's Sessions Woods Conservation Education Center in Burlington has exhibits and classroom space available for learning about wildlife. An on-site educator can present an indoor program or take a small group out for an interpretive walk on the trails. (Programs or walks should be scheduled in advance of any visits.)

The environment in which we live is ever changing, having many effects on wildlife populations. Bear sightings are on the rise in Connecticut due to the return of forests following the abandonment of farms in the late 1800s. Beavers, once gone, are back, creating wetland

habitat for a variety of wildlife. Coyotes have expanded their range eastward and are now common in many places in Connecticut. These real world situations can serve as important topics for students learning about environmental issues.

Children are motivated to learn in a hands-on environment. The new classroom space at the Sessions Woods Conservation Education Center has animal furs, skulls, and track replicas which children can investigate and see up-close.

The exhibit room contains several exhibits that are informative and interactive. Visitors can learn about turkeys, bears, white-tailed deer, and wildlife habitat.

Trails on the 700-acre property include three-mile and one-half-mile

loops on wide, gravel paths. The three-mile loop features many habitats, including beaver marsh, forest, vernal pool, and stream environments. There also is a tree identification guide to take along on a more rustic path.

A newly-built pavilion behind the Education Center provides a great place for conducting outdoor programs or for groups to have a picnic during their visit to Sessions Woods.

A visit to Sessions Woods can be a memorable and learning experience. If you are an educator or youth group leader, contact Wildlife Division Educator Laura Rogers-Castro (860-675-8130 or laura.rogers-castro@po.state.ct.us) to schedule a spring visit to Sessions Woods!

Native Plant Profile: *Red Cedar*

Written by Peter Picone, Habitat Management Program

Red cedar (*Juniperus virginiana*) can be beneficial to local wildlife populations. Because it is an evergreen, it provides thermal, nesting, and escape cover, as well as food in fall and winter. As a pioneer species, this small tree is usually the first to colonize abandoned fields. The heyday of this tree in Connecticut was during the farm abandonment era of the late 1800s and early 1900s. As the farm fields were abandoned, this plant dominated for a while, along with a whole community of pioneers, such as gray birch (*Betula populifolia*), pin cherry (*Prunus pensylvanica*), and gray dogwood (*Cornus racemosa*). As one takes a stroll through the sawtimber-sized forests of today, remnant skeletons of rot-resistant red cedar poles can easily be found still hanging on in the understory.

Connecticut's landscape is no longer conducive for growing red cedar. Older forests with sawtimber sized trees have crowded out old fields of alder. Often times, a patch of red cedar can be found struggling to grow under the tall

overstory of oaks, hickories, and maples. However, the cedars will eventually be smothered by the taller trees that usurp most of the sunlight. Habitat managers can play a role in rejuvenating red cedar patches by cutting out the competing vegetation and painting the cut stumps with a herbicide to prevent resprouting. Maintaining patches of red cedar helps retain winter cover and food for a variety of wildlife.

An important feature of the red cedar is that it is dioecious, meaning that red cedar trees are either male or female. The female trees have the benefit of providing both cover and berries for



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Many species of birds, including the yellow-rumped warbler, feed on the berries of red cedar in fall and winter when temperatures become too low for the birds to find insects for food.

wildlife. This is important to know, especially when purchasing trees for a planting. One male tree is all that is needed to pollinate a group of female trees. Maximizing the number of female trees is a good strategy for increasing berry production. Female trees, which usually have obvious berries, can best be determined in the fall. Interestingly, the bluish-white berry of the red cedar tree is technically a cone.

Eastern bluebirds, cedar waxwings, and yellow-rumped warblers will gobble up the berry-like cones of the red cedar. Observing a small flock of wild turkeys eating berries in a patch of cedars in a powerline right-of-way also is a sight to see. Mourning doves will build their early spring nests in cedars before most deciduous trees have any leaves. A favorite field observation by the author was watching a diminutive saw whet owl roosting in a cluster of three red cedars with two captured white-footed mice hanging on the branches alongside it.

Red cedar is only one component of a natural community of plants that helps maintain the habitat diversity of our landscape in Connecticut. Get your binoculars, put on your field shoes, and head out to see it for yourself.



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Red cedar provides a safe daytime roost with heavy cover that is frequently used by saw-whet owls during winter.

Help Is Needed to Find Chimney Swift Roosts and Nests!

Written by Shannon Kearney-McGee, Wildlife Diversity Program

Background

The Chimney Swift Survey Project is part of a three-year statewide initiative to more thoroughly assess the chimney swift population in Connecticut. These birds are often found foraging for insects over towns, cities, and rivers. The chimney swift has a dark gray, stubby, cylindrical body and very stiff wing beats, and has often been described as a flying cigar. Although it is not known how abundant the chimney swift population was during the pre-colonial period, the bird has been a common breeder in Connecticut through the 19th and 20th centuries. Historically, in autumn, chimney swifts gathered in enormous flocks around large chimneys before migration. Currently, this species appears to be declining, possibly as a result of fewer chimneys with broad openings and other characteristics suitable for nesting swifts. To learn more about the distribution and abundance of chimney swifts, the Wildlife Division is asking for help from the public. Information is needed on nesting and roosting locations in Connecticut.

Congregating/Roosting Chimney Swifts

As their name implies, chimney swifts often congregate and nest in large chimneys, but will also use ventilation ducts, walls of buildings, and other human structures. Chimney swifts do not perch like songbirds, but cling to vertical surfaces, and use deep shafts in which to raise their families and roost at night. Chimney swifts appear in Connecticut at the end of April or early May. Around the lengthening evenings of May, they will congregate at large building structures, such as abandoned factory chimneys or church towers. As they gather, they chatter and fly loosely in circles high over their chosen roost site. As the evening becomes darker, they begin to descend into the chimney to roost.

Nesting Chimney Swifts

Although hundreds of birds roost together during migration, each chimney swift pair must have its own site to raise its young. These birds

originally nested in trees, but no such nesting sites have been reported from Connecticut. Nesting chimney swifts are actually beneficial to homeowners. They are able to eat nearly one-third of their own weight in flying insect pests, such as mosquitoes, biting flies, and termites, every day!

Chimney Maintenance

If you have a masonry or clay flue-tile chimney, keep the top open and the damper closed from April through October to provide a nest site for these beneficial insect eaters. Many new chimney shafts are fabricated or lined with metal sheeting. **These metal chimneys are NOT suitable for chimney swift nesting and should be capped.** The birds cannot grip the walls of these chimneys and will become trapped. Have your chimney cleaned in March or early April before the chimney swifts return from their winter home in South America.

Recent Chimney Swift Research

During late summer 2005, historic and potential chimney swift migration roost sites were surveyed. Wildlife Division staff, with the assistance of four volunteers, searched towns with reported chimney swift activity or historic roost locations for active chimney swift roosts. Once an active roost was located, surveyors counted swifts entering the roost. Roost searches and counts were conducted from one hour before sunset, until sunset. Counts were conducted once in August and once in September 2005. Twelve towns, including six historic and six potential sites, were surveyed for chimney swift roosts. Three active roosts were located. Counts from active roosts ranged from 50 to more than 200 birds, depending on date and location.

Incidental sightings of chimney swift nesting locations, as well as migration roosting locations, were requested from the public through various birdwatching

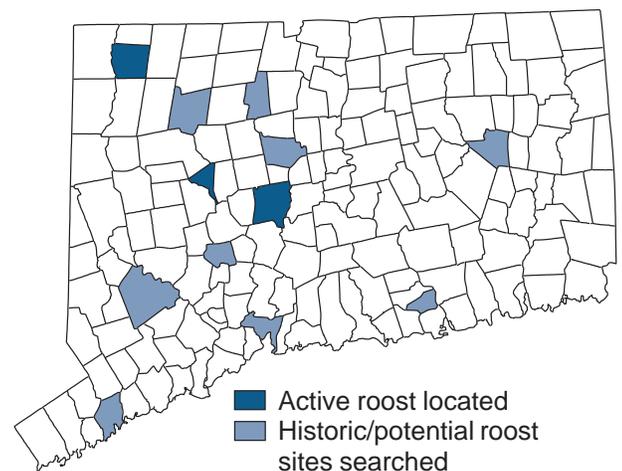
organizations, announcements placed on birdwatching related email lists, and press releases. Less than 10 nesting chimney swifts were reported. Information received from the public on sightings information was insufficient to analyze in detail.

Incidental sightings of chimney swifts from current and past avian surveys were compiled to illustrate a potential distribution for chimney swifts in Connecticut. Chimney swift sightings during surveys were distributed broadly and corresponded closely with large river corridors. The broad distribution of chimney swifts may allow them to be adequately monitored using randomized point count transect routes.

How You Can Help

If you have information on nesting or roosting locations for chimney swifts in Connecticut, please contact Shannon Kearney at the Wildlife Division's Sessions Woods office, P.O. Box 1550, Burlington, CT 06013; 860-675-8130; shannon.kearney@po.state.ct.us. Information requested is your name, address, and phone number, as well as where the nest or roost is located, the structure in which it is located, the date of your observation, the number of birds observed, and whether you would like to participate in chimney swift survey efforts.

Distribution of towns searched for chimney swift roosts, 2005.



Wildlife Calendar Reminders

- Dec. 28-Mar. 15 Shepaug Bald Eagle Viewing Area is open for viewing bald eagles three days a week -- by advance reservation only -- on Wednesdays, Saturdays, and Sundays. Call 1-800-368-8954, Tuesday through Friday, from 9:00 AM-3:00 PM, to make reservations.
- January Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2005 Connecticut Income Tax form.
- Feb. 16-19 Visit the exhibit sponsored by the DEP's Fisheries, Wildlife, and Law Enforcement Divisions at the 9th Annual Hunting and Fishing Expo, at the Connecticut Expo Center in Hartford. For more information on the Expo, visit the website for North East Promotions, www.fishingandhuntingexpo.com.
- Feb, 18 **Children's Program: Birds!**, at the Sessions Woods Conservation Education Center in Burlington, from 1:00 PM-2:15 PM. Children and their parents/caregivers will join Wildlife Division Educator Laura Rogers-Castro for an informative indoor slide program on birds, followed by a walk outside to view winter birds. All children must be accompanied by an adult. Those interested must preregister for this free program by calling the Wildlife Division at 860-675-8130 (Monday through Friday from 8:30 AM - 4:30 PM). Sessions Woods is located on Route 69 in Burlington (almost midway between Route 6 in Bristol and Route 4 in Burlington).
- Feb. 18-19 **7th Annual Connecticut River Eagle Festival**. To find out more information about the Festival, visit Connecticut Audubon's website at www.ctaudubon.org.
- Early March Clean out bluebird nest boxes and install new ones.

Hunting Season Dates

- Jan. 16-Feb. 15 Special late Canada goose hunting season in the south zone only. For more details, consult the 2005-2006 Migratory Bird Hunting Guide, available at town halls and DEP offices. The guide also can be found on the DEP's website at www.ct.gov/dep.
- Feb. 10 State land lottery deadline for spring turkey hunting season.
- Feb. 28 Send in permit-required (small game season) survey cards.
- March 15 State land lottery deadline for deer hunting season.
- See the 2006 Connecticut Hunting and Trapping Guide for specific season dates, details and delineation of deer management zones. The guide is available at Wildlife Division offices, town halls, and on the DEP's website, www.ct.gov/dep.

Step Up to the Plate for Wildlife...

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



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

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

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

Connecticut Wildlife

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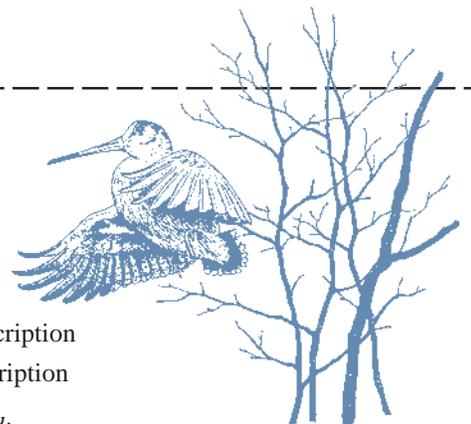
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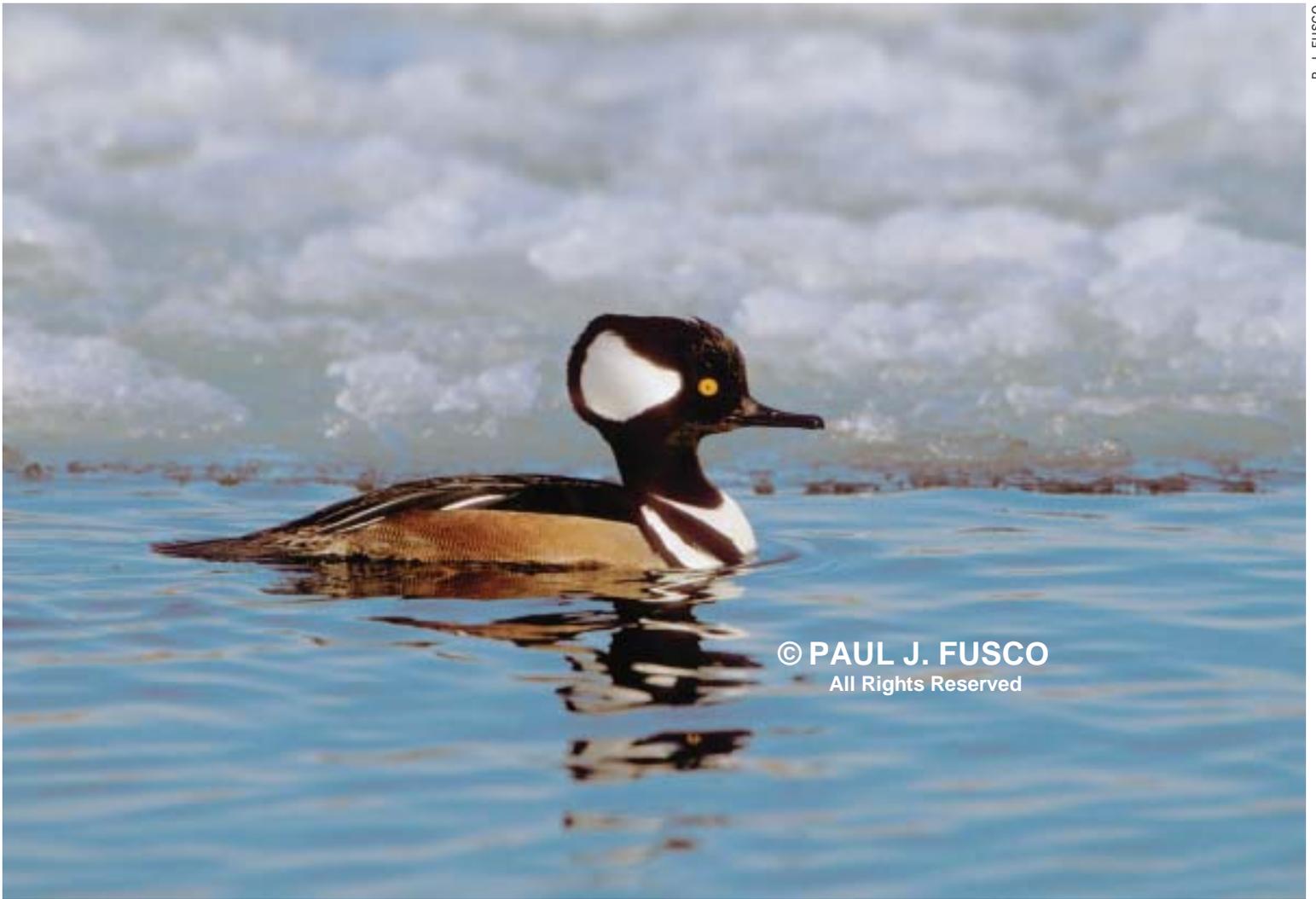
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A drake hooded merganser swims in a Connecticut pond on a crisp winter morning.

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