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Wildlife

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WILDLIFE DIVISION

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As the days shorten and the leaves turn, some Connecticut residents who live close to the land practice the age old rituals of preparing for winter. Harvesting the last of the garden crops, stacking away the firewood and making preparations for the fall hunting seasons. In these modern times, the need for a home garden, a wood burning stove and game for the table may not be as critical as it was in the past. However, some people still prefer to use what the land has to offer and practice a more independent lifestyle. Proper management of our agricultural lands, woodlots and wildlife ensures that these uses are ecologically sustainable for as long as the land base can support them.

Those who are preparing to hunt this fall will find healthy and abundant populations of white-tailed deer, wild turkey and waterfowl. Not so ironically, the current "users" of these species (the sportsmen) are the same segment of society who rescued them from near oblivion less than a century ago and who pay for the research and management that perpetuates them today. Under the current seasons and bag limits, hunters will pay for the opportunity to pursue wild game and put highquality food on the table in an ecologically sustainable way. In some cases, their efforts will help reduce overabundant wildlife populations. However, throughout much of the state, the annual harvest of game simply compensates for other natural mortality. It retains mankind's role in the natural food chain.

This system of wildlife management is working in just the way Aldo Leopold said it would when he wrote the landmark textbook Game Management in 1933. During the first half of the 20th century, when most conservation efforts were focusing on the short-term needs of wildlife protection and restoration, Leopold was looking decades ahead. The utilitarian concepts he described would pay for and perpetuate wildlife as long as management was conducted in a scientifically sound manner. Currently, there is no substitute for the model he described nearly 70 years ago.

The success of Leopold's principles depends upon the ability of state and federal agencies to manage hunting seasons in a way that maintains healthy and abundant wildlife populations. It also depends upon the sportsmen's acceptance of their role in the system of science-based management. Fortunately for Connecticut, both of these conditions are being met. Over the years, Connecticut sportsmen have complied with, and in many cases advocated for, harvest restrictions on migratory game birds when populations declined. In addition, Connecticut hunters have assisted in deer management efforts through their willingness to harvest antlerless deer where needed throughout the state. Under this scenario, regulated hunting will continue to provide benefits to both humans and wildlife far into the future. -- Dale W. May

Cover:

Connecticut sportsmen are preparing for the upcoming deer hunting season. See pages 3-5 for what's in store for the fall hunting seasons.

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. It places an excise tax on firearms, ammunition and archery equipment. Articles reporting on Wildlife Division projects funded entirely or in part with federal aid monies are depicted with the logo of the Wildlife Restoration Program.

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Get Ready for the 2001-2002 Hunting Season -

White-tailed Deer Season

Connecticut's deer population is healthy and harvest rates are expected to be high during the 2001 deer hunting season. Aside from the size of the deer herd, the abundance of acorns and weather conditions during the hunting seasons are variables that will influence hunter success. The hunter success rate (22%) in 2000 approached the record high success rate (22.3%) of 1995. Weather conditions experienced during the spring of 2001 may result in few or no acorns in most of Connecticut's forestlands. A lack of acorns this fall will cause deer to be more mobile as they travel to green fields to feed. This situation likely will yield high hunter success rates for hunters who have access to open fields.

Since 1995, a replacement antlerless tag system has been used to increase the harvest of antlerless deer in specific areas of the state where deer populations continue to increase. During the 2001 season, hunters who harvest an antlerless deer on private land and have permission to hunt on private land in deer management zones 11 and 12 (see the 2001 Connecticut Hunting and Trapping Guide) will be eligible to obtain a free replacement antlerless tag for use during the shotgun/rifle or archery deer hunting season. A limited number of replacement antlerless tags will be available at designated vendor locations on a firstcome, first-serve basis. Archery hunters who harvest a deer are still required to complete and submit a kill report card to the vendor. The replacement tag program has resulted in an increased harvest of female deer in deer management zone 11 (southwestern Connecticut).

Hunters are reminded that bowhunting is permitted during the shotgun/rifle deer hunting season in deer management zones 11 and 12 only. On private land in zones 11 and 12, bowhunters can deer hunt for three and a half months (Sept. 15-Dec. 31).

2001 will be the third consecutive year that the antlerless-only deer tag on private land shotgun/rifle and muzzleloader permits will NOT be valid in deer management zone 4. This restriction was implemented after a four-year decline in

the deer population in this area. After only the second year of limiting the harvest of female deer, the population appears to be increasing gradually. If this trend continues, the restriction on the antlerless tag may be loosened.

Fall Wild Turkey Season

Hunting opportunities during the wild turkey season are expected to be abundant statewide. This past spring was relatively warm, with no extended periods of rain. These weather conditions resulted in limited mortality on nesting hens and good survival of poults. Connecticut's wild turkey population continues to remain healthy throughout the state.

This fall, turkey hunters should look for birds in areas with abundant wild grapes,

bittersweet and harvested corn fields. During most years, oak ridges are good locations to find turkeys in the fall because of the abundance of acorns. However, this year will likely be an exception, due to the drought in April and May and a severe frost during early May which damaged oaks and caused acorns to be reduced in number or nonexistent. In the absence of acorns, wild turkeys will switch to other food sources.

The fall bowhunting and firearms seasons, which will be open statewide, start on September 15 and October 20, respectively. During the bowhunting season, the bag limit is two birds of either-sex taken on either state or private land. During the firearms season, the bag limit will be one bird of either-sex on



Connecticut's deer population is healthy and harvest rates are expected to be high during the 2001 deer hunting season.

state land and two birds of either-sex on private land. Although hunters have many hunting options during the fall, some claim that wild turkey hunting provides excitement and challenge unequaled by any other game species. This is also a great time to be in Connecticut's forests enjoying the autumn colors.

Waterfowl Season

Ducks: The U.S. Fish and Wildlife Service (USFWS), in conjunction with the Atlantic Flyway Council, of which Connecticut is a member, again has offered the liberal harvest option based on the status of the Eastern mallard population. The population estimate of

continued on next page

Hunting Season, continued

one million mallards is well above the population objective. A 60-day season with a sixbird daily bag limit will be offered, the same as last year. Individual species' daily bag limits remain unchanged. The canvasback population declined to average levels and cannot support the full liberal harvest. The USFWS has offered a 20-day canvasback season within the regular season. Black duck harvest restrictions will remain. No black ducks can be taken in the early season.

The early duck seasons begin October 10. The Wednesday opening day helps to spread out hunter pressure. Also, sportsman have preferred the season opening prior to the small game season as this also reduces opening day overcrowding.

Canada Geese: Special early and late Canada goose seasons will again be offered. These seasons target resident geese. The early season will be September 4 to 25 in the north zone and September 17 to 25 in the south zone, with a daily bag limit of five birds. The late season will be January 15 to February 15, 2002, in the south zone, with a daily bag limit of five birds. A special late season cannot be offered in the north zone because there are too many migrant geese present during that period.

The North Atlantic Population (NAP) of Canada geese remained at average levels. The USFWS recommended maintaining the moderate harvest regulations of a 45-day season, with a two-bird daily bag limit. The USFWS did change the framework and the season can now extend until January 20. The NAP unit in Connecticut includes all counties except Litchfield and Hartford Counties west of the Connecticut River.

The Atlantic Population (AP), which nests in northern Quebec, increased substantially from last year and had excellent production of young. This population has fully recovered since the population bottomed out in 1995 when the season was closed. This is an



Connecticut's wild turkey population continues to remain healthy throughout the state.

example of successful international cooperative wildlife management. The USFWS increased the season to 30 days, with a two-bird daily bag limit. The AP unit in Connecticut includes Litchfield and Hartford Counties west of the Connecticut River. For a more detailed definition of the boundaries for the AP and NAP units, consult the 2001-2002 Migratory Bird Hunting Guide, available at town clerk's offices, Wildlife Division offices and on the DEP's website (<u>http://</u> dep.state.ct.us).

Youth Waterfowl Hunter Training Days: The USFWS offered two Youth Waterfowl Hunter Training Days this year, but the days must be consecutive hunt days and on non-school days. The Youth Training Days in Connecticut will be October 6 and 8, 2001. Participants must be 15 years of age or younger, possess a valid small game hunting license and a HIP permit and be accompanied by an adult at least 18 years of age. Adults must possess a valid hunting license; however, they are not allowed to hunt waterfowl. Ducks, mergansers and coots may be pursued by youth hunters. Bag limits and shooting hours are the same as for the regular duck and goose hunting seasons, except that no canvasbacks can be taken. Youths may take one black duck per day.

All waterfowl hunters are reminded that, in addition to obtaining a hunting

license, they are required to purchase a federal Duck Stamp, a Connecticut Duck Stamp and a HIP permit. Federal Duck Stamps are available from local post offices for \$15.00. State Duck Stamps (\$5.00) and HIP permits (\$2.00) can be purchased at local town clerks' offices.

Small Game and Upland Bird Seasons

The Wildlife Division will purchase 18,935 adult ring-necked pheasants for distribution on public hunting areas during the 2001 pheasant season. The total represents a slight reduction from last year's purchase of 20,180 pheasants and will result in some minor adjustments in allocations for the various hunting areas. In addition to the adult pheasant purchase, 1,050 eight-week-old pheasants have been purchased and distributed to the Norwich and Sprague Rod and Gun Clubs for rearing to maturity and eventual release on permitrequired hunting areas in that region of the state.

The Division's Pheasant Program is self-supporting. The annual budget for the purchase of pheasants is determined by the net revenue collected from the sales of pheasant tags and hunting licenses to sportsmen pursuing stocked pheasants on public lands. The number of pheasant hunters has been declining each year, while the cost of purchasing pheasants has continued to increase over the long-term. In 2000, 9,668 hunters purchased pheasant tags, compared to 10,024 hunters in 1999, resulting in a loss of supporting revenue for the purchase of pheasants.

The outlook for fall pheasant hunting opportunities remains good, as the ratio of birds stocked per hunter has remained relatively stable for many years. No major changes in areas to be stocked are anticipated for the upcoming season. Pheasants will be released regularly at designated state-owned, state-leased and permit-required hunting areas starting prior to opening day (October 20) and continuing through Thanksgiving Day. Approximately 28 percent of the pheasants will be stocked by opening day; the remaining allotment of pheasants will be released during five additional distribution periods. To obtain a complete list of major stocking areas,

contact the Wildlife Division, at (860) 424-3011.

The opening day for most small game hunting will be the third Saturday in October (October 20) during the 2001 hunting season. Wildlife species that depend on early successional stage habitat types, such as rabbits and ruffed grouse, remain at relatively low levels. However, wildlife species that live in forested habitats, such as gray squirrels, are abundant across the state. The gray squirrel hunting season opens on September 1, providing an excellent hunting opportunity when most other hunting seasons are closed. Hunting squirrels can sharpen a hunter's power of observation and provide additional recreation while scouting for deer hunting stand locations in the preseason.

Sportsmen pursuing woodcock are reminded that the woodcock season runs from October 27 to November 24, 2001. The rail season is from September 1 to November 4.

Attention Rabbit Hunters

The Wildlife Division encourages all rabbit hunters to support an ongoing research project documenting the distribution of New England cottontails in Connecticut (see article on page 4). Hunters can participate by dropping off frozen specimens at the Wildlife Division's Franklin or Sessions Woods offices, or by calling these offices for assistance. Information on the location (road and town), collection date, collector's name and contact phone number must accompany all rabbit specimens. This information will improve current knowledge about Connecticut's cottontail populations as well as enhance our ability to better manage the cottontail resource.

Bear Sightings Continue Upward Trend

Written by Paul Rego, Furbearer Program Biologist

The DEP Wildlife Division has monitored bear sighting reports for 15 years as one means to assess the population's trend. The number of bear sightings (372) recorded through July 31, 2001, has surpassed the total sightings recorded in any previous year. Both 2000 and 1999 were record years for bear sightings, with over 300 reports received each year.

The increase in sightings reflects the growth and expansion of the bear population in Connecticut. Another factor is the more formal program of keeping track of reports. Bears have become a part of the landscape in many Litchfield and Hartford County towns. These towns are closest to western Massachusetts, which is believed to be the primary source of our bear population. Eastern Connecticut is farther from this population source and has lagged behind the northwest in bear activity. However, more bear reports were received in eastern Connecticut thus far in 2001 than in any previous year.

Connecticut is not only on the receiving end of bear migration. In recent years, two bears handled and

tagged in Connecticut were subsequently seen in Massachusetts. Another was killed by a vehicle in New York and another was reported in Rhode Island. In Connecticut, the DEP has handled bears previously marked in Massachusetts, New York and Pennsylvania. One bear that is currently settled in Connecticut was previously trapped by Massachusetts

wildlife officials several times and was even seen in Vermont.

Connecticut is expected to experience the same pattern of black bear population increase witnessed in Massachusetts. The Bay State bear population increased from an estimated 700-750 bears in 1988 to approximately 1,800 in 1998. The increase and expansion of Connecticut's bear population will be fueled by reproduction by resident bears and will be augmented by a growing source of immigrant bears to the north.

The Wildlife Division continues to collect reports of bear sightings in the state. To report a bear sighting, call the Division's Sessions Woods office, at (860) 675-8130 (Monday through Friday, 8:30 am-4:30 pm).

Connecticut Towns with Reported Bear Sightings



2001 CT Duck Stamp: Buffleheads at Oyster Point

Premier wildlife artist Rob Leslie has created a beautiful rendering of a coastal scene, featuring buffleheads and an oyster boat, for the 2001 Connecticut Migratory Bird Conservation Stamp (Duck Stamp). This stunning painting shows a small flock of buffleheads flying across the oyster beds offshore from New Haven. These diminutive birds are one of the smallest ducks and are easily recognized by the striking black and white plumage of the males. The males also sport a glossy, nearly iridescent purplegreen head.

The background of the painting displays a detailed depiction of one of the boats in Connecticut's renowned oyster fleet. Today, in Connecticut, approximately 400 people work at harvesting oysters, using a fleet of 71 vessels. Connecticut vies with Louisiana for the top dollar value of oyster harvest every year.

Sportsmen, art collectors wildlif and wildlife conservationists alike should consider purchasing full-color art prints and stamps of the 2001 Connecticut Duck Stamp. Not only are Connecticut Duck Stamps collectible works-of-art which feature native waterfowl and local landmarks, but most importantly, the proceeds collected from the sale of stamps, prints and other Duck Stamp memorabilia can only be used to finance wetland habitat restoration and enhancement projects in the state.



The 2001 Connecticut Migratory Bird Conservation Stamp--*Buffleheads at Oyster Point*--was painted by wildlife artist Rob Leslie.

Rob Leslie also created the artwork for Connecticut's second Duck Stamp. The 1994 painting featured canvasbacks, with the spectacular background of Falkner Island and its historic lighthouse.

Duck Stamp funds have financed a long and impressive list of wetland projects throughout Connecticut, in both state forests and wildlife management areas. The funds also enabled the DEP to purchase a specialized amphibious mulching machine that can create openings in vegetation-choked wetlands.

Waterfowl hunters are required to purchase the state Duck Stamp. However, anyone interested in wetland and wildlife conservation should buy one. Stamps are available for \$5.00 from any Connecticut town hall. Collector's editions of stamps and prints can be purchased from local art dealers.

Be a leader in conservation efforts! Your purchase will help habitat restoration efforts and waterfowl conservation in our state. **Buy a Connecticut Duck Stamp today!**

What other Connecticut Duck Stamp featured both buffleheads and boats?

The 1999 print by Keith Mueller featured Canada geese in the foreground, but also had buffleheads in the background, as well as boats anchored in Mystic Harbor.

CT's Mourning Doves Counted in Annual Survey

Many Connecticut residents are familiar with the sight and sounds of the mourning dove. This resident of both rural and suburban areas is one of the most widely distributed and abundant birds in North America. The mourning dove is also a popular game bird that can be legally hunted in most of the lower 48 states. However, mourning doves are not hunted in Connecticut and other New England states (except Rhode Island).

Because the mourning dove is a migratory bird, the U. S. Fish and Wildlife Service (USFWS) oversees its management. A primary management goal, as established by the USFWS, is the maintenance of mourning dove populations in a healthy, productive state. To achieve this goal, the management of doves includes assessing population status, regulating harvest and managing habitat.

In an effort to monitor mourning dove populations, federal and state

P. J. FUSCC

biologists from the lower 48 states (including Connecticut) participate in the annual Mourning Dove Call-count Survey. The resulting information on status and trends is used by wildlife administrators in setting annual hunting regulations.

In the United States (U.S.), the survey currently includes more than 1,000 randomly selected routes. Each call-count route is usually located on secondary roads and has 20 listening stations spaced at one-mile intervals. At each stop, the number of doves heard calling, the number of doves seen and the level of disturbance (noise) that impairs the observer's ability to hear doves are recorded. The number of doves seen while driving between stops is also noted. Counts begin one-half hour before sunrise and continue for about two hours. Routes are run once between May 20 and June 5. The total number of doves heard on each route is used to



The mourning dove is a common resident of both rural and suburban areas. It is one of the most widely distributed and abundant birds in North America.

New Publication on Beavers Available

The DEP Wildlife Division recently published a helpful booklet entitled, Beavers in Connecticut -- Their Natural History and Management. The booklet is intended to provide property owners, land managers and municipalities with information on the natural history, population dynamics and beneficial aspects of beavers, as well as options for resolving beaver/human conflicts. The Division plans to distribute the booklet to various individuals and agencies. Those interested in learning about beavers or how to resolve problems can request a free copy of the booklet from the Division's Sessions Woods office.

determine trends in populations and provides the basis for determining an index to population size during the breeding season.

Within the U.S., there are three zones that contain mourning dove populations that are largely independent of each other. These zones encompass the principal breeding, migration and U.S. wintering areas for each population. Connecticut is part of the Eastern Management Unit. Within that Unit, Connecticut, Vermont, New Hampshire, Maine, Massachusetts and Rhode Island are combined to form a New England group. The Eastern Management Unit includes 27 states comprising 30 percent of the land area of the U.S. Dove hunting is permitted in 18 of those states, representing 74 percent of the land area of the unit.

Survey Results for the Eastern Management Unit

The New England states, along with a few other states in the Eastern Management Unit, averaged less than 10 mourning doves per route during the 2000-2001 count. There was a 6.1 percent decrease Unit-wide during the 2001 count. However, there was no significant change in population estimates in New England.

2001 Survey in Connecticut

During Connecticut's 2001 survey, a total of 29 doves were heard calling, seven were seen at the survey locations and 16 were seen between survey stops. In 2000, 26 doves were heard, eight were seen at stops and 12 were seen between survey locations.

The report, *Mourning Dove Breeding Population Status, 2001*, written by D. D. Dolton, R. D. Holmes and G W. Smith and published by the U.S. Fish and Wildlife Service, was used as a reference for this article.

The Tale of Two Rabbits: New England or Eastern?

Written by W. David Walter, Research Assistant

The New England cottontail (NEC) is the only rabbit native to Connecticut. Historically, the NEC could be found as far west as New York, as far north as southern Maine and it was distributed statewide in Connecticut. In the early 1900s, private organizations and some New England states introduced the Eastern cottontail (EC) to supplement the native cottontail populations.

By the late 1930s, the EC was distributed statewide in Connecticut. Also in the 1930s, a statewide collection effort to assess NEC distribution was conducted. Researchers found 88 NEC in 45 of the 80 towns that specimens were collected. Several studies have documented NEC in different regions of the state during the past 50 years, but no current statewide distribution data exists for NEC.

To document the current distribution of both species, a statewide collection effort was necessary. In October 2000, a project was initiated by the DEP Wildlife Division to collect cottontail specimens throughout Connecticut from hunters, incidental roadkills and livetrapping.

Identifying Cottontails

Past researchers have documented that body size and markings on the fur could be used to differentiate the NEC and EC. On average, the NEC typically weighs one-half pound less than the EC and has a black spot between the ears and a black line along the edge of the ear. The EC typically lacks the black

spot and ear line and usually has white hairs or a white spot on the forehead. However, one in three cottontails lacks these distinctive spots, making identification between species difficult. For these situations, two other methods are used to differentiate between the NEC and EC. If skulls are available, the differences in skull characteristics have been a reliable method of identification. On the skull, the *nasal frontal suture* is jagged for NEC and smooth for EC (see illustration). The nasal frontal suture is a reliable characteristic for identifying the two species of cottontails and is commonly used to verify species identification. If skulls are not available, recent advances in DNA analysis have made the identification of cottontails possible using muscle tissue. Because the NEC and EC are genetically distinct, tissue samples can be extracted from cottontails for DNA analysis to differentiate the species.

Collecting Cottontails

In October 2000, the Wildlife Division requested that hunters, sportsmen's clubs, wildlife rehabilitators and DEP staff donate cottontail specimens for the study. From October 2000 to June 2001, 284 cottontails were collected from 78 of 169 Connecticut towns by hunters and from roadkills, livetrapping and wildlife rehabilitators (see map).





The differences in skull characteristics of New England and Eastern cottontails have been a reliable method of identification. On the skull, the *nasal frontal suture* is jagged for NEC and smooth for EC.

Of the 284 cottontails collected, 61 specimens were not identifiable by fur or skull characteristics and are pending DNA analysis. Twenty-one specimens, collected from 11 towns, were identified as NEC and 202 specimens from over 61 towns were identified as EC. Hunters contributed the largest sample (131) of cottontails from 25 towns, of which 14 were NEC and 117 were EC. The 108 roadkilled cottontails were collected

Connecticut towns where cottontails were collected and where New England cottontails were found.





The New England cottontail (top) has a black spot between the ears and a black line along the edge of the ear. The Eastern cottontail (left) usually has white hairs or a white spot on the forehead.





cottontails.

from 50 Connecticut towns and contributed three NEC and 66 EC. Livetrapping resulted in the capture of 36 cottontails, of which four were NEC. Three cottontails were killed by predators and found in the woods and six were young collected by wildlife rehabilitators.

Which Cottontail Is Found Where?

Generally, results of the statewide collection effort confirmed that the NEC still maintains a statewide distribution. occupying sites on both sides of the Connecticut River. The NEC tended to occupy wetland areas with dense understory vegetation. All NEC in this study were found at sites that contained or were adjacent to riparian habitat (i.e., lakes, swamps, rivers, streams). These wet areas were typically large patches (more than 12 acres) of shrub-dominated wetlands or forests with dense understory vegetation (top photo). The EC occupied shrubby habitats as well, but it also exploited open fields, hedgerows and disturbed patches more than the native NEC.

Habitat loss, fragmentation and competition with the more adaptable EC all have been implicated as possible reasons for the declining NEC populations throughout the Northeast. To understand the affects these factors have on NEC populations in Connecticut, the Wildlife Division will conduct a radio telemetry study in fall 2001 in habitats where NEC and EC are co-inhabiting. Attaching radio collars on both species will enable a detailed study of habitat use and interactions between species. Evaluating the size and use of rabbit home ranges, habitat characteristics and mortality factors, as well as interactions between both species, will assist biologists in understanding management needs for the NEC.

Help Is Still Needed

Although samples were collected from 78 towns in Connecticut, more specimens are needed to provide sufficient distribution data. Collections so far have documented NEC in 11 towns, but they likely are present in many more areas where samples were not collected. The Wildlife Division is encouraging interested individuals to collect cottontail specimens by all legal available means on public and private



Habitat in Nehantic State Forest, in Lyme, where a New England cottontail was trapped in February, 2001.



Habitat on private property in Woodstock where an Eastern cottontail was captured in March, 2001.

property throughout the state. All collected cottontails or heads should be labeled and stored frozen. Wildlife Division personnel should be contacted for pickup. In eastern Connecticut, contact or deliver specimens to the Franklin Wildlife Management Area in North Franklin (860-642-7239) or, in western Connecticut, Sessions Woods Wildlife Management Area in Burlington (860-675-8130). The New England cottontail study was made possible through a grant from the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund. The DEP Wildlife Division would also like to thank the sportsmen, wildlife rehabilitators, landowners and volunteers who helped make this preliminary effort to learn more about the New England cottontail a success.

Connecticut's Sleek Aviators - The Swallows

Written by Paul Fusco, Public Awareness Program

Five species of swallows and one martin call Connecticut home. Look for them flying gracefully over open fields and around bodies of water as they catch their preferred food, flying insects. Long, pointed wings carry their streamlined bodies in fluid, darting flight. They are strong and tireless fliers that feed almost entirely on the wing.

Swallows are slender, sparrow-sized birds with very small feet and small, short bills. Their bills open with a wide gape as they catch multitudes of flying insects. Most swallows are patterned with dark iridescent plumage above and light plumage below. All have slightly forked tails, with the exception of the barn swallow, whose tail is deeply forked, and the cliff swallow, which has a more squared-off tail. Some swallows nest in colonies while others are fiercely territorial and nest singly.

All swallows migrate south for the winter, with most leaving the United States and Canada for faraway reaches of South America. Many will go as far south as Argentina.

In Connecticut, the bank swallow is the smallest member of its family, with a length of four and three-quarter inches, while at seven inches the purple martin is the largest. Sometimes swallows can be observed perched in groups on wires or dead tree branches.

Among their prey are many kinds of flies and beetles, grasshoppers, wasps, flying ants and termites, mosquitoes and midges. With food habits like this, it's no wonder that the members of the swallow family have long been regarded as being beneficial to humans.

Native Americans recognized the value of purple martins and hung hollowed gourds to encourage them to nest in their villages. Being cavity nesters, martins were attracted to the gourds, forming nesting colonies in the villages. Purple martins were valued not only for their insect consuming skills, but also because they would fearlessly defend the nest colony, driving away hawks, crows and other predatory birds in mass attacks, thus also protecting the village poultry.

Gourds are still used today to provide nesting places for martins. Prefabricated plastic gourds are available commer-



Cliff swallows are colonial nesters. They build their nests out of mud pellets, which frequently are adhered to a sheltered surface on buildings or bridges.

cially, as are large martin houses that can have nest cavities for over a dozen pairs.

Nest boxes are readily used by one of our more common swallows, the tree swallow. Where boxes are plentiful, they can frequently be found nesting near Eastern bluebirds. Both species favor similar open habitats and require old woodpecker holes or tree cavities in which to nest. Beaver marshes, with their standing dead trees and plentiful insects, are ideal natural habitats, especially for tree swallows. In areas with a shortage of natural tree cavities, nest boxes can provide a much needed element for both tree swallows and bluebirds to reproduce successfully.

As harbingers of spring, the first swallow to return to Connecticut is the tree swallow, usually making an appearance by mid-March, well before the last ice and snow have melted. These advance "scouts" sometimes don't fare well if the weather remains cold and wet for an extended period of time. In situations like this, tree swallows are known to feed heavily on the winter persistent fruit of northern bayberry.

The bulk of the spring migration for tree swallows in Connecticut lasts from late March through the mid-May, with most nest boxes being occupied by the end of May.

In fall, large numbers of migrating tree swallows stage at some shoreline locations, often forming huge flocks. During the evening they sometimes make an impressive sight as thousands of swallows swarm down to their nighttime roost in a marsh.

Rural areas with nearby open water are favored by bank swallows. These swallows are colonial nesters, building their nests inside tunnels that are dug into steep banks of sand, clay or gravel near rivers or in gravel pits. Starting with their bill, then using their feet, each pair of bank swallows will excavate the nest burrow up to three or four feet long near the top of the embankment. These embankments may be honeycombed with hundreds of nest holes.

The bank swallow is perhaps the least adaptive to human development. All the other swallow species commonly use buildings, man-made structures or artificial nest boxes to reproduce. Bank swallows will not use these types of nesting areas, and so, their abundance is closely tied to the availability of earthen banks.

Usually found near large bodies of water, the Northern roughwinged swallow also nests in cavities. It is known to excavate burrows, similar to the bank swallow, or use an existing cavity. The existing cavity chosen can be as diverse as a crevice in a stone wall, a hole in an old bridge abutment or wooden building, drain pipes, culverts, rock caves or sometimes the old nest cavity of a bank swallow or kingfisher. Rough-winged swallows are normally found nesting in single pairs and not in colonies.

Over the last 100 years, rough-winged swallows have increased their range,

spreading northward into Connecticut and beyond. In the late 1800s they were considered to be rare summer visitors. However, now they are considered fairly common nesters. The increasing presence of rough-winged swallows in Connecticut may be a result of these birds adapting to living close to humans and development.

An interesting courtship behavior of the rough-winged swallow may be seen when a pair of birds is in flight. While chasing after the female, the male will extend his long, white, under-tail covert feathers outwards at the base of his tail. These flashy feathers will curl up and around the dull, brown, outer tail, becoming visible from a good distance.

In Connecticut, the cliff swallow has become well adapted to living close to humans, now nesting mainly on dams, bridges, other masonry structures and under the eaves of buildings instead of at its traditional cliff sites. Cliff swallows build their nests out of mud pellets, forming the shape of a bottle, sometimes with a long entrance neck. The species is highly gregarious and nests in colonies.

The cliff swallow has undergone dramatic swings in its Connecticut population over the last 200 years. Records indicate that in the early to mid-



Observers may have the opportunity to witness a spectacular sight as migrating swallows move through Connecticut in the fall. This massive flock of tree swallows was photographed flying over a Natural Area Preserve at Hammonasset Beach State Park last October.

1800s, the cliff swallow was an increasingly abundant summer resident here, but by the late 1800s, the species was in noticeable decline. There seem to be two main reasons for this decline. First, there was a change in habitat that occurred at the time. In the early 1800s, Connecticut was largely cleared of forests for farming. Expansive open fields with barns for building nests provided ideal habitat for the cliff swallow and the population grew. As the late 1800s approached, many farm fields began to become overgrown with vegetation and have since succeeded into much of the forest that we have today. Combined with this habitat change was the explosive increase in house sparrows, which are known to usurp the nests of the cliff swallow. Today, aside from the purple martin, the cliff swallow is the least abundant of our swallows.

The long, forked tail is diagnostic for Connecticut's most abundant swallow species -- the barn swallow. It nests singly or sometimes in small colonies in rural and suburban areas. It builds a cupshaped nest out of mud and grass, usually plastering it to a sheltered part of a building, such as under eaves, inside open barns or under a bridge. Barn swallows favor agricultural areas with lakes or ponds nearby, and are most common in farmland habitat.

The barn swallow remains one of Connecticut' most abundant nesting songbirds, as the population has not changed much over the last century. Its graceful flight and colorful bubbling song make the barn swallow a familiar fixture of Connecticut's ever changing landscape.

Connecticut's Swallows Breeders

Purple martin *Progne subis* Tree swallow *Tachycineta bicolor* Northern rough-winged swallow *Stelgidopteryx serripennis* Bank swallow *Riparia riparia* Cliff swallow *Hirundo pyrrhonota* Barn swallow *Hirundo rustica*

Rare Migrant

Cave swallow Hirundo fulva

Junior Assistants Valuable to the CE/FS Program

Written by David Kubas, CE/FS Program Coordinator

Large class and short of help ... not enough time to put educational handouts together ... need to arrange the chairs to view the video screen ... need help in setting up the range site. The certified Conservation Education/ Firearms Safety (CE/FS) instructor needs a qualified Junior Assistant to help out.

Four years ago, the Junior Assistant Program was initiated to officially recognize the valuable help that many young people have been providing to the CE/FS Program over the years. Education of our youth in the area of natural resources and the safe use of firearms is important. Although Junior Instructors are not allowed to actually teach, their involvement in the program allows them to see firsthand the responsibility that the certified instructors have accepted in teaching ethical and safe hunting behavior.

The young volunteers have the opportunity to be trained by attending CE/FS-sponsored instructor workshops in the safe use of firearms, bows and trapping equipment. Because they will have many years of exposure and training in the hunter education process, these young helpers are bound to acquire a solid background in their developing sportsman interests. Some of these young people may even turn out to be future instructors. Additionally, this valuable experience will serve them well in developing a sense of volunteering in the community, which many public and private high schools

are currently requiring of their graduates. Presently, there are 17 junior assistants working in the CE/FS Program.

In order to qualify, interested candidates must meet the following criteria:

• *The candidate must be between 12 and 21 years of age.*

• The candidate must have a clean record with no serious legal violations.

• Candidates must have successfully completed the CE/FS course (firearms, bow, trapping) in which they wish to assist.

• Each candidate must be sponsored by a certified CE/FS instructor.

• The candidate must file an application with the Wildlife Division within the district in which they will help.

• The application must be signed by a parent or legal guardian of the candidate, giving the applicant permission to participate in the program of choice.

• The assistant will work under the supervision of a certified instructor.

Anyone interested in the Wildlife Division's CE/FS Junior Assistant Program who meets the above qualifications may call one of two district offices to obtain more information or an application. Those living on the west side of the Connecticut River should call the Sessions Woods office, at (860) 675-8130. Those residing on the east side of the river should call the Franklin Wildlife office at (860) 642-7239. Give us a call, we'd be happy to have you aboard!



Junior Assistant Sal Renzuella

Born and raised in Norwalk, Sal is a Senior at Norwalk High School, where he is also a cadet in the school's ROTC program. Sal is college bound with plans to study aeronautical science and participate in the ROTC program. He aspires to be an officer in the U.S. Air Force, flying the A-10. Hunting, fishing and sporting clays are Sal's favorite hobbies. When finally settled, he hopes to become a hunter education instructor. following in his parent's footsteps. Sal is the son of certified CE/FS instructors Simone and Tom Renzuella.

National Hunting and Fishing Day Celebrated Every Year

September 22, 2001, was designated as National Hunting and Fishing Day in Connecticut by Governor John G. Rowland to recognize the state's sportsmen for their contributions to conservation. National Hunting and Fishing Day is celebrated nationwide every year in September.

Governor Rowland called upon citizens to join with sportsmen and conservationists in their efforts to ensure the wise use and proper management of our natural resourcesto benefit future generations. "Every year leisuretime activities become more varied and hunting and fishing continue to be invigorating outdoor sports that provide a lifetime of enjoyment and connect us with the values of stewardship and natural resource conservation," said Governor Rowland.

"Sportsmen have been at the forefront of the conservation movement for over 100 years," Governor Rowland added. "Not content with merely vocalizing their support, hunters and anglers requested special fees and taxes on their equipment which help pay for wildlife management and other conservation programs." In Connecticut, sportsmen's hunting and fishing licenses, permit fees and excise taxes on equipment contribute \$6.3 million annually to the conservation and management of the state's fisheries and wildlife resources. Sportsmen-financed programs have led to the dramatic comeback of wood duck, wild turkey, American shad, striped bass and numerous other wildlife and fish populations.

Habitat Management Program Activities

Written by Paul Rothbart, Supervising Wildlife Biologist

Early Successional Stage Habitat

During the past field season, prescribed burning, brush mowing, brontosaurus mower/mulching and grassland plantings were accomplished as part of the DEP Wildlife Division's ongoing efforts to enhance early successional stage habitat on state lands. Projects were funded through the USDA's Wildlife Habitat Incentives Program and the Conservation Reserve Program; state funds also were used.

Projects were conducted at Naugatuck State Forest, Pachaug State Forest, Bloomfield Flood Control Area, Higganum Meadows Wildlife Management Area (WMA), Pequonnock Valley WMA, Simsbury WMA, Wopowog WMA, Bartlett Brook WMA, Barn Island WMA, Spignesi WMA and the John E. Flaherty Field Trial Area. Over 258 acres were enhanced through these various management practices.

Woodcock/Early Successional Stage Habitat Workshop Held

This past summer, the Wildlife Division participated in a cooperative Woodcock/Early Successional Stage Workshop in cooperation with the University of Connecticut's Wildlife Conservation Research Center, the Wildlife Management Institute and the Hammonasset Fishing Association. Over 40 participants attended, including representatives from The Nature Conservancy, Connecticut Audubon, the National Audubon Society, U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation and Regional Water Authority, as well as consultant foresters, private landowners, state legislators and members of sportsmen's clubs and land trusts. The group of participants represented the very diverse conservation community within Connecticut. Topics included early succession species and their habitat trends, ecology and needs; the status and research needs of the American woodcock; and the structuring of visionary funding initiatives. The workshop was an excellent effort at developing a conservation coalition that can educate the public about the decline of early successional stage habitat and its associated species and can also promote the need for habitat management throughout Connecticut.



Participants who attended the Woodcock/Early Successional Stage Habitat Workshop held in summer 2001.

Your Questions Answered ?????

What is the big, black and yellow spider I find in my garden each fall?

The black and yellow spiders seen in gardens and fields during late summer and early fall are, coincidentally, black and yellow garden spiders (Argiope aurantia). Banded garden spiders (A. trifasciata) are also seen at this time but are slightly smaller, less common and have thin, black, white and/or yellow bands on their abdomen rather than the strong, yellow markings found on the black and yellow garden spiders. Both banded and black and yellow garden spiders have silver-colored carapaces (the top or front part of a spider). The females of these orb-weavers have bodies about an inch long and are

usually seen hanging head down in the middle of their large web.

Most webs constructed by black and yellow garden spiders have a zigzag pattern, called the stabilimentum, somewhere in the web. There are many different thoughts regarding the purpose of the stabilimentum. Originally, it was believed to protect the spider (males are often found here in mating season), stabilize the web or warn birds of its presence, but more recently it has been discovered to reflect ultraviolet light, a prime insect attractant. Orb webs are used to snare insect prey and are usually constructed nightly in about an hour. Most orb-web weavers actually eat their old webs and many recycle the silk

almost immediately as they form a new web. The adaptations of spiders are truly remarkable and although some spiders are large and startling to see at first glance, they should be appreciated for their innovative insect-catching abilities.

Do you have a wildlife question you'd like to have answered?

Please send it to:

Your Questions Answered DEP - Wildlife Division P.O. Box 1550 Burlington, CT 06013

Email: katherine.herz@po.state.ct.us

Clearcut Planned for Sessions Woods WMA

Written by David S. Irvin, DEP Forestry Division

"A clearcut in Connecticut?" This is a common reaction heard from state residents regarding the use of this forestry practice. This harvest alternative for "regenerating" or growing a new forest is not new nor uncommon, but the term "clearcut" often conjures up negative images of vast denuded landscapes, eroding soil and fields of stumps seemingly devoid of life.

The truth is that clearcutting can sometimes be the *best* thing for a healthy forest and for many of our most treasured and colorful migratory birds, as well as many other wildlife species. It is important to remember that the forest will eventually grow back in a clearcut created for forestry purposes, unlike the land cleared for new housing and commercial development.



This photograph of a fresh clearcut shows the mature forest edge and the coarse woody debris left behind. In just a few years, this opening will be thick with saplings.

Clearcut at Sessions Woods

A 14-acre clearcut is planned for the DEP Wildlife Division's Sessions Woods Wildlife Management Area (WMA) in Burlington. The 453-acre area is the site of the Division's Conservation Education Center and several interpretive trails that demonstrate wildlife habitat management practices for landowners and homeowners. In 1997, the DEP Forestry and Wildlife Divisions worked cooperatively to develop a 10-year management plan for Sessions Woods. Goals of this comprehensive plan include improving



A clearcut planned for Sessions Woods will benefit the resident whippoor-will population. This species of special concern prefers open woodlands and young tree growth for nesting.

forest health and productivity, diversifying wildlife habitat and expanding the educational demonstration areas along the trails to include the entire property. Different types of management. including prescribed fire, selection cutting and clearcutting, are demonstrated in close proximity to the heavilyvisited trails.

Therefore, in this instance, a clearcut close to a hiking trail is considered an asset, not a liability, in light of the educational objectives emphasized at Sessions Woods.

This forestry operation will be the second under the 1997 management plan. The first was a 33-acre harvest directly adjacent to Route 69 and covering over a half-mile of the Beaver Pond Trail. Its purpose was to encourage the reproduction of white pine, thus maintaining coniferous habitat (evergreen trees) on the property.

Why Clearcut?

Why was clearcutting chosen to manage a portion of the forest habitat at Sessions Woods? It all started with the original forest inventory of the stand to determine overall tree health, tree density, the presence of wildlife den trees, hard mast availability (i.e., acorns, hickory nuts), vegetation present on the forest floor and other information. The data revealed an area that was "poorly stocked" and in overall poor health and quality. Many trees had small crowns and were growing slowly. Low quantities of acorns were being produced. Numerous trees had disease or insect problems, as well as forks and crooks, making them susceptible to wind damage. The forest inventory showed that the forest stand had plenty of unused growing space, a dominance of unhealthy or low vigor trees and a carpet of new seedlings on the ground, indicating that the time had arrived to grow a new stand, or "regenerate."

How Is a Forest Regenerated?

Options exist to use either even-aged or uneven-aged systems. In uneven-aged management, selection cutting is used to create a forest of several distinct ages simultaneously. This type of management works best on shade tolerant trees like maple, birch and beech. The forest stand at Sessions Woods was mostly oak, both in the understory (seedlings on the ground) and overstory (mature forest canopy). Even-aged management develops a stand of one uniform age class. This includes both "shelterwood" cutting and clearcutting. In the former, the overstory is removed to release new regeneration in two to three gradual phases, allowing young seedlings to develop under the "shelter" of the older trees. By the time of final harvest, regeneration is thick and well-established. A clearcut is accomplished in one complete removal rather than in multiple phases. This kind of operation is best for Sessions Woods because:

1) Regeneration is *already* present and ready for release, so mature trees are not needed as a seed source.

2) Oak seedlings need full sunlight to grow adequately and will die if not fully released in the near future.

3) Some wildlife species that prefer open habitats, such as the chestnut-sided warbler, will not use an area that was cut as shelterwood because of the presence of the large trees that are left in the canopy during the seedling phase.

4) A multiple harvest does not make sense economically as there is not enough timber per acre for more than one cut. Biological needs and economic realities must often be balanced in forest management decisions.

Is Replanting Necessary?

Should the clearcut be replanted? Simply, it is not necessary. Trees naturally grow back and do so quickly. Planting to reestablish a forest in Connecticut is not usually successful. It means years of labor intensive weeding and herbicide treatments to control natural competition. Damage from deer browsing is also a serious problem. Instead, different types of harvests are designed to regenerate a variety of forests and favor native species that can best use the growing site.

What About the Mess?

What about all of the debris left behind

after a clearcut? Woody debris from treetops and from trees too small to use (called "slash") are not pleasing to the eye following a fresh clearcut. But it can also serve a purpose in ecology. The material will eventually decay, adding nutrients back to the soil. Meanwhile, short-term benefits may include protection of seedlings from deer browse, cover for small animals and mulching protection of the soil until the new forest canopy closes.

What About the Wildlife?

What happens to the wildlife after the clearcut? There will be significant benefits to many different kinds of wildlife. Although Connecticut is currently over 60 percent forested, with much of this forest near maturity, there has been a steady decline in once plentiful open field and pasture land, as well as young forests in the seedling/ sapling phase. The result is lower populations of birds and mammals that use these areas. Regeneration cuttings can help restore this sort of habitat.

Many migratory songbirds have declined due to the loss of grasslands and seedling/sapling forests. A long list of our most cherished birds, including cedar waxwing, white-eyed vireo, bluewinged warbler, chestnut-sided warbler, cardinal, bluebird, flicker, goldfinch and rose-breasted grosbeak, all require early successional stage vegetation for nesting. The whip-poor-will, a bird that resides at Sessions Woods, is a Connecticut species of special concern. It prefers open woodlands and young growth for nesting and should benefit from the clearcut. Raptors are expected to use the



The chestnut-sided warbler requires early successional stage habitat for nesting. A clearcut planned for Sessions Woods WMA will provide this important habitat for a bird often observed on the property.

new clearcut. Broad-winged hawks nest close to forest openings and red-tailed hawks, a frequent sight at Sessions Woods, commonly hunt in clearcuts.

Other animals are considered "edge species," and tend to use the fringes between openings and forested canopies. Deer, turkey and grouse are well-known members of this group. The 14-acre harvest will create an estimated 3,500 feet of new "edge" around the perimeter of the clearcut, benefiting these animals.

Researching Chestnut Trees

The Sessions Woods clearcut is expected to become part of a statewide forestry research project of the Connecticut Agricultural Experiment Station. Researchers have been interested in conquering the chestnut blight fungus for many years. American chestnut, a once dominant forest tree, was virtually wiped out by accidental introduction of the blight early in the 20th century. All that remains are vigorous sprouts that repeatedly surface but rarely make it beyond sapling size before succumbing to the blight. Chestnuts require full sunlight exposure for growth and, therefore, a clearcut is very good for this species. The Experiment Station hopes to use chestnuts that naturally sprout in the clearcut at Sessions Woods in experimental efforts to develop strains resistant to the blight.

The Sessions Woods timber harvest will take place during late summer or fall 2001 by a local contractor. The harvested wood is expected to be used at local mills. For more information, call the Forestry Division's Pleasant Valley office, at (860) 379-7085, or the Wildlife Division's Sessions Woods office, at (860) 675-8130.

FROM THE FIELD

Golden-winged Warbler Observed During Survey

A golden-winged warbler was observed recently during surveys conducted by DEP staff in northwestern Connecticut. The golden-winged warbler (*Vermivora chrysoptera*), a species listed as threatened in Connecticut, was thought by many to be extirpated from the state, making this a very encouraging observation. Breeding Bird Survey data collected since 1966 show the population in southern New England declining at a rate of over 20 percent per year.

Although research is needed to better understand the population trends, there are some factors that are currently thought to be the main contributors to the decline. The loss of shrubland habitat is one of these factors. Habitat requirements and the changes that make habitat unsuitable for breeding are not yet fully understood. Golden-winged warblers prefer shrubby, open areas that are often created by the natural succession of abandoned farmland. As farms have disappeared from the Connecticut landscape, much of the land has either matured into forest or been used for development, displacing the goldenwinged warbler from the state. Without disturbances such as farming, fire or flooding to create early successional stage habitat, the golden-winged warbler is left with few suitable breeding areas in the state.

Another factor leading to the population decline is the expansion of the blue-winged warbler (V. pinus) into the range of the golden-winged. This expansion has led to increased competition between the two species and interbreeding which has resulted in hybrids known as "Brewster's" and "Lawrence's" warblers. Research suggests that the blue-winged may be out-competing and replacing the goldenwinged in its range, but the reasons for this are unclear. Finally, cowbird nest parasitism has been recognized as a possible factor in the golden-winged warbler's decline. Recent research has

found up to 30 percent of golden-winged nests being parasitized by cowbirds, which can lead to lower nest success.

In order for management plans to be successful, much more research needs to be conducted concerning habitat requirements, hybridization and cowbird parasitism in golden-winged warbler populations. If we can better understand these factors and how they relate to one another, we will have a much better chance of creating effective management plans. -- J. T. Stokowski, Research Assistant

Butterfly Surveys Conducted at WMAs

This past summer, the DEP Wildlife Division, with the help of several volunteers, conducted surveys at two wildlife management areas (WMA), Babcock Pond and Goshen, to determine the diversity of butterfly species found at the sites. Babcock Pond WMA in Colchester consists primarily of wetland habitat, but also has forest, field and old field habitats. Goshen WMA, which is almost entirely field and old field habitat, proved especially challenging to survey due to the large size of the fields.

Both sites were surveyed at least once during each major butterfly flight season, beginning in early June. Transect surveys were also conducted at Goshen WMA and involved walking along an established path, noting any butterflies seen within 2.5 meters of the observer. During this limited field season, close to 40 butterfly species were observed at each WMA.

Determining the presence or absence of butterflies and their flight periods can help provide guidance for management decisions (such as mowing or burning) and be used to evaluate management actions. Surveys will be conducted again next year, beginning in April to add some of the early spring fliers. Butterfly watchers interested in assisting with these efforts can contact Laura Rogers-Castro at the Division's Sessions Woods office (860-675-8130).

Sandy Jacobson Retires

Sandy Jacobson, a Program Assistant at the Wildlife Division's Sessions Woods Wildlife Management Area office, retired from state service at the end of July. A member



of the Sessions Woods staff since 1996, Sandy worked with the Conservation Education/Firearms Safety (CE/FS) Program, processing student certificates and assisting the volunteer instructors with course scheduling. Anyone who has called the Sessions Woods office, either about CE/FS courses or with questions about wildlife, probably has spoken with Sandy. Sandy's organizational skills, as well as her infectious smile and laugh, will be missed by all, especially the Wildlife Division staff and the CE/FS volunteer instructors. We wish her well in her retirement.

Outreach Kits for Eastern CT Educators

Educators in the eastern half of the state no longer need to travel to Burlington to borrow the Wildlife Division's "Woodland Wildlife" and "Wildlife in Your Connecticut Backyard" outreach kits. The two kits are now also available from the Wildlife Division's Franklin WMA office (Wildlife in Your Connecticut Backyard) and the DEP's Eastern District Headquarters in Marlborough (Woodland Wildlife). Both kits are filled with various wildlife props (skulls, track replicas, feathers, etc.), in addition to a slide show and script.

The "White-tailed Deer" outreach kit is also available; however, at this time, it can only be obtained from the Division's Sessions Woods office in Burlington. To borrow any of the kits, contact the nearest Wildlife Division office for more information.

Wetland Bird Callback Survey Numbers Down

For the second year in a row, the number of volunteers who conducted wetland bird callback surveys decreased. Only seven sites were surveyed in 2001 by a total of eight volunteers. Fortunately, the number of birds recorded was relatively high, despite having so few areas surveyed. However, more help still is needed to make next year's survey successful. Those interested in helping to conduct wetland bird callback surveys next year should contact Geoff Krukar, at (860) 675-8130.

The annual wetland

bird callback survey is conducted by volunteers who search wetlands for possible breeding wetland birds. Volunteers have the opportunity to find five species of rails, two species of bitterns, the common moorhen and pied-billed grebe. Survey results are tabulated and entered into a database to help the Wildlife Division better monitor populations of these secretive birds.

Moose Sightings on the Rise

The Wildlife Division has been monitoring moose sightings in the state since 1992. During the months of May and June 2001, the Division received at least 16 moose sightings of at least five different moose. Both young and mature cows and bulls were sighted. Most moose sightings were received from the towns of Tolland, Ashford, Torrington, Norfolk and Goshen. Connecticut now has an expanding resident moose population. In 2000, a cow with two calves was observed in the Hartland area. Please call the Wildlife Division's Franklin office (860-642-7239) to report any moose sightings.

2001 Wetland Bird Callback Survey Results

Species	# of sites where heard
American bitter	n 0
Least bittern	1
Virginia rail	1
Sora	1
Clapper rail	2
King rail	0
Black rail	0
Common moor	nen 0
Pied-billed greb	be 1
Coot	0
Willet	2
7 sites were surve * nesting populati	eyed ions only

Status in CT Endangered Threatened Not listed Not listed Not listed Endangered* Endangered* Endangered Endangered Not listed Special concern



Rehabilitators Care for Thousands of Animals Each Year

Having completed a series of state requirements and complying with local, state and federal laws, wildlife rehabilitators are authorized to care for sick, injured and orphaned wildlife with the intention of returning healthy animals back to the wild.

During 2000, approximately 220 wildlife rehabilitators cared for 4,824 birds. 3,730 mammals and 111 reptiles and amphibians. Of that total, 105 animals were Connecticut threatened, endangered or special concern species and nearly 4,332 animals were successfully released back to the wild.



Hundreds of sick and injured songbirds are cared for by wildlife rehabilitators every year. This young robin is undergoing treatment for foot injuries.

Take the Wildlife Challenge!

Guess which animal is described in the challenge and enter into a drawing to win a free wildlife poster. Clearly print your answer on a postcard, along with your name, address and phone number and send it to: CT Wildlife Division, P.O. Box 1550, Burlington, CT 06013, **Attn: Wildlife Challenge**. The answer and winner will be printed in the next issue of *Connecticut Wildlife*. **Official Rules:** Only one postcard will be accepted per household, per challenge. Postcards for this issue's contest must be postmarked by October 12, 2001. Only one winner will be chosen for each challenge. Each winner will be chosen at random from all correct entries received by the postmarked deadline.

Congratulations go to John Slanski who was chosen as the winner of the July/ August challenge. John gave the correct answer of "river otter" and his name was randomly picked from all correct answers submitted by readers. John will be sent the wildlife poster of his choice. Thanks to all readers who sent in postcards with answers to the Challenge. Please keep trying!

September/October Wildlife Challenge

At the beginning of the twentieth century, this large bird came close to extinction due to excessive market hunting. Its plumes were in great demand for use in women's apparel. Although populations recovered somewhat after market hunting was outlawed and legal protection was established, the degradation and loss of wetland habitats and the development of coastal areas have prevented populations from returning to their previous levels. It is a threatened species in Connecticut and can be found in freshwater and saltwater marshes, streams, ponds, lakes or mudflats.

Attention Teachers: Learn About ... *The Federal Jr. Duck Stamp Program and Scholarship Competition*

It's time to start thinking about the Federal Junior Duck Stamp Program and Scholarship Competition. The program is an integrated art and science curriculum developed to teach environmental science and habitat conservation. The curriculum demonstrates that wetlands are not only nature's filter system, but serve as a barometer of environmental health. Free curriculum guides can be requested by calling 1-877-887-5508. For information on the Junior Duck Stamp Program, visit the website at http://duckstamps.fws.gov. Entries for the scholarship competition must be postmarked by March 15, 2002, and addressed to your state's receiving site: Paul Rothbart, CT Waterfowl Association, 177 Romulus Road, Cheshire, CT 06410.

Attention Sportsmen:

The DEP's Office of Licensing and Revenue, located at the DEP Headquarters at 79 Elm Street in Hartford, will extend its hours of operation on selected dates in October and November to accomodate the large number of hunters who wish to obtain permits for the fall hunting seasons. The office will be open from 9:00 am to 7:30 pm on: October 18, November 1, November 8 and November 15. Normal hours of operation are Monday through Friday from 9:00 am to 4:00 pm.

Wildlife Calendar Reminders

Sept. 1
Opening day of the September squirrel season.
Sept. 1-Nov. 4 Rail hunting season.
Sept. 4-25 September goose hunting season in the north zone.
Sept. 15-Nov. 13 First portion of archery deer and turkey hunting seasons.
Sept. 17-25 September goose hunting season in the south zone.
Sept. 22 National Hunting and Fishing Day (see page 12 for more information).
Sept. 30 Deadline for returning Bat House Survey Cards.
October Most adult mosquitoes disappear after the first hard frost.
Bats begin to travel to winter hibernaculas early this month.
Oct. 6 & 8 Youth Waterfowl Hunter Training Days
October 10 Early duck seasons begin (Consult the 2001-2002 Migratory Bird Hunting Guide, available at DEP offices, town clerks' offices and at the DEP website: <u>http://dep.state.ct.us</u>).
October 20 Small game hunting season opens.
Oct. 20-Nov. 3 Fall firearms turkey hunting season.
Oct. 27-Nov. 24 Woodcock and snipe hunting season.
November 4 Trapping season begins (except for the beaver trapping season which begins December 1).



There are over 30,000 different kinds of spiders. Close to 500 are found in Connecticut. Many are web weavers, although others ambush their prey. Almost all are harmless to people and most help us by eating insects.

Did you know.....

Wolf spiders carry their young (spiderlings) on their backs. It only takes an orbweb weaver 45 minutes to spin its web. Spiderlings can "balloon" (float in the air on lines of silk) to move from one place to another. Many birds depend on spider silk to "glue" their nests together. Not all spiders have venom glands. Tarantulas are not found in Connecticut. Harvestmen (dady-long-legs) are not spiders and do not

Paralyzed Prey

make silk.

A spider's venom is used to paralyze or kill its prey. Most spiders' fangs are not strong enough to break through human skin. The black widow's venom could make you very sick, but this spider is uncommon in Connecticut.

What makes a spider a spider?

Spiders are not insects!

Spiders have 2 body parts and 8 legs. Insects have 3 body parts and 6 legs.

Spiders usually have 8 eyes. Scientists can identify many spiders from the size and arrangement of their eyes.

Spiders also have fangs, which they use to inject venom into their prey.



Sensational Silk!

Spiders make liquid silk from special glands in their abdomen. The silk leaves the spider's body from spinnerets located at the tip of the abdomen. Different types of silk help spiders make webs, egg cases, protective "retreats" and more. Pound for pound, silk is stronger that steel. Researchers are studying silk for use in bullet-proof vests. Now that's strong!!

Try this at home:

Go out at night to look for spider eyes. Take a flashlight, hold it on your forehead and shine it 10 feet from you on the ground. Look for sparkling green eyes among the plants. These are the emerald eyes of wolf spiders.

