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Connecticut Wildlife

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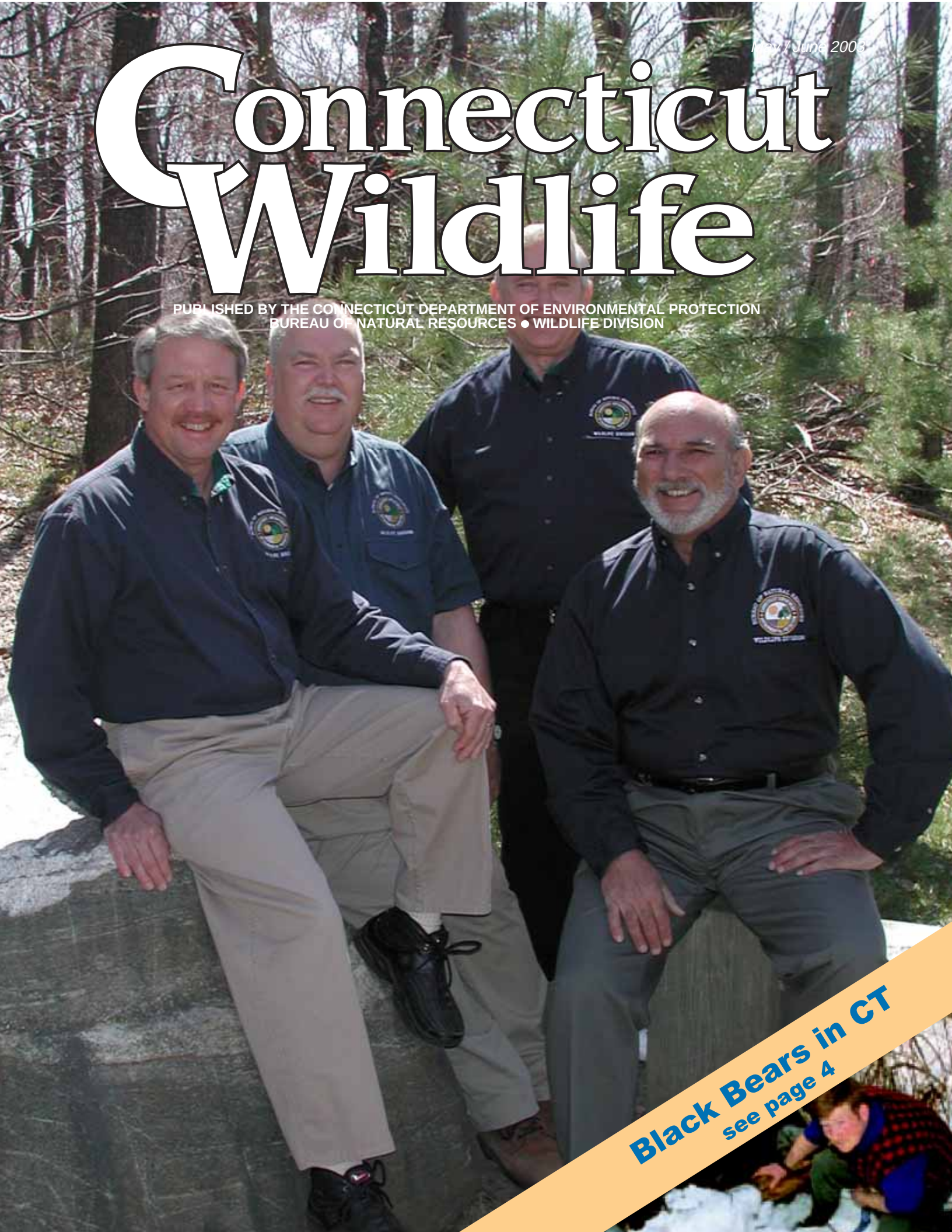

Black Bears in CT
see page 4

From the Director

This is a time of dramatic change within the Department of Environmental Protection. Due to the state's current fiscal condition, all divisions within the agency are making preparations to accomplish their missions with fewer resources. The Wildlife Division has spent the last few months prioritizing its programs and identifying projects and activities that will be curtailed or abandoned given current and anticipated reductions in personnel and operating funds. This is a situation that is still evolving, pending the passage of a state budget. The process is a painful necessity.

One thing that has already occurred is the departure of many senior DEP staff through an employee retirement incentive program. On its surface, this represents a very significant loss of leadership, experience and institutional knowledge. Many of these individuals, including four from the Wildlife Division (see page 8), have made outstanding contributions to the management of Connecticut's wildlife and their habitats. On behalf of the Wildlife Division, I thank these co-workers for their friendship, mentoring, dedication and career commitments to Connecticut's environment. The departure of staff from key support divisions, such as Parks, Law Enforcement, and Field and Support Services, will have a direct impact on many Wildlife Division programs.

Turnover can infuse an organization with creativity and enthusiasm if the departing staff is replaced with high-quality recruits. However, given the current economic uncertainties, we will be challenged to rebuild our staff in the short-term. Until the budget situation stabilizes, we will do the best we can with what we have. Many members of the Wildlife Division will be assigned new duties to cover our primary functions. Some of these assignments may be temporary and will provide opportunities for individuals to learn new skills and expand their expertise. There will be a period of reduced efficiency as the staff goes through on-the-job training, but I am confident in our ability to adapt in a professional manner.

Progressive managers exhibit a willingness to "embrace" change. However, I may be speaking for a lot of managers in stating that these types of changes feel more like a headlock than an embrace. It is difficult to accept the fact that we will accomplish less, especially when there are so many critical challenges facing wildlife management. We will maximize our impact by prioritizing our activities, making full use of partnerships, volunteers and other resources, and maintaining the flexibility to take advantage of grants and other funding opportunities as they arise. And, we hope for better economic times ahead.

Dale W. May

Cover:

Four valued and longtime employees are retiring from the Wildlife Division in June: (l to r) Wildlife District Supervisor Steve Jackson, Assistant Director Pete Bogue, CE/FS Program Coordinator Bob Kalinowski and Wildlife Maintainer III Rich Garini (see article on page 8).

Photo by Paul J. Fusco

Connecticut Wildlife

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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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Protecting Nesting Herons and Egrets Is Everyone's Responsibility

P. J. FUSCO

Protecting egrets, like this great egret, and herons from human disturbance during the nesting season (mid-May to September) is the key element in restoring their populations.

Over the past several years, the DEP has worked cooperatively with the U.S. Fish and Wildlife Service (USFWS) to protect colonies of herons, egrets and ibises that nest on several islands along Connecticut's coast, while also accommodating reasonable public access to the islands. The protection involves temporarily closing interior portions of Charles Island, in Milford, and Duck Island, in Westbrook, from mid-May until September to prevent beach visitors from disturbing nesting birds. Herons, and two state-threatened species, the great egret and snowy egret, return annually to the islands to nest. The glossy ibis, a state species of special concern, nests on both islands and appears to have increased in numbers at Duck Island.

The critical nesting area of these rookeries is protected with signs and/or fencing. Several locations also feature large, educational signs that alert visitors to the birds' presence and the need for protection of nesting areas. In 2002, the DEP Wildlife Division provided funding, through the Wildlife Conservation and Restoration Act Program, to Connecticut Audubon for a special rookery monitor at Charles Island. The rookery monitor educated visitors about the rookery and collected data on human use of the island and on the bird colony.

Unfortunately, last summer the DEP was forced to issue an emergency closure of Charles and Duck Islands to prevent continuing human disturbance of nesting birds. A tremendous amount of disturbance occurred at the islands, causing the majority of great and snowy egrets, glossy ibis and little blue herons to abandon the nest site at Duck Island. Disturbance at Charles Island also forced birds to leave their nests. It was felt that continued disturbance could result in total abandonment of both sites. Charles and Duck Islands are designated as Natural Area Preserves, primarily because of their importance as nesting habitats for herons and egrets. Observations by the rookery monitor and USFWS personnel indicate that human disturbance is becoming more frequent on the islands. Examples of these disturbances include illegal camp-outs, unleashed dogs roaming the closed areas of the island (dogs are perceived as predators by the birds) and, most notably, a large bonfire that was built outside the fencing on Duck Island last year, right in front of the educational sign detailing the importance of the island to herons and egrets.

Protecting herons and egrets from human disturbance during the nesting season (mid-May to September) is the key element in restoring their populations. If nest sites are disturbed, the adults will leave their nests, subjecting the eggs and young to exposure and possible death. Young birds that are agitated by disturbance may fall from the nest and will not be fed by the adults, resulting in death from exposure, starvation or predation.

The educational signs, along with fencing materials and smaller nest area designation signs, were provided for this project through grants from the Connecticut Endangered Species/Wildlife Income Tax Check-off Fund, the Long Island Sound License Plate Program and the Federal Partnerships for Wildlife Program.

For more information, contact the DEP Wildlife Division at (860) 675-8130, or the USFWS McKinney Refuge at (860) 399-2513. The public can help in this effort to protect the nesting birds by following the temporary closure, letting others know the importance of protecting these special areas and reporting any observed violations to the DEP TIP hotline: 1-800-842-4357.

The USFWS Stewart B. McKinney National Wildlife Refuge also requests that the public respect temporary area closures and remain out of bird nesting sites on Falkner, Outer, Sheffield, Goose and Chimon Islands.

Black Bear Dens Checked Over Winter

Seven females with a total of 17 newborn cubs found

Written by Paul Rego, Furbearer Program Biologist

In December, seven female black bears chose sites where they would spend the next three to four months curled in a nearly motionless, apparent sleep. The sites varied from the cozy to the exposed, from a ramshackle "lean-to" formed by the limbs of fallen trees to an open, crude bed of leaves. Many of the bears were largely exposed to the frequent snows and nearly constant freezing temperatures of January, February and March. For each, the greatest protection against the elements was the dense coat of shiny black fur and the inches of fat that lay just beneath.

Unlike most bears, these were being watched. They were radio-collared as part of a DEP Wildlife Division project to gain information on Connecticut's growing bear population. The seven sows had been trapped, ear-tagged and collared in the summer of 2002. Examinations at that time revealed little evidence that they were caring for cubs. It was suspected that most would give birth to cubs in the coming winter.

Wildlife Division research assistant Mark Freeman inspects a den of a female black bear. The den was just a simple brush pile that left the bear and its cubs somewhat exposed to the harsh winter of 2003.

P. J. FUSCO (2)

Wildlife Division biologist Paul Rego holds a bear cub while research assistants Mark Freeman (center) and Henri Woods weigh another cub. By obtaining weights of these six to eight-week-old bear cubs, biologists are able to monitor their growth and health.

The seven sows and their chosen den sites were inspected in March. Bear researchers commonly inspect dens to determine reproductive success of bears. The technique typically involves a slow, stealthy approach of the den in an attempt to get close enough to inject the sow with an immobilizing drug--close or closer than the eight-foot reach of a syringe pole. The search begins, and is narrowed to yards, with a radio receiver and antenna. Pinpointing the sow's exact location typically occurs by seeing the texture of fur or its extreme blackness between the jumble of downed limbs or hearing the squeal of cubs. Because the sheltered darkness makes the bear's anatomy nearly indiscernible, the challenge is to determine a good injection site--neck or rump. Once drugged, the female can be examined and the presence and number of cubs determined.

The suspicions of last summer were realized. All seven sows had litters. Three sows had litters of three cubs and four had litters of two. Researchers have found similar litter sizes in other northeastern states. The 17 cubs included 10 females and seven males. The cubs, which weighed less than a pound at birth, were five to seven pounds when examined. Despite giving birth and nursing for nearly three months, being crudely sheltered from wind, rain and snow, and having fasted for nearly four months, all of the females weighed 20 to 30 pounds more than they had the previous summer. The nutrition from abundant fall acorns was still present in the bears as fat reserves and was now being transferred to the cubs as lipid-rich milk.

It is not surprising that these seven bears all bore litters. Female black bears breed every other year. Because they apparently did not have cubs the previous year, they were due. Food abundance or scarcity from year to year in a region tends to synchronize reproduction leading to general reproductive success or failure in the region's females.

The bear population in Connecticut has been increasing dramatically. Ten to 20 years ago it was believed that many of the state's bears were young males wandering from Massachusetts and not necessarily residents. Now our state has resident female bears that will contribute to population growth. Documenting litters in Connecticut provides tangible evidence of population growth. The bear population is expected to continue to grow. The question will soon become "How many bears do Connecticut residents want and where do they want them?"

This study is being funded by the Wildlife Conservation and Restoration Act Program.

Research Projects at McKinney National Wildlife Refuge

By Sara Williams, U.S. Fish and Wildlife Service

Thirty percent of Connecticut's total population lives in towns and cities along the shore. With such densities, one might imagine little room left for wild things. You will find quite the contrary when spending time along the shoreline. Stewart B. McKinney National Wildlife Refuge provides just less than 1,000 acres of sanctuary for wildlife along the shoreline with six islands and three mainland units stretching from Greenwich to Westbrook.

The broad mission of the National Wildlife Refuge System is to conserve fish, wildlife, plants and their habitats. When compatible with the System's mission and the purpose of the refuge, six priority public uses of hunting, fishing, wildlife observation, photography, environmental education and interpretation are permitted on refuges. One of the specific purposes of Stewart B. McKinney National Wildlife Refuge is to provide opportunities for scientific research, environmental education and fish and wildlife-dependent recreation. Many cooperative programs and partnerships continue to help the refuge fulfill this goal. Scientific research on the refuge helps determine the abundance and distribution of wildlife. Research projects also identify, analyze and document important habitat parameters of species present on refuge units. This information is used by the refuge in the creation of management plans, shapes the ecological and technical understanding of the scientific community and provides resources for educators.

Upcoming research projects taking place on the refuge are described below.

The Salt Meadow Unit, Westbrook

The refuge will take part in a cooperative research project between U.S. Geological Survey-Patuxent Wildlife Research Center and the U.S. Fish and Wildlife Service that compares parallel ditched marshes to Open Marsh Water Management (OMWM) marshes. The cooperative research project will survey the bird, mosquito, plant and nekton communities, and study the hydrology and sedimentation of parallel ditched and OMWM marshes from Maine to New Jersey. OMWM projects diversify the hydrological systems of ditched marshes through ditch-plugging and the creation of pannes and pools. Coastal marshes of the Northeast have been ditched since colonial times for mosquito control and salt hay farming. The Menunketesuck River marshes at the Salt Meadow Unit were first ditched in the 1920s and occasionally maintained until the 1980s. Lowered water tables and altered vegetation patterns are a few impacts of marsh ditching. It is thought that ditching negatively affected the ecology

P. J. FUSCO

A project will be initiated next year at the Great Meadows Unit to evaluate the abundance and breeding success of rails (like the clapper rail, above), black ducks and other waterbirds.

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Forestry – Looking Beyond the Trees!

The 2003 Connecticut Forestry Centennial

By David S. Irvin and Donald Smith, DEP Division of Forestry

Connecticut is a state of forests, brimming with a diversity of wildlife!

DEP-FORESTRY

There were many large, destructive forest fires in Connecticut in the early 20th century. It became apparent that reforestation programs had to include fire control. This innovation was an early fire suppression vehicle.

Forests are a vital part of Connecticut's character, covering 60 percent of our landscape. They play an essential role in the state's attractiveness and appeal, adding to the quality of our lives, our economy and, of course, they provide homes for many types of wildlife.

But Connecticut has not always been this forested. While residents can now marvel at the healthy return of wildlife, such as white-tailed deer, black bear, bobcat, turkey and numerous migratory birds, just 100 years ago most of the state's forests were cleared for agriculture or cut indiscriminately for fuelwood and charcoal production. Forest fires were widespread. Most woodland dwelling wildlife had disappeared.

In 1903, after much lobbying by concerned citizens, the legislature appropriated $2,000 to "buy land suitable for the growth of oak, pine, or chestnut lumber at a price not exceeding $4 per acre. . . ." The state acquired 70 acres of brush land in Portland and named it "Portland State Forest" (later changed to Meshomasic State Forest). From that first small purchase, Connecticut's State Forest System has grown to 30 state forests, totaling approximately 150,000 acres.

2003 marks the 100th anniversary of Connecticut's state forests and the practice of forestry in the state. All year long, the DEP will promote the *Connecticut Forestry Centennial* in recognition of this accomplishment. The Division of Forestry will celebrate the history and successes of the State Forest System and will raise public awareness about the diverse values of managed forests – both public and private. The theme is "*Forestry--Looking Beyond the Trees*."

The DEP Division of Forestry invites the public to enjoy the benefits their forests hold – benefits that exist because of a lot of hard work during the past century. The DEP hopes the public will learn about the history of their forests and the work being done now. Everyone should understand how important it is to continue the history of care for the forests. It is an investment in the future.

Centennial Activities

So, what's involved in *Looking Beyond the Trees?* Here's what's coming up this year:

CPTV Documentary: In association with Connecticut Public Television, the Division of Forestry is working on a documentary about the history of Connecticut's forests and their contribution to our quality of life. Planned to air at the end of 2003 (the video will be made available to schools and libraries all over the state), the show will include unique features of our state forests, natural history, land use from pre-colonial time to the present, factors impacting forests and the landscape and why forestry is needed today. However, at this time, not all of the funding needed for production is in place. Fundraising for this project continues, as several significant donations are needed to complete the documentary. Anyone interested in supporting this project is encouraged to contact the State Forester's Office in Hartford (DEP Forestry Division, 79 Elm Street, Hartford, CT 06106, (860) 424-3630).

Forestry Image Library: Division of Forestry staff members are collecting historical and modern photographs pertaining to forests and forestry in Connecticut. They are also searching for privately held photography (that can be authenticated) for inclusion in the collection. All of the photographs are being scanned and digitized. When complete, the collection will be copied to CD and distributed upon request.

PowerPoint/Slide Presentations: Drawing upon the new Forestry Image Library, a new slide presentation about the Division of Forestry has been developed. Another presentation featuring a historical perspective of state forests was created using archival images. Groups interested in a presentation should call (860) 424-3630.

Brochure: The Division of Forestry's "Forests for the Future" brochure will be completely updated, describing each of the Division's programs.

Educational Pamphlets: Work is underway on a new pamphlet designed for people who use our state forests – and wonder, at times, why trees are cut. The pamphlet will explain the need for active forest management to create healthier, more productive and more resilient forests, as well as diverse habitats for wildlife.

Youth and Family-based Contests and Activities

Art poster contest for grades 4-12: Judging has been completed on a poster contest for all Connecticut students in three age groups, grades 4-6, 7-9 and 10-12. Entries were based on the theme: "Forestry--Looking Beyond the Trees." 1st, 2nd and 3rd prizes were awarded in each age group, with a Grand Prize awarded to the best overall poster. The Grand Prize poster will be reproduced and used as the symbol for the *Connecticut Forestry Centennial*. The winning posters can be viewed on the DEP's website at www.dep.state.ct.us/burnatr/forestry/centen/posters.htm.

Internet-based contest/activities web page. The DEP is currently developing a youth-oriented educational activities web page with a simple contest quiz and activities.

"Letter-boxing" on State Forests. Letter-boxing is sweeping the forests of the nation. People are hiding unique stamps, ink pads and paper in waterproof containers in the woods, and then posting clues on the Internet to help people find the letter boxes. Once a letter box is found, you are supposed to use your own stamp on the paper in the box to show you were there, then use the stamp in the box on your own pad of paper. It's fun to collect stamps – and you see the forest "up-close and personal" in the process. In the DEP's version of letter-boxing, a Centennial patch will be awarded to people who collect a certain number of unique stamps from the state forest letterbox trails. The first letterboxes have already been placed in state forests!

Recently-retired DEP forester Jim Pronovost measures a white pine in a modern state forest.

A Whole Tree Artists' Festival

During the year, one large specimen of our official state tree (white oak) will be cut down on one of the state forests as a crowd of Connecticut artisans looks on. Each of the artisans will then "stake a claim" on some portion of the tree (from roots and bark to leaves and seeds) and take it home with them. The artisans will then create masterful works of art from the tree. Later on, the artisans will come together to exhibit their works. Coordinated by the creative minds at DEP's Kellogg Environmental Center in Derby, this promises to be a unique and fascinating project!

DEP-FORESTRY (2)

Charcoal mounds, like this one in Burlington, once dotted the smoky, clearcut landscape. This practice helped regenerate the oak forests that are so common today.

A Forestry "Event"

Everyone loves a party! The DEP Division of Forestry and the Connecticut Forest and Park Association are planning for one to be held in the fall of 2003. This one-day celebration of the history and value of Connecticut's forests is scheduled to be held at People's State Forest in Barkhamsted on Saturday, October 4, 2003. An array of demonstrations, workshops and hikes will be featured. Other hikes in various state forests and wildlife management areas are being scheduled throughout the year.

The year should prove to be a fulfilling one for all Connecticut wildlife and forest enthusiasts. The DEP will work harder than ever to reach its citizens and bring them closer to nature, their land and their heritage. And, the DEP hopes Connecticut residents will broaden their horizons and learn a lot while enjoying themselves.

Wildlife Division Bids Farewell to Longtime Employees

Four valued and longtime Wildlife Division employees are retiring from state service in June: Pete Bogue, Steve Jackson, Bob Kalinowski and Rich Garini. Their accomplishments and contributions have been many. And, as much as we do not want to see them go, we wish them all the best in their retirement. The Wildlife Division would also like to thank each of these men for their hard work and dedication over the years to the wildlife resource. They will surely be missed.

Assistant Director Pete Bogue

Thirty years ago, in 1973, Pete Bogue started a long and successful career with the DEP shortly after receiving a B.S. degree in wildlife management from West Virginia University. Pete quickly worked his way up the ranks from seasonal worker to wildlife biologist to senior staff biologist and finally Assistant Director of the Wildlife Division.

Pete's responsibilities were numerous during his time with the Division. In the early days, he supervised wildlife propagation (ducks) at Franklin Wildlife Management Area (WMA), and administered the pheasant stocking and permit required programs. As Assistant Director, he was the federal aid project leader and administrator for the Division's Technical Assistance, Habitat Management and Conservation/Education Firearms Safety (CE/FS) Programs.

Working with Division cooperators, such as the Dr. John E. Flaherty Field Trial Association, Valley Shore Waterfowlers, the Ruffed Grouse Society, Connecticut Waterfowl, National Wild Turkey Federation and Ducks Unlimited, on habitat management and other wildlife projects was a welcome bonus to his many other duties.

When asked what he thought were his major accomplishments during his tenure, Pete listed the following:

- Revamping and undertaking major improvements to pheasant purchases and the pheasant stocking program in the 1970s.
- Initiating the first Ducks Unlimited M.A.R.S.H project in Connecticut with the acquisition of 53 acres of marsh in New Haven.
- Being involved with the CE/FS Program since its inception in 1982 and helping to develop and administer a nationally recognized hunter education program.
- Working with Northeast Utilities to set up the Cooperative WMA and Hunting Program.
- Working with DEP Land Acquisition in the purchase of Babcock Pond and Goshen WMAs and additions to many other WMAs, including Sessions Woods and Flaherty Field Trail Area.
- Developing the Sessions Woods WMA into a site for conservation education.
- Maintaining a cooperative working relationship for the past 20+ years with the Dr. John E. Flaherty Field Trial Association to implement habitat/facility improvements at the Flaherty Field Trial Area, making it a nationally recognized facility among the field trial fraternity.

Pete's most memorable events during his time with the Wildlife Division included assisting biologist Steve Jackson with the pickup and release of the first wild turkeys in Connecticut in 1975 and when the Air National Guard used a helicopter to airlift a fire tower to a hilltop at Sessions Woods WMA.

When Pete first started with the Wildlife Division, there was a staff of only six. He has watched that staff grow over the years to 35 permanent employees. He also watched while the Division's clientele shifted from being solely sportsmen interested in hunting programs to a more diverse audience of wildlife enthusiasts. Through it all, he felt that the Division staff has always remained dedicated to the profession of wildlife management. However, Pete sees several challenges for the future. The most important will be carrying out the mission of the Wildlife Division with limited resources, including staff and budgets. He feels that because of these limited resources, it may be difficult for the Wildlife Division to take advantage of new funding opportunities and programs that require matching funds. Another challenge will be maintaining sportsman-funded programs along with the demands from the new clientele of wildlife enthusiasts.

After leaving the busy atmosphere of the Wildlife Division's Hartford office, Pete has plans to spend more time with his family and to enjoy the outdoors and some good hunting and fishing opportunities, especially a retirement fishing trip for halibut in Alaska. Pete also plans to work with his son to expand his businesses: Bogue's Land Works LLC and Bogue Farms LLC, both of Middletown.

Pete advises his colleagues at the Wildlife Division to be persistent and stay dedicated to the cause. With persistence, Pete feels that goals will be obtained, although it may take longer than expected in the state system. He wishes his colleagues at the Wildlife Division the best of luck and thanks them for the opportunity to be part of the team for the last 30 years. All of us at the Wildlife Division wish Pete well in his retirement. We also want to thank him for his role in making the state's hunter education program one of the best in the nation and for his hard work in adding so many acres of public land for wildlife and wildlife-related recreation.

District Wildlife Supervisor Steve Jackson

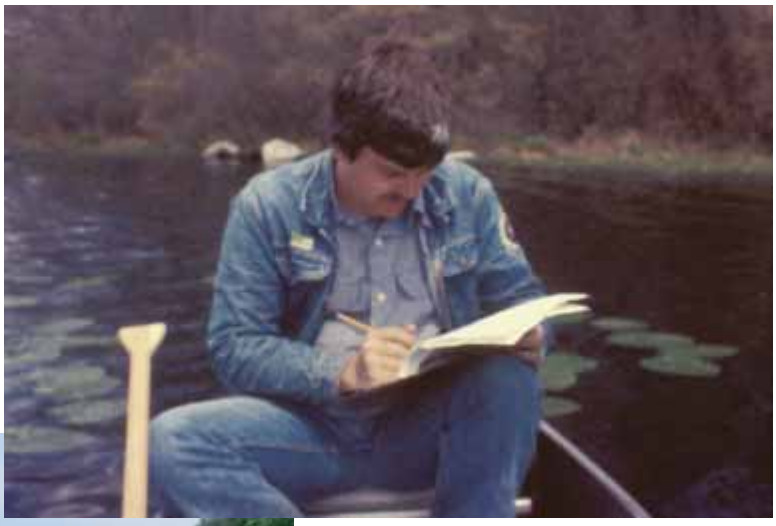
Also retiring with 30 years of service to the Wildlife Division is District Wildlife Supervisor Steve Jackson. After receiving a B.S. in wildlife management from West Virginia University and a M.S. in wildlife biology from the University of Connecticut, Steve joined the Division as a biologist in 1973. Within two years, Steve achieved one of his major accomplishments, restoring the wild turkey to Connecticut. He obtained 22 livetrapped turkeys from New York, which were then released in Canaan. From that initial release in 1975, wild turkeys now occur statewide and the population is estimated at over 30,000. Steve was also responsible for establishing the first turkey hunting season in Connecticut in 1981.

Steve was eventually promoted to District Wildlife Supervisor at the DEP's Western District Headquarters in Harwinton. He supervised the management of wildlife on state WMAs in the district and worked with the Division of Forestry on the management of state forests. The work included mowing fields, marsh management, the construction of marshes, parking areas and roads, the establishment of food plots, pheasant stocking and the administration of agricultural agreements and management

Wildlife Division retirees on the job. (Below) Bob Kalinowski (left) participating in a photo shoot for the CE/FS Instructor Handbook. (Right) Steve Jackson releasing one of the first wild turkeys to be reintroduced in Connecticut back in 1975.

DEP-WILDLIFE

P. J. FUSCO



DEP-WILDLIFE

P. J. FUSCO

Wildlife Division retirees on the job. (Above) Pete Bogue conducting field work. (Left) Rich Garini (left) coordinating a session on field trial dogs for Wildlife Division staff during a field training day.

plans. He also assisted the public with animal complaints (mostly concerning beavers and deer), environmental reviews and land management consulting. Through his efforts at WMAs in western Connecticut, public access to these areas increased substantially.

In 1994, Steve moved his office to the Sessions Woods Conservation Education Center where he developed the educational trail system that demonstrates wildlife habitat management practices. He also supervised the maintenance and enhancement of the center and the 455-acre WMA, coordinated public presentations at the center and worked closely with volunteer groups, such as the "Friends of Sessions Woods," as well as the Boy Scouts of America. Steve was instrumental in the establishment of the nonprofit "Friends of Sessions Woods." And, through Steve's efforts, 30 Boy Scouts completed Eagle Scout projects which benefitted Sessions Woods.

Just like Pete Bogue, Steve has watched the Wildlife Division staff grow over the years. With that he has seen how federal aid dollars, which were once used for land acquisition, now must be used to fund salaries of Division personnel. Other changes that occurred

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Recent Advances By Two Showy Shorebirds

Written by Paul Fusco, Wildlife Outreach Unit

Connecticut's two largest species of breeding shorebirds have undergone a dramatic change in population over the last 30 years. Both willets and American oystercatchers have gone from being entirely absent in Connecticut, to becoming a regular sight as they raise their young along our shoreline.

Both species suffered from widespread and intense unregulated hunting and egg collecting in the 1800s that led to their extirpation from Connecticut and surrounding states. During that time, the breeding range of both shorebirds receded well to our south. Protection was granted to these species in the early 1900s, as well as to most other shorebirds, and, since then, willets and oystercatchers have been gradually expanding north, reclaiming their original range.

According to documented records, willets last nested in Connecticut in 1873 at Madison. Confirmed as nesting again in 1978, willets have been increasing and are now found as breeders in most of the larger salt marshes in Connecticut.

The American oystercatcher was not documented as breeding in Connecticut before 1981, when a nest was discovered on a small island in Mystic. Today, oystercatchers are widespread nesters along our entire coast, although at low densities.

Willets and American oystercatchers that breed on the east coast of the United States generally winter along the southern United States and Gulf Coast shorelines. Compared to most other shorebirds, the distance these two species must travel during migration between their breeding and wintering grounds is short. While these short distance migrants are doing well, many other shorebird populations that have much longer migrations are not. Species like the sanderling and red knot that migrate between Arctic breeding grounds and Latin American wintering areas have been experiencing significant long-term population declines.

Willet

Willets are large, wading sandpipers. They are generally brown to gray in color and have striking white wing patches, which can be seen when the birds raise their wings or when they are in flight. Their long bill is used for probing and grabbing crustaceans, marine worms, small fish and insects.

They will typically nest on the back side of coastal sand dunes under thick clumps of beach grass or under low shrubs that border a tidal marsh. The nests are well hidden and are usually close to their marsh and shoreline feeding areas.

Willets are noisy birds on their breeding grounds. If an intruder gets too close to their nesting territory, one or more willets will fly up from the marsh, actively circling and noisily scolding the intruder. They will not settle down until the threat has passed, whether it be a human or a gull. The birds' loud alarm calls and flashing white wing patches help to disorient and drive away any potential nest predator.

Look for willets in coastal salt marsh habitats in and around the marsh grasses and creeks. They also can be seen feeding in intertidal areas or resting on beaches. Their loud, repetitive call of *pill-will-willet* carries for quite a distance. They are generally found in Connecticut from May into October.

Willets can be found in most of Connecticut's larger salt marshes from May through September.

American Oystercatcher

Slightly smaller than a herring gull, the American oystercatcher is Connecticut's largest member of the shorebird family. It has a chunky body, short tail and medium length legs. Its black head and neck and dark brown back contrast with its white underside. In flight it shows prominent white wing and tail patches, making the oystercatcher a flashy bird.

The List

The first Connecticut State Endangered Species List was finalized in 1992. At that time, the willet was listed as threatened and the oystercatcher was listed as special concern. The first revision to the list became official in 1998. On it, the willet was downlisted from threatened to special concern, and the oystercatcher remained as special concern. A second revision to the list will be finalized soon, and the willet may be delisted.

Oystercatchers have a long, heavy bill that is bright reddish-orange in color. The chisel-like and laterally flattened bill is well adapted for prying into and opening clams, mussels and oysters. They will also feed on marine worms, crabs and other invertebrates.

Oystercatchers have a noisy, emphatic call, often made when the bird is in flight. Their *wheep, wheep, wheeop* call is sometimes followed by a loud series of *pic, pic, pic* notes.

Sandy beaches and tidal mudflats are the favorite haunts of American oystercatchers. The birds are extremely wary and tend to frequent the outermost sandbars and mudflats. They typically arrive in Connecticut during late March or April and depart by some time in October. Some hardy individuals may stay later.

P. J. FUSCO (3)

American oystercatchers are only found in open coastal habitats. They will use dunes, sandbars and mudflats to forage and raise their young.

Conservation

While both of these species seem to be on the increase with their breeding ranges expanding northward over the last decade, they are still at risk. The American oystercatcher's coastal beach habitat is greatly reduced from what it once was and has high human use and disturbance during the nesting season. The willet's coastal salt marsh habitat is continually under pressure from encroaching development and various recreational activities.

Critical stopover sites where long distance migratory shorebirds find food and refuge are being identified and protected by both government agencies and non-government organizations. Most of these same areas will also benefit short distance migrants like the willet and oystercatcher.

The DEP Wildlife Division monitors the breeding populations of both willets and oystercatchers through the Wetland Callback Survey and the Colonial Waterbird Survey. Ongoing wetland restoration projects by the Wildlife Division also benefit willets.

Young oystercatchers (left) and willets (right) are highly mobile. They are able to forage on their own by walking and running along tidal creeks and mudflats, well before they are able to fly.

Flying Squirrels: The Nighttime Gliders

By James P. Fischer, Research Contractor

It is usually by chance that most people encounter the nocturnal creatures that inhabit their backyard, whether these animals are seen when the porch light is turned on or in the car's headlights while pulling into the driveway after dark. These creatures are surrounded in an air of mystery, but they also lend themselves to a sense of awe when their presence is discovered. Flying squirrels are a common neighbor for most people who live in Connecticut, yet they are usually overlooked because they are only active at night.

Identifying Flying Squirrels

Flying squirrels sport some prominent features that make it easy to distinguish them from other tree squirrels. They have large dark eyes which protrude from their face and allow them to see a world that is shrouded in darkness. The patagium, or extra fold of skin, bestows this animal with a mode of transportation that few mammals use. The patagium extends from the wrist of the front arm to the ankle of the rear leg and allows this small tree squirrel to glide amongst the trees with ease and precision. The fur on the tail projects to the sides, making the tail look flat but helping it serve as a rudder during aerial displays.

Unfortunately, this animal was given a name that includes the term "flying," when in reality it glides. The term "flying" infers a form of flight that is synonymous with bats and birds, which flap their wings to generate loft and thereby flight. Rather, "flying" squirrels extend their limbs to open the patagium and use gravity, as well as the fluid properties of air, as they silently glide with subtle movements of their limbs to maneuver through the trees. Studies have indicated that this form of travel is highly efficient and allows flying squirrels to use resources that are isolated and ephemeral.

Flying Squirrels in Winter

Flying squirrels do not hibernate during Connecticut's long winters, but rather stay awake and nest with other flying squirrels. By sharing a nest, these squirrels also are sharing body heat. Group nesting has its advantages, especially when the winter nights are long and cold. Scientists have learned that when an individual flying squirrel is not part of a group nest during the cold winter months, it needs a great deal of food to stay warm and alive. But when that same animal is part of a group nest in winter, it needs less food because its demand for energy is reduced.

Northern and southern flying squirrels look very similar and require a great deal of practice to tell them apart. The southern flying squirrel, which is found throughout the state, is the more common of the two.

Southern and Northern Flying Squirrels

Two species of flying squirrels occur in eastern North America, the southern flying squirrel (*Glaucomys volans*) and northern flying squirrel (*G. sabrinus*). The southern flying squirrel resides throughout most of eastern North America from as far north as Maine and southern Canada, while the southern edge of its distribution is in Florida and Texas with a few isolated populations in Central America. The northern flying squirrel lives throughout Canada, into the Rocky Mountains in the west and extending into the Appalachian Mountains in the east.

The two species look very similar and require a great deal of practice to tell them apart. To date, both species have been observed in Connecticut. The southern flying squirrel has been recorded throughout the state, while the northern flying squirrel has been observed at only a couple of locations. Flying squirrels are believed to be common in Connecticut's mature forests, but they can also be found in the suburban communities where small patches of trees are interspersed throughout the neighborhoods. They live in tree cavities that were either made by a previous owner, like a woodpecker, or when the center of the tree rotted away.

The southern flying squirrel is commonly associated with trees, such as oak and hickory, that produce fruit known as hard mast. When opening a hickory nut, southern flying squirrels gnaw a hole that is symmetrical with a smooth edge, while red squirrels make a hole with a rough edge and gray squirrels completely break the hickory nut into small pieces.

Northern flying squirrels are typically associated with a type of forest called the northern hardwood and coniferous forest. The trees that are usually found in these forests include white pine, red spruce, balsam fir, sugar

maple, yellow birch and American beech. Both species of flying squirrels eat nuts, seeds and fruits; however northern flying squirrels will also consume fungi and lichens consistently throughout the year.

Good for the Forest

Northern and southern flying squirrels are important organisms in Connecticut's forests. When flying squirrels store seeds and nuts to be consumed at a future date, they help in the regeneration of forests when the uneaten seeds and nuts sprout into new trees. Another way flying squirrels may be encouraging the regeneration of Connecticut's forests is when they consume fungus that forms a beneficial relationship with trees. Fungal spores, which serve as "seeds" for the fungus, survive digestive processes and are found in flying squirrel feces. Just like insects that pollinate flowers by carrying pollen between plants as they feed, flying squirrels spread beneficial fungal spores through the forest.

New Research Study

Questions that explore the ecology of flying squirrels, as well as provide insight into how and where they live and how they affect their environment, may be answered in the future. However, first the current status of both northern and southern flying squirrels in Connecticut must be assessed. It has been approximately 30 years since any investigation has focused on flying squirrels in Connecticut and we know that the forests have changed since then. Most importantly, the forests have become older. Therefore, a new research project is starting this year to assess the status of both flying squirrel species in Connecticut. Another aspect of this new research project will be to associate the habitat type for each of these species. Understanding habitat associations will help managers conserve these species. The research project is being sponsored by the Endangered Species/Wildlife Income Tax Check-Off Fund. Future reports will appear in *Connecticut Wildlife* so that you can follow the progress of the investigation.

The Wildlife Observer

Fisher Sighting

Reader Donald Pelletier sent in the following "Interesting Wildlife Observation" and photograph:

"I was hunting coyote on snowshoes in Tunxis State Forest, in Hartland, on Saturday March 2. I Moved from spot to spot , until I came upon a promising area. I sat at the bottom of a nice pine and started to make a rabbit in distress call. No sooner had I put the call down, I saw something moving in the pines in front of me. I didn't know what it was at first until I saw it again. I knew it was a fisher [Cat]sic. Last year I had witnessed a bobcat during deer season, and told my dad about it. His response was I should start carrying my camera. After seeing the fisher the second time, I knew he was making his way towards me. I put down my .22 rifle and had enough time to pull out my camera, get it set up and make another series of rabbit distress calls. He came running right in, giving me time to make to take a couple of shots until he reached my trail, doing an about face and running like there is no tomorrow. From now on my camera will be part of anything I do outdoors because I have seen a lot of things that I wish I had pictures of. Thought I would share these with your department."

Do you have an interesting wildlife observation to report to the Wildlife Division?

Please send it (and any photos) to:

Wildlife Observations
DEP - Wildlife Division
P.O. Box 1550
Burlington, CT 06013

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

(submitted photos will be returned at your request)

Attend an Educator Workshop

The DEP Wildlife Division will be holding free educator workshops at the Sessions Woods Conservation Education Center in Burlington. To obtain an application, call 860-675-8130 or email laura.rogers-castro@po.state.ct.us. CEUs are available for all workshops.

How the Master Wildlife Conservationist Program Can Help You: Tuesday, July 8, from 9:30 AM-11:30 AM. Attend this workshop to learn how to enlist the help of Master Wildlife Conservationists in your class or at your nature center

Insects of Connecticut: Tuesday, August 19, from 9:00 AM-12:00 noon. Explore the basics of insect identification and discover ways to use insects to teach about ecology. Learn also about some of the insect projects being conducted in Connecticut.

WNV Research Continues

Written by Shannon Kearney and Dr. Richard A. French, University of Connecticut, Department of Pathobiology and Veterinary Science

West Nile Virus (WNV) was an epidemic in 2002, affecting many birds and mammals, as well as humans, in New England and across the United States. WNV is an arbovirus (arthropod-borne virus) that is most often transmitted between individuals by infected *Culex* spp. mosquitoes. Birds are most commonly affected and are necessary for the transmission cycle of the virus. Humans and horses are incidental hosts and, although the virus affects them, they are not involved in viral transmission.

As part of Connecticut's WNV surveillance program, dead birds were collected from May through October 2002 by the DEP Wildlife Division and submitted to the Connecticut Veterinary Diagnostic Lab (CVDL) and Connecticut Department of Public Health (DPH) for testing. Tests were conducted on 928 birds, representing 38 species. Of those, 528 tested positive for WNV and most (95.4%) were corvids (crows or blue jays). Nationally, 138 species of birds have tested positive for WNV. Dead birds, specifically corvids, remain a good indicator for virus presence in an area. Incidental infections of humans and horses often correlate with sightings and/or confirmation of WNV-positive dead birds.

The location of the first incidence of WNV-positive mosquitoes by the Connecticut Agricultural Experiment Station (CAES) correlated with the first sightings of positive dead birds. The CAES found WNV-positive mosquito pools in 15 towns (Bridgeport, Darien, East Haven, Easton, Greenwich, Hamden, Hartford, Manchester, New Britain, New Haven, Newington, Norwalk, Shelton, Stamford, Stratford). Positive mosquito species were mostly *C. pipiens* and *C. restuans*, which predominantly feed on birds. Mosquitos that feed on mammals (*C. salinarius*, *Aedes vexans*, *Ochlerotatus trivittantus*), including humans, also tested positive in six of these towns. Again in 2002, the disease was found in "hot spots" early in the season, particularly in Hartford, Fairfield and New Haven Counties, and circulated primarily among birds and bird-biting mosquitoes. As the incidence of infection in birds and other mosquito species increased around the beginning of August, the virus spread to other towns and to mammals. Mammal WNV cases included four horses from Canaan, Canterbury, Norwalk and Wallingford. There were 17 reported human cases of WNV in Connecticut in 2002, but, fortunately, no human fatalities.

Maps and more information on WNV in Connecticut are on the DEP website: www.dep.state.ct.us/mosquito/index.asp.

Emerging Issues

In 2002, WNV expanded across the country to 16 new states. Now 44 states and Washington D.C. report the presence of the virus. The 2002 WNV epidemic was the largest arboviral meningoencephalitis epidemic documented in the western hemisphere. Nationwide totals reached 3,389 infected humans, 14,122 birds, 14,717 horses, three dogs, eight squirrels and two unspecified species. Additionally, 144 seropositive wild-caught birds were reported from Indiana, Kansas, Louisiana and Ohio. A bird that is seropositive has produced antibodies to WNV, indicating that the bird was exposed to the virus but recovered.

New routes of WNV transmission to humans were discovered: through organ transplantation from one infected person to four recipients, possibly through blood transfusions and to babies through the placenta and breast feeding. However, there has not been any evidence of WNV symptoms in these children.

There was new information about alternate routes of infection for birds, such as raptors. In 2000, a red-tailed hawk from Connecticut was diagnosed with WNV in February. At that time of year it is unlikely that the hawk was bitten by an infected mosquito. It was thought that transmission may have occurred through consumption of infected prey. In support of this theory, recent experiments demonstrated virus transmission through oral consumption as well as physical contact. Although consumption and physical contact need to be considered, the major transmission route for the virus remains the mosquito.

There has been a lot of new research into the susceptibility and sero-prevalence of wild birds in hopes of predicting the spread and potential effect of the virus on bird populations. The species most likely involved in the spread of WNV, given the level and duration of infection they maintain, include blue jays, common grackles, house finches, American crows, house sparrows, ring-billed gulls and American robins.

The rapid and unpredicted spread of WNV was an indication of the lack of understanding of the complex geographical dynamics of vector borne viruses. Research questions that remain unanswered include: whether WNV in the United States is a more virulent form of WNV than previously known strains; the potential vectors of the virus in new geographical areas; how the virus might overwinter in these vectors and thus the corresponding potential geographical range to which the virus could spread; and, the potential effects on wild bird populations, especially threatened and endangered species.

Careful Surveillance

Although the past couple of years of WNV surveillance have resulted in increasing numbers and species of birds that have tested positive for the virus, it is important to consider other possible causes of death. **In Connecticut, birds that have been submitted to CVDL for necropsy have not all died of WNV.** Notably, 29% of corvids, 100% of mourning doves and 74% of raptors submitted for testing did NOT die of WNV. Additionally, across the country, 23% of dead American crows and 60% of other dead bird species did not test positive for WNV infection. Through necropsy of dead birds submitted from Connecticut and Vermont, CVDL demonstrated other causes of death, including avian poxvirus, trichomoniasis, physical trauma and various other parasites. Thus, many of these deaths may not be a result of WNV infection. However, this mortality should not be ignored. Although these bird deaths may not be indicators of WNV, they are still important to consider, as they may prove to be important indicators of the health of the wildlife populations themselves.

CT's Volunteer Hunter Education Instructors Honored

Written by Peter Bogue, Assistant Director

Connecticut's Conservation Education/Firearms Safety (CE/FS) Program honored its volunteer instructors on March 23 at the Annual Awards and Recognition Dinner held at the Aqua Turf Club in Plantsville. This year's event marked the 21st anniversary of Connecticut's CE/FS Program, which started in 1982. Since then, a total of 99,447 students have graduated from one of the three programs: firearms, bowhunting or trapping. The volunteer instructors honored at this event contribute thousands of hours without compensation to educate hunters and trappers in safe and ethical techniques.

At the dinner, the CE/FS Program also recognized two instructors from each of the firearms, bowhunting and trapping programs who have made exceptional contributions during the past year. An award of merit was given to an additional two instructors for their outstanding efforts in teaching classes in all three categories of firearms, bowhunting and trapping. CE/FS coordinators each chose an instructor to recognize for their individual contributions to hunter education. In addition, eight instructors received "Distinguished Service Awards," recognizing their efforts for facilitating various CE/FS workshops over the past few years.

Special recognition for their contributions and support to Connecticut's CE/FS Program was also given to the Rockville Fish and Game Club, Inc., and the Wallingford Rod and Gun Club, Inc. Instructors Steven Bergenty, Louis Cappola, James Dobensky and Edwin Ertel, Jr., were all recognized for over 30 years of involvement with hunter education in Connecticut.

During calendar year 2002, 325 certified instructors donated 16,264 hours without compensation to conduct 212 courses for 5,738 students enrolled in basic firearms, bowhunting and trapping programs. The DEP Wildlife Division is proud of the hundreds of instructors who donate their time and expertise to educating Connecticut's sportsmen to be safe and responsible hunters. Connecticut's program continues to be recognized as one of the best in the nation, thanks to the efforts of our volunteers.

Top honors for 2002 were given to the following instructors:

Firearms:
William Collins, Warren Speh

Bowhunting:
Mark Hall, Ralph Jackson

Trapping:
George Finch, Jr., Jules Perreault

Award of Merit:
Lawrence King, Francis Wasylink

Special Recognition:
Peter Picone, Paul Scungio

Distinguished Service Award:
Kenneth Arnold, Gary Bennett, Michael Crawford, Raymond Hanley, Michael Reid, John Rein, David Sanford, Robert Wojcik

P. J. FUSCO

Award recipients at the 21st Annual CE/FS Recognition Dinner: (standing, l to r) Bob Kalinowski (CE/FS Program Coordinator), David Sanford, Francis Wasylink, George Finch, Jr., Gary Bennett, Jules Perreault, Raymond Hanley, Edwin Ertel, Jr., Louis Cappola, Lawrence King, Warren Speh and David Kubas (CE/FS Program Coordinator; (seated, l to r) Paul Scungio, Peter Picone (Wildlife Division biologist), Ralph Jackson, William Collins, James Dobensky and Michael Crawford.

MWCs Donate 1,000+ Hours of Service

With less than a year since the Master Wildlife Conservationist (MWC) Program was initiated, MWCs have provided over 1,000 hours of volunteer service for the DEP Wildlife Division. Volunteers have eagerly assisted with wildlife surveys, data collection at deer check stations, monitoring beaches to protect nesting piping plovers and terns, banding geese and various other research projects. MWCs have also assisted with Division outreach efforts and have manned booths with wildlife-related displays at agricultural and town fairs, schools and nature centers. In addition, they have presented wildlife programs for town commissions, scouts, school groups, libraries and the public.

MWCs have access to slide shows developed by Division staff and various wildlife-related props, such as pelts and skulls, to use in programs. The MWC Program invites interested groups (i.e., scouts, schools, libraries, nature centers) to request assistance by contacting Laura Rogers-Castro at 860-675-8130 or laura.rogers-castro@po.state.ct.us.

FROM THE FIELD

Eagle Banding News

Last year, the DEP Wildlife Division was tracking eight pairs of eagles. Four of those pairs had successful nests, with seven young fledged. This year, the eight pairs are back. Two pairs lost their nests early, probably due to cold weather, but six pairs have hatched eggs or the eggs are due to hatch soon.

One nest, in New London County, had **three** chicks big enough to band by the end of April. Most eagles lay only two eggs, possibly because the adults may be limited in their ability to provide food to a large number of hungry young chicks. A nest containing three chicks only happens in a small percentage of nests nationwide and it has not happened in Connecticut since bald eagles made a comeback in 1992. Successfully hatching and fledging three chicks is a high point.

All of the other active eagle nests are on private property. The Division does not disclose the exact locations of nests to protect the eagles from disturbance and out of respect for the landowners who do not want trespassers on their land. The other nests are in Middlesex, Litchfield and Hartford Counties.

G. KRUKAR

The three eagle chicks from New London County are sitting in the nest in the order they were banded in late April. Meet P7P, P8P and K9K!

2003 Midwinter Bald Eagle Survey

The 2003 Midwinter Bald Eagle Survey was conducted in Connecticut on January 10 and 11. A total of 77 bald eagles—45 adults, 31 immature eagles and one of unknown age—were recorded statewide. In 2002, 54 birds were counted. The Midwinter Bald Eagle Survey is not a complete census of the entire wintering population in Connecticut. It is an index. The survey is conducted nationwide during a target time period and is coordinated by the U.S. Department of the Interior, U.S. Geological Survey and the Forest and Rangeland Ecosystem Science Center at the Snake River Field Station in Oregon. For more information, go to: http://srfs.wr.usgs.gov/midwinte.htm.

Bald eagles migrate south from the northern states during winter to areas of open water where they are able to catch fish, their main food item. The higher number of bald eagles counted this year can be attributed to the cold weather conditions which kept most waterways to the north covered with ice. It is expected that the eagle count in the northern states will be lower this year than in the past.

As in past years, volunteers from private conservation organizations, the DEP, Master Wildlife Conservationists and the general public helped conduct the survey by recording all eagles seen at areas traditionally used by the birds and areas of suitable wintering habitat. The DEP Wildlife Division extends its gratitude to all the volunteers for reporting their careful observations.

This year, about 134 volunteers helped conduct the survey, which is a considerable increase from the 88 volunteers that helped last year. However, despite the increased help, 10 areas that were checked in 2002 were not checked this year. Volunteers are still needed to help with the 2004 Midwinter Bald Eagle Survey, especially along the lower Connecticut River. Those interested in helping with next year's survey should send a letter providing your name, address and telephone number to Julie Victoria, Wildlife Diversity Program, 391 Route 32, North Franklin, CT 06254.

Midwinter Bald Eagle Survey 1979-2003

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

The adult/immature breakdown is not available for 1979-1981.

McKinney Refuge,
continued from page 5

of salt marshes, and that OMWM helps to counteract these apparent impacts. The Connecticut DEP conducted an OMWM project in 1993 at the Salt Meadow Unit.

Dr. Chris Elphick of the University of Connecticut will continue to investigate the ecology of saltmarsh sparrows in Connecticut (see Sept./Oct. 2002 issue of *Connecticut Wildlife*). The multi-year study was initiated on three marshes in 2002: marshes of the Salt Meadow Unit and the Menunketesuck River, Hammonasset Beach State Park in Madison and East River in Guilford.

C. GJERDRUM

C. ELPHICK

Saltmarsh sharp-tailed sparrows are caught in mist nests and then banded as part of a research project to learn more about the ecology of these birds.

While not federally listed as endangered or threatened, saltmarsh sharp-tailed sparrows and seaside sparrows are two of the highest priority species for bird conservation in New England. Long Island Sound saltmarsh sharp-tailed sparrow numbers may even be significant to the global population of the species. Unlike most neotropical migrants that breed in the forests of New England, saltmarsh sharp-tailed sparrows are not territorial and males mate with more than one female (polygyny).

Most birds in forest systems are surveyed by the point-count method, where the calls of birds and individuals seen are counted within one-half hour of sunrise at various points for timed intervals. Because saltmarsh sharp-tailed sparrows do not vocally call to defend territories, the point count method may not accurately detect individuals. Elphick's study combines point counts, mist-netting and nest searches to estimate sparrow abundance and productivity.

In addition to evaluating alternative techniques for monitoring saltmarsh sparrow populations, the study will determine the relationship between salt marsh characteristics (such as marsh size and vegetation) and breeding success. The importance of marshes in Long Island Sound and the biology of saltmarsh sparrows will be better understood and therefore aid in the conservation of the species and the management of saltmarshes.

Great Meadows Unit, Stratford

Several decades ago the largest unditched high salt marsh in Connecticut was slated for industrial development. Through the efforts of the community and several environmental groups, the Great Meadows marsh was protected for generations of Americans yet to come. The Great Meadows Unit is valued as an important foraging area for herons, egrets, shorebirds and waterfowl. The American black duck and the state endangered northern harrier use the marsh for breeding and staging.

Dr. William Giuliano and master's candidate Kristin Schaumburg of Fordham University have started a new project that will take place on the refuge's Great Meadows Unit in Stratford next year. This research will evaluate the abundance and breeding success of American black ducks, rails and other waterbirds at 40 marshes along the Connecticut shore. The refuge monitors the Great Meadows Unit for marsh birds that are of primary concern in North America, such as rails, bitterns, American coot and common moorhen. Surveys begin within one-half hour of sunrise and tapes of pre-recorded marsh bird calls are played at various points to elicit vocalizations. Vocalizations by birds help establish and maintain territories during the breeding season. The secretive rails and bitterns of the marsh are not readily observed visually, but can be detected when the birds "call back." Survey methods were developed by Courtney Conway of USGS, Patuxent, Maryland, and standardized for all refuges in the Northeast. Standardized surveys allow trends to be identified on a landscape level by ensuring compatible data sets. The callback surveys, however, do not identify how successful the marshbirds are when breeding. The Fordham study will identify brood success in conjunction with habitat features, to create a better understanding of the factors affecting these species. Populations of some marsh birds appear to be declining in North America, possibly because of an overall decline in emergent wetlands over the past century or accumulation of environmental contaminants in marsh substrates.

Editor's Note: Prerecorded marsh bird calls should not be used as a general bird observation tool unless it is part of a regimented scientific study.

Retirements,
continued from page 9

during Steve's tenure include the return of wildlife like bears and fishers to Connecticut's expanding and maturing forests, the increase in the state's deer population and the Division's efforts to expand its nongame and endangered species program. Most of all, he feels that the Wildlife Division has made a substantial effort in bringing its message to the public through the CE/FS Program, *Connecticut Wildlife* magazine and the Sessions Woods Conservation Education Center. However, Steve sees several major issues facing the Wildlife Division in the future: wildlife habitat loss and the declining diversity of the remaining habitat, the challenge of balancing public support for the Wildlife Division's programs and the potential impact of a poor economic environment on the Division's resources.

After his retirement, Steve will still be a familiar face at Sessions Woods as he plans to stay involved with the "Friends of Sessions Woods." He also hopes to volunteer for the Boy Scouts and Habitat for Humanity. In addition, some recreational camping and fishing have been added to the "To Do" list.

Steve advises his colleagues at the Wildlife Division to persevere through the mounting paper work because the wildlife resource is depending on them. He believes that the management of wildlife and its habitat is essential to the long-term survival of the resource and wildlife-related recreation. He considers humans to be an invasive exotic. Thus, humans must find creative ways to mitigate their impact through wildlife management. Steve's parting words to his coworkers are: "The last 30 years have gone by quickly. I have enjoyed working for the Wildlife Division and the people I've worked with along the way. It has been a rewarding career. I would like to wish everyone the best in their future." All of us at the Wildlife Division wish Steve well in his retirement. He will always be remembered as the "Father of Wild Turkey Restoration" in Connecticut.

CE/FS Coordinator Bob Kalinowski

With over 34 years of public service, 20 of those with the Wildlife Division, Conservation Education/Firearms Safety (CE/FS) Coordinator Bob Kalinowski can retire knowing that he contributed to making Connecticut's CE/FS Program one of the best hunter education programs in the nation. Bob came to the Wildlife Division in 1983 with a B.S. in wildlife biology and experience with wildlife research and the University of Connecticut Police Department. He also brought along his thorough knowledge and interest in hunting, modern and primitive firearms, ammunition, hunting equipment and hunting safety.

As one of two CE/FS Program coordinators in Connecticut, Bob was based at the Franklin Wildlife Management Area and was responsible for recruiting, training and educating volunteer instructors for the Program to provide them with the necessary expertise and tools to teach hunter education and ethics to the public. Bob's other responsibilities included shooting range safety in the state, hunter safety issues on state-owned properties and legislative changes in the use of firearms and various ammunition used for hunting. Bob also reviewed and summarized all hunting related accident data from 1982 to present so that the data could be reported to the International Hunter Education Association (IHEA), as well as to CE/FS volunteer instructors who could use the information to relate to their students how to prevent hunting accidents.

Bob's accomplishments during his time with the Wildlife Division are many. He chaired the Education Committee for IHEA and served on the Region V Manual Committee, where he reviewed the Northeast Regional Hunter Education Manual that is currently used in Connecticut's CE/FS Program. He also assisted in designing and completing the Franklin WMA shooting range, as well as assisted in the production of numerous visual aids (slides, videos, publications) for hunter education that are used in Connecticut and other regions in North America. During his time with the Wildlife Division, Bob was also involved with the following:

- The initiation of alternate delivery, or the home study option, for CE/FS classes.
- Requiring mandatory shooting for all hunter safety students (Connecticut was one of the first states to do so).
- The completion of a statewide range survey
- Over 100,000 students graduated from the CE/FS Program since its inception in 1982; and some of the best instructors in North America were recruited for Connecticut, contributing over 300,000 hours to the DEP so far.

Some of Bob's most memorable events during the past 20 years include the Annual Instructor Recognition Dinners held for CE/FS instructors, meeting some of the best volunteers in the world, watching CE/FS instructors receive national and state awards for their volunteerism, attending sportsman's club meetings and events and getting to know the many people who care about hunting and the future of hunting.

Despite all of the positive aspects of his career, Bob feels the Wildlife Division still faces several challenges. Those include a lack of general state funding for wildlife programs, as well as not being able to hire enough wildlife technicians or biologists to thoroughly assist the public with wildlife issues or to manage Connecticut's wildlife resources. Other stumbling blocks are changes in Connecticut's demographics and the public's perception of hunting. Through it all, though, Bob has observed the Division staff to be hard working and dedicated, no matter what roadblocks were put in front of them. He feels that although a conservation-oriented career is sometimes a difficult road to travel, the journey is well worth it.

Bob plans to not really "retire" after retirement and to stay active in conservation related activities. His parting words are: "I am thankful to have had the opportunity to work with some of the most intelligent, dedicated and professional people in North America--those at the DEP, all of my friends involved in IHEA and other professionals in hunter education. They made the road easier to travel." All of us at the Wildlife Division hope that Bob has an enjoyable and rewarding retirement and we thank him for his hard work and dedication in making the CE/FS Program one of the best in the nation.

Wildlife Maintainer III Rich Garini

Rich Garini came to the Wildlife Division upon completing a 32-year

career as a data processing professional with one of the major Hartford insurance companies. He brought with him a strong work ethic and a "can do" attitude with a desire to impact, in some small way, the wildlife habitat and recreational opportunities available to Connecticut sportsmen. The idea for this new personal challenge was based on his involvement with the DEP's Citizens Advisory Council and Environment 2000 Council.

Rich began his career with the Division in 1993, marveling at the attempts to complete projects with so little in resources. About a year later, using personal connections, Rich suggested that the Wildlife Division initiate a work program with two of the Connecticut prisons in Somers. The Division realized the low-cost benefits of the idea and, within a month, Rich was supervising a five-man work crew. Initially, the crew concentrated on habitat restoration, clearing vegetation from dikes and opening young pine stands and orchards. This effort spanned a period of over four years and the crew accounted for thousands of volunteer hours that benefitted both game and nongame wildlife.

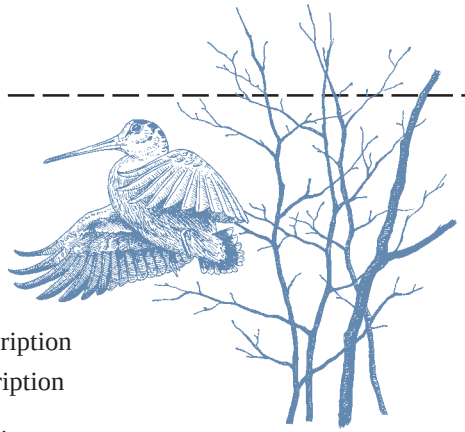
With the advent of the Farm Bill's Wildlife Habitat Incentives Program (WHIP), Rich's responsibilities shifted toward warm season grass projects. Perhaps his most challenging and rewarding effort was his role as onsite coordinator for the Enfield Grassland Mitigation Project at the Department of Corrections facility in Enfield.

According to Rich, the three major issues (stumbling blocks to progress) facing the Wildlife Division in the future are the same ones he saw 10 years ago: the negative impacts of purely political decisions on the environment, a lack of money to support Division projects and the need for more willingness by the State Legislature to realize the importance of Division programs which enhance and protect the state lands entrusted to the Division as stewards for the people.

Rich will long remember the self motivation that drives most of the people he has come into contact with on the job and had the pleasure of working with. In Rich's own words, "To those many, many hard working people, I wish continued success and thank you for sharing your hearts and minds with me during my 'second career.'" All of us at the Wildlife Division will miss Rich's ambition and innovative ideas. Connecticut's wildlife habitat has benefitted because of Rich's efforts over the last 10 years.

Wildlife Calendar Reminders

May-August	Keep dogs off of Connecticut beaches to avoid disturbing nesting shorebirds.
.....	Herons and egrets are nesting on offshore islands in Long Island Sound. Refrain from visiting these areas to avoid disturbing the birds.
June 7	**National Trails Day Event**, at the Sessions Woods Conservation Education Center, in Burlington, starting at 9:00 AM. The Wildlife Division is working cooperatively with the Connecticut Forest and Park Association to sponsor hikes leaving from the flag pole in front of the Conservation Education Center. These guided walks will vary in length and difficulty, ranging from an interpretive walk to a hike of several miles. Call (860) 675-8130 for more information.
June 7	**Guided Walk through the Clearcut**, at the Sessions Woods Conservation Education Center, in Burlington, starting at 9:00 AM. (This event was rescheduled from November.) Join DEP forester David Irvin on a tour of a one-year-old 14-acre clearcut. Learn about the wildlife and forestry benefits of this type of forest cutting. A brief tour of a prescribed burn, American chestnut planting and a 10-year-old clearcut that has regrown will be included. Dress for the weather and wear suitable footwear for stepping through woody debris. Call (860) 675-8130 to preregister
July 4	While viewing fireworks displays at Connecticut coastal areas, respect fenced and posted shorebird nesting areas and offshore rookeries.
July 8	**Teacher Workshop: How the Master Wildlife Conservationist Program Can Help You**, from 9:30 AM-11:30 AM, at the Sessions Woods Conservation Education Center (see page 16 for more information).
August 19	**Teacher Workshop: Insects of Connecticut**, from 9:00 AM-12:00 PM, at the Sessions Woods Conservation Education Center (see page 16 for more information).



P. J. FUSCO

Meet one of Connecticut's newest black bear cubs! This cub was one of 17 that were examined by Wildlife Division biologists this past March and April. To learn more about how the cubs were found and why, see page 4 of this issue.

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