July / August 2002

Connecticut Wildlife

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

From the Director

As much as possible, I spend spring mornings in the woods. It is nature's busiest season. Above all the other sounds of spring, the one that moves me the most is the drum of the ruffed grouse. To the grouse, perched upon a fallen log, earnest wingbeats are a pronouncement that he has survived the winter and is eager for the chance to pass his genes to another generation. To me, it is a reassurance that the woodland ecosystem is intact. This spring, for the first time in my memory, I did not hear a single one.

Grouse, woodcock and many other species are declining at a rapid rate. The birders know it, the hunters know it, the entomologists know it, but perhaps few others have noticed. These species rely upon transitional habitats; something between a field and a forest. With our fields turning into subdivisions and thickets growing to mature woodlands, our early successional habitats are disappearing. Unlike other rare wildlife that were never abundant due to their precise habitat requirements, most of the early successional obligates were common and widespread just a few decades ago. The magnitude of the decline and the number of species involved is alarming.

There is some potentially good news here. The habitat trends that are eliminating the grouse can be reversed. There are several federal programs that reward landowners for conducting practices that benefit early successional wildlife. This year there is also an exciting new federal program, called the State Wildlife Grants (SWG), that provides funding to states to assist wildlife species in need. Like the sportsmen-funded Pittman-Robertson program, SWG provides federal funds contingent upon matching state funds. This year, Connecticut was awarded $776,000 that the Wildlife Division planned to use to develop a private lands habitat management program and to conduct surveys and implement recovery plans for a number of declining species. Unfortunately, it appears that the state match of $475,000 can't be found and Connecticut will be forced to forfeit its allocation back to the U. S. Fish and Wildlife Service. How many of these golden opportunities can we afford to lose?

We residents of Connecticut are blessed to own something that is priceless, magnificent and irreplaceable: our wildlife. We collectively own it in equal shares. We have the power to manage and enhance it, to squander and destroy it, or to ignore it. If our goal is truly to maintain healthy ecosystems and viable populations of native species, we had better hurry up and recognize the fact that there is a cost involved. I think it is an incredibly important investment and a debt we owe to future generations. Don't you?

Dale W. May

Cover:

A snowy egret searches for food in a tidal pool. To learn more about egrets in Connecticut, see page 10.

Photo courtesy of Paul J. Fusco

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

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Wildlife Are Harmed By Thoughtless Actions

Every spring, the Wildlife Division tries to spread several important messages about people's interactions with wildlife (see May/June 2002 *Connecticut Wildlife*). Some of the more important messages include "preparing for bears" by securing garbage and not feeding bears, respecting nesting areas used by shorebirds and waterbirds along the Connecticut coastline and not bringing home "abandoned" young wild animals. We realize it is difficult to get the message out to everybody. But, as hard as we try to spread the word, each year we document several instances of people harming wildlife, usually unintentionally. Either out of a desire to help or just general curiosity, people often, by their very actions, end up hurting wildlife instead of helping.

Maybe the yearly warnings, reminders and signs telling people what they should or should not do when they encounter wildlife is not enough. People tend to learn best by example and experience. Therefore, the intent of this article is to go beyond the "do's and do not's" and explain what happens when people disregard warnings and/or do not use common sense.

P.J. FUSCO

Signs at heron and egret nesting areas on Charles and Duck Islands ask people to respect the nesting birds. During 2002, there were several instances of people ignoring the signs and causing repeated disturbance to the birds. Many birds have left the area or moved from their preferred nest sites because of the disturbance. To protect the wildlife, the islands will be closed to the public from June 21 to September 9, 2002.

Bald Eagle Chicks Die Due to Human Disturbance

Most of us have heard the story. Bald eagles stopped nesting in Connecticut in the 1950s. However, in 1992, a pair in Barkhamsted made history when they successfully produced two chicks. Ten years later, eight pairs of eagles set up nesting territories in five Connecticut counties. (See article on page 17)

2002 was a great year for bald eagles in Connecticut, except for one mishap that should never have happened. A new pair of eagles chose to nest on private property along the Connecticut River in Rocky Hill. The first year that a bald eagle pair begins to nest is a very critical and tentative time. If human attention is drawn to the area and the adults are continually disturbed off the nest, the nest may fail and the pair will not return to the site. Fortunately, the landowner, Wildlife Division biologists and town officials from both Rocky Hill and Wethersfield recognized the need to restrict access to this highly sensitive area. The roadway to the nest tree was blocked off and signs instructing people to stay away were installed.

According to Wildlife Division biologist, Julie Victoria, the cooperation of town officials and local police and highway departments to help protect the nesting eagles was commendable. However, an article about the nesting eagles and photographs printed in a major Connecticut newspaper were unwelcome. The article and photographs that were published actually pinpointed the location of the nest.

Don Hopkins, spokesman for Connecticut's Bald Eagle Study Group, a small group of raptor enthusiasts who donate countless hours to study bald eagles and conduct field observations, noted that the publicity surrounding the nest was unfortunate but avoidable. "Publishing the location and photographs of this nest was like painting a bull's-eye on it," said Hopkins.

Despite the road barriers and signs, people did not respect the posted areas or the eagles' habitat and they did not keep their distance. Because of the intense and continuous disturbance at the nesting site, the adult eagles constantly had to fly to defend their nest, which kept them from tending to their young. With the adults so busy defending their nest, the young probably were not fed and sheltered adequately. Thus the young died and the adults subsequently left the area.

In this situation, if people had heeded the signs and not trespassed beyond the barriers, the eagle chicks probably would have fledged and left the nest. The lesson learned here is that, although curiosity with a rare and fascinating creature is understandable, we cannot let our "curiosity kill the creature." There is an important reason behind the signs and barriers that the DEP or other officials erect around sensitive wildlife areas. The end result when people don't follow the rules is that the wild animals that many of us enjoy watching and learning about are ultimately harmed.

continued on next page

Wildlife Harmed,
continued from previous page

Bonfire Disturbs Heron/Egret Rookery

Duck Island, just off the coast of Westbrook, is a special place during summer. It is special not simply because it is a quaint, little island in Long Island Sound, but because it serves as a summer home to several members of the heron family, such as great and snowy egrets. It is here that these birds build nests and raise their young. Duck Island is so important to these long-legged wading birds that it was recently designated a Connecticut Natural Area Preserve. For several years, the DEP Wildlife Division has worked with the U. S. Fish and Wildlife Service to cooperatively protect the nesting colony. The interior portion of the island is closed for the season and fenced off from the beach. Nesting area closure signs and a large educational sign explain to visitors why the island is closed and why it is important.

For several years, the birds and island visitors have shared Duck Island without incident. Unfortunately, that is no longer the case. During the 2002 nesting season, the birds had returned as usual and began the task of building nests and laying eggs. Early in the nesting season, human visitors to the island decided it was an ideal spot to build a bonfire. The bonfire was built outside the fence; ironically, right in front of the educational sign detailing the importance of the island to herons and egrets. The resulting smoke and disturbance caused the majority of great and snowy egrets, glossy ibis, little blue herons and others to abandon the rookery entirely. A handful of birds did eventually return to try again, only to be confronted a month later with people off-loading cookout supplies, grills and their canine companions from their boat. The end result for the birds of Duck Island? A lack of common sense and a blatant disregard for this Natural Area turned a peaceful nesting site into a place unfit for raising young birds. Only time will tell if the birds that abandoned Duck Island abandoned it forever. (Duck and Charles Islands have been closed to the public until September 9. See page 14.)

P. J. FUSCO

Two oystercatcher chicks were taken from an offshore island in Long Island Sound this past nesting season. One chick died and one survived, but it must remain in captivity.

Oystercatcher Chicks Snatched

This past May, two oystercatcher chicks were taken from an offshore island in Long Island Sound and endured an ordeal that should never have happened. One chick eventually died; the other survived, but will have to spend the rest of its life in captivity. Oystercatchers are shorebirds that nest on Connecticut beaches in very small numbers. They are a species of special concern on Connecticut's Endangered and Threatened Species List because of their low population.

The ordeal started when a high school student from Stamford found the young chicks on the shoreline of an island while kayaking in Long Island Sound. Thinking they would make great pets, he brought them home and eventually gave one to a friend. The friend decided to bring the chick to school to show around. Fortunately, another student who was concerned about the welfare of the chick, contacted licensed wildlife rehabilitator Meredith Sampson. Ms. Sampson came to the school and took the chick so that she could care for it and try to save it from further harm. Upon learning that there was a second chick, Ms. Sampson worked with the Stamford Animal Control Officer to locate the person who originally took the chicks from their nesting beach and who still had the second chick. By the time they arrived at the person's home, the chick was in very poor condition. It was cold, wet and undernourished. The person had attempted to occasionally feed the chick ham and bread; not a healthy diet for a young oystercatcher. Despite Ms. Sampson's efforts to save the chick, it died shortly after being rescued.

Fortunately, the other chick survived. However, it cannot be released back into the wild. Instead, a permanent home, such as a zoo, will have to be found for the bird.

What is the lesson learned from this story? First of all, shorebirds, just like any other wild bird, should never be kept as pets and it is illegal to do so. Shorebirds have very specialized diets and needs, and those taken into captivity rarely ever survive. If shorebird chicks are found alone on the beach, that doesn't mean they are abandoned. The adults are either watching or foraging nearby. The best thing to do is to leave the chicks where you found them and walk away from the area. Remember also that shorebirds and most other birds found in

our state are protected by the federal Migratory Bird Treaty Act and violators may be arrested and fined.

Leave Fawns in the Woods

Every May and June, the Wildlife Division receives numerous calls about supposedly "abandoned" fawns. Many animals, including deer, leave their young alone while they are feeding. This is especially true with female deer (does) and their fawns. Does only feed their fawns four to six times a day for about 15 minutes each time. Fawns are also left alone in order to minimize attention to the bedding site. It is extremely unlikely that any young fawn found alone is abandoned. For the first several days after birth, fawns instinctively freeze and will lie motionless when approached. It is best to not touch a fawn, but rather leave it alone for at least 24 hours to determine whether the adult is still returning for feedings.

Fawns removed from the woods and raised in captivity fare poorly when released back into the wild. Deer fawns are far better off if raised in a natural environment. Wildlife rehabilitator Dara Reed, who specializes in fawns, recommends that the best action to take if you find a fawn is to leave it alone and walk away from the area immediately. When she receives calls from people who have brought home healthy fawns with no apparent injuries, she tells them to return the fawn to the exact area it was taken from. Before leaving, she suggests that any human scent be removed from the fawn by wiping it from head to hooves with a cloth that has been rubbed in the dirt at the site. Ms. Reed has had some success in returning fawns to their mothers. Usually the doe is still in the area and will come back and take care of and nurse the fawn once the people have left the woods.

Remember that it is illegal to remove fawns from the wild. It is also illegal to keep wild animals as pets. Raising wildlife for successful return to the environment requires considerable knowledge of appropriate feeding formulas, hours of care and sufficient facilities, in addition to the proper training and required state and federal permits. Improper care results in underweight and undernourished animals or animals that are not releasable because they have become too accustomed to being around people.

Stories Are Endless

When talking with wildlife rehabilitators and biologists, it is apparent that the stories of people disturbing and harming wildlife, as well as causing more harm than good, are endless. Most of the problems are caused by well-intentioned but ill-informed citizens. Other problems are a result of a lack of common sense, a lack of knowledge or disregarding the rules. Hopefully, by describing actual examples, we can spread the word and prevent future incidents. You can also help by contacting the Wildlife Division or the TIP hotline (1-800-842-HELP) to report any violations or concerns.

The editor would like to thank Division biologists Julie Victoria and Jenny Dickson and wildlife rehabilitators Meredith Sampson and Dara Reed for providing information for this article.

The Wildlife Observer

Hawk Watch

The following interesting wildlife observation and photographs were submitted by K. C. Alexander, Compost Specialist for the CT DEP Recycling Program:

"What a great way to start my day! One morning, I arrived at work to find this red-tailed hawk perched on the ledge of my fourth floor office at DEP Headquarters in Hartford. It was the closest I had ever come to a raptor in the wild. Taking care not to startle the beautiful bird, I snapped a bunch of digital photos as he/she looked curiously at the camera. I felt like a fish in a fishbowl as this awesome creature watched my every move. It visited for about an hour while my co-workers peered over an office divider to sneak peeks. Without warning, he eventually flew away, no doubt to dine on the pigeons and squirrels in adjacent Bushnell Park. It was a real treat to see this bird up close and personal. I wish every day could begin this way!"

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)

Survey Sheds Light on Connecticut Pheasant Hunters

Written by Mark Clavette, Recreation Management

A number of changes have occurred over the years that have directly affected pheasant hunting on stocked public hunting grounds. This includes a reduction in the number of pheasants purchased for stocking, a loss of public hunting access to privately-owned lands under state leases or agreements, changes in stocking methods and other restrictions on state-owned properties available for public hunting. With increasing costs and a declining base of hunters supporting the stocking program, the need to obtain more input from sportsmen was very evident.

A survey to assess the attitudes, opinions and preferences of public land pheasant hunters was initiated in July 2001 as part of the DEP Wildlife Division's ongoing evaluation of the pheasant stocking program. The results of the survey have been compiled and are currently under review. Based on the review, several changes may be implemented during the upcoming pheasant hunting season.

The Wildlife Division retained Curriculum Research and Evaluation, Inc., as a private contractor and external evaluator to assist in the survey design, conduct data analysis and prepare a final report. Survey questionnaires were mailed to a stratified random sample of approximately 2,000 of the 9,668 individual hunters who purchased pheasant harvest tags during the previous fall season. The distribution of surveys was based on hunter residence and the number of surveys mailed was proportional to the number of pheasant hunters residing in a particular town. All Connecticut townships were represented. Pheasant hunters were most eager to provide their input and opinions as noted by the fact that 60 percent of the hunters receiving surveys responded to the six-page questionnaire. A total of 424 surveys were used for statistical analysis.

The primary objectives of the survey were to develop a hunter profile, determine the strengths and weaknesses of the current stocking program and determine the most popular directions for potential future changes. The survey sought responses from a variety of categories pertinent to one's public pheasant hunting experiences and respondents were asked to qualify their responses through additional comments. This included a critique of the current program, termed "quality indicators," and examined responses to various statements about the hunter's personal experiences. Hunters were also asked to provide a satisfaction rating and explain their primary reason for their response. Respondents were asked about their expectations and priorities in the field and preferences for changes to the distribution methods currently used. Future policy changes, including the level of support for youth hunting opportunities, volunteer involvement, restricted access hunting, regulatory changes and future funding options, were also examined. Finally, respondents were asked to provide information about themselves in an effort to create a demographic profile of the public land pheasant hunter.

Following are some highlights from the survey.

Demographics/Hunter Profiles

- The average pheasant hunter is male, 44.5 years of age, a graduate of the Connecticut Conservation Education/Firearms Safety Program, has 18 years hunting experience and does not hunt pheasants as a member of a private hunting club. Respondents hunted public lands an average of 12 days, with an average harvest of 3.3 pheasants. Sixty-four percent hunted with a dog. Eighty- five percent of respondents hunted other types of game besides pheasants, including deer (66%), turkey (39%), waterfowl (37%) and other small game (54%).
- Pheasant hunters were not willing to travel far to reach public hunting areas. Most respondents indicated they would only be willing to travel 30 miles or less. Hunters obtain most of their information about the stocking program from DEP's Hunting and Trapping Guide. Half of those responding indicated that a DEP conservation officer had checked them in the field while pheasant hunting.
- Eight percent of hunters reported taking a full seasonal limit of 10 pheasants. Twenty-six percent were unsuccessful and reported no pheasants taken. Harvest rates for those hunting with dogs were disproportionately higher, with an average take of 4.2 pheasants compared to those who didn't hunt with a dog (1.3 average). Hunters using a dog harvested 87 percent of the total pheasants reported taken.
- Weekday hunting opportunities were equally as important as Saturdays, with respect to when hunters did most of their pheasant hunting.

Policy or Regulation Changes/ Funding Options

- Seventy percent of hunters indicated that they had hunted on controlled access Permit-Required Hunting Areas in the past. Nearly half (49%) did not support restricting hunting access to additional state-owned areas through similar measures. Respondents were equally divided about the convenience of obtaining daily hunting permits; however, 61% supported the idea of a future telephone or computer-based reservation system for access permits.
- The majority (85%) of hunters felt that the current cost of their hunting license and pheasant tag fees are reasonable. In addition, 68% favored an increase in the price of pheasant tags to raise additional supporting revenue for the stocking program. Of those supporting fee increases, 79 percent indicated they would be willing to pay up to $10 in additional tag fees. The most popular suggested increase was $5.00. Many hunters qualified their responses in that they would expect more pheasants to be stocked as a result of increased costs to participate.

Priorities and Expectations

- Hunters supported the current daily bag limit of two and seasonal bag limit of 10 pheasants. Respondents were evenly divided when asked about allowing the purchase of additional sets of pheasant tags by the most successful hunters. Similarly, they were only slightly more in favor of eliminating the tagging system as an enforcement tool altogether.

P. J. FUSCO

The average Connecticut pheasant hunter is male, 44.5 years of age, a graduate of the CT Conservation Education/Firearms Safety Program, has 18 years hunting experience and does not hunt pheasants as a member of a private hunting club.

● Pheasant hunters have as their top priority the ability to hunt under safe conditions, followed by the chance to at least see pheasants in the field. Hunting under uncrowded conditions and hunting in suitable cover and habitat ranked third and fourth in importance, respectively. Successful harvest of pheasants was ranked as least important to those responding to the survey.

● Pheasant hunters showed strong support for an expansion of youth hunting opportunities on public lands. Eighty-six percent agreed with closing selected state areas for youth-only pheasant hunting and training events.

● Most respondents supported the use of additional volunteers to assist in supplemental stocking efforts. Sixty percent also supported payment of additional fees for an access stamp, with proceeds to be used for an enhanced leasing program for public hunting access on privately-owned lands.

Critique of Program/Quality Indicators

● Fifty-eight percent of the respondents felt that there are too many hunters using public lands for pheasant hunting. Most hunters also indicated that there was too much competition from other hunters. Unsportsmanlike behavior was not a problem for most hunters; however, 50% indicated that over-bagging was still a problem on public hunting areas.

● In general, most hunters have witnessed a decline in conditions for pheasant hunting over the past five-year period. Seventy-four percent did not agree that hunting for pheasants is better now than it was in the past. When asked to rate their level of satisfaction and the overall quality of the stocking program, the majority indicated that they were generally dissatisfied. The primary reason given was that there were simply not enough pheasants being stocked, with 75% of respondents indicating that insufficient numbers of birds are being provided in the field.

● Feedback from respondents was mostly positive regarding DEP employees involved with pheasant stocking activities. Sixty-two percent agreed or strongly agreed that employees were doing a good job in the field.

Preferred Stocking Methods

● Respondents indicated the most support for not closing any hunting areas on days that stocking takes place. They also indicated strong support for maintaining the current number of available pheasant hunting sites in an effort to distribute hunting pressure and meet hunting demand. Only 32% of respondents agreed there were enough areas currently being stocked with pheasants. Hunters did, however, recognize that some marginal areas with poor habitat or reduced acreage may need to be deleted from the list of areas to be stocked.

● Eighty-two percent of hunters responding to the survey indicated preference for a more equal distribution of pheasants throughout the seven-week fall distribution period. Specifically, hunters did not want to continue with a higher percentage of pheasants stocked for the "opening day" period as in the past. Increasing the frequency of stocking on all areas was also preferred by most hunters. Seventy-one percent did not agree that hunting areas were being stocked frequently enough.

The results of the survey show that there is much work to be done to improve public land pheasant hunting. It is also obvious that the Connecticut pheasant hunter would like to see improvements to the program. Some changes, such as a more equalized distribution of pheasants, are relatively easy to accomplish and will be implemented for the upcoming fall 2002 season. Other modifications will require regulatory or legislative action, and some will require additional consideration, evaluation or input from user groups. The Wildlife Division recognizes that hunters highly value the opportunity provided to them through the current program and looks forward to the prospects for future improvements.

Only One Successful Peregrine Nest this Year

Written by Julie Victoria, Wildlife Diversity Program Biologist

Although 2002 was a great year for nesting bald eagles in Connecticut, peregrine falcons did not fare as well.

This peregrine falcon chick, from the nest platform on the P. T. Barnum Bridge in Bridgeport, was banded by Division biologists in late May 2002.

Travelers Tower Peregrines

In the May/June issue of *Connecticut Wildlife,* it was mentioned that the Peregrine Falcon Webcam was back online. Unfortunately, web surfers did not have much to see when they visited the webcam. The peregrine falcon pair that nests on the Travelers Tower in Hartford laid one egg this year; however, the female did not incubate the egg and the pair did not produce any chicks this year.

It is anticipated that the peregrines will return next year to the Travelers Tower and give webcam viewers the chance to see nesting peregrines in action.

The DEP Wildlife Division would like to thank the personnel at the Travelers Co. and Trammel Crow Co. (facility managers for the Travelers Tower) for their assistance, especially Elizabeth Connors (Travelers) and Joe Lagana (Trammel Crow).

Barnum Bridge Peregrines

The peregrine pair that nests under the P. T. Barnum Bridge in Bridgeport (see *Connecticut Wildlife* July/August 2001) again produced two chicks that were banded by Wildlife Division biologists in late May. The chicks are expected to fledge from the nest box in early July.

Since 1997, the Division has banded and examined peregrine chicks hatched in Connecticut as part of the protective management program for this state endangered species. Attaching leg bands is a very useful tool for wildlife managers. The identifiable bands enable biologists to track the movements of banded peregrines, providing important information to the federal recovery program for this recently delisted species. Although the peregrine is no longer on the federal endangered species list, it is still classified as endangered in Connecticut. Therefore, it is necessary to collect any pertinent data that can be added to our knowledge of this species' life history in our state.

The Wildlife Division would especially like to thank Mary Baier of the Connecticut Department of Transportation (DOT) who allowed Wildlife Division staff to use DOT equipment and contractors to access the nest box. Appreciation is extended to Dan Biron from DEP Inland Wetlands, who has been very helpful with all peregrine issues along Interstate 95 and who is also the DEP liaison to DOT. The Wildlife Division also would like to thank Captain Tim Purdy (tugboat operator), Dominic Caciopoli (safety boat operator), John Fronte (labor foreman) and Edward Pawlick, L. S. (DMJM & Harris, Inc., Party Chief) who helped in the banding process.

J. FRONTE / CT DOT (2)

One of the adult peregrines from the P. T. Barnum Bridge watches from a perch while Division biologists examine its young and attach leg bands.

Milford Peregrines

Another peregrine pair set up housekeeping but did not lay eggs this past spring in the Devon section of Milford at an NRG power plant along the Housatonic River. NRG employees had built a nest box for the birds after the pair was seen in the area, preying on pigeons. Once the box was built and put in place atop a decommissioned conveyor tower, it took about three weeks before the birds set their talons on the gravel inside the 32-inch wooden crate.

What is interesting about the male of the Milford pair is that it was banded in New Hampshire in 1996 and was the only chick in the nest that year. The banding effort that year was featured in photographs and text that appeared in a Scott-Forsman Beginning Readers booklet written by homeschooler Jesse Beecher of Tamworth, New Hampshire, who volunteered for Audubon Society NH as a falcon nest site monitor at Square Ledge. New Hampshire biologists were excited to find out that this male was alive and thriving because they had not had any reports about him since his banding in 1996.

Controlled Burns Help Maintain Grassland Habitat

Written by James W. Warner, Field Assistant

With summer in full swing, the success of prescribed burning to enhance wildlife habitat is obvious. This valuable management tool which mimics natural events, combined with the reestablishment of native warm season grasses, has given new life to important grassland bird nesting areas in Connecticut. The burning process increases soil fertility, sets back woody growth, interrupts the process of succession and enhances warm season grasses. Areas across the state have been set aside as grassland habitat and fire is used on many of these sites to maintain them.

The DEP Forestry Division plans and carries out the controlled burns that the Wildlife Division requests at various state properties to maintain grassland habitat. Highly trained foresters and field personnel perform these burns throughout the state during early spring.

When executing a controlled burn, field personnel establish a fire control line around the perimeter of the area so that the fire remains under control and stops when it reaches the control line. Control lines should be about ten feet wide and surround the entire area to be burned. This will prevent the prescribed fire from spreading because fuel items are eliminated in the control line and the fire will stop when it hits the line. Once the control line is completed and weather conditions are favorable, the field can be ignited. Driptorches are used to ignite the fire along the edge of the control line. As the fire becomes larger, it rapidly burns through the grassy vegetation, leaving a blackened landscape behind. Within weeks of the fire, the newly, naturally fertilized field promotes the growth of warm season grasses (which were previously seeded by the Wildlife Division). The grasses grow tall and bunchy, making ideal nesting habitat for grassland birds.

J. WARNER (2)

DEP Foresters David Irvin (foreground) and Ed McGuire ignite the controlled burn at Robbins Swamp WMA in Canaan.

The field at Robbins Swamp WMA after being burned.

Burns in 2002

This past spring, the DEP Forestry and Wildlife Divisions cooperated on prescribed burns at three wildlife management areas (WMA). At Robbins Swamp WMA in Canaan, about 19 acres of a 24-acre field were burned to enhance a warm season grassland. About 19 acres were burned at Bartlett Brook WMA, in Lebanon, to maintain old field habitat, enhance warm season grasses and regenerate aspen. At Pease Brook WMA, also in Lebanon, two fields were burned (22 acres total) to maintain old field habitat and enhance a cool season grassland.

The Wildlife Division extends its thanks to the DEP Forestry Division for its assistance in these wildlife habitat projects.

The White Egrets

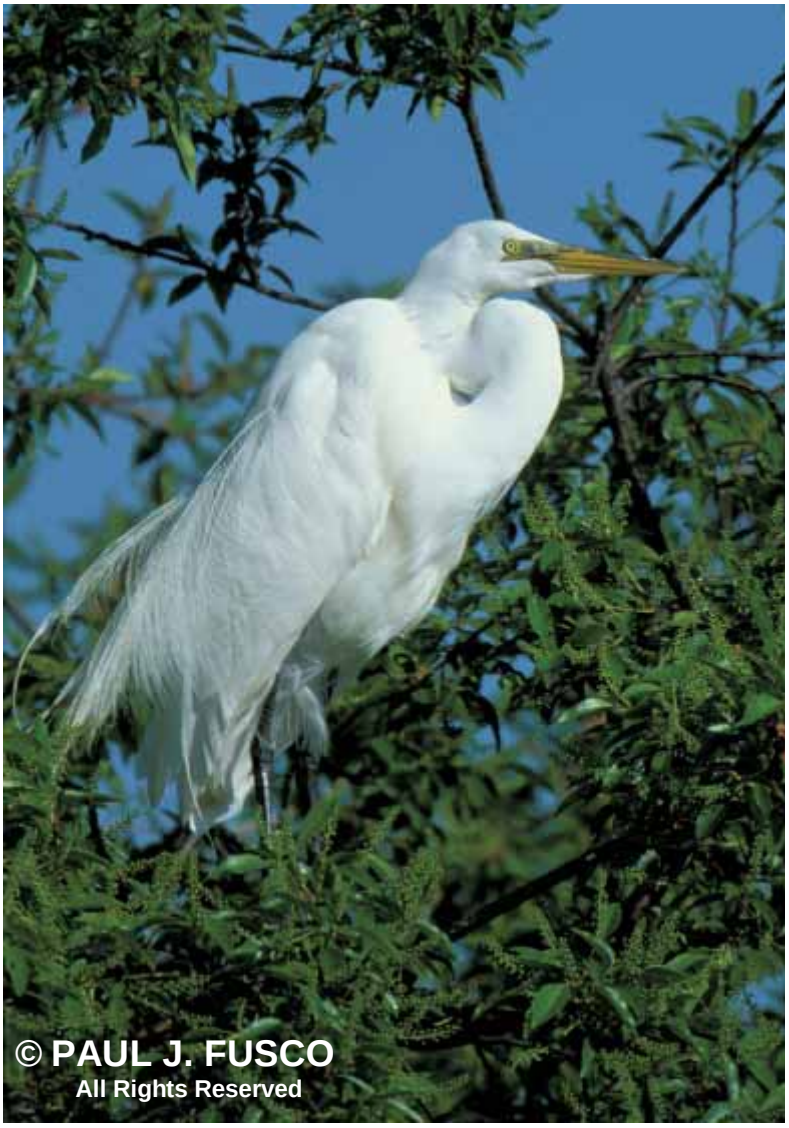
Written by Paul Fusco, Public Awareness Program

Wildlife watchers along Connecticut's shoreline are treated every summer to great looks at some elegant members of the heron family, the egrets. Their pure white plumage is stunning and makes them highly visible for wildlife watchers at any level. They are typically observed during the day as they hunt for small fishes and other food in tidal marshes, creeks, mudflats and ponds.

Great egrets usually hunt by slowly stalking their prey, while snowy egrets are more active hunters. At times, snowys can be seen running back and forth with wings outstretched and flapping, as they chase schools of small fish in shallow water. They may get so caught up in their chase that in order to keep up with fast swimming fish they will even fly up a few feet over the water's surface, then suddenly lunge into the water in an attempt to grab the fish.

Cattle egrets are a bit different than most of the other species of herons and egrets in that they normally feed in pastures and open field areas instead of in wetlands. They are typically found in association with large herbivores, such as livestock. As the large animals walk through fields, they stir up insects and rodents, providing opportunistic cattle egrets with a chance at an easy meal.

P. J. FUSCO (2)



Great egrets use some of Connecticut's offshore islands to nest and raise their young. Their long breeding plumes give them an elegant appearance.

While shoreline areas are usually the best places to find egrets in Connecticut, some egrets will make visits to inland wetlands once their nesting season is over. This post-breeding dispersal occurs by late summer; great egrets are typically the ones found inland.

In the fall, at tidal marshes along the coast, snowy egrets will gather in small, loose flocks before migrating south. At times they may provide a show for observers by squawking and jousting with one another as they compete for the best feeding spots. These turf battles are usually short-lived and are resolved when the more dominant individuals stake their claims. By the end of October most snowy egrets have left Connecticut for the winter. Great egrets are a bit more hardy than their smaller cousins, with a few individuals being documented well into the winter at some coastal locations, especially in milder winters.

The skin at the base of the bill turns from yellow to red on breeding snowy egrets.

The Plumes

Egrets get their name from the french word *aigrette*, which means ornamental plume. Grown during the breeding season, these showy plumes almost led to these species' demise and thus sparked one of the most significant grassroots conservation initiatives in United States history. The initiatives resulted in landmark bird protection laws, the beginnings of the National Wildlife Refuge system and the formation of the National Audubon Society.

The long breeding plumes were used in the millinery trade to decorate such fashionable items as women's hats. Plume hunters killed egrets at their nests in order to satisfy the big

city markets. Under extreme pressure throughout their range, egret populations plummeted. Snowy egrets suffered a heavier loss because they were more numerous and their wavy, filamentous plumes were in higher demand than the straight, stiff plumes of the great egret. The demand was so high that at one point egret plumes were worth more than double their weight in gold. This unregulated market hunting began in the mid-1800s and peaked shortly after 1900, leaving both egret species near extinction. The plumage vogue took a heavy toll on other bird populations as well. Numbers of terns, gulls, plovers, shorebirds and other species were also disappearing at a fast rate.

A growing grassroots bird protection movement came underway in the late 1800s that led to the passage of bird protection laws in many states and the incorporation of many state Audubon societies into a national organization dedicated to the protection of birds. In 1900, Congress passed the Lacey Act, banning the interstate traffic of birds and wildlife killed in violation of state law. The fledgling National Audubon Society was able to hire wardens to enforce state bird protection laws at many breeding areas. As plume hunting continued, public outrage ensued when an Audubon bird warden was killed by illegal plume hunters in southwest Florida in 1905. President Theodore Roosevelt took notice with a statement of support for the Audubon's "efforts to stop the sale and use of the plumes from the white herons."

In 1903, President Roosevelt set aside Pelican Island in Florida as "a preserve and breeding ground for native birds" in an effort to protect nesting birds on the island. All of the egrets, herons and spoonbills that nested there had been exterminated by plume hunters, egg collectors and vandals in the late 1800s. The creation of Pelican Island as a refuge kept the declining the brown pelican population on the island from also being eliminated. Pelican Island was to become the nation's first National Wildlife Refuge in a system that today encompasses more than 500 units across the United States. President Roosevelt went on to create 55 more refuges before leaving office.

P. J. FUSCO (2)

Snowy egrets are extremely active feeders. They sometimes put on a show as they spar with one another over the best feeding spots.

Womens hats, such as this one decorated with egret plumes, were extremely popular in the late 1800s. The demand for plumes used in this fashion vogue nearly brought about the extinction of the egrets.

After protection was given to egrets and other avian species with the passage of the Lacey Act in 1900 and eventually the Migratory Bird Treaty Act in 1918, the days of unregulated market hunting were over. Since those laws were enacted, populations of great and snowy egrets have been slowly increasing and repopulating their former haunts, including Pelican Island. After an absence of perhaps over 100 years, both the great egret and the snowy egret returned to Connecticut by 1961 as breeding species when they were reported nesting at the Norwalk Islands.

continued on next page

Egrets,
continued from previous page

Great Egret

Standing over three feet tall and with a wingspan of up to five feet, the great egret is one our most elegant birds. Its white plumage and long, straight flowing breeding plumes, together with long legs, a slender body and long neck, give this bird its stately appearance. The elegant plumes worn by the great egret make it appear as if it is wearing a bridal train.

Its larger size, yellow bill and black legs distinguish the great egret from the snowy, which has a black bill and black legs with yellow feet. Great egrets feed mostly on small fish, but will also take aquatic invertebrates, frogs, salamanders and snakes.

Snowy Egret

This medium-sized egret has thin, wispy plumes on its head, breast and back. In full breeding display, with upwardly curving back plumes waving in the breeze, the snowy egret is a strikingly impressive sight.

Snowy egrets frequently use one foot to "rake" the vegetation and sediment below the water's surface as a hunting technique. This behavior brings otherwise hidden prey, such as small fish, into sight by flushing them from cover and making them easier to catch.

P. J. FUSCO (2)

Cattle egrets are not common in Connecticut.

Cattle Egret

Smaller and chunkier than the other egrets, the cattle egret also has shorter legs. During the breeding season its white plumage is marked with buffy patches on the crown, upper chest and back.

This wide-ranging species expanded its range, apparently naturally, from Africa to South America some time in the late 1800s by making the remarkable flight across the Atlantic Ocean. Since then, cattle egrets have increased and spread throughout most of the Western Hemisphere, including into parts of Connecticut. The first documented breeding of cattle egrets in our state was recorded in 1971 on the Norwalk Islands. This species is a sporadic breeder in Connecticut, presumably because of a shortage of pastureland with livestock that would serve as foraging areas near coastal breeding locations.

Conservation

Egrets are colonial nesters, breeding in rookeries that may number hundreds of pairs of birds. In Connecticut, snowy and cattle egrets nest in thick shrubby vegetation, while great egrets nest in taller trees. To be successful, the rookeries must be relatively free from disturbance and predators. These conditions exist on several offshore islands near Connecticut's coastline.

The Wildlife Division, in cooperation with the U.S. Fish and Wildlife Service (USFWS), conducts surveys every three years to document the numbers of egrets and other colonial nesting waterbirds in Connecticut. Recent surveys in the state show fluctuations in egret populations. These results will be compared and coordinated with survey results from other nearby states to draw regional conclusions on the status of egret populations in the Northeast. Because egrets may shift their nesting areas from time to time, the regional tallies will give the most accurate insight into population trends.

Two factors that are potential threats to island rookeries are human disturbance and predation. The Wildlife Division and USFWS encourage people to help reduce these threats by staying away from fenced nesting areas and not leaving litter or food scraps behind when visiting coastal areas. Litter and food scraps attract predators, such as raccoons, which can have devastating impacts on colonial waterbird rookeries.

This nearly fledged great egret chick was depredated by a raccoon on Chimon Island in Norwalk, in 1992. Heavy predation pressure from raccoons at Chimon Island in the early 1990s forced egrets to use other nearby islands to breed in subsequent years.

If nest depredation becomes too severe, the birds will be forced to abandon their rookery and may not return to nest there the following year. Raccoons have caused this to happen at some of Connecticut's island rookeries. For this reason it is important to protect potential island rookery habitats, as well as those currently in use. If one island becomes unsuitable for nesting, the birds need to have an alternate place to go.

All of the state's egrets are listed on Connecticut's Endangered, Threatened and Special Concern Species List. The great and snowy egrets are threatened species, while the cattle egret is a species of special concern. Protection efforts undertaken by the Wildlife Division include closing access to vulnerable rookeries and placing educational signs in sensitive areas that may be visited by people.

Offshore islands that are suitable breeding areas for egrets are few in Connecticut and need to be protected on a continuing basis to maintain healthy populations of egrets. Wetland protection and ongoing restoration projects are helping provide egrets with the productive foraging areas they need to raise their young.

Your Questions Answered ??????

Concern for CT's Ruffed Grouse

There are so few ruffed grouse left in CT that they now seem endangered. Their decline cannot be completely explained by habitat decline, wet nesting seasons or increased predators. Their decline coincides with the rise of the wild turkey in their habitat. The Ruffed Grouse Society has said that the Pennsylvania Game Commission has seen evidence of turkeys destroying or occupying grouse nests. Do you have any evidence of this in CT? Does the DEP plan to study the now serious decline? In light of the decreasing population, is the DEP considering cutting down the daily and season hunting bag limits? - H. Bullard, Chaplin.

Ruffed grouse are upland game birds that have very specific habitat requirements, which may be categorized by early forest stages of dense thickets of vegetation. Although once very common in Connecticut and throughout the Northeast, this species is now found at relatively low densities in the state. The primary factor leading to this decline is changing land use patterns, resulting in a lack of suitable grouse habitat. Over the past 300 years, drastic changes have occurred to our state's landscape. During the 1600s and into the early 1800s, forests were cleared for farming. Farms were abandoned during the 1800s and early 1900s, which resulted in farmland converting to dense thickets and eventually back to mature forests. These habitat changes led to fluctuation in wildlife diversity and abundance. For example, mature forests are more favorable to deer, bear, moose and wild turkeys, while an agricultural landscape supports grassland birds and bluebirds, and transitional habitats (i.e., early successional forest stages) are conducive to cottontail rabbits, woodcock and ruffed grouse. At present, most (60%) undeveloped land in Connecticut is dominated by mature forests. This has led to increases in species that require forested habitat types; whereas species that use other types of habitat have declined.

Although there has been some suggestion that competition between wild turkeys and ruffed grouse is the reason for the decline of grouse, there is no scientific evidence that supports this claim. Wild turkeys and ruffed grouse have historically coexisted, without negative interactions. Ruffed grouse are adapted to use early to mid-successional forests. Although wild turkeys will use these same habitats for nesting, escape cover and feeding, they are generalists, meaning that they can survive in a mosaic of habitats. During the critical winter period, when food may be limited, the feeding habits of each species differ; grouse feed primarily on tree buds while turkeys find food on the ground. In addition, competition for nest sites does not appear to be a problem. In a recent turkey nesting study in Connecticut, the Wildlife Division examined 48 turkey nests and found only one nest with potential grouse interaction. During a five-year study of wild turkey nesting and survival in Virginia and West Virginia, over 600 nests were located and only three contained both grouse and turkey eggs. The State of Pennsylvania is currently conducting a turkey nesting study and those researchers have not reported interactions that suggest that turkeys are significantly impacting grouse populations.

L. GREGONIS

The Wildlife Division is responsible for the management of ruffed grouse in Connecticut. Over the last several years, the Division, in cooperation with the Forestry Division, has stepped up efforts to enhance early successional stage habitat on state lands through timber cutting and prescribed burning. The key to managing ruffed grouse is to provide more early successional stage forests. Hunting regulations have been established to provide hunting opportunities without impacting grouse populations. The Division will continue to monitor grouse populations through hunter harvest data and breeding bird survey data. Additional ruffed grouse research efforts are also being considered.

This answer was provided by Mike Gregonis, Deer/Turkey Biologist

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

Franklin Shooting/Field Facility Upgraded

A project involving major improvements and enhancements has been completed at the Franklin range/shooting facility, which is located at the Wildlife Division's Franklin Wildlife Management Area. This facility is dedicated solely to the training of Conservation Education/Firearms Safety Program students and instructors. The project included the replacement of shooting decks, a new 50-yard shooting deck/roof (see photo), roofing of the 25-yard shooting deck, a new storage building, a new elevated bow/tree stand training platform and numerous replacements to other training structures/ and equipment. This project was funded under a new U.S. Fish and Wildlife Service Section 10 grant, which is available for enhancements to state hunter education programs. Special thanks should be extended to the DEP's Squaw Rock carpentry crew for their expertise and hard work in completing this project. --*Peter Bogue, Assistant Director*

R. KALINOWSKI

FROM THE FIELD

Tiger Beetle Specialist Dr. Phil Nothnagle Remembered

The Wildlife Division acknowledges with great sadness the death of Dr. Philip J. Nothnagle who passed away at his home in Vermont on June 1, 2002. Phil was a noted entomologist specializing in tiger beetles, having worked with the DEP Wildlife Division and The Nature Conservancy to survey and monitor the Connecticut endangered Puritan tiger beetle population since 1989. He was well recognized and highly respected region-wide for his expertise. When the Puritan tiger beetle was listed as federally threatened in 1990, Phil served as one of the leading scientists on the U. S. Fish and Wildlife Service's Puritan Tiger Beetle Recovery Team.

A day in the field with Phil was always an adventure. He was interested in all invertebrate species and would often encourage others to try to capture impossible-to-catch dragonflies and damselflies so that he could study and identify them. The effort often landed someone, or everyone, in the water. Although we had many ordinary trips along the Connecticut River looking for tiger beetles, the time the engine quit and the boat had to be towed back to the dock by concerned fishermen was the one trip that will not be forgotten.

Phil shared his vast knowledge about Puritan tiger beetles with such interest and zeal that you didn't realize you were learning. When asked to help write about Puritan tiger beetles, he jumped at the opportunity. He prepared information for the Wildlife Division's Puritan tiger beetle fact sheet and wrote about Puritan tiger beetles for *Connecticut Wildlife* (N/D 1998).

His passing leaves all that knew him sad. All in the Wildlife Division are thankful for Phil's many contributions and we extend our sympathy to Phil's family.

Julie Victoria, Wildlife Diversity Biologist

P.J. FUSCO

Dr. Phil Nothnagle searching for state-endangered Puritan tiger beetles in Connecticut.

Litchfield H. S. Wins Connecticut Envirothon

The weather was great and so was the enthusiasm of 45 registered high school teams as they competed in the 11th annual Connecticut Envirothon competition held in West Hartford. The top scoring team in the 2002 competition was Litchfield High School.

This year's event took place at the Metropolitan District Commission's Water Treatment Facility property on Route 44 in West Hartford. The property offered many opportunities for "natural challenge" questions. Five stations, which covered the topics of forestry, wildlife, soils, aquatics and invasive non-natives, were located throughout the area.

Preparation for the Connecticut Envirothon occurs during the school year as each team studies the five environmental subjects and attends workshops to hone their knowledge of the subject areas and natural resource management. Subject matter includes definitions of terms, as well as hands-on identification and applied science questions. The various high school teams had 30 minutes to answer a 100-point test in each subject, using their knowledge and teamwork skills.

The 2002 top scoring team, Litchfield High School, will go on to the National Envirothon competition to be held in August in Massachusetts. The Wildlife Division wishes them the best of luck.

The mission of the Connecticut Envirothon is to promote environmental awareness, knowledge and active personal stewardship among Connecticut high school students through education and team competition.

Peter Picone, Urban Wildlife Biologist

Late Development - DEP Issues Emergency Closures to Protect Wildlife

Heron and egret rookeries on Charles Island in Milford and Duck Island in Westbrook have received a tremendous amount of human disturbance during the 2002 nesting season. Both islands were recently designated as Connecticut Natural Areas Preserves, primarily because of their importance as nesting habitats for these elegant, state-listed wading birds. To prevent total abandonment of these rookeries by the birds, both islands have been completely closed to the public until September 9th. For more information on these disturbances or on the members of the heron family using the islands, see the articles starting on page 3 and page 10.

Connecticut Envirothon 2002 winning team from Litchfield High School. Team members are (from left): Stephen Zepecki III, Alexandra Regenbogen, Carla Williams, Kevin Waugh, Nelson Bricker, team advisor John Markelon and two alternates.

WCRP Project Updates

Migratory Bird Stopover Habitat Project

The spring of 2002 marked the beginning of the Wildlife Division's three-year Migratory Bird Stopover Habitat Project. Little information exists on critical stopover habitats used by migrating birds. Loss of these critical habitats can result in greater distances between "refueling" stops for migrating birds, which can significantly increase their mortality. Identification of such areas throughout the country is an important priority of Partners In Flight. This project parallels the previous Silvio O. Conte Stopover Habitat Surveys that were performed along the upper Connecticut River, but will highlight additional areas along the Housatonic, Naugatuck, Thames, and mid- to lower Connecticut Rivers. The Wildlife Division will use these surveys to help identify Connecticut's priority sites and help guide conservation efforts at state and local levels.

P. J. FUSCO

Black-throated green warbler

A few highlights from this year's spring surveys included such species as spotted sandpipers and warbling vireos, as well as worm-eating, blackburnian, hooded, bay-breasted, cerulean, blackpoll and yellow-throated warblers. The exciting sightings weren't just of the migratory bird variety though. A couple of reports from volunteers included displaying turkeys, a newborn fawn stumbling away into the forest cover and a coyote finishing up a night of scavenging.

Although the surveys have been a success thus far, many more volunteers are needed to conduct future surveys. Future plans for the project include a fall warbler identification workshop for volunteers as well as an annual banquet with a presentation of the year's findings. This is an excellent opportunity for birders to take an active role in conservation research.

The fall survey component will begin at the end of August and run through September. On each of the five scheduled days, volunteers are asked to make one visit to each of 10 points and conduct a 10-minute survey at each point. The surveys require participants who are familiar with bird identification by sight and sound. Once you are assigned to an area, surveys can be conducted by an individual or a small team. You may also choose to split up the surveys of one area between individual surveyors. Those that only have time to do a couple of surveys are also encouraged to take part and fill in for volunteers with other commitments.

For more detailed information on this and other volunteer opportunities, please visit http://dep.state.ct.us/burnatr/wildlife/geninfo/volunteer.htm, or call J. T. Stokowski at 860-675-8130.

J. T. Stokowski, Research Assistant

Wildlife Gardens in Urban Schoolyards

The Wildlife Division has assisted four urban schools in improving wildlife habitat on their school grounds by establishing butterfly and hummingbird gardens. The native plants used in the project were purchased through the Wildlife Conservation and Restoration Program (WCRP) grant received this past year.

Students, faculty and volunteers planted native wildflowers, such as beebalm (*Monarda didyma*), wild bergamont (*Monarda fistulosa*), butterfly weed (*Aesclepias tuberosa*), New England aster (*Aster novae-angliae*) and cardinal flower (*Lobelia cardinalis*). Also added for wildlife enhancement were native shrubs, such as highbush blueberry (*Vaccinium corymbosum*), northern bayberry (*Myrica pensylvanica*) and sweet pepperbush (*Clethra alnifolia*). In the fall, a common hackberry (*Celtis occidentalis*) tree will also be planted at the schools. The plantings have aesthetic appeal, but more importantly, they provide nectar and larval foods for butterflies. Hummingbirds will benefit from the tubular flowers of the cardinal flower, beebalm and trumpet creeper (*Campsis radicans*) vine. Local songbirds can feast on summer berries from the highbush blueberry and late winter berries on northern bayberry. The plantings will help educate the students, faculty and visitors on the types of plants used in habitat enhancement for songbirds, hummingbirds and butterflies.

Peter Picone, Urban Wildlife Biologist

Bear Research

As part of a Wildlife Conservation and Restoration Project to learn more about Connecticut's bear population, Wildlife Division biologists are currently trapping, marking and releasing a sample of resident bears. Bait stations have been set up on state forests and wildlife management areas with frequent bear reports, primarily in northwestern Connecticut. Bait stations provide evidence of bears living in the immediate area. When bait, typically food attractants, is used consistently by a bear, a culvert trap will be deployed at that location to capture the bear.

All bait sites and culvert traps will be marked with signs, so that anyone who may encounter them will know that they are in the area of a DEP research project and **SHOULD NOT DISTURB** the area.

Once captured, the bears will be marked with highly visible, numbered ear tags. Subsequent sightings of marked and unmarked bears will provide better estimates of the bear population and movements of individual bears. In addition to the ear tags, some female bears will also be fitted with radio collars. The collars emit a signal that allows biologists to track their movements and determine habitat preferences and home range size. Before being released, each captured bear will also be measured and weighed and its age will be estimated.

One bear that was recently marked with ear tags and released in northwest Connecticut was captured in Hartford, near the Founders Bridge. Because the bear was deep into an urban area, with high vehicle traffic and a high probability of encountering people, DEP staff successfully darted and tranquilized the bear so that it could be relocated. This bear was a 130-pound male, estimated at 2 1/2 years old.

Participation by the public in reporting bear sightings, along with ear tag numbers and colors is extremely helpful. The DEP encourages anyone who sees a bear to report it to the Wildlife Division at (860) 675-8130 or (860) 424-3011.

CT Coastal Birding Trail

Connecticut's Coastal Birding Trail has continued to evolve over the summer. Several planning meetings and site visits were conducted with Wildlife Division biologists and trail consultants. In the coming months, nominations will be accepted for possible stops along the birding trail and a series of fall meetings are scheduled to highlight the positive impacts birding and nature trails can have on local communities. More details on how to nominate sites and how to monitor the progress of the trail will appear in the next issue of *Connecticut Wildlife*.

Moose Are Here to Stay in CT

There's no question about it. Moose are now living in Connecticut and are here to stay. However, it is not clear whether moose were ever native to the state. If moose did exist here during early colonial times, they occurred in small numbers and at the southerly fringe of their range. In 1935, George Gilbert Goodwin wrote in *The Mammals of Connecticut*: "The moose, if ever a native to Connecticut, has long since disappeared from within the limits of this state."

During the 1980s and 1990s, moose populations in Maine, Vermont and New Hampshire increased dramatically because of favorable habitat conditions and limited hunting. This resulted in a southerly expansion of New England moose populations and an increased frequency of moose wandering into Connecticut.

Moose Arrive in CT

Starting in the 1970s and all the way through the early 1990s, moose occasionally were documented traveling through the state; however, no resident moose population existed. Since 1992, the Wildlife Division has been documenting credible moose sightings received from the public. From 1992 to May 2002, a total of 106 moose sightings were reported in 45 towns. Most sightings have been in the northwest region of the state, although moose have been seen as far south as Guilford, East Lyme and Essex.

To develop a population growth index, a question was added to the annual deer hunter survey card in 1996 regarding hunter observations of moose during the fall hunting season. Deer hunters reported 141 sightings of moose from 1996 to 2001. Since 1996, hunter sightings of moose have been reported from nine to 25 towns annually. During this six-year period, moose sightings have been reported in 44 different towns. Moose were reported in Hartland and Woodstock five of six years and in Union during all six years. Over 17 percent of all moose sightings were reported in Union from 1996 to 2001. In 2001, 25 sightings were reported from 17 towns and the number of sightings per 1,000 hunter-days almost doubled from 1999 (0.041) to 2000 (0.076) and decreased in 2001(0.058). In other words, for every 100,000 hunter-days in the field, 5.8 moose sightings were reported in 2001.

Moose Decide to Stay in CT

By 1998, there was evidence that a resident moose population was becoming established in Connecticut.

- *November 1998*: Four-year-old female moose was found dead in Yale Forest. Nearby tracks indicated that a calf had been in the area.
- *July and September 2000*: First actual sighting of a cow moose and calves in Hartland.
- *October 2001*: Cow moose with calves was seen in Hartland.
- *January 2002*: Cow moose and calves were reported in East Hartland and East Granby.
- *April 2002*: Cow and calves were seen at the Barkhamsted Reservoir by a DEP conservation officer.
- *June 2002*: Cow and calf observed by Wildlife Division staff at Goshen Wildlife Management Area.
- Over the past four years, cow moose with calves have been observed annually in five different towns.

In the first six months of 2002 (January-June), the public reported 29 sightings in eight towns. Five were reported in January, three in February, two in March, eight in April, eight in May and three in June. Based on the frequency and distribution of these reports, the 29 sightings represent about nine different animals.

Moose on the Move

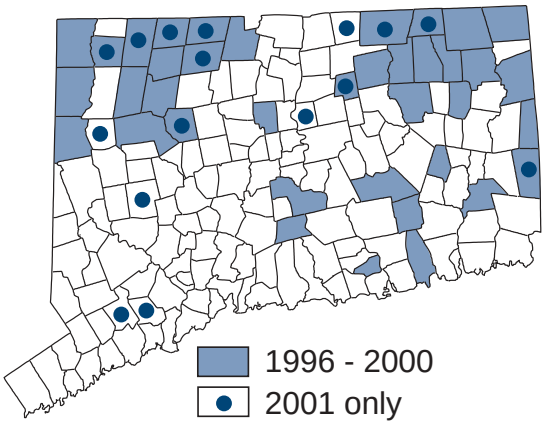
Moose sightings reported by the public provide the DEP with information on general movements of moose in Connecticut. For example, in May 1998, a young female moose was first observed in Eastford. In an eight-day period, the moose passed through Scotland, Lebanon, Franklin, Bozrah and Montville. After traveling at least 56 miles in 11 days, the moose was hit and killed by a car on Interstate 95 in Westbrook on June 5. The car was totalled and the passengers sustained non-life-threatening injuries. A physical examination of the moose indicated that she was two years old and had sustained internal injuries and three broken legs in the accident. A two-year old female that travels a long distance in spring is likely dispersing from her natal home range to establish a new home range.

Another moose on the move was observed in late September 2001. A yearling four-point bull moose was seen traveling from the Massachusetts/Connecticut border south to Willington, Tolland, Vernon and South Windsor over a two-week period. On October 7, 2001, the moose was observed in Riverside Park behind the Hartford Police Department, which is bordered by Jennings Road, Interstates 91 and 84 and the Connecticut River. Overall, the moose traveled about 36 miles in 14 days. A young bull moose traveling a long distance in fall is usually related to the breeding season. DEP staff successfully immobilized the moose, which was equipped with a radio-collar, packed with ice to prevent overheating, administered medication to reverse the effects of the immobilizing agent, and transported and released in upstate New York.

Moose-Vehicle Accidents

As a resident moose population becomes established in Connecticut, moose/vehicle accidents are expected to increase. The first report of a moose being hit by a motorist in Connecticut history occurred in June 1995. Be-

Moose Sightings in CT



tween June 1995 and December 2001, six moose/vehicle accidents were reported in Connecticut, resulting in two dead moose and four severely damaged vehicles. Although six accidents may seem low, the few moose that do wander into or live in Connecticut have a relatively high likelihood of becoming involved in a motor-vehicle accident because of the numerous roads that transect the landscape. A moose-vehicle accident in Connecticut poses an increased potential of human fatalities compared to a deer-vehicle accident. Because of this increased risk, every moose sighting or encounter in Connecticut must be treated seriously with full awareness of expected outcomes.

This article was taken from a Wildlife Division booklet currently in the final stages of publication. *History and Status of Connecticut's Moose Population* was prepared by Howard Kilpatrick, David Celotto, Andrew LaBonte and Rebecca Riggs.

Seven Bald Eagle Chicks Banded

Written by Julie Victoria, Wildlife Diversity Program Biologist

As reported in the last issue of *Connecticut Wildlife*, eight bald eagle pairs had set up nests in five Connecticut counties this past nesting season. Only five of the pairs successfully hatched chicks. Seven of the chicks were recently banded and examined by biologists. (The number of chicks banded does not include the young that died in the Rocky Hill nest. See page 4 for an explanation of what happened.)

Wildlife Division technician Geoffrey Krukar climbed the nest trees so that the chicks could be carefully lowered to the ground for examination. Once on the ground, the chicks were weighed and measured, and blood samples were taken to determine the general health of the birds and to detect the presence of heavy metals. The young chicks were fitted with an aluminum band on each leg—one of the bands is black and white and can be easily identified through a spotting scope. Attaching leg bands is a useful tool for wildlife managers because this technique allows them to trace local movements of individual bald eagles, estimate population changes and determine the species' lifespan.

With the exception of 1996 when no chicks hatched in the state, Connecticut's eagle pairs have produced 24 chicks since 1992 and the Wildlife Division has banded and examined 21 of the chicks as part of the management program for this state endangered species. The increased number of eagle pairs in Connecticut is consistent with the upward trend this protected species is experiencing nationwide.

P. J. FUSCO (2)

Wildlife Division technician Geoffrey Krukar removes an eagle chick from the nest and prepares to lower it to the ground where biologists will examine it and attach leg bands.

The DEP Wildlife Division would like to thank the volunteers that helped with the time-consuming task of bald eagle monitoring: Don Hopkins, Jerry Mersereau, Mike O'Leary, Hank Golet, Ed Nash, Mary Beth Kaiser, Alan Nordell and Ned Pfieffer.

Butterfly Garden at Sessions Woods

The butterfly garden at the Sessions Woods Wildlife Management Area has been expanded thanks to the Bristol Garden Club, Wildlife Division staff and volunteers. The Bristol Garden Club provided the funding to the Friends of Sessions Woods, while staff and volunteers did the actual design and planting of the garden. Visitors can expect to see many native plants, including spicebush, cardinal flower, milkweed, aster, joe-pye-weed and yarrow. The Midwestern-native purple coneflower, always a favorite with butterflies and gardeners, is also planted, along with black-eyed Susan. Butterfly gardens have become more popular in the past decade or so and provide a great place to view native wildlife in a beautiful setting. Gardens designed to attract butterflies are most successful when careful thought is given to site and plant selection. The butterfly garden at Sessions Woods can be visited anytime from sunrise to sunset.

Dry Conditions Prevail for Breeding Waterfowl Survey

Written by Min T. Huang, Waterfowl Program

The dry conditions that had persisted in Connecticut were all too evident when the breeding waterfowl survey was conducted this past spring. Since its inception in 1989, the states from Virginia north to New Hampshire have participated in this important survey. The survey is ground-based and targets randomly placed square kilometer plots. In the northern states and Canada, breeding waterfowl surveys are conducted from the air along fixed transects. The spring breeding waterfowl survey provides part of the data that drives the Eastern Mallard Adaptive Harvest Management (AHM) models. Outputs from these models determine the lengths and bag limits of duck hunting seasons in the Atlantic Flyway. As the black duck and Canada goose AHM processes become formalized, the data derived from these surveys will be used in those models as well. Additionally, the breeding survey provides wildlife managers with an index to both habitat condition and waterfowl production.

The 2002 surveys in Connecticut indicated that habitat conditions were relatively poor this year. Most of the non-urban survey plots had scant amounts of water, 9% being completely dry. Coastal habitats, although not as affected by lack of rainfall as inland sites, were also fairly dry this spring. Salt marsh restoration work being conducted along the coast has helped to mitigate some of the problems that dry weather poses for wildlife nesting in the coastal marshes.

As is typical, mallards and Canada geese dominated the survey. Mallard breeding pair estimates were 20,244. This is a 25% increase from 2001 and a 33% increase from the five-year average. Canada goose pair estimates were 10,456. This represents a 28% decline from 2001 and a 16% decline from the five-year average. Both the wood duck and black duck estimates were down from 2001 and their respective five-year averages. Wood ducks were estimated at 4,172, nearly 45% of last year's estimate and 26% below the five-year average. Black ducks were not observed inland and the coastal estimate was 114 pairs. This is half of last year's estimate and 80% below the five-year average. Mute swans, a deleterious and introduced species, were observed in 14% of the plots this year. Eighty-five percent of mute swan occurrences were in inland survey plots. Rare Connecticut breeding species, such as gadwall and blue-winged teal, were also observed during the survey. The hooded merganser, a cavity-nester similar to the wood duck, seems to be gaining a foothold in the state, and the survey indicated an estimated 346 breeding pairs.

P. J. FUSCO

An estimated 4,172 pairs of wood ducks were observed during the 2002 breeding waterfowl survey.

Since the beginning of the survey in 1989, there has been annual variation in all species breeding pair estimates, but particularly with black duck and wood duck counts. Some of the year-to-year estimates of these two species differ by over 400%. These changes in estimated breeding pairs do not correlate with harvest estimates, thus are likely the result of bias. Much of this variation is likely attributable to bias introduced by different observers from year to year, changing habitat conditions and the secretive nature of wood ducks and black ducks relative to mallards and Canada geese. Both mallards and Canada geese will readily use park ponds, backyard ponds and large lakes; all highly conspicuous areas. Black ducks and wood ducks typically use more forested wetlands for breeding. Ground surveys can be difficult to conduct in these habitats and less conspicuous species which use habitat characterized by thick cover can easily be overlooked.

In order to assess some of this variation, 30% of the inland plots and all of the coastal plots were surveyed from the air immediately after the ground surveys were completed. Aerial survey results differed significantly from ground survey results in both number of birds observed, and in some cases, species observed. The Wildlife Division will continue to assess the efficacy of aerial surveys for part or all of Connecticut's breeding waterfowl plots.

Breeding waterfowl and all species dependent upon healthy wetland systems face an increasingly uphill battle in Connecticut. Wetland loss, the effects of exotic species invasions and the overall degradation of our wetlands have and continue to result in a gradual decline in both species abundance and diversity. The continued acquisition, conservation and enhancement of Connecticut's remaining fresh and saltwater wetlands is of paramount importance to the future biodiversity of this state.

Take the Wildlife Challenge!

Guess which animal is described in the challenge and enter into a drawing to win a free wildlife poster. 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**. Answers may also be sent via email to katherine.herz@po.state.ct.us. The answer and winner will be printed in the next issue of *Connecticut Wildlife*. Postcards for this issue's contest must be postmarked by **August 21, 2002**. Email answers must also be received by that date. Only one winner will be chosen at random from all correct entries.

Congratulations

go to Katie DeJohn who was chosen as the winner of the May/June challenge. Katie gave the correct answer of "garter snake." Thanks to all readers who sent in postcards with answers to the Wildlife Challenge. Please keep trying!

July/August Wildlife Challenge

The July/August wildlife challenge is an animal introduced into the eastern United States from Europe. It can be seen in freshwater ponds, slow rivers, coastal bays and inland lakes in Connecticut where it competes with native waterfowl for nesting habitat. This large animal weighs about 25 pounds and mainly eats aquatic vegetation. Can you name this issue's wildlife challenge?

Wildlife Calendar Reminders

July 1	Federal Duck Stamps are available at post offices.
	Connecticut Migratory Bird Conservation Stamps available at local town halls.
July 31	**Public Hearing** on proposed amendments to establish requirements for implementing a falconry program in Connecticut, 7:00 PM, Department of Environmental Protection, Phoenix Auditorium, 79 Elm Street, Hartford. Copies of the proposed amendments may be obtained from the Wildlife Division (860-424-3011).
August	Dispose of fishing line in covered trash receptacles. Discarded fishing line is a dangerous hazard for wildlife.
	Insects in full chorus in Connecticut's fields.
August 1	**Waterfowl Regulations Meeting**, 7:00-9:00 PM, Connecticut Forest and Park Association, 16 Meriden Road, Middlefield.
August 10-11	**Sharon Audubon Festival**, Route 4, in Sharon. For more information, call 860-364-0520, or visit www.audubon.org/local/sanctuary/sharon. Wildlife Division staff will be participating in this fun and educational event.
Aug. 30- Sept. 2	Visit the Wildlife Division's display at the Woodstock Fair.
Sept.	2002 pheasant tags available from town clerks' offices ($10.00 for 10 tags).
Sept. 2	Early squirrel hunting season opens.
Sept. 15	Report use of bluebird nest boxes by sending a Bluebird Nest Box Network survey card to the Wildlife Division.
Sept. 16-Nov. 19	First portion of the archery deer and turkey hunting seasons.
Sept. 27-29	Visit the Wildlife Division's exhibit at the Durham Fair. Division staff and Master Wildlife Conservationist volunteers will be giving short, informative demonstrations on wildlife at various times during the fair. For more information on the fair, visit the Durham Fair website at http://www.durhamfair.com.
Sept. 30	Report use of bat houses to the Wildlife Division. Call 860-675-8130 for more information.

J. WARNER

DEP Forester David Irvin feels the extreme heat of the fire as he ignites a controlled burn at Robbins Swamp WMA in Canaan.

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