May/June 2012

Connecticut Wildlife

CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
BUREAU OF NATURAL RESOURCES
DIVISIONS OF WILDLIFE, INLAND & MARINE FISHERIES, AND FORESTRY

Eye on the Wild

Connecticut Audubon Society's Connecticut State of the Birds 2012: *"Outdoor experiences, both unstructured and supervised, are essential to children's cognitive development and to forming a lifelong bond with the natural world."*

Where Is the Next Generation of Conservationists Coming From?

That question is the title of the Connecticut Audubon Society's (CAS) Connecticut State of the Birds 2012 *report. It also is a question that is being asked by the conservation community, such as government agencies, non-profit organizations, and environmental educators. The underlying concern, as expressed in* Connecticut State of the Birds 2012*, is that children spend so much time inside on computers and playing video games, and engaging in highly-structured, carefully-scheduled activities, that they are not forming the bond with the natural world now that will translate into a commitment to conservation in 10 or 20 years.*

Author Richard Louv originally brought this problem to the forefront in 2005 when his book, Last Child in the Woods - Saving Our Children from Nature-Deficit Disorder*, was published. Shortly after, in 2006, the Department of Energy and Environmental Protection began to address this disconnect with nature by establishing the No Child Left Inside® initiative, which provides children a chance to unplug from technology and unearth the vast opportunities that our State Parks and Forests have to offer. Visit www.ct.gov/ncli to learn about No Child Left Inside®, as well as events and outdoor activities to help you discover nature.*

Several large conservation agencies and organizations are also leading efforts to encourage families and children to discover the outdoors. The U.S. Fish and Wildlife Service's "Connecting People with Nature; Let's Go Outside" initiative (www.fws.gov/letsgooutside) provides information on nature activities, events at National Wildlife Refuges, conservation at home, conservation careers, and volunteer opportunities. The National Wildlife Federation's "Get Outside Be Out There" campaign (www.nwf.org/Get-Outside/Be-Out-There) also details tips and activities, and offers advice on overcoming obstacles to getting kids outside.

The Connecticut Audubon Society has made a commitment to keep the topic of kids and the outdoors in the forefront in our state as it engages conservation experts, parents, kids, and educators in community forums and local events. You can review the Connecticut State of the Birds 2012 *report and find out about forums, events, and a variety of family outdoor activities on the CAS website, www.ctaudubon.org.*

Kathy Herz, Editor

Cover:

A state and federally endangered roseate tern feeds on a sand lance. To learn more about roseate terns, see the article on page 12.

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. Connecticut Wildlife *contains articles reporting on Wildlife Division projects funded entirely or in part with federal aid monies.*

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– Restoring the Wild Turkey to Connecticut –

Written by Michael Gregonis, DEEP Wildlife Division

DEEP WILDLIFE DIVISION FILE PHOTO

In the predawn darkness of a cold winter morning, Dale May (former Wild Turkey Program Biologist and retired DEEP Wildlife Division Director) and I are sitting in a blind waiting for wild turkeys to arrive at the bait site. Two rocket nets have been set up and all the turkey trapping procedures have been completed and double checked. Off on a distant hillside, as the sun peeks over the horizon, we hear "yelp, yelp, yelp," the first indication that turkeys are nearby. A few minutes later, the entire flock awakens and a chorus of yelps, clucks, cackles, and gobbles erupts across the hillside. We know that this is a good sign and the turkeys should be on the bait soon. Our excitement increases as the first birds begin feeding on the cracked corn. Dale gives last minute instructions, "wait until all the birds have their heads down and we will shoot on three – one, two, three," BOOM! Both sets of rockets go off simultaneously. When the smoke clears, we find 25 turkeys in the two nets. This successful wild turkey capture occurred on January 26, 1991, in Torrington, Connecticut; it is a small event in one of the greatest wildlife management success stories – the restoration of wild turkeys across North America.

Wild turkeys have a long history in Connecticut. Although they are now abundant across the state's landscape, that was not always the case. Pre-colonial information about wild turkeys in Connecticut is scarce; however, experts estimated the statewide population was over 24,000 birds. Native Americans routinely burned the forest, a process that enhanced habitat for turkeys by creating forest openings and reducing underbrush. They used turkeys as a source of food, and for medicinal purposes, clothing, arrow fletching, arrow heads, and tools.

When European settlers arrived in Connecticut, they cleared vast amounts of forestland for agricultural purposes, building materials, and firewood. In 1600, Connecticut was 95% forested. By 1850, about 35% of the forests remained. Loss of habitat, introduction of disease from domestic turkeys and chickens, and colonists using wild turkeys as a food source led to the demise of this species. By the early 1800s, the wild turkey was extirpated from Connecticut. The last documented wild turkey in our state was killed in North Branford in 1813.

Over time, many farmers left Connecticut in search of better agricultural opportunities in the Midwest. This situation allowed forests to regenerate once again, eventually providing habitat suitable for wild turkey restoration. Like many other states, Connecticut's initial restoration attempts were with pen-raised turkeys. Between 1956 and 1970, 740 game farm turkeys were released in the state. Although these birds had the same genetic background as wild turkeys, they did not possess the survival skills that are passed from hen to poult. Because of this lack of parental training, survival rates were low and none of the releases resulted in a viable self-sustaining population of turkeys.

Successful wild turkey restoration was eventually accomplished by capturing truly wild turkeys with cannon and rocket nets and transplanting them into new areas. During the winter

of 1974-1975, Connecticut received 17 female and five male wild turkeys from the New York Department of Environmental Conservation. These New York birds were released on Great Mountain Forest in Canaan, forming the core of Connecticut's population. By 1978, the population had grown to a level that an in-state trap and transfer program was established. Scenarios similar to the one outlined at the beginning of this article played out many times from 1978 to 1992, resulting in the capture of 356 turkeys which were released at 16 different locations throughout Connecticut. Remarkably, today, wild turkeys are found in all 169 Connecticut towns and the population is estimated at about 35,000 to 38,000 birds.

During the 75th Anniversary of Wildlife and Sport Fish Restoration Program, it is important to remember that wild turkey restoration was made possible in Connecticut because of this program, which obtains funding from an 11% excise tax on sporting arms and ammunition and a 10% tax on handguns. Sportsmen and shooters pay this tax to help ensure that state wildlife agencies have the resources to wisely manage wildlife, maintain quality hunter education programs, and operate public target ranges. In Connecticut, federal Wildlife Restoration funds allow the Wildlife Division to acquire and improve wildlife habitat, conduct wildlife surveys and inventories, and maintain and improve hunter education programs.

CT's Wild Turkey Restoration Project

Capture Site	Release Site	Year Released	# Released
Olean, NY	Canaan	1975	22
Canaan	Barkhamsted	1978	9
Norfolk	Union	1978-79	15
Norfolk	Barkhamsted	1978-79	15
Canaan	Voluntown	1979-80	16
Norfolk	East Haddam	1979-80	21
Canaan	Guilford	1981-82	23
Torrington	Lebanon	1981-82	20
Kent	Killingly	1981-82	18
Torrington	Cheshire	1981-82	13
Northwest, CT	Ellington	1986	30
Northwest, CT	Hebron	1986-87	27
Northwest, CT	N. Stonington	1987	28
Sharon	Pomfret	1990	6
Torrington	Hampton	1991	35
Warren	Hampton	1991	7
Warren	Eastford	1991	18
Sharon	Eastford	1991	4
Warren	Pomfret	1991	20
Litchfield	Hampton	1992	9
Total Released Turkeys			**356**

As the smoke from the rockets hung over the trap site, Dale and I worked quickly to secure the birds and prepare them for transport to a release site in Natchaug State Forest near Hampton Reservoir. Each bird was weighed, banded, aged, sexed, and evaluated for physical condition. The birds were then placed in special National Wild Turkey Federation transport boxes and moved across the state. Once at the release site, the boxes were opened and the turkeys flew or ran into their new forest surroundings, completing another successful wild turkey release. When traveling through Natchaug State Forest, I often think about the capture and release of those birds and I am thankful that funding and dedicated professionals were available to restore the wild turkey to Connecticut's fields and forests.

P. J. FUSCO

Connecticut's successful turkey restoration project was made possible because of the funding provided through the Federal Aid in Wildlife Restoration Program. Hunters contribute to this program through special fees on firearms, ammunition, and archery equipment.

Nuisance Aquatic Vegetation Control by Weed-eating Carp

Written by Mindy Barnett, DEEP Inland Fisheries Division

Among the many services provided by the DEEP Inland Fisheries Division (IFD) is the administration of the State's permitting program for triploid grass carp. Private pond owners often contact the IFD seeking technical guidance regarding their pond management needs, including possible options for control of nuisance aquatic vegetation. Many pond owners prefer biological control options over the use of herbicide treatments and other alternatives. The stocking of triploid (functionally sterile) herbivorous (plant-eating) grass carp is just one of several options used to manage nuisance aquatic vegetation in small ponds.

Grass carp (*Ctenopharyngodon idella*), or white amur, feed strictly by grazing on aquatic vegetation. Native to Asia, grass carp were first imported into the United States in the early 1960s. Researchers were interested in the fish's potential as a biological control agent of nuisance aquatic vegetation.

Although grass carp are in the same family as the common carp, they do not share their bottom feeding habits. Thus, grass carp do not "muck up" the pond bottom, adversely affecting water clarity. They are voracious eaters, generally consuming two to three times their body weight for the first five to eight years of their life. After this initial feeding and growth spurt, the carps' metabolism slows, but they can live for up to 20 years. If not stocked at appropriate levels, grass carp could quickly clear an entire pond of vegetation, eliminating needed habitat (food, shelter, spawning) for other resident fish and wildlife. If allowed to escape, they can also adversely affect other bodies of water.

Grass carp need to be contained in the location where they are stocked to prevent possible escape. Originally an Asian river fish, they seek moving water and are known escape artists; therefore, diligence with screening is required. Many ponds can be rendered ecologically isolated by screening off the pond's outlet and/or inlet to prevent these fish from escaping. Ponds with large watersheds (typically one square mile or greater) are usually not considered for introduction of triploid grass carp due to the significantly greater difficulty or inability of achieving ecological isolation without restricting passage of flood waters.

Triploid grass carp were first produced in the U.S. in 1981 and commercially available for use in 1983. The process of creating sterile, triploid fish typically involves shocking the eggs with heat or pressure shortly after fertilization. This process forces the eggs to retain an extra copy of chromosomes, thus the term triploid (for three sets of chromosomes) rather than diploid (two sets). Triploid fish are incapable of reproducing, which is an important reason why these non-native fish have been accepted, under certain conditions, as a management tool in Connecticut.

R. JACOBS, DEEP INLAND FISHERIES

A grass carp netted from a locally stocked pond. This fish can grow to weights exceeding 25 pounds!

The IFD manages the triploid grass carp permitting program, which began in 1988. Stockings are regulated through the issuance of special importation and liberation permits. Before permits are issued, every site is visited and inspected by staff from the IFD Habitat Conservation and Enhancement program. Since 1988, biologists have issued over 2,800 permits for private ponds across the state, averaging 80 new inspections per year, with a total of 58,075 triploid grass carp being stocked. The majority of ponds (70%) that have been permitted for the use of triploid grass carp are less than 0.50 acres in size.

Whether or not triploid grass carp are a viable option for the biological control of nuisance levels of aquatic vegetation in a particular pond depends on several factors. Criteria considered during the permitting process include type of vegetation, amount of vegetation present, and whether the pond can be "ecologically isolated" per Connecticut State Regulations. Grass carp prefer finer leafed, submerged, and small floating vegetation, such as advanced algae or stoneworts (*Chara* and *Nitella*), American elodea, and bushy pondweed. Plants with thick, fibrous, or waxy leaves and stems, such as watershield and water lilies, are rarely consumed, and grass carp are not capable of eating unicellular algae (i.e., phytoplankton). Grass carp are preferential eaters, sometimes completely eradicating a favored plant before touching another type. This can lead to the unpalatable plants taking over the pond and making the vegetation problem worse.

The IFD recommends aquatic vegetation coverage of 20-40% as a "best" management level in most multi-use waterbodies. Nuisance levels would need to be greater than 20% to be considered for aquatic vegetation control. Although the control of aquatic vegetation by triploid grass carp can be slow (2-3 years) when compared to herbicide treatments, the results can last several years before restocking is required. Triploid grass carp can be a great biological control for nuisance aquatic vegetation in small ponds. After a permit application is received, the pond is inspected to determine if the use of triploid grass carp is appropriate and the stipulations for screening requirements in the inlet and outlet are explained. If approved for stocking, fish can be purchased from private commercial hatcheries. Readers seeking more information on the triploid grass carp management program should contact Mindy M. Barnett, Fisheries Resource Technician, CT DEEP, Inland Fisheries Division, Eastern District Headquarters, 209 Hebron Avenue, Marlborough, CT 06447. Phone: 860-295-9523, Fax: 860-344-2941, Mindy.Barnett@ct.gov. For additional information on small pond management, contact the IFD at 860-424-FISH or purchase the book, *Small Ponds in Connecticut – A Guide for Fish Management*, at the DEEP Bookstore (www.ct.gov/deep/store). It is a great resource for small pond management.

– The Wood Duck Success Story –

Written by Min T. Huang, DEEP Wildlife Division

P. J. FUSCO

The DEEP's Bureau of Natural Resources celebrates another federal Wildlife and Sport Fish Restoration Program success story during the program's 75th Anniversary – the recovery of the wood duck.

The male wood duck – with its boldly patterned plumage of green, purple, bronze and white, noticeable crest, and bright red eyes – is among the most spectacular of waterfowl. The female is rather drab in comparison, mostly gray and light brown, with a white teardrop-shaped eye ring. This medium-sized dabbling duck is a common nester in Connecticut, and is most often seen from March through November (*see page 17 to learn about the natural history of wood ducks*).

Wood ducks were once plentiful in Connecticut, thriving in or near wetlands that had an abundance of snags (standing dead trees) that provided natural nesting cavities. However, by the early 1900s, wood ducks were on the brink of extinction. Unregulated hunting and habitat destruction had driven their numbers, along with many other migratory birds, to very low levels. In response, conservationists supported the passage of the Migratory Bird Treaty Act in 1918, which provided regulatory protection for wood ducks and other migratory birds. Regulation of hunting seasons for wood ducks and other waterfowl resulted in harvest levels that were sustainable. However, despite the regulation of harvest, the continental population of wood ducks remained low due to a lack of natural cavities in snags.

In the case of wood ducks, the influx of dedicated monies from the Federal Aid in Wildlife Restoration (also known as Pittman Robertson or P-R) Program was the real catalyst that turned the tide for the species. Stable funding made it possible for state wildlife agencies to devote needed resources for wood duck recovery. Many agencies, Connecticut DEEP included, began wood duck nest box programs. Specially built nest boxes placed in suitable habitats can provide much needed nesting sites for wood ducks.

Connecticut's wood duck nest box program was initiated in 1953. In the first 10 years of the program, a total of 1,247 boxes were constructed and placed in suitable habitat. Over 3,000 wood duck nest boxes have been constructed and placed throughout the state since the beginning of the program. These boxes have been responsible for higher wood duck production and an increasing population.

Currently, the Wildlife Division, with the help of volunteers, checks and maintains approximately 600 nest boxes on state lands. Boxes are cleaned annually and productivity estimates are made based upon the number of hatched eggs found in each box.

Despite continued and steady loss of wetland habitat throughout the state, Connecticut's current wood duck popula-

tion is at an all-time high. Wood duck nest boxes also benefit other cavity nesting species, such as the hooded merganser. Hooded merganser populations in Connecticut also are on the rise, in large part due to increased availability of artificial nesting cavities.

Historically, hunters have borne the cost of the Federal Aid program ostensibly for the perpetuation of hunted species and the habitats they require. As an intended, but often overlooked bonus, non-hunted species also have benefitted from this stable source of funding. Every time we are out enjoying wildlife and natural places, we should thank hunters and anglers for their continual contribution towards conservation. Seventy-five years after the establishment of the Federal Aid program, maybe it is time to think about the development and implementation of a similar program to raise funds for the conservation of non-hunted species by encouraging the segment of the populous that enjoys wildlife through bird feeding, nature study, or other outdoor endeavors to contribute as well.

P. J. FUSCO (2)

The female wood duck is rather drab compared to the male. It is mostly gray and light brown, with a white teardrop-shaped eye ring. The wood duck is a common nester in Connecticut, and is most often seen from March through November.

Buy a Connecticut Duck Stamp!

Help support the conservation of wetlands where wood ducks and other wildlife live. Connecticut Duck Stamps can be purchased for $13 wherever hunting and fishing licenses are sold – participating town clerks and retail agents, DEEP License and Revenue (79 Elm Street, Hartford), and through the online Sportsmen's Licensing System (www.ct.gov/deep/sportsmenlicensing). Upon request, stamps can be sent through the mail.

Working for Wood Ducks Over the Years

In addition to installing and monitoring wood duck nest boxes on state land, the Wildlife Division has undertaken a number of efforts, through its Waterfowl and Habitat Management Programs, to restore, monitor, and enhance Connecticut's wood duck population:

- **The state's populations of breeding wood ducks and other waterfowl are surveyed every year during a regionwide effort to estimate the number of waterfowl nesting in the North Atlantic coastal states. During April of each year, Division staff and volunteers survey a sample of wetland areas throughout the state. Wood ducks are the third most abundant species counted after mallards and Canada geese.**
- **To determine the movements and survival rates of wood ducks, the Division has trapped wood ducks and attached bands to their legs before releasing them. Those who recover leg bands from wood ducks, or any other migratory bird, are encouraged to report their findings to the U.S. Fish and Wildlife Service (www.reportband.gov), which is responsible for the stewardship of all migratory birds.**
- **Since the inception of Connecticut's Duck Stamp program in 1993, funding has been provided for replacing water control structures and repairing dikes at wildlife impoundments (ponds and marshes) on DEEP properties. Control structures are a vital part of the impoundments because they allow water levels to be raised or lowered to provide optimum wetland habitat for wood ducks and other wetland wildlife.**

Promoting a Healthy Urban Canopy

Written by Rachel Holmes, DEEP Division of Forestry

Spring is in full swing: the soft petals of flowering trees have fallen to the ground, and tiny chartreuse leaves have emerged from the twigs of trees and shrubs that shade our city streets and stand tall in our backyards and parks. The fragility of these leaves and twigs and the subtle movement of new growth give the appearance that 'all is quiet on the urban forest front.' It's hard to remember the scene of last August when our trees were first under attack by the heavy winds of a tropical storm, or the scene just two months later when Jack Frost took the place of our jack-o-lanterns, bringing snow instead of Halloween candy. Even if the scenes fade from our memory, the stumps and missing limbs of surviving trees remind us of the destruction brought on by these unusual weather events.

Connecticut residents suffered great loss after these storms. Many were without power; some for nearly two weeks. But we now stand to suffer a less obvious loss in the form of diminished community benefits provided by trees, resulting from canopy loss during the storm and after storm damage prevention efforts. As efforts to clean up after the storms are winding down, it is time to refocus our energy toward restoration of our urban forest to prevent the loss of tree-related benefits.

Ironically, many of these benefits actually mitigate storm-related damage. Research has shown that after heavy rains, tree roots prevent soil loss and absorb stormwater that would otherwise rush into natural bodies of water, affecting not only the balance of these fragile aquatic ecosystems, but also the drinking water that we derive from them. Trees also serve as windbreaks during intense storms. Leaves capture tiny particles of dust, ash, pollen, and smoke that might otherwise cause or worsen the effects of asthma, particularly in children. Trees serve as natural air conditioners – their dense leafy crowns shade buildings in summer and, when leafless, trees allow light to come in on cold winter days. Trees also provide habitat for wildlife. A benefit to all of us, roots store carbon, removing carbon dioxide from the atmosphere where it would otherwise contribute to global climate change. Beyond these tangible benefits, the trees we 'interact' with on a day-to-day basis impart a sentimental value for each of us.

P. J. FUSCO (2)

Flowering dogwood not only has showy flowers in the spring, but it also produces berries in the fall that are an important food source for migratory birds.

Serviceberry (shadbush) is a low-growing, native tree (less than 30 feet tall) that produces a summer fruit that is eaten by robins, catbirds, tanagers, cedar waxwings, and other birds.

It is our duty and responsibility to ensure that these benefits remain for future generations. It is simple: when you maintain the urban tree canopy, you maintain the benefits it provides. Maintenance, or 'stewardship,' of the urban tree canopy includes two broad tasks. First, protect the oldest and biggest members of our tree community. Second, replenish aging and dying trees with young, healthy, and appropriately sited trees.

Maintaining Mature Trees

Our largest trees provide the greatest benefits given the comparatively large surface area of their leaves and branches, and their root systems. Often, the largest trees are also the oldest. Much like us, trees develop special needs as they grow older and structurally weaker, and as their disease response mechanisms become less effective. These needs require the specialized care of a licensed arborist. These well-trained, highly-skilled men and women can assess the health of a tree, as well as its surrounding conditions, and assist homeowners in forming realistic management goals. More

importantly, according to Connecticut law, tree care on private property must be done by a properly-licensed arborist. For a regularly-updated list of arborists, please visit www.kellysolutions.com/CT/.

Planting the Right Tree in the Right Place

Inappropriately sited trees can do more harm than good, a fact made obvious during these last several months. While the trees that were planted years ago simply cannot be 'relocated,' nor should they be, we can make wise planting decisions as we move forward. Urban foresters advocate the 'Right Tree, Right Place' philosophy of tree species and site selection. When considering whether or not to plant a tree in a particular spot, it is imperative to first consider how the tree will interact with its surroundings at its mature height and size. In the forest, trees compete with other trees for light, space, underground growing space, etc. In the urban setting, trees compete with overhead power lines, buildings, underground utilities, or compacted soils. Selecting the right tree for the right location will reduce the likelihood of competition for resources, thereby reducing the threat of damage caused by trees to our critical infrastructure and vice versa.

Short Tree List

Recognizing the importance of promoting a long-lived tree canopy, urban forestry professionals and scholars in Connecticut have developed a list of tree species appropriate for locations where growing space is limited – either above or below ground. Glenn Dreyer of Connecticut College, and Jeff Ward and Sharon Douglas, both of the Connecticut Agricultural Experiment Station, recently updated an existing list of trees that reach a maximum of 30 feet at maturity. This list can be found on the Connecticut Agricultural Experiment Station website at www.ct.gov/caes/shorttrees.

Meskwaka Tree Project

Tree stewardship requires well-trained volunteers and, when necessary, tree care professionals. For those who feel called to care for our urban forest in a volunteer capacity, there are several ways to gain the knowledge necessary to be effective. The Meskwaka Tree Project is a training course offered through the University of Connecticut Cooperative Extension System. It is held annually in June, this year from June 14-16. This three-day, two-evening course is designed to educate attendees on the basics of urban forestry and tree care, including tree anatomy and physiology, tree identification, soil-root interactions, 'Right Tree, Right Place,' and proper pruning, among other topics. Graduates of the program, called Meskwaka Cooperators, will have also learned the important human dimensions of urban forestry, including working with the media and government relations, to name a few. For more information or to register, contact Meskwaka organizer, Bob Ricard, at Robert.ricard@uconn.edu.

Final Thoughts

After an emergency, we tend to form stronger relationships with members of our community through our collective efforts to cope with devastating damages and restore our respective ways of life. As 'members of our community,' trees provide us with indispensable physical, economic, and emotional benefits. Indeed, trees are an essential component of the urban forest which we must work together to restore and protect for future generations.

International Migratory Bird Day at Sherwood Island

Hundreds of families came out to Sherwood Island State Park in Westport on Saturday, May 5, 2012, to celebrate the 20th anniversary of International Migratory Bird Day. This event was held as part of the No Child Left Inside® 2012 Great Park Pursuit Spring Sprint. Families had a terrific time learning about bird behaviors, going on guided bird walks, banding live birds, learning how to use binoculars and spotting scopes, playing "bird call bingo," and much more!

The event was a cooperative effort between the DEEP State Parks and Wildlife Divisions, Friends of Sherwood Island, Connecticut Audubon Society, Audubon Connecticut, and the Connecticut Ornithological Association.

Launched in 2006, No Child Left Inside® is a promise to introduce children to the wonder of nature – for their own health and well-being, for the future of environmental conservation, and for the preservation of the beauty, character and communities of the great State of Connecticut.

P. J. FUSCO

The bird banding station was a very popular activity at the International Migratory Bird Day celebration at Sherwood Island State Park in Westport. A licensed bird bander from Connecticut Audubon Society holds a bird that was caught in a mist net and explains the banding process to curious on-lookers. Kids who visited the station received a "Bird Buddy" bracelet where they could write down the band number of a bird that was banded and released during the event.

A Curious Find: Porcupine "Poop" Trees

Written by Ed McGuire and Daniel Evans, DEEP Division of Forestry; photos provided by DEEP Forestry

While marking boundaries in Natchaug State Forest in Eastford on a snowless February day, we came upon a tree unlike any we had ever seen – a 24-inch diameter, hollow sugar maple, open at the bottom, with fresh animal droppings inside the opening and what looked like several years worth of scat outside the tree. We had no idea what animal was using the tree. Later on in the day, Dan came upon a smaller tree, a 13-inch diameter hickory broken off at about five feet high, with an opening at the bottom and a heap of droppings around the outside. Tip-toeing in, he caught a glimpse of a tail of an animal with quills inside the tree, and the mystery was solved – it was a porcupine! We dubbed the trees "porcupine poop trees," the larger one being the "principal poop tree" and the hickory the "pignut poop tree."

A den site regularly used by porcupines is evidenced by the large accumulation of droppings at the entrance. This is the "principal poop tree" found by the authors.

The "Poop" on Porcupines

The North American porcupine (*Erethizon dorsatum*) is found across the northern tier of the United States and into Canada. Porcupines are probably more common in the highlands of Connecticut than generally thought. They are infrequently seen due to their nocturnal and solitary nature, the large amount of time they spend feeding and resting on tree limbs, and their use of rock caves in ledges as preferred den sites. Dens are used mostly in winter, and caves provide the best protection from cold and moisture. Where there are no caves, hollow trees and logs are used as dens. Individuals may use the same suite of dens year after year – "suite of dens" is used because porcupines have been observed to change den locations as often as once every three weeks. In winter, a porcupine will reportedly sit upright in a den, using its tail for support and folding its legs across its stomach for warmth.

Porcupines are preyed on by coyotes, bobcats, and fishers, but their quills provide a good defense. During a two-year study of 50 porcupines at the Quabbin Reservoir in Massachusetts, where fishers are abundant, no porcupines were killed by fishers. Starvation in a harsh winter is a more common cause of mortality.

Porcupines eat some herbaceous plants, but they do most of their feeding in trees, both deciduous and coniferous, eating leaves, buds, and mast. The Massachusetts study found red and white oaks to be the most commonly used deciduous trees for feeding and resting. Oak buds and foliage in spring and acorns in the fall are important food sources for porcupines. In winter, porcupines almost exclusively use hemlock for both food and cover. Hemlock foliage and inner bark provide most of their winter food. Porcupines will also eat the inner bark of sugar maple, beech, elm, white pine, and other species. In some places, porcupines have been regarded as pests due to damage done to tree stems, with attempts made to eradicate them. Vermont reportedly paid out $90,000 in bounties on porcupines in 1952.

Looking for More

A couple of weeks after our initial encounter, we went back to the area with a camera. Again, on the ground inside the hickory was a porcupine, apparently either frozen with fear or sound asleep, not even stirring as we crept up to take a photograph, and still not stirring even as one of our cell phones rang. Judging by the piles of droppings outside the trees, it was well-fed, living the good life of deep slumber after big daily meals during the almost snowless winter.

The Bigelow Brook parcel of Natchaug State Forest, where the porcupine den trees were found, is not far from the Yale-Myers Forest. The parcel was purchased by the State of Connecticut with funds provided by the George Dudley Seymour Trust. The area has a mix of hardwood and softwood tree species – hemlock of all sizes; towering white pine; sugar and red maple; red, white, and black oak; pignut and shagbark hickory; white ash; beech; black cherry; and black, yellow, and paper birch. Old charcoal hearths and cart paths indicate

A porcupine takes refuge in the "pignut poop tree" found in Natchaug State Forest in Eastford.

that the area had been cut over for charcoal production, the last time probably around 1900. Fire scars on the base of some trees are a sign of a moderately intense surface fire in the stand several decades ago.

The area slopes to the west to Bigelow Brook. The western aspect provided partial protection lower on the slope from the southeast winds that hit eastern Connecticut during the Great New England Hurricane in 1938. Some trees were blown over, others partially tipped, and some survived unscathed, including some pines now over 100 feet tall. The resulting patchwork of "micro-stands" contains tree species of various sizes porcupines can use in different seasons and for several purposes. We observed evidence of inner-bark feeding by porcupines on hemlock, sugar maple, and beech. We saw only one tree, a six-inch diameter sugar maple, that may have been killed as a result of porcupine feeding. We found another hickory den tree, this one apparently used less frequently than the others, but with the outer husks of hickory nuts scattered outside. Two of the three porcupine den sites observed were in hollow pignut hickories. Hickories are affected by seven species of *Poria* (heart-rot fungi) which infect trees containing wounds, like stem scars from fires, resulting in trees becoming hollow at the bottom.

In early April, we walked through a piece of conservation land in Ashford to get to a part of the Westford Block of Natchaug State Forest. The conservation land was similar to the Bigelow Brook parcel, with many large hemlocks. It looked like porcupine habitat, but we did not see any evidence of porcupines until we walked past a 20-inch diameter red maple, hollow at the bottom and next to a swamp. Sound asleep on the ground, inside the opening, was a porcupine. Interestingly, there were no droppings near the tree.

A 13-inch diameter hickory tree, broken off at about five-feet high, provides the perfect den site for a porcupine. The authors dubbed this tree the "pignut poop tree."

Threat of Invasive Insect Pests

Two non-native insect pests, the hemlock woolly adelgid and elongate hemlock scale, which feed on hemlock twigs and sap, pose a serious threat to Eastern hemlock. Feeding on twigs results in the necrosis (death) of foliage and eventual dieback of living branches. These pests are currently impossible to eradicate on a forest-wide scale. Loss of hemlocks in the landscape would severely affect porcupine winter habitat and pose a serious threat to the continued existence of porcupine in the northeastern United States. Loss of hemlock and these curious creatures from our northeastern forests would be a shame.

Junior Naturalist Series at the Belding WMA in Vernon

A Junior Naturalist Series for children of all ages will be held at the Wildlife Division's Belding Wildlife Management Area (WMA) in Vernon. Programs go from 9:00 AM-12:00 PM, and a parent or guardian must accompany all children. The programs are free, but please register by calling 860-306-5418. Children can sign up for one or more programs. Parking is on Bread and Milk Road in Vernon. *(Programs listed for two dates are repeats of the same topic.)*

L. CURRAN, for BELDING W.M.A.

June 27 and 28 – Birds: What makes a bird a bird? Where do birds live? See and hear a variety of birds and bird homes, and then play a bird game or two.

July 11 and 12 – Butterflies, Dragonflies, Ladybugs, Beetles! How many different kinds of butterflies are there? What do dragonflies eat? Can you make a hoverfly land on your finger? Walk the wildflower meadow and look for all kinds of fascinating insects.

July 18 and 19 – Stream Life: The streams at Belding WMA are full of creatures. Get your hands wet while looking for stream-dwelling animals.

July 25 – Nature Photography: Photography is a great way to learn about nature. Learn some basics of nature photography and then head out into the wildflower meadow for some great shots. Return after lunch for a viewing of everyone's photos.

August 1 – Signs of Wildlife: Animals are all around, but many avoid being seen by humans. Look for evidence of wildlife and learn to identify the signs that different animals leave when they pass through. Then, go on a wildlife scavenger hunt.

The Wide Ranging, Yet Threatened – Roseate Tern

Article and photography by Paul Fusco, DEEP Wildlife Division

One of the more graceful birds found in Connecticut – the roseate tern – is also one of our most threatened. Hanging on with a tenuous connection, this tern has only one regular breeding site in the state which commands special protections to ensure breeding success.

Roseates are slender, white-bodied terns, similar to common and Arctic terns. They have a black cap and pearl gray mantle (topside of wings and back). The deeply forked, snow white tail is one of their most notable features. In flight, their sweeping elegance cannot be overstated. At rest, the outer tail feathers extend far beyond the folded wing tips. At the start of the breeding season, the bill is black with a small amount of red at the base. As incubation and chick rearing progresses, the bill acquires varying amounts of pinkish red. Roseate terns get their name from the faint and hard-to-see rosy splash of color on their breast during the breeding season. Their calls include a harsh and raspy "*kraaak*," which is loud and low in pitch. The birds also frequently give a soft "*kulick*" or "*hew-it*" call.

Distribution

Roseate terns have a global range. In North America, they are known to breed in two separate populations – the northeastern and the Caribbean. The northeastern population is distributed in scattered locations on the Atlantic coast from the Madeleines Islands, Quebec, to Long Island, New York. There are two main breeding sites within that range, Great Gull Island, New York, and Bird Island, Massachusetts. Roseates also breed in 15 to 20 other smaller colonies, including one at Falkner Island in Connecticut. Falkner Island is owned and managed by the U.S. Fish and Wildlife Service (USFWS) as part of the Stewart B. McKinney National Wildlife Refuge.

The breeding range for the Caribbean population includes the Florida Keys and most of the islands south to Venezuela and west to islands off Central America.

The winter range is not fully known, although records indicate that most roseates winter along the coast of South America as far south as Brazil. Some birds may winter at sea. Roseate terns are also found in parts of Europe, Africa, Asia, and Australia.

Behavior

Roseates are exceedingly buoyant and effortless fliers. They are strong and fast, using rapid, shallow wingbeats to power across great maritime distances. Their wings are relatively short when compared with other similar-sized terns.

Like other terns, roseates plunge dive over shallow coastal water to catch small fish. They will hover over their quarry before plunging, but do not hover as long as a common tern might. In our region, the roseate's most important food item is the sand lance, which makes up an overwhelming percentage of its diet. Other fish that show up in the roseate's diet include small herring, anchovy, sil-

Slender and buoyant, roseate terns are perhaps the most graceful birds of the maritime habitat. Their long, deeply forked tail is one of their most notable field marks.

versides, and juvenile menhaden and bluefish. Rarely do the birds catch crustaceans, including shrimp, even if those food items are abundant. When compared to common terns, roseates tend to catch smaller fish and their diet is much less diverse. They will normally forage close to the breeding colony, but have been known to sometimes travel over 20 miles to a foraging area.

The courtship display involves high spiraling flight in which the male leads the pair down from heights of up to 900 feet. From there, the pair will glide downward on set wings. The male will exhibit a somewhat exaggerated posture, with bill pointed downward. At times, males will also fly around the breeding colony carrying a fish in their bills, calling excitedly, "*ki-RIK-chi-vik-chi-vik-chi-vik*."

The northeastern population of roseates breeds in colonies that also contain either common or Arctic terns. In such colonies, roseates may be taking advantage of the other species' highly aggressive and protective behavior directed at intruders and predators. In our region, roseate terns usually nest under the cover of rocks, driftwood, or dense vegetation, or in artificial nest structures. They will readily use old tires and wooden nest boxes that are placed on the ground by wildlife managers.

The roseate tern's call of "*KRAAAK*" is likened to the sound of ripping cloth. It is a good identification characteristic that easily separates roseates from other similar-looking terns.

The typical clutch size is two, with the chicks hatching after approximately 24 days of incubation. The chicks take their first flight about 28 days later. It is during this time, when the young are growing and unable to fly, that they are at their most vulnerable. Roseate tern chicks and eggs have a long list of predators. Among the most significant are black-crowned night herons, herring gulls, great black-backed gulls, peregrine falcons, raccoons, and rats. Other species that have been known to prey on roseates include great-horned owl, red-tailed hawk, red fox, mink, and ruddy turnstone (eggs). Red ants have also been documented killing chicks in the nest.

Conservation

The roseate tern is classified as a federal and Connecticut endangered species, and is considered near threatened globally. Roseates were formerly killed in great numbers along the Atlantic coast of North America to supply birds and their feathers for the plume industry. Bird protection laws, such as the Migratory Bird Treaty Act of 1918, put an end to market hunting in the early 1900s. With regulatory protection, the roseate population peaked in the 1930s when there was an estimated 8,500 pairs. However, the population has never fully recovered its former abundance, even though other species, including the common tern, have fared better. The trend for the northeast population also has been poor. Since 2000, roseate numbers in the northeastern region have dropped by 25%, and the population is currently estimated at 3,500 pairs.

The roseate tern colony on Connecticut's Falkner Island was once considered the third largest in the northeastern population. The island hosted an average of 150 to 200 pairs, along with up to 3,000 pairs of common terns, until the early 1990s. More recently, the Falkner Island population has declined significantly, with only 45 pairs reported in the 2010 breeding season and 47 pairs in 2011.

More recently, roseate breeding colonies have suffered from burgeoning gull populations that have displaced terns and resulted in increased predation at breeding sites. Other predators have also grown in numbers recently. Late summer hurricanes have been known to decimate large congregations of terns, striking at a time when juvenile terns are most vulnerable as they are still mastering their flight skills.

The USFWS has been working on many conservation measures to reverse the decline in the northeast roseate population, including monitoring of nesting colonies to track breeding pair numbers and productivity, banding studies, foraging studies, and habitat protection and restoration at breeding sites. The management of nesting sites to provide roseates with artificial nest shelters has been highly successful. Despite all of these measures, the northeast roseate population has still declined significantly over the past 10 years.

Current conservation goals for roseate terns include: 1) increasing the northeast nesting population to 5,000 breeding pairs, with at least six large colonies, 2) increasing the total number of colonies to 30 or more sites, and 3) expanding the breeding range into historically occupied areas south of the current range.

Little is known about roseate tern ecology during migration, and there are many unanswered questions about mortality, specifically why the northeast population is declining at such a fast rate while the breeding colonies have had good productivity. Survival rates of fledglings and juveniles is one area that needs to be studied further.

Snap Shot: Collis P. Huntington State Park

Article and photos by Nathan Hale, DEEP State Parks Division

Collis P. Huntington State Park is located in northern Fairfield County in the towns of Redding, Bethel, and Newtown. It contains over 1,000 acres of woodlands, fields, streams, and ponds and is home to many species of wildlife. Typical of our Connecticut woodlands, there have been sightings of black bear, coyote and bobcat. In addition, the park offers a great variety of recreation.

Huntington State Park contains five ponds, three of which are suitable for kayaking and canoeing, and are stocked with fish by the Inland Fisheries Division to provide four seasons of fun for angling, boating, and ice fishing. There also is the opportunity to try the latest fad of paddle boarding, where one stands on a large surf board and propels with a double ended paddle.

There are over eight miles of gravel roads and more than 15 miles of multi-use single track trails appropriate for all levels of biking, hiking, trail running, horseback riding, and cross country skiing. The park also contains the Aspetuck Valley Trail, which is for foot travel only. This trail begins in the park and follows the Aspetuck River south through the Centennial Watershed State Forest. It is managed by the Connecticut Forest and Park Association as part of the Connecticut Blue-Blazed Hiking Trail System. Other popular activities include bowhunting, geocaching, letterboxing, orienteering, and rappelling.

The park was deeded to the State in 1955 in memory of Collis P. Huntington, a wealthy railroad and shipping magnate. It was opened to the public in 1973 after the death of Anna Hyatt Huntington, an internationally known sculptress. Anna's most famous piece of art was Joan of Arc in New York City. Her last piece was completed at the age of 91; it is of Israel Putnam on horseback and it can be seen at Putnam Memorial State Park in Redding. Anna was predeceased by her husband Archer who was described as a giant at 6'4" tall and 300 pounds.

This bronze statue of a bear with cubs flanks the main entrance of Collis P. Huntington State Park in Redding. The statue was founded in 1955 by Roman Bronze Works, Inc., and sculpted by Anna Hyatt Huntington.

This stone lighthouse sits on an island in Lake Hopewell, also known as Sterrett's Pond, in Collis P. Huntington State Park in Redding.

When using the trails and waterways at Huntington State Park, you feel as if time has stopped and all is well with the world as there are no sounds of traffic impeding on the peaceful surroundings, save the occasional sound of a chain slapping on a frame from a passing mountain biker, or the snort of a horse as yet unseen, or the wispy sound of a set of skis after a fresh winter snowfall.

Huntington is a great park and you will find it worth the trip. It is well maintained by the DEEP State Parks Division and supported by numerous volunteers, including the Friends of Huntington State Park, Connecticut Chapter of the New England Mountain Biking Association, Connecticut Forest and Park Association, and the Connecticut Horse Council.

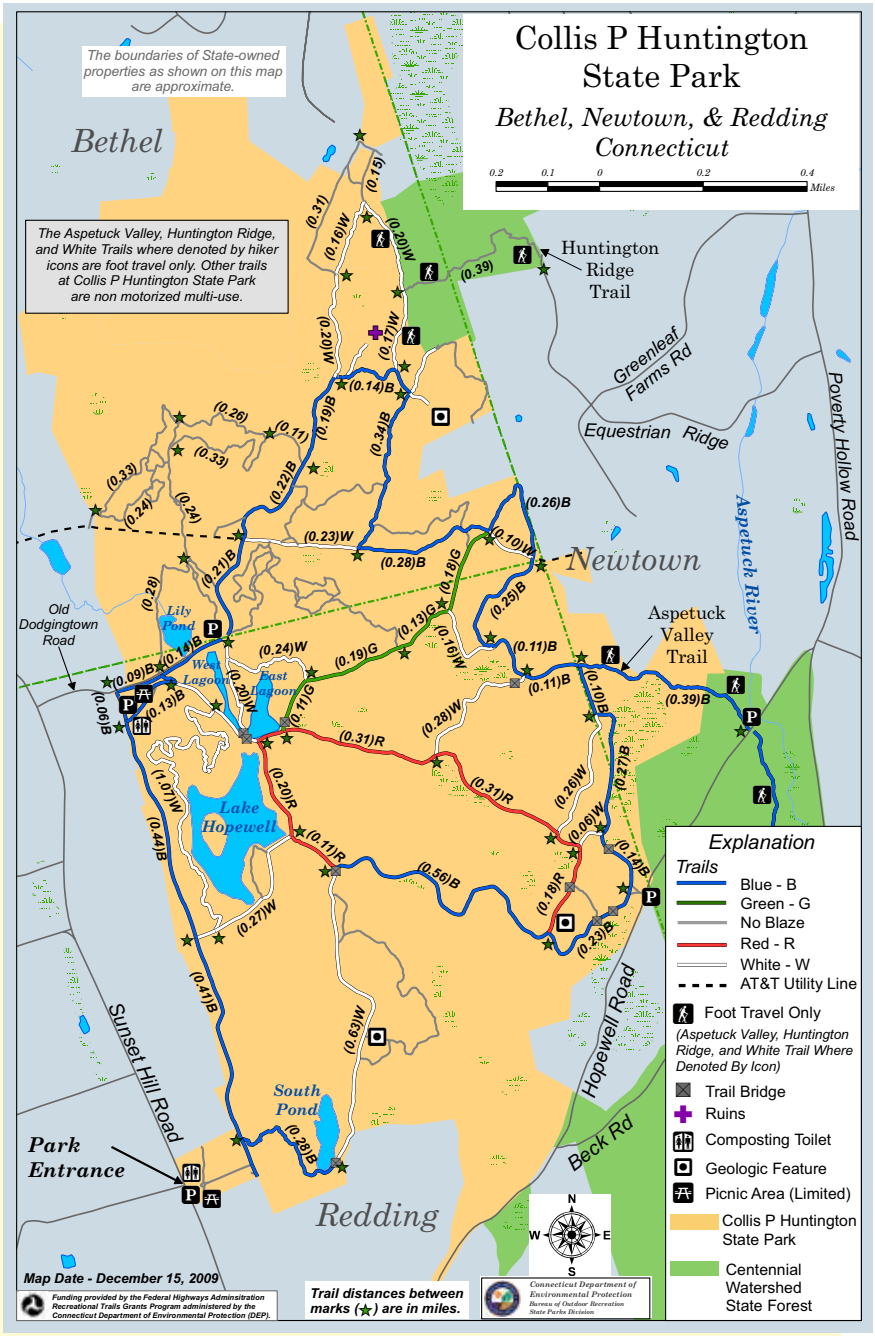
Have a Positive Park Experience!

To make your outdoor experience as enjoyable as possible, the DEEP recommends keeping the following tips in mind:

- **State park and forest recreation areas are open daily between sunrise and sunset.**
- **Trails and service, logging, and other roads are open to non-motorized, multiple use activities (foot travel, mountain biking, equestrian) unless posted closed.**
- **Connecticut Blue-Blazed Hiking Trails and the National Park Service Appalachian Trail are limited to hiking except where they overlap a multiple use trail.**
- **Public roadways in state parks and forests are open to registered motor vehicles (includes registered dirt bikes) and non-motorized multiple uses unless posted closed.**
- **Effective since January 1, 2006, riding an ATV (quad) on state or municipal property may result in charges of criminal trespass (Public Act 05-234). At the current time, Connecticut does NOT have any public areas open to quads.**
- **Registered dirt bikes can ride on the motorized trail at Pachaug State Forest or at the Thomaston Dam. Visit www.nae.usace.army.mil/recreati/tmd/tmdhome.htm for more information.**
- **Trail building and maintenance is illegal unless authorized. To request permission to put in a new trail, contact DEEP's Trails Coordinator at 860-424-3578. Contact the Park Supervisor for permission to perform trail maintenance.**
- **After it rains, please be aware of fragile areas that should be avoided, such as wetlands and steep slopes. For your safety and to prevent erosion and disruption of habitats, always avoid travel through streams that have no bridges or stepping stones.**
- **If you see any illegal activities, please call the State Environmental Conservation Police at 860-424-3333.**

Essential for Safe Trail Use

- **Always let others know where you are going and when you expect to return.**
- **Be aware where hunting is allowed and when hunting seasons are open. Wear bright orange during the hunting seasons to increase your visibility.**
- **Remain on trails that are blazed.**
- **Cyclists and motorized users should yield to pedestrians and equestrians. Pedestrians should yield to equestrians.**
- **Park in designated areas only.**
- **Keep your dogs on a leash.**
- **Respect private property – when you leave State Land, you no longer have permission to recreate.**
- **Plan your route! Trail maps are often found at trail heads and always on the DEEP Web site (www.ct.gov/deep/parkmaps).**



Parks and Wildlife - What You Need to Know

While visiting parks, forests, and wildlife management areas, keep in mind that your actions may be affecting the resident wildlife.

- **ALWAYS be respectful of wildlife when visiting state properties.**
- **ALWAYS keep dogs on a leash and respect areas that are posted NO DOGS for the protection of nesting birds and other animals. Stay on trails and do not let dogs run free through the woods, vernal pools, and on beaches. Also, do not let dogs chase wildlife.**
- **Properly dispose of trash and food items in waste containers or bring the items home with you.**
- **Properly dispose of fishing line and other fishing equipment that can cause harm to wildlife and nesting birds.**
- **Watch wildlife from a distance. Stay out of areas that are closed or fenced off to protect wildlife.**
- **Learn about Connecticut's wildlife and what you can do for conservation. Go to www.ct.gov/deep/wildlife to find fact sheets and other information.**

Connecticut River Seine Survey Provides Long-term Data

Written by Penny Howell and Jacque Benway, DEEP Marine Fisheries; photos provided by DEEP Marine Fisheries

Too often pollution, habitat loss, and overfishing dominate the headlines about our waterways. Although these issues should not be overlooked, in the case of Connecticut's shoreline and major rivers the good news is that many are in much better shape than they were decades ago. Great strides have been made in restoring and maintaining our marine and freshwater habitats. Our state's namesake and largest river is a good example. The Connecticut River has recovered from centuries of industrial use and abuse, and by 1997 was designated an "American Heritage River" by the U.S. Environmental Protection Agency. The National Wildlife Federation lists the lower Connecticut River Silvio O. Conte National Fish and Wildlife Refuge as one of four refuges in its top 10 places in the U.S. to see wildlife – competing with refuges in Montana, Texas, and Mississippi that are in far more rural settings. In Connecticut, much of our natural beauty is close to our cities and backyards. And, because our natural areas are always in danger of being "loved to death," the DEEP Marine Fisheries Division has designed long-term studies that function as an early warning to alert us to stresses on aquatic systems.

The longest on-going study is the Connecticut River Seine Survey, which began in 1978. Every summer, fishery biologists document the ups and downs of fish production in the Connecticut River from Holyoke, Massachusetts, south to Essex, Connecticut, where the river's fresh waters mix with saltwater pushed north by the tides from Long Island Sound.

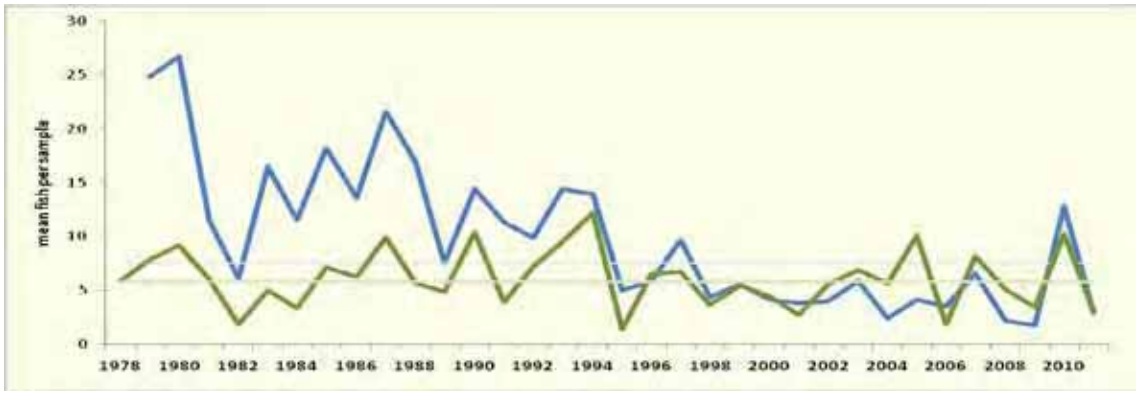
A 50-foot seine is dropped off a skiff and pulled upstream and offshore to sweep through the site.

Each year, seven seine hauls are taken from mid-July through mid-October, with annual catches exceeding 50,000 fish and representing 35 different species. Among the most sensitive fish are the anadromous species which return from the ocean every spring to hatch their young in the relative safety of freshwater rivers. The abundance of newly-hatched juveniles of these species is a good indicator of the river's health and, for that reason, the Seine Survey has kept careful records of both American shad and blueback herring juvenile abundance for the last 33 years.

The summer of 2010 saw a breakthrough for both of these fish as the average catch of juvenile shad ranked in the top three for the time series and the average catch of bluebacks exceeded their long-term median for the first time since 1997. A total of 32,722 blueback herring was collected in 2010. The last annual catch of this magnitude was in 1983 when over 36,000 blueback herring were collected. In 2010, the majority (87%) of herring were caught in the three southernmost stations – Salmon River, Deep River, and Essex – while above average catches of juvenile shad were captured at northern stations – Wilson and Holyoke.

Juvenile shad (top) and blueback herring are almost identical as yearlings.

Even though the summer of 2011 saw a return to less than average numbers, these pulses of high abundance show that the river's most sensitive species are able to reproduce well when conditions are favorable. Along with other species showing up in good numbers, such as spot-tail shiners and sunfish, these fish form the base of the river's food pyramid and their strong numbers translate up through the food chain to popular game fish, as well as favorites at local fish markets. When the herrings do well, we all reap the profit.



Seine survey indices for blueback herring juvenile abundance (dark blue line) show that 2010 production was above the average (light blue line) for the first time since 1997. The abundance index of American shad juveniles (dark green line) was above the average (light green line) several times in the last decade.

Wood Duck

Plestiodon fasciatus

Background and Range

The wood duck is one of the most beautiful of the North American ducks. In the early 1900s, the species was considered in danger of extinction throughout its range due to market shooting, habitat loss, and hunting seasons that extended into the breeding season. With the implementation of the Migratory Bird Treaty Act in 1918 between the United States and Canada, market shooting was outlawed and judicious hunting season lengths and bag limits were instituted. These changes, together with the construction and placement of nest boxes during the last seven decades, have resulted in a dramatic comeback of wood duck populations.

The wood duck ranges from Nova Scotia and Minnesota south to Florida and Texas. In the west, the species occurs from British Columbia to Washington and south through California. Wood ducks are also found in Cuba. They winter in California, the southeastern and Gulf states, and Cuba. Wood ducks are distributed throughout Connecticut, with the highest densities located in the northwest and northeast corners of the state.

Description

The wood duck is a medium-sized dabbling duck, about half the size of a mallard. It weighs approximately 1.5 pounds, measures between 16 to 21 inches long, and has a 24 to 28-inch wingspan. The male is slightly larger than the female. Both sexes have a noticeable crest that extends outward from the back of the head. The male's plumage of green, purple, bronze, and white and its bright red eyes make it one of the most impressive of Connecticut's waterfowl. The female is rather drab in comparison, mostly gray and light brown, with a white teardrop-shaped eye ring.

In flight, the wood duck is identified by its rapid wingbeat, light underbelly, and long, rectangular tail. Flight is swift and direct and usually not much higher than the treetops.

Wood ducks are highly vocal and are often heard before they are seen. They have a number of calls. The male's call is a drawn out "ji...ihb" or "jeeb," while the female's flight call is a squealing "oo-eek, oo-eek."

Habitat and Diet

Slow-moving or shallow waters near forested habitats provide optimal habitat for wood ducks. In Connecticut, wood ducks inhabit freshwater wooded swamps, marshes, ponds, rivers, and streams. Important nesting areas include forested swamps (red maple and standing dead timber), shrub swamps, and emergent marshes. Ponds and lakes with shoreline cover (over-hanging shrubs and trees) are also readily used by wood ducks. Waters with woody debris (logs, stumps, standing trees) and green vegetation provide the best habitat for wood ducks. Adults use the woody debris for loafing and the vegetation provides both cover and food resources. Invertebrates, which provide an important source of protein for the hen and ducklings, are typically higher in waters with woody debris and emergent vegetation.

Wood ducks feed on plants (watermeal, duckweed, wild rice, pondweeds, smartweeds), seeds (especially watershield), aquatic insects, and other invertebrates (snails, clams). Adults feed on acorns during fall and winter, searching for them in flooded swamps, bottomlands, and oak forests.

Life History

Wood ducks nest in tree cavities but cannot excavate their own nest holes. Hens will use pre-existing cavities wherever they can be found but will usually select ones located in close proximity to water. However, wood ducks have been known to successfully nest up to one-half mile from the nearest water source. A scarcity of natural cavities may limit a wood duck population. Nesting sites can be provided by erecting specially-constructed nest boxes in suitable habitat. The nest boxes are readily accepted by wood ducks.

Wood ducks form pair bonds on the wintering grounds. The pairs typically begin arriving in Connecticut in early to mid-March. Hens tend to return to the areas from which they were fledged or had previously nested successfully. The hen inspects and chooses the nest site. Wood ducks do not carry nest materials to the nest as most other birds do. They will use whatever materials exist within the chosen cavity to create the nest.

In Connecticut, nesting usually begins in March. The hen lays 1 egg per day until her clutch is complete; the average clutch size is between 10-14 eggs. Once a hen has laid all of her eggs, she

P. J. FUSCO

P. J. FUSCO

begins incubating them. Development of the chicks doesn't start until incubation. Due to this evolutionary adaptation, all of the eggs hatch at the same time. The incubation period typically lasts 30 days. Broods hatch as early as the first week in May and as late as the fourth week in July.

After hatching, the hen will brood (cover and warm) her hatchlings for a day. Twenty-four to 36 hours after hatching, the young are called from the nest by the female. Small toenails on the webs of the ducklings enable them to climb up the wall of the cavity and out of the hole. The ducklings will then drop to the ground and join the hen, which will lead them to quality brood-rearing habitat. Areas with a mix of submerged vegetation beds, which provide an abundant supply of invertebrates, and stands of dense herbaceous vegetation like bulrushes, cattails, duck potato, water lilies, duckweed, and pickerelweed, which provide excellent cover from predators, constitute good brood habitat. The young are capable of flight at 56 to 60 days after hatching.

Interesting Facts

Wood ducks are among the most productive egg layers of all the duck species. This evolutionary adaptation occurs because wood ducks experience very high duckling mortality rates. If the first nest fails, the female will attempt up to 2 re-nests to raise a brood.

Wood ducks will often lay their eggs in another wood duck nest. This phenomenon is called dump nesting. Nests containing 15 or more eggs are considered dump nests. After the nesting season, sometimes whole eggs or dead chicks are found in dump nests. This is because once the hen and her own brood leave the cavity, they do not return. Dump nesting typically occurs in areas where nest sites are densely crowded and are not visually isolated from each other. Hen wood ducks will observe other hens entering cavities to lay eggs and will then follow suit. Hens that dump eggs typically lay and incubate their own eggs later in the nesting season. Thus, a hen doesn't "throw all her eggs in one basket" and increases her odds that one or more of her eggs will survive. It is generally thought that dump nesting is favorable for wood ducks and thus has evolved as part of wood duck behavior.

In proportion to their wing length, wood ducks have the broadest wings of any duck. They also have the largest eyes of any of the duck species. These evolutionary adaptations likely evolved to assist the wood duck to fly through the trees and branches characteristic of the habitats they frequent.

Local resident wood ducks congregate in flock sizes of 10 to 50 and sometimes up to 200 in wooded swamps during late summer and early fall.

Migrant wood ducks that originate from Ontario, the Maritimes, New York, and New England states begin to arrive in Connecticut in mid-September, with peak arrival in October. Both resident and migrant wood ducks migrate rapidly out of the state during November. Most are gone by mid-November, although some linger into December during mild weather. Connecticut's breeding population of wood ducks winters south of Maryland along the Atlantic Coastal Plain, with North Carolina, South Carolina, and Georgia being the most important areas.

Conservation and Management

The recovery of the wood duck is an outstanding example of successful wildlife management. The Wildlife Division began monitoring wood duck nest boxes on state and private land starting in 1953. Today, the Division maintains nearly 600 nest boxes annually on state land. This program has been very successful. Box use averages 50% and nest success is 80-90% in nest boxes placed on posts over water in suitable habitat. In comparison, nest success in tree cavities is about 50%. Raccoons may be a significant predator on tree cavity nests, while flooding may cause nest failure in boxes.

Wood ducks require high quality wetland habitat with low human disturbance. Heavy human development pressures in Connecticut have a negative impact on wetland habitat and the wood duck population. Some valuable wetland habitat is currently owned and managed by the DEEP, land trusts, and private conservation organizations. However, wide-scale habitat protection can only be accomplished with strong enforcement of freshwater wetland regulations, incentives for open space preservation, and an environmentally aware public.

What You Can Do to Help Wood Ducks

Build, install, and monitor wood duck nest boxes in appropriate wetland habitat. Nest box plans and installation guidelines are available from the DEEP Wildlife Division at www.ct.gov/deep/wildlife and by contacting the Franklin Wildlife office at 391 Route 32, North Franklin, CT 06254; 860-642-7239; deep.ctwildlife@ct.gov.

An Alternative Approach to Monitoring CT's Deer Population

Written by Andy LaBonte, DEEP Wildlife Division

B. EMBACHER, DEER MANAGEMENT PROGRAM

Wildlife Division biologist Andy LaBonte poses with one of the female white-tailed deer that was live-captured this past winter in northwest Connecticut and fitted with a radio collar, ear tags, and a temperature sensitive vaginal implant transmitter (VIT). This female will be monitored as part of deer population monitoring project.

Over the past decade, sportsmen in northwest Connecticut have expressed concerns about what appears to be a decrease in the number of deer and number of fawns produced each year. Northwest Connecticut has harsher winters and higher elevations than most of the state. The area also has a healthy population of bears, coyotes, and bobcats. These predators have been increasing in numbers and, based on opinions of many sportsman, are believed to be the cause of decline in the deer population. However, data collected at deer check stations throughout the state have not shown any clear declining trend in the deer population in northwest Connecticut.

The Wildlife Division is initiating a more intensive study to determine if the deer population in northwest Connecticut is declining and if the production of fawns appears to be lower than expected. The study involves capturing adult female deer in the towns of Canaan, Cornwall, Salisbury, and Sharon, and equipping them with a radio collar, ear tags, and a temperature sensitive vaginal implant transmitter (VIT). Radio-collars are used to locate the females several times a week using a hand-held receiver and antenna to determine pre-fawning movements. Deer will be monitored daily as the fawning period (May-July) approaches. During the birthing process, the VIT falls out and emits a rapid signal which can easily be identified. The challenge then lies in locating the fawn(s) and carefully collecting biological measurements (weight, and body, ear, and hoof lengths), and fitting them with a small, expandable radio-collar and ear tags. Fawns will be monitored daily for several months to evaluate movements and causes of mortality.

Due to the time commitments of this project, volunteers are being sought from northern Connecticut to assist teams of Wildlife Division biologists with monitoring deer, using radio-telemetry equipment, or locating and tracking fawns from May through August. Those interested in volunteering for this project should contact Wildlife Division biologist Andy LaBonte at 860-642-7239 or andrew.labonte@ct.gov.

Volunteers Are Always Needed

Find out how you can help the DEEP Wildlife Division with a variety of monitoring and research projects by checking the "Volunteer Opportunities" web page on the DEEP website (www.ct.gov/deep/wildlife). Projects include Chimney Swift Watch, Northwest Connecticut Deer Study (see above), Wild Turkey Brood Survey, and other bird surveys. Opportunities vary, depending on the time of year and how many volunteers are needed. New opportunities are posted as they become available.

There also are opportunities to volunteer as a Master Wildlife Conservationist (www.ct.gov/deep/wildlife), Conservation Education/Firearms Safety instructor (www.ct.gov/deep/hunting), or Connecticut Aquatic Resources Education (CARE) instructor (www.ct.gov/deep/CARE). Additional training and certification are required.

FROM THE FIELD

Golden Eagle Makes Return Trip to Connecticut

PHOTO BY P. J. FUSCO

A golden eagle that was rehabilitated, fitted with a solar-powered transmitter, and released in northwest Connecticut in March 2011 was recently located in the same area where it was originally found injured. A snowmobiler had found the eagle in February 2011 in Amenia, New York, near the Connecticut border (see the May/June 2011 issue of *Connecticut Wildlife*). With help from wildlife rehabilitators at the Sharon Audubon Center and Horizon Wings, the eagle was stabilized and eventually brought to the Tufts Wildlife Clinic in Massachusetts, where it was treated for multiple puncture wounds to its left leg. After nearly a month of care, the eagle had fully recovered and was ready to be released. Upon receiving permission from DEEP, research assistant professor Todd Katzner from West Virginia University banded the eagle with a U.S. Fish and Wildlife Service aluminum band and outfitted it with a high-frequency GPS-GSM telemetry unit prior to being released at Mohawk State Forest in Cornwall in March 2011.

In the weeks following its release, the eagle stayed in the tri-state area of Connecticut, New York, and Massachusetts before taking a dramatic turn north and heading toward the Quebec/Labrador border in April of last year. At that time, telemetry contact with the bird was lost, and it was not until March 2012 that biologists were finally able to receive information again about the whereabouts of this magnificent bird. What followed was a data bonanza that allowed Dr. Katzner to create detailed maps of the bird's movements for nearly a year.

As it turns out, the eagle had spent the summer in northeastern parts of the Canadian province of Quebec. It then headed south starting in October and returned to the New York/Connecticut area by December 2011. In fact, from December 2011 through early March of this year, the eagle spent time near the area where it was originally found injured. Nearly a year later, it appeared that the eagle made its journey back to its breeding grounds in Canada.

Todd Katzner will be giving a presentation on his Golden Eagle Research for the Sharon Audubon Center on July 28, 2012. The time and location are yet to be determined. Contact Sharon Audubon for more information at www.sharon.audubon.org or 860-364-0520.

Bureau of Natural Resources Now on Facebook

The DEEP's Bureau of Natural Resources now has a presence on the social networking site, Facebook. The shortcut to access the site is www.facebook.com/CTFishandWildlife.

The DEEP CT Fish and Wildlife Facebook page features a variety of information on fishing, hunting, and wildlife watching in Connecticut. Links to upcoming events, weekly fishing reports, natural history and conservation information on Connecticut's fish and wildlife species, and ways to contact the Bureau of Natural Resources are among the items that can be found on the Facebook page.

The DEEP is using Facebook, along with other outreach tools, such as the DEEP website and *Connecticut Wildlife* magazine, to let state residents know about all of the interesting and important conservation projects and activities of the Bureau of Natural Resources."

Visit and "like" the CT Fish and Wildlife Facebook page so that you can have instant access to up-to-date information. The page also provides an opportunity for our "fans" to post their fish and wildlife photos and to ask questions and make comments.

Find us on Facebook

www.facebook.com/CTFishandWildlife

Become an Osprey Watcher: Connect with a global community of observers

P. J. FUSCO

The Center for Conservation Biology has launched Osprey-Watch, a project created to engage a global community to collect data on breeding osprey. Linked by an interest in osprey and a concern for the health of the aquatic environments on which they rely, this community will for the first time provide a global perspective on this charismatic species. The mission of Osprey-Watch is to bring citizen scientists together in order to collect information on a large enough spatial scale to be useful in addressing three of the most pressing issues facing aquatic ecosystems, including global climate change, depletion of fish stocks, and environmental contaminants.

Osprey are one of few truly global sentinels for aquatic health. They feed almost exclusively on live fish throughout their entire life cycle. They are a top consumer within aquatic ecosystems and are sensitive to both overfishing and environmental contaminants. Nearly all populations breed in the northern latitudes and winter in the southern latitudes, effectively linking the aquatic health of the hemispheres. Their breeding season in the north is highly seasonal, making them an effective barometer of climate change.

Osprey-Watch is a user-friendly, internet platform that allows observers across the globe to map nests, log observations, upload photos, and interact within an observer forum. Information entered into the platform will be immediately accessible to users and will be summarized following the breeding season. To join a growing community of global citizens, please visit www.osprey-watch.org.

Target Shooting Opportunities at Public Shooting Ranges

Residents and visitors to Connecticut who wish to practice shooting have several public shooting ranges to develop their skills and enjoy this exciting outdoor sport. A Range Safety Officer is present at the firearms ranges during all operating hours. Archery target shooting is available at the Nye Holman State Forest. The following locations provide opportunities for rifle, handgun, and shotgun shooting, including patterning a shotgun and, at Wooster Mountain, clay target shooting.

Wooster Mountain State Park Cooperative Shooting Range – Located in Danbury on Route 7, approximately two miles south of the Danbury Mall. Operated by the Danbury Shooting Sports Association. Clay target shooting is allowed. State pistol permit required to shoot handguns. Call 845-279-4513 for daily time and fee schedule.

High Rock Cooperative Shooting Range – Located in Naugatuck State Forest, Naugatuck. Operated by the High Rock Shooting Association, Inc. Range hours: Saturday, 9:00 AM - 5:00 PM; Sunday, 12:00 PM - 5:00 PM. Range fee: $5.00 for the first hour, fractional for more time. No clay targets allowed. State pistol permit required to shoot handguns. Call 860-491-9921 for information.

Glastonbury Public Shooting Range – Located in Meshomasic State Forest, Glastonbury. Paper targets only, clay targets not allowed. No range fees. Reservation requests can only be made one week in advance by calling the Range Reservation line at 860-424-3737 or by sending an email to glastonburyrange@ct.gov. Requests can be made starting on Mondays at 9:00 AM and ending on Tuesdays at 2:00 PM. Any requests made before or after this period will not be considered. Directions: From Route 2 Eastbound, take Exit 10 (Route 83 Manchester/E. Glastonbury); go right at end of exit to stop sign; take left onto New London Turnpike crossing over highway to Wassuc Road (Wassuc Road becomes Toll Gate Road); stay straight on Toll Gate Rd. to end at gate and entrance to range. Gate is open only during public hours. From Route 2 Westbound, take Exit 11 (Thompson Street/Wassuc Road); go right at end of exit to gate/entrance.

Nye Holman Field Archery Range – Located in Nye Holman State Forest, Tolland, on Route 74. Entrance is on South River Road. Field course available to public at all times unless posted otherwise. Field points only; arrows with broadheads are strictly prohibited.

Charles Bruckerhoff, DEEP Wildlife Division

Wanted: Bat Monitors

The Wildlife Division is looking for volunteers to assist in monitoring Connecticut's bats during evening acoustic surveys. The acoustic surveys consist of driving a predetermined route and recording ultrasonic vocalizations as the bats forage for insects. Information gathered in these surveys will help us understand how bats are doing in the wake of white-nose syndrome, a deadly disease that has killed over 5.5 million bats since its discovery in 2007. If you are interested in helping the Wildlife Division with these surveys, please contact the Bat Program at deep.batprogram@ct.gov or by calling the Sessions Woods office at 860-675-8130. Thank you for your help as we continue to gather knowledge about Connecticut's bats.

Bat Art Contest for Kids

The winner's artwork will appear on the back cover of *Tabitha's Tale*, a children's book about bats, which is due out later this year. The deadline for receipt of artwork is June 30, 2012. A small donation to a bat conservation organization is requested for participating. For further information email linda@cmsincorporated.net.

2012 Is the Year of the Lizard

2012 has been proclaimed the Year of the Lizard by Partners in Amphibian and Reptile Conservation (PARC) to raise awareness for lizard conservation. The DEEP Wildlife Division, which has been a member of PARC since 1999, is participating in this outreach effort by shining a spotlight on Connecticut's lizard population. Very few Connecticut residents are even aware that the state has a native lizard -- the five-lined skink (see the March/April 2012 issue of *Connecticut Wildlife* and visit www.ct.gov/deep/yearofthelizard or PARC's website www.yearofthelizard.org to learn more). The five-lined skink is so uncommon in Connecticut that it is considered a threatened species on our state's Threatened and Endangered Species List.

Why Focus on Lizards?

Lizard populations in North America and throughout the world are being impacted by the growth of human communities. Threats faced by lizards include habitat loss and fragmentation, invasive species, predation, over-exploitation, and climate change. You can make a difference for Connecticut's only native lizard by observing five-lined skinks from a distance and leaving them alone. Report any possible sightings of five-lined skinks to the DEEP Wildlife Division at 860-675-8130.

Wild skinks should NOT be kept as pets. Those sold in pet stores should NOT be released to the wild as they can introduce diseases to wild and genetically distinct populations.

What Is PARC?

Partners in Amphibian and Reptile Conservation (PARC) is an inclusive partnership dedicated to the conservation of the herpetofauna--reptiles and amphibians--and their habitats. Membership comes from all walks of life and includes individuals from state and federal agencies, conservation organizations, museums, pet trade industry, nature centers, zoos, energy industry, universities, herpetological organizations, research laboratories, forest industries, and environmental consultants. The diversity of its membership makes PARC the most comprehensive conservation effort ever undertaken for amphibians and reptiles. PARC is habitat focused, and centers on endangered and threatened species and keeping common native species common.

What You Can Do

- **Lizards are watchable wildlife. If you ever have the opportunity, watch them!**
- **Do not take wild lizards as pets, or release pet lizards into the wild.**
- **Consider adopting a lizard from a shelter or rehabilitation center rather than buying a new one for a pet.**
- **Learn more about lizards and tell others about lizard conservation needs**

More Readers Wanted!
Share Connecticut Wildlife *with friends, family, neighbors, and coworkers.*

Searching for Wood Turtles in Fairfield County

Article and photo by John Foley, Seasonal Resource Assistant and Master Wildlife Conservationist

Last summer, the Wildlife Division continued its search of the elusive North American wood turtle, a Connecticut species of special concern. The main focus area of the survey was in the ever-growing suburban region of Fairfield County. Wood turtles, along with many other turtles, reptiles, and amphibians, are becoming rarer in this area due to habitat loss. Surveys were conducted from June 2011 to November 2011, with emphasis on finding suitable habitat, and then in hopes of finding turtles.

Wood turtles use aquatic and terrestrial habitats at different times of the year. Their habitats include rivers and large streams, riparian forests (adjacent to rivers), wetlands, and early successional habitats (forest clearcuts, old fields, meadows, hayfields). Terrestrial habitat that is usually within 1,000 feet of a suitable stream or river is most likely used. Preferred stream conditions include moderate flow, sandy or gravelly bottoms, and muddy banks.

Turtle Finds and Results

Over 125 potential sites were surveyed, consisting of historic and newly discovered sites. Forty sites were noted as having suitable habitat, while 37 had moderate habitat, meaning they contained some suitable habitat but also lacked sufficient nesting areas, shelter, vegetation, etc. The rest of the areas surveyed contained no suitable habitat. Sites with suitable habitat were revisited several times in hopes of finding actual turtles.

Forty-one wood turtles were found at 17 sites in 11 towns. Most of the sites visited were public open space parcels and state parks. All turtles captured were sexed (if sex could be determined), measured, weighed, notched, photographed, and released. A GPS reading was taken for the location point of any turtles captured, observed, or found deceased. Turtles were found basking on sandy/vegetated areas near or along stream banks, under matted vegetation in upland meadows, and in the water.

All other turtle species found during the surveys were noted as well. A total of 39 eastern box turtles (another state species of special concern) were discovered. During summer, both box and wood turtle habitats can overlap. Both species prefer open meadows and fields adjacent to wetland floodplains. At one site, a wood turtle was found within 40 yards of a box turtle. Very few spotted turtles were located. When they were found, they were basking on logs in flooded meadows and wetlands. The spotted turtle is another species of conservation concern. Painted turtles and snapping turtles were abundant in many of the surveys. These two species are primarily aquatic and have larger egg clutches. Only two musk turtles were located in the headwaters of a small stream coming from a large pond. The critically endangered bog turtle, the wood turtle's closest relative, was not found nor was any suitable habitat.

Future of Turtles

It is interesting to note that reptiles are the least ecologically important species to humans compared to fish and mammals, yet they **more** at the hands of humans than any other animal group. Turtles have existed for over 220 million years and have evolved minimally. It is unbelievably tragic that during the age of mankind, over 40% of turtles worldwide are on the verge of extinction. Preservation and management of habitat, research, and public awareness are some of the biggest factors that need to be addressed for the future survival of turtles.

Habitat loss is the most critical reason for the decline of turtles. Wood turtles especially suffer due to their extensive habitat requirements. People may think fallen limbs, snags, and uprooted trees in streams are "eye sores," but they are essential as a source of cover for aquatic life. Mowing of fields near streams can be detrimental to wood turtles, especially if a large enough buffer zone is not created. Invasive plants, such as Japanese knotweed, Japanese barberry, and purple loosestrife, can devastate turtle habitat. Nesting and basking areas become non-existent from thick overgrowth, and food availability is compromised. An overabundance of predators, such as raccoons, can result in the depredation of nearly 90% of turtle nests, affecting the recruitment needed to sustain populations. The collection of wild turtles for pets and the release of non-native pet turtles are other contributing factors to the decline in turtle populations.

What You Can Do

- **Leave turtles in the wild. They should never be kept as pets.**
- **Never release a captive turtle into the wild. It probably would not survive, may not be native to the area, and could introduce diseases to wild populations.**
- **Do not disturb nesting turtles.**
- **As you drive, watch out for turtles crossing the road. Turtles found crossing roads in June and July are often pregnant females and they should be helped on their way and not collected. Without creating a traffic hazard or compromising safety, drivers are encouraged to avoid running over turtles that are crossing roads. Also, still keeping safety precautions in mind, you may elect to pick up turtles from the road and move them onto the side they are headed. Never relocate a turtle to another area that is far from where you found it.**
- **Make your backyard a better habitat for reptiles and amphibians.**
- **Learn more about turtles and educate others.**

Conservation Calendar

May-August..... Respect fenced and posted shorebird and waterbird nesting areas when visiting the Connecticut coastline and also when viewing fireworks displays near these areas. Keep dogs and cats off beaches to avoid disturbing nesting birds. Herons and egrets are nesting on offshore islands in Long Island Sound. Refrain from visiting these areas during the nesting season.

June 2..... **National Trails Day**, sponsored by the Connecticut Forest and Park Association (CFPA). Hikes and other events will be held throughout the state (see below). To learn more, visit the CFPA Web site (www.ctwoodlands.org) or call 860-346-2372.

June 2..... **Rainbow Dam Fishway Open House** in Windsor, from 10:00 AM-3:30 PM. To get to the fishway, take I-91 to exit 40 (Rt. 20) and proceed as if going to Bradley Airport. Take the Rt. 20 exit labeled Hamilton Road South, turn left at the end of the ramp, and then turn right at the first stop sign at Rainbow Road. Drive about ¼ mile and look for signs on the left side of the road.

June 24-30..... National Mosquito Awareness Week – go to www.mosquito.org for more information. Visit Connecticut's mosquito Web page at www.ct.gov/mosquito to learn more about mosquitoes and West Nile virus.

June 23-24..... **The Great American Backyard Campout** – the DEEP will be hosting this annual campout for those who participated in the Great Park Pursuit "Spring Sprint" in conjunction with the National Great American Backyard Campout. Go to www.ct.gov/ncli for more information.

July 28 ..... **Golden Eagle Research** presentation by Todd Katzner from West Virginia University, sponsored by Sharon Audubon Center. Time and location are yet to be determined. Contact Sharon Audubon at www.sharon.audubon.org or 860-364-0520.

Aug. 11-12 ..... **Sharon Audubon Festival**, at the Sharon Audubon Center, Route 4, Sharon. For more information, contact Sharon Audubon at www.sharon.audubon.org or 860-364-0520.

Programs at the Sessions Woods Conservation Education Center

Programs are a cooperative venture between the Wildlife Division and the Friends of Sessions Woods. Please pre-register by calling 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM). Programs are free unless noted. An adult must accompany children under 12 years old. No pets allowed! Sessions Woods is located at 341 Milford St. (Route 69) in Burlington.

June 2..... **National Trails Day Hikes at Sessions Woods**. The first hike starts at 1:30 PM – Wildlife Division Natural Resource Educator Laura Rogers-Castro will lead an **educational walk** to the beaver marsh focusing on wildlife, habitat, and wildlife management areas. Participants can return the same way or continue on their own to complete a three-mile loop of the property. The second hike starts at 8:00 PM – Master Wildlife Conservationist Shirley Sutton will lead a **moonlight hike** to experience the sounds, scents, and sights an evening in the woods can offer. This slow, mostly level hike (in the dark) is appropriate for all brave and adventurous individuals, but no dogs. Both programs begin at the flagpole in front of the Conservation Education Center. Please wear appropriate footwear.

June 3..... **National Trails Day Beaver Pond Trail Walk at Sessions Woods**, from 2:00-4:30 PM. Join Wildlife Division biologist Peter Picone for an interpretive hike through Sessions Woods. He will talk about native plants and their wildlife value, and also discuss various habitat management techniques along the trail. Hikers will visit a beaver marsh and walk on a wetland boardwalk overlooking a picturesque wetland. Mr. Picone is the manager of this 774-acre state wildlife management area.

July 11 ..... **Butterflies at Sessions Woods**, starting at 10:00 AM. Visit the flowers and fields at Sessions Woods to identify the local butterfly fauna during this popular program. Learn about butterfly conservation and factors that influence butterfly populations. Information on starting a butterfly garden habitat will also be provided. Meet in the small classroom of the exhibit area in the Conservation Education Center.

July 15 ..... **In the Footsteps of the Leather Man**, starting at 1:00 PM. During the 1800s, there was a mysterious wanderer dressed in a leather "suit," who hiked Westchester County, New York, and parts of Connecticut. Due to his attire and the fact that he did not reveal his name, he was given the name "Leather Man." The mysteries and truths of the legendary "Leather Man" will be addressed during a slide show with Master Wildlife Conservationist Shirley Sutton, followed by a hike to one of the Leather Man's favorite shelters at Tory's Den. Participants will drive to the hiking location and then meet to traverse a 1.5-mile, round-trip hike over dirt road and trail. The pace will be moderate, with stops along the way to observe natural and historical features. Dress appropriately, and bring water and snacks. Children must be accompanied by an adult. Please, no pets.

Connecticut Wildlife

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Connecticut Department of Energy and Environmental Protection
Bureau of Natural Resources / Wildlife Division
Sessions Woods Wildlife Management Area
P.O. Box 1550
Burlington, CT 06013-1550

P. J. FUSCO

The tuft of filaments growing out of the middle of a wild turkey's chest is known as a beard. Although uncommon, multiple beards do occur in Connecticut's wild turkey population.