

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



# Eye on the Wild

Birds are returning from migration, snakes are coming out of their winter dens to bask, wood frogs are calling from their vernal pools .... spring is here! With this in mind, it is important to remember that the breeding season is a critical time for wildlife, and human disturbance adds unnecessary stress. When you are out watching the wildlife, even in your own backyard, remember these tips for responsible wildlife viewing:

- **Respect private property and cordoned off/posted nesting areas.** Private landowners post the boundaries of their properties to keep out trespassers. Biologists post signs and close nesting areas to limit the amount of human disturbance to wildlife during a critical period of their life cycle. For species like the piping plover and least tern, critical beach nesting habitat is cordoned off every year to keep people from inadvertently stepping on cryptically-colored eggs and chicks.
- Keep your distance from wildlife. Use optics, such as binoculars and spotting scopes, to view wildlife from afar. If a bird is responding to your presence by looking at you or modifying its behavior from normal postures, you are too close! For a bird like the bald eagle, keeping your distance is especially important because the eagle is thought to have the best vision of any animal on the planet! Eagles almost always see us before we see them.
- "Fade into the woodwork." Whenever possible, while actively viewing wildlife, speak at low volumes, wear natural colors, and use vegetation to screen yourself from view. Wild animals are sensitive to unpredictable human behavior and events. While an animal may live close to a busy road or railroad tracks, it may have acclimated to the predictable activities associated with those sites cars driving by and trains passing. A human approaching on foot may not be a regular event; therefore, the animal may perceive the person as a threat. When threatened or disturbed, animals often waste precious energy resources while responding to perceived "threats," either by modifying their behavior, fleeing, or chasing away the "threats."
- If you care, leave it there! Although young animals may appear to be "orphaned," the adult is probably close by, waiting for you to leave. It is best to leave the animal alone. If you are absolutely certain a wild animal has been injured or orphaned, before touching or moving it, contact the DEEP Wildlife Division at 860-424-3011, or a DEEP authorized wildlife rehabilitator.
- Keep dogs leashed and cats indoors. To protect fragile young wildlife, people are urged to keep cats indoors and dogs on leashes. Countless numbers of rabbits, squirrels, birds, and other wildlife fall prey to pets every year.

Wild animals need a time and space to raise their young without having to contend with human disturbance. Being aware of your behavior and how it affects the wildlife you are observing can absolutely make a difference in the ability of wildlife to successfully raise their young.

Laura Saucier, DEEP Wildlife Division

#### About the Cover:

American oystercatcher pair in flight. A partnership between the DEEP Wildlife Division, U.S. Fish and Wildlife Service, Connecticut Audubon Society, Audubon Connecticut, and other groups is working together to monitor coastal waterbirds, such as oystercatchers, piping plovers, and least terns. See the article on page 4 to learn more.

Photo courtesy of Paul J. Fusco



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# **Connecticut State Parks – a Concept Takes Root**

Written by Alan Levere, State Parks Division

It seems so easy in retrospect – set aside a variety of landscapes fairly distributed across the state for people to recreate in, and call them state parks. For us, today, it seems to be a simple concept. But in Connecticut in 1913, nothing like it had ever been done.

Park lands were certainly set aside around the country at that time in history. In 1854, Hartford's Bushnell Park became the first municipal park in the nation to be assembled using public money. City Park, as it was then known, was as much an urban renewal project around the railroad station as it was a place for the urban masses to reinvigorate themselves from their

confined, tenement housing. A city park offered everyone a chance for fresh air and a verdant landscape. Slowly, the idea caught on and cities began to create parks as refuges from urban congestion. By 1874, Central Park in New York City, designed by Hartford's own Frederick Law Olmsted, was completed.

Setting aside parks started to gain momentum after America's Civil War and with the rapid growth of industrialization. When the war ended in 1865 and the first transcontinental railroad was completed in 1869, there came a young but growing system of national parks. Yellowstone, the first national park, was designated in 1872, followed 18 years later by Yosemite, General Grant, and Sequoia National Parks. National parks were often vast,

state lands. In 1909, an act was put before the State Legislature to preserve and protect certain sections of the lower Connecticut River. That act did not pass, but in 1911 the General Assembly established a three member, special commission to advise the General Assembly specifically on "... a plan for laying out, acquiring and maintaining of ample open spaces ... for the use of the public, in the towns





One of the oldest photographs in the State Park Division's archives is this view of the lower Connecticut River that was the target of the original 1909 attempt for protection. In 1918, the area become Dart Island State Park in Middletown.

unique, grand, and/or remote areas of natural beauty that were set aside to protect them from threats of railroad development.

The concept of establishing state parks was slower to gain traction. The first state park in the nation was Niagara Falls in New York State where, after 15 years of haranguing, Frederick Law Olmsted won his battle for preservation in 1885. Massachusetts set aside the Mount Greylock Reservation in 1898 for its first state park "... to preserve its natural environment for public enjoyment." Rhode Island joined the effort in 1909 by dedicating Lincoln Woods as its first park, memorializing the centennial of Lincoln's birth.

Thus, in southern New England, Connecticut was last to add a park under the State's care. Those in the know were fully aware of the dual needs of public preservation and recreation on and cities of the state..."

Eighteen months later, in February 1913, the Special Commission reported to the General Assembly on the need and plans for a park system. The result of their work was the creation, on September 1, 1913, of the Connecticut State Park Commission.

As with any epic story that spans 100 years, there have been wonderful adventures and saddening dilemmas. Follow the story of Connecticut's State Parks in *Connecticut Wildlife* magazine over the next several issues, and join the DEEP as we kick off a year-long Centennial Celebration of State Parks, beginning in August 2013. You also can follow the celebration on the DEEP website at <u>www.ct.gov/deep/stateparks</u> or on our Facebook page at <u>www.Facebook.com/CTStateParks</u>.

The Connecticut State Parks Facebook page (<u>www.facebook.com/CTStateParks</u>) will feature historical photos from our state parks and provide regular updates on 100th Anniversary events and activities.

# **Conservation Partnership Works to Protect Connecticut's Coastal Birds**

Written by Patrick Comins, Audubon Connecticut, and Milan Bull, Connecticut Audubon Society

ast summer a new partnership was launched by Connecticut Audubon Society and Audubon Connecticut, called the Audubon Alliance for Coastal Waterbirds, that works together to increase protection for vulnerable beach-nesting birds. The Alliance hopes to expand those efforts, especially in light of the impacts of Hurricane Sandy to coastal habitats.

The Alliance works closely with the U.S. Fish and Wildlife Service's (USFWS) Stewart B. McKinney Na-



CT DEEP Plover Technician Rebecca Foster (left) and Audubon Alliance for Coastal Waterbirds Technician Sean Graesser remove fencing and signs from Bluff Point State Park, in Groton, after the shorebird nesting season.

tional Wildlife Refuge, the DEEP Wildlife Division, and others to assist with management, coordination of volunteers to monitor at-risk species, and education of the public about how to share the shoreline with these birds. It also fields a number of dedicated seasonal employees to provide a mobile labor force to get the job done wherever or whenever needed. For example, the Alliance provides critical assistance to the DEEP and USFWS in installing, maintaining, and removing fencing and signage at nesting areas, along with installing nest exclosures and participating in other key activities.

The Alliance began with support from the National Fish and Wildlife Foundation's (NFWF) Long Island Sound Futures Fund, along with matching support from the Cross Foundation, the Community Foundation for Greater New Haven, and the Jeniam Foundation, and is pursuing other funding to continue efforts for this season and beyond. The goal is to minimize conflict between birds and people along the Connecticut coastline.

The program was tremendously successful in 2012, with more than 80 volunteers who put in 1,872 hours monitoring and educating the public about piping plovers, least terns, and other coastal birds. This expanding stewardship may have contributed to increased productivity of state-threatened least terns statewide.

The Alliance's main partners – Audubon Connecticut, the state organization of the National Audubon Society, and the Connecticut Audubon Society, an independent conservation organization founded in 1898 – have worked to

From Henry David Thoreau's Cape Cod... "But if I were required to name one sound, the remembrance of which most perfectly revives the impression which the beach has made, it would be the ... peep of the piping plover ..." conserve and improve wildlife habitats on Long Island Sound for years.

The Alliance focuses protection efforts on piping plovers (listed as a state and federally threatened species), least terns, American oystercatchers (both state threatened species), and other sensitive coastal species. These bird species use Connecticut's beaches during migration or for nesting and raising young. They face many challenges in their attempts to produce enough young to maintain stable population levels and face tough odds to safeguard their eggs and nestlings from high tides, storms, predators, and human disturbance due to throngs of beachgoers, boaters, and dogs.

Piping plover chicks essentially fend for themselves from the moment of hatching, and these precocious fluffballs are at risk from trampling until they learn to fly. These chicks need access to the waterline to feed and too much disturbance on the beach can make it more difficult for the young birds to find the necessary protein to support their quickly growing bodies.

In addition to patrolling beaches, the Alliance monitors herons, egrets, and other birds that nest on Long Island



(From left to right) The least tern, piping plover, and American oystercatcher, which nest on Connecticut beaches during the busy summer season, are the focus of a unique partnership to minimize disturbance, monitor the birds' progress, and educate beach visitors about these rare and special birds.

Sound's islands, and documents stopover areas for migratory shorebirds.

Coastal birds present particular conservation challenges. They use beaches at the same time of year that people do. The good news is that with a few simple precautions, people and wildlife can share the beach successfully. To that end, the Alliance produced a guide to sharing the shores with nesting piping plovers. (A link for downloading a copy of the brochure can be found at <u>www.ctwaterbirds.</u> <u>blogspot.com.</u>)

In addition to the Alliance work, Audubon Connecticut is working with the USFWS and the Manomet Center for Conservation Science on a project to better understand the distribution and productivity of American oystercatchers in Connecticut and Rhode Island. This includes the most comprehensive survey of oystercatchers in the state, in which 182 American oystercatchers that formed 62 pairs and fledged 22 chicks statewide (0.355 chicks/breeding pair productivity) were documented in 2012. Even though productivity is low, proper stewardship measures directed at the number of oystercatcher pairs could make Connecticut an important nesting ground for these charismatic birds. Audubon will be working to ramp up efforts for American oystercatchers over the next two years thanks to another grant from NFWF.

This upcoming nesting season, having enough eyes and hands on the shoreline to monitor and conserve these birds is more important than ever because of the effects of Hurricane Sandy. This historic storm eroded important nesting areas, beaches, and dune systems. Alliance staff recently contributed to a report by the American Littoral Society and NFWF that estimates that nearly \$50 million is needed to repair damage and respond to habitat changes at important



Other summertime coastal birds, like the semi-palmated sandpiper (left) and the great egret, are sensitive to human disturbance and benefit from protection efforts directed at nesting shorebirds.

wildlife habitats along the east coast. The report can be found at <u>www.nfwf.org/</u> <u>Pages/hurricanesandy/Wildlife-Impact-</u> <u>Assessments.aspx</u>.

In many cases, historic nesting sites for coastal birds were damaged to the point where nesting at those locations may no longer be possible. The good news is that these birds are adapted to storms and the dynamic nature of our shoreline.

In calm times, dune vegetation takes hold, gradually spreading toward the high tide line, and the birds eke out their existence between the dune grass and high water line. When a storm like Sandy comes along, dunes are moved landward and vegetation is scoured or covered with sand. This creates new nesting areas at higher elevations, offering nests protection from tidal flooding.

Normally, storms are just what these birds need every few years, but today our shorelines are hardly natural systems. Many areas have been reinforced to protect human infrastructure and the remaining wild areas of barrier beaches and tidal marshes tend to be magnets for human activity. Often there is no room for the birds to nest without disturbance. New nesting areas are likely to be closer to high traffic zones and in places where beach-goers are not used to sharing the shore with these fascinating and threatened creatures. Without proper stewardship, the birds are unlikely to take advantage of these natural cycles and produce the bumper crop of chicks that they need to make it to the next storm.

However, with just a little respect for shorebirds and their nesting areas, there is plenty of room for both birds and people to share our shores. The Alliance and our volunteers stand ready to lend a helping hand. In most cases, we have found that people are quite cooperative and show real interest in these birds once they see and learn about them.

Piping plovers, least terns, oystercatchers, and other shorebirds need your help now more than ever. To find out how you can help, please visit our blog at <u>www.ctwaterbirds.blogspot.com</u>; send an email to <u>ctwaterbirds@gmail.com</u>; or find us on Facebook at <u>www.facebook.com/</u> <u>pages/Audubon-Alliance-for-Coastal-</u> <u>Waterbirds/168520783251234</u>.

# Learning Is Year Round at Goodwin Conservation Center

Written by Steve Broderick, Forester & Program Director at Goodwin Forest Conservation Education Center

**N**ucked away in "The Last Green Valley' of northeast Connecticut is a marvelous destination for those who love recreating in and learning about forests and nature. Whether you have a couple of hours or a couple of days, the James L. Goodwin State Forest and Conservation Education Center in Hampton has plenty of great choices for you.

The Center and Forest previously belonged to James L. Goodwin, one of Connecticut's first "home grown" professional foresters. A scion of one of Hartford's oldest and most notable families (think Goodwin Park. Goodwin Hotel, etc), James graduated from the Yale School of Forestry in 1910. He purchased 28 acres of land in Hampton, Connecticut, in 1914, and



Goodwin Conservation Education Center Forester Steve Broderick teaching "sugarbush" management at a recent Center short course on maple syrup production.

by the 1930s had amassed nearly 1,800 contiguous acres in the area. For 50 years, he practiced pioneering, state-of-the-art forest management on what he called "Pine Acres Farm," keeping meticulous records and teaching us much about the new science of forestry. A historic film and photographic display in the Center's Great Room chronicles this rich history for visitors to enjoy.

In 1964, at the age of 83, Goodwin gifted the entire property to the people of Connecticut as a State Forest. A stipulation of the gift was that the house and grounds would forever be used as an education center, to provide "forestry, wildlife and general conservation education for youth and adults." This mission dovetails perfectly with the mission of the surrounding State Forest, part of which is to demonstrate good forest and wildlife management to private forest owners and the public. Each year, Center staff offers dozens of interpretive hikes, short courses, and other educational programs. Most involve taking participants on the extensive trail system and discussing past, current, and future management practices on the surrounding forest.

This "education through demonstration" approach lies at the heart of the Center's work, and is applied at a variety of scales. Next to the Center is the Haley Native Plant Wildlife Gardens, where visitors can see dozens of labeled plant species having value for wildlife as food and/or cover. With a variety of sun, shade, and other growing conditions, visitors can be sure to find a combination of plants that could successfully be grown in their own backyards. At the other end of the landscape scale, the Center has partnered with The Nature Conservancy and the U.S. Forest Service to help local towns identify privately owned forests that have particular importance in protecting water quality and promoting landscape connectivity. Outreach targeted to those forest owners is another part of the Center's educational programs.

The Center is operated under a unique public/private partnership involving the DEEP Division of Parks and Public Outreach, the DEEP Division of Forestry, and the Connecticut Forest & Park Association, Inc (CFPA). The DEEP Wildlife Division also plays an important role. In 2008, when difficult times resulted in the elimination of the DEEP staff member assigned to the Center, CFPA stepped up to the plate and helped cover the cost of providing a year-round Center Forester and Program Director. This private support has been critical to maintaining the educational programs and fulfilling the mission Mr. Goodwin charged us with in 1964.

In autumn 2009, another private support vehicle was born when a group of Goodwin Center volunteers came together to create the Friends of Goodwin Forest. This group, joined together out of a love for the Center and Forest and a belief in our mission, is now some 115 members strong and growing. Operating under the wing of CFPA, the Friends support our efforts through volunteerism, fundraising, and advocacy.

The Goodwin State Forest and Conservation Education Center include 17 miles of some of the best maintained hiking, cross country skiing, and equestrian trails anywhere in New England, all lying with a managed forest environment. Three large ponds offer great fishing, wildlife watching, and non-motorized boating. The Nature Museum includes dozens of native wildlife mounts, native wood displays, and more. There is a great youth campground and a large picnic pavilion overlooking Pine Acres Pond. So, if you have not visited Goodwin State Forest yet, maybe now is the time!

The Goodwin Center staff will work with you to provide workshops and guided interpretive hikes for adult or youth groups. Please call in advance to make arrangements as staff time is limited. If you would like to receive emails about Goodwin Center programs and activities, or for information on the Friends of Goodwin Forest, call 860-455-9534, e-mail <u>sbroderick@ctwoodlands.org</u> or go to www.ct.gov/deep/Goodwin.



A young white pine area on the Goodwin Center Forest demonstrates techniques for growing high value native timber products.

# Citizen Scientist Volunteers Assist with Summer Night Bird Surveys

The DEEP Wildlife Division, with the help of citizen scientist volunteers, conducted summer night bird surveys in 2012 to track population trends of whip-poor-wills and northern saw-whet owls in Connecticut. Connecticut conducts surveys along 10 points within a standard U.S. Geological Survey quadrangle and uses a callback recording of a northern saw-whet owl. Surveys have been conducted along 13 official regional routes from 2010 - 2012 by volunteers. Many targeted species were observed along survey routes last season.

With respect to the whip-poor-will, a state species of special concern, survey results indicate route occupancy has fallen from 83% (2010) to 61% (2012) of routes estimated to be occupied by at least one whip-poor-will. Whip-poor-will distribution also appears to be concentrating, with numbers of birds increasing at sites that are occupied. For 2013, based on the lunar schedule, the

#### 2012 Summer Night Bird Survey Results

Species	# Individuals Observed
Barred Owl	17
Eastern Screech Owl	6
Great Horned Owl	8
Long-eared Owl	3
Northern Saw-whet Owl	1
Whip-poor-will	20

best time to observe a whippoor-will will be between May 18-24 and June 17-23. Stay tuned to *Connecticut Wildlife* to learn the results of this survey.

Several opportunities are available for citizen scientists to volunteer for Wildlife Division projects. To find out how you can get involved, check the DEEP website at <u>www.ct.gov/</u> <u>deep/wildlife</u>, and select "Volunteer Opportunities."



The whip-poor-will is an elusive ground nesting bird that is often heard but not seen. It is active only at night, hiding by day among branches of trees or nesting, perfectly camouflaged, in leaf litter on the forest floor. This bird is easily identified by its distinctive call – "whip-poorwill" – heard most often at dusk or dawn, along woodland edges.

Historically, the whip-poor will was considered a common breeder in most of Connecticut (with the exception of Fairfield County). Due to a perceived population decline, the whip-poorwill is currently listed as a species of special concern on Connecticut's Threatened and Endangered Species List and as a species of regional conservation concern by the Northeast Endangered Species and Wildlife Diversity Technical Committee.

# An Innovative Use of an Old Idea

Written by Roger Wolfe, Connecticut Wetlands Habitat and Mosquito Management (WHAMM) Program

In August 2011, Tropical Storm Irene hit the Connecticut coastline causing much damage. The Town of East Haven took the brunt of the storm. Many beachfront homes either collapsed into Long Island Sound or were swept from their foundations. Docks, furniture, and personal memorabilia floated across the marsh behind the houses during the storm surge and were deposited in a broad swath of trash and flotsam against the upland edge hundreds of yards from their origin.

In the weeks following the storm, the Town of East Haven contacted the Connecticut Wetland Habitat and Mosquito Management (WHAMM) Program to ask for assistance in removing the debris. If the crew could use the Program's low ground pressure excavators, tracked Argos, and amphibious Marsh Master to get the debris to a road or upland staging area, the Town could load it into dumpsters using conventional equipment. The challenge was to devise a means of loading large volumes of debris and getting it off the marsh in a timely fashion.

Wetland Restoration Supervisor Frank Shaw recalled how his uncle, a longtime Connecticut farmer, devised a flatbed sled to remove salt hay from the marsh. With this concept in mind, the innovative members of the WHAMM crew developed and built a novel device using materials found around the shop.

Starting with a discarded full-sized truck bed liner, a trash sled was created that could be pulled behind an Argo, Marsh Master, or other low ground pressure unit and be sturdy enough to hold several yards of debris. The bed liner was reinforced across the width of the bottom with pieces of 2"x10" oak lumber. Acting like sled runners, two 2"x10" skids were attached, which ran the length of the liner. Both ends of the skids were cut at 45 degree angles so they would slide better across the marsh. Carriage bolts were counter-sunk from the bottom (so as not to dig into the marsh) and secured through 2-inch boards inside the sled. Finally, a length of chain was attached to form a D-loop to the cross pieces at both the open and closed ends of the sled.

The Marsh Master drags an empty trash sled, designed by the WHAMM crew, to a site for debris removal after Tropical Storm Irene in 2011.

The sled could then be pulled out to the site with the open end to the back. Once on site, the sled was detached from the Marsh Master, filled with debris, and then pulled back out from the open end so debris would not fall out the back. In addition, several of these sleds could be attached together via a link to the chains and pulled in tandem. Once at the staging area, a tractor could push the sled or hook onto one of the chains and drag it into position, then lift up the closed end of the sled, emptying the contents to be hauled away later. Hundreds of yards of debris were removed using this inexpensive and innovative old idea.



Using a clamshell bucket, the low ground pressure excavator loads debris into the sled.



Several sleds can be chained together to increase the efficiency of debris removal.

# **Tautog: Long Island Sound's Reef Mavin**

Written by Penny Howell, DEEP Marine Fisheries Division; Photos provided by DEEP Marine Fisheries Division

ver 100 finfish species have been cataloged in the DEEP Marine Fisheries Division's Long Island Sound Trawl Survey (LISTS) catches. Many of these fish migrate into the Sound from the open ocean to spawn and feed in its productive basins and shallows. However, some from this diverse list are true home-bodies, resident species which stay in or near the Sound all year. One resident species popular with anglers is the tautog (its name was given by the Narragansett Indians). Tautog, also known as blackfish, can grow up to 35 inches in length and reach five pounds in weight. Connecticut's trophy record for the Sound is 20 inches and 4.93 pounds.

However, where tautog really break records is in their longevity. Like many fish species, tautog reach maturity and can spawn at age three to four. But, they can live for 20-30 years, making this species one of the longest-lived in the Sound. LISTS data show that when the Survey began in 1984, more than one in 100 tautog caught in the Survey were 20 years old or older - making them older than many of the students hired by the Marine Division to process these age samples! In the last decade, this percentage has dropped to 1 in a 1,000, with fish older than age 15 becoming very rare. There is a real danger in this shortened age structure. Older and larger female tautog produce not only more eggs than younger females, but also eggs with a higher survival rate, making the older fish large contributors to sustaining the next generation. Marine Fisheries Division staff have joined with biologists from neighboring states to pool fisheries and habitat data in pursuit of the causes behind this species' failing survival.

Tautog are reef fish, fully adapted to life among the rock outcroppings found throughout the Sound. They also seek out shipwrecks, jetties, and other artificial structures, as well as shellfish beds of all kinds. Their powerful jaws and large teeth enable them to easily chew their favorite prey, the crabs and shellfish that share the reef habitat. The "shell hash" left behind enhances the sea-bed structure, which in turn can increase successful larval settlement for several species of fish and shellfish. Scuba divers who swim near reefs



A large, adult male tautog showing off his teeth before he is released from the Survey catch back to his reef.

in the Sound have reported hearing tautog noisily crunching on shells before the divers are close enough to see the fish themselves. Divers can easily see tautog at night, or when water temperatures drop in autumn, as these fish go into torpor, seeming to sleep as they nestle among the rocks. In late spring and summer, adult tautog establish preferred home sites near structures or beds of dense

vegetation, only moving short distances to feed and spawn. When the water temperature drops, these adults congregate in deeper waters but return to their home site when the temperature warms again. This habit of aggregating around established structures makes tautog fairly easy to catch by divers and anglers, as well as a limited commercial fishery. However, they are susceptible to local depletion if removals exceed the reproductive rate.

One of the silent and unintended mortality factors for tautog is lost and abandoned lobster traps. A study of such derelict gear carried out by Marine Fisheries Division biologists and Environmental Conservation Police Officers showed that tautog were the most common finfish re-



A juvenile tautog.

trieved from these abandoned traps. This is an unfortunate negative consequence of their shelter-seeking behavior. Many entrapped animals are able to escape if the trap does not settle into the mud, but breeding activity can be disrupted and escape may only be possible after a period of starvation has reduced an animal's size. Plus, there is a tipping point between escape and becoming bait for the trap. Other fates of entrapped animals include infection, disease, or prolonged exposure to poor water quality (i.e., low dissolved oxygen, high/low temperatures, or salinity). Removal of lost and abandoned lobster gear would greatly improve the survival and well-being of these senior citizens of Long Island Sound.

# Youth Fishing Passport Program Connects Young Anglers to a Lifetime of Outdoor Experiences

## Passport is a gateway to youth related fishing activities, benefits, and more

Written by Mike Beauchene, DEEP Inland Fisheries Division

Tishing is a fun fam-**H**ily activity that can generate memories to last a lifetime. Connecticut's DEEP has launched a free "Youth Fishing Passport" (YFP) Program (www.ct.gov/ deep/YFP) to introduce and connect youth, under the age of 16, with the many excellent fishing opportunities across the state. The Youth Fishing Passport is a new initiative intended to help promote environmental





The Youth Fishing Passport Program connects youth and their families to fishing, like this up-close introduction to one that didn't get away – a largemouth bass, held by Bill Hyatt, Chief of the Bureau of Natural Resources.

TOP 2 PHOTOS BY J. MURTAGH, DEEP INLAND FISHERIES CARE PROGRAM

responsibility, stewardship, and a sense of belonging to the sportsmen community. It encourages youth to take an active role in responsible fishing, increases awareness of fishing regulations, and makes youth embrace being true anglers.

The Youth Fishing Passport is available through the online sportsmen licensing system at <u>www.ct.gov/deep/sportsmenli-</u> <u>censing</u> (detailed instructions are available on the YFP webpage). Each youth who



registers will be issued a lifetime Conservation ID number, just like adult sportsmen and women currently receive.

The ultimate goal of the Youth Fishing Passport Program is to get kids and their families excited about fishing, hence selecting fishing as an activity of choice. To achieve this goal, the Youth Fishing Passport Program focuses on activities that challenge youth, incentives provided by the fishing industry to encourage youth to fish, and a support network that encompasses learning how to fish, sharing fishing successes, and

fishing events to provide opportunities for youth and families to remain engaged in fishing. The Program is free and available to youth under 16 years of age.

#### Youth Fishing Passport Activities

"Geo-Catching" and "Fishing Challenge" are two activities for Passport holders that test their angling ability throughout the year. Both activities encourage youth to attempt to catch fish featured on a list of species commonly found in Connecticut and also managed by the Inland Fisheries Division. The activities differ in that "Geo-Catchers" must capture a "featured fish" from a particular body of water, while the "Fishing Challenge" requires youth to catch at least one of each "featured fish" on the list, regardless of fishing location.

Passport holders who participate in these challenges must send or email (<u>deep.inland.fisheries@ct.gov</u>) a photo of themselves with the captured fish in front of a recognizable landmark, along with their Conservation ID number. The Inland Fisheries Division will keep track of each Passport holder's progress, and those who have been most successful in each activity will be recognized at the annual Trophy Fish Awards ceremony held each February.

National studies have shown that children who have fun and successful fishing trips are more likely to become life-long anglers.



#### **YFP Benefits**

To ensure that youth are successful and want to continue fishing, the Inland Fisheries Division is recruiting members of the fishing community who will offer fishingrelated incentives to Passport holders. These include rewards and benefits, ranging from a discount on fishing-related purchases to free giveaways. Stay up-to-date with a current list of supporting vendors by visiting the Youth Fishing Passport sponsor webpage as the list continues to grow.

Some early incentives include a free bag of Berkley Power Bait for the first 1,000 youths to register for the Passport. Additionally, J.F. Griffin Publishing, LLC, – publishers of the Connecticut Angler's Guide and Hunting and Trapping Guide – will be sponsoring a Youth Fishing Passport Sweepstakes now through May 24, 2013. Prizes include a fishing charter for a family (grand prize), three second place prizes of a fishing gear pack from Berkley and Shakespeare, and six third place prizes of Shakespeare rod and reel combinations. To register for this sweepstake, youths must obtain a Youth Fishing Passport and enter their information on the contest webpage at www.eregulations.com/connecticut/fishing/.

#### **YFP** Support and Encouragement

There is no doubt that fishing is fun, but getting started can seem a daunting task. To help you make your first cast, you and your family can take a free "learn to fish" class through the Connecticut Aquatic Resources Education (CARE) family fishing program. Classes are offered at numerous locations across the state throughout the spring. The current listing of CARE classes is available at <u>www.ct.gov/deep/fishing</u>.

fishing? What are the fishing regulations? Do you just need some general pointers? Inland Fisheries Division staff are always available to answer your questions via phone (860-424-3474) and/or email deep.inland.fisheries@ct.gov. Anglers can find all the fishing regulations (plus other fishing-related information) in the Connecticut Angler's Guide at www. ct.gov/deep/anglersguide. Print versions of the guide are available at many town clerk offices, bait and tackle/outdoor equipment vendors, commercial marinas, campgrounds, and DEEP facilities, or by contacting the DEEP Inland Fisheries Division (860-424-FISH). The Connecticut Fish and Wildlife Facebook page (www. facebook.com/CTFishandWildlife) features a variety of information on fishing, hunting, and wildlife watching in the state.

Wondering where and when to go

#### Free Fishing Day – May 11, 2013

On May 11, 2013, everyone is invited to experience the many excellent fisheries in Connecticut without having to possess a fishing license. Free Fishing Day is a great opportunity for experienced anglers to take a family member, friend, or acquaintance outdoors and introduce them to the many benefits fishing has to offer. Both residents and non-residents can participate in Free Fishing Day and the opportunity applies to all public waters of the state, both inland and marine. Take advantage of this occasion to "try" fishing for a day and become "hooked." You can strike out on your own or visit one of several locations across the state which will be freshly stocked with trout:

- 11th Annual Youth Fishing Education Day at Chatfield Hollow State Park (Killingworth)
- Northwest Chapter of Trout Unlimited will offer fly fishing activities at Kent Falls State Park (Kent)
- City of Meriden and the Meriden Rod and Gun Club will host a fishing derby and a Carp Fishing Clinic at Mirror Lake, in Hubbard Park (Meriden)
- Mianus Chapter of Trout Unlimited will host a flyfishing event in Merwin Meadows Park (Wilton)
- Griswold Fish and Game Club will host free fishing classes for youth 5-12 years old as part of their Jr. Sportsmen Program (Griswold)

If your organization would like to host an event on Free Fishing Day, please contact the Inland Fisheries Division at 860-424-FISH or by email at <u>deep.inland.fisheries@ct.gov</u>. A complete listing of Free

Fishing Day events and the latest updates are available at <u>www.ct.gov/</u><u>deep/fishing</u>.

A "Family Fishing Day" is scheduled as part of DEEP's "Great Park Pursuit Spring Sprint" at Osbornedale State Park (Derby). There will be plenty of activities at this event, including fishing (of course), fish sampling, fish stocking, a fish fry, games, and prizes. The Great Park Pursuit is part DEEP's No Child Left Inside® initiative, which introduces families to the outdoors, building the next generation of environmental stewards and showcasing Connecticut's State Parks and Forests. Family Fishing Day at Osbornedale State Park is FREE and no registration is required. For more information on "Family Fishing Day," contact Rachael Sunny at <u>rachael.sunny@ct.gov</u> or 860-418-5981. More information on the "The Great Park Pursuit Spring Sprint" can be found at <u>www.NoChildLeftInside.org</u>.

Anglers should be aware that although no licenses are required for Free Fishing Day, all other Connecticut laws and regulations, including seasons, size limits, and catch limits, remain in effect. Current fishing regulations can be found in the 2013 Connecticut Angler's Guide (www.ct.gov/deep/anglersguide). Visit the DEEP Fisheries webpage (www.ct.gov/deep/fishing) for additional information, including places to fish, purchasing your fishing license, and periodic updates regarding Free Fishing Day. You may also call 860-424-Fish (3474), "Like" us on Facebook (www.facebook.com/CTFishandWildlife), and/or join the Inland Fisheries ListServ (select the link at www.ct.gov/deep/ fishing).

# **The Wind Rider - Northern Harrier**

Article and photography by Paul Fusco, DEEP Wildlife Division

ith minimal effort, even in the slightest of wind, the slender, long-winged northern harrier can be seen coursing low over the expansive grasses of a salt marsh or hayfield as it hunts for its quarry. Back and forth it rocks on long wings that are almost always held in a dihedral, or "V" position. Seldom does the bird flap its wings. Instead, it buoyantly floats, using little energy to ride the wind that sustains its flight. Tucking its wings back for a more streamlined profile, it gains speed as it attempts to surprise an unwary vole or sparrow.

While hunting, harriers will often hover low over their prey, pinpointing the exact location where the prey may be hiding before plunging feet first to capture it. Like an owl, a harrier's facial feathers form a disk that gathers sound, helping the bird locate prey that is often difficult to see. Harriers will sometimes harass their prey by hovering and following it over thick grass, waiting for

the right opportunity to strike. Recogniz-



Northern harriers are slender hawks with long, narrow wings and a long tail. Immature harriers are commonly seen during fall. They can be identified by a solid rufous underside.

ing the hovering behavior of the hawk, the British and United States military named their vertical/short takeoff and landing aircraft, the Harrier jump jet,



Adult males are pale gray above with a white underside that is lightly marked with brown. The dark wingtips are conspicuous.

after the hawk.

Northern harriers are medium-sized hawks with slender bodies, long slender wings, a long tail, and long legs. Sometimes referred to as a "gray ghost," adult males are pale gray with a white underside that is lightly speckled. The wingtips are black. Adult females are brown with brown streaking on the white to buff-colored underside. Immature birds are dark brown with a solid rich rufous underside that may show darker streaks. Females are larger than males. In flight, all plumages show a conspicuous white rump patch.

When soaring, harriers can hold their wings either in a slight dihedral, or they may hold them flat. Sometimes harriers can be seen soaring with spread tail feathers, similar to how other hawks fan their tail feathers.

#### Habitat

Northern harriers are open country birds. Large expanses of open grasslands, fields, wet meadows, and marshes are the favored habitats of this raptor, also known as the marsh hawk. During migration and in winter, northern harriers are most often seen at Connecticut



Adult female northern harriers are seen more commonly than adult males. They are brown above and have a tawny underside that is heavily streaked with dark brown.

shoreline locations. Areas such as dunes, coastal grasslands, and saltmarshes offer good hunting opportunities. In highlydeveloped coastal areas, the bird may only be seen as it passes through. Some of the more consistent places to find harriers include the marshes of Hammonasset Beach State Park, Stratford Great Meadows, and the marshes of the lower Connecticut River.

The northern harrier is a circumpolar species, found from mid-level to northern latitudes across North America, Europe, and Asia. In North America, some harriers winter close to their breeding areas, while many migrate as far south as Mexico, Central America, northern South America, and the Caribbean islands.

Harriers nest on the ground in undisturbed wetter habitats. Their nests are usually well-concealed and placed next to a small shrub or in taller clumps of grass. The female will incubate her clutch of four to nine pale blue to white eggs. Males do most of the hunting and will pass food to the female in aerial transfers. Eggs take approximately 31 days to hatch and, once hatched, young fledge the nest at 30 to 35 days. Favored prey items include rodents, small birds, snakes, and large insects. Males are known to take more birds, while females take more mammals. Harriers have been known to take prey as large as ducks, which they may kill by drowning.

#### **Conservation**

Northern harriers are a state endangered species. Although these birds may be regularly found in the right habitat in winter or during migration, there are few modern records of nesting in the state. Harriers were once common breeders in Connecticut using extensive grasslands, farmland, and undisturbed coastal and inland marshes. Over the last 100 years, state and regional populations have dropped sharply. Reasons for their decline are a familiar story. Habitat loss and degradation due to human development are primary causes. Reforestation of open lands has further reduced habitat. The use of pesticides, including DDT, also has impacted populations by introducing poison to the food chain. Studies have shown that persecution in the form of indiscriminate shooting also was a major factor in the rangewide decline of the harrier in North America, especially during the first half of the last century Currently, the continent-wide population of northern harriers is stable or slightly decreasing. In the Northeast, the potential for increase is limited due to the extensive loss of open habitat.

#### **Recent Nesting Records**

In the last 15 years, only two northern harrier breeding locations have been confirmed. Other possible nesting sites have been reported.

2012	Middlesex Co.	unconfirmed
2008	Fairfield Co.	confirmed
2007	Hartford Co.	probable
2007	New London Co.	unconfirmed
2001	Hartford Co.	confirmed
2000	Hartford Co.	unconfirmed
1998	New Haven Co.	probable

# The North American Waterfowl Management Plan:

# **People Conserving Waterfowl and Wetlands**

Written by Min T. Huang, DEEP Wildlife Division, photography by Paul J. Fusco

The North American Waterfowl Management Plan (NAWMP) was originally developed in 1986 in response to widespread declines in continental waterfowl populations and increasing losses of wetland and upland nesting habitat throughout North America. The original NAWMP transformed the ways in which partnerships worked together to achieve shared goals. One of the greatest results of the Plan was the formation of the Joint Ventures (see article in the July/August 2012 issue of *Connecticut Wildlife*).

The NAWMP and its successes have become the model for how to achieve conservation on a landscape scale. The Plan pioneered the shift in waterfowl management from an era dominated by harvest management and site-specific habitat protection into one where waterfowl managers became important participants in making decisions about how to effectively use the working landscapes of all of North America. The NAWMP should be considered one of the most effective conservation efforts in North America. To date, partners have conserved over 15.7 million acres of critical wetland and associated upland habitats that are vital to waterfowl in Canada, the United States, and Mexico. Waterfowl

populations today are substantially higher than when the NAWMP was conceived in 1986.

Since its inception, the NAWMP was updated in 1994, 1998, and 2004. These updates were necessary for maintaining the momentum of the endeavor and to reaffirm the overall direction of waterfowl management. Due to the changing face of the landscape, both in literal and political terms, the NAWMP has not only gone through another update, but underwent a major revision beginning in 2009. The revision was completed in 2012 and involved several years of extensive work by many people and organizations.

The 2012 NAWMP Revision envisions an ambitious course and outlines a pathway that is previously uncharted. It breaks new ground by re-examining the fundamental goals of the waterfowl management endeavor itself. Differing from the updates of 1994, 1998, and 2004, where the goal of the plan, which remained unchanged, was to produce abundant waterfowl populations through partnerships for habitat conservation, the 2012 Revision challenges the waterfowl management community to define and explicitly state what is most important. In essence, the vision is to re-establish the



The mallard is the most adaptable of Connecticut's waterfowl and can be found in both urban and rural wetland or pond habitats.

fundamental goals of waterfowl management.

The 2012 NAWMP Revision sets forth three overarching goals for waterfowl conservation: 1) abundant and resilient waterfowl populations to support hunting and other uses without imperiling habitat; 2) wetlands and related habitats sufficient for sustaining waterfowl populations at desired levels, while providing places to recreate and ecological services that benefit society; and 3) growing numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation. The first two goals have always been part of the NAWMP. The additional third goal underscores the importance of people and associated resources to the success of waterfowl and wetlands conservation.

Explicitly recognizing the relationship between hunting, habitat, and humans – the three legs of the stool upon which waterfowl management is built – sets forth an ambitious course for the future of waterfowl management. By formally linking the relationships, there is recognition that the objectives for each of the 'legs of the stool' should also be linked. Although this linkage can be reasonably

straightforward, it can get complicated. In simple terms, however, the waterfowl management community has already demonstrated that it can develop and implement strategies that address overarching harvest and habitat management objectives on a Continental scale. Development of these types of linked objectives involves assessing and accepting tradeoffs, the old 'you can't have your cake and eat it too' adage.

Given limited resources, only so much habitat can be protected. And, given the limited amount of habitat, only so many birds can be produced and sustained. With limited amounts of habitat and birds, certain restrictions on hunting seasons and bag limits must be put in place to ensure conservation of the resource. That example, however, only addresses two 'legs of the stool' and, to date, looks at just a few species (mallards, pintails, and black ducks) and only cursorily. None of the developed strategies addresses the original intent - that is, clear goals for habitat management (acres of particular habitats and where on the landscape) and associated harvest management. Should each of those goals carry equal weight?

Now, with the direction of the 2012 NAWMP Revision, it is necessary to push the envelope further by including new species and doing a far better job of incorporating the real tradeoffs of habitat



Once plentiful along the Connecticut shoreline in fall, winter, and early spring, the number of wintering American black ducks has declined steadily due to the loss and degradation of our state's coastal wetlands.

management with harvest management. Above and beyond that, it is important to consider the thoughts and opinions of not only hunters, but also the other users of the waterfowl resources. These constituents are the third 'leg of the stool.' This may prove to be the most challenging and difficult task that the waterfowl management community tackles. Managers must first determine who are the constituents and what are their objectives. When looking at hunters, it is difficult to keep all of them happy when a limited amount of available habitat can only produce/ sustain a limited number of waterfowl. Then, throw into the mix limited access to some areas for hunting. It is important to remember that hunters provide the bulk of the funding for habitat conservation through hunting fees and firearms/ammunition purchases.

What about the constituents that do not hunt, but still enjoy the waterfowl resource and associated habitats? They benefit from the efforts and financial support of hunters, but should they also contribute to waterfowl and habitat conservation and, if so, how? How would this affect the use the waterfowl resource? There are still so many questions that need to be answered.

The 2012 NAWMP Revision lays out a new course for waterfowl management. It includes the acknowledgement that resources for the continued conservation of wetlands and associated uplands is waning. Given the erosion of support and the huge challenges that lay in front of waterfowl managers, how best do they use limited resources to accomplish what society desires, along with fulfilling the

mandate as stewards of the resource?

Despite the many challenges that face waterfowl and wetlands in North America, the NAWMP and the many partners that have worked to implement it since 1986 are up to the task. The future of waterfowl and wetland habitat looked bleak in the early 1980s. The hurdles in front of us now are different from those faced in 1986, although they are still daunting. Changing farm policies and wetlands laws, climate change, continued development, and resource extraction are just a few of the threats that face waterfowl and wetlands. The challenge was met in 1986 and, through the continued partnerships and efforts of many dedicated people and organizations, the current challenge will be met. Future generations will still be able to enjoy abundant waterfowl and wetlands.



Atlantic brant are small, coastal geese that breed in the high Arctic. On the East Coast, they winter in the mid-Atlantic states from Massachusetts to the Carolinas. Wintering numbers in Connecticut have been increasing steadily in recent years.

# **Collecting Wild Snakes – Know the Laws and the Issues!**

Written by Laura Saucier, DEEP Wildlife Division, and Julie Victoria (retired DEEP Wildlife Division Biologist)

Onnecticut has many laws that protect and perpetuate our natural resources. These laws range from established seasons for hunting, the number of animals that may be harvested (i.e. bag limits), restrictions on the sex or age of an animal collected, or outright bans on the taking or possession of some species (i.e. endangered and threatened species). Our native snake species are no exception. In Connecticut, snakes are protected by speciesspecific bag limits and regulation of their collection by permits. These checks and balances are in place to protect snakes from over-zealous collection, much like our lessons learned during the market shooting era when countless herons, egrets, and other birds were harvested to support the hat industry.

# What's the Problem with Collecting a Snake?

There are so many myths and fears surrounding snakes that it may be difficult for some people to understand why anyone would want to take snakes out of the wild to keep or sell as pets – but illegal collection in Connecticut is a complicated issue, primarily affecting timber rattlesnakes and eastern ratsnakes (formally known as the black ratsnake). Removing individual snakes from the wild, including young ones, can have a negative impact on local populations. In the case of the state endangered timber rattlesnake, the overall population requires high levels of survivorship - every individual is important to the population's stability. A snake must live for many years and reproduce numerous times in order to replace itself in the population. For both the timber rattlesnake and the eastern ratsnake, losing adult snakes, particularly adult females, is a serious problem. Adult female timber rattlesnakes can take up to 12 years to become sexually mature and they may only produce young every two or three years. Eastern ratsnakes have such low population densities that the loss of just one adult can lead to the local extinction of a population.

Knowing that removal of even just a few individuals from wild populations can be highly detrimental to rattlesnakes, it is disconcerting that some people continue to collect them (illegally) for monetary gain. Other people want to keep a venomous snake captive for the thrill or status of owning a dangerous animal. The Internet has added pressure to this issue by containing advertising where rare or hard to find snake species may be purchased. This is problematic because it is difficult to prove if the species being sold are captive bred (farmed) or taken from



the wild. Snake enthusiasts are encouraged to become familiar with Connecticut laws and regulations concerning reptiles through the DEEP, not from a reptile dealer. Timber rattlesnakes may NOT be collected or possessed in Connecticut. Current regulations for eastern ratsnakes allow for the collection of only one individual from the wild.

The taking, sale, and possession of snakes is regulated under Connecticut General Statutes (CGS) 26-55, 26-66-14 and 26-78 (<u>www.ct.gov/deep/lib/deep/</u> regulations/26/26-66-13through14.pdf). State-listed species are regulated under CGS 26-311. The species currently on Connecticut's List of Endangered, Threatened and Special Concern Species are timber rattlesnake (endangered), common ribbonsnake, eastern hog-nosed snake, and smooth greensnake (all species of special concern).

#### Snakes As Pets

Having a snake as a pet can be exciting because they are fascinating animals. But, keep in mind that caring for a snake in captivity is not as easy as you may think. Snakes require specific temperatures, diets, and lighting for digestion and skin health. Cages must be kept clean as snakes can carry salmonella bacteria, which can cause illness in humans. Additionally, once the novelty of having a snake in captivity wears off, the owner is faced with the decision of what to do with it. Captive snakes, whether they were collected from the wild or bought from a pet store or reptile dealer, should NEVER be released into the wild. Released snakes rarely survive, can introduce diseases to wild reptile populations, and, in the case of non-native species, may harm native snake or other wildlife populations.

#### Keep Wild Snakes Wild

You can help keep wild snakes wild by observing them from a distance and *continued on page 19* 



The state endangered timber rattlesnake is one of two venomous snakes found in Connecticut (the other is the northern copperhead). It is illegal to collect or possess timber rattlesnakes in our state.

Eastern Ratsnake

Pantherophis alleghaniensis

#### **Background and Range**

The eastern ratsnake is the largest snake found in Connecticut. It is irregularly distributed within the state, but is locally common. It thrives in areas that contain a mixture of houses, agriculture, and woodland, taking advantage of the increased rodent and bird populations that often occur in patchwork habitats. Reforestation of Connecticut's landscape, due to the decline in farming, has benefited the eastern ratsnake population. However, populations are threatened by habitat alteration, overcollection for the pet trade, and roads, which are a barrier to migration and a source of mortality (snakes are often killed by vehicles).

The eastern ratsnake ranges over eastern North America, from western Vermont, central Massachusetts, and extreme eastern Rhode Island, through Connecticut, south-central

New York, Pennsylvania, and large portions of the Midwest. In southern New England, the eastern ratsnake is more widespread at low elevations. In Connecticut, its center of abundance encompasses the southeastern hills and coastal region of the state, from New Haven eastward to the Rhode Island state line. Ratsnakes are irregularly distributed in the coastal areas and southwestern hills up to southern Litchfield County. In the Central Connecticut Lowland, they are found along the trap rock ridge formations northward into central Massachusetts.

#### **Description**

This large, black, heavy-bodied snake can measure between 46-68 inches long. Flecks of white are often present on the black body, and the snake has a white chin and a belly with a black checkerboard pattern. The scales along the backbone are lightly keeled (slight raised ridge along the center).

Juvenile eastern ratsnakes are light gray with brown/black blotches, a large head, and a black checkerboard belly. The lightly keeled scales are difficult to see in juvenile snakes.

The eastern ratsnake is distinguished from the similar-looking northern black racer by its lightly keeled scales, thin neck, and the black checkerboard pattern on the belly. It has a square-shaped body compared to the cylindrical-shaped body of the black racer. The ratsnake has a well-defined iris, while the black racer has more uniformly dark eyes.

#### **Habitat and Diet**

The eastern ratsnake inhabits rough, forested terrain with ledges and rock outcrops, as well as small meadows adjacent to woodlands.

Active hunters, eastern ratsnakes prey on rodents and other small mammals (chipmunks, moles, mice, rats), small birds, reptiles, amphibians, insects, and sometimes bird eggs. They will enter barns and attics in search of food. The ratsnake is a constrictor; it seizes prey with its jaws and wraps tightly around the animal, squeezing until it suffocates. The snake then swallows the prey whole.



#### Life History

Eastern ratsnakes enter their winter dens in late autumn, usually in early to mid-November. Dens are generally located in rock crevices or old burrows, and may be used year after year. Dens are typically communal; they may contain several ratsnakes and/ or other snake species, such as black racers, timber rattlesnakes, and copperheads.

Ratsnakes emerge from their winter dens in mid- to late April, and mating follows soon after through May. Eight to 12 eggs are laid in piles of decaying leaves and abandoned burrows, or under stumps and hollow logs. The females do not care for the eggs. After hatching in late summer, the young snakes must fend for themselves.

#### **Interesting Facts**

The eastern ratsnake is also known as the black rat snake. It is active in the daytime, but can also be out at night.

The ratsnake's square-shaped body enables it to climb high in trees, attics, haylofts, and other structures. This snake is often found around old barns or buildings where it can find plenty of food, mainly rodents. For this reason, ratsnakes play an essential role in controlling rodent populations. On the other hand, ratsnakes are preyed upon by mink, larger carnivores, and large birds of prey.

#### What You Can Do

Eastern ratsnakes are popular with the pet trade, therefore populations are often vulnerable to overcollection. This or any other wild snake should never be collected from the wild to keep as a pet. The removal of even one individual can negatively affect the population. In addition, wild snakes kept in captivity often succumb to infection, parasites, and stress.

Watch for snakes crossing roads or basking on the warm pavement. Just like many other snake species, ratsnakes are frequently killed by vehicles.

Northern Black Racer

# Coluber c. constrictor

#### **Background and Range**

The northern black racer is one of two large, black snakes found in Connecticut (the other is the eastern ratsnake). It is considered an Important Species in the state as its population is declining due to loss of habitat through succession, fragmentation, and development.

Several subspecies of black racers are found throughout the 48 contiguous states, Canada, and Mexico. The northern black racer ranges from southern Maine, west to Ohio, and south to Georgia, Alabama and parts of Tennessee. In Connecticut, the species is found statewide but is rare in the extreme northwestern corner.

#### **Description**

This fairly large snake can measure in

length from 33 to 65 inches. It has a solid black, cylindrical body with a bluish belly and white chin. The scales are smooth, giving the snake a "matte" appearance. The head, which is not much wider than the body, is small for this larger-sized snake. The eyes are large, with circular, dark brown-amber pupils, and prominent brow ridges. Young black racers do not resemble adults in pigmentation. Instead, they have a row of dark brown blotches on a light graybrown body, and the venter has several rows of spots. The juvenile pattern is gradually replaced by the uniform adult coloration as a snake enters adulthood.

The similar-looking eastern ratsnake has lightly keeled (raised ridge along the center) scales, a belly that is white with black checkerboard patterns, and a more square-shaped body.

#### **Habitat and Diet**

The black racer prefers open, lightly wooded habitats. These include meadows, fields, powerline rights-of-way, roadsides, and transitional zones between forests and fields. This snake thrives in areas that are mowed or occasionally cleared, and will avoid heavily forested habitats. Winter den sites are usually in old burrows or rocky areas with deep fissure cracks.

An active daytime hunter, the black racer will search for prey over an extensive home range. Its prey consists of smaller individuals of other snake species, toads, frogs, small birds, chipmunks, mice, shrews, other small rodents, and invertebrates such as butterfly and moth larvae, various other insects, and spiders. Juvenile black racers tend to eat more invertebrates. Although this snake's scientific name implies it, the northern black racer does not constrict its food. Instead, the snake pins prey with its body and swallows it whole.

#### Life History

In colder environments, snakes will brumate during winter. Unlike hibernation when animals are asleep, brumating animals are awake but inactive. Black racers will migrate to their winter dens by late October, often using the same dens year after year and sometimes sharing them with other black racers or other snake species. Black racers usually emerge from their dens by



late March and begin breeding shortly after. It is at this time that they become more territorial and defensive. A clutch of 3-32 eggs will be laid in June-July, hatching in August-September. The eggs are distinct by having a rather granular texture. Egg clutches are hidden under logs or burrows, or in a nest cavity in leaf litter or sand. This species has been known to deposit eggs communally. Maturation occurs in 1-2 years for males and 2-3 years in females. The lifespan of black racers in the wild can last up to 10 years.

#### Interesting Facts

Although the black racer is swift, its top speed is about 8 to 10 miles per hour, about the same as a quick jog.

Racers are beneficial to humans by controlling rodents, especially when they occur in or near agricultural fields.

Racers are preyed upon by other vertebrates. They are often killed by vehicles and during mowing operations. Although less frequently mistaken for venomous snake species because they lack a blotched or banded pattern, some individuals are still killed unnecessarily by people.

If cornered or agitated, this non-venomous snake may lash out in defense and bite, expel musk, or discharge feces.

#### What You Can Do

Understanding that this snake species is non-venomous is important. No Connecticut venomous snake has an all black back. Although black racers are sometimes aggressive, no snake will deliberately attack a human. If startled or cornered it may strike in self defense. If you cross paths with a black racer, merely go around it and allow it venture on its way.

Black racers, or any other wild snake, should never be collected as a pet. This snake does not do well in captivity, often succumbing to infection, parasites, and stress. The removal of even one individual can negatively affect the population.

Some of the information for the snake fact sheets was obtained from *Amphibians and Reptiles of Connecticut and Adjacent Regions*, by Michael W. Klemens, and the Massachussetts Natural Heritage Endangered Species Program (<u>www.nhesp.org</u>).



# Celebrate Year of the Snake!

The DEEP Wildlife Division, DEEP State Parks Division, local nature centers, and conservation organizations will be holding Year of the Snake events and activities throughout the year. Below is a selection of some of the scheduled events. A more up-to-date list is available on the DEEP's Year of the Snake webpage (<u>www.ct.gov/deep/YearoftheSnake</u>). Check the website regularly to find out about some exciting opportunities to learn about snakes and even see some snakes up-close. Snake programs will also be held at some of Connecticut's State Parks during the summer season. Educational snake programs offered during Year of the Snake can be added to the webpage listing by emailing <u>deep.</u> <u>ctwildlife@ct.gov</u> or calling 860-675-8130.

The following listed events and activities are free and open to the public, except where noted. Pre-registration may be required.

#### Snakes Alive!

Jay Kaplan of Roaring Brook Nature Center will present a wide variety of live snakes at Dinosaur State Park.

**Date and Time:** Thursday, April 18, 2013. Two shows are scheduled: 11:00 AM and 12:30 PM.

Location: Dinosaur State Park, 400 West Street, Rocky Hill

**Cost:** Tickets are available with admission fee on a first-come, first-serve basis after 9:00 AM on the day of the show. Ticket prices are \$6.00 for ages 13 and up; \$2:00 for ages 6-12; and 5 and under is free. Each program is limited to 100 seats. Program is recommended for children 5 and up.

#### The Year of the Sssssnake!

Come join the Friends of Greenwich Point as they collaborate with the Connecticut Audubon Society (CAS) and the Bruce Museum to present the Year of the Snake! You and your family will get to see some of these magnificent reptiles up close, learn identification tips, and explore the natural history of some of our native species. Find out how snakes benefit us and our environment. There will be various family-based hands-on activities about snakes, and one of CAS's teacher-naturalists will be on-site offering informational sessions, in addition to answering any questions regarding these scaly critters.

Date and Time: Sunday, May 5, 2013, from 1:30-3:30 PM.

Location: Innis Arden Cottage, Greenwich Point, CT

**Other Event Information:** The program is FREE but space is limited; RSVP is required. Please email Jane Guenther, Program Coordinator at CAS, at jguenther@ctaudubon.org or call 203-259-6305 x 109 to make your reservation today!

#### Eastern Hog-nosed Snake

Herpetologist Dennis Quinn will present an informative program on the amazing eastern hog-nosed snake. Participants will discover what makes this snake one of the most unique of Connecticut's 14 snake species. Learn how to identify eastern hog-nosed snakes and their habitat requirements during this interesting presentation. **Date and Time:** Wednesday, May 29, 2013, starting at 6:30 PM.

Location: Wildlife Division's Sessions Woods Conservation Education Center, 341 Milford Street, Burlington, CT

**Other Event Information:** This FREE presentation sponsored by the DEEP Wildlife Division is appropriate for ages 12 and up. Please pre-register by calling the Sessions Woods office at 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM).

# Mark Your Calendar! SNAKE DAY at Sessions Woods on June 23

Join the DEEP Wildlife Division and the Friends of Sessions Woods for a FREE, special event focused on snakes. Individuals and families will have the opportunity to attend informative talks on Connecticut's native snakes, participate in snake crafts, and see live snakes up-close. Brian Kleinman from Riverside Reptiles will provide an educational program at 2:45 PM, featuring several live snakes. Snake Day will also allow participants to view artwork from the Snake Art Contest for Kids.

Date and Time: Sunday, June 23, 2013, from 1:00-4:00 PM

Location: Wildlife Division's Sessions Woods Conservation Education Center, 341 Milford Street, Burlington, CT 06013

**Other Event Information:** This event is FREE and suitable for all ages. Pre-registration is encouraged but not required. To pre-register or for more information, call the Sessions Woods office at 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM).

# Snakes

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leaving them where you find them. Consider how much more interesting and rewarding it is to view snakes in their natural environments (and not in a boring terrarium)!

#### For More Information

For more information about snakes and snake conservation in Connecticut, visit the DEEP's Year of the Snake webpage at <u>www.ct.gov/</u> <u>deep/YearoftheSnake</u>. You can also visit the Partners in Amphibian and Reptile Conservation (PARC) website at <u>www.</u> yearofthesnake.org.

Snake Art Contest for Kids Entries must be postmarked by May 17, 2013

The DEEP Wildlife Division and the Friends of Sessions Woods are sponsoring a kid's art contest for 2013 Year of the Snake. All children from kindergarten through fifth grade are eligible to enter an original drawing, painting, or sketch of a snake species that can be found in Connecticut (see list of eligible species below). All submitted artwork will be on display and the winning entries will be announced during Snake Day at the Sessions Woods Conservation Education Center on June 23, 2013. Entries for the contest must be postmarked by May 17, 2013.

Contest details, guidelines, and an official entry form are available on the DEEP's Year of the Snake webpage (<u>www.ct.gov/deep/</u><u>YearoftheSnake</u>). Questions or requests for more information can be directed to deep. ctwildlife@ct.gov or the Wildlife Division's Sessions Woods office at 860-675-8130 (Mon.-Fri., 8:30 AM-4:30 PM).

#### **Connecticut's Native Snakes**

Common Gartersnake Northern Brownsnake Common Ribbonsnake Northern Copperhead Eastern Hog-nosed Snake Northern Watersnake Eastern Milksnake Northern Red-bellied Snake Eastern Ratsnake Ring-necked Snake Eastern Wormsnake Smooth Greensnake Northern Black Racer Timber Rattlesnake

# **One Truly Extraordinary Bug**

Written by Laura Rogers-Castro, DEEP Wildlife Division

What is big, has red eyes and orangeveined wings, and can only be seen every 17 years in central and south central Connecticut? The answer is the periodical cicada, *Magicicada septendecim*. The "magic" in *Magicicada* is fitting because cicadas are charmingly unique. Not all folks will agree, but a closer look at the biology of the periodical cicada should provide, at the very least, a bit of enchantment.

#### **June 1996**

A springtime visit to many upland forests in Connecticut 17 years ago brought an almost deafening sound to the air. The trees were alive with the mating calls of cicadas. In a noble effort to attract a mate, a male cicada sings by rapidly vibrating a pair of ribbed tymbals located at the base of the abdomen. The mating calls attract only females of the same species. One saying goes "Happy are the cicadas lives, because they all have voiceless wives," referring to the belief that male cicadas are the only vocal cicadas. Females may respond to male calls with distinctive "clicks" made with their wings. These clicks are noticeable only to a trained ear.

#### Life Cycle

The life cycle of a periodical cicada begins with the eggs that are deposited in small twigs on trees by a female with her ovipositor. Each female may deposit 400 to 600 eggs. After the nymph hatches from the egg in late summer, it falls to the ground, tunnels underneath the soil, and begins to feed on the xylem fluids in the roots of trees. The nymphal stage is adapted to a "fossorial" life by having a highly specialized first pair of legs that is modified for digging.

For the next 17 years, the periodical cicadas of Connecticut spend their lives underground. During this time, they will molt four times, growing bigger after each shedding of the exoskeleton. The final molt (fifth) occurs after they emerge from the ground and climb the lower trunk of a nearby tree. Periodical cicadas typically emerge as the soil below the surface warms with spring temperatures. If spring is early, cicadas emerge the third week of May. A cold, wet spring may delay the cicadas until late May or early June. Regardless, the amazing fact is that in one woodland, many thousands of cicadas



The adult 17-year cicada, *Magicicada septendecim*, is striking with its red eyes and orangered wing veins.

emerge during a few weeks after spending almost two decades underground. The adult life is short, lasting only two to three weeks.

#### How to Find Cicadas

There actually are three species of 17-year periodical cicadas in the Northeast. *Magicicada septendecim*, Connecticut's lone species, is the most common. The two other species, *M. cassini* and *M. septendecula*, are found in the nearby Hudson Valley. Each species has its own

distinctive mating call and habitat preference. All of the cicadas that emerge in the same year and have the same length of life cycle are assigned to a "brood." Connecticut's cicadas are "Brood II (two)." This brood is distributed from New York and Connecticut south to North Carolina. Brood II in Connecticut may especially



Periodical cicada nymphs remain underground for 17 years. They are expected to emerge in central Connecticut this year in late May through June.

be heard in broad-leaved forests associated with traprock ridges in New Haven, Hartford, and Middlesex Counties.

If you hear cicadas, search the ground for circular exit holes (about ½-inch in diameter), which are often near the base of a tree. Scan tree trunks near the holes for "nymphal skins" or exuviae from which the adult cicadas have emerged. Adults are one inch to one-and-a-half inches long, mostly black and red-eyed. Their long wings extend past the abdomen, with many of the wing veins reddish-orange along the leading margin of the wings.

#### Cicada Conservation

Although a noisy forest is unnerving to some, the singing chorus of cicadas does not last long. The late entomologist Charles Remington from Yale University was influential in the creation of a "Magicicada Preserve" in Hamden (owned by the South Central Connecticut Regional Water Authority), probably the first cicada preserve in the world. Although not recommended but an interesting tidbit for those who enjoy living off the land, Dr. Remington has been quoted as saying the flavor of cicadas is "vaguely cashew-like" or like the "sweetness in good, young venison!" Cicadas are prey items for many birds, especially starlings, grackles, robins, and blue jays, as well as other animals. Populations also can be infested by a fungal parasite.

Connecticut's 17-year cicada colonies are constantly threatened by loss of habitat due to development. A few colonies seen in 1996 may not appear this year because they are covered by pavement or buildings. Historically, in addition to Brood II, Connecticut had a Brood XI in Suffield, Willington, and probably Glastonbury. The brood was last seen in Willington in 1954 and is now presumed to be extinct.

#### Where to See the Phenomenon

As the weather warms, head for the ridges of Central Connecticut for a little cicada magic. A visit to Hubbard Park in Meriden, Ragged Mountain in Southington and Berlin, and Sleeping Giant State Park in Hamden will provide the best chance for seeing the cicadas. Rest assured, you will not have any difficulty hearing them!

#### The author extends her appreciation to Dr. Maier for his review of this article

Dr. Chris Maier, an entomologist at the **Connecticut Agricultural Experiment** Station (CAES), has studied the periodical cicada for over three decades. This year he is particularly interested in locating populations of cicadas that have not been recorded during the last two emergences (1979 and 1996). If you find a colony in Avon, New Haven, Newington, Rocky Hill, or West Hartford, please contact Dr. Maier (203-974-8476 or chris.maier@ct.gov).

# Connecticut Outdoors

### Burnt Corn Flakes and Elephant Legs - How to Identify Trees by their Bark

#### Written by Jerry Milne, DEEP Forester

Most tree identification books focus on leaves, twigs, and buds. But what do you do when you cannot reach the branches, or the leaves are obscured by other trees, or it is winter?

Foresters need to identify trees by bark alone. Fortunately, different species of trees have distinctive bark that can be distinguished by color, thickness, and patterns. Some are easier to pick out than others, such as shagbark hickory (see photo), which is easily identified by its shaggy strips. Gray birch (see photo) also is obvious.

Other trees are more difficult to identify by the bark. In my experience, I have found that describing bark in terms of familiar objects can be helpful. For example, the bark of black cherry looks like "burnt corn flakes" (see photo). Flowering dogwood bark resembles "alligator hide" (see photo). American sycamore reminds me of "camouflage" (see photo), while American beech looks like "an elephant's leg" (see photo).

I recently discovered an excellent book for identifying trees by their bark: Bark - A Field Guide to Trees of the Northeast, by Michael Wojtech and published by University Press of New England. The photos in the book clearly

show the differences in bark, not only among species, but at different ages of individual species. This is important because bark changes in appearance as a tree grows from

young to mature to old. Using this guide, you can identify just the trees in your backyard, or if you are more ambitious, the entire forest!



From left to right: American sycamore, shagbark hickory, and flowering dogwood.



From left to right: black cherry, gray birch, and American beech.



# FROM THE FIELD

## CT State of the Birds 2013

Concerned with the dramatic decline of 17 species of birds that nest in Connecticut and eat only insects caught while flying, Connecticut Audubon Society has called for a multi-agency program of research and assessment, along with immediate remedies such as reductions in pesticide use and the creation of man-made nesting sites. The recommendations and action plan are contained in Connecticut State of the Birds 2013, *The Seventh Habitat and the Decline of Our Aerial Insectivores*. The authors of the report include staff from the DEEP Wildlife Division, along with other bird experts and researchers. The 17 species – known as aerial insectivores because they eat insects on the wing – include barn swallows, whip-poor-wills, common nighthawks, chimney swifts, purple martins, and tree swallows. The Connecticut State of the Birds report can be found at <u>www.ctaudubon.org</u>.

### Emerald Ash Borer Found in Three More CT Towns

The emerald ash borer has been detected in three more Connecticut towns – Cheshire, Oxford, and Middlebury – all located in New Haven County where it was previously found in July 2012. This invasive, exotic insect is responsible for the death and decline of tens of millions of ash trees from the Midwest to New York State and south to Tennessee. A "delimiting" survey to determine the area in which ash borers are present and the extent of infestations resulted in the detection of the new areas. The survey is being conducted by the DEEP Division of Forestry, with assistance from the Connecticut Agricultural Experiment Station, USDA Animal and Plant Health Inspection Service, U.S. Forest Service, New York Department of Conservation, and Vermont Department of Forests, Parks & Recreation. Emerald ash borers have been previously confirmed in five other New Haven County communities, as well as in Dutchess County, New York, and most recently, Berkshire County, Massachusetts. The insect is a plant pest under federal and state regulations. Detailed information about the quarantine placed on New Haven County and firewood regulations can be found at <u>www.et.gov/deep/eab</u> or <u>www.ct.gov/caes</u>. Information about the emerald ash borer is available at <u>www.emeraldashborer.info</u>.

### Leucistic Hawk Photo Sparks Readers' Interest

The photograph of a leucistic red-tailed hawk on the back cover of the January/February 2013 issue of *Connecticut Wildlife* generated reader interest. We heard from residents who have seen a similar-looking hawk (maybe even the same individual), as well as leucistic gray squirrels and white-tailed deer. Mike Cristina sent us these amazing photographs of a

leucistic fawn and its "family" that he took at his home in eastern Connecticut. Readers are encouraged to send along similar observations and photographs to <u>deep.ctwildlife@ct.gov</u>. Depending on space and photo quality (as well as permission), we may be able to share them in *Connecticut Wildlife* or on our Facebook page (<u>www.facebook.com/</u> CTFishandWildlife).





# Find us on Facebook www.facebook.com/ CTFishandWildlife

#### Teaming With Wildlife Honors Congresswoman Rosa DeLauro

The Teaming With Wildlife Coalition and the Association of Fish & Wildlife Agencies recently honored Congresswoman Rosa L. DeLauro (CT), along with Senators Dick Durbin (IL) and Saxby Chambliss (GA), and Congressman Jim Gerlach (PA), for their outstanding leadership to safeguard imperiled species during the coalition's annual Teaming With Wildlife Fly-In in Washington, D.C. in early March 2013. The Fly-In is a critical Capitol Hill event for the 6,300+ member Teaming With Wildlife Coalition to advocate for dedicated, on-the-ground conservation funding in every state and territory to prevent wildlife from becoming endangered.

"I am honored to have received this award and take it as a call to continue advancing efforts to protect our wildlife," DeLauro said. "The state and tribal wildlife grants I have strongly supported throughout my career help states preserve wildlife and prevent more species from becoming endangered."

The State and Tribal Wildlife Grants Program provides each state and territory with approximately \$1 million annually to develop and implement their Congressionally mandated State Wildlife Action Plans aimed at conserving fish and wildlife that are in decline and may be headed towards federal listing.

Since 2010, funding for the State and Tribal Wildlife Grants Program has been cut by more than 30%. Coupled with the impacts of budget sequestration, further cuts to the program could force state fish and wildlife agencies into making tough decisions that could include reducing invasive species control efforts that cause billions of dollars in economic damage; providing less technical assistance to private landowners; decreasing surveillance on diseases such as white-nose syndrome that is devastating bat populations; and reducing the number of projects to reintroduce at-risk species back into their native habitat. In addition, further cuts to State and Tribal Wildlife Grants could lead to increased federal ESA listings and threaten the associated jobs and local economies tied to the \$45 billion wildlife recreation industry. A recent economic study by Southwick and Associates showed that the State and Tribal Wildlife Grants Program supports twice the number of jobs as those supported by road and bridge construction.

# Conservation Calendar

April 22 ..... Earth Day - Visit the DEEP website for more information and a listing of Earth Day events (www.ct.gov/deep/earthday).

- May 11..... Free Fishing Day (see page 11 for more information).
- May 11......International Migratory Bird Day Celebrate this special day with a focus on life cycles. This theme details all aspects of a migratory bird's life, from nesting and migration to breeding and raising young. Most importantly, it addresses the need for conservation throughout the life cycle. Learn more at <u>www.birdday.org</u>.
- May 17...... Endangered Species Day, which was initiated by the U.S. Congress in 2006, is an opportunity for people young and old to learn about the importance of protecting endangered species and everyday actions that people can take to help protect our nation's disappearing wildlife and last remaining open spaces. Learn more at <a href="http://www.stopextinction.org/esd.html">www.stopextinction.org/esd.html</a>.

#### **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.

#### **Hunting Season Dates**

Will only be used for subscription purposes

- April 13 & 20........... Spring Turkey Junior Hunter Training Days to provide junior hunters with an opportunity to learn safe and effective hunting practices from experienced hunters. Visit the DEEP website (<u>www.ct.gov/deep/hunting</u>) for more details.
- April 20 ..... Opening Day of Fishing Season (www.ct.gov/deep/fishing).
- April 24-May 25 ..... Spring Turkey Hunting Season

Consult the 2013 Connecticut Hunting & Trapping Guide and 2013 Connecticut Angler's Guide for specific season dates and details. Printed guides can be found at DEEP facilities, town halls, bait and tackle shops, and outdoor equipment stores. The guides also are available on the DEEP Web site (<u>www.ct.gov/deep/hunting</u> or <u>www.ct.gov/deep/fishing</u>). Go to <u>www.ct.gov/deep/sportsmenlicensing</u> to purchase Connecticut hunting, trapping, and fishing licenses, as well as required deer, turkey, and migratory bird permits and stamps. The system accepts payment by VISA or MasterCard.

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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 PERIODICALS POSTAGE PAID AT BURLINGTON, CT, AND ADDITIONAL OFFICES



The DEEP Wildlife Division continues to monitor the state's bear population by tracking 24 radio-collared females and checking their winter dens to determine how many cubs are born each year and whether or not their cubs survive the first year of life. Annual measurements and other data are collected from each female and its offspring. DEEP Wildlife Division staff in these photographs include wildlife biologists Paul Rego and Jason Hawley, and seasonal resource technician Melissa Ruszczyk.