connecticut W/110116e

©PAUL J. FUSCO All Rights Reserved

Wild Thoughts

12

ring is an amazing time of year. As ice begins to melt, the Soil warms, and saps begins to flow, and our thoughts turn to a natural world reawakening. This issue of Connecticut Wildlife features some of the things we look forward to as the days grow longer. You will learn the tale of mooneves and new efforts to allow them to successfully spawn. Our aquatic adventures continue with a closer look at creatures with fascinating names, such as creeper, floater, mucket, bean, pearlshell, and more. These freshwater mussels rely on tricks to help them reproduce, but much like the mooneyes, also require connected aquatic habitats to thrive.

This time of year, you may be lucky enough to spot a tom turkey in full display for a field of hens. You can also learn about how our turkey population fared last year and what is influencing nesting success. If you want to increase your chances to outwit one of these wily birds during the spring turkey hunting season, our new advanced hunter workshops may be just what you were looking for.

This is also when wildlife become increasingly active. It is time once again to become Bear Aware – put away your bird feeders until later next fall, delay putting out your garbage and recycling until the morning of collection day, and read more tips on how to deal with hungry bears that are waking up from hibernation.

Spring migration is one of the wonders of nature. The American oystercatcher is one of our earliest returning shorebirds. It is hard not to smile when you spot this large, colorful bird feeding along our coastline. A new study seeks to learn more about their movements and habitat needs and you can help. Thanks to Audubon Connecticut, a range-wide banding project now includes Connecticut and is helping to implement one of the conservation actions identified in our state's Wildlife Action Plan. If you spot an oystercatcher sporting brightly colored leg bands, let us know.

One of the joyous sounds of spring is the happy, bubbly call of the barn swallow. Did you know this tiny bird travels thousands of miles each year as it moves from its summer home in Connecticut to its winter home in South America?

Spring is also time for new things – new leaves appearing on trees, new flowers emerging amidst the brown leaves on the forest floor, and new conservation efforts. You will learn how one budding conservationist turned her passion for wildlife and her interest in educating people into something that will help people understand why protecting bats matters, explain what challenges bats face, and enable others to carry that educational message forward for years to come.

Please take a few minutes to enjoy this issue of Connecticut Wildlife, share what you have learned with others, and get outside to enjoy the amazing array of sights and sounds springtime in Connecticut always delivers.

Jenny Dickson, Supervising Wildlife Biologist



Connecticut Department of Energy and Environmental Protection Bureau of Natural Resources Wildlife Division www.ct.gov/deep Commissioner Katie S. Dykes Deputy Commissioner Susan Whalen Chief, Bureau of Natural Resources

Rick Jacobson

Magazine Staff

Managing Editor Kathy Herz Production Editor Paul Fusco Contributing Editors: Mike Beauchene (Fisheries) Christopher Martin (Forestry) Circulation Trish Cernik

Wildlife Division

79 Elm Street, Hartford, CT 06106-5127 (860-424-3011) Office of the Director, Recreation Management, Technical Assistance, Natural History Survey

Sessions Woods Wildlife Management Area P.O. Box 1550, Burlington, CT 06013 (860-424-3011)

Wildlife Diversity, Birds, Furbearers, Outreach and Education, Habitat Management, Conservation Education/Firearms Safety, Connecticut Wildlife magazine

Franklin Wildlife Management Area 391 Route 32, N. Franklin, CT 06254 (860-424-3011) Migratory Birds, Deer/Moose, Wild Turkey, Small Game, Wetlands Habitat and Mosquito Management, Conservation Education/Firearms Safety

Eastern District Area Headquarters 209 Hebron Road, Marlborough, CT 06447 (860-295-9523) State Land and Private Land Habitat Management

Connecticut Wildlife magazine (ISSN 1087-7525) is published bimonthly by the Connecticut Department of Energy & Environmental Protection Wildlife Division. Send all subscription orders and address changes to Connecticut Wildlife, Sessions Woods WMA, P.O. Box 1550, Burlington, CT 06013. Subscription rates are \$8 for one year, \$15 for two years, and \$20 for three years. No refunds. Periodical postage paid at Bristol, CT. Postmaster: Please send all address changes to Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013.

www.ct.gov/deep/wildlife www.facebook.com/CTFishandWildlife E-mail: deep.ctwildlife@ct.gov Phone: 860-424-3011



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.

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at 860-418-5910 or deep.accommodations@ct.gov if you. have a disability and need a communication aid or service; have limited proficiency in English and may need information in another language; or if you wish to file an ADA or Title VI discrimination complaint

Copyright 2019 by the Connecticut Wildlife Division. The Wildlife Division grants permission to reprint text, not artwork or photos, provided the Wildlife Division is credited. Artwork and photographs printed in this publication are copyrighted by the CT DEEP Wildlife Division. Any unauthorized use of artwork and photos is prohibited. Please contact the managing editor to obtain permission for reprinting articles (<u>deep.</u> <u>ctwildlife@ct.gov</u> or 860-424-3011).

Printed on recycled paper







IN THIS ISSUE

PHOTO BY P. FUSCO, DEEP WILDLIFE

4 Audubon Connecticut Launches State's First American Oystercatcher Banding Program

The first season of banding oystercatchers in Connecticut was a success

- 8 Mooneyes Trying to restore a historic spawning stream of rainbow smelt
- **10** Advanced Hunter Education Free workshops teach skills specific to a particular aspect of hunting
- **12 Connecticut's Bubbly Companion** *The barn swallow has long been one of Connecticut's most familiar birds*
- **14 Freshwater Mussels** *Mussels have some of the most marvelous anatomical adaptations of the animal world*
- **16** Slight Decline in 2018 Wild Turkey Season Harvests Results for the 2018 spring and fall wild turkey seasons
- 20 **Bat Appreciation Day at Old-Newgate Prison and Copper Mine** *This family-friendly annual event at the historic site is a cooperative effort between DEEP and the Connecticut Department of Economic and Community Development*
- **22** Avon Girl Scout Earns Gold Award with Bat Education Project A bat exhibit and education toolkit will have long-term conservation benefits

DEPARTMENTS

- **18** From the Field
- 23 Conservation Calendar

Cover:

A banded American oystercatcher stretches its wings near a Connecticut nesting beach. Read more about the oystercatcher banding project on page 4. Photo courtesy of Paul Fusco



Audubon Connecticut Launches State's First American Oystercatcher Banding Program

Written by Elizabeth Amendola, Audubon Connecticut

S ince 1999, over 3,000 American oystercatchers have been banded along the Atlantic and Gulf coasts, and this year, Audubon Connecticut was very excited to join the banding efforts.

Following protocols established by the American Oystercatcher Working Group and with the help of Working Group members – Audubon North Carolina, Audubon New York, and Manomet – Audubon Connecticut's staff was able to gain the experience and knowledge necessary to start banding oystercatchers in Connecticut. The DEEPWildlife Division and U.S. Fish and Wildlife Service have also been supportive and played important roles in this landscape-scale monitoring effort.

The American oystercatcher was historically abundant along the Atlantic coast. The species was extirpated in the Northeast as a result of intensive hunting and egg collecting in the 1800s. After passage of the Migratory Bird Treaty Act of 1918, the population began to slowly rebound. The first reported sightings of oystercatchers returning to Connecticut were not until 1980. The American oystercatcher is listed as a state threatened species under Connecticut's Endangered Species Act. While the number of birds in the state is growing, several factors, including habitat loss from coastal development, human disturbance from recreational activities, high predator pressure, and vulnerability to sea level rise, have kept the population low and threaten the species' long-term survival. As a result, the National Audubon Society Birds and Climate Change Report lists the American oystercatcher as Climate Endangered.

Monitoring the Population

During the 2011 breeding season, the first comprehensive and targeted survey of breeding American oystercatcher populations in Connecticut was performed by Audubon Connecticut, resulting in the first estimate of their productivity. The project grew in 2012 with the creation of the Audubon Alliance for Coastal Waterbirds (the Alliance), a partnership between Audubon Connecticut, Roger Tory Peterson Institute of Natural History, and The Connecticut Audubon Society. In collaboration with the DEEP Wildlife Division, the Alliance has implemented conservation efforts statewide over the last seven years, contributing to the growth of the breeding population of American oystercatchers.

The creation of the Audubon Connecticut American Oystercatch-



American oystercatcher in flight.

er Banding Program seeks to further our understanding of the lives of oystercatchers. Color banding individual birds and the subsequent re-sighting of those individuals will help define distribution, abundance, reproductive success, site fidelity, and habitat use in Connecticut, as well as identify important wintering sites along the Atlantic coast. With a better understanding of the life history of American oystercatchers, more effective management practices can be created and implemented, ensuring the future success and survival of the species.

Banding Efforts

The first season of banding Ameri-





This fledgling American oystercatcher from Bluff Point Coastal Reserve in Groton was given yellow bands marked N06. It is the offspring of banded individual "Yellow N05".

can oystercatchers in Connecticut was a success. Through the use of various methods and techniques, 11 oystercatchers were banded in the 2018 season. Birds were banded in three of the four counties along the Connecticut shoreline. The first banding sites were selected for their ease of accessibility and the potential to deploy all the various capture methods. This helped determine which methods work best to facilitate future success at the more difficult sites in Connecticut.

The preferred capture method employed the use of American oystercatcher breeding behavior. Oystercatchers are very territorial during the breeding season and the mated pair will aggressively chase out any intruders. Using oystercatcher decoys and a recording of an oystercatcher territorial alarm call within a breeding pair's territory triggers an aggressive behavioral response from the pair who attempts to chase away the intruders. Decoys are strategically placed near a hidden net, allowing researchers to deploy the net and trap one or both of the territorial pair. This preferred method caused minimal disturbance to the breeding pair or to other nesting birds at the site.

Upon capture, an oystercatcher is handled in a speedy and efficient manner to reduce its stress. Measurements and weight are recorded and identifying bands are put on the legs of the bird. A U.S. Geological Survey (USGS) metal band is placed on the lower leg just above the foot and fieldreadable color bands are positioned above the ankle on the upper leg. The color bands have a unique alphanumeric code and can vary in orientation. Five of the bands put out this past season read in a horizontal orientation with a

two character code, and the

other six were in a trian-

gular formation with three characters. The color of the band corresponds to the state or region in which the bird was banded. Connecticut, Massachusetts, and Rhode Island use yellow bands, New York and New Jersey use orange bands, and Georgia uses red bands.

This past season, birds were captured at five sites; four were mainland beaches and one was an offshore is-

American oystercatchers can be found on Connecticut's coastal beaches, mudflats, and offshore islands. PHOTOS BY P. J. FUSCO, DEEP WILDLIFE land. Of the birds banded, two were breeding pairs, one pair from Cockenoe Island in Westport and the other from Milford Point. Individual birds were captured at Long Beach in Stratford and Sandy Point in West Haven. The remaining individual banded, a fledgling and the offspring of one of this season's banded adults, was from Bluff Point Coastal Reserve in Groton.

Observations of Banded Oystercatchers

Audubon Connecticut's banding efforts have already resulted in an increased understanding of



Banded oystercatcher "Yellow N01" on Cockenoe Island, Westport, in late August 2018. This individual was banded in May 2018 at Long Beach, Stratford.

the behavior

and movements of the state's oystercatcher population. One individual trapped at Milford Point was a re-capture. This oystercatcher was already fitted with a USGS metal leg band; field-readable yellow color bands with the unique code of 1T were added to the bird's legs. This bird was originally banded in New York as a fledgling four years earlier. Thanks to its unique band, we now know were it fledged and its exact age. At four years of age, this was likely the first breeding attempt for this young bird and it will be very interesting to see if its breeding success increases with age.

Banding efforts have also given insight into the migratory behavior of the Connecticut population. One individual from Long Beach in Stratford, "Yellow N01", along with its mate, made two unsuccessful nesting attempts and was last observed at Long Beach in midJuly. The whereabouts of this individual was unknown until it was seen in August 2018 on Cockenoe Island in Westport with a group of 38 other oystercatchers. This re-sighting reveals more about the movements of oystercatchers along the Connecticut coast and highlights Cockenoe Island as an important staging area before migration.

Another individual, "Yellow 2T", banded during the 2018 season at Milford Point, has also expanded our understanding of American oystercatcher migratory behavior. Historically, it was not known where most of Connecticut's breeding population overwinters. Yellow 2T, banded in 2018 at Milford Point, was last observed in Connecticut on September 14, 2018. Thanks to re-sighting efforts along the Atlantic Coast, it was spotted at Cedar Key off the northeast coast of Florida on October 6, 2018, just three weeks later.

Report Sightings of Banded Oystercatchers

The success of the project is dependent upon reports of banded oystercatchers seen by researchers and the public. The American Oystercatcher Working Group maintains a database of all reported sightings

collected from researchers and data submitted through an online sighting report form at *amoywg.org*. Reported sightings provide critical data that will improve our knowledge of the ecology of oystercatchers and help advance the conservation of this vulnerable species.

Report sightings of banded American oystercatchers to <u>amoywg.org</u>.

Mooneyes

Written by Ed Machowski, DEEP Fisheries Division

he meeting in the middle of the night during a full moon in April almost seemed covert. But, it was then, many years ago that I met with another DEEP Fisheries Biologist, along with a local, avid fisherman, to hopefully witness something I had not yet seen in my young career. We checked our flashlights and then crept quietly to the stream bank with only the bright glow of the full moon illuminating our path. Once at the bank, we paused for a moment and then, at the count



Fisheries Division Seasonal Resource Assistant Frank Beres selecting a proper location to place a spawning mat full of fertilized smelt eggs within a tributary stream to West Hill Pond.

of three, we turned on our flashlights. It took the fish a moment to realize that intruders had interrupted their spawn, and it took us a moment to realize that all those little glowing dots were hundreds and hundreds of glistening fish eyes! Almost in unison we shouted, "THEY'RE HERE!" And, just then every spawning smelt turned and in an explosive exit, headed back to the lake. But, as fast as they left, others came in to take their place. It does not seem possible that a four-inch fish could make one's heart rate increase, but the spectacle in that stream was impressive to say the least and something I still think back upon.

Rainbow smelt (also known as mooneye, frost fish, and ice fish) are native to coastal waters of the northeastern United States from Virginia through the Canadian Maritimes and inland along the St. Lawrence River to Lake Superior. Through introductions, the range and distribution of rainbow smelt have expanded to many inland waterways throughout the U.S., including a few Connecticut lakes. Historical records indicate that smelt had been stocked into at least 12 Connecticut lakes between 1914 and 1976, but only four – West Hill Pond, Colebrook Reservoir, West Branch Reservoir (Hogsback), and a privately-owned drinking

water supply reservoir – developed reproducing populations.

Anadromous (live in salt water and spawn in fresh water) smelt populations have been an important cultural feature in most northeastern coastal communities. Not only did they provide dietary



A burlap spawning mat laden with smelt eggs retrieved from the donor stream and ready to transport to West Hill Pond.

sustenance, but large recreational ice fisheries, along with commercial fisheries, developed quickly for this popular fish as coastal smelt populations grew. Today, the anadromous smelt populations are, at best, a mere fraction of their historic levels and are considered extirpated or at extremely low population levels anywhere south of Massachusetts. The rapid decline in coastal smelt populations is thought to be largely attributable to loss of suitable spawning habitat, changing oceanic conditions (e.g., increasing water temperatures and predation), and possibly fishing pressure.

A similar decline and disappearance of smelt was also experienced at West Hill Pond in Barkhamsted in the early to mid-1990s. The population of smelt in West Hill Pond that stemmed from initial and subsequent stockings grew sizeable enough to support a popular winter ice fishery, and also provided ample forage for the lake's trout population. When the smelt population was at its peak in the 1970s through 1980s, it was not uncommon to see lanterns illuminating the lake's frozen surface on a winter night as Connecticut anglers attempted to catch their limit of this tasty fish.

Why did the West Hill smelt populations decline? Smelt historically spawned in a small intermittent tributary stream at the lake's southwest corner. In most years, spring weather conditions provided ample rain to keep the stream flowing during the smelt spawn, which coincides closely with the first full moon in April (hence the name "mooneyes"). It is actually not so much the moon phase that triggers the spawn, but more the water temperature. When tributary temperatures near the magic 50°F mark, especially if accompanied by a warm spring rain, adult smelt pack into these flowing streams or along suitable vegetated shoreline areas to spawn.

One six-inch adult female may produce as many as 34,000 eggs. Male and female smelt negotiate the swift stream current to get as far upstream as possible before the female releases her eggs and the males release their milt to fertilize the now drifting eggs. As the eggs settle to the substrate, they adhere to the first surface they contact. Eggs then develop a stalk which suspends them swinging back and forth in the stream current, providing oxygen to the egg membrane until they hatch.

The historic spawning stream at West Hill Pond provided suitable conditions in most years, but during springtime where



Smelt feed primarily on zooplankton, but will also readily prey on smaller fish. Note the large teeth for such a small predator!



In most landlocked populations, smelt typically spawn as two-year-old (pictured here) or older fish, and seldom reach lengths over six inches.

there were dry conditions, there was not enough water flow, and smelt could not negotiate a barrier at the stream mouth to gain access to the spawning grounds. Seeing this was a problem, a local Connecticut Conservation Officer (now known as an Environmental Conservation Police Officers) stepped in to lend a helping hand. Each spring as smelt would congregate in the stream mouth, the Conservation Officer would catch the adults with a net and move them above the barrier. In addition, he would run a small pump to ensure stream flow and also provide spawning mats in the stream on which smelt could lay their eggs. These mats would then be moved into the cove at the mouth of the stream where they would remain until the eggs hatched. This work continued until the Conservation Officer retired in the early 1990s. Without help during the spawn, it only took a few short years before the smelt population dwindled and eventually disappeared by the late 1990s.

Fast forward to 2014. In an attempt to restore the historic smelt population in West Hill Pond and provide forage for trout as well as resurrect a popular fishery, DEEP Fisheries Division biologists and lake residents, with help from the Conservation Advisory Council, embarked on a restoration effort.

Eggs collected from spawning smelt in an undisclosed location have been transported to the stream at West Hill Pond each spring. Spawning mats laden with smelt eggs are collected from the donor streams and placed in the stream at West Hill Pond until they hatch. To date, over 10 million eggs have been successfully transferred. However, only anecdotal evidence, along with direct observation of about a dozen eggs found in the mouth of the spawning stream, indicate that the transplants have been remotely successful in jump-starting a

successful in jump-startin smelt population.



Advanced Hunter Education *Providing New Opportunities*

Written by Keith Hoffman and Paul Benjunas, DEEP Wildlife Division



Greg Chasko, retired Assistant Director for the DEEP Wildlife Division and current President of the Connecticut Waterfowl Association (CWA), demonstrates how to use a call for waterfowl hunting at a Waterfowl Hunting Seminar sponsored by CWA and the Division's Conservation Education/Firearms Safety Program.

onnecticut's hunter education program, also known as the Conservation Education/Firearms Safety (CE/FS) Program, has launched a series of advanced hunter education workshops to reinforce lessons learned in hunter safety courses while also teaching skills specific to a particular aspect of hunting. By building hunters' abilities beyond what they receive in basic hunter safety courses, advanced hunter education helps to retain hunters who may still be working towards success in the field. These workshop offerings also aim to build interest and excitement to recruit those who have not yet hunted and reactivate those who have hunted in the past, but have lapsed in participation. The advanced hunter education workshops cover a variety of topics and provide opportunities for learning skills and techniques to promote success. Each workshop is offered on a yearly basis and is often held in two or more locations throughout the state. Over the past several years, the public's interest in the workshops has increased significantly, and feedback from participants has been overwhelmingly positive.

Spring Turkey Hunting Clinics

Presented by a combination of DEEP wildlife biologists and volunteer CE/FS

instructors, these clinics are perfect for new and experienced turkey hunters. DEEP's Wild Turkey Program biologist introduces participants to the success story of Connecticut's wild turkey population, as well as basic biology and habitat requirements. Participants are given tips and tactics for hunting turkeys with both a bow and firearms. Basic calling techniques and setup are also covered. During the last portion of the clinic, students have an opportunity to pattern their shotguns under the guidance of a CE/FS instructor. The popular 2019 spring turkey clinics were scheduled in March and April.

Waterfowl Hunting Seminar

This seminar will be held in September by the Connecticut Waterfowl Association (CWA) in partnership with the CE/FS Program. It prepares both new and experienced hunters for the waterfowl season, beginning with a review of the safety considerations required to hunt ducks and geese. Students participate in the discussion of basic setups for hunting geese in agricultural fields, as well as both ducks and geese over water. Examples of watercraft used for duck and goose hunting are discussed, along with the basic techniques for calling. The seminar concludes with samples of locally harvested waterfowl.

Small Game Hunting Clinic

Small game hunting requires minimal investment in equipment and offers a great deal of opportunity in Connecticut. Two clinics, scheduled for September, will provide information on how to capitalize on the diverse small game hunting in our state. Classroom instruction begins with a presentation from DEEP's Small Game Program biologist on habitat and biology of common small game animals. Then, experienced small game hunters provide instruction on hunting techniques and equipment. The clinic also includes live demonstrations of field dressing and game care for several small game species. Finally, stu-



The Venison Processing Workshop is extremely popular and has been well-received by participants. Registration for this workshop always fills up quickly. The next workshops will be held in fall 2020.

dents are given the opportunity to skin and dress gray squirrels using the techniques they learned in the classroom.

Deer Hunting Marksmanship Clinic

This clinic, offered in October, gives participants the opportunity to sight in their shotgun or rifle ahead of the November firearms deer seasons. Students are required to bring their deer hunting firearm (cased and unloaded) and 60 rounds of ammunition to the Glastonbury Public Shooting Range on the day of the clinic. Students receive a lesson on basic marksmanship principals, followed by a range safety brief, and then are paired with a coach who works with them to sight in their firearm to 100 yards. Once a student's firearm is on target, there is the option to shoot from multiple realistic shooting positions for hunting, including from a treestand and ground blind.

Venison Processing Workshop

One of the most daunting challenges for a deer hunter is processing an animal once it is harvested. This workshop guides participants through the steps of taking a deer from whole animal to freezer-ready, packaged meat. The workshop team includes a professionally-trained butcher, restaurant owner/ chef, and a cadre of experienced deer hunters. Students are guided through skinning and butchering, while the team explains the cuts of meat on a deer and their equivalent in domestic stock. A demonstration on preparing venison covers sausage-making and other basic to moderately difficult recipes. Participants leave the seminar with a recipe booklet, list of processing supplies, and an enhanced understanding of how to process a white-tailed deer. The 2019 workshops were held in February and were met with great interest.

Learn More

The CE/FS Program expects to add new clinics in the future. Information on current and any additional workshops can be found at www.ct.gov/deep/AdvancedHunterEdu. All programs are free and open to the public. Registration is mandatory and opens approximately 30 days before the event.



Connecticut's Bubbly Companion *The Barn Swallow*

Article and photography by Paul Fusco, DEEP Wildlife Division

The barn swallow is one of Connecticut's most familiar birds. It breeds statewide and is quite comfortable around human habitation. Barn swallows are most common in suburban and rural areas that have a mix of open country, wetland, or farmland nearby. They do not occur in heavily forested areas. In Connecticut, barn swallows likely benefitted from the clearing of the forests during colonial times hundreds of years ago. As Connecticut's forests have regrown since that time, barn swallow populations have likely been affected. Yet, they remain one of our most common and widespread birds.

Barn swallows are strong and tireless fliers that feed almost entirely on the wing. Their long, pointed wings and deeply forked tails give them greater dexterity in flight and help attract mates. Look for

barn swallows cruising over open fields and around bodies of water, as they catch their preferred food of flying insects, including flies, beetles, ants, termites, mosquitoes, grasshoppers, and wasps. Their flight pattern is typically graceful and swooping as they fly swiftly close to the ground or over water. They do not glide as much as other swallows.

These slender, sparrow-sized birds have very small feet and small, short bills, which open with a wide gape, as the



Barn swallows gather mud for nest building.



birds catch multitudes of flying insects. The plumage is metallic blue-black above and buffy to rusty orange below, with a reddish brown breast and darker throat. The barn swallow is Connecticut's only swallow with a deeply-forked tail that has white spots.

Its song is traditionally described as cheerful and expressing happiness. The bubbling and twittering calls of *kvik-kvik*, *vit*, *vit* and *szee* are short and emphatic, full of charm and

> liveliness. Coupled with their consumption of insects, barn swallows are a welcome companion in most neighborhoods.

Migration and Range

The barn swallow is the most abundant and widely-distributed swallow species in the world. It breeds throughout most of North America, Europe, and Asia and winters in Central and South America, the Mediterranean, and sub-Saharan Africa, the Middle East, Southeast Asia, and Australia. There are six currently recognized subspecies of barn swallow, with subspecies *Hirundo rustica erythrogaster* being the one found in the Western Hemisphere.

Western Hemisphere birds winter from Costa Rica south to southern Argentina. Some individuals may have the longest migration of any North American land bird, traveling between Alaska and southern Argentina, a distance of 7,000 miles.



Five anxious youngsters await an incoming food delivery from one of their parents. Barn swallows build nests out of mud and grasses, plastering them to a rough surface in a sheltered location, which may include barns and sheds.

Interestingly, some barn swallows have been known to also breed on the wintering grounds, making them a rarity in the avian world.

Nesting

Barn swallows nest singly or sometimes in small colonies in rural and suburban settings. Traditionally nesting in caves and on rock outcrops or cliffs, today barn swallows more frequently nest alongside humans. They build a cup-shaped nest out of mud and grass, usually plastering it to a sheltered part of a building, such as under eaves, inside open barns, or under a bridge. Barn swallows can sometimes be seen at mudholes in the spring, as they gather bill-sized globs of mud for nest building. Females lay four to five white eggs speckled with brown. Incubation lasts 13 to 17 days, and young birds fledge at 18 to 23 days after hatching.

Conservation

Contrary to popular belief, barn swallows, not egrets, have the distinction of being the first birds whose slaughter for the millinery trade led to the fledgling beginnings of the avian conservation movement in the United States. In 1886, naturalist George Bird Grinell published an editorial in *Forest and Stream* magazine that protested the killing of barn swallows for hat decorations and led to the founding of the first Audubon Society.

Barn swallows have long been recognized as beneficial to humans. Their close association with people and their structures goes back for thousands of years in Europe, where legends involving barn swallows have developed. For instance, having the birds nest on your property is considered a harbinger of good luck. If any harm befalls barn swallows on your farm, it was told your cows will give bloody milk or go dry. Another myth has it that the barn swallow had its central tail feathers burned away when it stole fire from the gods and an angry demon hurled a fireball at it.

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

Freshwater Mussels Sentinels of Our Rivers

Written by Snehal Mhatre, DEEP Wildlife Division

he names pimpleback, heelsplitter, fatmucket, pigtoe, monkeyface, elephant ear, wartyback, and snuffbox sound like magical zoological characters from movies like the "Fantastic Beasts" or "Pan's Labyrinth". However, they are common names of some of the most endangered animals in North America - freshwater mussels. Sometimes referred to as "freshwater clams" or "living rocks", freshwater mussels play an important ecological role in freshwater systems, filtering

bacteria and detritus from surface waters and acting as bio-sentinels (living indicators of water quality). North American rivers once supported around 300 species of native freshwater mussels. However, over the past two centuries, the shell trade and habitat manipulation and fragmentation, as well as declines in water quality, have left many of these amazing mollusks on the brink of extinction. Connecticut is home to 12 species, and six are protected by Connecticut's

Endangered Species Act.

While mussels may lack the charisma of polar bears or tigers, they have some of the most marvelous anatomical adaptations of the animal world. Mussels have a unique life cycle which involves symbiosis with specific fish species (host fish). Freshwater mussels are sedentary animals. They have limited ability to move around, so they have devised some crafty ways to disperse their offspring. Female mussels release tiny larvae called glochidia to attach to the gills or fins of host fish for a few weeks. While attached to the host fish, they hitch a ride up or downstream, develop into juvenile mussels, and finally drop off to live the rest of their lives filtering water on the stream bottom. Fe-

male mussels have evolved a variety of attractants and behaviors to lure host fishes close enough so that their glochidia can be released onto the fish. Some mussel species have special flaps on their mantle (fleshy wall that encases internal organs) that, when protruded out of the mussel's shell, resembles a small fish (Fig. 1) or crayfish (Fig. 2.) to lure in fish. Some mussel species concentrate their glochidia into packets that superficially look like a small aquatic insects to attract predaceous fish like largemouth bass (Fig. 3). Finally, there are species that will snap shut on the snout of a host fish, keeping the fish close to release glochidia onto it (Fig. 4). All of these varied behaviors and anatomical adaptations make these boring-looking animals evolutionary splendors.

The presence of suitable host fish and good quality stream habitat are important for the widespread, continual distribution of Connecticut's freshwater mussels. For example, the alewife floater is being considered for listing under Connecticut's Endangered Species Act due to the limited distribution of its host fish, the alewife (Fig. 5). The alewife is an anadromous fish which is born in fresh water and spends most of its life in the sea only to return annually to freshwater rivers to spawn. The passage of alewife within freshwater streams is disrupted by the presence of dams and has likely caused localized extinctions of the alewife floater throughout the state in the past. Dams act as direct barriers to fish movements and prevent mussel dispersal within streams and rivers. Connecticut has a dense network of 4,000 big



a small fish similar to a shiner. Fig. 2: (Bottom) The mantle resembles a crayfish to attract fish such as bass and sunfish.

Fig. 3: (Left) These glochidia (mussel larvae) packets have evolved to look like aquatic insect larvae. Fig. 4: (Right) A snuffbox mussel (Epioblasma triquetra) clamped on the head of a logperch.

and small dams across the state. Many are mill and pond dams, small concrete and stone barriers holding back a large pool of water. These impoundments are susceptible to periods of droughts and floods, likely to be further exacerbated by climate change, causing mussel dieoffs. DEEP actively works with federal

and private conservation partners to restore critical fish passage and enhance aquatic connectivity through the removal of remnant dams, as well as installation of fish passages which help re-establish freshwater mussel populations upstream of the dams. The survival of Connecticut's freshwater mussel species depends

on protecting critical freshwater habitats from degradation and encouraging responsible water and land use management and planning. On your next river excursion, look for these "living rocks" and be mindful of the essential role they play in keeping rivers clean and healthy.





Slight Decline in 2018 Wild Turkey Season Harvests

Written by Michael Gregonis, DEEP Wildlife Division; photography by Paul Fusco, DEEP Wildlife Division

The 2018 wild turkey hunting season harvest totals (all seasons) declined by four percent from 2017 (1,685 versus 1,761). Both the spring and fall archery harvests showed a five percent decline, whereas the fall firearms harvest reported an 18% increase. The spring season is the most popular with the highest hunter participation and harvest.

2018 Spring Turkey Season

The start of the 2018 spring wild turkey hunting season can best be described as wet. The first two days of the season experienced such poor weather conditions that hunter participation was probably low, resulting in limited harvest on these critical days. Despite inclement weather initially, wild turkeys came to hunters' calls and were tabulated in Connecticut's 37th annual spring wild turkey season.

The 2018 spring season was open



Connecticut's spring wild turkey season harvest, 1981 - 2018.



statewide from April 25 to May 26, and 1,504 turkeys were harvested. Seventynine percent of the harvest occurred on private land, while 21% of the harvest occurred on state land. It is not surprising that the majority of birds are harvested on private land, as this land type has excellent habitat and may have more experienced hunters. However, the state land harvest is impressive when considering that less than 10% of Connecticut's total landownership is in public hands.

At least one turkey was harvested from 143 of

Connecticut's 169 towns, with Woodstock (48) and Ashford (34) reporting the highest harvests. The harvest was comprised of 1,137 adult males, 361 juvenile males, and six bearded hens. (Note: research has shown up to one in 10 hens have beards.) Multiple birds were harvest by 391 individual hunters.

In an effort to provide a quality turkey hunting experience for Connecticut's junior hunters (ages 12 to 15 years), the 14th annual Junior Turkey Hunter Training Days took place from Saturday, April 14 through Saturday, April 21. Junior hunters harvested 40 birds, and the training days were well-received by both youths and mentors.

2018 Fall Firearms Turkey Season

The fall firearms turkey season began on the first Saturday in October (Oct. 6) and ran until October 31. This season is less popular than the spring season because hunters have to choose between hunting archery deer, waterfowl, small game, and/or wild turkeys. Despite the many opportunities this time of year, a core group of turkey hunters enjoys the challenges posed by the fall firearms turkey season. During the 22nd fall firearms season, hunters harvested 66 birds from 38 towns, with Woodstock (7) reporting the highest harvest. Unlike spring, both male and female turkeys are legal for harvest. The 2018 harvest included 24 adult males, 18 juvenile males, 15 adult females, and nine juvenile females. Eighteen hunters harvested multiple birds. The small increase in the fall firearms harvest may be attributed to a scarcity of acorns. A lack of acorns re-

Distribution of the 2018 spring turkey harvest in Connecticut.



sults in turkeys spending more time feeding in open fields, increasing their visibility and making them more vulnerable to harvest.

2018 Fall Archery Turkey Season

Connecticut's 35th fall archery turkey season was open statewide and ran concurrently with the archery deer hunting season, which ran from January 1 - 31 in Deer and Turkey Management Zones 11 and 12 and September 15 – December 31 in all Zones. Most fall archers are deer hunters who hope to encounter a turkey while afield. Due to the limited range of archery equipment and the acute eyesight and hearing attributed to wild turkeys, the archery harvest is limited. During the 2018 season, archers reported harvesting 115 birds from 65 towns. The highest harvest towns were East Haddam (6), Granby (4), Scotland (4), and Thompson (4). Seventy-three of the 115 birds were males (45 adults, 28 juveniles) and 42 were females (29 adults, 13 juveniles).

A more detailed report of the 2018 turkey hunting seasons can be found in the 2018 Connecticut Wild Turkey Program Report, which is on the DEEP website at www.ct.gov/deep/hunting.



FROM THE FIELD



If You Care, Leave It There!

Every year, the lives of many wild animals are disturbed by people who take young animals from the wild in a well-intentioned attempt to "save" them. These well-meant acts of kindness have the opposite effect. Young animals may appear to be "abandoned" but an adult is likely close by, waiting for you to leave. The best thing you can do for young wildlife is to leave them alone.

If you are absolutely certain a wild animal has been injured or orphaned, before touching it or moving it, contact the DEEP Wildlife Division at 860-424-3011 (weekdays, 8:30 AM-4:30 PM) or DEEP's Emergency Dispatch Center at 860-424-3333 (after hours or on weekends). You can also find a DEEP-authorized wildlife rehabilitator at *www.ct.gov/deep/wildlifeproblems*.

To protect vulnerable young wildlife, people are urged to keep cats indoors and dogs on leashes. Countless numbers of rabbits, squirrels, birds, snakes, and other wildlife fall victim to pets every year.

Wildlife Encounters – What to Do

Many wildlife species, such as squirrels, raccoons, and bats, will use houses or other buildings for shelter and as a place for raising young. The DEEP website provides information on how to handle problems with wildlife (*www.ct.gov/deep/ wildlifeproblems*). A licensed Nuisance Wildlife Control Operator can be hired if professional assistance is needed for solving common nuisance wildlife problems. Those who need additional help and advice concerning nuisance wildlife, particularly with species not covered on the DEEP website, should check out *www.wildlifehelp. org* and select "Connecticut" as the state to get started. The WildlifeHelp.org website is supported by the Northeast Association of Fish and Wildlife Agencies and the Northeast Wildlife Damage Management Cooperative.

April is Invasive Plant Pest and Disease Awareness Month

The U.S. Department of Agriculture has proclaimed April to be Invasive Plant Pest and Disease Awareness Month. Invasive pests and diseases can devastate crops and forests, throw ecosystems out of balance, and lead to lost jobs and closed export markets.

What are invasive species? They are plants, animals, or microorganisms that are not native, and their existence in the ecosystem causes or is likely to cause harm to the economy, environment, or human health. If left unchecked, invasive species can threaten native species, ecosystem services, recreation, and property values.

By the Numbers

- \$120 billion in damages caused by invasive species in the U.S. and 81 million acres of public and private lands at risk from insects and disease.
- 42 percent of threatened or endangered species are expected to be displaced by invasive species.

What You Can Do

- Avoid planting invasive plants on your property.
- Learn how to control invasive plants and what tools to use to properly remove them.
- Report invasive plant infestations to the Connecticut Invasive Plant Working Group (*info@cipwg.org*).
- Do not dump houseplants in the wild or aquariums in water, such as lakes, streams, rivers, or ponds.
- Learn about invasive species in Connecticut at www.ct.gov/deep/ invasivespecies.
- Clean off your clothes, boat, animals, and gear after recreating to prevent the spread of invasive species to other areas.
- Do not collect invasive plants, their seeds, or reproductive bodies.
- Do not carry firewood long distances. Burn it where you buy it!

Adapted from https://www.fs.fed.us/science-technology/invasive-species-pests-disease.

World Migratory Bird Day – May 11

The 2019 World Migratory Bird Day (WMBD 2019) will be celebrated in North America on May 11 and the theme is "Protect Birds: Be the Solution to Plastic Pollution". The accumulation of plastic and plastic pollution have become a worldwide epidemic and a primary threat to birds across the globe. An estimated 8.3 billion metric tons of plastic have been produced since its introduction in the 1950s. Only a small portion of plastic waste has been recycled, leaving the vast majority to accumulate in landfills or the natural environment. Most of these plastics exist indefinitely, fragmenting into smaller and smaller pieces over time. As exposure to plastics increases, birds and their environments are facing increasingly detrimental consequences.

Twelve focal bird species have been selected for WMBD 2019, representing diverse groups of birds, the habitats they use, and their foraging behaviors. The birds are belted kingfisher, black skimmer, Chilean flamingo, common tern, killdeer, lesser scaup, Magellanic penguin, mural, northern fulmar, osprey, prothonotary warbler, and tricolored heron. Despite their differences, each of these birds and their habitats have been impacted by plastic pollution. Reducing the use of plastic and cleaning up the waste that is currently contaminating our natural environments is essential to migratory bird conservation.

By making changes individually and within our communities, we can make a difference in the fight against plastic pollution! WMBD invites you to participate as a host site by using the theme to introduce your communities to the impacts of plastic on bird populations and the importance of adopting an eco-friendly lifestyle. Involvement in habitat restoration activities, such as trash cleanups, are encouraged to improve the local environment and motivate participants to continue efforts that contribute to a plastic-free world.

Learn more about World Migratory Bird Day at *http://www.birdday.org* and a new website at *https://www.migratorybirdday.org*.



Yellow warblers begin to arrive in Connecticut by the end of April. Breeding territories are claimed in May, and nesting begins by the end of May.



Always Be Bear Aware

With the arrival of spring, black bears are leaving their winter dens and Connecticut residents are reminded to take steps to reduce encounters and potential conflicts with bears. These steps are increasingly important because the state's bear population continues to grow and expand, and bear activity increases in early spring. Reports of bear sightings, even in heavily populated residential areas, continue to be on the rise. The Wildlife Division also continues to see an increase in the number of reported problems with black bears. **The primary contributing factor to bear nuisance problems is the presence of easily-accessible food sources near homes and businesses.** Fed bears can become habituated and lose their fear of humans. Bears should NEVER be fed, either intentionally or accidentally. Bears are attracted to garbage, pet food, compost piles, fruit trees, and birdfeeders.

Take the following simple steps to avoid conflicts and problems with black bears:

- Remove birdfeeders and bird food from late March through November.
- Eliminate food attractants by placing garbage cans inside a garage or shed. Add ammonia to trash to make it unpalatable.
- Clean and store grills in a garage or shed after use. (Propane cylinders should be stored outside.)
- Do not intentionally feed bears. Bears that become accustomed to finding food near your home may become "problem" bears.
- Do not approach or try to get closer to a bear to get a photo or video.
- Do not leave pet food outside overnight.
- Do not add meat or sweets to a compost pile.

More information and frequently asked questions about bears can be found on the DEEP website at *www.ct.gov/deep/blackbear*.

Bat Appreciation Day at Old New-Gate Prison and Copper Mine

Written by Patrick Bailey, DEEP Wildlife Division

Id New-Gate Prison and Copper Mine in East Granby hosted the second annual "BatAppreciation Day" on September 8, 2018. This was a collaborative effort between the Connecticut Department of Economic and Community Development (DECD) and DEEP Wildlife Division. The event was even more successful than the 2017 Bat Appreciation Day with over 240 attendees.

Visitors learned about bat ecology, habitat needs, and conservation challenges, as well as the role the Wildlife Division plays in monitoring Connecticut's bat populations. More adventurous souls also had the opportunity to descend into the entrance of the former mine where bats hibernate over winter. There were many activ-



The historical Guard House at the Old New-Gate Prison and Copper Mine in East Granby. The site operated as a prison from 1773 to 1827 and could accommodate more than 100 prisoners in its caverns at any one time.



The area that would become the Old New-Gate Prison and Copper Mine was still part of the town of Simsbury in 1705, when it was designated for mining copper ore. This view shows the underground chambers of the copper mine.

ities for young budding biologists as well, including bat-themed arts and crafts, a "five senses" hike that focused on native Connecticut wildlife, and readings from bat-related children's books, such as *Stellaluna*.

Old New-Gate Prison and Copper Mine is both a national historic landmark and a state archaeological preserve. The museum was closed for renovations from 2009 through 2017, reopening to the public in July 2018. The museum offers much to learn about Connecticut's cultural heritage, but what many may not realize is that the mine also serves as an important hibernation



(Above) Aerial view of the Old New-Gate State Archeological Preserve in East Granby. It was designated a National Historic Landmark by the National Park Service in 1973. PHOTO: CAPTURE, LLC

(Right) Jonathan imagining what it is like to be a bat! PHOTO COURTESY C. KOCER

site for over-wintering cave bats. The link between wildlife and culture is why the partnership between DECD and DEEP makes so much sense. In the words of the museum's Director of Operations, Liz Shapiro, "We are essentially in the same business – preserving our cultural and natural heritage." Now, with the facility open and staffed by Museum Assistant Morgan Bengel, plans are already underway for Bat Appreciation Day 2019.

"Old New-Gate has a long, complex history, but the story did not stop when the prison closed," says Bengel. "Working with DEEP Wildlife Division biologists, we are making an effort to incorporate wildlife conservation into our interpretation and keep Old New-Gate focused on the present as well as the past."

Unfortunately, cave bats that hibernate in the copper mine have suffered steep

population declines due to the fungal disease known as white-nose syndrome (WNS). WNS has had devastating impacts on bat populations throughout the United States and Canada, with millions of bats perishing as a result. The infection appears as a white growth on the snout and wing membranes of infected bats. It interferes with hibernation physiology, causing bats to awaken frequently during winter. These arousals come at the cost of vital fat reserves and, ultimately, lead to starvation. WNS does not affect humans and is spread primarily from bat to bat, but it can also be transmitted unknowingly by people who visit caves and mines. In order to prevent human-facilitated transmission of the disease, visitors are required to decontaminate their footwear after taking the underground tour at Old New-Gate.

In addition to Bat Appreciation Day



2019, other interesting events are scheduled throughout the year at Old New-Gate Prison and Copper Mine. So, if you are looking for an enjoyable way to spend a day, do not miss an opportunity to learn about this fascinating site and its residents – both past and present. For more information, go to https://portal.ct.gov/ DECD/Content/Historic-Preservation/04_State_Museums/Old-Newgate-Prison-and-Copper-Mine.

Avon Girl Scout Earns Gold Award with Bat Education Project

Written by Kate Moran, Bureau of Natural Resources

eet Brynna Morris of Avon, Connecticut, recipient of the prestigious Girl Scout Gold Award. This award is the highest honor given in Girl Scouts, one that only five percent of eligible candidates are awarded. "It's not a one-and-done kind of thing," says Brynna. Gold Award candidates are required to implement a multi-year project that makes a lasting, positive change in the world. Brynna has a bit of history with the DEEP Wildlife Division. Her Silver Award was for a "Bear Aware" project that she and three other scouts completed in 2016. This project and her growing interest in public attitudes toward wildlife set the stage for her current Gold Award project - educating Connecticut residents about bats. Wildlife Division staff provided guidance and technical advice as Brynna developed and implemented her ideas. Her final project report was approved in late 2018, and she will be participating in the Statewide Gold Expo on June 2, 2019.

If educating the public about bats was her focus, Brynna first had to determine whether there was a need in the community. To accomplish this, Brynna developed a survey to gauge the public's baseline knowledge of bats. What better

place to implement the survey than at the first Bat Appreciation Day held in 2017 at Old New-Gate Prison and Copper Mine in East Granby. As Brynna greeted visitors, she asked them to participate in her survey, which consisted of questions about bat ecology, biology, and conservation needs. After analyzing the survey data, Brynna found that many of the respondents had limited knowledge and a few misconceptions about bats. Survey respondents also expressed a desire to learn more about bats. Armed with these results, Brynna prepared her project proposal and justification, emphasizing the community's need and desire to learn about bats, as well as the methods she would use to fulfill that need.

In order to fund such an ambitious project, Brynna submitted a

grant proposal to "The Unlikelies Challenge" founded by Carrie Firestone, author of teen novels, The Unlikelies and The Loose Ends List. Out of 209 entries, Brynna's proposal was one of six to receive the \$1,000 award, along with the responsibility to implement a unique community service project. With resources in hand, Brynna spent the following summer designing and handcrafting a "Bat Trivia" exhibit. This hands-on, interactive, and ar-



Brynna Morris, 2018 Girl Scout Gold Award Recipient

tistic exhibit addresses many of the misconceptions people have about bats by dispelling myths and featuring interesting facts about Connecticut's native bat species. It will remain a permanent installation at Old New-Gate Prison and Copper Mine for years to come.



Brynna also assembled a bat education toolkit that can be loaned to educators to use in their classrooms. The kit contains educational resources, such as books, photos, puppets, and a PowerPoint presentation about Connecticut's bats. Educators can borrow the kit by contacting the Wildlife Division at laura. rogers-castro@ct.gov. The Bat Trivia exhibit and bat educational toolkit were unveiled during Bat Appreciation Day 2018, and will continue to be used in the future to promote bat conservation and education in the community. Brynna Morris has a passion for making the world a better place, and is an inspiration to young and old alike. There is no doubt that her efforts will have a positive impact on public attitudes and bat conservation well into the future.

Subscription Order Please make checks payable to: Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013		
I Year (\$8.00) 2 Years (\$15.00) 3 Years (\$20.00) Name:	Check one: Renewal New Subscription Gift Subscription	Donation to the Wildlife Fund: \$ Help fund projects that benefit songbirds, threatened and endangered species, reptiles, amphibians, bats, and other wildlife species.

Will only be used for subscription purposes

Order on-line with a credit card through the DEEP Store at: www.ct.gov/deep/WildlifeMagazine

Mid-April - August....Share the shore! Respect fenced and posted shorebird and waterbird nesting areas when visiting the Connecticut coastline. Also, keep dogs and cats off of shoreline beaches to avoid disturbing nesting birds.

May 11......World Migratory Bird Day (see page 19 for more information or go to https://www.migratorybirdday.org/)

Programs at the Sessions Woods Conservation Education Center

Programs are a cooperative venture between the Wildlife Division and the Friends of Sessions Woods. A complete list of programs can be found at www.ct.gov/deep/SessionsWoods. Please register by sending an email to **laura.rogers-castro@ct.gov** or calling 860-424-3011 (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.

April 28Venomous Reptiles with Rainforest Reptiles, starting at 12:30 PM with a Dessert Extravaganza Potluck, as part of the Friends of Sessions Woods 2019 Annual Meeting. Please bring a dessert to share. At 1:00 p.m., there will be a brief, 10-minute business meeting before the featured program, "Venomous Reptiles", presented by herpetologists with Rainforest Reptiles, the leading animal presenter in the northeastern United States. The program will also include information on the harmful effects of releasing non-native reptiles into the wild. The free presentation is suitable for all ages. This program is made possible through the Friends of Sessions Woods Paul Petersen Educational Fund.

May 4.....Sessions Woods Hike, starting at 10:00 AM. Join Friends of Sessions Woods Board of Director Jan Gatzuras for a five-mile hike at Sessions Woods. This moderately difficult hike passes through pretty woodland forests and the Great Wall, a steep rocky escarpment nearly 70 feet high. Please meet at the kiosk in the Sessions Woods parking lot and wear sturdy hiking shoes. Participants should also bring water and a snack for this approximately three-hour hike. Registration is not necessary but recommended in case of a cancellation due to severe weather.

2019 Hunting and Fishing Season Dates

April 13-20Junior Spring Turkey Hunter Training Days (excluding Sunday). More details are at www.ct.gov/deep/JuniorHunter.

- April 24-May 25 Spring Turkey Hunting Season
- May 11..... Free Fishing Day -- no license required.
- June 16.....Free Fishing License Day #1. Statewide free fishing licenses for this special day are available at www.ct.gov/deep/ sportsmenlicensing.
- August 11Free Fishing License Day #2. Statewide free fishing licenses for this special day are available at www.ct.gov/deep/ sportsmenlicensing.

Consult the 2019 Connecticut Hunting and Trapping Guide and 2019 Connecticut Fishing Guide for specific season dates and details. Guides are available at DEEP facilities, town halls, and outdoor equipment stores, and also on the DEEP website (www.ct.gov/deep/hunting; www.ct.gov/ deep/fishing). Go to www.ct.gov/deep/sportsmenlicensing to purchase Connecticut hunting, trapping, and fishing licenses, as well as required permits and stamps. The system accepts payment by VISA or MasterCard.

Sign up to receive *Wildlife Highlights*, a free, electronic newsletter for anyone interested in Connecticut's wildlife and the outdoors! *www.ct.gov/deep/WildlifeHighlights*



www.facebook.com/CTFishandWildlife



PERIODICALS POSTAGE PAID AT BURLINGTON, CT, AND ADDITIONAL OFFICES

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



A band of early morning gobblers works its way through a Connecticut field.