

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

> ©PAUL J. FUSCO All Rights Reserved

Eye on the Wild

The current issue of Connecticut Wildlife is all about things "new" – areas to fish along the Connecticut River that may provide new opportunities to fish for new species; new size limits to provide enhanced opportunities for shore anglers; new land acquisitions; new advanced hunter education seminars and clinics; and even a new take on Connecticut Hunting and Fishing Day events. Our magazine itself is preparing to unveil a new look.

Beginning with our September/October issue, you will notice some changes to Connecticut Wildlife. Look for a transformation in our covers. We also will be featuring more photos of the natural resources you love and more ways to convey conservation information graphically. Some features will be incorporated to make the magazine easier to read, which may not be readily apparent but should increase your ability to explore all our fascinating articles in depth. We are considering the addition of some new feature sections that will provide more suggestions on everything from wildlife viewing to backyard habitat enhancements.

As we transition toward a new and improved version of Connecticut Wildlife, we would love to hear from our readers on what you would like to see, what you particularly enjoy, and what you think about our new look as we move forward. It is our goal to help Connecticut Wildlife deliver the information you want; provide updates and information on what is happening with stewardship and conservation of the forestry, fisheries, and wildlife resources that make Connecticut special; and to help you learn more about the amazing world around us.

Please share your ideas and feedback with us by sending an email to deep.ctwildlife@ct.gov or by mail to Connecticut Wildlife Editor, Sessions Woods WMA, P.O. Box 1550, Burlington, CT 06013.

Be sure to also check out our Facebook page (www.Facebook. com/CTFishandWildlife) *and sign up to receive our free monthly electronic newsletter*, Wildlife Highlights (www.ct.gov/deep/ WildlifeHighlights).

Jenny Dickson, Supervising Wildlife Biologist, Outreach Program

Cover:

The once abundant eastern box turtle population has declined in recent years due to habitat fragmentation and road hazards. The box turtle was placed on Connecticut's Endangered Species List as a species of special concern in 1998.

To read more about turtle conservation, turn to page 8. Photo courtesy of Paul J. Fusco



Published bimonthly by Connecticut Department of Energy and Environmental Protection Bureau of Natural Resources Wildlife Division www.ct.gov/deep Commissioner Robert Klee Deputy Commissioner Susan Whalen Chief, Bureau of Natural Resources William Hyatt Director, Wildlife Division Rick Jacobson

Magazine Staff

Managing Editor Kathy Herz Production Editor Paul Fusco Contributing Editors: Mike Beauchene (Fisheries) Deb Pacileo (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 Opportanity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact us at 860-418-5910 or <u>deepaccommodations@ct.gov</u> 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 Tile VI discrimination complaint.

Copyright 2017 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>. ctwildlife@ct.gov or 860-424-3011).

Printed on recycled paper

Another Successful Year of Canada Goose Banding

Article by Min Huang, DEEP Wildlife Division

The Wildlife Division annually attaches leg bands to resident Canada geese across the state. Canada geese and other harvested species of migratory birds (e.g. mallards, wood ducks) are banded to help assess important vital rates, such as survival, and also obtain information on movement patterns. Banding data, used in conjunction with other data, like estimates of population size, can provide insight into whether current hunting pressure is compensatory or additive. Annual goose banding and subsequent data analysis have enabled Wildlife Division biologists to firmly understand the population dynamics of Connecticut's resident goose population and also develop programs to address nuisance and potential health issues caused by an overabundant population.

Division biologists rely heavily on the assistance of volunteers during the two weeks spent catching geese every June. In the absence of the great volunteer effort, we would not be able to accomplish this task. For many of the volunteers, goose banding is an activity they look forward to every year, and for Division biologists, it is a gathering of old friends. We often comment that volunteers who participate in goose banding either come along once and are never seen again, or they are hooked and we enjoy their company and assistance every year. We have had the pleasure of watching a number of youngsters mature from pre-teenagers to fantastic young adults over the past 16 years of goose banding, as well as seeing more gray hairs and maybe some expanding waistlines!

Geese are captured and banded at three to six sites per county across the state. This provides a representative sample of the state's entire population. They are caught during the annual flightless molt period. Geese, like all other waterfowl, shed their flight feathers all at once and are rendered flightless for the time it takes to regrow the feathers. In the case of Canada geese, it takes about four weeks. Flightless geese are herded with small boats or on land by people into a portable net that is constructed and taken down at each banding site. Once in the net, geese are aged, sexed, and fitted with an aluminum leg band with distinct letters and numbers. From time to time (every four years or so), highly observable

July/August 2017



Wildlife Division staff and volunteers herd molting, flightless geese into a portable net so that the geese can be aged, sexed, and fitted with aluminum leg bands.

coded, yellow neck collars are placed on some adult geese. These collars give biologists the ability to develop independent population estimates (independent from the annual breeding survey) and also develop a better understanding of movement patterns. Information from leg-banded birds is only obtained through recaptures or if the band is found on a bird and then reported to the USGS Bird Banding Lab (usually meaning that the bird is dead). Sightings of geese with collars provide information on live birds and typically involve more than one sighting.

In 2017, a total of 2,058 geese were captured at 40 sites across the state. Of those geese, 857 were already banded and 285 were marked with neck collars. The highest percentage of banded to unbanded birds typically occurs in the urban counties (Fairfield, Hartford, New Haven, and New London) where hunting pressure is slight. This was the case in 2017.

Citizen Scientists Report Sightings of Neck-collared Geese

In August, the Wildlife Division conducted an independent population estimate of the state's resident Canada goose population. This study is done every three to four years. Although the **Division conducts annual breeding** surveys, it is beneficial to occasionally estimate the population through a different means to get a feel for productivity and also help validate the spring survey.

The Division sent out a request to staff and volunteers, and through our Facebook page and monthly electronic newsletter, Wildlife Highlights, for people to report any geese seen with yellow neck collars during the week of August 20-26, 2017. The information requested included flock size, location, date observed, number of collared birds in the flock, and individual codes of those collars (if possible to read).



Wildlife Division Conducts Clapper Rail Nest Success Study

Written by Min Huang, DEEP Wildlife Division

lapper rails, like many of the saltmarsh obligate bird species, are declining across their range. It is estimated that clappers are declining at annual rates of between seven to 10 percent. It is imperative to determine what is causing the decline. Adult survival rates of this migratory species may be one cause. Another may be lowered nesting success due to sea level rise and increasing predation.

Previously, the Wildlife Division conducted a nesting study on Connecticut's coast to assess nesting success of rails. Targeted surveys and nest success work were conducted at seven coastal sites in 2012: Great Harbor Wildlife Management



In 2016, the Wildlife Division initiated a study to assess clapper rail nesting success and adult survival. This bird is declining across its range.

Area (WMA), East River WMA, Great Island WMA, Barn Island WMA, Upper Island, Black Hall River Marsh, and Hammock River Marsh. Clapper rails



A radio transmitter with harness is deployed on the back of a clapper rail, allowing biologists to locate this secretive bird in the marsh.

were detected at all sites and Virginia rails at all sites except for East River and Great Island WMAs. Six clapper rail nests and six Virginia rail nests were found and monitored. Hatching success was 33% for clapper rails and 50% for Virginia rails.

Unlike beach nesting species, such as piping plovers and least terns, clapper rails appear to be less prone to losing nests to flooding. They also seem to be less prone to flooding than other marsh nesting species, such as saltmarsh sparrows. Rail nests were found in clumps of smooth cordgrass (*Spartina alterniflora*) or, less often, in clumps of saltmeadow cordgrass (Spartina patens), typically within 15 feet of tidal creeks. Most of the failed nests were due to predation, not flooding. However, flooding was a factor in nest failure at Great Island and Great Harbor WMAs. As sea levels continue to rise, it is likely that in the absence of extensive marsh migration, rail nesting success will decline as higher mean tides flood more nests.

In 2016, the Wildlife Division initiated a study to assess clapper rail nesting success and adult survival. Nanotag technology is being used to estimate annual survival rates of adults, and the fate of clapper rail nests is being monitored to estimate nesting success rates. Nanotags are small, individuallycoded transmitters which emit a specific frequency. These tags are picked up by antenna arrays that are set up all along the Atlantic Coast and parts of Canada. Seven such arrays exist along Connecticut's coastline which were erected by CT DEEP, UConn, and the U.S. Fish and Wildlife Service. Over 30 different wildlife species are now being tagged with these types of transmitters. P. J. FUSC

Callback surveys were used to locate rails in two marshes chosen as study sites, East River WMA and Hammonasset Beach State Park. These surveys were not intended to index populations but rather to locate birds so as to better direct nest searching efforts. Survey locations at each site were determined through Google Earth. Ideal nesting habitat was considered to be the margin between smooth and saltmeadow cordgrasses.

Nest searches were conducted using information collected during callback surveys. Bearings taken during surveys were drawn in Google Earth and each triangulation point was investigated. In areas with only one bearing, any ditch that was crossed was carefully searched, and any areas of smooth cordgrass were also investigated. While searching, tracks were kept on GPS to ensure that designated areas were reached and covered completely.

Upon finding a nest, coordinates were obtained and blue or red flags were placed five paces on a cardinal heading from the nest. Nests that had been flooded, predated, or fledged were marked immediately nearby to aid



A rare sight to see – a successful clapper rail nest in the process of hatching out.

in quick relocation if future visits were required.

In 2016, 18 clapper rail nests were found and monitored; nine each at East River WMA and Hammonasset Beach State Park. The daily survival rate was estimated for all nests. At East River WMA, the daily survival rate was 98.4% and overall nesting success was 72%. At Hammonasset Beach State Park, the estimated daily survival rate was 97.5% and overall nesting success was 59%. The pooled estimate for the daily survival rate was 98%. Overall nesting success was estimated at 65.4%. This estimate is much higher than the 33% nesting success estimated in 2010. The sample size in 2016 was three times greater than in 2010. In 2017, researchers found 29 nests to date. Nesting in 2017 seemed to be much more prolonged than in 2016, with active nests still being found into early July.

This study, once completed, will enable the Wildlife Division to better devise management actions which can help reverse the current population trend for clapper rails, and potentially the entire suite of saltmarsh nesting birds.



Clapper rails stay hidden in marsh vegetation or remain along the edge between marshes and mudflats while searching for their food consisting of crabs, crustaceans, fish, and plants.

Partners in Action Working Together

The Atlantic Coast Joint Venture (ACJV) is a partnership to restore and sustain native bird populations and habitats throughout the ACJV region, which spans the 17 states and territories from Maine to Puerto Rico. The list of birds and habitats in need is long. Addressing the many conservation needs in the region while also making a real difference on the ground can be challenging. To address this challenge, the ACJV has chosen to apply its collective energies to a small but strategic set of conservation priorities.

The ACJV, with help from a vast network of partners, selected species and habitats that represent the full geography of the partnership and have a high degree of conservation need, including those where the Joint Venture partnership can provide the greatest added value. The decision was made to focus ACJV efforts primarily on coastal marsh habitat, with a subset of flagship species (saltmarsh sparrow, black rail, and American black duck) chosen to represent that habitat. Coastal marshes are one of the most imperiled habitats along the Atlantic Coast, impacted by sea level rise and coastal development. They span the entire geography of the Joint Venture, making the ACJV uniquely responsible for their conservation. Threats to this habitat are high and difficult to address; as a result, a whole suite of tidal marsh birds are in decline and some are facing extinction in our lifetimes.

Advancing Black Rail Conservation Along the Atlantic Coast

The black rail is a highly secretive marsh bird believed by researchers to be one of the most endangered birds along the Atlantic Coast. The species once occupied coastal areas from Texas to Massachusetts but has experienced steep annual declines across their breeding range since the 1990s. Conservative estimates of black rail populations suggest that only 455 to 1,315 breeding pairs remain – a rangewide decline of more than 90%! The population has declined to the point where black rails no longer occur in Connecticut, but our state is still important to efforts to advance conservation of black rails along the Atlantic Coast.

Little is known about the cause of the population free fall – or how to address it – but sea level rise and coastal development are likely to blame. The species is so secretive and inhabits such inaccessible habitats that it remains one of the least understood species in the ACJV. It is known that black rails have very specific habitat requirements and are generally found in the highest and driest portions of wetland habitats where there is dense overhead vegetation. This high marsh habitat has been highly altered by urban development, marsh ditching and draining, and invasive species, while sea level rise is converting much of it to low marsh or open water.

With trends like this, it is critical to move quickly on the most promising conservation actions. One encouraging opportunity for black rail conservation is the use of managed impoundments. Properly managed impoundments can be nearly four times as likely to attract black rails than natural tidal marshes. These habitats may provide critical refuge for black rails. The Joint Venture is searching for opportunities to test alternative impoundment management strategies and seeking funding to develop a Black Rail Conservation Action Plan; fill data gaps; and create habitat priority maps to help partners focus conservation actions where they matter most.

Information was obtained from the Atlantic Coast Joint Venture website: **acjv.org**.



The Quinetucket – One of CT's Best Kept Fishing Secrets

By Justin Davis and Mike Beauchene, DEEP Fisheries Division

• the Pequots, the Quinetucket (long tidal river), the longest river in New England (410 miles) draining over 11,000 square miles, was integral to their life. Then as now, it is a remarkable resource and home to a diverse abundance of fish and wildlife. The early colonists, realizing the opportunity the long flat river and its rich flood plain could provide, quickly settled on adjacent land - a perfect location for the new start they were seeking.

Over the next 200 years, as the human population along the river expanded, so did their demands. Early on (1790-1800), over-exploitation of salmon, shad, and sturgeon decimated populations of these anadromous fishes. By the 1960s, the river had become so foul that it was nicknamed "America's best landscaped sewer" and became a catalyst for landmark anti-pollution legislation.

Decades later, focused efforts to improve the river have paid significant rewards. Today, the Connecticut River, as we call it, is one of our best-kept secrets. This article highlights some of the more popular fisheries in the freshwater section of the river (north of Essex/Lyme). Each year, the river produces some quality trophy fish and it is highly possible that a new state record fish for several of these species could come out of the Connecticut River.

Northern Pike: The pike fishery is best in spring when fish aggregate to spawn in coves and vegetated backwaters, but jumbo pike can be caught



While many just zoom over bridges crossing the Connecticut River in Hartford, those who cast a line understand the quality fishing she affords.

year-round (including through the ice on coves). When looking for pike, target coves like Keney, Crow Point, Wethersfield, Wrights, Chapman's Pond, Hamburg Cove, or the main channel around Cromwell Meadows and Haddam Meadows in spring. During summer, try around marinas (deeper water and artificial structures) and along weedlines bordering deeper cuts. Big pike like big bait - plastics, plugs, in-line spinners,

and large live golden shiners and fallfish or dead white suckers are favorites.

Catfish (White and Channel): The channel cat fishery is a hidden gem that is underused. There are abundant large fish, which can exceed 15 pounds, throughout the river. Cat-fishing is more productive at night. While active most of the year, these fish are very active in spring and come in to the shallows to feed and spawn in May through early June. Cast-



R. WILLETTE, for DEEP FISHERIES



The Connecticut River supports a diverse fishery from common carp (left) to bowfin (right).

ing a chunk of oily fish like mackerel from shore using a heavy bank sinker is effective. Based on some of our DEEP catfish sampling, the lower part of the Mattabesset River (Middletown) is channel catfish heaven.

Largemouth Bass/Smallmouth Bass: Connecticut River bass follow the same typical patterns (pre-spawn, spawn, summertime, fall movements, etc.) as their lake-dwelling counterparts. With a significant amount of water, habitat, and potential for large bags, the Connecticut River has attracted several national-level professional bass tournaments over the years. Largemouth prefer backwaters, oxbows, and coves.

The best chance of good smallmouth action is the northern section of the river (north of Windsor) where these fish are abundant. Kings Island is a prime location. This part of the river is shallow enough for wading most summers and, as such, is a fun summer fishery. The rocky habitat found in this stretch of the river is perfect for wading and drifting live crayfish or minnows or casting small plastic grubs.

Bowfin: DEEP first observed these prehistoric-looking fish while sampling a small cove on the east side of the river at the Connecticut state line (Raspberry Brook). Bowfin have now extended their occurrence southward through the entire river. To target bowfin, think backwater; the swampier the better. These fish thrive in poorly oxygenated, mucky backwater areas that other fish cannot handle. Top water weedless lures are the way to go (given the areas they live in). While it is now legal to fish for and target bowfin, possession of live bowfin is still illegal.

Common Carp: Pursuing the common carp is truly a world-class fishery as evidenced by the willingness of people to travel from all around the world to fish for these giant minnows. A carp tournament has been held on the Connecticut River for the past two years, drawing international participation. The Connecticut River routinely produces 20- to 30-pound fish pretty much everywhere. Hot carp areas include around Hartford. Salmon River Boat Launch, Haddam Meadows, Middletown, Mattabesset River, and pretty much any state or town park with access to the shoreline. Prebaiting your selected site is a great way to increase success. This is a challenging but very rewarding fishery should you want consistent success.



Access to the Connecticut River can be found at riverside parks and boat ramps located along the entire river, including in Enfield, the Greater Hartford Area, Middletown, Haddam, and Old Saybrook/Old Lyme.

Panfish: This a collective group of fish that is low in the food chain and consists of calico bass (black crappie), vellow perch, white perch, and sunfish. Panfish can be found in large numbers in backwater coves and marinas of the Connecticut River. If you are looking to take fish home for the dinner table, panfish are the best option as they do not accumulate the heavy metals that the larger predatory fish will and taste fantastic (hence the name, "pan"-fish). Jigheads (1/32 oz. to 1/16 oz.) with one- to threeinch plastic grubs are fantastic baits, and you cannot go wrong with small live shiners.

Striped Bass: This is primarily a spring fishery in the freshwater section of the river, as these large predatory marine fish make feeding forays upriver from Long Island Sound. The strength of the fishery in the upper river (north of Hartford) varies by year with flow conditions and the strength of annual shad and herring runs (which are food for large striped bass). The action from Glastonbury/Rocky Hill southward is rather dependable from year to year. While the majority of these fish are in the two to eight pound range, it is not unusual to encounter a fish in the 30 to 50 pound range. The best places to fish during the spring run are where migrating shad and herring congregate to spawn (such as a shallow narrowing of the river and the mouth of some tributaries) and/or fast flowing water. Popular fishing spots

include Kings Island, Windsor Locks Trail, and the lower Farmington River. Similar to pike (go big or go home!), large plastics, plugs, or live bait (hickory shad, menhaden) are the ticket for the big fish. If lots of consistent action is your preference, try smaller plastics, lures, or bait (sandworms are popular) for the "schoolies" (22 to 27 inchers), perfect for the bonus striped bass tags provided by the Fisheries Division.

American Shad: The American shad fishery is a shadow of what it used to be decades ago, but dedicated folks still have a shot at catching one of these "poor man's tarpon." American shad migrate upriver in May. The most popular areas are the Windsor area (Bissel Bridge boat launch) and around the lower Farmington River. Willow leaf spinners and shad darts are perennial favorites.

Many of us only know the Connecticut River by the bridges we drive over on our travels east and west across the state. We encourage you to explore this remarkable resource and take advantage of its fantastic fisheries (some already know what we are talking about!). If you are looking for guidance on how to get in on the great fishing opportunities, there is no better place to get some inside scoop than your local tackle shop. Find a way to spend some time on the shores or the currents of the mighty Ouinetucket - and while you are there, cast a line. You just might discover a golden opportunity that has been hiding in plain sight.

Turtles: Modern Threats to Creatures of Steady Habits

Article by Brian Hess, DEEP Wildlife Division; photography by Paul Fusco, DEEP Wildlife Division

Two turtles travelling down the road hit each other head-on. The police officer responding to the accident found the only eyewitness was a snail. "Can you tell me what happened?" the officer asked. "I'm not sure," replied the snail. "It all happened so fast!"

The idea of a slow turtle may be the punchline of the joke, but in fact, turtles have placed a giant evolutionary bet on the notion that slow and steady will win the race to reproductive success.

While some animals mature quickly and reproduce rapidly, turtles take their time. Many species of turtles take close to a decade before reproducing. Once they reach sexual maturity,



In Connecticut and elsewhere, snapping turtles have a mistaken reputation for decimating game fish and waterfowl populations. Scientific research, however, indicates that this is rarely the case.

females steadily produce eggs year after year for the rest of their lives. Hatchling turtles are vulnerable because of their small size and unhardened shells. They are eaten by skunks, raccoons, foxes, weasels, birds, snakes, and other turtles. But, once they grow bigger and their shell hardens, turtles have few natural predators because their defense is so robust. Adult turtles can live for decades, and some species live for over a century. Female turtles produce so many eggs over that long lifespan, the chances that some will escape predation are high.

Healthy turtle populations have persisted using this slow and steady strategy for 200 million years, and are reliant on two key conditions: **first**, that many adults live long lives with repeated reproduction attempts, and **second**, that they have occasional reproductive success.

That balance is upset when most adults do not survive year to year, or when nests fail year after year. Turtles have outlived the dinosaurs, but human-caused threats, like habitat degradation and overexploitation, imperil the majority of the world's turtle species.

Threats to Adult Survival

Roads: Shells are a good defense against a skunk or raven, but they are no match for a car tire. Over the past century, roads have fragmented many turtle habitats, bisecting marshes, rivers, and woodlands. In late spring and early summer, females travel over land to find suitable nesting spots. As roads sprawl across the countryside, turtle crossings become more frequent. Crossing a road can almost guarantee certain death on high-speed, busy roads. Consequently, a poorly designed road can quickly extirpate a population of turtles.

Turtle crossing signs, barriers, and underpasses can be helpful, but the best solution is to build roads where turtles are

Painted turtles are a welcome sign of spring as they can be seen sunning themselves on logs soon after the ice melts on Connecticut ponds.



July/August 2017

unlikely to be impacted.

Food: Turtles and their eggs have always been easy targets for humans. From the use of Galapagos tortoises to feed sailors to the collection of sea turtle eggs in Central America to the consumption of diamondback terrapins in the eastern United States, turtles are an important human food source in many places around the world. Though turtles are not a large part of the American diet. the United States exports millions of wild caught turtles each year, mostly for food.



Wood turtles are threatened by habitat fragmentation, which exposes turtles to the danger of potentially being killed while crossing roads.

In Connecticut, limited numbers of snapping turtles can be harvested from public waterways with a fishing license and a free snapping turtle endorsement, but the collection of other turtle species is prohibited. No turtle eggs may be collected.

Pet Trade: In the United States, between one and four percent of households has a pet turtle. Many of these turtles are hatched in captivity and purchased legally, but some are collected from the wild, either by a curious amateur naturalist or commercial seller. Illegal collection and overexploitation are serious problems, and a worldwide black market exists for rare and exotic animals. The pet trade has decimated species like the Egyptian tortoise and pancake tortoise. In the northeastern United States, wood turtles, spotted turtles, box turtles, and bog turtles are all potential targets of poaching. When these turtles are removed from the wild, they are functionally dead to their breeding population.

The collection of wild turtles is not allowed in Connecticut. Turtles sold in Connecticut pet stores must have paperwork demonstrating that they were hatched in captivity.

Disease: Generally, turtles do not move far. As a result, their home ranges are quite small and the possibility of spreading dis-

and mortality.

To minimize the threat of spreading disease, biologists and scientific collection permit holders who conduct work in sensitive wetlands are required to sanitize gear and equipment after fieldwork. (Instructions for sanitizing equipment to prevent spreading disease can be found at *www.northeastparc.org/products/pdfs/NEPARC_Pub_2014-02_Disinfection_Protocol.pdf*)

Threats to Occasional Reproductive Success

Subsidized Predator Populations: Many predators of turtle eggs and hatchlings have become habituated to humans. Animals like ravens, rats, raccoons, and skunks have learned that human development can be a source of easy food, water, nesting sites, and shelter. As a result, developed land and nearby natural areas can support many more predators than a pristine habitat. These additional predators can put such a drain on turtle nests and eggs that none hatch. Studies of diamond-back terrapin nests in the marshes around New York City showed nest predation rates nearing 100%.

continued on next page

ease outside that small area is limited. Humans moving contaminated equipment or animals from place to place accelerate this process, spreading diseases to animals that have not encountered that disease strain before. A particular threat to box turtles is ranavirus, which can cause skin lesions, respiratory problems,

Most Turtles Have a Low Reproductive Rate

Species	Female Age at Matur	ity Eggs per Year	Life Span
Box Turtle	~10 years	3-8	50-100 years
Wood Turtle	12-20 years	4-12	40-60+ years
Spotted Turtle	8-10 years	3-4	25-50+ years
Bog Turtle	9-15 years	2-5	~40 years
Painted Turtle	~10 years	5-6 per clutch, 2 clutches per year	20-40 years
Snapping Turtl	e 8-10 years	20-40 eggs	40+ years

Turtles

continued from page 9

Few easy solutions exist for outsized predator populations. Lethal predator control and predator exclusions around nests are not completely effective and can have high costs. A simple step is for people to not feed wildlife, especially on lands near wildlife habitat. Artificial feeding can attract predators.

Habitat Degradation: While bird eggs receive constant attention from the female, turtle eggs receive no parental care. Turtle nests require very specific moisture, temperature, and substrate conditions to be successful. The absence of the correct conditions will prevent eggs from hatching or keep the nest from being laid altogether. Additionally, adults of some species also have narrow habitat requirements which may change

Careful stewardship and conservation action can successfully slow or reduce the declining trend of turtle populations.

throughout the season. Turtles require different but connected habitats throughout the year. In places where pollution, invasive species, and development have degraded or fragmented the habitat, adults may not survive and nests may not be successful.

Removing invasive plants, cleaning pollution sources, and preserving land from development can help keep turtle populations healthy. These actions are especially effective in larger and unfragmented habitats where more robust populations persist.

Turtles in Connecticut

Connecticut has 12 native species of turtles, including four sea turtle species. Nine of these species (including all four sea turtles) are on Connecticut's List of Endangered, Threatened, and Special Concern Species. The diamondback terrapin, wood turtle, spotted turtle, and box turtle are listed as



Turtles lay their eggs in nests dug in the ground. The nests are heavily predated by skunks and raccoons, as seen in this photo.



Crossing a road poses a high risk for turtles.

Commercial Trafficking and the Pet Trade

Over one third of the world's estimated 318 turtle and tortoise species are threatened with extinction due to a combination of habitat loss, the pet trade, and, worst of all, unsustainable commercial trafficking, primarily for food and medicinal markets in Asia. Some Asian species have become so scarce that traffickers are sourcing turtles from other parts of the world, including the United States, to continue providing massive numbers of turtles for their markets.

In 2016, the U.S. Fish and Wildlife Service finalized trade protections for four species of freshwater turtles found in this country, including the common snapping turtle, by having them listed as Appendix III species through the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

CITES is an international agreement signed by more than 180 governments which aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Species are listed under one of three appendices depending on the severity of the threat presented by trade. Listed species may be traded internationally only when accompanied by permits.

Experts fear without strong protections and enforcement that many of the world's turtles and tortoises will become extinct in the next few decades.

In addition to food markets, a growing pet trade in turtles and tortoises is contributing to the devastating impact on wild populations around the world.

Some species are in high demand as pets, including the radiated tortoise (right, above), leopard tortoise (right, below), ploughshare tortoise, and star tortoise.





The spotted turtle is a species of special concern in Connecticut. Individuals may not be collected or removed from the wild.



Since 2015, the diamondback terrapin has been listed as a species of special concern in Connecticut. Further protection is provided by a state regulation that prohibits an open season on terrapins.

species of special concern, and the bog turtle is listed as state endangered. Additionally, the bog turtle is listed as federally threatened and only remains in a few sites in Connecticut. The most common turtles in our state are the painted turtle and snapping turtle.

The DEEP Wildlife Division has recently participated in regional efforts to plan for, inventory, monitor, and conserve diamondback terrapins, bog turtles, and wood turtles.

Turtles are charismatic and popular members of our native ecosystem, but they are under many serious threats, in part because of their slow and steady reproductive strategy. The threats described in this article are by no means an exhaustive list of all problems facing Connecticut's turtles. Our turtles are hanging on, but having healthy populations of turtles in the future will require our care and attention.

Learn More About Turtles

The Wildlife Division has a special webpage on the DEEP website, which was developed in 2011 when we celebrated the Year of the Turtle (*www.ct.gov/deep/YearofTurtle*). The webpage contains a wealth of information on turtles in Connecticut, including links to fact sheets on native turtle species, and so much more.



The common musk turtle is found in low elevation areas in Connecticut. It measures from three to five inches in length.



The bog turtle is an endangered species in Connecticut. Only small and isolated populations exist in the state.

How You Can Help

Drive with care. Watch for turtles crossing roads, especially in late spring. If road conditions are safe for you, move the turtle across the road in the direction it was already heading.

Leave wild turtles in the wild. An animal in captivity is as good as dead to the wild population.

Do not move turtles from place to place, even if you think a turtle would be better off in another habitat nearby.

Moving animals can spread disease between different populations of turtles.

Clean equipment, like waders and buckets, with bleach between locations to avoid spreading disease.

Clean up trash and do not feed wildlife. Trash and extra food can support larger predator populations which put added pressure on turtle nests and hatchlings.

Do not disturb nesting turtles or turtle nests. ©PAUL J. FUSCO

Little Dancer – The Snowy Egret

Article and photography by Paul Fusco, DEEP Wildlife Division

Often putting on a show for onlookers, the snowy egret is energetic and accommodating as it darts about while foraging. But, when another snowy comes too close, a standoff and subsequent battle over feeding territory may ensue. Loud squawks attempt to intimidate as both birds jump, rake, and poke at each other until one gets tired of the action and flies off. These confrontations may last a few minutes or just a few seconds, and may involve many individuals as the birds jockey for position.

The snowy egret is a medium-sized, white wading bird with a long, black bill and black legs with bright yellow feet. Thin, wispy plumes are present on the head, breast, and back. In full breeding plumage, with upwardly curving back plumes waving in the breeze, the snowy egret is a stunningly beautiful sight. It is no wonder that this bird was a primary target for the plume hunters of the mid- to late 1800s and early 1900s.

Range

Snowy egrets have an extensive range. During migration and the breeding season, they can be found across much of the United States south of Canada. Most of the breeding activity in the eastern U.S. is within a narrow band of coastal habitat from New England south to Florida and then west around the Gulf of Mexico to Texas, and up the Mississippi River valley. They also breed in the West Indies, Mexico, and almost all of South America.

Snowy egrets retreat from northern, colder parts of their range for the winter. The overall population is large, and the snowy egret's conservation status, according to Birdlife International, gives the species a red list category of Least Concern on a range-wide level.

Behavior

Snowy egrets frequently use one foot to "rake" vegetation and sediment below the water's surface as a way to get small fish to move from cover, making it easier to catch them. The birds also catch small fish by actively chasing them in shallow water. With wings flapping, an egret sometimes runs, hops, and jumps after fish in an entertainingly elegant ballet.

Flight is light and airy, with more rapid wingbeats than the larger great egret. When roosting, snowys will gather in numbers, often perching in low shrubs or small trees at the edge of a marsh.



A black bill and black legs with bright yellow feet help to identify the snowy egret.

Conservation

Egrets are colonial nesters, breeding in rookeries that may number hundreds of pairs of birds. In Connecticut, snowy egrets nest in thick, shrubby vegetation. To be successful, rookeries must be relatively free from human disturbance and predators, such as raccoons. Suitable conditions exist on several offshore islands near the Connecticut coastline.

The DEEP Wildlife Division, in cooperation with the U.S. Fish and Wildlife Service (USFWS), along with Audubon Connecticut (National) and Connecticut Audubon Society conduct nesting surveys every three years to document the number of egrets and other colonial nesting waterbirds in Connecticut. Recent surveys have shown fluctuations in egret numbers. Survey results are compared and coordinated with surveys from other states to develop trends in egret populations in the Northeast. Because egrets may shift their nesting locations from time to time, regional tallies give the most accurate insight into population trends.

Offshore islands which provide suitable breeding conditions for egrets are few in Connecticut and need to be

> protected on a continuous basis to maintain healthy egret populations. Wetland protection and ongoing restoration projects are helping provide egrets with the productive foraging areas they need to raise their young. Protection efforts undertaken by the Wildlife Division include closing access to vulnerable rookeries and placing educational signage in sensitive areas that may be visited by people.

> Two potential threats to island rookeries are human disturbance and predation. The Wildlife Division and USFWS encourage people to help reduce these threats by staying away from fenced nesting areas and not leaving litter or food scraps behind when visiting coastal areas. Litter and food scraps, including fishing bait, attract predators, which can devastate colonial nesting waterbird rookeries.

If nest depredation or human disturbance become too severe, the birds will abandon their rookery and may not return there to nest the



In full breeding plumage, the snowy egret shows off its beautiful wispy plumes and bight red lores (bare skin between the bill and eyes).

following year. Raccoons have caused abandonment of rookeries in Connecticut in the past. For this reason, it is important to protect potential rookery habitats, as well as those currently in use. If one island becomes unsuitable for successful nesting, the birds need to have an alternate place to go.

Egret numbers in North America were decimated by unsustainable practices of plume hunters to satisfy the millinery trade during the late 19th and early 20th centuries. The snowy egret population has been making a long-term comeback since the passage of legal protection under the Lacey Act (1900) and Migratory Bird Treaty Act (1918). The first documented snowy egret breeding in Connecticut was in 1961. Because of limited breeding locations and vulnerability to population impacts, the snowy egret is listed as a threatened species in Connecticut.



Snowy egrets often have skirmishes over feeding opportunities.





The Plumes Article and photography by Paul Fusco, DEEP Wildlife Division

The word "egret" is derived from the French word "aigrette," which means ornamental plume. Grown during the breeding season, the showy plumes almost led to the demise of both the great and snowy egrets. Thus sparked one of the most significant grassroots conservation initiatives in United States history. The initiative resulted in landmark bird protection laws, the beginnings of the National Wildlife Refuge System, and the formation of the National Audubon Society.

The long plumes of egrets were used in the

millinery trade to decorate such fashionable items as women's hats. Plume hunters killed egrets with breeding plumes at their nests to satisfy the big city markets. Under extreme pressure throughout their range, egret populations plummeted. Snowy egrets suffered heavier losses because the birds were more numerous and their wavy, filamentous plumes were in higher demand than the straight, stiff plumes of the great egret. The demand was so high that at one point, egret plumes were worth more than double their weight in gold. This unregulated market shooting began in the mid-1800s and peaked shortly after 1900, leaving both egret species near extinction in the United States. The plumage vogue took a heavy toll on other bird populations as well. A number of terns, gulls, plovers, shorebirds, and other species also disappeared at a fast rate.

A growing grassroots bird conservation movement came to life in the late 1800s which led to the passage of bird protection laws in many states and the incorporation of many state Audubon societies into a national organization dedicated to the protection of birds. In 1900, the U.S. Congress passed the Lacey Act, prohibiting trade in wildlife, fish, and plants that have been illegally taken, possessed, transported, or sold in violation of any state or U.S. law. This meant that



market hunting.

birds killed in one state could not be transported and sold in another, which essentially shut down

The fledgling National Audubon Society was able to hire wardens to enforce state bird protection laws at many breeding areas. As plume hunting continued, public outrage ensued when an Audubon bird warden was killed by illegal plume hunters in southwest Florida in 1905. President Theodore Roosevelt took notice with a statement of support for the Audubon's

"efforts to stop the sale and use of the plumes from the white herons."

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

After protection was given to egrets and other bird species with the

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



Meadow Brook Wildlife Management Area Expanded

Written by Elaine Hinsch and Laurie Fortin, DEEP Wildlife Division

eadow Brook Wildlife Management Area (WMA) in Colchester grew by 109 acres when DEEP purchased a parcel from Prospect Hill Associates with the help of a Federal Aid in Wildlife Restoration (Pittman-Robertson) grant. The new acquisition is located along the southeast edge of the wildlife management area and shares a 2,656-foot boundary line with the original area. The property provides two additional roadside access points and, with the existing Meadow Brook WMA, a buffer from houses along Prospect Hill Road.

Habitat types found on the 263-acre property are conducive for the management of a variety of game and nongame wildlife species. The southern half of the property consists primarily of upland hardwood forest with maple, oak, and hickory dominating the canopy. The understory in this area is sparse due to nearly complete canopy closure and includes a series of stone walls reminiscent of past agricultural use. A 1.5-acre opening, which is on the southwestern edge, has a mix of herbaceous plants. The property becomes more mesic (balanced supply of moisture) at lower elevations, with a canopy dominated by red maple and an understory primarily consisting of spicebush. Several acres within the northern part of the property contain prime farmland soils and have a dense, shrubby understory. The addition of this property to Meadow Brook WMA will reduce encroachment from development, thus maintaining the various hunting programs and providing more habitat for wildlife.

Meadow Brook WMA is heavily used for a variety of wildlife-based recreational opportunities, including regulated hunting. It has become an important area for pheasant hunting, as well as for small game, waterfowl, spring turkey, fall firearms turkey, and muzzleloader and



Habitat types found on the 263-acre Meadow Brook Wildlife Management Area are conducive for the management of a variety of game and nongame wildlife species.

non-lottery shotgun deer hunting.

The actual Meadow Brook for which the area is named is a 15-foot wide wadable meadow stream that parallels Route 2 and is open year-round for fishing. This gravel stream, which flows into the Jeremy River, has only a light sand and silt load. The stream has a moderately diverse fish community for its size. The waters can be slightly warm for trout and tea-colored with moderate amounts of adult trout cover. (Check the current Connecticut Angler's Guide for regulations and information.)

Maps of public hunting areas on state forests, wildlife management areas (including Meadow Brook), and other similar properties can be found on the DEEP website at www.ct.gov/deep/huntingareamaps.

Federal Aid Dollars Working for Wildlife

The DEEP Wildlife Division receives the majority of its funding through federal grants. The Federal Aid in Wildlife Restoration Program has been particularly important. It was initiated by sportsmen and conservationists to provide states with funding for wildlife management and research, habitat acquisition, and sportsmen education programs.

Funds are derived from a federal excise tax on sporting arms, ammunition, and archery equipment. These funds are collected from the manufacturers by the Department of the Treasury and are apportioned each year to the States and Territorial areas by the U.S. Department of the Interior on the basis of formulas set forth in the Act. Appropriate state agencies are the only entities eligible to

receive grant funds.

Attention Hunters – Updates to Daily Permits and Permit-Required Area Vendors

Daily permits for the morning (AM) or afternoon (PM) are required from October 21 to November 18, 2017, to hunt small game and pheasants at Cromwell Meadows WMA, Durham Meadows WMA, Housatonic River WMA, Nathan Hale State Forest, Naugatuck State Forest - Hunter's Mountain Block, Simsbury WMA, and Skiff Mountain WMA. Morning hunters may hunt from 9:00 AM - 12:00 PM and afternoon hunters may hunt from 1:30 PM - 4:30 PM. Compliance with these requirements is necessary in order for birds to be stocked prior to 9:00 AM and again between 12:00 -1:30 PM. Permits are available through the Online Sportsmen Licensing System (www.ct.gov/deep/SportsmenLicensing) on the Monday preceding the Saturday hunts starting at 12:01 AM.

Daily permits for most Permit-Required Hunting Areas can be obtained for free online, although some can still be obtained at various vendors. The list on page 37 of the 2017 Connecticut Hunting and Trapping Guide has been updated for the fall season. Please check the DEEP website at www.ct.gov/deep/hunting to view the updated list.

No Boat? No Worries! Great Fishing from the Shore

Written by Ashley Frink and Greg Wojcik, DEEP Marine Fisheries Program

ishing from the shore L along Connecticut's coastline is a great way to get a taste for saltwater fishing, while also being very affordable. With help from a **DEEP Marine Fisheries** program created in 2011, recreational anglers who fish at specific locations have an increased opportunity to use our Public Trust marine fisheries resources. The Enhanced Shore Fishing Program was created to improve the quality of access and fishing in Connecticut coastal locations, especially in urban areas. There are now 45 enhanced opportunity sites located along Connecticut's coastline, spanning from Stonington in the east to Norwalk in the west, where minimum size restrictions for summer flounder (fluke) and scup (porgies) have been reduced. At these sites,

ENHANCED OPPORTUNITY SHORE FISHING SITE



TO ENHANCE FISHING OPPORTUNITY FOR SHORE ANGLERS, THESE SMALLER MINIMUM SIZES HAVE BEEN ESTABLISHED AT THIS SITE FOR SUMMER FLOUNDER (FLUKE) AND SCUP (PORGY).



SHARE <u>THE EXPERIENCE</u> Take someone fishing

This sign is posted at all Enhanced Opportunity Shore Fishing Sites where lower minimum sizes apply for scup and summer flounder. Be sure to check the current Connecticut Angler's Guide for complete fishing regulations.

anglers of all ages can enjoy Connecticut's beautiful coastline while being able to increase their chances of catching their own dinner.

As part of this program, seasonal resource assistants from the DEEP Marine Fisheries Program interview recreational anglers at many of the enhanced sites to obtain catch information. Questions asked include, "What are you fishing for today?" "Have you caught any fish?" and "How many times do you go saltwater

fishing in an average year?" At the end of the interview, catch cards are given to anglers where they can record the types and sizes of fish caught that day, and whether the fish were kept or released. All of the information collected from anglers who participate helps determine the composition of species and length frequencies of fish caught and harvested from all of the Enhanced Shore Fishing Sites each year.

In addition to providing a better understanding of angler catch from the Enhanced Fishing Shore Sites, the data are also used to support the enhanced shore fishing size limits for two popular fish: scup and summer flounder. These size limits can safely remain reduced while still assuring that marine conservation objectives continue

to be met. Reducing the minimum size for these two species at specific locations along the coast gives shore anglers a better chance to catch a legal size fish because the bigger fish are often farther offshore and typically more available



Calf Pasture Beach in Norwalk is one of 45 locations along Connecticut's coastline designated as an Enhanced Opportunity Shore Fishing Site. This site is a great spot to catch scup.



Fort Trumbull in New London is one of 45 locations along the Connecticut coastline designated as an Enhanced Opportunity Shore Fishing Site. This site is a terrific spot to catch both summer flounder and scup.

to boat anglers. At Enhanced Opportunity Shore Sites, summer flounder can be harvested at 17 inches (compared to 19 inches otherwise) and scup can be harvested at nine inches (compared to 10 inches otherwise). A list of all the Enhanced Shore Fishing Sites can be found at *www.ct.gov/deep/saltwaterfishing*. The website also includes links to current catch limits and the Connecticut Coastal Access Guide, which contains information about the sites.

The Enhanced Opportunity Shore Fishing Program not only helps shorebased recreational anglers enjoy a satisfying and productive saltwater angling experience, it also ensures that the conservation of marine fishes continues for years to come.

Casting Room Only!



Over 300 people lined the fishing pier at Fort Trumbull State Park as part of the 6th Annual Saltwater Fishing Day sponsored by DEEP's No Child Left Inside® and the Connecticut Aquatic Resources Education (CARE) programs. The fishing was very good overall, including catches of keeper-size fluke and scup and plenty of nice snapper bluefish. Other fish included sea robin, butterfish, black sea bass, cunner, and an oyster toadfish. "Bent rods" and "smiling faces" were rampant throughout the day. The always popular "touch pool" introduced many youth to different types of fish, as well as the best way to pick up a spider crab!

In addition to the fishing, State Environmental Conservation (EnCon) Police were on hand with their marine fish trailer, while staff from the Connecticut Department of Agriculture/Bureau of Aquaculture, Connecticut Sea Grant, DEEP Wildlife Division, and Mystic Seaport all provided activities and information relating to Long Island Sound.

The annual event is held on the second Saturday of August each year. Mark your calendar now and we will see you at the pier in 2018.

No Down Time in Summer for CT EnCon Police

The month of May kicked off the "busy season" for the State Environmental Conservation (EnCon) Police, and the rest of the summer remained busy as well. The warmer temperatures brought heavy crowds to many state parks and forests. State campgrounds quickly filled up with tents and camp trailers and began to transform into small communities. Boating activity increased heavily along the state's waterways as many boat launches became congested with vessels waiting in line to launch. Fishing seasons in both the inland and marine districts remained very active as officers conducted proactive enforcement patrols between calls for service. EnCon Officers have been working tirelessly to patrol the various state parks, forests, beaches, campgrounds, boat launches, waterways, and Long Island Sound, as well as respond to nuisance wildlife complaints (including numerous bear complaints). We are highlighting a few fish and wildlife related cases. If you want to learn about other cases, you can follow the EnCon Police Facebook page at www.Facebook.com/CTEnConPolice.

Marine District

On June 17, 2017, Marine District Officers were on a vessel conducting boating enforcement in the Connecticut River in the vicinity of the Baldwin Bridge when one of the officers observed a vessel that he recognized from a previous charter boat violation. The vessel was docked and an individual was filleting numerous fish next to four other people. The officers spoke with the four individuals who informed them they had paid \$650 for their trip. The vessel operator initially stated to the officers that he took friends on a recreational trip. However, he later conceded that he charged the four individuals for the fishing trip. The vessel operator was found to not have an active charter license and his captain's license had expired several years ago. The vessel operator was cited for the violations.

On July 10, 2017, Marine District Officers across the shoreline cited numerous individuals for illegal fishing to include: Possession of Undersize Striped Bass in Stratford; two separate violations of Possession of Undersize Tautog on the Thames River; three separate citations for Possession of Undersize Fluke in Stonington; Possession of Undersize Fluke in Stratford; and numerous violations for Possession of Undersize Scup.

Eastern District

In early May, an Eastern District Officer received a report of an individual offering deer meat for sale on a reptilebased social media group. After a lengthy investigation, the Officer determined that a male suspect had taken a road-killed deer and attempted to sell the venison. The suspect was also found to be illegally possessing a reticulated python (regulated species). The suspect was cited for the wildlife violations and the snake was seized and turned over to Rainforest Reptiles of Massachusetts for proper care.

On July 20, 2017, Eastern District Officers participated in the Connecticut Police Chief's Association Day at the Channel 3 Kids Camp. Officers spoke to campers about outdoor, fire, and boating safety. Officer Logiodice and K-9 Ruger gave a demonstration on evidence detection and recovery.

Western District

On June 5, 2017, EnCon Police and the U.S. Fish and Wildlife Service served an arrest warrant to a Newtown resident for a violation of falsely reporting a deer harvest and illegal importation of deer from a chronic wasting disease (CWD) confirmed state, as well as a federal Lacey Act violation. The arrest warrant was the result of an ongoing investigation. In February 2017, an anonymous tip was reported to



EnCon Police regarding a 24-point buck that was reportedly taken in Bridgewater, Connecticut. The buck had a very large, non-typical rack and the cape was clear of any blemishes caused by tick bites, suggesting that it was not from a wild deer herd in Connecticut. The investigation established that on November 5, 2016, the accused hunted and harvested a 24-point buck from a captive deer farm in Pennsylvania. The accused did not process the meat for consumption; did not clean the deer as required prior to preparing it for mounting; and illegally brought the whole buck back to Connecticut. He then tagged the buck and falsely reported it as being harvested in Bridgewater. Deer from a CWD-confirmed state, such as Pennsylvania, must be properly reported when harvested and must be processed for consumption and cleaned prior to being brought into the state. CWD is contagious in deer and once it is established in the herd it is very difficult to eradicate.



The EnCon Police K-9 Unit would like to thank the Central Connecticut Chapter of Safari Club International (SCI) for their generous donation which allowed the Unit to purchase a GPS collar for K-9 Ruger. EnCon K-9 teams are regularly called to search for missing people and GPS collars improve the ability of the team to cover and thoroughly search large areas. The K-9 Unit recently outfitted all five K-9s with GPS collars, and SCI was the first group to come forward with a donation to support their purchase. EnCon Officer Logiodice and K-9 Ruger are pictured as they accepted the new GPS collar from SCI Chapter President Gregg Buonocore and Legislative Affairs Chairman William Scarpa.

Invasive Plant Profile: Mile-a-minute Vine

Written by Lisa Massicotte, DEEP Wildlife Division

Invasive plants are a major threat to our natural resources and the milea-minute vine (*Persicaria perfoliata*), which was originally found in 2000 in Greenwich, is now beginning to spread through southern Connecticut, slowly heading north. This year, Cromwell became the 47th town where mile-aminute was found in the state.

Non-native mile-a-minute often displaces important wildlife habitat. It out-competes and overgrows native species, interferes with forest regeneration, disrupts normal ecosystem functioning, and can smother and shade out small seedlings of other species. Under ideal conditions, a single plant can grow up to six inches in a day – almost one-quarter inch per hour if growth was constant in a 24-hour cycle.

This fast-growing vine has also found its way onto Charles Island Natural Area Preserve off of Milford in Long Island Sound.

"DEEP Wildlife Division staff has been restoring habitat on the island. However, management of mile-a-minute is challenging due to its ability to grow rapidly and produce an abundance of seed," explained Wildlife Division Biologist Peter Picone.

"Access to Charles Island is limited due to the nesting of a variety of listed bird species, including glossy ibis and snowy egret," continued Picone. "These birds nest during the same months, June through August, which provide the most desirable growing conditions for mile-a-minute, preventing biologists from treating the island before the invasive vines produce seeds."

In an effort to manage mile-a-minute, biological control weevils have been released by the Connecticut Agricultural Experiment Station's scientist Carol Cheah and UConn Senior Extension Educator Donna Ellis. Additional strategies to control mile-a-minute on Charles Island include mechanical removal, biological control, and herbicide use.

Mile-a-minute has been discovered at another location in North Haven, disrupting an ongoing habitat restoration project to provide wintering habitat for northern saw-whet owls, the smallest owls found in Connecticut. The area is undergoing treatments similar to Charles Island.

UConn's Department of Plant Science and Landscape Architecture has created a website, which contains information, news, publications, and educational materials relating to mile-a-minute vine in Connecticut. Visit *www.hort.uconn.edu/ mam* to learn more.

Before attempting removal of suspect mile-a-minute, it is important to be sure the vine has been correctly identified. Many other species, including native plants, may be confused with mile-a-minute vine.

According to UConn's website, mile-a-minute has three distinct characteristics used for identification:





As it's name implies, mile-a-minute vine grows very fast and has dark blue to purple berries.

- Leaves shaped like triangles equilateral triangles without lobes or indentations.
- Curved barbs or prickles along the stems and on the stalks, which join the leaf to the stem.
- Saucer-shaped leaves at nodes and branching points (called ocrea).

If you see mile-a-minute in your town, please fill out a sighting report form at www.mam. uconn.edu (look for the "Report MAM" button on this webpage). Questions can be directed to mileaminute@uconn.edu.

FROM THE FIELD

2016 Deer and Turkey Summaries Available

The 2016 Connecticut Deer Program Summary and 2016 Connecticut Wild Turkey Program Summary are now available on the DEEP website at www.ct.gov/deep/hunting.

The Turkey Summary includes harvest statistics and a summary of the 2016 spring gobbler season, followed by the fall firearms and archery wild turkey hunting seasons.

The Deer Summary contains white-tailed deer information for 2016, including harvest statistics, research activities, and population dynamics of

Connecticut's deer population.

ALDLIG

Something Fishy in CT

Something Fishy in Connecticut is a new interactive fishing resource for novice and expert alike. Within a 60-minute drive you can be fly fishing the famed Housatonic or Farmington River, catching monster pike in Bantam Lake, taking jumbo carp from the Connecticut River, or be on Long Island Sound fishing for tasty favorites like fluke, porgy, black sea bass, striped bass, and bluefish. This interactive application has lots of great information, including interactive maps and links, providing all you need to know about Connecticut's fisheries. Go to www.ct.gov/deep/Fishing to find the link for Fishy in Connecticut.

Advanced Hunter Education Opportunities

The DEEP Wildlife Division's Conservation Education/Firearms Safety (CE/FS) Program offers hunting safety classes on firearms and archery hunting and trapping throughout the year. The classes are taught by a dedicated corps of certified volunteer instructors. The CE/FS Program is now offering Advanced Hunter Education seminars and clinics on such topics as waterfowl hunting, hunter marksmanship, small game hunting, venison processing, and wild turkey hunting. These hunting seminars and clinics are meant to expand on the knowledge and skills of hunters and anyone else who wants more information about pertinent topics in hunting. All programs are free and open to the public. Periodically check the DEEP website at www. ct.gov/deep/hunting to see when courses are scheduled. Information on several courses planned for 2018 will be included in the 2018 Connecticut Hunting and Trapping Guide, which should be available by mid-December 2017. A brief description of the seminars and clinics follows:

Waterfowl Hunting Seminar: Sponsored by the Connecticut Waterfowl Association (CWA), this seminar will provide participants with all of the basic information needed to get started or become a more successful waterfowl hunter! Expert instructors will provide interactive presentations on various aspects of duck and goose hunting, including decoy spreads, biology, shooting, calling, and hunting techniques.

Hunter Marksmanship Clinic: Today's hunter understands that owning and mastering a rifle or shotgun is part of his/her hunting heritage. Whether you are a new shooter or a seasoned marksman, this clinic can help you improve your mastery of marksmanship skills. After a review of marksmanship principles, participants will be coached one-on-one; get sighted in to 100 yards; and have the opportunity to shoot from multiple shooting positions.

Small Game Hunting Clinic: Small game hunting is one of the most overlooked types of hunting. This clinic is designed to give hunters the tools and knowledge to hunt small game in Connecticut. Habitat, techniques, tactics, and game care will be covered. Participants will have the opportunity to skin a squirrel and receive some great recipes for preparation.

Venison Processing Seminar: This seminar will take participants through all the steps from skinning a deer to packaging venison. The instructor will share cooking secrets and samples.

Wild Turkey Hunting Safety Seminar: Both experienced and first-time turkey hunters stand to benefit from attending this seminar, which will provide A-Z hunting information, including safe hunting practices, specialized equipment, calls and decoys, site setup, and other strategies for harvesting turkeys. Participants will have an opportunity to pattern their shotguns for turkey hunting following classroom instruction.



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



2018 Migratory Bird **Conservation Stamp Prints** Available

Prints of the 2018 Connecticut Migratory Bird Conservation Stamp created by nationally renowned and Connecticut artist Chet Reneson are now available in limited quantity. Mr. Reneson's artwork depicts surf scoters at the mouth of the Connecticut River. There are a limited number of signed Conservation Prints. The prints sell for \$200 each, and all proceeds from the purchase of these stunning prints, just like all funds collected from the sale of Migratory Bird Conservation Stamps, go into the Connecticut Migratory Bird Conservation Fund to be used for the enhancement of wetland and associated upland habitats in our state. Those interested in purchasing a print should contact DEEP Wildlife Division biologist Min Huang at *min.huang@ct.gov* or 860-418-5959.

The Migratory Bird Conservation Fund is the sole source of money for many of the wetland projects that are conducted in Connecticut. No General Fund money is dedicated towards wetland conservation. Other federal dollars (e.g., Federal Aid in Wildlife Restoration monies generated by hunters) also are used for wetland conservation in our state.

Hunters are not the only ones who can purchase Migratory Bird Conservation Stamps and artistic prints. Anyone who cares about Connecticut's wetland habitats and wetlanddependent wildlife can purchase these items and contribute to conservation in Connecticut. Own a piece of history and do your part for habitat protection and restoration! Migratory Bird Conservation Stamps can be purchased for \$17 each through the Online Sportsmen Licensing System (www.ct.gov/deep/ sportsmenlicensing) or at DEEP License and Revenue, 79 Elm Street, Hartford (Monday-Friday, 8:30 AM-4:30 PM; 860-424-3105).

Improving Habitat for Wildlife and Reaping the Benefits!

Written by Peter Picone, DEEP Wildlife Division Biologist and landowner of Charter Oak Tree Farm, Sprague, CT

There is a much to be thankful for and one aspect that is held in high regard is our land. My family and I have been restoring and enhancing wildlife habitat on our 40.7-acre property and are enjoying the successes and learning from the challenges. As a wildlife biologist who specializes in habitat enhancement, I have been able to practice what I preach. My family and I have also participated in many habitat-related seminars, field walks, and lectures over the years and gleaned valuable information that has helped us improve and enhance our land.

Wildlife is a priority for us. The wildlife we enjoy seeing on our land varies with the season and habitat type, such as hearing the peenting call of an American woodcock at dusk along the field and young forest patches; watching wild turkey poults in our meadow or woods pecking for insects with their ever-vigilant mother guarding their every move; seeing a bald eagle soar over the Shetucket river eyeing potential fish to prey on; and finding an uncommon marbled salamander partially hiding under a log.

Something is always going on at our land. Nature gives us back way more that we can ever give it. As most landowners know or find out quickly, "necessity is the mother of invention." Owning your own land and taking care of it forces one to learn to adapt strategies and test ideas and practices in the field. My wife JoAnne and I, along with our sons Neil and Anthony, have implemented and tested several habitat management projects.

Improving soil erosion conditions was a top priority early on. Soils are the backbone of habitat quality. Natural Resource Conservation Service soil scientists and conservationists helped develop a soil erosion prevention plan and map. Restorations included the repair of an access road by smoothing eroded areas, adding proper water bars, and contouring to eliminate rutting and erosion.

We created a biologically diverse meadow from a 5.5-acre abandoned corn field monoculture. Invasive, nonnative plants were rampant throughout the abandoned field and along the edges. They included autumn olive, Japanese knotweed, and tree of heaven. We pulled up as many of the autumn olives as we could with a tractor and chain and then herbicided the rest. Tree of heaven was



(From I to r) Dr. Leila Pinchot of the U.S. Forest Service and Dr. Sandra Anagnostakis of the Connecticut Agricultural Experiment Station assisted Wildlife Division biologist Peter Picone and his family with planting disease-resistant American chestnut trees at their tree farm.

controlled by cutting and spraying stumps with herbicide. We mowed a 30 by 50 foot patch of Japanese knotweed and then applied a foliar spray of herbicide in late summer to try to root kill it.

Native grasses and wildflowers were planted in the meadow, such as big bluestem, little bluestem, Indian grass, switch grass, New England aster, New York ironweed, wild bergamot, and mountain mint. Not only did we consider color and nectar sources when deciding on plants, but we also included common milkweed and orange butterfly weed to provide food for the caterpillars of the monarch butterfly.

Non-native invasives in the understory and canopy of the forested areas also were eliminated, including Japanese barberry, oriental bittersweet, common privet, and burning bush. They were pulled out with a tractor and chain; cut and painted with herbicide on the stumps; and sprayed with a foliar application of herbicide. The forest understory was restored with native shrubs, including winterberry, spicebush, mountain laurel, arrowwood viburnum, and witch hazel. Fencing was placed around the new plantings to prevent deer browsing for at least five years until the shrubs grew above deer browse height (5.5 feet high).

Over 100 disease-resistant American chestnut trees were planted on our property with the assistance of Dr. Leila Pinchot (great-granddaughter of Gifford Pinchot) of the U.S. Forest Service and Dr. Sandra Anagnostakis of the Connecticut Agricultural Experiment Station.

We also created young forest habitat to encourage cottontail rabbits, American woodcock, and eastern towhees. Forest cover and vertical stratification were improved by using a forest management practice called "crop tree release" on 10 acres of forest. This is done by cutting subordinate trees on three sides of a dominant tree to allow more light to penetrate the upper canopy. Songbird nest boxes in the field have attracted eastern bluebirds, tree swallows, and house wrens, and a wood duck nest box was installed in a forest patch near the Shetucket River.

The majority of actions identified in our Forest Stewardship Plan (prepared in conjunction with the DEEP Forestry Division) and the Natural Resource Conservation Service's 10-year plan of action for our property have been undertaken. Over the course of implementing our habitat management projects, my family and I have learned a lot about our land and its wildlife. Most importantly, we are leaving our land ecologically better than we found it. If you would like more information, please contact Peter Picone at *peter.picone@ct.gov*.

Connecticut Hunting and Fishing Day 2017

Written by Andy LaBonte, DEEP Wildlife Division

rab the family and \mathbf{J} some friends and head outside to enjoy Connecticut Hunting and Fishing Day on September 23, 2017, from 10:00 AM to 4:00 PM. 2017 brings a change of pace for the seventh Connecticut Hunting and Fishing Day hosted by the Connecticut Department of Energy and **Environmental Protection** (DEEP). This year, this FREE, family-friendly event will be held at the Cabela's/UTC complex, with parking provided courtesy of Cabela's at 475 East Hartford Blvd. N. in East Hartford. After holding the event at state wildlife management areas in past years, Cabela's provides a centralized location near major highways, plenty of free parking, and a fresh take on this special event.

Connecticut Hunting and Fishing Day recognizes the contribu-

tions of hunters and anglers who have been at the forefront of the conservation movement to protect Connecticut's natural resources. In addition, the DEEP invites people of all ages who may not have yet experienced hunting and fishing to participate in these exciting outdoor activities. Connecticut Hunting and Fishing Day provides the perfect opportunity to gain firsthand exposure.

Unlike during past years, this year's venue will be centrally located and is expected to draw possibly up to 3,000 participants. The event features activities for all ages, including:

- Live birds of prey and waterfowl
- BB gun and archery range
- Fly casting and fly tying
- Field dog demonstrations
- Taxidermy and decoy carving demos
- Backyard bass casting
- Moose calling demonstration and competition
- Live action simulated hunting range

Try your hand at archery at Connecticut Hunting and Fishing Day on September 23! Come learn about target archery, field archery, flu-flu archery, and bowhunting.

- Kid's crafts
- Tree milling
- Fish and wildlife exhibits
- A chance to win a variety of great door prizes
- and more!

Celebrity guests include Alex Wetherell and Del Delmastro, both Cabela's Pro Staffers. Alex won the Junior Bassmaster World Championship when he was 17; the 2015 Old Milwaukee B.A.S.S. Eastern Divisional at 22; and The Bass Federation State Championship and Semi-National Championship in 2016. Del started bowhunting small game animals, using a recurve bow, at the age of 15. In the early 1990s, Del became one of Connecticut's first pro-staff sponsored bowhunters. He has hunted internationally for various species of wildlife, and is a senior member of the Pope and Young Club and a Senior Archery instructor for the Connecticut Conservation/Education Firearms Safety Program. Alex and Del will be on-hand to answer fishing and hunting questions and provide some tips on how to

reel in the big ones and track even the most elusive big bucks. Attendees will also have the opportunity to speak firsthand with staff from various Divisions within the DEEP, as well as with representatives from outdoor retailers and a variety of conservation, hunting, and fishing organizations.

Some exciting new activities are planned for the 2017 Connecticut Hunting and Fishing Day. Visit our website at www. ct.gov/deep/HuntFishDay to learn more.

Connecticut Hunting and Fishing Day is made possible due to generous donations from the following: Cabela's Connecticut Waterfowl Association Dynamic Outdoor Concepts Mossberg Firearms Purina The Friends of Sessions Woods The Home Depot Rocky Mountain Elk Foundation Wild Edge, Inc. Anderson's Family Farm in Portland

Conservation Calendar

September 23....... Connecticut Hunting and Fishing Day – Celebrate National Hunting and Fishing Day with the Connecticut DEEP at its Connecticut Hunting and Fishing Day celebration at Cabela's in East Hartford. Go to www.ct.gov/deep/HuntFishDay for more information or see article on page 22. You can learn more about National Hunting and Fishing Day at www.nhfday.org.

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 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.

September 30.......Bird Walk, starting at 7:30 AM. Join Burlington birder Laura Spitz for a walk along the trails at Sessions Woods. Laura will provide insight on easy ways to identify birds as the group visits many habitat types, including forest, meadow, and beaver marsh, throughout the wildlife management area. Please bring binoculars if you have any and meet at the flagpole in front of the Sessions Woods Conservation Education Center.

Hunting Season Dates

Sept. 1-30 Early September Canada goose season.

- Sept. 15-Nov. 14 First portion of the deer and turkey bowhunting season on state land.
- Sept. 15-Dec 30...... Deer and turkey bowhunting season on state land bowhunting only areas (and private land for turkeys).
- Sept. 15-Dec 31..... Deer bowhunting season on private land.
- Oct. 7 & Nov. 4......Junior Waterfowl Hunter Training Days Go to www.ct.gov/deep/juniorhunter for more information.
- Oct. 14Junior Pheasant Hunter Training Day Go to *www.ct.gov/deep/juniorhunter* to learn about special hunting events for junior pheasant hunters on October 14 and other days this fall. (See below)
- Oct. 21Opening day of the small game hunting season.

Nov. 4 -11.....Junior Deer Hunter Training Days (excluding Sunday) - Go to www.ct.gov/deep/juniorhunter for more information.

Consult the 2017 Connecticut Hunting and Trapping Guide and 2017-2018 CT Migratory Bird Hunting Guide for specific season dates and details. The guides are available at DEEP facilities, town halls, bait and tackle shops, and outdoor equipment stores, and also on the DEEP website (www. ct.gov/deep/hunting). 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.

Junior Pheasant Hunter Training Days

Saturday, October 14, is designated as Junior Hunter Training Day for pheasants on state and private land. The Wildlife Division, in cooperation with various sportsmen's clubs, holds several special hunting events for junior hunters on Junior Pheasant Hunter Training Day and other days during the pheasant hunting season. Check the DEEP website at *www.ct.gov/deep/juniorhunter* to see a list of events scheduled for this year. The Division appreciates the assistance of the Bozrah Rod and Gun Club (Lebanon), Wallingford Rod and Gun Club, Torrington Fish and Game Club, Northwest Connecticut Sportsman's Council, and Belltown Sportsman's Club (East Hampton) for hosting junior pheasant hunts this year. Junior hunters who register to participate in these club-sponsored events will have the opportunity to sharpen their shooting skills on a trap field and then take to the field to hunt with either a certified volunteer hunter safety instructor or experienced hunter, as well as with well-trained bird dogs with their handlers. "Hunt on Your Own Junior Pheasant Hunts" will be held on Saturday, October 14, at NU-Skiff Mountain WMA (Sharon), Goshen WMA (Goshen), Housatonic WMA (Kent), and Robbins Swamp WMA (Canaan). Licensed junior hunters accompanied by a licensed adult hunter (18 years of age and older) are invited to hunt pheasants at these areas. Dog handlers will not be provided but birds will be released at these sites prior to the date. Junior hunters must also obtain a Resident Game Bird Conservation Stamp (\$14) and a free Training Day Permit at *www.ct.gov/deep/SportsmenLicensing*. Thanks are extended to the Northwest Connecticut Sportsman's Council for stocking these four state areas in northwestern Connecticut for the "Hunt on Your Own Junior Pheasant Hunts."

Find us on Facebook		
www.facebook.com/CTFishandWildlife	cticut	
Subscription Order Please make checks payable to: Connecticut Wildlife, P.O. Box 1550, Burlington, CT 06013		
Check one: 1 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
City: State: Zip: Tel.:	Gift card to read:	species, reptiles, amphibians, bats, and other wildlife species.
Email:		

Will only be used for subscription purposes

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



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



Connecticut's osprey population was in dire trouble in 1974 when there were only nine active nests in the state. Contamination of the food chain by organochlorine pesticides during the previous 40 years resulted in widespread nest failures. Osprey were also restricted by a lack of standing dead trees for nesting. After a 1972 federal ban on the use of DDT, along with the placement of artificial nest platforms, the osprey population began a long recovery. Today, there are over 500 active osprey nests in Connecticut.

Due to federal clean water regulations since the 1970s, Long Island Sound has gradually become cleaner and now supports improved fish populations. As seen in the photo above, menhaden are an important food source for osprey in Connecticut.