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CONNECTICUT

Wildlife



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From The Director

As we enter a new decade it's an ideal time for reflection—what's worked, what didn't quite accomplish our goals, and what's in store for the future. This issue of *Connecticut Wildlife* provides the perfect context for that assessment.



The 30-year anniversaries of both the North American Wetlands Conservation Act (NAWCA) and Partners in Flight (PIF), highlight some major successes. Many waterfowl populations have rebounded thanks to NAWCA and the many projects implemented through the related North American Waterfowl Management Plan. The success of the wetland restoration projects these initiatives supported benefit far more than waterfowl. PIF helped initiate a dialog—regionally, nationally, and internationally—about songbird conservation and the need to approach conservation from a landscape-scale perspective. While many amazing efforts have been completed, conservation is still impacted by needs that vary based on a bird's life history. The impact of a changing climate has brought unpredictable storm events and variations in phenology, the cyclical and seasonal nature of plant and animal life, into the conservation discussion and will be important considerations in future conservation efforts.

The dramatic increase in Connecticut's bear population over the past few decades is both a tremendous success and a future challenge. Learning to "Be Bear Aware" and adjusting our personal behaviors to help us avoid conflicts with a growing population is imperative. We can resolve to do simple things, waiting to put out our trash until collection day or cleaning our grills after we cook outdoors, that when done in an entire neighborhood or across a town or throughout the state can help prevent bears—and many other animals—from learning bad behaviors that will risk public safety and the health and welfare of the bears themselves.

Trying new approaches is an important part of making sure our efforts are adaptive. Developing different ways to promote pike spawning and using community scientists to help gather data on bobcats are two good examples of how a fresh approach or new interpretation can help accomplish our goals.

Sometimes our reflections cannot mirror a success or show us future directions or new approaches. As you'll learn from our story on greater and lesser scaup, despite research and conservation actions, populations are still declining and the reasons or solutions remain somewhat elusive. What the story of scaup conservation does tell us is that broad conservation partnerships that span not only geo-political distances, but also conservation disciplines, will likely provide the best path forward.

I encourage all of you to enjoy the conservation successes, innovative initiatives, and interesting facts in this issue of *Connecticut Wildlife*. Please take a moment to reflect on the lessons they provide, how you can learn from them, and to let them inspire you to connect with nature. Make your first resolution of this new decade to venture outside and explore the amazing diversity of wildlife and habitats Connecticut has to offer.

Jenny Dickson, DEEP Wildlife Division Director

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Greater scaup flock flying over Long Island Sound. Read about wintering greater scaup on page 12. PHOTO BY P. J. FUSCO

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A bobcat scans over its winter territory from the comfort of a tree branch. Read about new findings discovered by the DEEP Wildlife Division's bobcat research project on page 8.

Photo courtesy Paul Fusco

30 Years of Conservation Success for Migratory Birds

What will the next 30 bring?

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

The years 2019 and 2020 mark the 30-year anniversaries of two critical bird conservation movements, the North American Wetlands Conservation Act (NAWCA) and Partners in Flight (PIF). NAWCA celebrated its 30th anniversary in December 2019 and PIF will follow suit in December 2020.

North American Waterfowl Management Plan

NAWCA was originally passed, in part, to support activities under the North American Waterfowl Management Plan (NAWMP). NAWMP is the visionary initiative to conserve continental waterfowl populations and habitat that the waterfowl management community began implementing over 30 years ago. It is one of the greatest conservation success stories in the world. This scientific approach to waterfowl habitat restoration and protection created a new partnership-based model for conservation that has been broadly acclaimed and widely emulated. Born at a time when wetland habitats were being destroyed across the continent and most waterfowl populations were in crisis, the NAWMP sets continental population goals for all species and populations of waterfowl. Through the conservation actions of all of the many partners in the Plan, many waterfowl populations are now substantially larger than they were 26 years ago. Over 75% of populations are at or above goal. An additional benefit to the protection and enhancement of continental wetlands has been the resurgence of the majority of other non-hunted wetland birds. In a time period that has seen most shrubland, forest interior, and grassland species decline, many wetland species have held their own.

Since 1986, NAWMP partners have conserved and restored over 15.7 million acres of wetlands, grasslands, and other key habitats for ducks, geese, and swans shared by Canada, the United States, and Mexico. Many of these accomplishments have occurred through NAWCA.

In the past 15 years, the NAWCA program has evolved into a more all-bird program, rather than just focusing on waterfowl. NAWCA is a grant program through which, in part, the goals and objectives of the NAWMP can be achieved. NAWCA consists of both a Standard Grant and Small Grant Program. Standard grants award up to one million dollars and small grants award up to \$150,000 for wetland projects. These competitive grants, totaling over \$1.73 billion, have



The wood duck is a common breeding waterfowl species in Connecticut and throughout eastern North America. A highly sought after species by waterfowl hunters, its population is slowly increasing.

benefitted over 2,950 projects. More than 6,200 partners have contributed another \$3.57 billion in matching funds to affect 30 million acres of habitat. As an all-bird grant program, many of the affected acres are upland acreages. In Connecticut, we have been fortunate enough to receive over three million dollars in direct grant monies through NAWCA that have been leveraged with an additional \$15 million. These grants have resulted in the acquisition, enhancement, and restoration of over 12,000 acres of critical habitat in our state.

The Next 30 Years for NAWMP – a Vision for the Future

The NAWMP vision undertook a major revision in 2012. Not willing to rest on our laurels, the waterfowl management community realized that changing times call for changing strategies. New threats to waterfowl and their habitats continue to emerge and stand to undermine past NAWMP successes. Many new challenges create competition for land, water, and funding and these must be addressed in order for us to continue maintaining our cherished resources. Conservation programs must become more adaptable, efficient, and relevant to a society that is increasingly disconnected from the natural world. The revision targets three overarching goals:

Goal 1: Abundant and resilient waterfowl populations to support hunting and other uses without imperiling habitat.



Inland wetlands are critical for the life cycle of many species, including amphibians, reptiles, and many migratory birds.

Goal 2: Wetlands and related habitats sufficient to sustain waterfowl populations at desired levels, while providing places for recreation and ecological services that benefit society.

Goal 3: Increase numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation.

Two of these goals, dealing with populations and habitat, have always been the foundation of the NAWMP. The third goal, explicitly focused on people, is new as part of the revised NAWMP. This third leg of the stool underscores the importance of people to the success of waterfowl conservation, and is born out of concern for the ongoing loss of waterfowl hunters, the opportunity presented by growing numbers of people who pursue waterfowl with cameras and binoculars, and a recognition that the NAWMP can succeed only if waterfowl conservation is relevant to broader societal issues. On its 30th birthday, the NAWCA continues to be an integral part of the delivery of the NAWMP.

Partners in Flight – the Land Bird Conservation Counterpart to the NAWMP

Partners in Flight (PIF) began in December 1990 due



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The wood thrush is a species of high conservation concern throughout its breeding range. Numbers continue to decline as habitat, not only on the breeding grounds but also on their wintering grounds, continues to be degraded and lost.

to increasing concerns over disproportionate declines in populations of long-distance migrating birds. PIF parallels the NAWMP and is a network of more than 150 partner organizations throughout the Western Hemisphere engaged in all aspects of land bird conservation. This includes science

support, research, planning, and policy development. Partners also support land management, monitoring, education, and outreach. The primary PIF vision is to “keep common birds common” and prevent vulnerable species from becoming endangered. Inherent in PIF’s mission is the core idea that while laws and regulations help manage for an abundance of game species for manageable harvest or serve to maintain minimum viable populations for stability and recovery of very rare species, there are no laws, regulations, or incentives to maintain an abundance of common species.

PIF’s mission reflects the importance of keeping birds common for two central reasons: 1) the general expectation of society that there be an abundance of birds and healthy ecosystems; and 2) from the ecological standpoint, that we maintain an abundance of birds for the critical ecological role they fulfill, from agricultural pest control to pollination to helping sustain healthy ecosystems.

PIF’s strategic goals are to: 1) maintain healthy bird populations, in natural numbers, in healthy habitats and ecosystems; 2) keep species from becoming threatened or endangered through proactive measures and science-based planning; 3) promote full annual life cycle conservation of migratory birds throughout the Western Hemisphere;

and 4) promote the value of birds as indicators of environmental health and human quality of life.

The Next 30 Years – a PIF Vision for the Future

Given the massive declines in bird abundance documented in an article in *Science* in 2019 (Vol. 366, Issue 6461, pp. 120-124, <https://science.sciencemag.org/content/366/6461/120>), PIF’s core mission is more relevant and more urgent than ever. Over the last 30 years, as more has been learned about birds, threats, people, and what works



The yellow warbler is very common; however, its population has likely declined by 25 percent over the past 40 years.

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and what does not, PIF partners have adapted and refined their approaches. Strategies will undoubtedly need to continue evolving. That said, many already-identified actions, challenges, and themes are likely to influence the work of PIF in the near future. The greatest action is the need to “Bridge the Implementation Gap”. This entails moving from planning to conservation actions on the ground. Three main challenges to increased action/bridging the gap are identified in the 2016 Plan:

- The scope and scale of the challenge;
- Lack of conservation capacity; and
- Need for greater societal awareness and engagement.

The second bullet is truly the roadblock to stemming the current tide of non-hunted migratory bird declines. In many instances, the science to inform the planning process exists. What does not exist is the money to implement the many excellent species recovery plans that have been written. A recent example of how funding makes the difference is with



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Funding for the American oystercatcher has allowed a recovery management plan to be implemented, resulting in a conservation success story.

the American oystercatcher, an iconic shoreline species. In 2008, the American oystercatcher population was at 10,100. At that time, a management plan for the recovery of the species was written, with a goal of \$10 million for implementation of the plan. The funding, provided largely through the National Fish and Wildlife Foundation (a private entity), was realized and the management plan could be implemented. By 2018, the population had increased by 23% to 12,453.

The Future of Migratory Bird Conservation

Although these bird conservation programs have been widely successful, the NAWMP and NAWCA have been much more successful than PIF. The true difference in effectiveness to enact positive change lies in the funding mechanisms in place and the fervor of the constituencies that are represented by the groups of species each is trying to conserve. As we move into the future, however, the constituency base for all migratory bird conservation is changing and the conservation community must find ways of engaging new partners. In the absence of a concerted, unified effort to increase the awareness of and, ultimately, the funding base for bird conservation, many species are expected to disappear during our lifetime. Everyone can help by being advocates for conservation of critical habitats and informing others of the importance of habitat and clean air and water. Annually purchasing state and federal duck stamps and supporting federal legislation for concrete, reliable funding for wildlife, such as the Recovering America’s Wildlife Act, are important. When we have a passion for something, such as wildlife, we should be willing to pay for its conservation.



Bobcat Project Update:

Data Analyses and Looking Ahead to Season Three

Written by Valerie Dugan, DEEP Wildlife Division



If you see a bobcat, look for a collar and/or ear tags, and please submit a sighting report to the DEEP Wildlife Division. Sighting reports are a valuable tool for biologists.

PHOTO COURTESY MICHAEL WHITTAKER

After collecting data on another 50 collared bobcats, season two of the Connecticut DEEP/UCONN Bobcat Project is coming to a close. Since the project's inception in 2017, a total of 153 bobcats have been tagged, and of those, 105 have been collared. The DEEP Wildlife Division's Furbearer Program is currently recovering the Global Positioning System (GPS) collars that have automatically detached from the bobcats beginning in October 2019. The GPS collars will continue to detach through March 2020.

Biologists are analyzing data collected at kill sites, the term for a site where a bobcat has been feeding on prey. There appear to be consistent food sources bobcats will use year round, such as squirrel, rabbit, opossum, raccoon, turkey, and white-tailed deer. However, seasonal variations in diet have become apparent. As spring approaches and hibernating animals emerge, woodchucks become an important dietary item from March through October. With the arrival of fawning season in late May, fawns become a reliable prey source for bobcats and remain a steady part of their diet through late September. Even as deer continue to mature into sub-adults and then adults, they remain a staple prey item. During the abundance of summer, a variety of food sources emerge, including songbirds, waterfowl, domestic fowl, mink, fish, skunk, domestic cat, chipmunk, and rodents. Autumn heralds the beginning of hunting seasons in Connecticut. Biologists have found that bobcats scavenge on various waterfowl and deer organs discarded by hunters. During the sparse winter months when many prey species have gone into hibernation, deer and rac-

coon prove to be crucial food sources. While bobcats prefer live prey, they will also occasionally scavenge on road-killed prey items, including deer, raccoon, and avian species. Use of scavenged food sources seems to increase in winter.

Biologists are also analyzing data collected from the breeding and maternal denning seasons. While bobcats can breed any time of year, the behavior most often occurs in February and March. A male and female bobcat will initiate courtship and travel together for several days. After breed-



DEEP WILDLIFE DIVISION(2)

Biologists place trail cameras at bobcat kill sites to observe predator activity and behavioral interactions.



Deer are an important food source for bobcats year-round. Bobcats will prey on deer themselves, as well as scavenge on remains from other predator kills or road-kills.

Bobcats with Kittens Will Often Move their Dens

Did you know that female bobcats move their dens several times while raising kittens? New research collected during DEEP's Bobcat Project has shown that most female bobcats will regularly transfer their young kittens to new den sites as they grow. Biologists believe that moving den locations is not only a way to accommodate growing kittens, but to also protect them against other predators. The longer a female bobcat and her kittens stay in one location, the more scent will be around for predators to locate the den. Once the kittens are old enough, they will use dens less and less as they travel around with the female, learning



K. TESTERMAN / DEEP WILDLIFE

to navigate the world. Young bobcats disperse from the female and seek out their own territories before the next breeding season.

ing has taken place, the mated pair will resume their solitary travels. A female who has successfully bred will give birth approximately 60 to 70 days later, typically in May or June. However, in cases where the female has had a litter fail, she may breed again and have a second litter later in the year.

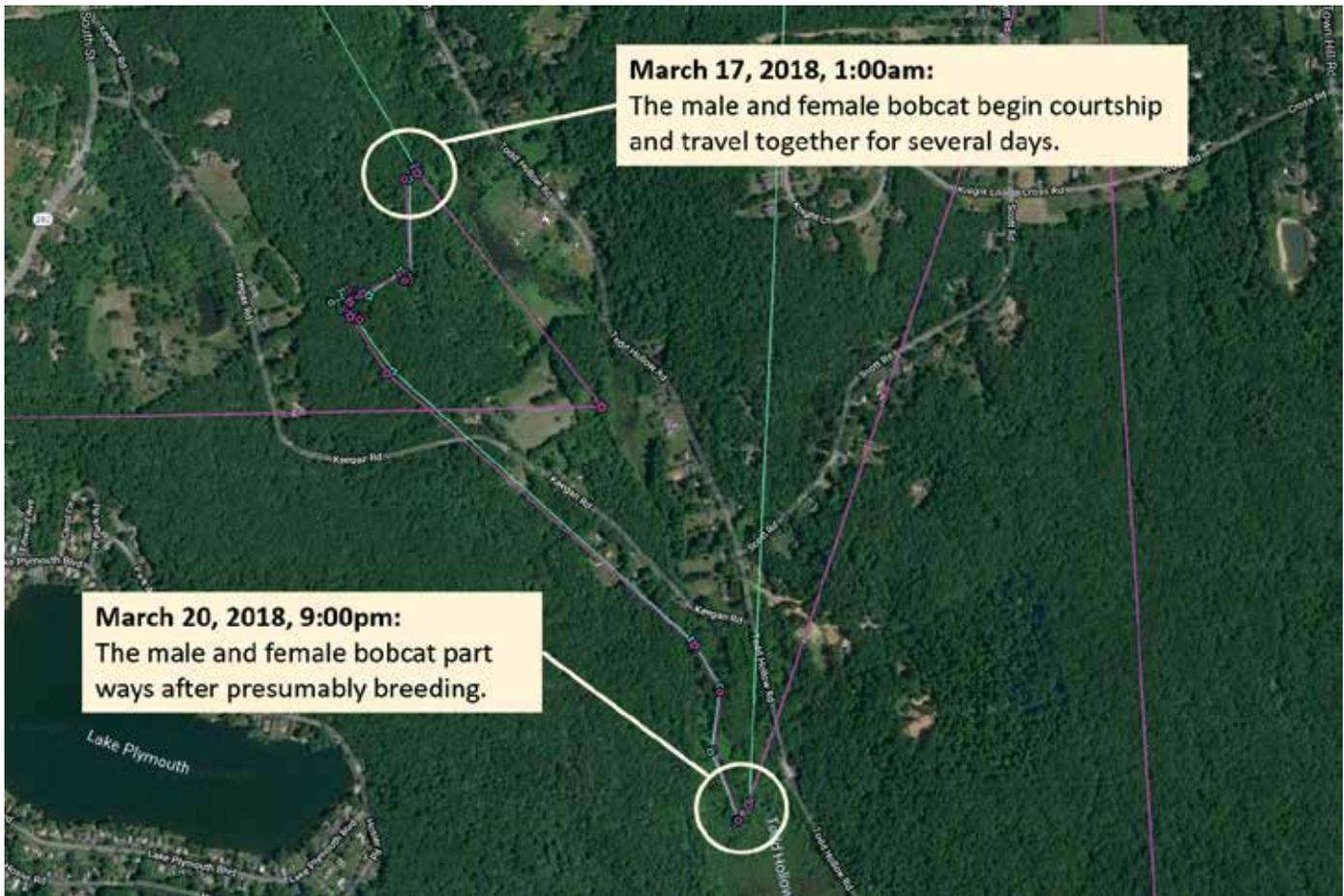
In the summers of 2018 and 2019, biologists collected reproductive data from 17 dens across the state. The research team recorded an average litter size of two kittens, with a high of four kittens counted in one litter. Female bobcats will keep their kittens hidden in a den, making outings to hunt and bring back food. It is not uncommon for the female to move the kittens to a different den as they age and grow, requiring more space and reducing scent for potential predators. Once the kittens are mobile enough, they will travel around with the female and use rendezvous sites; a term referring to day-use sites where the female can stash the kittens for short periods of time. As the kittens mature, they will travel with the female daily, honing their hunting and survival skills. A bobcat's offspring will disperse as early as their first fall or may stay with her into winter and then set out to find their own territory before the female

breeds again.

With the arrival of 2020, biologists are focusing on third season project goals. The third and final trapping season will be focused in the Farmington Valley and surrounding towns. This will likely include Avon, Simsbury, Farmington, Canton, East Granby, Bloomfield, West Hartford, Windsor, Windsor Locks, and Hartford. Biologists aim to collar 30 bobcats within this concentrated area.

A major research objective for the third season is to collect data from collared bobcats with adjacent home ranges. The collars used for the third season are outfitted with proximity sensors. They will alert biologists when collared individuals are within 100 meters of one another. Additionally, the collars will increase the frequency of GPS locations recorded during these encounters, which will provide details as to the precise movements of each cat during their interaction. This will allow biologists to study intraspecific interactions, or interactions between animals of the same species. Biologists hope to learn how these solitary animals interact when they cross paths. Do male-female interactions differ from same-sex interactions? Is there tolerance or even

The third and final trapping season of the Bobcat Project will be focused in the Farmington Valley and surrounding towns.



During peak breeding season in February and March, biologists are able to monitor probable breeding events using GPS locations. The pink-colored locations are a female bobcat and the blue ones are a male.

P. J. FUSCO

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Small mammals, like mice, chipmunks, and voles, are an important part of a bobcat's diet. Because prey this small is often consumed within a short time-frame, GPS points tend not to cluster in one general area in the way they cluster at a kill-site of a larger prey species, such as a woodchuck, raccoon, or deer. However, biologists have found small rodent remains at den sites, suggesting that small rodents serve an important role in kitten-rearing.

cooperation between individuals and does this change across the urbanized landscape of Connecticut? The Bobcat Project hopes to discover the answers to these questions and more in the next season of the study.

To answer these questions, the Bobcat Project needs your help! Property owners in the Farmington Valley or surrounding towns who are willing to grant permission for bobcat trapping or want to monitor a trap themselves can reach out to Wildlife Division biologist Jason Hawley (jason.hawley@ct.gov or 860-424-3011). Trapping will likely commence in mid-summer 2020.

The DEEP is still collecting sighting reports and road-killed bobcats. Sightings can be reported via Facebook (www.facebook.com/CTFishandWildlife), the iNaturalist app, and email (deep.ctwildlife@ct.gov). Please report road-killed bobcats to the Wildlife Division at 860-424-3011. Once again, thank you to all of the Connecticut residents who have assisted with this study the past two years, and to those who will assist in the third year.



Atlantic Bluebills

The Greater Scaup in Connecticut

Article and photography by Paul Fusco, DEEP Wildlife Division

Bluebill is the traditional name given by waterfowlers for the greater and lesser scaup, based on the color of the bill on adult males. Scaup have long been a favorite among hunters across the nation, as well as in Connecticut. For a period of time, scaup harvest numbers ranked third in the state behind mallard and wood duck. Since the mid-1970s, the scaup harvest has steadily declined, as has the scaup population. The wintering scaup population in Connecticut waters has gone from over 40,000 in the mid-1950s to an average of about 10,000 in the early 1980s to less than 2,000 in the early 2000s. Harvest totals have also declined from an average of over 3,000 up until the mid-1980s to an average of 100 to 200 in more recent years. Despite the decline, it is still inspiring for hunters and wildlife watchers alike to experience large flocks of greater scaup when they drop in by the hundreds, or when they form immense rafts on harbor waters.

Greater scaup are sharp-looking ducks. When on the water, males appear black at both ends and white in the middle. In bright sunlight, these “drakes” glisten with a glossy iridescent green head and blue bill. Females are brownish with a sharp white facial patch around the base of the bill. Both sexes have a white wing stripe that extends from the speculum into the primary feathers, seen when the birds are in flight. Both males and females have bright yellow eyes.

At times, greater and lesser scaup are difficult to tell apart. Look for the shape and color of the head and the size of the bill. The shape of the head on the greater has a more rounded shape, while that of the lesser peaks toward the back. The greenish gloss on the drake greater scaups' head

is replaced with a purplish gloss on drake lessers. The bill is proportionally larger on the greater scaup.

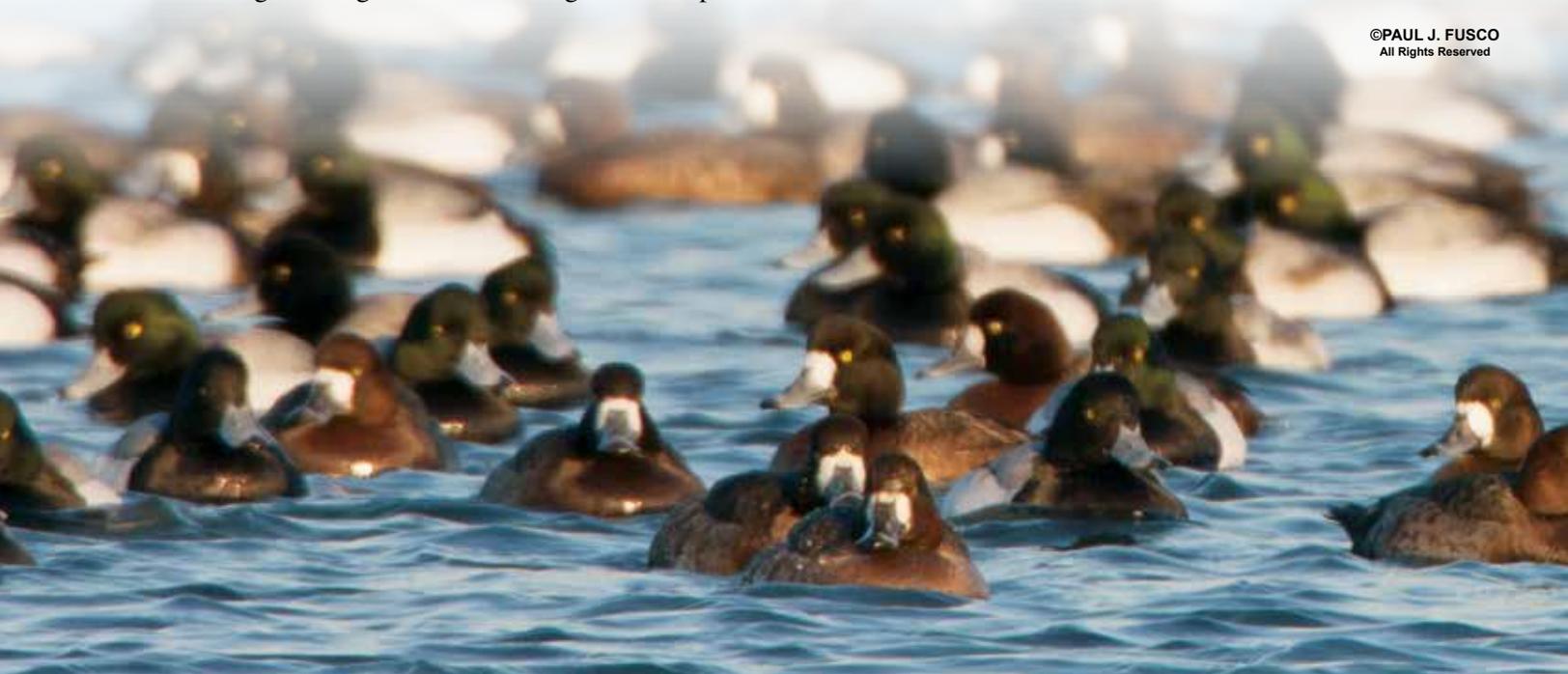
While both species have a white wing stripe, the stripe extends out farther on the wing in greater than in lessers. Habitat choice can also be an indicator for differentiating the two species. Greater are more likely to use salt water in winter, while lessers are more associated with fresh or brackish water. Large flocks may contain a mix of both species.

Like all diving ducks, scaup have a lobed hind toe, which separates them from dabbling ducks, such as mallards. Their legs are set far back on their bodies, giving them expert swimming ability underwater. They frequently inhabit deeper water than dabbling ducks, but not as deep as the sea ducks. When feeding, scaup will dive from the water's surface, using their legs to swim underwater as they forage, primarily for thin-shelled mollusks, including surf clams, while wintering in Connecticut. All diving ducks, including scaup, have a smaller ratio of wing size to body size than dabbling ducks. When taking flight, they need to run across the water's surface to gain enough speed to become airborne.

Conservation

Greater scaup wintering in Connecticut have decreased markedly over the last 50 years. According to DEEP aerial surveys, the population in Connecticut once numbered in the tens of thousands. In the Division's most recent survey (2015), 3,600 scaup were counted. In 2004, only 1,900 were recorded. Researchers have been studying greater scaup to find out why their numbers have dropped significantly. One factor that has emerged is that contaminants may be

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contributing to the decline.

Wintering greater scaup in Long Island Sound and elsewhere are potentially exposed to high levels of contaminants, including heavy metals. Studies have shown that selenium may be affecting the breeding health of a large percentage of female scaup, resulting in reproductive failure and sterility. The ducks are known to absorb selenium when they ingest introduced invasive zebra mussels as the birds migrate through the Great Lakes region. Selenium in low levels is an essential nutrient, but excess amounts can be harmful and highly toxic. Selenium occurs naturally in coal and is especially prevalent in bituminous coal, which is burned in power plants in the United States, including the Upper Midwest/Great Lakes region. Once it enters the water, selenium can spread into the ecosystem and food chain where problems develop.

While the selenium theory has been in debate, new research has been studying the loss and degradation of quality habitats as a primary factor in scaup declines. It seems that boreal forest wetlands close to the breeding grounds have been disappearing over the years. This phenomenon has been linked to climate change, which has resulted in a thawing of permafrost that used to keep boreal wetlands stable. Thawing has instead allowed water to drain away into the soil. Thus, climate change has the potential to affect productivity and survival of young scaup in boreal habitats at critical times in the life cycle.



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Greater scaup spend a large portion of the winter on in-shore waters along the Connecticut coast.

Greater scaup are considered common throughout their range, although Partners in Flight, a collaborative scientific working group, lists them as a common bird in steep decline. That designation applies to birds that have lost 50% of their population over the course of the last 40 years. The most recognized factors that may be contributing to the decline are contaminants (multiple compounds), climate change, habitat degradation, and hunting pressure.

The U.S. Fish and Wildlife Service, along with states and provinces, carefully manages allowable take during hunting seasons and limits the number of individual birds hunters can harvest based on many factors, including population size and trend. In fact, Connecticut has a reduced bag limit for scaup with a daily bag limit of two birds and possession limit of six.



Esox, My, What Big Teeth You Have...

Written by Mike Beauchene, DEEP Fisheries Division

Loved by some and despised by others, the myth that pike and pickerel are a detriment to a waterbody is simply that, a myth. Some anglers feel the fish are a detriment to the survival of other fish, like bass and trout, through their predatory nature. Others deem them as nuisance fish because their sharp teeth may cut the line, resulting in the loss of a favorite lure. On the flip side, some appreciate that they are a great year round sportfish, active during both the open water and ice fishing seasons and provide a tremendous fight when hooked. Others enjoy the delicious and tasty meal provided through the harvest of a pike or pickerel.

Esocidae is a family of freshwater fish characterized by a long slender body and duck-like snout filled with sharp, pointy teeth. This group of freshwater fish contains pike, pickerel, and muskellunge. Three species are present in Connecticut, with the two most familiar being the chain pickerel (native) and the Northern pike (introduced). A much smaller and less known species, the redfin pickerel (native), is commonly found in Connecticut's swamps, marshes, and low-gradient rivers. Muskellunge and the amur pike do not exist in the state; however, the DEEP has occasionally authorized the stocking of tiger musky, a hybrid between the muskellunge and Northern pike, by the Lake Lillinonah Authority and the Woodridge Lake Association (private water).

The Northern pike and chain pickerel are at the top of the food chain in Connecticut's lakes and ponds. As a top predator, Esocids are built for speed; they are like the cheetah of the African plains. Super-elongated, cylindrical bodies with perfect fin placement allow rapid acceleration from being suspended nearly motionless in and along weedlines – an ambush feeding strategy known as “lie and wait”. A good strategy for targeting pike and pickerel while fishing is casting flashy lures and soft plastics along weedlines, hoping to entice an explosive hit that these fish are known for!

Not only do esocids make a great addition to creating a



Northern pike are very popular when fishing “on the water”. The only trick when targeting these large, toothy fish is to make sure you have a wire leader and drilled a large enough hole in the ice.

PHOTO COURTESY S. BOYDEN

diverse fishing opportunity, but they, like other predatory fish that have been stocked by the State of Connecticut and private citizens, serve an important role in providing balance within the aquatic ecosystem, keeping forage species and panfish populations from becoming overabundant.

Connecticut's Species

Chain pickerel (*Esox niger*) is Connecticut's top native

freshwater predator and is found across the state in many lakes, ponds, slow-moving rivers, and riverine impoundments. The largest are often found in out-of-the-way ponds that receive light fishing pressure. Being a coolwater species, the chain pickerel is active throughout winter, triggering many “flags” on ice angler tip ups.

Chain pickerel have light-colored sides with dark “chain-like” markings. A dark vertical line passes through the eyes, and scales cover the entire cheek and gill cover (opercle). Chain pickerel are commonly up to 18 inches in length, with trophy fish growing upwards of 27 inches long.

The redfin pickerel (*Esox americanus americanus*) is also native to Connecticut and the smallest of the esocids. It prefers quiet backwaters of streams, marshes, and small ponds within the Connecticut River Valley and coastal watersheds. Redfins are predatory but take much smaller prey, including aquatic insects, small fish, and small crustaceans. As its name implies, the pectoral, pelvic, and anal fins are orange-red. Similar to the chain pickerel, scales cover the cheek and gill cover and a dark-colored vertical line goes through the eye. Redfin pickerel lack the chain-like pattern, having more of a wavy banding. The snout is much shorter than other esocids, giving the appearance that they swam into a wall. Redfin pickerel are very similar to the grass pickerel (*Esox americanus vermiculatus*), which is distributed west of the Appalachians (and not found in Connecticut).

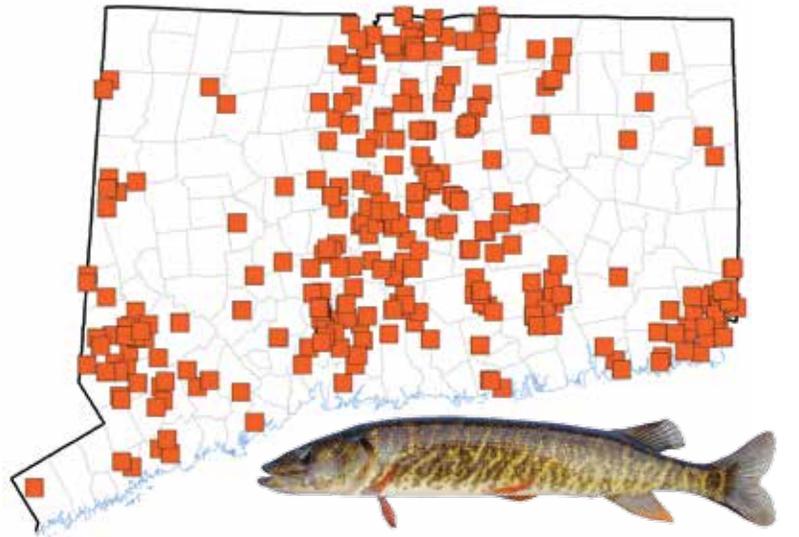
The Northern pike (*Esox lucius*) is a very popular and sought after gamefish in Connecticut, prized for its size and fighting ability as it is the state’s largest introduced freshwater gamefish. The species was introduced here, but its native range is circumpolar in northern latitudes and has a long history with fishing, especially in Canada, northern Europe, and Russia. Currently, the Fisheries Division actively manages recreational fisheries of Northern pike in four pike management lakes and the Connecticut River. Recreational pike fisheries are maintained through annually stocking young pike that were raised within spawning marshes along the Connecticut River and Mansfield Hollow Reservoir, as well as purchasing juvenile pike from a commercial vendor. A self-sustaining population occurs within the Connecticut and Housatonic Rivers.

Pike differ from pickerel in that they lack or have a very faint line through the eye, and the cheek is fully scaled, but the gill cover (opercle) has scales on the top half only. The body is dark-colored, with solid cream-colored oval markings. The dorsal fin and tail usually have dark markings (spots or lines). North-

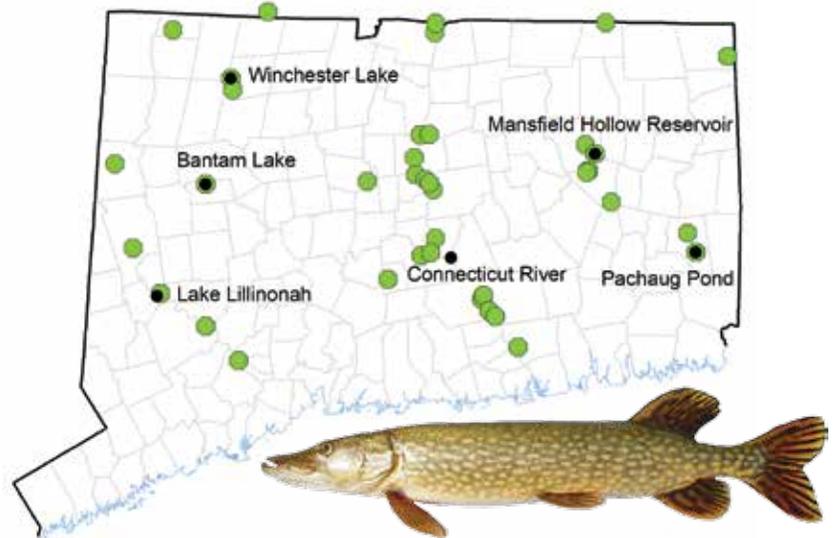
Chain Pickerel



Redfin Pickerel



Northern Pike



Black dots indicate active Northern pike management by the Fisheries Division.

ern pike are common from 18 to 30 inches long, with “gator” pike exceeding 40 inches in length. Giant Northern pike are a favorite target for many Connecticut ice anglers, who will bait tip ups with 12-inch live shiners or dead fish, such as shiners or white suckers.

Connecticut’s Pike Spawning Program

The Fisheries Division currently uses a combination of natural marshes to rear Northern pike, as well as purchasing pike from a commercial hatchery, to support the popular recreational fishery. The Division has been rearing pike in marshes for decades. Currently, they are reared in marshes along the Connecticut River and adjacent to Mansfield Hollow Reservoir. Previously, spawning marshes were also maintained along the Bantam River and in Wyantnock Wildlife Management Area. In the Connecticut River system, adult pike are captured in early March using a fixed weir trap. They are measured, clipped, and released back into the marsh for a period of time. Spawning involves the fish broadcasting eggs and milt (sperm) over a wide area using a rapid flick of their tails. The eggs are sticky and adhere to submerged aquatic vegetation.

The adults are recaptured (post spawn) and released back into the Connecticut River in June when the marshes are drawn down to collect the juveniles. The young esocids hatch in about 10 days and feed on zooplankton, insects, and even each other. In June, Fisheries staff begin to carefully lower the water level in the marshes. As the water level drops, the young pike swim out of the marsh and are collected in large holding boxes. The fish are loaded into oxygenated tanks and transported to various stocking locations.

One of my very first roles as a seasonal employee with the Fisheries Division (back in the late 1980s) was to act as a “pike marsh water level control technician” or, in less glamorous terms, beaver dam buster. The task was to keep the water draining out of the marsh by removing obstructions downstream of the Bantam River marsh system (mostly placed the night before by beavers). I remember it being super-hot, humid, and scary as my partner and I waded through narrow channels, sometimes up to our chest in thick marsh muck. Good thing there are no alligators in Connecticut!

A second method involves obtaining one-day or two-day old fry from the State of New Jersey’s Hacketstown Fish Hatchery. New Jersey has a captive spawning program for pike, much like Connecticut’s trout program and has graciously donated about 100,000 of these tiny pike to Connecticut for



PHOTO COURTESY J. JACOBOWITZ

Esocids are Connecticut’s largest freshwater predator, with the Northern pike (top two photos) and the chain pickerel (bottom photo).



PHOTO COURTESY J. PUNTY



PHOTO COURTESY M. NADEAU

Most catches of our native chain pickerel are in the 12- to 20-inch range, but not this one!

our efforts for a number of years now. These fish are placed into the marsh in Mansfield until June when the water is lowered and the four-inch pike are collected. The purpose of stocking fry into a marsh, as opposed to stocking adults and allowing them to spawn and create fry that then grow to fingerlings, is to attempt to eliminate some of the uncontrollable environmental variables that come into play when

a fish is being created through spawning. By stocking fry, we have bypassed a very dangerous and high mortality life stage for fish. These fry are not stocked into Connecticut River marshes, nor are the fingerlings of these fry stocked into the Connecticut River so as to maintain genetic integrity.



Delicious Eats

Often overlooked as table fair (due to having lots of bones), pike and pickerel have a beautiful white flesh that is great fried, baked, added to chowders, pickled, or made into fish cakes. While tasty, esocids are very bony and do take skill and some work to clean and fillet (there are plenty of videos on YouTube to demonstrate how to remove those pesky “Y” bones). For those up for the challenge, here are a couple of recipes.

Pike/Pickerel Bake

Shared by DEEP Fisheries Division Biologist, Ed Machowski; super simple and oh, so delicious!

Ingredients

Pike or pickerel fillet, deboned (will end up with about 5 boneless strips of fish per fillet)

- 1 cup cauliflower florets
- 1 cup green bell pepper, seeded and membrane removed, sliced thin
- 1 cup red bell pepper, seeded and membrane removed, sliced thin
- ½ cup red onion, sliced thin
- 1 large carrot, cut about 3 inches long and sliced thin
- 2-3 garlic cloves, peeled, crushed, and coarse chopped
- ⅛ cup olive oil
- ⅛ cup butter, melted
- ¼ cup fresh parsley, chopped
- 2 tbsp. fresh thyme
- 2 tbsp. fresh oregano or savory (whichever you prefer)
- 1 tbsp. coarse black pepper
- Pinch of cayenne
- Salt to taste

Directions

- 1) Preheat oven to 350° F.
- 2) Prepare suitable size casserole dish to hold all of the vegetables and fish.
- 3) Mix the vegetables together and put in casserole dish.
- 4) Mix oil, butter, and remaining ingredients together.
- 5) Reserve 2 tbsp. of this mix, and pour the remaining oil/butter/herb mixture over the vegetables.
- 6) Cover casserole and bake in oven until vegetables are just starting to soften.
- 7) Now, place the deboned fish strips on top of the vegetables and top with the reserved oil/butter/herb mix.
- 8) Place in the oven and bake until fish is flaky (about 5 – 8 minutes).
- 9) Spoon some of the juices from the bottom of the casserole over the top.
- 10) Go catch another pickerel and repeat.

Pickled Pickerel or Pike

Recipe by Hank Shaw at honest-food.net and recommended by Justin Wiggins, DEEP Fisheries Division Biologist.

The nice thing about pickling pickerel is the pesky “Y” bones dissolve during the brining process, so at the end you are left with a boneless fillet. I made this recipe using two 20-inch pickerel harvested from the cold January waters. I can’t wait to do it again this winter! This recipe is from renowned food writer Hank Shaw and can be found, along with dozens of other wild food recipes, at honest-food.net. I ended up adding some sliced jalapeno peppers and a handful of fresh garlic cloves to the mason jar.

Ingredients

- 1 cup kosher salt
- 5 cups water, divided
- 1 pound pickerel or pike fillets, cut into ½-inch pieces
- 2 cups cider or white wine vinegar
- ⅓ cup sugar
- 1 tsp. mustard seed
- 2 tsp. whole allspice
- 2 tsp. black peppercorns
- 2 bay leaves
- Peel of 1 lemon, sliced and white pith removed
- 1 medium red onion, thinly sliced

Directions

- 1) Heat 4 cups of water, enough to dissolve salt. Let this brine cool to at least room temperature, preferably colder. When it is cold enough, submerge the pike pieces in the brine and refrigerate overnight. Meanwhile, bring the sugar, vinegar, the remaining cup of water and all the spices to a boil. Simmer 5 minutes, then turn off the heat and let this steep until cool.
- 2) Heat 4 cups of when the pike has brined, layer it in a glass jar with the sliced lemon peel, bay leaves, and red onion. Pour over the cooled pickling liquid with all the spice, and seal the jars. Wait at least a day before eating, and I find it best after about a week to 10 days. Store in the fridge for up to 1 month.



PHOTO COURTESY J. WIGGINS

Bears Use a Familiar Strategy During Cold Winter Months

Written by Kyle Testerman, Wildlife Management Institute

Connecticut's changing seasons are one of the many attractive attributes of living in the state. Green springs, warm summers, colorful autumns, and cold, snowy winters. The state's resident wildlife adjusts to those seasonal changes with a variety of strategies. Black bears are well-known for their seasonally changing diets and activity levels. In spring, wetlands are the perfect place to feed on vegetation, like skunk cabbage. Summers are full of berries, insects, and the season's bounty of fresh leaves and grasses. Autumn is a time of hyperphagia, or "excessive eating", when bears are eating as much as they can before winter; acorns and other hard mast contribute to the bulk of their diet during this season. When winter arrives, bears settle in for their long winter's nap and do not emerge until the spring...right? Well, not quite! Black bears are very adaptable, which has allowed them to occur from Alaska's Arctic to Florida's Everglades, and 38 other states in-between, where winters can vary from long and severe to hot and humid.

Surviving Winter

Black bears use winter dens primarily for two reasons. The first is for pregnant females to have a safe and protected place to give birth to cubs. In Connecticut, this occurs pri-

marily in January. In the den, newborn cubs are about the size of a soda can, but grow fast with their mother's milk. The second reason bears den for winter is due to a decrease in their normal food supply – the vegetation has died and snow is covering the ground. When food supplies are low, it becomes too energetically expensive to stay warm and active all winter. As a result, bears "den up" and experience periods of torpor, or a mild hibernation, where their heart rate, breathing, and metabolism decrease to save energy. A bear's body temperature can even drop about 12° F. While this temperature drop saves energy, it is not such an extreme decrease in temperature that it would take a lot of time and energy for a bear to warm itself back up, which allows it to quickly respond to danger.

The smaller decrease in body temperature is one of the key differences

between bears and true hibernators, like bats and woodchucks. The bear's strategy of only moderately lowering its body temperature is similar to when thermostats are regulated in homes during winter. To save on heating costs, we typically turn the heat down only a few degrees when we are gone for the day, and set it back up to normal when we get home. Returning to the normally set temperature is fairly quick. If the heat was turned off, it would take considerably more time and energy to warm the house back up to a comfortable level. Bears are able to find the right balance between long-term energy savings, the high costs of rewarming, and the ability to become active quickly if necessary.

Effect of Mild Winters

When we experience mild winters in Connecticut, some bears may remain active throughout the season. For example, if there is little snow cover and a plentiful acorn crop from autumn, bears may continue to forage for this high-calorie, natural food source. Anthropogenic (human-related) foods, like garbage, food waste, pet food, and bird seed, can be very abundant in residential areas. Consequently, even when natural foods are plentiful, bears may localize their activity around natural and anthropogenic foods. Active bears will still use a den or multiple dens, coming and going to forage on a local food



During mild winters with little or no snow cover, some bears may remain active. Here, a bear is caught on camera taking down a winter bird feeder.

PHOTO BY KYLE TESTERMAN



A male black bear emerges from a winter den on a sunny, mild afternoon.

source. Therefore, residents should not be too surprised if they continue to see bear activity in their neighborhood during winter.

Be Bear Aware, Even in Winter

Because bears can remain active all year long, people should continue to practice good habits of coexistence, even in colder months. Keeping garbage secure and bird feeders out of reach, as well as keeping dogs on a leash when hiking and checking yards before letting pets outside can reduce potential conflict. Electric fences should remain on and monitored throughout winter to effectively protect property. If a bear gets to your bird feeders, do not put them back up, or the bear may become food-conditioned. Food-conditioned and human-habituated bears are more likely to be around homes looking for food on a regular basis, and may even discover a suitable place to den in a

backyard under a deck, shed, or brush pile. Denning, even for short periods, in such close proximity to homes can lead to property damage and pose potential risks to people, pets, and bears. It is in everyone's best interest to prevent this from happening by removing attractants, like bird feeders and garbage, and sealing up areas under decks and sheds where bears may find shelter. As wildlife continues to adapt to humans and our changing landscape and climate, we too can try to adapt our habits to help reduce conflicts with wildlife.

To learn more about black bears and also report bear sightings, visit www.ct.gov/deep/blackbear. Your sighting reports help the Wildlife Division learn more about Connecticut's bear population by providing an index of bear abundance, distribution, and seasonal activity. Sighting reports also alert us to potential conflicts.



Bear Dens Come in All Shapes and Sizes

Brush piles, slash piles, or fallen trees are the most common dens used by bears in Connecticut. Bears also use rock crevasses and ledges, open ground nests, and hollow trees as dens. Ground nests are usually just a sparse mat of leaves and twigs and are typically located in thick vegetation, such as mountain laurel. Bears are also known to den under decks and sheds in people's backyards.



Female black bear with cub using a hollow tree as a winter den.

Welcome New Employees

The DEEP Bureau of Natural Resources is excited to have some experienced and talented new employees join our ranks to fill gaps left by many recent retirees. Meet some of the newest staff within the Wildlife Division (look for more on new staff within the Fisheries and Forestry Divisions in future issues).

Keith Hoffman, Firearms Safety Representative

Keith joined the Wildlife Division's Conservation Education/Firearms Safety Program (CE/FS) as the Assistant Coordinator in February 2018. Keith holds a Bachelor's of Science degree in Conservation Law Enforcement from Unity College in Unity, Maine and has been a volunteer instructor with Connecticut's CE/FS Program since 2015. He is an avid hunter, usually pursuing deer and waterfowl. Keith also enjoys backpacking throughout the country, as well as trail running.



PHOTO COURTESY E. HOFFMAN

Will Cassidy, Wildlife Division R3 Coordinator

Will joined the Division in December 2018 and is based out of the Franklin Swamp Wildlife Management Area office in North Franklin. He is working with both staff and sportsmen and women in Connecticut to develop and implement an "R3" Plan (Recruit, Retain, and Reactivate hunters and trappers) for our state. Will holds a Bachelor's of Science degree in Natural Resources from UCONN. He has worked as a seasonal resource assistant for the Wildlife Division since 2014, initially for the CE/FS Program, and for the



PHOTO BY A. SIERKEVICIUTE

past four years, with the Migratory Bird Program. Will has been a volunteer CE/FS instructor for four years and is certified in archery, firearms, and trapping. He enjoys hunting, fishing, camping, boating, scuba diving, and participating in the shooting sports.

Michael Ravesi, Wildlife Biologist

Mike joined the Wildlife Diversity Program at the Sessions Woods Wildlife Management Area office in Burlington in February 2019. He is currently working on a variety of projects involving



PHOTO BY P. BENJUNAS

reptiles, amphibians, small mammals, and birds, as well as state-listed species. Before joining the Wildlife Division, Mike served as a Natural Resource Specialist for three years at the Camp Grayling Joint Maneuvering Training Center. He has extensive experience studying the federally-listed Eastern massasauga rattlesnake. In addition, he has studied snake fungal disease in a number of species and served as the coordinator for Department of Defense snake fungal disease surveys nationwide. Mike has coordinated projects for species ranging from Kirtland's

warbler to Northern long-eared bats. He holds a Master's of Science from Indiana-Purdue University where he focused on massasaugas and a Bachelor's of Science in Computer Information Systems and Environmental Sustainability from Bentley University. Mike also has experience with habitat management, wildland fire management, and environmental education. He enjoys long-distance running, rock climbing, and kayaking.

Paul Benjunas, Outreach Program Biologist

Paul joined the Wildlife Division's Outreach Program at the Sessions Woods office in Burlington in August 2019. His current outreach efforts include expanding the Division's online and social media presence, presenting educational programs for the general public, and providing communications on the Wildlife Division's efforts. Paul holds a Bachelor's of Science in Biology and Education from Southern Connecticut State University. While completing his degree, Paul worked for the Outdoor Education Program for Regional School District #13, serving the communities of Durham and Middlefield. Paul is a veteran of Envirothon events, having competed in high school and now serving as an advisor to the Cuginchaug Regional Team. He is graduate of Connecticut's Master Wildlife Conservationist Program, has worked with the Division's CE/FS Program, and has been working for the Outreach Program in various capacities since 2018. Paul has a passion for wildlife and spends his time outdoors hiking, hunting, fishing, and photographing wildlife.



PHOTO COURTESY M. HULLBERT

William Hull Recognized as First New England Recipient of the Leopold Conservation Award

William (Bill) Hull of Pomfret, Connecticut, and patriarch/founder of Hull Forest Products was recently honored by the Sand County Foundation as the first New England recipient of the Leopold Conservation Award. Bill was recognized for his enduring commitment to sustainable forest management, exemplified by his purposeful acquisition and then permanent protection of over 27,000 woodland acres in Connecticut and Massachusetts for forest product production and wildlife habitat conservation.

The Sand County Foundation presents the Leopold Conservation Award to a private landowner who exemplifies the spirit of Aldo Leopold's land ethic, which he wrote in his influential book, *A Sand County Almanac*, is "an evolutionary possibility and an ecological necessity". The award is presented to an individual or a family dedicated to leaving their land better than how they found it.

A Well-deserved Award

Bill Hull showed an affinity for trees in his childhood Rhode Island backyard. By the age of 15, he convinced a local farmer to lend him the money to purchase a forest. He paid off the loan (with interest) two years later, and was on his way to becoming one of New England's leading foresters.

While earning a forestry degree at the University of New Hampshire, Hull got his start in the lumber business sawing white oaks into barrel staves on an old-fashioned circular sawmill. Despite market downturns and collapses, bankruptcy scares, and several devastating fires, he bootstrapped a tiny business into the largest sawmill in southern New England. Today, Hull Forest Products manufactures more than 10 million board feet of lumber into sustainable building materials each year.

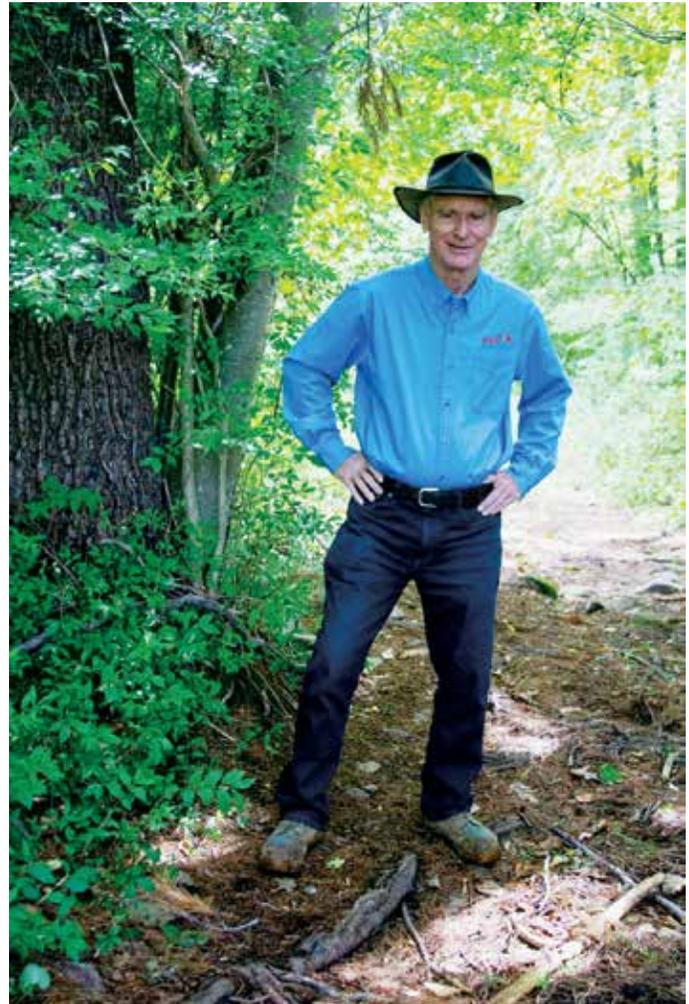
With a business dependent on healthy, productive forests, he launched a woodland management division staffed with licensed foresters to help other landowners keep their woodlands intact by providing them a viable financial return.

He has acquired more than 27,000 acres of forestland with a single-minded dedication for conserving working forests that provide bird and wildlife habitat and biodiversity across New England.

Hull Forest Products, which employs 80 people, is a family of forestland owner-investors working in the combined fields of forest management, timber harvesting, and wood products manufacturing and marketing.

Hull credits his rural background with teaching him that growing and harvesting trees helps the environment through increased wildlife habitat, improved air and water quality, and carbon sequestration. He has voluntarily placed conservation easements on 90 percent of his southern New England forests.

The Hull Family has permanently protected 27,740 acres of forestland through their land trust, Hull Forestlands. By removing the possibility of development, it ensures that working forests will



HULL FOREST PRODUCTS

remain a source of timber for generations to come. These unique and environmentally important landscapes are home to wetlands, streams, and forests that sustain drinking water supplies for urban areas and provide habitat for migratory waterfowl.

In 2000, Hull Forestlands participated in the largest private land protection project in Massachusetts' history by permanently preserving more than 8,000 acres of working forestland. The Massachusetts Secretary of Environmental Affairs hailed the innovative project that spread across five watersheds in Massachusetts and Connecticut as a "regional model for innovative conservation of natural resources".

A five-minute video about Bill Hull's Leopold Conservation Award can be viewed on YouTube at <https://youtu.be/mOvW6StIZ6c>.

The New England Leopold Conservation Award was made possible through the generous support of the New England Forestry Foundation, American Farmland Trust-New England, The John Merck Fund, The Ida and Robert Gordon Family Foundation, Wildlands and Woodlands, Whole Foods Market, David and Ann Ingram, and the Yale School of Forestry and Environmental Studies.



CT Junior Duck Stamp Winner to Be Featured on the 2021 CT Duck Stamp

Calling all creative young artists and art educators in Connecticut. Entries are now being accepted for the 2020 Connecticut Junior Duck Stamp Art Competition, part of a U.S. Fish and Wildlife Service (USFWS) environmental education program administered since 1987 by the Connecticut Waterfowl Association (CWA). Starting this year, in addition to being the Federal Junior Duck Stamp Contest Entry, the CT Junior Duck Stamp “Best in Show” winner will also be featured as the 2021 Connecticut Migratory Bird Conservation Stamp!

This contest is open to all students, kindergarten through grade 12, who are Connecticut residents. To enter, students create and submit a drawing or painting featuring native waterfowl (ducks or geese). There is no cost to enter. Entries for this year’s contest must be postmarked by March 15, 2020, and mailed to Christopher Samorajczyk, 29 Bowers Hill Road, Oxford, CT 06478. Questions can be directed to Chris at 203-888-0352 or csamor16@att.net.

Submitted artwork will be judged in four groups according to grade level, encouraging artists of all ages and ability levels to be inspired and join in the contest’s creative fun and learning. Three first-, second- and third-place entries will be selected from each group, and prizes will be awarded.

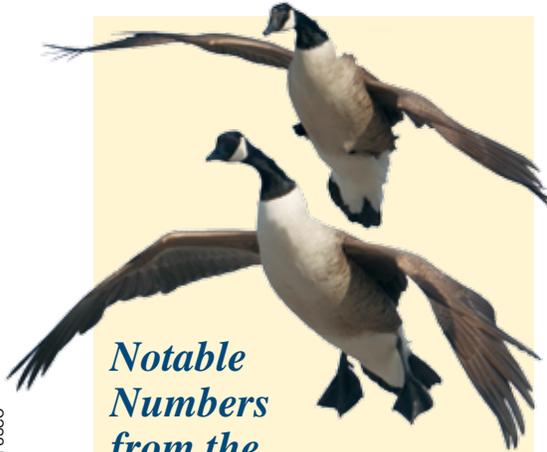
Guidelines, entry forms, and additional information about the Connecticut Federal Junior Duck Stamp Art Competition can be obtained on the Connecticut Waterfowl Association website at www.ctwaterfowlers.org/junior-duck-stamp.html or on the DEEP website at www.ct.gov/deep/CTDuckStamp.

Judging of the Junior Duck Stamp Art Contest submissions will take place at an event, open to the public, on Monday, March 23, 2020, at 7:00 PM, at Sessions Woods Wildlife Management Area in Burlington.

Habitat Improvements at Charter Marsh



A crew from the Wildlife Division’s Wetland Habitat and Mosquito Management (WHAMM) Program uses a Rockhound cutting head mounted on a mini-excavator to clear the impoundment dikes and remove invasive autumn olive at Charter Marsh in Tolland. Similar maintenance on wildlife areas throughout the state is done during winter.



Notable Numbers from the Sept. 2018 - Feb. 2019 Migratory Game Bird Hunting Season

Duck Harvest Total	16,400
Mallard Harvest	6,000
Wood Duck Harvest	2,500
Duck Hunter Days Afield	12,500
Goose Harvest Total	8,000
Goose Hunter Days Afield	11,100
CT Duck Stamps Sold	4,400
Woodcock Harvest Total	900
Woodcock Hunters	700
Woodcock Hunter Days Afield	3,800
Rail Harvest Total	100
Rail Hunters	50



Look for a New DEEP Website Soon

For the past several months, the DEEP has been in the process of transitioning its website to the new ct.gov portal where all State of Connecticut websites will reside. Plans are to launch the new website sometime in February 2020. It will have a new look and feel; plus, it will be mobile-friendly and easier to use for those who visit the website on their mobile devices.

P. J. FUSCO

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Conservation Calendar

Dec. - March Observe eagles at the Shepaug Dam Observation Area in Southbury. The viewing area is open Saturdays, Sundays, and Wednesdays from 9:00 AM to 1:00 PM from early December through early March. Visitation to the observation area is by reservation only. To schedule a free visit, go to https://www.firstlightpower.com/recreation/?location_id=397 or call 1-800-368-8954 (Tuesday through Friday between 9:00 AM and 3:00 PM).

Jan. - April Donate to the Endangered Species/Wildlife Income Tax Check-off Fund on your 2019 Connecticut Income Tax form. Learn more at www.ct.gov/deep/EndangeredSpecies.

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.

March 22 **March Mushroom Madness**, starting at 9:30 AM. The CT Valley Mycological Society (CVMC) welcomes members and non-members to their annual meeting at Sessions Woods for an enlightening indoor presentation on mushrooms. The meeting provides an opportunity to talk with others interested in the field of mycology and view some of the resources available to learn more about mushrooms. The CVMC meeting includes a coffee and refreshment half hour beginning at 9:30 AM, followed by the program at approximately 10:00 AM.

April 4 **Vernal Pool Hike**, starting at 1:00 PM. Join Wildlife Division Biologist Paul Benjunas for a hike to the vernal pool located on the Beaver Marsh Trail at Sessions Woods. Paul will provide insight on the dynamics of a seasonal waterbody, along with a look at the inhabitants of these important wetlands. The hike will be approximately 2 miles roundtrip. Participants should meet inside the Sessions Woods Conservation Education Center.

April 26 **Saving Animals from Extinction: Tales of Species Recovery in Connecticut and Beyond with Jim Knox and a few special Zoo Ambassadors**, starting at 1:00 PM. The Friends of Sessions Woods Annual Meeting will feature Zoologist and Connecticut's Beardsley Zoo Curator of Education Jim Knox. All are welcome! Jim will profile his work with Species Survival Plans and wild species re-introductions in Connecticut and beyond. Learn how 21st century science is extending the reach and achievements of field conservationists and how Connecticut citizens can become involved in recovery efforts to protect our planet's most imperiled and majestic creatures. Jim will bring along a few special live zoo ambassadors! There will be a dessert potluck at 12:30 p.m. prior to the program. Jim Knox is writer and host for PBS television's Wild Zoofari and has shared his knowledge of and passion for wildlife with millions of viewers throughout the U.S., Russia, Thailand, the Middle East, and Europe on Animal Planet. Jim has served as an on-camera wildlife expert for The Today Show, CBS Early Show, and Fox News. He has studied rhinos, lions, and great white sharks in South Africa, conducted field research for Alaskan brown bears, field conservation for Atlantic salmon, and written nationally for the U.S. Fish and Wildlife Service.

Early 2020 Hunting and Fishing Season Dates

April 11 Opening day of the trout season at 6:00 AM.

April 18-26 Junior Turkey Hunter Training Days (excluding Sunday). Learn more at www.ct.gov/deep/JuniorHunting.

April 29-May 30 Spring Turkey Hunting Season

Consult the 2020 Connecticut Hunting and Trapping Guide and 2020 Connecticut Fishing Guide (available in late March) 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.



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P. J. FUSCO

Coyotes are opportunistic feeders, meaning they will feed on whatever is most readily available and easy to obtain. A coyote's diet consists predominantly of mice, woodchucks, squirrels, rabbits, some fruits, carrion, and when available, garbage. They will also eat white-tailed deer and will scavenge on animal remains, including road-kills. Because coyotes use so many different food sources, they have adapted to and live in a variety of habitats, including urban and heavily-populated areas. Some coyotes will also prey on small livestock, poultry, and pets. In Connecticut, unsupervised pets, particularly outdoor cats and dogs are vulnerable to coyote attacks. Coyotes taking pets are not considered a threat to human safety.