

WILDLINES

New Hampshire Fish and Game's quarterly newsletter of the Nongame and Endangered Wildlife Program



SUMMER 2023



Landowners Make Shrublands for COTTONTAILS

The state-endangered New England cottontail has been a species targeted for conservation for many years in New Hampshire. Their population has declined due to the loss of thick shrublands they depend on and the introduction of the highly adaptable eastern cottontail. Nongame Program biologists have approached the conservation of this species from every angle, including monitoring, releasing captive-bred rabbits into preferred habitats, and maintaining shrublands. Some of the greatest progress toward recovery has been accomplished by coordinating with local landowners and towns to create more areas of suitable habitat on the landscape, providing a place for these native rabbits to thrive once again.

New England cottontails need at least 10 acres of thick cover to hide from predators, from foxes on the ground to hawks in the sky. They also need easily accessible forage-like seedlings and the shoots of birch, maple, and other trees. These dense and messy thickets have historically been cleared to make lawns or for other development.

"Private landowners with large properties have worked with the Natural Resource Conservation Service (NRCS) to strategically cut areas to allow shrubby regeneration to grow," said Nongame Program Biologist Brett Ferry. It is essential to have a connected

network of appropriate habitat. "Areas that were cleared eight to ten years ago are now suitable for rabbits, making it the best time to release new cottontails onto this landscape." Through monitoring, biologists have now seen these rabbits breed and disperse to other patches in the area beyond the release site.

"We're seeing great successes on the seacoast, with the highest report of reproduction this year," said Nongame Program Biologist Heidi Holman. Biologists discern this by collecting fecal pellets from the site and sending them to the University of New Hampshire for analysis. This partnership led to the determination that the population in the Rollinsford-Somersworth area is growing, with 39 new wild-born offspring detected in 2022. "This population was also bolstered by the release of captive-born cottontails on some of the City of Somersworth's property, made possible by the hard work of the town's conservation commission."

"It's the collaboration among multiple landowners in close proximity to one another



New England cottontail

that has had the biggest impact here," said Ferry. The NRCS and Nongame Program are still seeking landowners of over 10 acres who are interested in learning about habitat management for cottontails in the towns of Somersworth, Rollinsford, Dover, Durham, Lee, and Madbury. Learn more about this project and the range-wide conservation initiative by visiting newenglandcottontail.org.



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COPPERY EMERALD DRAGONFLY (*Somatochlora georgiana*)



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Description: This dragonfly is rare and localized throughout its range in the U.S. Adults are strong fliers in pursuit of flies and mosquitoes, and are most active in July and August. They have large chestnut-colored eyes and brownish bodies with two yellowy stripes. In New Hampshire, the coppery emerald dragonfly is known to occur at only one site and is considered a species of special concern.

Habitat: Temperate swamps and the Appalachian oak-pine forest, specifically forested peatlands, forest streams, and Atlantic white cedar swamp.

Threats:

- Habitat conversion from the filling of wetlands.
- Reduced habitat quality from polluted water run-off.
- Droughts that may reduce productivity and increase the decomposition of peat in their preferred habitats.

Conservation Actions:

- Learn to identify New Hampshire's dragonfly species.
- Report dragonfly and damselfly sightings at <https://nhwildlifesightings.unh.edu>.
- Biologists will continue to monitor the known site in New Hampshire.

BARREN SP WILD PLAC

A geologic history of glacial movement, boulder scouring, erosion, and flooding has marked New Hampshire with areas of sandy outwash and many kinds of rocks. These areas are targeted for the extraction of sand, gravel, and stone, creating large patches of dug-up earth that may appear unsightly.

The excavation of these materials is often a short-lived endeavor, however. Once the area is abandoned, the leftover “pits” are easily converted to ball fields, other development, or at the very least are re-planted to serve another purpose. However, the vegetation at these extraction sites is slow to become re-established, allowing an early successional state to remain for decades. These long-lasting shrubby areas provide important cover and foraging opportunities for wildlife.

Several species of greatest conservation need have been observed using these habitats. Bees and other pollinators, reptiles, and many shrubland birds, such as indigo bunting, brown thrasher, and warblers, have been documented. “The sandy conditions and high solar exposure are attractive to turtles and snakes for nesting,” said Nongame Program Biologist Melissa Winters. “In situations where abandoned gravel pits



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Green sweat bee

are located near wetlands or streams, they become a hot spot for our rare turtles to lay their eggs, such as Blanding's, spotted, and wood turtles.”

For snakes, these sandy, brushy habitats are ideal locations for basking, foraging, mating, and nesting. Two species in particular, the state-threatened Northern black racer and the state-endangered Eastern hognose, often incorporate these pits as part of their large home ranges. During



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Wood turtle

RACES ACES?

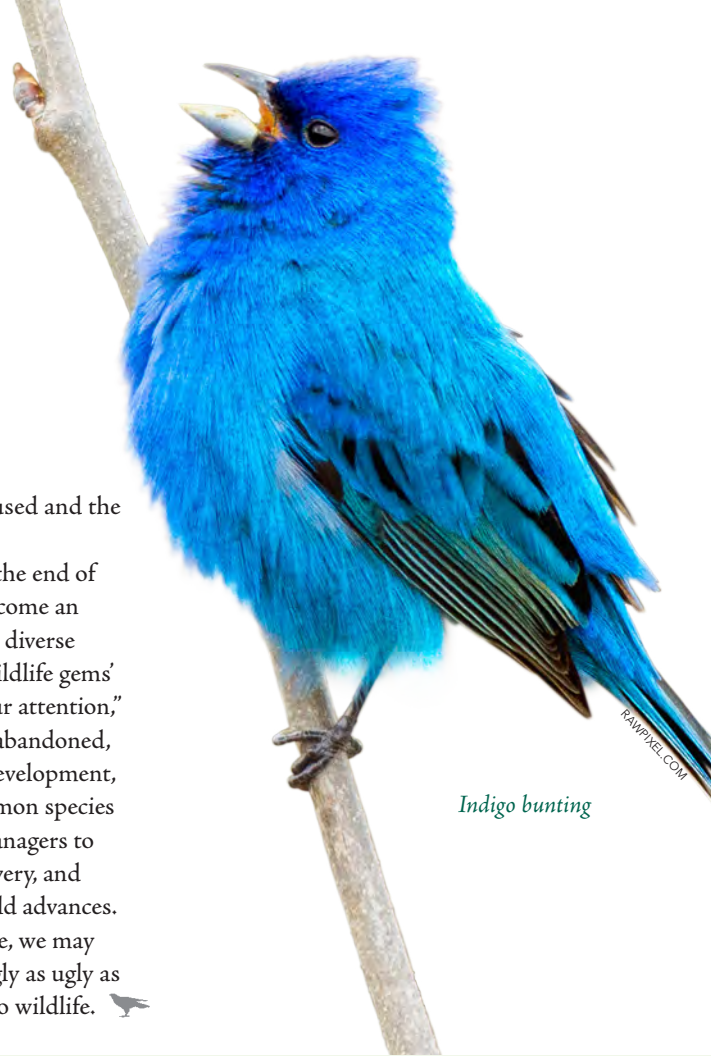
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a radio-tracking study of more than 30 black racers, Nongame Program biologists routinely documented them using both active and abandoned sand and gravel pits across southern New Hampshire. "These sites provided ideal habitat features, and in some cases the snakes remained there for the majority of the summer," said Biologist Brendan Clifford. However, these sites can also become a hazardous place for snakes and turtles when

active because of the machinery used and the compacting and moving of soil.

Those pits that have reached the end of their excavation potential may become an excellent component of the state's diverse wildlife habitat. "These are the 'wildlife gems' hidden in plain sight that need our attention," said Clifford. Leaving these sites abandoned, without substantial planting or development, can be beneficial to rare and common species alike. It is a great reminder for managers to be adaptive as information, discovery, and understanding of the natural world advances. When we take the time to observe, we may find that even something seemingly as ugly as a gravel pit can be of great value to wildlife. 🐦



Indigo bunting

WATER SNAKE AND SNAPPING TURTLE MYTHS

Are there dangerous snakes in New Hampshire waters?

The native Northern water snake is a nonvenomous species that may be confused with venomous water-loving snakes, such as the water moccasin, which is actually a southern species that doesn't occur in New England. The Northern water snake is one of New Hampshire's larger snakes, reaching up to 42 inches in length. It's identified by its thick, darkly colored body that may be banded. They naturally occupy all freshwater habitats and are often the prey of various hawks, wetland birds such as herons or bitterns, and even large bass.

Although Northern water snakes prefer to be in or around water, they will move over land. Females bask on land when preparing to give birth between August and September. When threatened on land, Northern



Northern water snake

water snakes may rear up or flatten their bodies to look more imposing. Leaving them alone will be less stressful for the snake.

Are turtles and water snakes eating all the fish?

Both species can utilize any size wetland, from large lakes to small ponds and flowing streams, and will take advantage of any food that is readily available. The common snapping turtle is an omnivorous scavenger, eating plants as well as insects, worms, amphibians, smaller reptiles, crayfish, carrion, and fish. The carnivorous Northern water snake will take opportunities to eat these as well (with



Snapping turtle

the exception of plants), and occasionally mice and shrews. Turtles and snakes are part of New Hampshire's natural freshwater food web and play vital roles in our ecosystems.

Are snapping turtles dangerous?

While a common snapping turtle is capable of delivering a swift and powerful bite, they are actually equipped with far less biting force than a person has. Still, a bite from its bony (toothless) beak would hurt and requires that we treat these reptiles with respect. Snapping turtle bites are rare, and

MYTHS continued on page 4



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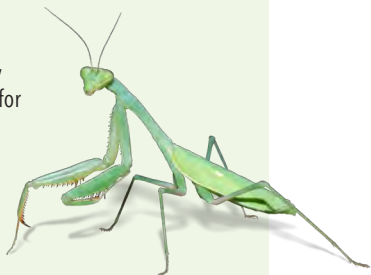
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JULY

- Garter snakes may seek refuge under objects on hot days, resting after hunting for earthworms, toads, wood frogs, and red-backed salamanders.

AUGUST

- If you've ever hoped to see a praying mantis, it's a good time to look for this well camouflaged insect on weedy vegetation. They feed mostly on invertebrates.



SEPTEMBER

- The fruit of the wild grape (*Vitis spp.*) is a favorite of many songbirds in late summer, providing an excellent source of nutrition and cover.

MYTHS *continued from page 3*

are only likely to happen if one is handled or it feels threatened.

In the water, snapping turtles hide in sediment or flee underwater to avoid confrontation. When threatened on land, their only defense is to snap, which has given them the reputation of being aggressive. Unlike other turtles that can pull their head and limbs into their shell, snapping turtles have a reduced lower shell (plastron) and are unable to protect their soft-bodied parts.

Is a snapping turtle found on land lost or sick?

Snapping turtles can travel long distances over land, and females will seek out dry, sunny areas to nest. Even when far from water, the turtle is not lost. If one is observed nesting in a backyard, the best thing to do is give it plenty of space and keep pets indoors. Covering a nest is not advised because hatchlings can become trapped and covers could interfere with incubation. Marking the area off with a yard cone or flag to prevent disruption can help to ensure the success of the nest. Even tiny hatchling turtles seen on land in the fall or spring are on a journey to a nearby wetland and are not lost, so it is best to let them be on their way.

If you see a snapping turtle crossing

Loons have begun the challenging task of raising the next generation on Granite State lakes. Loons show cues when stressed that include raising feathers, vocalizing, sinking low in the water, stretching out their neck and head, and performing a display of rearing up in the water, as shown here. These are signs that the bird feels threatened and needs more space. "We generally recommend maintaining a distance of 150 feet or more from loons. Because all loons have different tolerance levels, it is best to watch for behavioral cues to determine if a loon needs more space," said Caroline Hughes of the Loon Preservation Committee (LPC). "Closely approaching loons can cause them to flush off of their nest or distract them from providing their chicks with the care they need."



© KITTIE WILSON

Thank you to LPC and photographer Kittie Wilson for sharing this photo.

a road, let it continue unless there is an immediate danger to it. When you approach a snapping turtle, it will turn and face you to defend itself, prolonging its time on the road. If there is immediate danger, and you are confident in doing so, you may maneuver

the back of the turtle onto something like a flattened cardboard box or car mat to drag the turtle across the road in the direction it was heading. Never pull or pick up a snapping turtle by its tail. This can lead to dislocation of the spine and eventual death. 🐢