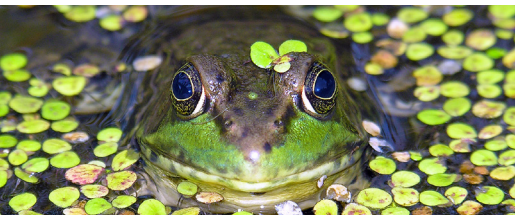


# WILDLINES

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



## SPRING 2020

## Surveys Reveal Concentrations of **CLIFF SWALLOWS**




ALAN SCHMIEBER PHOTO

Cliff swallows build nests in large colonies, and in some states, the numbers of nests reach into the thousands. During nesting season, adult cliff swallows glide and dart in pursuit of insects at high altitudes and they congregate at wet areas to collect mud with which to build their renowned mud nests.

In New Hampshire, cliff swallows are one of the most quickly declining species of birds, and in 2017, they were officially classified as threatened in the Granite State. Threats to the birds listed in New Hampshire's Wildlife Action Plan include impacts from climate change, effects of insecticides, and changes in food supply.

Pamela Hunt of NH Audubon led

targeted spring surveys for cliff swallows for the past three seasons. "I've spent time revisiting sites where cliff swallows were once known to nest in New Hampshire, as well as providing some outreach about the birds and their nests," said Hunt. Working with property owners is necessary since cliff swallows build their nests on man-made structures, including bridges and barns. "Most interactions with homeowners and farmers have been positive and that's critical for the continued existence of cliff swallows in the state," said Hunt, who has found that most landowners are open to sharing space with the birds and their nests.

Hunt reported that an estimated 150 pairs of cliff swallows remain in 20 colonies, mostly in Coos County and the Lakes Region. Half of these pairs are concentrated in just four colonies north of Concord. A single cliff swallow nesting site was located on the seacoast in New Castle, supporting just one pair for the last few years. In partnership with New Hampshire Fish and Game Department's Nongame and Endangered Wildlife Program, NH Audubon biologists will continue to adjust monitoring strategies for cliff swallows in the coming years. Anyone who observes a cliff swallow or its nest is encouraged to report the sighting to [Ebird.org](http://Ebird.org). 

## Team Up with the Nongame Program This Season

There are many different ways that you can help support wildlife and the ongoing conservation projects taking place in New Hampshire:



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Big brown bat

**Count Bats**  
– Contribute valuable information about bats and their response to white-nose syndrome by conducting a bat count on your property. The little brown bat and big brown bat use

buildings as summer roosting sites, which makes it easy to locate colonies as bats fly out at dusk to forage. Find the instructions for conducting a bat count, a "how to" video, official data sheets, and sign up for the NH Bat Counts newsletter to get notifications about the upcoming bat counting season, information on training opportunities, and results from summer bat counts at [www.wildnh.com/nongame/bats-nh.html](http://www.wildnh.com/nongame/bats-nh.html).

**Protect Piping Plovers** – 2019 was a record-breaking year for the number of piping plovers on Seabrook and Hampton Beaches. With more plovers on the beaches,

*TEAM UP continued on page 4*



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New Hampshire Fish and Game Department

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## AMERICAN BROOK LAMPREY

*(Lethenteron appendix)*



© SCOTT BOLICK



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**Description:** This eel-like fish has a circular mouth with tiny teeth arranged in pairs. Adults move stones with their mouths to make small nests in clean rivers. When their larvae hatch, they drift downstream to calm water where they burrow into the sediment and filter-feed for about five years.

**Habitat:** Both coldwater and warmwater rivers and streams, specifically the Oyster River watershed.

**Threats:**

- Undersized stream crossings act as barriers to movement and reduce gene flow.
- Stormwater runoff and groundwater extraction can reduce water quality and raise stream temperature.

**Conservation Actions:**

- Avoid development adjacent to rivers and filter stormwater runoff through the ground before it enters streams.
- Update narrow stream crossings and culverts to help increase connectivity.

## Securing a Future for

# POLLINATION

New Hampshire's Wildlife Action Plan outlines a range of actions to conserve pollinators and their habitat, which include grass and shrublands, backyards, farmlands, and meadows that support a wide spectrum of flowers. There are two types of pollinators—those that actively collect pollen like bees and wasps and those that unintentionally

move pollen during their normal activities such as moths, flies, butterflies, some birds, and bats. Many plants rely on this fertilization process in order to develop new seeds and reproduce. This life-producing system has gained worldwide attention as pollinating insects continue to decline in number.

Nongame Program biologists have



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## Research Project Launched for Endangered



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extensive effort into locating harrier nests and foraging sites. Harriers hunt in open hayfields, shrubby regenerating clear cuts, and pastures, while nesting sites are often near wetlands. The loss of harrier habitat is associated with the raptor's continued decline. The New Hampshire Fish and Game Department's Nongame and Endangered Wildlife Program partners with NH Audubon to monitor and protect raptors throughout the state.

New Hampshire's population of breeding northern harriers has been in decline for decades. In July and August of 2019, NH Audubon biologists and volunteers put

"Establishing accurate annual numbers of breeding pairs has been difficult due to their wide-ranging foraging habits and well-camouflaged ground nests," said Chris

# POLLINATORS

partnered with the NH Department of Transportation to pinpoint highway corridors that might provide habitat that is essential to pollinators. Biologists will coordinate the planting of wildflowers and other nectar plants, target the removal of invasive plants that would otherwise overtake these areas, and work with roadside crews to reduce the


effects of mowing on pollinating insects. The goal is to plant along over 400 miles of New Hampshire highway, transforming it into a productive, colorful, buzzing habitat.

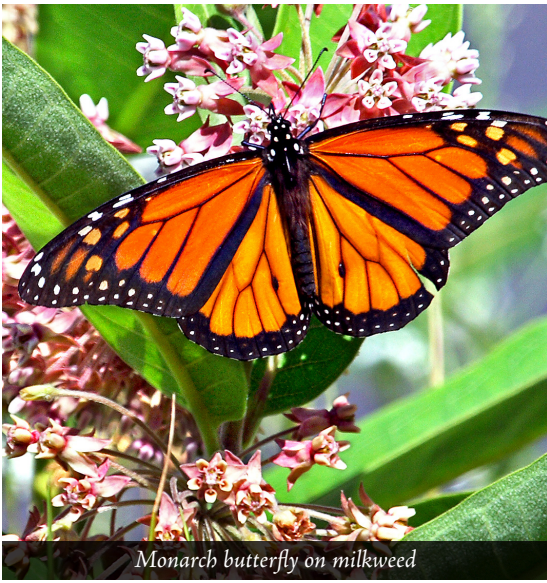
A grant for this effort was awarded by the New England Forests and Rivers Fund to address the decline of migrating monarch butterflies and their necessary host plant, milkweed. Enhancing pollinator habitat will support many different types of insects. The federally endangered rusty patched bumblebee, as one example, hasn't been recorded in the state since 1997. There are four types of bumblebees listed as Species of Greatest Conservation Need in the New Hampshire Wildlife Action Plan, as well as other butterflies and moths that once graced the state's meadows and gardens in greater numbers.

Successful large-scale conservation is a long-term endeavor, which makes the inclusion of younger generations in the protection of pollinators a valuable part of this effort. New Hampshire teachers who would like to launch wildlife habitat projects with their students can apply for a Schoolyard Action



*Rusty patched bumblebee*

Grant. This creative approach enables teachers to incorporate nature and environmental topics into classroom lessons. Grants are administered by the NH Fish and Game Department, the U.S. Fish and Wildlife Service, Project Learning Tree, and New Hampshire Audubon. Past projects include the creation of pollinator gardens and replanting areas of school property to enhance habitat for pollinators and other wildlife. These projects have been critical for connecting students to the outdoors while also fostering places for wild animals to find food, water, and shelter. 



*Monarch butterfly on milkweed*

## Endangered Raptor


Martin, bird of prey specialist with NH Audubon. Uniquely, harriers fly low to the ground and hover while hunting. Using both excellent vision and hearing, they capture smaller birds or mammals up to the size of a cottontail. Male harriers court females by performing an aerial dance of dives and rolls. Both males and females care for their young, which are raised in nests on the ground in grassy fields or shrubby marshland.

Surveys revealed that breeding pairs had declined in Coos County where they were once common, and that harriers were extremely uncommon south of the White Mountains. In 2008, New Hampshire wildlife officials reclassified harriers from threatened to endangered status. "Our goal for this first round of summer surveys was to gather evidence of successful reproduction



*Uniquely, harriers fly low to the ground and hover while hunting.*

and document active territories," said Martin. The team visited almost two dozen potential breeding sites and documented

northern harriers present at nine locations, and surveys will continue in the spring and summer of 2020. 



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## APRIL

- Loons molt back into breeding plumage and begin returning to their freshwater breeding grounds from the coastline.

## MAY

- Squirrels, rabbits, and songbirds consume the buds, twigs, and furry catkins of pussy willow (*Salix discolor*).

## JUNE

- Ospreys return to New Hampshire and hatch broods of 1 to 4 young in a bulky nest of sticks near water.



### TEAM UP *continued from page 1*

there is a greater need for volunteers who can track the birds' activity and alert beachgoers to their presence. If you are interested in participating in plover conservation, send an email to [Brendan.Clifford@wildlife.nh.gov](mailto:Brendan.Clifford@wildlife.nh.gov).

**Report Wildlife Sightings: Reptiles, Amphibians, and More** – Support the Nongame and Endangered Wildlife Program's ongoing research by reporting your wildlife sightings to [NHWildlifeSightings.unh.edu](http://NHWildlifeSightings.unh.edu), the only wildlife reporting website that links back to New Hampshire's wildlife monitoring and research efforts.

**Locate and Document Vernal Pools** – A vernal pool is a unique landscape feature that is valuable to many wildlife species, some very rare. Report vernal pools to help protect these often overlooked habitats. A reporting form is located on the Wildlife Sightings website at [NHWildlifeSightings.unh.edu](http://NHWildlifeSightings.unh.edu). Information on how to identify and document vernal pools can be found on the NH Fish and Game website at [wildnh.com](http://wildnh.com).

**Conduct a Frog Survey** – If you love listening to a frog chorus on a rainy night, this is the opportunity for you. Participants listen for frog calls from May to June and fill out a simple data sheet. Any frog calls can be reported, with a special focus on three species of rare frogs: northern leopard frogs, mink frogs, and Fowler's toads. For more information, visit [www.wildnh.com/surveys/frog.html](http://www.wildnh.com/surveys/frog.html).

**Find Monarchs and Milkweed** – Report sightings of monarch butterflies using



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A salamander may be the last animal you would expect to see while skiing! During warm days when snow melts, salamanders may temporarily emerge from their winter burrows. As some of the earliest amphibians to awake in the spring, spotted salamanders (pictured here) will move to breeding pools on the first rainy spring night that surpasses 40°F.

the "adopt a spot" method to describe a patch of milkweed habitat and track the activities of monarchs during the breeding season. Report adults you observe during migration and even tag individuals to track to Mexico. For more information visit [www.wildlife.state.nh.us/nongame/monarchs](http://www.wildlife.state.nh.us/nongame/monarchs).



Northern spring peeper

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