



Bat Houses at Glover's Ledge

Environmental Studies Department
Glover's Ledge
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In several spots around Glover's Ledge, you can see small boxes clinging to elevated panels of wood. If you were to stand underneath and shine a light up into them, you might just see a bat clinging to the inside!



Little brown bat inside a bat box

Bats at Glover's Ledge

New Hampshire is home to 8 of the 45 species of bats found in North America: the big brown bat (*Eptesicus fuscus*), the eastern red bat (*Lasiurus borealis*), the hoary bat (*Lasiurus cinereus*), the little brown myotis (*Myotis lucifugus*), the northern long-eared myotis (*Myotis septentrionalis*), the silver-haired bat (*Lasionycteris noctivagans*), tricolored bat (*Perimyotis subflavus*), and the small-footed bat (*Myotis leibii*).

Bats return to New England from their winter hibernacula in late April or May. Females mate in their winter roosts but give birth to their pups the following summer in collective maternal colonies. After raising their pups throughout the summer, the females and pups depart around early October to fly back to their winter hibernacula in more southern latitudes.

Surveys of the Glover's Ledge bat boxes in 2018 and 2020 revealed no maternal colonies but did find bats using the boxes as day roosting spots.

Importance of bats

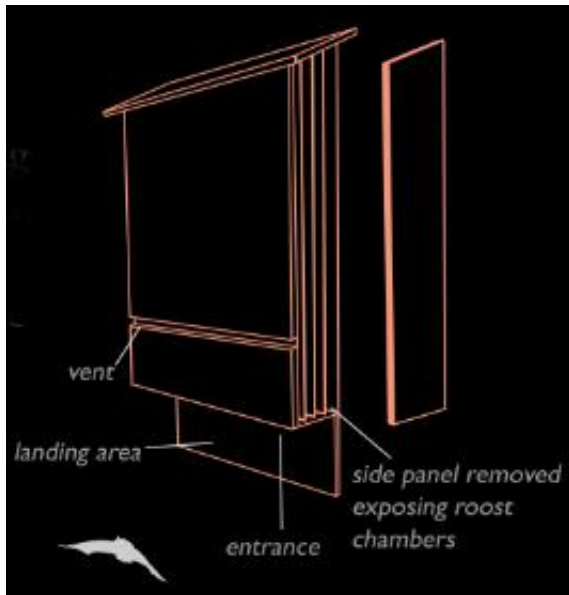
Bats are incredible insect eaters – a single bat can consume up to 100 mosquitoes or moths in an hour on a calm summer evening. Conservatively, most bats eat 50% of their body weight in insects every night! This makes them very effective and efficient pest control, particularly for agricultural land.

Bat boxes and conservation

The eastern red bat, hoary bat, silver-haired bat, tricolored bat, northern long-ear bat are all 'Near-threatened Species of Special Conservation Concern' in the state of New Hampshire and the small-footed bat is listed as a *Threatened* bat species in New Hampshire. Bats have suffered from habitat loss over the past few decades, particularly the loss of large trees with loose bark characteristic of late successional and old growth woods.



Bat boxes are an important step in restoring bat populations to sub-par habitats where they can act as pest control. The boxes are meant to mimic the small, tight spaces of rock outcroppings and the loose bark of oaks, beeches, and ashes where such colonies naturally gather. The interior is designed with several close-fitted wooden slats, which bats see as comfortable little nooks to roost and rest in.



These bat houses were erected in 2015 as an Antioch Masters student project by *Amanda Melinchuk* and funded by the *Philip H. Faulkner Jr. Scholarship in Forest, Wildlife and Cultural Conservation*. They were surveyed again in 2018 by *Chris Randle* and 2020 by *Kim Snyder*.

Things to look for:

During summer and early fall, bats can be seen and sometimes heard right around sunset. Look for a fluttering flight that moves in circles like a moth. You may also heard high-pitched squeaking – the bats using echolocation to catch their food!

Learn more about bats and bat conservation

Batcon.org

Wildlife.state.nh.us

Bats land on the extended slat and crawl inside the box, where they invert themselves and hang upside down to sleep.

Unfortunately, bats aren't the only ones who find the boxes to be desirable roosting spots. Bees and wasps sometimes take over a box and build their colonies inside. Boxes must be cleaned with a long pole each fall after the bats have left and again in early spring before they return to knock out any insects that have taken up residence.



Antioch Masters Student Chris Randle cleaning the bat boxes in 2018 when no bats were present.

Citation:

Randle, C. (2018). *Glover's Ledge Summer 2018 Event Report*. (Unpublished manuscript). Antioch University New England, Keene, NH.