GLOVER'S LEDGE

Technical Bulletin #09

Tracking Mammal Movement at Glover's Ledge

ANTIOCH UNIVERSITY NEW ENGLAND

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Signs of Mammal Activity

Seeing a large mammal in person can be an incredible experience. But more often than not, mammals are very good at avoiding us and stay far out of our sight. It can be hard to get an accurate idea of what kinds of mammals may be on a property, let alone how many individuals.

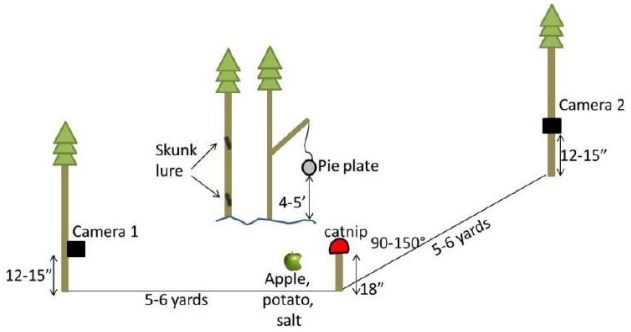
At Glover's Ledge, our longest running project has been to document the mammals using the property through the deployment of camera traps.

Photo of a porcupine exiting its den during a 2017 survey

Camera traps are stationary, motion-activated cameras that take a picture or short video clip when triggered. Over the course of 5 years of surveys, Glover's Ledge has recorded use of the property by porcupines, bobcats, coyotes, fishers, skunks, red foxes, raccoons, and deer.

Camera trap set-ups

Set ups for camera traps vary, depending on the species you wish to observe for and the duration they will be deployed. But all of them require 3 main parts: a camera, a mount for the camera, and some kind of bait or attractant.



Typical camera trap setup with lures

When selecting a site, it's important to think about what might bring a mammal to that location. Is it near water? In the right kind of habitat? Is it close to a trail? Or far away from a trail? All of these impact which kinds of mammals we are most likely to see. Antioch projects have either set cameras in clusters like the diagram above or placed them all across the property in transects to cover more area and habitat types.

Sometimes the cameras are set up to attract particular animals by setting out specific lures. Other times, bait may be generalized to attract as many species as possible. Bait can be anything from specific species scent lures available through hunting outlets, attractants like shiny pie plates, to food items like apples, peanut butter, or just salt.

Studies past and present

Antioch's Mammology course began camera trapping surveys in 2015, placing cameras and bait stations in a grid across the property from February to April. Since then, every year has had cameras deployed to study mammal movements.

In 2016, two AUNE students Sarah Cox and Jessica Meck continued the trapping study, this time looking at the different mammals using edge habitats versus more thickly forested habitats.

A bobcat captured by one of Cox & Meck's cameras.

Their survey found squirrels, deer, bobcats, fishers, raccoons, and skunks using forested habitat patches while only white-tailed deer and squirrels were found to be using the edge habitats.

Kyle Rodd surveyed the property in 2017 and detected the presence of bobcats, porcupines, and coyotes using the property in late winter.

Photo of a coyote from Kyle's survey.

Camera trap studies in 2018, 2019 and 2020 were completed by Antioch classes and Glover's Ledge interns. Data from these surveys are still being processed and we plan to continue these surveys on the property to keep a lens on our fellow mammals.

Landscape Perspective

Large mammals, particularly large carnivores require lots of space to roam and different types of habitats to meet their needs. Signs like scat, footprints, and scratches can alert us to mammal presence but camera traps are ideal for telling us how many and how long mammals are using the different habitats on the property.

The occasional detections of animals like fishers and bobcats indicate that Glover's Ledge acts as either part of the home ranges of these mammals or serves as a corridor between suitable habitat patches. In either case, this places Glover's Ledge as a strategic landscape in the conservation plan for these species in New Hampshire.

The most common species our cameras detected: white-tailed deer!

Maintaining these habitats and resources necessary for target species is part of the property management plan and a continued source of interesting data for Antioch students to share.

Things to look for:

If you see a camera or a bait setup, please do not walk in front of it or through it!

Instead, look for other mammal signs on the trails like scat, footprints, rubs, and browse.

Learn more about mammal conservation in NH

Wildlife.state.nh.us

Citation:
Cox, S. & Meck J. (2016). *A Comparison of Mammal Relative Abundance between Edge and Forested Habitats in Glover's Ledge Langdon NH.* (Unpublished manuscript). Antioch University New England, Keene, NH.