CFAES

SCHOOL OF ENVIRONMENT NATURAL RESOURCES

Wildlife Survey Within the Urban Landscape

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Background

The purpose of our study was to survey wildlife species that were located within the urban landscape. The survey's took place within two local urban natural areas.

Bill Moose Run

- 80 acre Conservation Easement held by Franklin County Soil and Water Conservation.
- Located behind Ohio School for the Deaf.
- Site waterway remained low throughout survey.

Sawmill Wetlands

- Approximately 17 acres owned by the Ohio Department of Natural Resources.
- Contains vernal pools (dried during the course of the study).
- Land was composed of Oak-Hickory forest and a 1.6 acre open field on the east boundary.

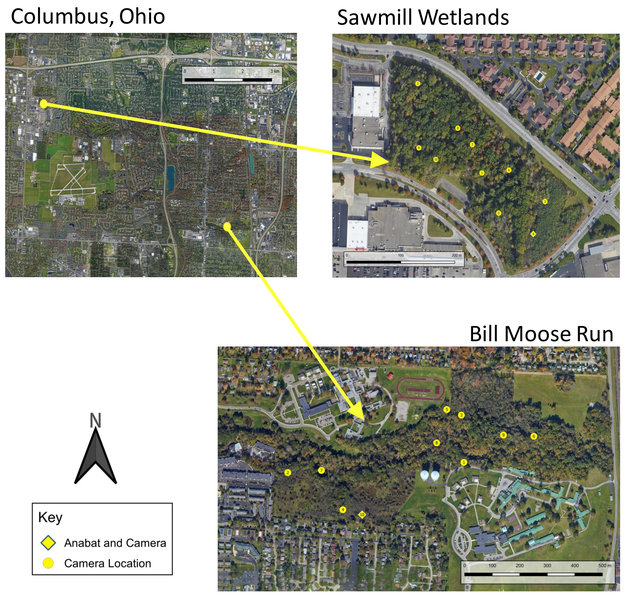

Figure 1: Sawmill Wetlands and Ohio School for the Deaf camera and Anabat survey sites.

Figure 2: Cat captured on a trail camera at the Sawmill Wetlands.

Methods

Both Sites

- Ten trail cameras deployed at ten randomly generated locations at each site.
- Cameras collected data for 24 consecutive days (9/20/2021 - 10/14/2021).
- One passive Anabat detector deployed at each site for a 7-day period.
- Vegetation surveys conducted at all camera sites. Analyzed:
  - Tree species and DBH
  - Relative density
  - Canopy cover
  - Ground cover
  - Non-woody species

Figure 3: Male White-tailed deer fighting at Bill Moose Run.

Results

Bill Moose Run

- Groundhog and eastern chipmunk were visually sighted.
- 70 bird species recorded since October 2020
- 5/10 camera sites had suitable cavity roosting bat habitat.
- Vegetation:
  - Average canopy cover 80%, maples most abundant.
  - Ground cover dominated by leaf litter, little understory.

Sawmill Wetlands

- Eastern chipmunk and southern flying squirrel were visually sighted.
- 70 bird species recorded since October 2020.
- 7/10 camera sites had suitable cavity roosting bat habitat.
- Vegetation:
  - Average canopy cover 89%, oaks most abundant.
  - Ground cover dominated by leaf litter, sites varied with amount of vegetation and logs.
  - Field consisted of many invasive species including Amur honeysuckle and Canada thistle.

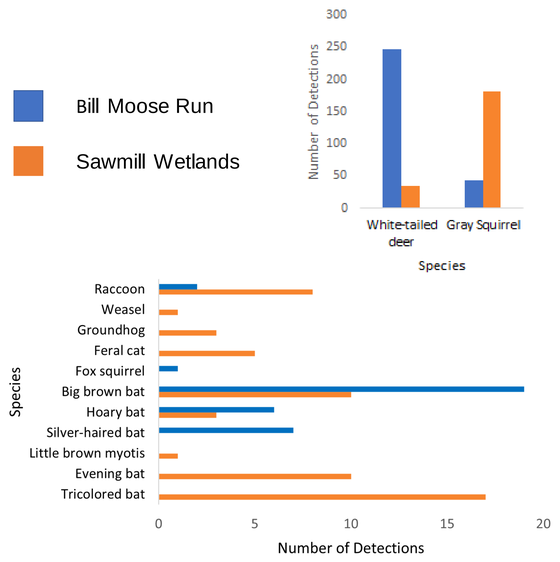

Figure 4: Detected species on cameras and Anabat for each location.

Figure 5: Curious White-tailed deer inspecting a trail camera at Bill Moose Run.

Recommendations

General

- Plant more Shagbark Hickories to promote roosting habitat space for detected cavity nesting bats.
- Manually create cavities in standing deadwood and install bat boxes.
- Remove invasive species (i.e. honeysuckle, Canada thistle and Chinese bushclover) by mechanical and/or chemical means.

Site Specific

Bill Moose Run:

- Continue diverse tree planting in western part of the site.
- Replace herbaceous understory in western section with native grasses and forbs.

Sawmill Wetlands:

- Increase public awareness of threats to wildlife posed by feral/free roaming cats and work to prevent visitors from feeding cats.
- Plant warm season grasses, and other native/pollinator prairie plants in the Eastern field.

Acknowledgements

Many thanks to the Friends of the Lower Olentangy Watershed, Dr. Bill Peterman, Dr. Chris Tonra, Andrew Wilk, Ohio School for the Deaf, and the Ohio Department of Natural Resources for making our research possible!