

Native Bat Conservation Program

Board of Management 2023 Update



toronto
ZOO



NATIVE BAT
CONSERVATION
PROGRAM

Why Bats?



Bat Program Plan: 2017 – 2020

Mission

To conserve bats in Ontario through scientific research to fill knowledge gaps, public outreach to build awareness, and knowledge sharing to maximise the impact of our efforts

Vision

To be Ontario's leader for bat conservation through a sustainable and innovative program

How Did We Get Here?

Grant Funding:
~\$2,000,000

Ontario

USFWS

Parks Canada

Ontario

Environment and Climate Change Canada

MITACs

2017

First Bat
Captures

2018

Northern
Myotis
Discovery

2019

First Nations
Project
Established

Large-scale
Acoustics in RNUP

First
Foraging
Telemetry

2020

Testing Autobat
Acoustic Lure
miniMOTUS
Proof of Concept

2021

Com. Sci.
Pilot

Myotis Capture
in South Bruce

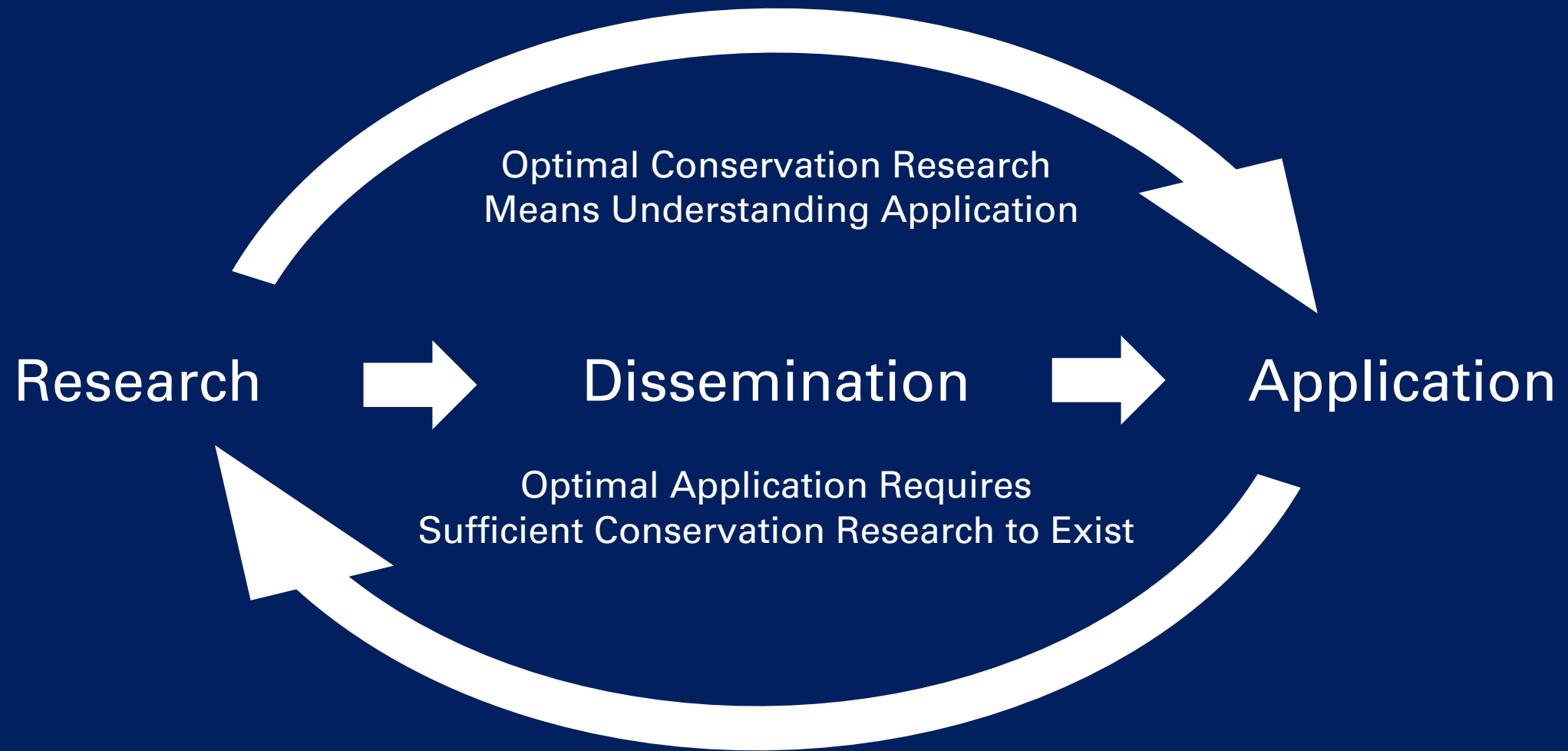
2022

First Paper!

First Northern
Bat Captures

Com Sci.
Scale Up

2023



5 Keystone Narratives





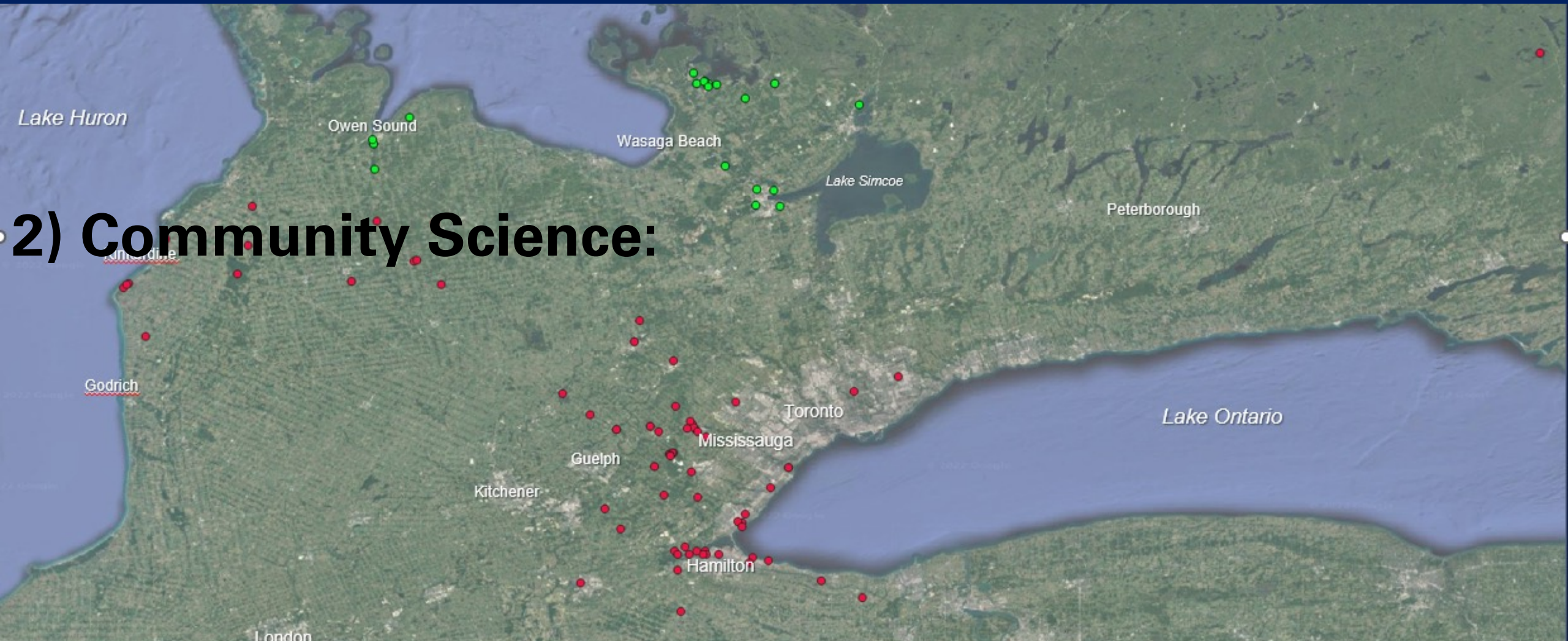
Impacts:

- Fill distribution & habitat knowledge gaps
- Create better "tools & rules" for practitioners

Anticipated Outcomes:

- Publication and guidance on value of using acoustics to predict roosts
- Habitat associations in Southern Ontario

2) Community Science:



Impacts:

- Engage & empower the public to help SAR bats
- Fill in the map!

Anticipated Outcomes:

- Proof of concept
- Application to address knowledge gaps
- Create toolkit to perpetuate approach

3) Little Brown Myotis Roost:



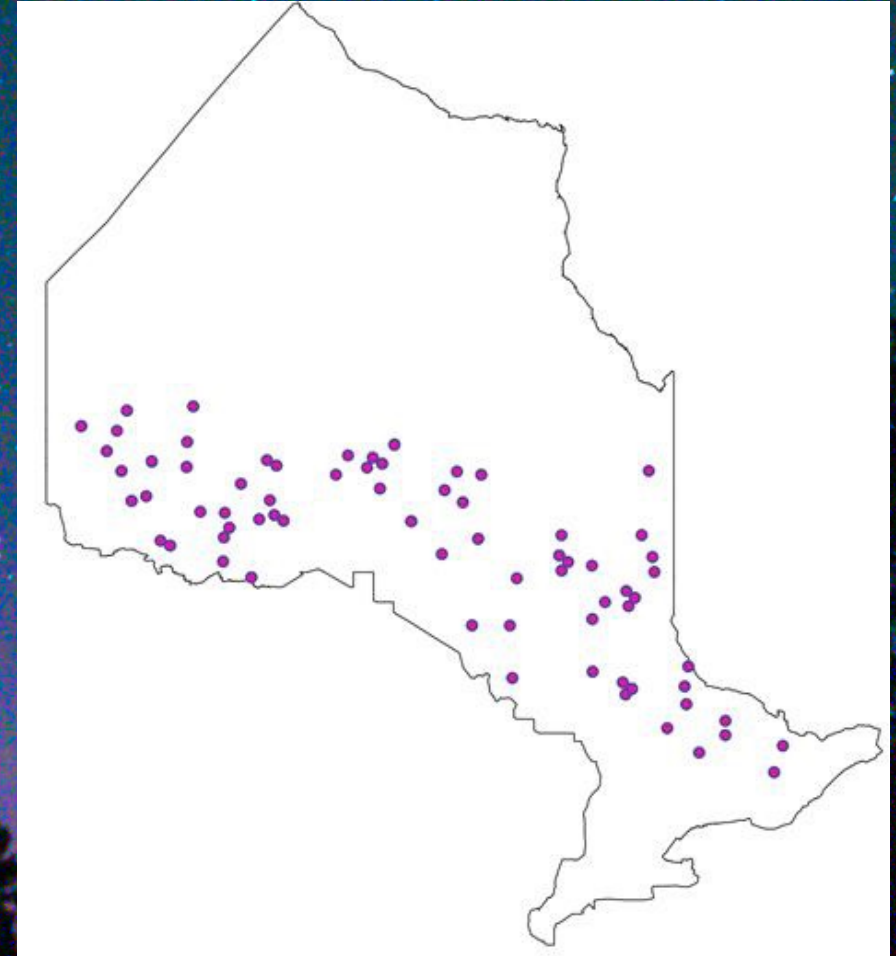
Impacts:

- Keep 500 SAR bats on the map
- Test mitigation effectiveness
- Inform & improve mitigation practice

Anticipated Outcomes:

- Installation of mitigation structures
- Case-study publication on mitigation
- Publication on before / after ecology

4) Northern Ontario Bats:



Impacts:

- Address fundamental knowledge gaps, including distribution and ranges
- Build a plan to understand critical habitat

Anticipated Outcomes:

- Distribution mapping for bats in Northern On.
- Ground testing of concepts
- Long-term plan to address gaps

5) Spatial Ecology:



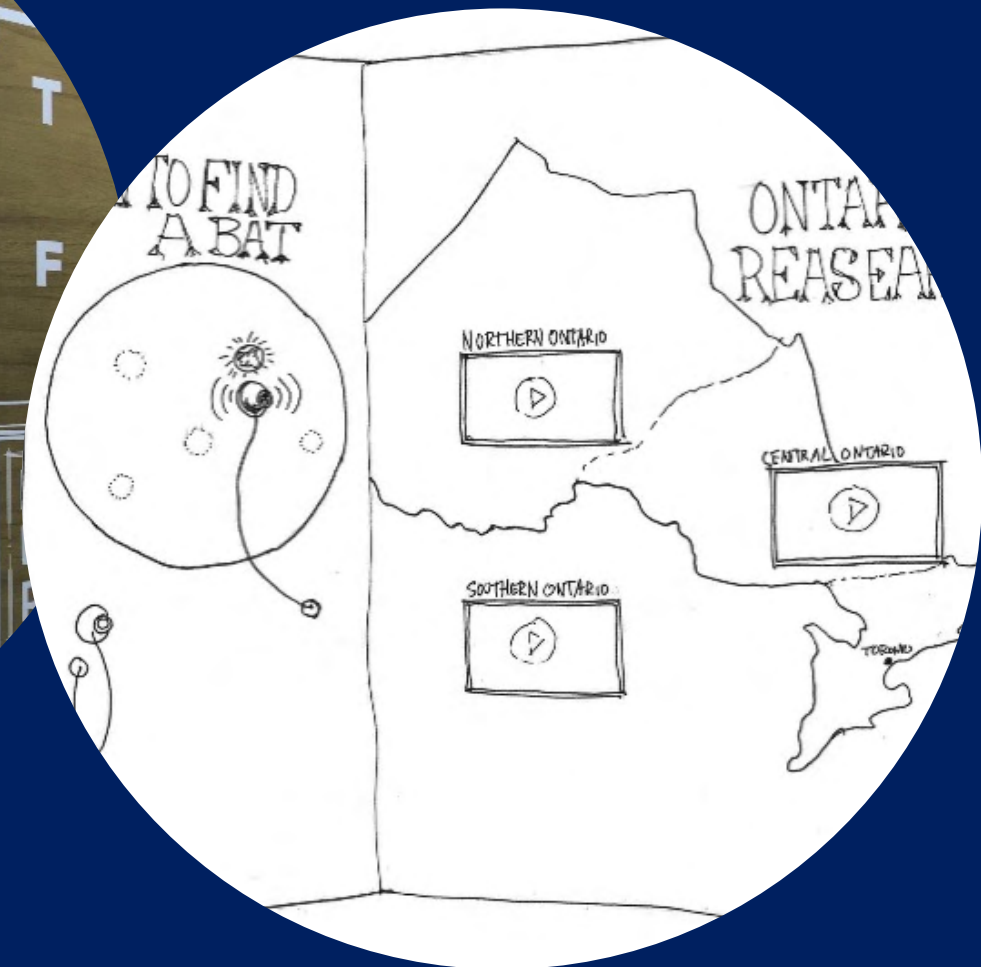
Impacts:

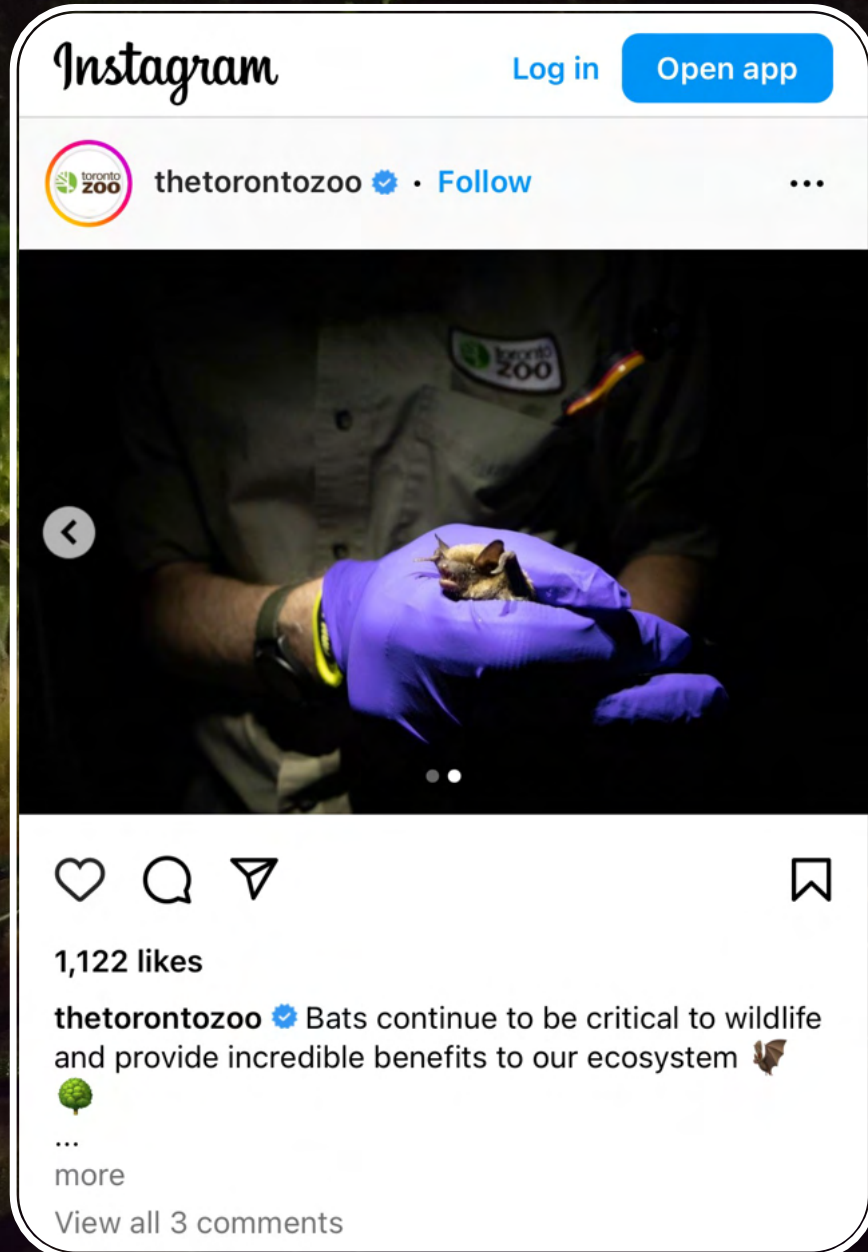
- Establish cutting-edge telemetry tools
- Understand SAR bats in a growing city
- Address roost and foraging gaps

Anticipated Outcomes:

- Knowledge base for data collection and interpretation
- Spatial ecology of urban bats

Showing the "Hidden Zoo"





Journal of Urban Ecology, 2021, 1–9

doi: 10.1093/jue/juab029
Short Notes

Occurrence of a forest-dwelling bat, northern myotis (*Myotis septentrionalis*), within Canada's largest conurbation

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