

WABAKIMI SONG METERS – HOW WE USE THEM AND WHAT WE LEARN FROM THE DATA



SONG METERS - WHAT DO THEY DO? HOW THEY ARE USED IN WABAKIMI

- Records calls of birds, frogs and bats
- 10 units dispersed throughout park placed on edges of wetlands to maximize species diversity and amphibians- zone project 80 units
- Bird recordings half hour after sunrise for 10 min
- Amphibian recordings half hour after sunset for 5 min
- Bat calls require special mic and unit with high frequency
- Drive road-based bat transects at dark or spot specific recording

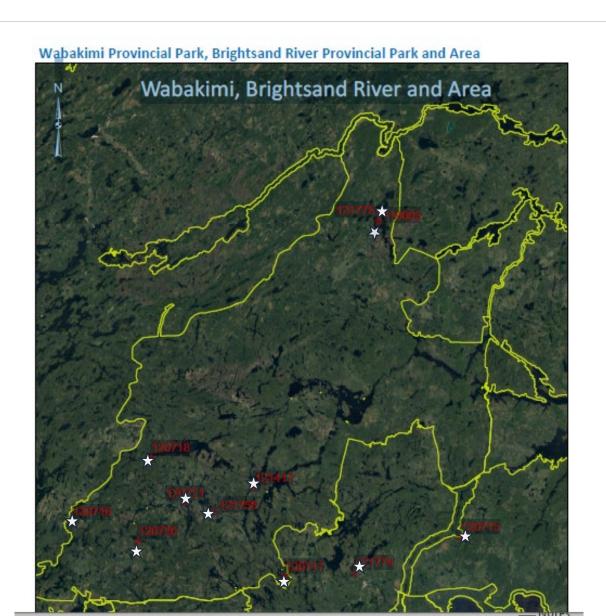


NEW SONG METER MINI – SMALL AND LIGHT





LOCATIONS IN WABAKIMI





SONG METERS - WHAT DO THEY TEACH US?

- Identify species presence/absence & track changes through time ie climate change and/or species at risk populations
- Record 'breeding windows' birds & amphibians
- Analysis of data confirms habitat use (local and migratory)



Olive- sided Flycatcher – Species at Risk – call is "Quick Free Beer!"

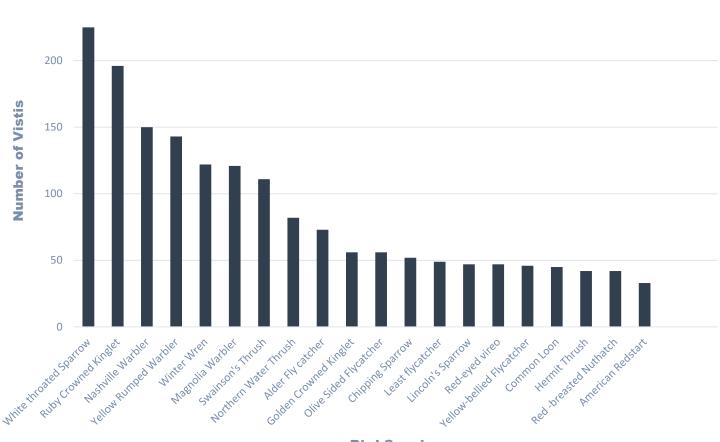


Canada Warbler – Species at Risk



SONG METERS DATA SUMMARIZED FROM LONG TERM MONITORING 2014-2019

Top 20 Bird Species Visits to all Wabakimi Songmeters 2014-2019

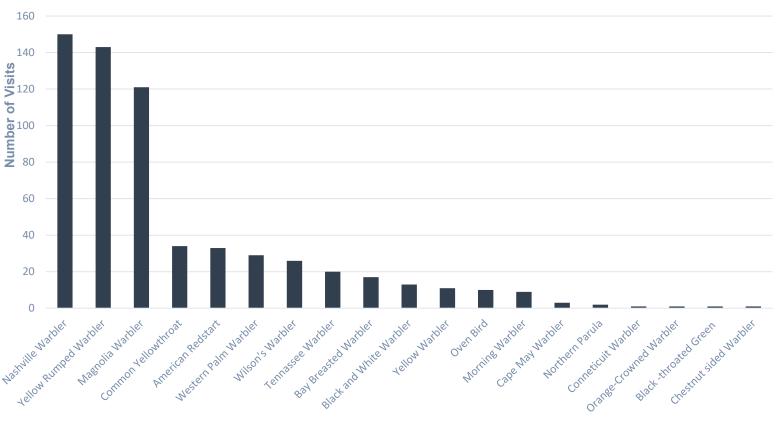




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SONG METER DATA SUMMARIZED FROM 2014-2019

Summary of all Wood Warbler Visits to Song Meters in Wabakimi 2014-2019





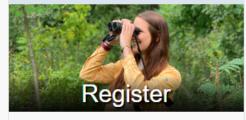
<u>Check out the Breeding Bird Atlas Website at : Ontario Breeding Bird Atlas</u> (birdsontario.org)



Home The Atlas Tools & Resources Get Involved Atlas Archives Indigenous Engagement

Please read our factsheet on Participating in Ontario Breeding Bird Atlas-3 during the COVID-19 Pandemic before participating in atlas activities.

Quick Links





Welcome to the Ontario Breeding Bird Atlas

About the Atlas

Data collection for the Ontario Breeding Bird Atlas 3 (Atlas-3) began on January 1, 2021. Volunteer birders will count and record the presence of breeding birds across Ontario – from the south to the north – for five years.

Atlas-3 is a partnership between the same five organizations as Atlas-2: Birds Canada, Canadian Wildlife Service (Environment and Climate Change Canada), Ministry of Northern Development, Mines, Natural Resources and Forestry – Government of Ontario, Ontario Field Ornithologists (OFO), and Ontario Nature.





ABOUT THE ATLAS

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PURPOSE OF THE ATLAS

- The goal of the Atlas is to map the distribution and relative abundance of Ontario's approximately 300 species of breeding birds – from as far south as Middle Island in Lake Erie, to Hudson Bay in the north.
- The data collected over five years provides essential information for researchers, scientists, government officials and conservation professionals. It will guide environmental policies and conservation strategies for years to come.
- Data collection for the two previous Ontario atlasses ran from 1981-1985 and 2001-2005, followed by the publication of books summarizing the results. The two previous projects were enormous (and successful!). But we're hoping Atlas-3 will be the best one yet – providing an unprecedented understanding of the status, distribution and abundance of the province's birds and a huge database of information that can be used for bird conservation purposes well into the future.

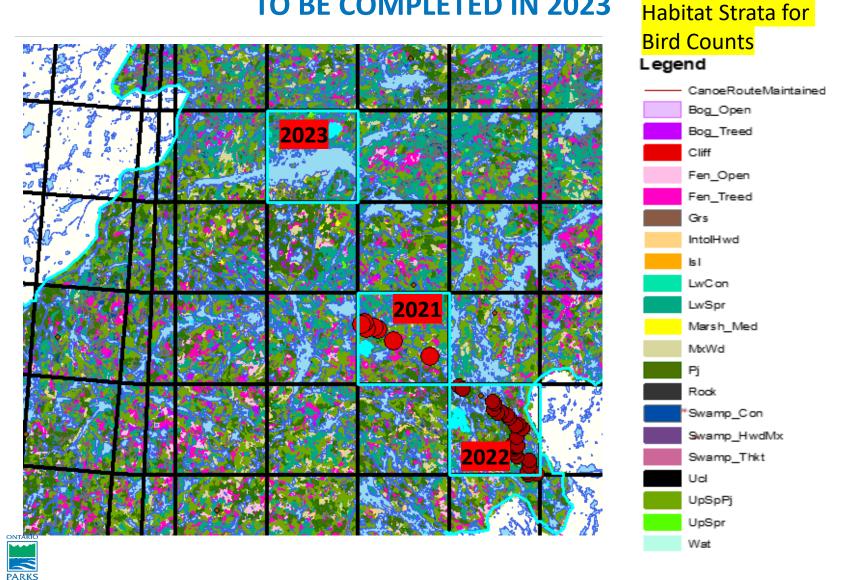


WABAKIMI IS COLLABORATING WITH OBBA TO COLLECT BIRD DATA IN THE PARK

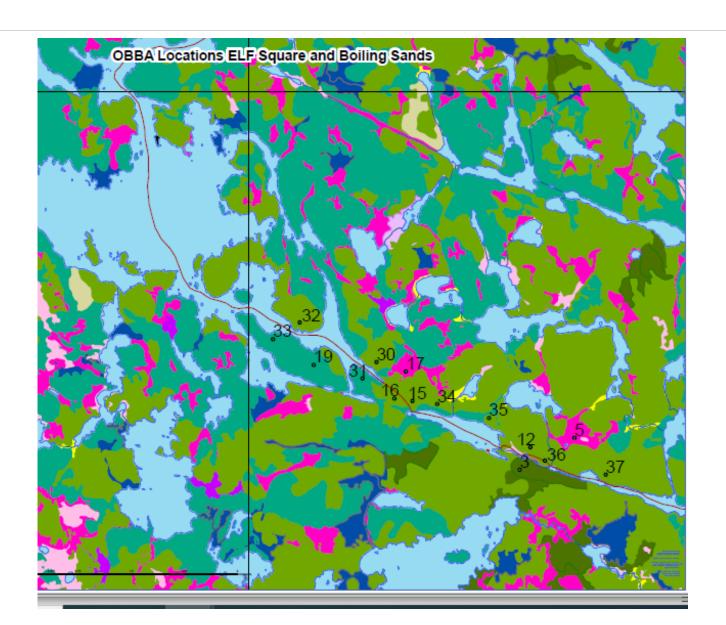
- The province is divided into 10kmx10km squares in which bird point counts will be completed.
- 25 point counts or 20 hours of bird recording is required /per square
- Point count sampling is performed by experienced birders who can identify calls(i.e., documenting all birds seen or heard in 5 minutes at point). This can be done while on a canoe trip or songs can be recorded on a specific schedule on a recording device that is moved along and left out for short periods of time.
- The Habitat is stratified using Forest Resource Inventory into forest type
- All Bird Habitat Strata within park would be sampled in each square (ideally)
- Wabakimi has placed 25 song meters out in one square per season (2021, 2022) and plans on completing squares in 2023, 2024 and 2025. These units must be a minimum of 100 m from the shoreline and at least 250m apart covering as many of the habitat strata as logistically possible.



OBBA SQUARES IN WABAKIMI COMPLETED (2021/2022) AND TO BE COMPLETED IN 2023 Habitat Strata for

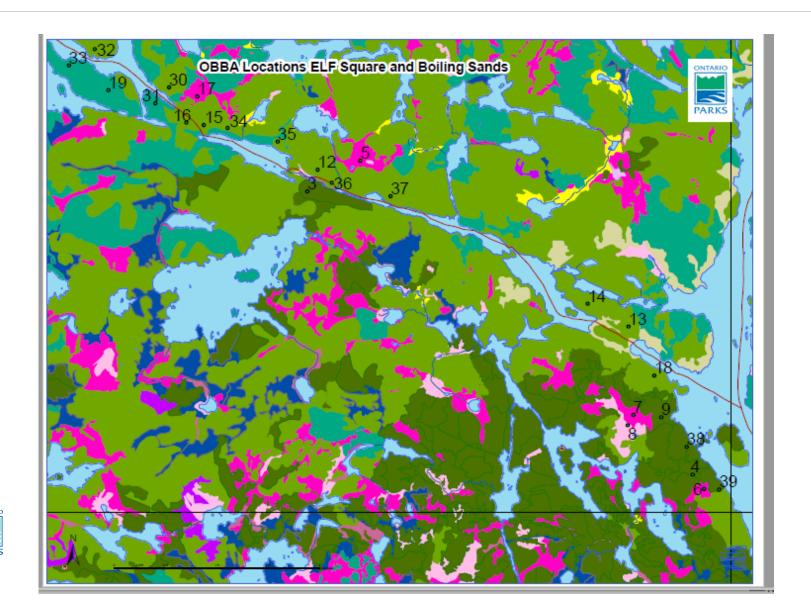


OBBA SQUARE 16UCA19 – ELF LAKE A-2021



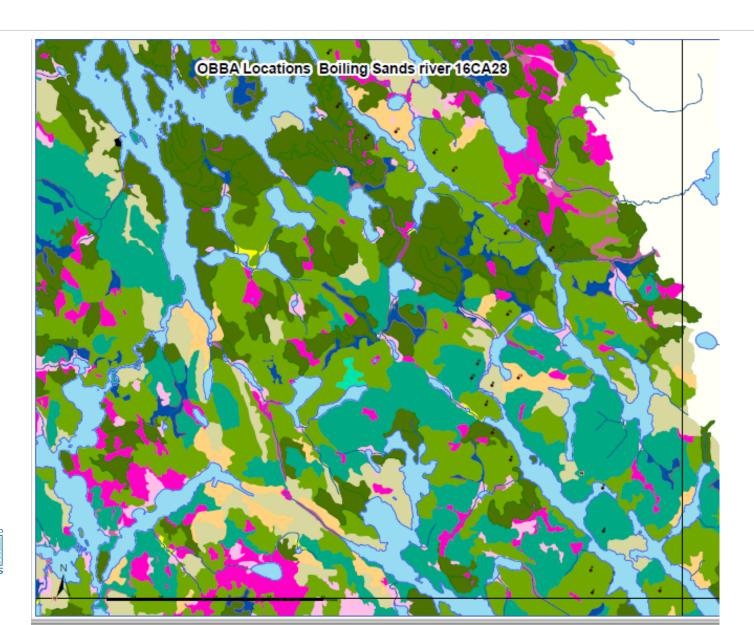


OBBA SQUARE- 16UCA19-ELF LAKE B-2021



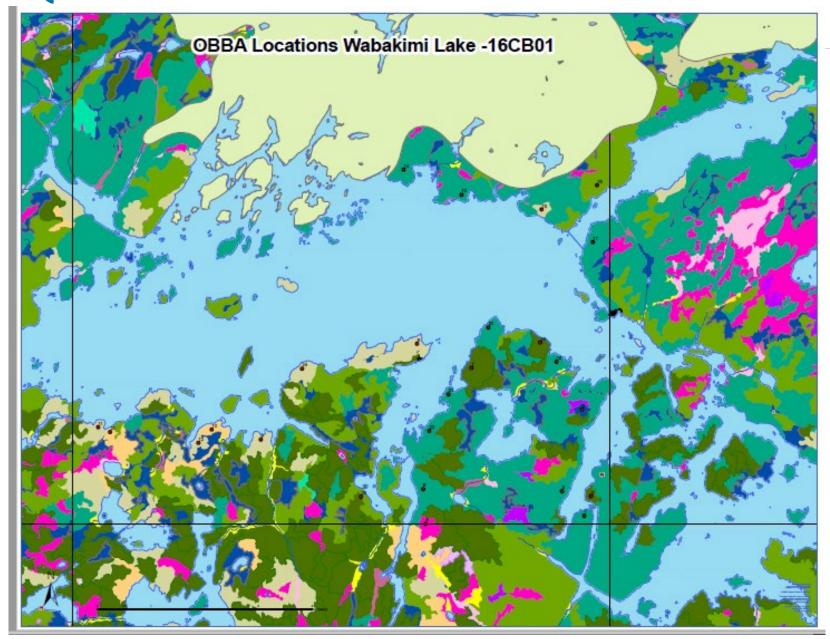


OBBA SQUARE 16UCA28-BOILING SANDS RIVER 2022





SQUARE 16UB01 – 2023 DEPLOYMENT-25 METERS



PLACING SONG METER ON A TREE HEAD HEIGHT PREFERABLY OUT OF WIND AND SUN IF POSSIBLE





DEPLOYMENT OF SONG METER TIMING

- Song meters will ideally be deployed as soon as ice is out of the lakes in the park and we can fly or canoe in. This is Normally the first or second week of June.
- There are 2 bird recording windows: May 24-June17 and June 13-July 3
- Song meters will be set up so that they start recording when they are turned on, and thus can be recording from May through July. To save batteries and space on SD card they have a recording schedule every second day in 5 minute increments.
- Site data is recorded on a form (Song meter unit ID, UTM location of site/ Canoe park location and a series of 16 photos are taken to verify ecosite type).
- Song meter data will be entered into the Wildtrax database and experts with interpret the data.
- After the 5 year OBBA study is completed the data will be summarized in a report. Check out the link to the book: Atlas of the Breeding birds of Ontario 2001-2005 as an example Ontario Breeding Bird Atlas (birdsontario.org)



OBBA DATA COLLECTION SHEET

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Song Meter	OBBA Square	Site Number	Location Description		Location (UTM)		Deployment or	Date	Time	Photos taken using Habitat	Camera ID	Photo Numbers	Comments (e.g., Song Meter damage,
(Number/Label	(if known)	(if known)	(lake, portage, etc.)	Zone	Easting	Northing	Retrieval	(YYYY-MM-DD)	(HH:MM)	Photo Series protocol	(if applicable)	(if applicable)	Comments (e.g., Song Meter damage, site condition)
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A SERIES OF PHOTOS ARE TAKEN TO VERIFY VEGETATION AND ECOSITE TYPE

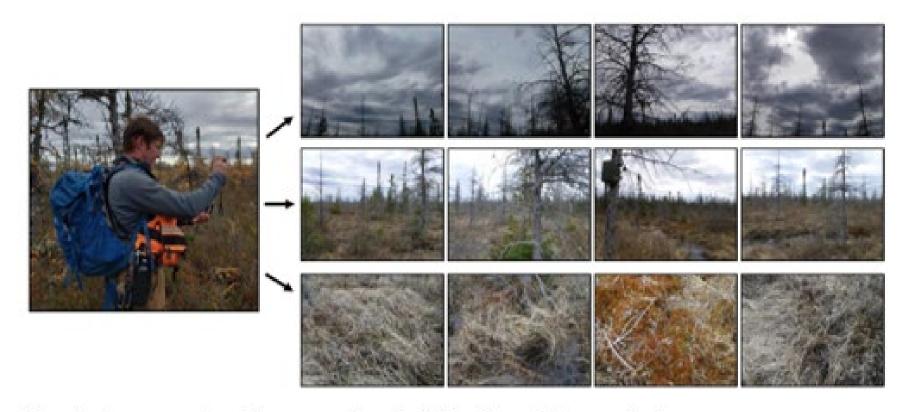


Figure 1. Demonstration of how to conduct the Habitat Photo Series method.