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# Long-term ecological monitoring in the northwest zone of Ontario Parks

April 11<sup>th</sup>, 2014  
Huntsville, Ontario





## What are we doing?

- Initiating long-term annual ecological monitoring strategy in NW Ontario
- Collecting a variety of information in a systematic manner to align with other provincial and national programs (e.g., Ecological Land Classification, Breeding Bird Atlas, Forest Bird Monitoring, Frog Watch, NHIC)
- Creating a full information cycle from field collection to reporting using existing tools (i.e., Ontario Parks Inventorying and Monitoring Program)
- Taking advantage of monitoring devices where and when possible



## Why are we doing the work?

- Support objective stated in the Provincial Parks and Conservation Reserves Act (2006)
  - “facilitate scientific research and to provide points of reference to support the monitoring of ecological change on the broader landscape”
- Allows for temporal and spatial trend analysis
- Make informed planning and management decisions, both within parks and outside parks
- Compliment and build upon existing monitoring programs
- Other benefits?





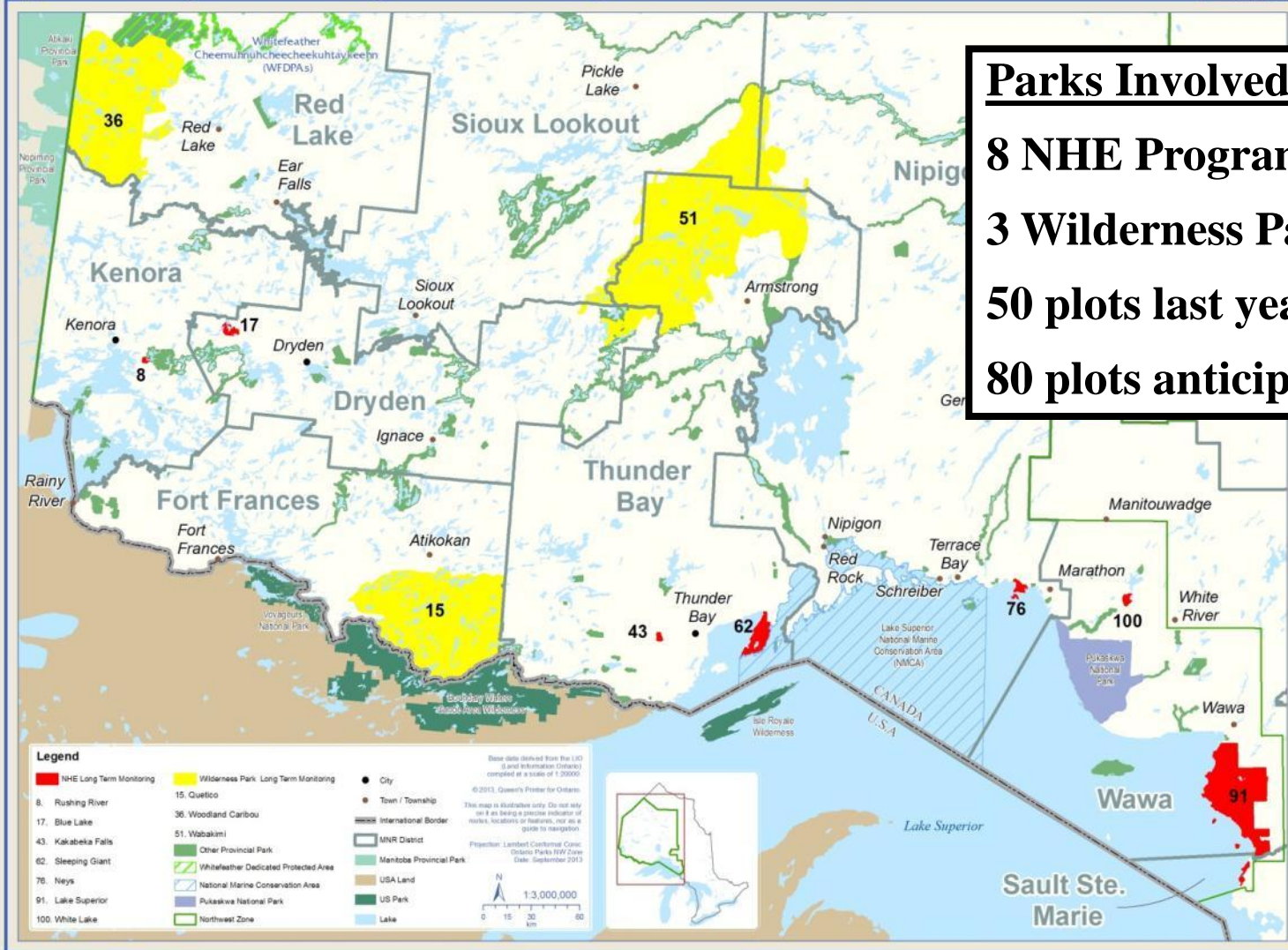
## Who is doing the work?

- Zone staff are championing the program
  - Creating the strategy (e.g., what to measure, time to measure, devices to use, location of plots, organizing data)
  - Providing training (e.g., monitoring devices, entering data, viewing data)
  - Measuring base data (e.g., substrates, vegetation, ground cover) and analysing sound recordings for birds and amphibians
  - Championing tools for information management (e.g., OPIAM)
- Park staff are providing park specific expertise
  - Determining location of plots with zone staff
  - Moving monitoring devices to collect information at appropriate times
  - Analysing camera trap information



# Where are we doing the work?

## Long Term Ecological Monitoring for Provincial Parks in Northwest Zone



**Parks Involved**

**8 NHE Program Parks (red)**

**3 Wilderness Parks (yellow)**

**50 plots last year;**

**80 plots anticipated this year**

- Legend**
- 8. Rushing River
  - 17. Blue Lake
  - 43. Kakabeka Falls
  - 62. Sleeping Giant
  - 76. Neys
  - 91. Lake Superior
  - 100. White Lake
  - 15. Quetico
  - 36. Woodland Caribou
  - 51. Wabakimi
  - Other Provincial Park
  - Whitefeather Dedicated Protected Area
  - National Marine Conservation Area
  - Pukaskwa National Park
  - Northwest Zone
  - City
  - Town / Township
  - International Border
  - MNR District
  - Manitoba Provincial Park
  - USA Land
  - US Park
  - Lake

Base data derived from the USGS (and Information Canada) compiled at a scale of 1:200,000

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This map is illustrative only. Do not rely on it as being a precise indicator of routes, locations or features, nor as a guide to navigation.

Projection: Lambert Conformal Conic  
Ontario Parks HWY Code  
Date: September 2013

Scale: 1:3,000,000

0 15 30 45 km

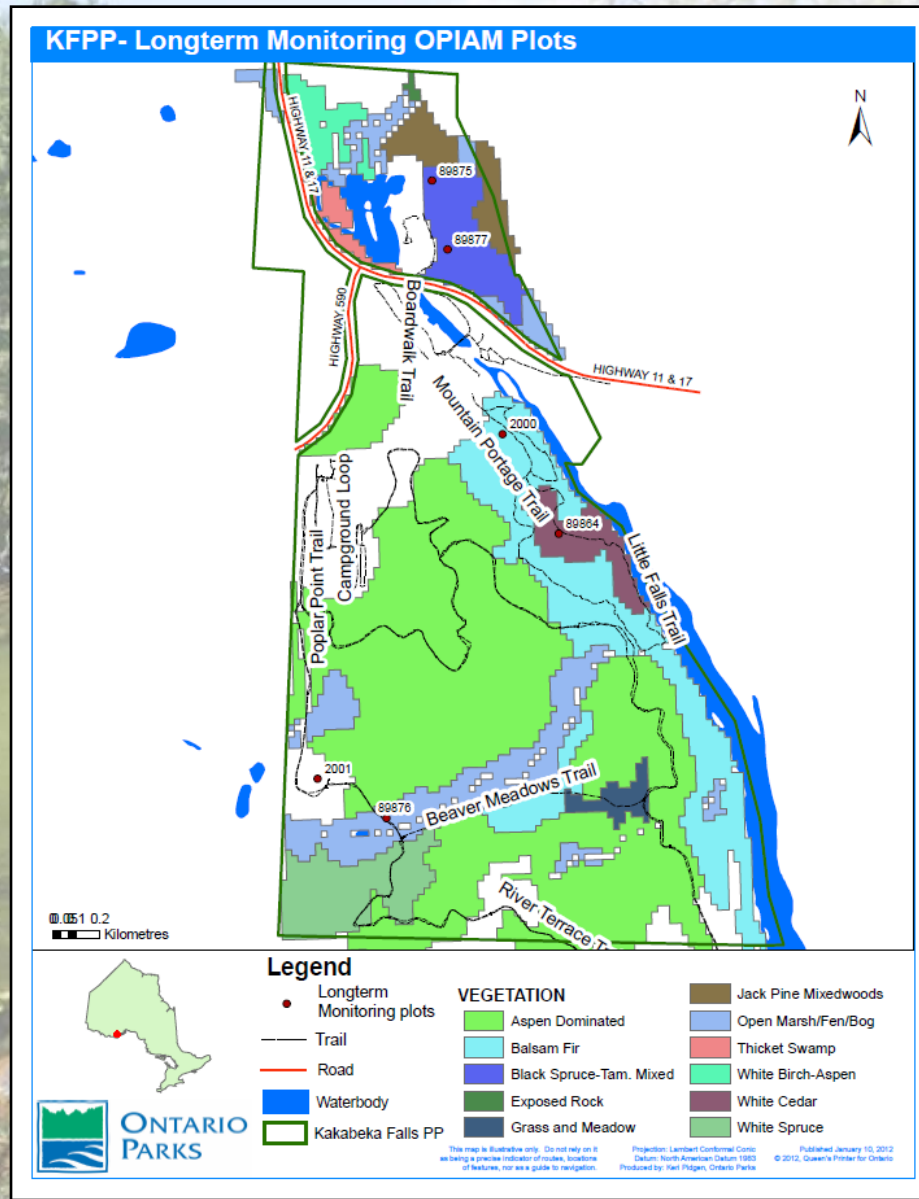






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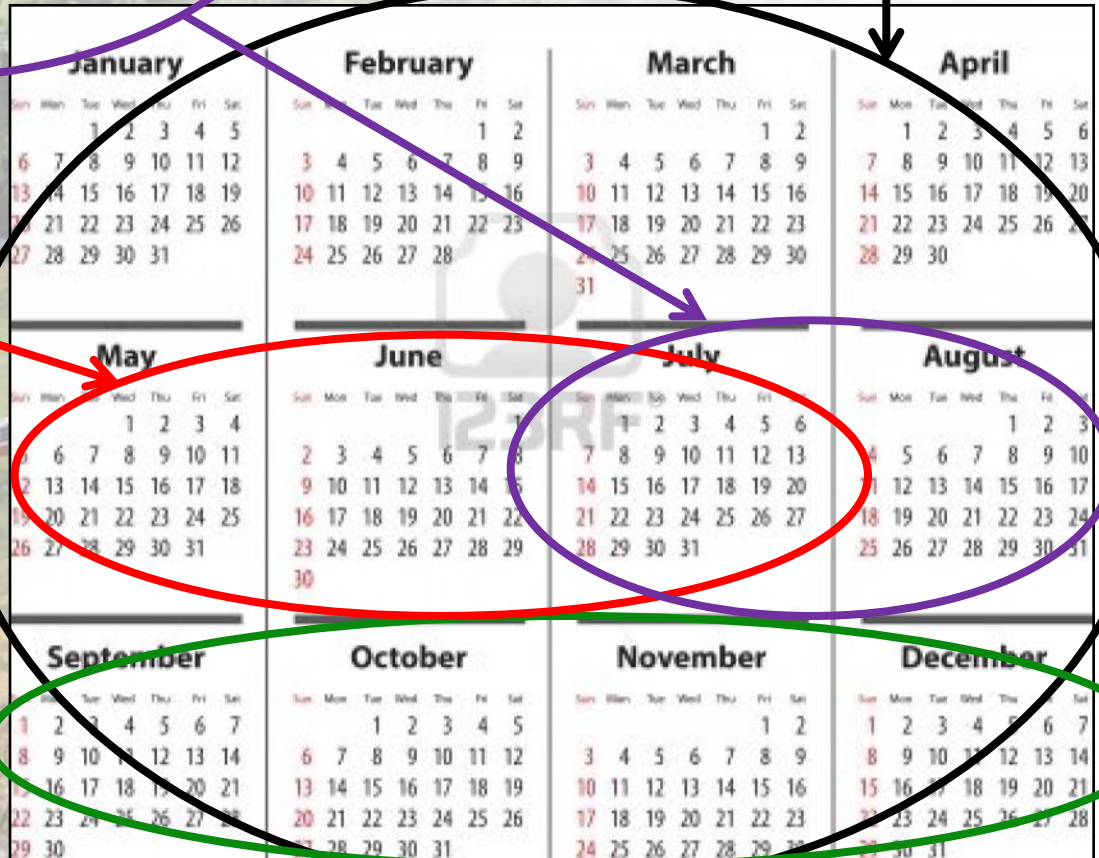
# Where are we doing the work?





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# When are we doing the work?



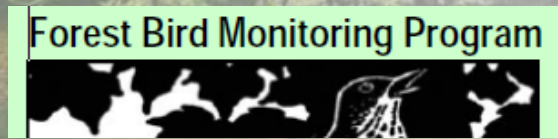




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# What are some critical pieces?

## Leveraging Existing Programs



- Consistent collection standards
- Easily share and blend data

## Engaging Staff



- With all aspects of the program (e.g., design, training, field work, data entry and reporting)

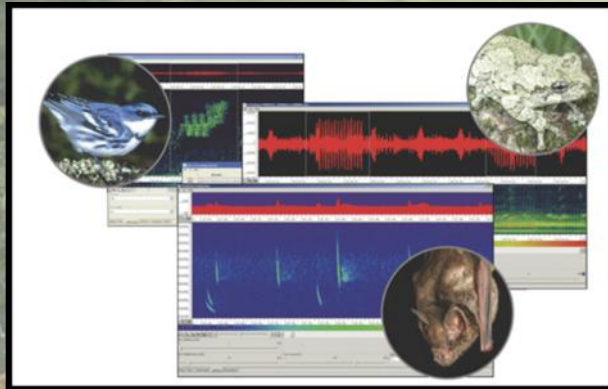
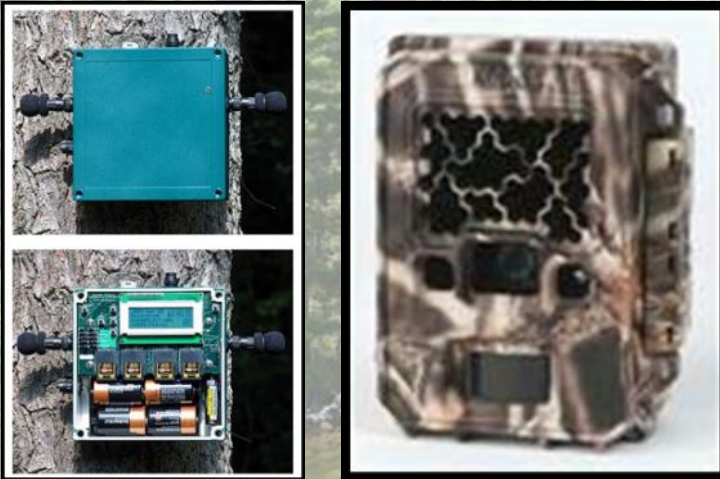




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# What are some critical pieces?

## Use of Technology



- Monitoring devices
- Analysis software

## Information Management



- Modular design
- Provides direction and the tools necessary for all components of the information management cycle (i.e. from field to reports)





## What are some additional benefits?

- Park staff are engaged and excited about the program
  - Increased interest in the flora and fauna within the park, as well as Ecological Integrity in general
  - NHE staff are starting to use monitoring information within their naturalist programs
  - NHE staff are communicating to the public the importance of parks as baselines of information
- Provincially, sounds and photos will be used in social media environments to engage public
- Increased partnerships with monitoring programs, including citizen science programs, to 'blend' data





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Questions or comments?

**Feedback will  
be greatly  
appreciated**