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

April 11th, 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?

Parks Involved
8 NHE Program Parks (red)
3 Wilderness Parks (yellow)
50 plots last year;
80 plots anticipated this year
Where are we doing the work?
When are we doing the work?

Cool Data
What are some critical pieces?

**Leveraging Existing Programs**

- Ecological Land Classification (ELC) in Ontario
- Atlas of the Breeding Birds of Ontario
- Forest Bird Monitoring Program
- FrogWatch
- Natural Heritage Information Centre (NHIC)

**Engaging Staff**

- Consistent collection standards
- Easily share and blend data

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

Feedback will be greatly appreciated