

August 2020

Interview with Shannon Walshe, Park Biologist Wabakimi Provincial Park Biologist

Shannon Walshe is the Park Biologist for Wabakimi Provincial Park and surrounding parks. Recently she responded to questions from Ray Tallent, FOW Conservation Chair. She provides an in-depth look at her work and activities.

Q-What led you to become a biologist?

A- I was fortunate enough to have spent the first 20 years of my life growing up in a wilderness canoeing park setting. My parents and 3 other siblings all lived in a log cabin where we had no television and not many other children to play with so I entertained myself by exploring nature in the backyard. From a young age I have always felt a deep connection to the natural world, a fascination with all the flora and fauna and their interconnections to the entire ecosystem. Spending my summers during university working as a field biologist, I decided that it didn't really feel like "work" since I was getting paid to do what I loved and it was what I needed to do full time.

Q- We know that you are the biologist for Wabakimi Provincial Park. Does your job position include other areas?

A- Yes my position as the biologist for the Wabakimi Cluster includes 17 parks and 6 Conservation Reserves listed in the tables below.

Wabakimi Node Park List- 17 Parks	
P2633	Brightsand River
P2256e	Kopka River
P2558	Wabakimi
P2253	Whitesand
P2656	Windigo Bay
P2261	Gull River
P2640	Kaiashk
P2263	Obonga-Ottertooth
P2649	Pantagruel Creek
P2657	Albany River
P2664	Little Current River
P2666	MacLeod
P2667	Nakina Moraine
P2220	Ogoki River
P3705	Otoskwin-Attawapiskat
P2674	Sedgman Lake
P3708	Winisk River

Wabakimi Node Conservation Reserve List- 6 CRs

C2204	Nakina Northeast Waterway
C2228	Kagianagami Lake
C2242	Mojikit Lake
C2249	Attwood River
C2262	Ottertooth
C2410	Garden Pakashkan

Q- What does a “typical” year of activities look like, for a Provincial Park Biologist?

A- From January until the ice goes off end of May I am usually planning projects for the summer field season or cleaning up /analyzing data from last field season. During that time I have also been working on writing up the life science section for the Wabakimi Park Plan Background document and also working on the preliminary fisheries and vegetation management plans. Once the ice is off the lakes I usually start deploying /refreshing the song meters and trail cameras as soon as possible to maximize the first bird window which starts May 15th. I then start a 10/4 schedule where I try to get out for one or 2 trips a month from June through September. Sept/Oct I am usually entering data and summarizing reports before my hiatus that starts in November.

Q- With respect to Wabakimi Provincial Park, what kinds of monitoring or experimental field biology are carried out, for further understanding ecology, inventory, and protection of flora and fauna?

A-

- The maintenance of ecological integrity is the priority in the planning and management of Ontario’s protected areas. Ecological integrity is a concept that addresses three ecosystem attributes – composition, structure and function. This concept is based on the idea that the species diversity of the protected area should be characteristic for the natural region and that ecosystem functions should be in balance. We look at both the terrestrial and aquatic ecosystems within the park. Therefore, most of the monitoring and research focuses on research that will feed management planning decisions and the adaptive management cycle.
- In terms of monitoring, we monitor song birds and amphibians with a song meter which is a sound recording device placed out in the park on a tree in a location that can record both bird song half hour after sunrise and frog calls half hour after sunset. We also have a similar box which can record high frequency bat calls. We have 10 song meters that are placed in the same location every year. This data can track species or population changes through time correlating to natural forest succession, forest disturbance (ie. forest fire) or changes related to climate change.
- We also monitor wildlife activity (Presence/absence and changes over time) specifically species at risk such as caribou and predator populations. We use wildlife cameras triggered by motion to determine movements and activity on trails and roads. This information will help to feed management planning and decisions related to the level of protection (ie. Restricted recreational opportunities within certain areas within the park).

- Broad Scale Fisheries Monitoring and aquatic health monitoring is taking place within the park
- Every 5 to 10 years the MNRF District flies Moose aerial surveys in wildlife management units which cover the park to get an idea of moose populations over time. These surveys also record caribou, wolverine and wolf activity such as animals and tracks observed in the survey areas.
- Annual we fly in March to conduct an aerial transect to observe woodland caribou movement patterns and use over time. The objective of this annual monitoring program is to collect spatial and temporal data on winter woodland caribou activity to identify changes to winter habitat occupancy within Wabakimi. Data from this monitoring program is used to advise management planning activities for Wabakimi Provincial Park.
- Small Mammal trapping and bat acoustic surveys are performed within and the area surrounding the park
- Forest Fire and forest succession research is being conducted in conjunction with caribou habitat monitoring. We are attempting to develop better models which estimate the natural ranges of variation of species and ages within the Wabakimi area to use as a benchmark in creating mosaics of caribou habitat that will provide for caribou now and into the future.
- Natural science values information collection while out on trips is entered into Ontario Parks database or the MNRF main database, [inaturalist](#) and [ebird](#). This information includes, moose, caribou, wolf and bear scat and tracks observed on portages and beaches, animals sighted as well as birds observed or heard, dragonflies, amphibians and rare plants.
- Recreational impact assessments are being carried out to assess ecological footprint of campsites and portage use. For example- camping on small islands and concerns with firewood depletion and toilet issues as well as disturbance to caribou calving during May and June.
- Education –We like to provide educational materials for the lodges and outpost camps as well as the canoe outfitters so that park users are aware of how they can minimize their impact on the environment. We have placed best practices for fishing and caribou educational posters at most lodges and outpost camps. We have also placed angler diaries at outposts for guests to fill out during their stay. We try to provide similar educational information in the park tabloid, outfitter newsletters, park website and through posts on facebook.

Q- Wabakimi Provincial Park includes critical habitat for the woodland caribou (as described in the Ontario Parks blog article, "[Wabakimi: the land of the grey ghosts](#)"). How do you estimate the habitat use, range, and numbers of the caribou?

A-

- The Species at Risk Branch, delineated 14 caribou ranges within the province of Ontario (*Delineation of Woodland Caribou Ranges in Ontario, 2014*). Wabakimi Park falls within the Brightsand and Nipigon Ranges. For more information visit: <https://files.ontario.ca/environment-and-energy/species-at-risk/Brightsand-Range-EN.pdf>
- Minimum animal numbers have been extrapolated from the Brightsands and Nipigon Range Population Assessments that were performed by the Species at Risk branch of MNR between 2011 and 2014.
- Research in the park has involved surveying islands in lakes for caribou calf sign to protect and designate certain areas as nursery areas.
- Walking transect surveys have also been performed in other mainland areas throughout the park to determine caribou use.
- Every winter a transect is flown through the park to determine where caribou are during winter and if they are using the same areas as previous years.
- We also set up camera traps to determine the extent of travel and caribou use along certain canoe routes/portages that could potentially conflict with recreational use.
- Habitat is being studied as well as fire regeneration to ensure the park manages to ensure sufficient current and future habitat is made available.

Q- What might be best-practices for canoe trippers to respect the welfare of the caribou? [I realize some of these are spelled out in the blog article, but it is likely some of the newsletter readers may not be aware of these]

A- *What can you do to help?*

Please do your part to help ensure that there will always be woodland caribou in the park:

- If out camping in the park, please avoid camping on islands if possible during the vulnerable calving period (May and June) and keep quiet to reduce disturbance. This may also increase your chances of seeing one.
- Stay on trails to avoid stepping on sensitive lichen carpets.
- Use existing campsites
- Keep dogs on a leash so they do not chase or harass caribou.
- If you see an animal, stop and observe, rather than pursue the animal. Get a camera with a good lens and try to capture it from the distance. Report your sightings to the park or enter on [inaturalist](#).

Q- How might a canoe tripper distinguish between tracks and scat of caribou, versus those of moose in Wabakimi?

A-

Moose



Woodland Caribou



- Caribou pellets are about the size and shape of Glossette raisins where as moose pellets are more the size and shape of chocolate covered almonds.
- Caribou tracks are very rounded at the top almost like a horse shoe and moose are very pointed at the top like an upside down heart.

Q- Are there other ways in which canoe trippers can contribute to flora and fauna information, monitoring, and protections? (beyond the obvious following of regulations and LNT practices)

A-

- Entering observations of Flora and Fauna into [inaturalist](#) and [ebird](#) -even amateurs can take a picture of a plant or animal and an expert will reply with the correct scientific name. it is a great way to learn! Observations can be entered without wifi and then when connected will automatically upload.
- Reporting UTM locations to the park of any rare species or sightings such as caribou, wolverine, wolves would be extremely valuable.

- Being aware of your ecological footprint in everything that you do including: where you choose to camp, collecting firewood, noise disturbance, how you deal with your toilet issues, invasive species/ cleaning your gear and disposal of fish remains
- Bear proofing your gear/campsite – smell proof so that bears do not get habituated
- Fishing – barbless hooks and not using live bait

Q- Ontario Provincial Parks are now operated under a ministry (MECP) separate from the one that manages other Crown Lands (MNR). What kinds of interactions occur to facilitate exchange of information and planning for habitat and wildlife protection?

A-

- We are informed of the forest management plans and if we have any concerns are free to comment. I often make a point of communicating with the foresters and biologists of the surrounding Crown lands to discuss ideas/options for cross boundary consistency in terms of Fire/Veg/Caribou management planning. Nature is not defined or managed by political boundaries so we must learn to manage collaboratively.

Q- Are there any invasive species issues that are of concern for the Wabakimi Area in the upcoming years?

A-

- Using live bait is currently permitted within the park but please do not release any live bait. Many lakes in Wabakimi have unique assemblages of species, and transfer of new species may inadvertently upset the ecosystem of a water body. For example, earth worms are currently not found within Wabakimi, the transfer of these invasive species through live bait is a source of unwanted invasive species movement. Please dispose of bait fish at least 30 meters away from any water body and take any worms out of the park at the end of the trip.
- The Emerald Ash borer is a highly destructive invasive beetle that is a pest of ash trees. These beetles have been found as far north as Thunder Bay but fortunately have not made their way into Wabakimi at this point. Wabakimi contains a number of stands of black ash trees so the potential is there to spread north. The transport of firewood is the main source of spread so fortunately, Wabakimi is relatively isolated with minimal road access.

Q- What is the most interesting or surprising thing you learned about Wabakimi in recent years?

A- I spent 10 years working in Woodland Caribou park prior to coming to Wabakimi and I assumed that since both parks are located in the boreal forest, that they would be similar in most aspects. I have come to realize quite the opposite, that they are extremely different. Woodland Caribou, located next to the Manitoba border is influenced by the hot dry prairie weather creating very short fire cycles with predominantly young jackpine stands. Wabakimi on the other hand has a much wetter, more humid climate with much older predominantly black spruce forests and a fire cycle almost double that of Woodland Caribou Park. This climate difference can affect everything including the rate at which lichen regenerates after a fire. Lichen regenerates faster with higher humidity levels.

