



Les **Amis** du Parc de la Gatineau  
**Friends** of Gatineau Park

# Amis Friends

2013-II

[www.friendsofgatineaupark.ca](http://www.friendsofgatineaupark.ca)

## *Biodiversity*

### **Wolves in Gatineau Park?**

*By Christie Spence<sup>1</sup> and Dr. Carolyn Callaghan*

One element of Gatineau Park's ecology that has received little attention is the presence and role of top predators. Top predators such as wolves and coyotes (canids) play a key role in maintaining healthy ecosystems: they regulate prey populations such as beavers and deer which in turn moderates impacts on native vegetation, provide food to scavengers, and control the spread of wildlife-borne disease (e.g. Lyme's disease). While it has long been suspected that there are wolves in

provide critical habitat for its survival and could require specific protection measures.

Gatineau Park has implemented a multi-year study to answer the following questions:

- Is the Eastern Wolf (*Canis lycaon*) present in Gatineau Park?
- Is there important seasonal habitat for canids (Eastern wolf, wolf-coyote hybrids) in the park?
- Are canids using ecological corridors to move between the park and other important habitats in the region?



**Canid captured by remote-sensing camera at a hair-snagging station during Phase I of the study.**

Gatineau Park, it is not known whether the Eastern Wolf, a federally-listed species at risk, is present. (Note: Interbreeding between coyotes and wolves is common in the region – only genetic analysis can determine which species and/or hybrids are present). If so, the park could

Phase I of the study aimed to determine the general presence of canids in the park. Dr. Carolyn Callaghan was contracted to conduct a study that used snow tracking, remote-sensing cameras and hair snagging traps in order to locate areas in that park that support canids.



The results of Phase 1 were encouraging. Thirty-one surveys were conducted by snowshoe, ski, and snowmobile, between January 17th and April 13th, 2013. Canid tracks were detected on 29 (78%) of the surveys: groups of two or more canids were detected most often (74%), and single canids represented 16% of the canid track observations. Group size varied from 2-7 animals. The remote sensing cameras detected canids in 86 of the 250 images of wild animals that were obtained. The images captured groups from two to six canids, in addition to black bears, fishers, red foxes, eagles, and large birds.



**Group of six canids observed by remote-sensing camera in Fall 2013**

The preliminary conclusion of the Phase I study was that the western portion of Gatineau Park probably hosts three packs of wolves totalling 15 individuals and three packs of coyotes totalling 10-12 individuals during winter. It is likely, however, that these animals regularly move in and out of the park in pursuit of prey and to meet other habitat requirements.

Phase II of the study aims to provide a more detailed understanding of the genetic identification of the canids present in the park, and of the movements and habitat use of individual animals within and outside of the park. Eight satellite tracking collars were purchased with the objective of obtaining detailed information about individual movements of canids from different groups using the park. Soft-sided leg hold traps are placed in known travel corridors within the park; captured animals are measured, weighed, sampled for genetic analysis (blood and hair), and fitted with GPS collars. Thereafter, each individual's locations are recorded every 2 hours and

transmitted via satellite approximately once per day.



**Juvenile animal fitted with a satellite collar in December 2013**

Wolf trapping is a difficult art, and so it may take several seasons of trapping to be able to deploy all 8 collars. By early winter 2013-14, three animals have been caught and collared, and their movements are being carefully monitored. The results of the study are expected to tell Gatineau Park biologists which species of canids are present in the park and to identify important seasonal habitats in the park such as winter deer yards, wolf denning sites and *rendez-vous* sites (important for young wolves before they join their packs in the hunt). This information will be used to inform park management decisions. Stay tuned!

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## Biodiversity

### Bryophytes: An Important Aspect of Diversity of Flora in Gatineau Park

by Jean Faubert, *FloraQuebec*

During the 2012 season, botanists from the FloraQuebec association conducted two studies on bryophytes (mosses and liverworts) in Gatineau Park.

#### *Saxicolous bryophytes*

The purpose of the first study was to ascertain whether there are rare bryophytes on and near climbing sites on the Eardley Escarpment. This study focused on saxicolous species on rock walls of the escarpment and fallen rocks below, continuing the inventory initiated in 2011 (see Bulletin N° 2012-I). During the 2012 season, six sites were visited and 64 taxons of bryophytes noted: 16 liverworts and 48 mosses. Two species with S1 status (at high risk in Quebec) and three with S2 status (at risk in Quebec) were observed. Two taxons of phytogeographical interest were also noted.

The Luskville Falls site has less diversity of flora than was hoped for given its potential quality. As was the case at the Home Cliff site, visited in 2011, more significant disturbances were noted here than at other sites.

At the other end of the scale, of the 11 sites visited in 2011-2012, the Farm Rock site has the greatest number of species observed. The large area of this site provides an abundance of micro-habitats conducive to bryological diversity. At this site alone, 10 taxons were found. Four of the five taxons with special status observed in 2012 are present at this site; of these, two are known only at this site. The non-inventoried areas near the rock wall also have rich bryological potential. From a conservation standpoint, the Farm Rock site is particularly rich.

Over the two seasons, a total of 11 sites were inventoried, with 71 moss species and 23 liverwort species observed. Three species with S1 status and five species with S2 status were discovered, for a total of eight species with special status. Of these species, six are present at only one site. At least for the large species (*Thamnobryum alleghaniense*,

*Amphidium mougeotii*, *Coscinodon cribrosus* and *Forsstroemia trichomitria*), this fact is an indication that these plants are probably rare in the Park, as well as in the province. As well, *Grimmia pilifera* (Figure 1) is remarkable since it is present at five of the 11 sites and abundant at each of these locations, even though it is rare in Quebec. From an interpretation standpoint, this plant could be used as an emblem of the Park.



**Figure 1. *Grimmia pilifera*, a saxicolous taxon characteristic of the Eardley Escarpment.**

Photo: M. Lapointe, 2012

The results of this inventory confirm that the Eardley Escarpment has broad diversity of flora including several species that, while discreet, are remarkable from a number of standpoints. We wonder how many other surprises are in store for us there!

#### *Corticolous bryophytes*

The purpose of the second study was to sample the corticolous bryophytes at seven sites in Gatineau Park, drawing up a preliminary list and identifying any species with special status. The terms of frequency and abundance of taxons at one of these sites, an old-growth maple forest with yellow birch, were noted. In total, 38 taxons of corticolous bryophytes were observed: 8 liverworts and 30 mosses.

To the great joy of the participating botanists, a new species for Quebec, the liverwort *Microlejeunea ulicina*, was discovered on the bark of a yellow birch in a deep valley in the Dunlop area. This was the first time this species had been noted in Quebec, and the second time it had been noted in



Canada. The only other observation in Canada it was possible to find was in southern Nova Scotia, and dates from 1910. The geographic distribution of this miniscule species covers the Appalachian region, from Nova Scotia to Georgia, Alabama and Tennessee.

Three other species with special status were observed: *Pelekium minutulum* (S1), *Zygodon rupestris* (S2), and *Anacamptodon splachnoides* (S2).



**Figure 2: *Anacamptodon splachnoides*, a moss species that grows only in cavities in trunks of deciduous trees.**

Photographie : M. Lapointe, 2012.

This last species, *Anacamptodon splachnoides* (Figure 2), is not very distinctive morphologically, being a small moss with no apparent special characteristics. However, its highly specific ecological niche makes it stand out: it grows almost exclusively in cavities in trunks of deciduous trees, most often maples, although it has been gathered (in all areas of its geographic distribution in North America) from ash, birch, elm and eight other species of trees.

Oddly enough, it is also found on the carpophores of polypore fungi. The presence of water appears to be the determining factor that allows this plant to grow in crevices, forks and tree-trunk cavities of all kinds that hold water. Often considered a rarity, *Anacamptodon splachnoides* may be widespread but overlooked in deciduous forests because of its particular growing environment. Whatever the case, this species is a highly interesting addition to Park flora given its considerable potential from an interpretation standpoint. In English, this plant is commonly known as “Knot-Hole Moss”.



Once again, the Friends of Gatineau Park are planning a series of fun, adventurous and educational programs throughout the coming year. This spring, the ever popular Dusk Series will be returning with evening programs (indoor talk, outdoor walk) where you can join in the search for amphibians in a shallow pond, listen for owls calling or explore the mysteries of nature after dark.

We are also hoping to develop some new programs over the coming year to help you learn about Gatineau Park and enjoy your visits. Please check our website ([www.friendsofgatineaupark.ca](http://www.friendsofgatineaupark.ca)) over the coming weeks for more details.



If you enjoy reading this *Bulletin Amis/Friends*, you may also like to join us on a committee as volunteer. Thank you to inform us at: [www.friendsofgatineaupark.ca](http://www.friendsofgatineaupark.ca)

