

ALGONQUIN PARK IS BLACK BEAR COUNTRY

For most Park visitors, seeing a Black Bear in its natural environment is an exciting experience. However, the excitement diminishes when that Black Bear is rummaging through your cooler or tent, searching for food. As visitors camping in bear country, you have a responsibility to follow the bear rules and to know what to do if you encounter a bear.



PETER FERGLUSON



Rules in Bear Country

Each year, Park staff spend hundreds of hours dealing with problem bears – help our staff by following the rules when camping in bear country.

1 Never feed or approach bears

The Black Bear is an intelligent animal, with the ability to remember food locations and can quickly become accustomed to human sources of food. People who feed bears create problems for everyone.

2 Store food out of reach of bears

In campgrounds and picnic areas, store all food (including pet food) inside the closed trunk of your vehicle, if possible. Do not store food, cooking utensils or fragrant items, such as soap, toothpaste, or shaving cream in your tent.

When camping in the backcountry, put all food in a pack and hang it well off the ground – at least four metres off the ground and two metres away from the tree trunk – and away from the vicinity of your tent.

3 Keep your campsite clean

In campgrounds, reduce the availability of garbage, and consequently garbage odours, by depositing your sealed bags of garbage daily in the bear-proof waste containers. Clean your picnic table and barbecue after every use, and clean up any spilled grease.

When camping in the backcountry, burn any food scraps and fat drippings thoroughly in a hot fire. Any remaining garbage should be placed in your litter bag and suspended along with the food. To eliminate food odours, dishes should be washed immediately after each meal (preferably well away from your campsite).

Charges can be laid for leaving out items which may serve as attractants to any wildlife.

BEAR SPRAY is pepper spray with a strength, and a propellant, specifically formulated to deter bears when it is sprayed in their eyes. Know how to properly use, store, and carry this product (available from many outfitters). Keep in mind that bear spray is no replacement for appropriate conduct in the outdoors.

“Maddie” the Map Turtle

by Patrick Moldowan

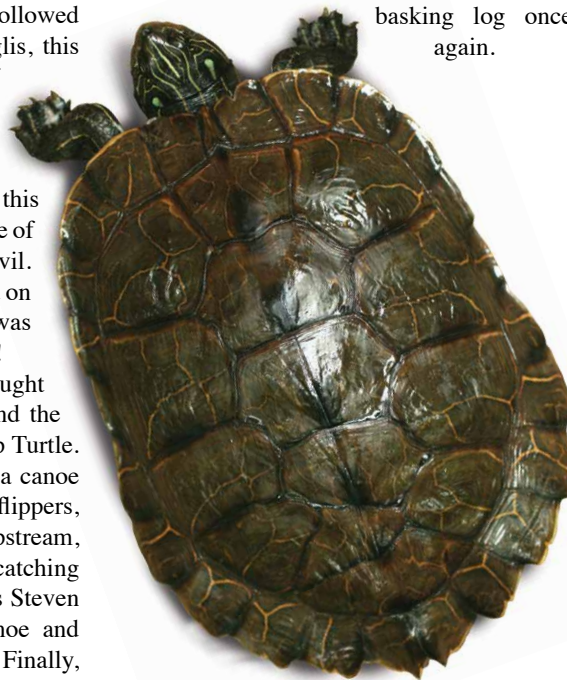
BIG news from the Turtle Lab! Over the 43 years of the Algonquin Turtle Project there have been a lot of firsts. Each and every year brings something new to discover and the 2014 field season is no exception. We are ecstatic to announce the first capture of a Northern Map Turtle (*Graptemys geographica*) in Algonquin Provincial Park!

Reports of a Map Turtle in Algonquin first circulated during the summer of 2012 when Park Naturalist Justin Peter snapped a photo of an individual basking in the Madawaska River, near Lake of Two Rivers. Another Map Turtle observation followed from Ontario Parks staff Jeremy Inglis, this one far removed on the east side of Algonquin Park in the Bonnechere watershed (where the species is known to occur outside of the Park’s boundaries). During nesting surveys this year, something unusual caught the eye of Turtle Project Field Leader Matt Keevil. The Map Turtle was back and perched on what looked like the very same log it was first photographed on two years prior!

The next day was sunny and brought great prospects for basking turtles and the capture of the elusive Algonquin Map Turtle. The Turtle Research Crew launched a canoe equipped with landing nets, wetsuit, flippers, and pure determination. We started upstream, winding downriver with the hopes of catching the turtle by surprise with researchers Steven Kell and Patrick Moldowan by canoe and Matt Keevil snorkeling stealthily. Finally, the Map Turtle was in sight! She was once again basking on her favourite old log, next

to a Painted Turtle. Not wasting any time, she dove off her log and headed for deep water. Turtle Researchers followed close and after much splashing, hollering, and excitement “Maddie” the Map Turtle was in hand!

As the first of her kind on the west side of Algonquin Park, Maddie has a lot to teach us. There is still a lot of speculation about this turtle’s past. Where did she come from? Is this a case of range expansion, natural dispersal into new habitat, or relocation by humans? We look forward to following up with Maddie in the years ahead, probably on her favourite basking log once again.



“Maddie” the Northern Map Turtle in Algonquin Park
PHOTO: PATRICK MOLDOWAN



The Visitor Centre offers **FREE WiFi** internet access ...and while there, don't forget to check out The Friends of Algonquin Park Bookstore and Nature Shop, or the Sunday Creek Café.

algonquinpark.on.ca



Algonquin

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Think inside the lodge

by David LeGros

When we think of the beaver many thoughts come to mind: an industrious creature; half in, half out of the water; busily cutting trees; collecting and piling branches and mud to build a dam. As expert engineers, a family of beavers can quickly build a dam, block a stream and create a small lake where they will build their lodge and raise a family. If we take a step back, one can see that the beaver’s activities are to serve itself, but are essential to a wide range of other creatures that rely on the pond that it creates and maintains. This is a classic lesson in ecology, one species that many others rely on: a key-stone species. It is easy for us to understand the habitats that beavers create and how wildlife use these, but can the beaver itself be a habitat? At least one creature has thought “outside of the box” and gone inside the lodge. However, before we can

explore the creature that lives on the beaver, we need to know why it can be a habitat – the forest of fur!

The beaver’s fur is quite extraordinary – the rich reddish-brown outer fur has long guard hairs to help keep the animal warm, but it is the fur you don’t see that is the most important. The extremely dense underfur acts as a water-proof barrier, keeping the beaver warm and dry while it swims. This amazing fur coat, so important to the beaver, soon attracted the attention of humans in the form of trapping (see side bar). Trappers had nearly wiped them out and few beaver remained on the land. Beavers have since made an unprecedented comeback across North America, and anyone canoeing through Algonquin’s wilderness will invariably have to portage around or carry their canoe over one (or possibly dozens!) of



F.J. PARENT

beaver dams. The beaver's recovery is even more impressive in that it is now possible to see beavers and their signs in urban centres. But long before humans had any interest in beaver pelts, a very special little creature had its eyes on our eventual national emblem. No, wait, it doesn't have eyes.

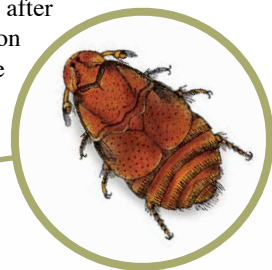
Beetles are among the most diverse group of living creatures on the planet, with over 340,000 known species. It has been said that there is no organic material, animal or vegetable, that is spared from the chewing mouthparts of beetles. As a rule, most beetles are pretty innocuous, although a few are pests of crops, trees and stored foods. One particular species of beetle has become an extreme specialist, and completely abandoned the traditional beetle lifestyle: like the trapper, this beetle makes a living off the beaver.

The Beaver Beetle (*Platypsyllus castoris*), the species name referring to its affinity with the beaver, is very unique and is almost unrecognizable as a beetle. It looks more like a louse or a flea than a beetle, and this is a reflection of its adaptation to an odd lifestyle. This tiny insect is flattened, with short legs, no wings, reduced elytra (the hard wing covers found on most beetles), and lastly it has no

eyes. All told it is somewhat reminiscent of a small, amber-coloured cockroach. But how does it make a living on the beaver?

It is a parasite, living only on beavers. Now you are probably thinking: insects breathe air, so how is the Beaver Beetle living on a creature that spends much of its time underwater? True, the beaver's habitat is aquatic, but the Beaver Beetle's habitat is a beaver! Remember that dense underfur of the beaver? The skin underneath the hair does not get cold and wet when the beaver dives, and the beetle makes its living here!

It feeds on the fatty skin secretions and skin debris, and maybe even some blood from wounds on the beaver, but it is not a true blood sucker. So tied to the beaver is the Beaver Beetle, that it can only be found away from its host at three brief times in its life. A female beetle, laden with eggs, climbs off the beaver while it is in the lodge to lay eggs in the substrate of the beaver's home. She may be off of the beaver for up to two days, and once done laying eggs quickly returns to her host. The eggs are laid in the floor of the lodge and hatch after about 30 days. Upon hatching, the larvae



Overhead view of Beaver Beetle – note the flattened body and lack of eyes.



KREZSATOR WAKTOR

instinctively know to find a beaver and begin feeding. The larvae, once fully matured, leave the comfort of the beaver for the inner workings of the lodge. But unlike where the eggs were laid, the larvae head for the ceiling of the lodge, and undergo a drastic change known as metamorphosis, in the mud and sticks. Metamorphosis takes up to 11 days, and once emerged, the young beetles head right back to the beaver.

Most insects have a strategy to reduce food competition between parents and offspring – the larvae feed on different foods than the adults, but the Beaver Beetle is an exception to this. The larvae and adults of the Beaver Beetle are perfectly content to feast on the same kinds of beaver morsels.

To be truly successful, the Beaver Beetle requires not one, but a family of beavers. As the family of beavers grows, eventually the young ones will leave their natal territory, finding their own place in the wilds of Algonquin. However, they will head out into the world with their own hitch-hiking beetles which also grew up in the family home, and they will continue their life cycles when the beaver establishes a lodge and family of its own.

From the early days of the fur trade and the exploration of the New World, to its diligent work as an ecosystem engineer, we know that beavers are an important part of the Canadian, and Algonquin landscape. The next time you visit a beaver pond, try to imagine all the interwoven stories happening before you. The habitats created by beavers are

important refuges for many kinds of wildlife, but we don't often think of what is happening inside the lodge, and that the beaver itself is a habitat!



"The Regent" style Beaver Felt Hat, circa 1825

Beaver Felt Hats

The beaver was central to the establishment of Canada and the exploration of North America. In the 1600s to mid-1800s trade in beaver pelts was a driving force of our fledgling economy, and even today, trapping still supports many people and communities in Canada. European settlers trapped beaver for their fur, but soon realized they could make felt hats using the underfur. The long guard hairs were removed and the dense underfur was felted and pressed into the form of a hat, which became fashionable and in high demand. These expensive hats were a sign of wealth, prosperity and status to the wearer in Europe. Fortunately for the beaver, Europe's sense of fashion eventually changed, and beaver-felt hats were no longer in style and demand subsided, allowing populations to recover.

Annual Algonquin Butterfly Count

The 18th annual Algonquin Butterfly Count took place on Tuesday July 1st, 2014. The count was a great success thanks to the many volunteer observers. A total of 32 species were observed during the count. The most interesting species observed was the Little Yellow, a species that has not been observed in Algonquin since July of 1959. For a guide and checklist of the species found in Algonquin, please see the newly

revised publication Butterflies of Algonquin Provincial Park, available from The Friends of Algonquin Park.



Little Yellow discovered by Rick Stronks July 1, 2014.

Algonquin Park 2014 Loon Survey

The haunting calls of the Common Loon symbolize Algonquin's wild country for many people. Nearly every small lake has a breeding pair and there are multiple pairs on the larger lakes. Unfortunately, there are environmental threats to loons throughout their range that could potentially affect numbers here in the Park. These include reduced reproductive success caused by acid precipitation, and loons dying during migration due to avian botulism.



BRIAN LASEBKY

In 1981, we began a project to help determine just how well loons were doing in Algonquin. Visitors and staff report the lakes where they see adult loons, their nests and young. On average, nests or young were observed on 40% of lakes where loons were reported during the 33 years from 1981 to 2013. Only a long-term monitoring program can distinguish real trends from normal yearly fluctuations and we need observations from as many lakes as possible.



Loon Reproduction in Algonquin Park Since 1981

Year	# of lakes surveyed	% with nest/young
1981	121	38
1982	184	28
1983	237	21
1984	298	34
1985	210	37
1986	216	35
1987	261	43
1988	260	40
1989	240	41
1990	248	40
1991	201	50
1992	203	39
1993	232	43
1994	183	46
1995	223	45
1996	219	42
1997	173	45
1998	175	42
1999	190	33
2000	216	44
2001	168	39
2002	143	41
2003	120	46
2004	144	41
2005	156	40
2006	147	41
2007	138	43
2008	169	39
2009	146	40
2010	138	36
2011	134	51
2012	128	48
2013	120	52

Please give us a hand by reporting your loon sightings this year. Report forms are available at park offices and the Visitor Centre.