



HAPPY HALLOWEEN

Friday, October 27th • Saturday, October 28th

- 🎃 Spookiest Campsite Contest
- 🎃 Skeletons 🎃 Costume Contest 🎃 Trick-or-Treat
- 🎃 Pumpkin Carving Contest
- 🎃 Marshmallows 🎃 Wolf Howl

Join us at the Visitor Centre on Saturday where a Park Naturalist will guide you through a collection of animal skeletons. Mew Lake Campground will feature “pick of the patch” pumpkin carving, spookiest campsite and best costume contests. Everyone is invited to participate in trick-or-treating among the campsites on Saturday night, and later, for a howling good time at the nearby Old Airfield with a Wolf Howl.



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 FERUGLISON



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.

ALGONQUIN VISITOR CENTRE
HOURS OF OPERATION

Open Daily	Open Daily
9 am - 7 pm June 17 to October 9, 2017	9 am - 5 pm October 10 to 29, 2017
Winter hours	Holidays
Weekends 9 am - 5 pm (full services) Weekdays 9 am - 4 pm (limited services) October 30 to December 23, 2017 January 8 to April 20, 2018 (Closed December 24-26, 2017)	Open Daily 9 am - 5 pm (full services) Christmas (December 27 to January 7, 2018) Family Day (February 19), March Break (March 10-18) Easter Weekend (March 30-April 2, 2018)
<i>Algonquin Logging Museum - Open 9 am-5 pm June 17-Oct.15, 2017. The 1.3 km trail with outdoor exhibits is open year-round.</i>	

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Algonquin

The Raven

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A Green Needle in the Hay Stack

by David LeGros

Algonquin Provincial Park is known for its forests, lakes, rivers and rocky shorelines, but open, grassy meadows and fields are rather uncommon here. As a result, many animals that live in these open habitats are very uncommon; creatures like the Woodchuck and Bobolink. One animal that makes use of tall grass and sunny patches of vegetation, to the point of mimicking plants, is the Smooth Greensnake. If you have not seen one of these beautiful reptiles, you could be forgiven; they live in grassy or brushy meadows and their bodies are coloured to match the surrounding vegetation. Many naturalists have caught fleeting glimpses of one only to lose sight of it in a split second since they are so well camouflaged and lightning quick. If you are lucky and get to observe one, you might well be enchanted by watching this small, inoffensive reptile.

The Smooth Greensnake is a small, thin-bodied snake that averages 45 cm in length. The pencil-thin body is vibrant green on the back and the belly is cream-colour. So we have determined that it is a snake, and it is also green, but smooth? This refers to the snake's scales. Many snakes, like Garter and Water snakes have “keeled” scales – a small ridge running down the centre of the scale, making them feel slightly rough. Some snakes, those without keeled scales, are smooth, very smooth in fact. And, just in case you are wondering, there is a Rough Greensnake, but it does not occur in Ontario. Our Smooth Greensnakes are relatively widespread through much of northeastern North America and

The Smooth Greensnake lives in grassy meadows but is hard to find.
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makes use of a variety of open habitats. It is partial to climbing low shrubs, small pine and spruce trees in meadows and will even scale dead snags. While up in the branches, the snake will blend in with the foliage not only by being green, but also by gently swaying in the breeze to mimic a leaf or blade of grass! The reason it has climbed into the bushes is to find prey. The Smooth Greensnake, like all snakes, uses its forked tongue to smell and will follow a scent trail to prey. This small snake has very good eyesight, which it also uses to locate prey. The combination of smell and sight help it to close in on prey. But what does a Smooth Greensnake eat? Unlike most snakes in Ontario, it feeds predominantly on insects and spiders that it quickly over-powers and swallows whole.

Snakes also use their sense of smell to find a mate, by following a scent trail. While you can imagine the challenges of mating without limbs, we will skip to the outcome – young. Because snakes are cold-blooded, they cannot make their own body heat and instead rely on warming themselves in the sun. So, brooding eggs like a bird would not work. Instead of making a nest, snakes lay their eggs in warm places such as under rocks, rotting stumps or decaying vegetation, and the female leaves them to chance. About half of Ontario’s snakes use this method, but it does pose many risks; perhaps the laying site does not get warm enough and the eggs won’t hatch, or a predator

discovers and eats the eggs. The other half of Ontario snakes remarkably give birth to live young, like a mammal. Live-bearing snakes are thought to have an advantage over egg-layers in cool climates because the pregnant female has the ability to move herself (and her brood) to a warm location and keep temperatures more constant for the developing embryos. Typically, egg-laying snakes mate in the spring, and lay their eggs a few weeks after. The eggs, if they are in a good location, hatch in 2-3 months, usually by late August for many species. Similarly, live-bearing snakes also mate in spring, and their young develop in the female for most of the summer, and are born in late summer. At hatching or birth, the baby snakes are fully capable of taking care of themselves and move on into the world within days.

So now that we know all this about snake reproductive tactics, and that live-bearers have a bit of an advantage in cooler regions, such as Algonquin and much of Ontario for that matter, does the Smooth Greensnake lay eggs or have live birth? The easy answer is eggs! The more interesting answer is “it’s complicated”.

Being a snake in a cool, northern climate means that summers are short and that incubating eggs might not always have enough seasonal warmth to fully develop. The Smooth Greensnake has adapted to these conditions by retaining shelled eggs for longer. This way, the female can move around and maintain a more constant body temperature, but the



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A short incubation time may help Smooth Greensnakes live in Algonquin’s cool climate.

eggs actually start developing well before she even lays them! By doing this, female Smooth Greensnakes have shortened their incubation period from the usual 1 to 2 months like other small snakes that occur in the same area, such as Northern Ring-necked Snakes, down to a period measured in weeks or even days. The average incubation period for Smooth Greensnake eggs is 7 to 14 days, and in one Ontario observation, as short as 2 days! By retaining eggs in her body and developing internally, the baby snakes are spared a risky and lengthy incubation period. It should be noted that the Smooth Greensnake, along with the Northern Ring-necked Snake are the two northern-most ranging egg-laying snakes in Ontario, and their shortened incubation periods might be part of the reason why. The hatchling snakes are rather small, about 12 cm long, and unlike their parents they are dull olive brown colour until they shed their skin for the first time, becoming bright green.

Even though our pretty little Smooth Greensnakes have some interesting reproductive adaptations to living in cooler

climates, they are still rare in the Algonquin highlands. In most of southern Ontario, there are quite a few meadows and old fields, shrubby areas and forest edges that make suitable habitat. Even the rocky barrens of central Ontario and Georgian Bay are decent habitat. However, dense forest is generally avoided and so much of Algonquin is marginal habitat at best. Most of our records of this species come from the east side of Algonquin and to a lesser extent, the Highway 60 Corridor. Likely habitats include beaver meadows, the margins of bogs and fens and the fields around old depot farms and lumber mill sites. On average, there are one or two reports a year for this species, but there could be more.

We are always interested in gathering natural history records for rare and even common species, and there is a way of submitting your sightings to a provincial data base – the Ontario Nature Reptile and Amphibian Atlas. You can submit your sightings of any snakes, turtles, frogs and salamanders using this resource, which go to help scientists develop distribution maps, monitor populations and

develop conservation strategies. Think this is too complicated for you and you aren’t an expert? No problem! There is even a free app for your phone to help you identify and submit your sightings. You too can be a citizen scientist. It is not possible for researchers to be everywhere at once, but there are hordes of people exploring Algonquin, nearly a million every year, and each person has the power to make and submit a relevant observation. Algonquin Provincial Park is an amazing and

large protected area, but few people make it to the centre of the park, either on foot, by canoe, or for biologists by plane or helicopter. As a result, we have few natural history records for some of these remote regions – so any record is helpful! Algonquin does appear as a big green blob on the map and certainly gets quite a bit of attention from visitors and scientists alike, but we could always use a little help when it comes to finding the smooth green needle in the enormous haystack.

Ontario Reptile and Amphibian Atlas

Ontario Nature protects wild species and wild spaces through conservation, education and public engagement. The Ontario Reptile and Amphibian Atlas (ORAA) is a citizen science project that maps the distribution of reptiles and amphibians across the province over time.

In Ontario, 75 percent of reptiles and 35 percent of amphibians are at risk of disappearing. The ORAA uses more than 200,000 observations submitted by partners and thousands of individuals to inform conservation, stewardship and management planning for reptiles and amphibians.

Ontario Nature welcomes sightings and photos of any snake, lizard, frog, toad, turtle, or salamander in Ontario. For more information and to submit sightings, visit ontarionature.org/atlas.



Blanding's Turtle photo: Joe Crowley

Algonquin Snakes

Species	Reproduction	Average Number
Eastern Hog-nosed Snake	Eggs	18
Northern Ring-necked Snake	Eggs	6
Smooth Greensnake	Eggs	7
Eastern Milksnake	Eggs	13
Northern Watersnake	Live birth	18
Eastern Gartersnake	Live birth	18
Northern Red-bellied Snake	Live birth	7
Dekay's Brownsnake	Live birth	10

Many people are surprised to learn that many of Ontario’s snakes have live birth. Which snakes have you seen and how do they reproduce?

Citizen science GOES MOBILE!

IMPRESS YOUR FRIENDS

with your knowledge of reptiles and amphibians while contributing to conservation in Ontario.

The Ontario Reptile and Amphibian Atlas app is a field guide that allows you to easily report your sightings.

DOWNLOAD IT FOR FREE USING WIFI

ontarionature.org/atlas
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Ontario Nature

A registered charity protecting Ontario's wild species and wild spaces since 1931.