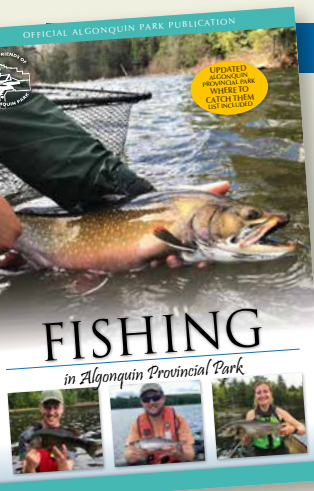


Reminders while fishing in Algonquin

- No live baitfish are permitted.
- No fishing is permitted within 100 m of a water control dam.
- No fishing within 300 metres downstream of Lake Opeongo's Annie Bay dam.
- Daily catch and possession limit for Lake Trout is 2 per person (1 per person with a Conservation Licence).
- Daily catch and possession limit for trout is 5 per person, no more than two of which can be Lake Trout (2 per person with not more than one Lake Trout, with a Conservation Licence).
- Be aware some lakes have slot limits. Check the Algonquin Information Guide for a list.
- Worms are not native to Algonquin and remaining worms should be taken home or thrown in the trash – not on the ground!



REVISED Publication

Fishing in Algonquin Provincial Park ONLY \$6.95

This significantly revised edition provides interesting facts about Algonquin's clear, cold lakes; threats to lake ecology; and fisheries research and management. It has lists of all fish species in Algonquin, plus gamefish present in 233 lakes. Park visitors often have limited knowledge of how or where to fish, or the kinds of fish to expect. This book is intended to provide you with the information needed to plan your next angling adventure in Algonquin Park.

Available at the Algonquin Visitor Centre Bookstore & Nature Shop, West and East Gates, or online at algonquinpark.on.ca



Tips for a Successful Release

- Use barbless hooks or bend the barbs in using a pair of pliers.
- Keep handling of fish to a minimum. If possible, lean over the side and use long-nosed pliers to twist the hook free while the fish is still in the water.
- If this isn't possible, use a large rubber net to carefully lift the fish into the boat. Leave the fish in the net and remove the hook using long-nosed pliers.
- If you must handle the fish, hold it horizontally with wet hands while you remove the hook. Holding a fish vertically can damage its spinal column. Avoid holding a fish by the gill-plate as you can accidentally damage fragile gill tissue with your fingers.
- Everyone wants the Algonquin Park fish photo. If you hope to take a photo with your catch, BE PREPARED! Have your waterproof camera ready to snap your shot to minimize handling time out of the water. Hold the fish over the water while taking the photo, so if you lose control it will fall into the water and not onto shore or into the boat. Underwater shots are equally as eye-catching!
- If necessary, gently support the fish upright in the water until it recovers.

CONTRIBUTE TO CITIZEN SCIENCE!

As of early 2021, the Algonquin Provincial Park iNaturalist project had over 51,000 observations of 3600 species!

Available on iOS, Android and at inaturalist.org

- Upload a picture of any wild plant, animal or fungus.
- iNaturalist's community and image recognition software will help you identify it.
- Help out other naturalists by identifying their observations.
- Every observation becomes part of a growing record of Earth's biodiversity.



By submitting your observations and photos to Citizen Science platforms like iNaturalist.ca, you can help park staff document biodiversity in the Park and even protect habitat. For more information join iNaturalist.ca, and check out Algonquin Provincial Park under projects.

iNaturalist Canada is run by the Canadian Wildlife Federation, the Royal Ontario Museum, and iNaturalist.org at the California Academy of Sciences.



ALGONQUIN VISITOR CENTRE

HOURS OF OPERATION

Algonquin Visitor Centre
April 24 to October 31, 2021
Open Daily 9 am - 5 pm
November 1 to December 23, 2021
Weekends 9 - 5 pm, full services
Weekdays 9 - 4 pm, limited services

Museum • Bookstore & Nature Shop

Algonquin Logging Museum
June 12 to October 17, 2021
Open Daily 9 am - 5 pm
The 1.3 km trail with outdoor exhibits is available year-round.

OntarioParks.com • algonquinpark.on.ca



Algonquin

The Raven

A Natural and Cultural History Digest

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What's that on your ankle?

by David LeGros

The simple things in life are often the best and a late summer paddle through Algonquin is among the finest things. The long days with warm breezes, a stunning landscape, adventure around every corner, chance encounters with wildlife, and few biting flies. You don't need to be a connoisseur to enjoy these days. Oh sure, its not without its occasional challenges; a strong wind holding you back, an alder-choked river, a stretch of shallow water or a beaver dam making progress slow, but you are on vacation – this is what you are here for! The shallows and beaver dams are easy enough to negotiate; just get out and pull or push your canoe over or through.

You might get a little wet, but its refreshing. The muck on your

feet connects you to ancient traditions of travel through the landscape, and the small leaf stuck to your ankle reminds you that we are all leaves floating down a metaphorical river of life as your brush it off. But then, it doesn't come off. That's no leaf. Don't panic, there's no need to dump your boat, friend. You know who you are.

That brief period of time you spent wading through the warm shallow water and muck put you in the realm of the leech. Leeches, often called blood-suckers, are not winning any popularity contests, but they are surprisingly interesting, if you get to know them.

Leeches are a kind of worm and are thus invertebrates. They have ribbon-like, segmented and rubbery bodies, with sucker

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disks at each end. The smaller of the two suckers is at the front, which is equipped with a small opening for a mouth, and blade-like “teeth”. The large, hind sucker is for gripping onto prey or habitat. Leeches blend into the background of their habitat, and are usually clad in black, brown, gray, green, even yellow or mottled. This might be a stretch for most people, but some leeches are even handsomely coloured. A few additional features of leeches that we rarely get to see include the small pores on the belly which are used for reproduction, and very tiny eyes, which number from two to 10 at the front end of the body.

Leeches are found in shallow water in Algonquin, and pretty much any permanent body of water will be home to leeches. They live under rocks and logs, and in aquatic vegetation, crawling around using their sucker-like disks found at both ends of the body to help them inch over the habitat. Many are also capable swimmers. Unlike most other elongate-bodied animals like eels or snakes that move side to side,

leeches swim by undulating like a wave through the water. If you can permit yourself to watch one swim, it is like a linguine noodle pretending to be a magic carpet in the water. Land leeches occur in some parts of the world, but not here, so you can ease your mind on shore.

Leeches don’t have very good eyesight; it is primarily used to tell day from night. Small hairs on the body of the leech help it detect waves and movement in water. Because most blood-feeding leeches are not fussy about what kind of blood they eat, it pays to swim right to any movement in the water. Upon finding a host, they latch on by using the sucker and mucus to make a seal, and then bite using their three teeth. Normally, a wound this small would start bleeding but then quickly clot and scab up. To combat this normal response to wounding, leeches secrete a small amount of hirudin (an anticoagulant in the leech’s saliva) in the wound, allowing the blood to flow freely. The seal forces the blood into the mouth, and the leech will feed for about 20 minutes to a couple of hours. Once it is full, it will drop off and move along, or in some cases,

just cling to the host. This is what the leech would like to happen, but in reality, very few of us will tolerate it. If you happen to have a leech attach on you, you can remove it safely by trying to get a thin item between the leech’s mouthparts and you. A bank card, or fingernail will do the trick. Using a side-scraping motion, you can remove the leech. Do not squeeze, salt or burn the leech; it may regurgitate blood (and perhaps not just yours!) back into the wound. Leeches can transmit some blood parasites, although they rarely do to humans. Blood parasites transmitted by leeches usually affect frogs and salamanders.

A commonly held belief that currently does not have any scientific proof, is that leech saliva has anesthetic properties. Leech saliva is full of other interesting compounds, like the anticoagulant, but nothing to dull pain. The wound caused by a leech is very minor, and at least at the time of the bite, is rarely noticeable. Just know, once the leech has been removed the bite will bleed freely for quite a while. Apply first aid treatment and keep the wound clean. While not really painful, the bite may become itchy and red from the leech’s saliva, but usually heals without problems.

Most of us aren’t that interested in feeding leeches, but at least they don’t need to eat often. A single blood meal may satisfy a leech for many months. In cold environments, leeches are less active over winter and have a very low demand for food.

While many leeches are blood feeding parasites, a number of species are simply predators. Many species, such as the “pretty” *Erpobdella punctata* feed on live and dead snails, while other species feed on dead fish and small, whole aquatic animals. Some species of leeches also feed on fish and amphibian eggs but do not normally impact populations. In turn, leeches are eaten by a wide variety of predators themselves; other aquatic invertebrates, including other leeches, fish, turtles, wading birds, and some mammals consume leeches.

Like many kinds of worms, leeches are hermaphroditic, meaning that each individual has both male and female parts but must mate to exchange genetic material. Cocoons containing fertilized eggs are attached to rocks or other debris. These can often be found by closely examining objects at the shoreline. Each cocoon contains about five eggs, and

the adult leech can produce five to 10 cocoons. Some species even brood their young; the adult Smooth Turtle Leech often has many young leeches clinging to its body. They may stay attached, all together, in the relative safety of the leg pocket of a turtle, even when not feeding.

If there was a superstar leech, it would surely be the North American Medicinal Leech. Apart from having a fantastic title, it is perhaps the easiest to identify, and among the most commonly seen in Algonquin. A stunning creature measuring over 10 cm, with the dark green back and a row of small red spots down the centre, and a reddish-orange belly. It is possible that it mimics the toxic Red-spotted Newt and may explain why it is found swimming in the open. The name “medicinal leech” is perhaps misleading for this species, but there is another similar leech from Europe that was used as a treatment for a variety of ailments. There are many historical and modern accounts of people using leeches to consume their blood for diverse therapeutic benefits. Today, leeches are still used to stimulate blood flow, primarily in grafted or reattached body parts following

medical procedures. Synthetic hirudin is also used medically to prevent blood clotting. You can imagine harvesting it from leeches being a challenge, so it is made in a lab.

But now, back to our flailing, panicking paddler. They didn’t really need to worry too much, and they probably carefully removed the leech, and placed it back in the water – a real kindness towards a creature that tried to eat you. Here at *The Raven*, we often take on the task of convincing the reader that a creature is not nearly as bad as you might think, and we hope we achieved that. Leeches are surprisingly interesting, and important parts of our landscape. Maybe our canoer even feels happy knowing that their blood is part of the landscape; contributing to the lives of countless organisms. The experience of getting into the backcountry is one of personal growth and facing challenges; we get dirty, or hungry, or hide from a sudden thunderstorm, and travel long distances under our own power. We do this to connect with an amazing landscape and traditions, and sometimes an element of that place connects with you, maybe even on your ankle.

Leeches are found in shallow water in Algonquin, and pretty much any permanent body of water will be home to leeches.

Animals that spend time in or near the water are fed upon by leeches. Some mammals, many kinds of birds, turtles, amphibians and fish are all suitable hosts. Turtles in particular are frequent victims, often having dozens on a single large Snapping Turtle. These are often the Smooth Turtle Leech, a strikingly patterned species. Basking in warm sunshine can discourage leeches from remaining on the body. Some Snappers have even figured out if they float in just the right spot in the pond, their neighbors, the Painted Turtle might even bite and eat the leeches - this was an amazing behavior discovered right here in Algonquin!



Photo by Patrick D. Moldowan



This Smooth Turtle Leech was found in a pond in early spring. It has dozens of young leeches on its underside. Smooth Turtle Leeches are boldly patterned on the back, and underside, note the checkered edges and stripes.

Photo by David LeGros



These North American Medicinal Leeches on the hind end of a Moose are full of blood. Once fed they won’t need to eat for weeks or even months. Moose flies also feeding on blood are seen above the “high water mark”.

Photo by Dr. Mhairi McFarlane