

Leeches: Good Guys with a Bad Rap

Leeches. The word probably fills some of you with a queasy, uncomfortable feeling, and others with the traumatic memories of a lovely day ruined by the discovery of one attached to your leg. I don't think the first thought in anyone's mind was: "Hey cool! A blog about leeches!"



Suffice to say, leeches get a bad rap. While some may deserve it (see the day ruiners above), others truly don't. So in this blog, I'd like to focus on the less often considered, positive, interesting and downright cool aspects of the chubby little guys we share our lakes with.

First things first. What exactly is a leech?

Leeches are actually a type of hermaphroditic (having both male and female parts) worm. There are approximately 700 known species of leech on the planet, and they are found on every continent (except Antarctica) and ocean in the world! Here in Canada, we have approximately 70 different species of leech, about 35 of which live in Ontario.

The largest leech in Ontario is appropriately named the Giant Horse Leech and can reach 36 cm in size. But don't worry, this species doesn't feed on human blood.

In fact, many species of leeches don't feed on blood at all, preferring instead to munch on other things that live in the water like aquatic insects, molluscs and fish. Even the species that do feed on blood don't wait around for a big juicy human leg to come walking through their house. Instead, many leech species are what are called opportunistic feeders, meaning they will feed on whatever they can get their mouths on (including humans).

What makes leeches so good?

1. Some leeches are very good parents

Some species of leech are incredibly devoted caregivers to their offspring. After they lay their eggs, some species will protect the eggs from predators with their own bodies. They will even fan the eggs to prevent fungus, bacteria or other contaminants from impacting their growth and development. When the eggs hatch, the parents will carry the offspring around with them until they are big enough to survive on their own.

2. Some leeches make for very good bait

Leeches are the preferred bait of approximately 20% of anglers in Ontario, especially those fishing for Walleye. The most commonly used bait leech is the Ribbon Leech. Sounds kind of pretty eh?

3. Leeches do not transmit disease

Unlike many other species that feed on blood (such as ticks and mosquitoes), leeches are not known to transmit any diseases to humans. That's a check in the pro column if you ask me.

4. Leeches are nature's cameras

Based on the blood contained in the stomachs of some terrestrial leeches, scientists can determine what kind of animal the leech fed on for its last four meals. This provides a picture of what animal species are present in a given forest environment. By using the contents of the leech's stomach, scientists don't have to wait to catch a glimpse of these animals in person or with trap cameras. Instead, they just have to catch a few leeches.

5. Leeches are an evolutionary marvel

While blood is an excellent source of food, feeding off the blood of live animals does pose some challenges. For example, leeches must be able to bite and feed from their prey without being noticed. That means they need to make sure that whatever (or whomever) they are biting, can't feel the bite. To address this issue, leeches have evolved to be able to produce and inject anticoagulants and anesthetics from their saliva into their prey as they bite.



The anticoagulants serve to keep the blood of the host flowing freely (without clotting), while the anesthetics ensure that the host doesn't feel a thing.

6. Leeches are still used in modern medicine today

That's right, modern medicine still turns to leeches for their help in some medical procedures. Specifically, leeches are used on patients who have just undergone surgery to reattach their fingers or toes. They act to relieve swelling at the surgery site.

So, given what you now know about how cool leeches actually are, I'm sure you want to do your best to avoid harming them unnecessarily, right?

But what should you do if you find yourself with one of these hitchhikers latched on to you?

Maybe you've heard it's best to sprinkle a bit of salt on it, or to try to burn it with a match. But not only do these things cause the leech pain and stress, they can also cause it to vomit some of its meal back into your body, which can ultimately lead to a mild infection.

The best thing to do to get rid of a leech (nicely) is to just let it finish its little snack. Now, leeches are slow eaters so this could mean you have a built-in plus one for the next 30-45 minutes.

If leaving the leech is too big of an ask (trust me, I don't blame you if it is), then you can try gently prying the leech off. The experts recommend using a credit card or a long finger nail to quickly break the seal between the leech's mouth and your skin. This will minimize the amount of discomfort to both you, and your new leech friend.

Written by Siena Smith, Conservation Program Assistant

Sources:

<https://www.ontario.ca/page/bait-management-review>

<https://cottagelife.com/outdoors/is-this-type-of-leech-common-in-ontario/>

<https://cottagelife.com/outdoors/10-things-you-didnt-know-about-leeches/>

<https://canadianpond.ca/learn/aquatic-life/leeches-really-menacing/>

<https://www.cbc.ca/news/technology/bloodsuckers-1.5361074>

<https://www.nytimes.com/2019/10/28/science/vampires-blood-leeches.html>

<https://www.nytimes.com/2018/04/09/science/leeches-conservation-biodiversity.html>

<https://nature.ca/notebooks/english/leech.htm>

<https://www.mentalfloss.com/article/76821/10-juicy-facts-about-leeches>