

Swimmer's Itch Is Pesky, but You Can Avoid It

by Susan Knight

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In this month's episode of *Field Notes*, Susan Knight of UW-Madison's Trout Lake Station talks about that annoying summer problem, "Swimmer's Itch" and how we can avoid it.

Last September, I was on one of my favorite lakes collecting aquatic plants for plant identification workshops I present over the winter. Later than night, my hands started to itch, and I could see little welts all over my hands and arms. Swimmers Itch! I haven't had this too often, and since only my hands and arms were affected, it was a minor annoyance. But it certainly can be a real summer fun killer, when swimming leads to itchy agony. The Wisconsin DNR has a great website about swimmer's itch, but spoiler alert – there isn't a heck of a lot you can do about it. Here is what Swimmer's itch is, and a few tips to help your lake not have it in the first place, and a couple things to do if you want to swim in a lake currently experiencing the problem.

First off, the itch is caused by a flatworm or schistosome, a little parasite that really doesn't harm you, but your body has an allergic reaction to it, and hence the itch. Like poison ivy, not everyone is sensitive to it, but you will likely be increasingly sensitive the more times you are exposed. It has a complicated life history, but there must be snails and some water fowl present for it to complete its life cycle. Here's how it works:

The parasite starts out as a small worm-like critter in the intestines of waterfowl, such as geese and ducks. These worms lay eggs inside the bird, which the bird then poops out into the lake. The eggs hatch into another life stage, the miracidium, that swims around in the lake until it finds and penetrates a snail. It then develops into the next life stage, called cercariae. The snails release the cercariae back into the water where they seek a warm-blooded host, usually a duck or goose, but sometimes, and accidentally, a human. I say accidentally because cercariae that penetrate a human cannot complete their life cycle. Humans are not a suitable host and the cercariae die after penetrating the skin. Your body reacts to the invasion by making you itch. If the parasite does find a suitable host, the life cycle starts all over again.

First off, this is a natural component of our Northwoods flora and fauna. It is not exotic, like Dutch elm disease, or the Emerald ash borer. It is more like poison ivy, black flies, and mosquitoes. Annoying, but natural, and here to stay. But just as it is a good idea to eliminate small pools of standing water around your house to minimize breeding space for mosquitoes, there are a few things you can do to discourage swimmers itch in your lake.

Because the parasite needs both snails and birds, the obvious strategy is to discourage these hosts. However, there is not much to be done about the snails. Many, if not most lakes up here have snails. Perhaps surprisingly, the common exotic snails such as the Chinese and banded mystery snails are not hosts for swimmer's itch. Instead, it is usually our native snails that are the culprits.

So that leaves the birds. First, DO NOT FEED THE DUCKS! This will beckon the birds to your shore, and attract them to your lake. Second, have a natural shoreline, with dense, native vegetation. Geese are especially attracted to lawns. A nicely mowed lawn next to a lake might as well have a "Welcome, Geese" sign on it. A natural shoreline with a wide fringe of shrubs and plants will discourage geese from residing on your lake. As a bonus, a natural shoreline is far healthier for your lake, anyway. People who complain about swimmer's itch, but have a huge lawn down to the lake, drive me nuts.

Some scientists in Michigan studying swimmer's itch have turned their findings into a business. These folks will round up your ducks and treat them with a medication to kill the life stage of the parasite that infects the birds. Their studies found that birds (and it mostly seems to be mergansers) often return to the same lake, and many of the ducks treated in one year will still have lower levels of the parasite when they return the following year. It would be reassuring to have these results confirmed with an independent study but it might be an option for some.

If there is swimmer's itch on your lake, you can help swimmers avoid it. First, towel off, or even better, shower as soon as you come out of the water. Don't sit around in a wet bathing suit. Second, the parasite seems to be especially common close to shore, so if possible swim from a raft or in deeper water.

So, don't feed the ducks, get rid of your lawn, towel off, and have a great end of summer.