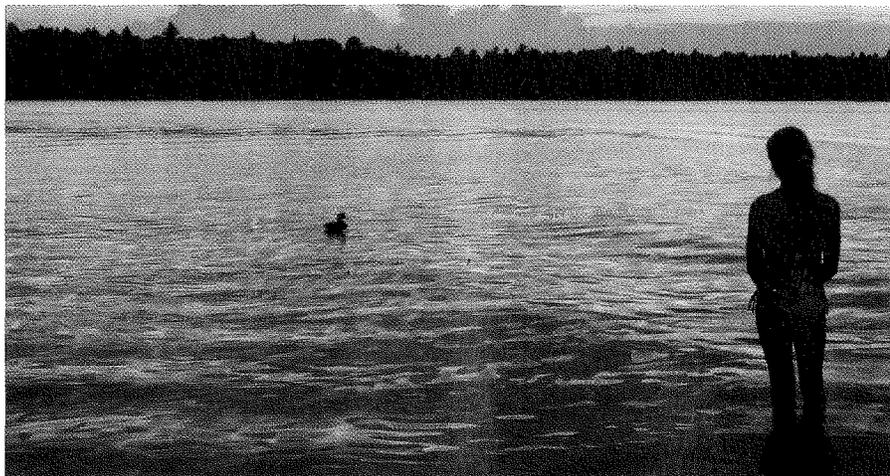


"Duck Itch": A Gift from the Water

If you've spent any time near populated Adirondack waters, you no doubt have seen signs warning against feeding the ducks. Perhaps these signs have given the reason: prevention of "duck itch" (sometimes also called "swimmer's itch"). What is duck itch? How is it transmitted? Does tossing a few bread



crumbs off the dock really cause it?

Duck itch is a skin reaction to the larva of a parasitic worm from the genus *Schistosoma*. While the skin reaction seen in the U.S. is rarely more than an annoyance, other schistosomes cause very serious disease in the developing world. Indeed, the burden of disease from schistosomiasis is second only to malaria as a cause of global human misery.

The worm's life cycle takes it from freshwater snails to waterfowl. The larval form, called the cercariae, is released into water from the snail and makes its way into hosts such as ducks. Infected ducks then pass worm eggs in their feces, which ultimately infect additional snails, completing the cycle.

Duck itch is caused by cercariae settling on the skin after a swim. Although the organisms do not actually live in the human host, the body reacts to their presence on the skin, causing an itchy eruption. Since this eruption is a form of allergy to the

cercariae, it can become worse with subsequent exposures.

The diagnosis of duck itch is "clinical," a technical term meaning that the doctor takes a look at it and decides that's what it is! There is no readily available laboratory study that can establish the diagnosis with certainty. Thus, there probably are a lot of itchy summer rashes called duck itch that are not. And vice versa. Treatment of duck itch is really just relief of symptoms. Topical creams such as 1% hydrocortisone help to relieve inflammation. Intense itching can be relieved by an oral antihistamine such as diphenhydramine (Benadryl®). If the rash lasts more than a couple of days, or if it begins to show signs of infection such as the presence of pus, a physician should be consulted. Folks who are susceptible to duck itch should dry vigorously with a coarse towel upon leaving the water; this can remove the cercariae before they have a chance to irritate the skin.

How big of a problem is duck itch

in the Adirondacks? Actually, we have no idea. Since there is no diagnostic test, the disease is not reportable to the state Department of Health, as are infections such as hepatitis, meningitis, and others. Consequently, there are no reliable statistics on the problem. Interestingly, exposure to the much-publicized blue-green algae blooms can result in symptoms possibly indistinguishable from duck itch. Perhaps fertilizer runoff is a bigger problem than tossed bread crumbs!

The Department of Environmental Conservation (DEC) has some statistics on the problem, although they also suffer from lack of a definitive test. For nearly three decades, DEC has been gauging local opinion of water quality through a survey form completed by trained water samplers through the Citizen's Statewide Lake Assessment Program (CSLAP). One of the items on the survey asks whether swimmer's itch has been reported to samplers. Scott Kishbaugh, from the DEC, tells me that over the past three years there have been sixteen such reports. These have been distributed throughout the state, with few repeat reports.

Is feeding ducks a problem? It certainly is, for the same reasons we should avoid feeding any animals in the wild: it conditions them to a food for which they may not be suited and attracts them into an area that may not otherwise be hospitable. Since the form of the infecting worm responsible for the condition is coming from snails, however, this practice probably plays a minor role in spreading disease.



Tom Welch, MD, is professor and chair of pediatrics at Upstate Medical University in Syracuse and an active member of the Wilderness Medical Society. He is a licensed professional guide, a certifying instructor for the Wilderness Education Association, and has guided groups in the Adirondacks, Montana, and Alaska. More information is available at his website and blog: www.adirondoc.com.