

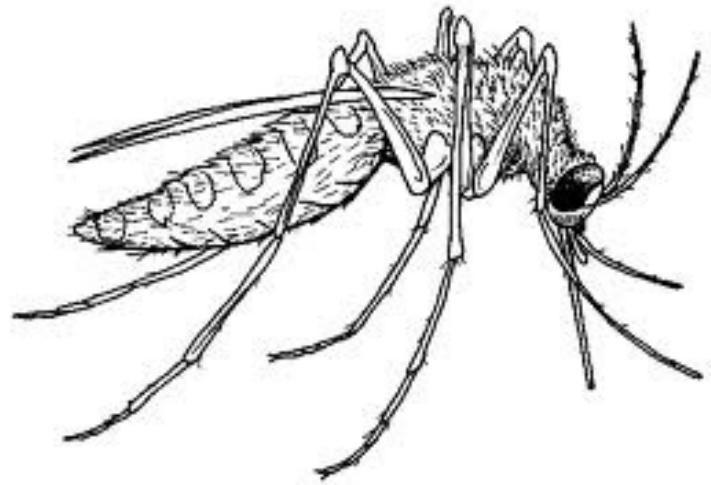
Blood-Thirsty Mosquitoes

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The light skinned, blond haired girl walked into the Nature Center, ready for her second day of camp. However, the little five year old had something extra she was toting: red dots all over her face and neck. My heart went out to her. It was as if she was vectoring chicken pox, ready to spread to the other kids. They had struck again! While all summer went well, with hardly a handful of swats, the mosquitoes had returned.....and in full force. So, where were these little vampires all summer, to suddenly emerge in hoards within a few days?

Ohio is host to some 60 species of mosquitoes, all with similar cycles and habits. All go through complete metamorphosis: egg, larva, pupa, adult. The larvae, a.k.a. wigglers or wrigglers, can be seen in any size body of water except fast moving streams. The little wrigglers can be seen wriggling about, feeding on organic material that is suspended in the water and heading to the surface frequently for air. Unless the water is disturbed, they will stay at the surface up-side down, siphoning air into their abdomen. . The pupa, or tumblers, are comma shaped and appear to “tumble” through the water. Lasting just a few days, out of the pupa emerges the adult.

Adult mosquitoes are fragile, little flies. Many times they are confused with larger, mosquito-looking flies such as crane flies, but a large mosquito will measure in at only ½". It may come as a surprise, but mosquitoes don't sustain their bodies on blood: they rely on nectar or other plant juices. While the males don't bite, the females are actually after the proteins in the mammal blood for egg production, not a full belly. Once ingested, chemicals in the gut of the female mosquito break down the blood into free amino acids. These proteins then go toward the development of the egg.



Where the eggs are laid depends on the species. Some will prefer vernal pools, while a rusty tin can will suffice for others. If laid in bodies of water with predators, the larvae fall victim to fish, dragonfly nymphs, and salamander larvae. In one study, up to 99% of the mosquito larvae in a Canadian vernal pool were preyed upon. Other places of egg deposition include dry land. This may seem peculiar, but these species of mosquitoes have eggs that can sit on the soil for years while waiting for the right amount of water to hatch. Their life cycles tend to be fast: egg to adult in about 7 days.

Although an outbreak of mosquitoes can be viewed as a biblical pestilence for humans, they are just like any other organism in the environment: a piece of the chain. A mosquito's life can seem insignificant when they are thought of as one of the thousands of fodder that larger species eat. What's one more mosquito? In some aquatic ecosystems, the mosquito larvae are a very important prey species. When not chased as food, adult mosquitoes are flower children, pollinating like honeybees. While they can be more than annoying at times, mosquitoes still have their place. They will be back, every year, much to our chagrin.

So the blood sucking insects of Lowe-Volk Park had a feast. Every child will attest to the wickedness of the mosquito swarms that week of Nature Day Camp. The little girl who appeared to need inoculated, fared well in spite of the bumps. She returned with Grandma the following week. Less all the red dots I remembered, she gave me a hand-made card. In the middle, she wrote “I love Nature Camp!”.

Enjoy the outdoors, everyone! :-)