

Blackflies

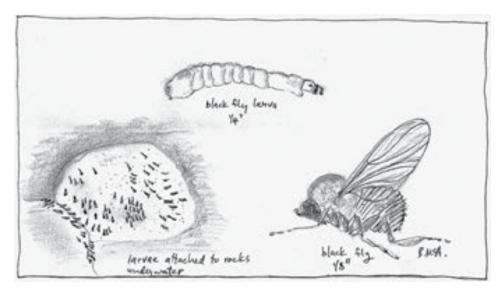
"I'll Die With the Blackflies Pickin' My Bones. . ." — Bill Staines, folk singer

The merry month of May! How we homesteaders scheme and work to get as much outside work done as we can before May comes along. We think strategically way back in October, raking and trimming, digging and filling the wheelbarrow. All so we don't have to be outside so much in early May. In April we work like crazy in the orchard and garden so we can hide inside some in May. Of course, you do have to get out in May, and you want to, but it has always been the time of bug dope, head nets, and long sleeves.

This is the time of a small insect (1/8 inch long) known locally by some as a "mayfly," but more accurately as a blackfly. "Mayfly" could be a name for any fly-type insect that pops out in May, but there are many species of critters that hit the scene now. There is the mayfly that is well-known to folks who go fly fishing for trout. They put on a lure, a floating hook fancied up to look like the real insect so it will fool a fish. They need to know what is hatching, right now. Many make their own lures or flies. They are the experts.

The blackflies do hatch out of the brooks now, but I doubt you can make a fishing lure that is so tiny. They have spent their childhood in the brook, anchored to rocks or vegetation. The blackfly female lays her eggs on rocks, leaves, or branches just at the edge of swift-moving water in a river or brook. Sometimes she lays the eggs on the surface of the water. Here the egg hatches and a tiny worm-like larva falls into the water and fastens onto the rocks using a circle of strong hooks at its posterior (rear) end. The anterior (head) end points downstream and waves in the current. There are two food-gathering "mouth fans" which sweep the water for tiny living things to eat: protozoa, diatoms, algae.

If for some reason the larva needs to move around on its rock, it spins a strong silk from its anterior end and fastens this to the rock. Then it lets go with the posterior hooks and flips to a



new place, hooks on again, and releases the silk. This way it can flip end-over-end downstream to find a more favorable mooring place.

The next stage in development takes place inside a cocoon, which is spun of silk and fastened to the rock. The pupa, inside, is developing now toward the adult form. There is a little hole in the anterior end of the cocoon and the pupa's external gills stick out into the water where they can extract oxygen.

During the larval and pupal stages, the insect stores oxygen under its skin, making an air bubble. When metamorphosis is complete, the fly, in its capsule of air, emerges from the cocoon underwater and bobs to the surface where the bubble pops and the adult flies off without ever getting wet.

Males and females fly about in swarms, getting their first meals of nectar from spring flowers. Soon the females feel a need for a blood meal. They are developing eggs and need extra protein. Only the females are equipped with piercing mouthparts, and they are especially attracted to dark, warm, carbon dioxide-producing creatures. When we first go out to work in the yard the flies may not find us. But as soon as we warm up and breathe heavily, especially if we wear dark clothes or hat, we will notice a black blizzard of hungry females around our heads. Maybe it helps to remember that the flies

that bite us are feeding someone else, their own developing eggs and next generation, as well as a host of predators from the fish in the streams to the birds of the air. With our blood we are part of that web of life, thanks in the month of May to the tiny blackfly, which is one of the wonders of nature, as are we. — Bonner McAllester