

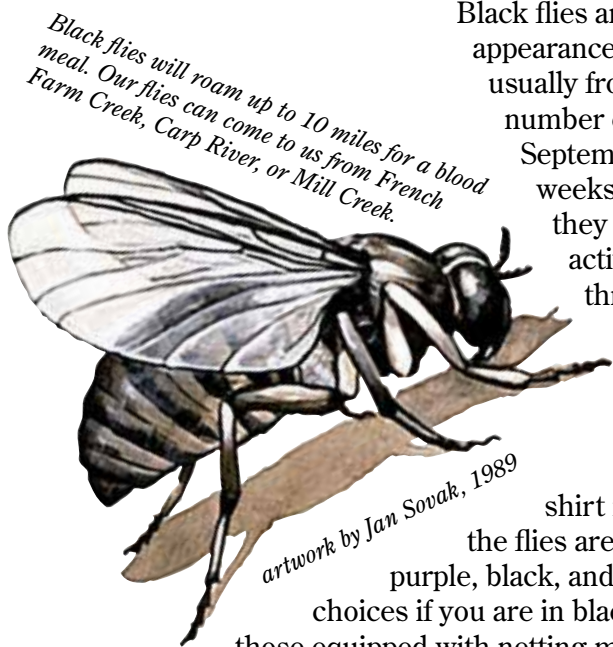
Nature Week at Heritage Village - May 24th

Black Flies

by Howard Russell & Jackie Smith, MSU Extension

Michigan is blessed with over 65 species of black flies with the majority of species occurring in the northern areas where clean rivers and streams are numerous. All black fly larvae are aquatic and only develop in clean well-oxygenated moving water.

Black flies are small, stout flies with a humpbacked appearance. Peak black fly season in Michigan is usually from mid-May to mid-June but the large number of species we have means one can enjoy them well into August and early September if you are in the right place. The adult flies live for about two to three weeks. Only females bite. Males thankfully feed on nectar. Unlike mosquitoes, they do not come indoors, are only active during the day, and cannot bite through clothing.



Black flies will roam up to 10 miles for a blood meal. Our flies can come to us from French Farm Creek, Carp River, or Mill Creek.

You can protect yourself from black fly bites by wearing long-sleeved shirts and long pants. Tuck your pant legs into your socks and your shirt into your pants. Some say that the flies are attracted to dark colors so blue, purple, black, and brown may not be good fashion choices if you are in black fly country. Hats are a must and those equipped with netting may be the only way to keep them off your face and out of your hair. I have found that insect repellents containing DEET offer some protection but there are times the flies will bite regardless of the repellent or amount used.

A typical, painful swollen eye bite



She retains the hemocytes in our blood and expels extra water. In this photo you can see the water droplet being expelled.

MSU Extension



For a short humorous animated video <http://www.nfb.ca/film/black-fly/>

Most active between 9am and 11am, then 4 - 7pm, on cloudy days and before a storm (according to experts)

NOT TO BE CONFUSED

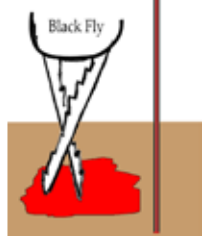
Mosquitoes

Both black fly and mosquito females are after our blood. The biggest difference is their extraction method. Mosquitoes use a proboscis that is much like a straw. They stab it in and suck out the blood.



Black flies, armed with two machete-like blades, use a slash and lap technique. They create a surface pool of blood.

In both cases it is the anti-coagulate that they inject to keep the blood flowing that we react to, giving us swollen eyes, arms, and ears. Black flies also add a little anesthetic to numb the spot so we don't know they are biting.



Slash and lap vs. stab and suck

Midges (muffleheads)

Need I mention that the midges are swarming right now? It is a mating ritual and you should be happy to know that not only don't they bite but they actually don't have mouths, so cannot possibly bite.

Of course, that does not keep them from being exceedingly bothersome. They are hatching from the Great Lakes shoreline, hence are denser the closer to the lakes you get.



The males have the fuzzy antennae. A head net is handy this time of year.



**MACKINAW
NATURE
CENTER**

by Sandy Planisek 2015
Issue #8