

Insanity brought on Wings

Charles Burchill - 2010

Black flies, Deer flies, Mosquitoes, Horse Flies, No-see-ums, Sand flies, Biting midges,... – aarrghh! – nothing causes more anxiety in canoe-country travelers than these flying fiends. I have memories, haunting memories that is, of traveling through the bogs and fens of northern Manitoba being chased by fleet uncountable deer flies, and one, two, or three horse flies for hours in the heat. At the cool end of each long day I would escape from the larger flies only to be hounded by swarms of small grey, black and invisible devils.

What are we talking about? Biting Flies: insects with only two wings and mouthparts designed to pierce or slice into our skin and then suck up our blood.

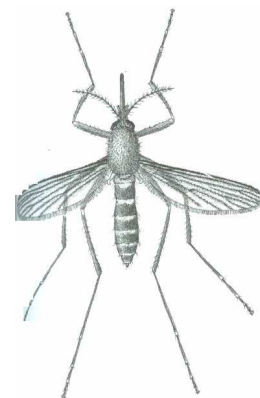
All biting flies locate humans and other animals by sensing the carbon dioxide and moisture in exhaled breath, dark colors (like blue jeans) and movement, warmth and perspiration. Running will only help while you continue moving [quickly], when you stop out of breath and breathing hard you will attract even more of them. Once a suitable host is located, a biting fly inserts its piercing mouthparts or lacerates the skin, injects its anticoagulant-containing saliva to keep the blood flowing, then sucks up the blood.

Dealing with biting flies? Wear light coloured long sleeves and pants. A bug shirt (a fine mesh shirt) is very effective along with a net hood; although the latter can be very warm. Tuck your pants into your heavy socks or wear gaiters to limit the black flies around your ankles. Remember to keep your cuffs and collar tight. Travel with someone more attractive [to the flies] than yourself. Apply insect repellent to your clothing if necessary – after reading the repellent labels carefully of course. Plan your trips late in the summer or in the fall.

Each of the following insect groups represents the common biting flies in Manitoba.

Mosquitoes (Family: *Culicidae*)

There are fifty species found in Manitoba at least 28 of which bite humans. These insects are most active in the morning and evening when the weather is warm and humid. The various species breed under different conditions so different species continue to be a nuisance from late spring through the fall - some even breed indoors (mosquitoes in the winter?!). They require stagnant water to breed.

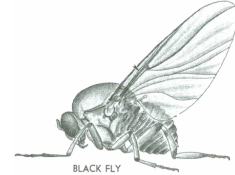


Although we all know what mosquitoes look like, especially when we feel their bite, there are a few insects out there that we regularly mistake for these biting irritants. The most common are Chironomids or midges that are often seen flying in large clouds or swarms appearing as ghost like pillars over marshes. These look-alikes have no proboscis (does not bite),

wings are shorter than the body, males have feathery antenna, and when at rest their body touches the surface.

Black Flies (Family: *Simuliidae*)

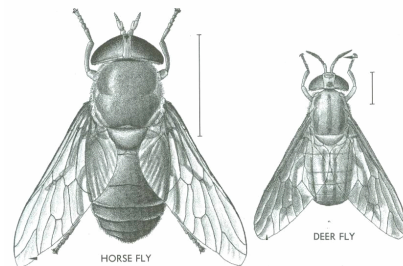
Like the mosquito black flies are most active at sunrise and sunset when the weather is warm and humid. Unlike many other insects these flies require fresh running water to breed; the existence of black fly larvae is a sign of un-polluted water. On humans, bites are common around the hairline, the neck, behind the ears and around the ankles.



Many bites are found when the flies are active as they typically arrive in swarms. Black flies feed exclusively during the day with activity often intensifying before a storm and may continue all day during overcast days. Fortunately black flies don't usually enter buildings or tents and when they do generally they don't bite (if you are getting lots of bites in your tent see biting midges below). The flies emerge in the spring, earlier than other biting flies, and peak usually in June. It is not all bad with black flies – adult males pollinate our beloved blueberries. Identifying black flies is usually fairly easy as they are small, black or gray, with short legs and antennae – and of course they bite. There are at least 16 (25 in some literature) species of black flies in Manitoba.

Deer Flies & Horse Flies (Family: *Tabanidae*)

Both of these flying demons are part of the same family. Combined there are up to 50 species in Manitoba. They are found near streams, dugouts, ponds, and lakes, where their larvae breed in decaying organic matter.



Deer flies are smaller (10mm long) and fast with a preference for white tail deer. Look for wings that are tinted smoky brown or have dark patterns with a greenish-yellow thorax and dark stripes. Trying to swat one of these speedsters is difficult – you are probably better off putting a roll of duck tape on the back of your hat.

Horse flies are much larger, some reaching as much as 2.5cm in length. Even though these larger flies are slower and can be hit quite easily, they usually just shake off any swat and continue to hone into your bare skin.

Both groups are most active during hot sunny days and like to go for wet skin (swimmers beware). They usually bite on the arms, head, and neck. Horse and Deer fly season starts in June and begins to wind down late in July or early August.

Stable Flies (*Stomoxys calcitrans*)

These flies are less common in canoe country having likely come with us from Europe, they are found primarily near livestock facilities. Their preferred host is cattle but they very gladly go after people when available. They are most active during the bright days of summer and fall. They are about the size of a house fly (~10mm long). Both males and females take blood meals using a stiff needle like piercing mouth piece. Their

preferred breeding and egg laying sites are associated with wet but well aerated organic matter (such as silage and wet rotting plant material along fence lines and ditches).

Biting Midges (Family: *Ceratopogonidae*)

This group flies are often called no-see-ums because of their small size (usually less than 3mm). They are also called punkies and sand flies by many people. Their small size allows them to slip through many mesh screens. There are upwards of 450 species in North America – fortunately most feed on nectar but there are certainly still enough of their blood sucking brethren to keep you awake at night. Those that do go after our blood are most active on calm days in the early morning, evening and dusk. The larvae live in mud substrates and the flies emerge in June and July. They prefer moist humid conditions and are most active after rain. This group and black flies are often lumped together by us paddlers.

More Information:

What's Eating You?

http://www.dnr.state.mn.us/young_naturalists/biting_bugs/index.html

Those Pesky Mosquitoes! <http://www.umanitoba.ca/afs/fiw/041125.html>

Biting Flies http://www.env.gov.nl.ca/env/env/final/bugs/biting_flies.html

Biting Insects <http://bitinginsects.siteideas.net/>

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