

Briefing Note

BLACK-FLIES

All You Wanted to Know...and More

No other biting flies inspire such apprehension as do black-flies. Black-flies often land and take off repeatedly without biting. Their numbers, and their tendency to bite, increase as sunset approaches. Relief comes after dark, for unlike mosquitoes and biting midges, black-flies do not attack at night. Also, unlike mosquitoes, black-flies seldom attack indoors or even in a vehicle; once they sense being trapped their attention seem permanently diverted to escape.



Although they cannot bite through clothing, black-flies have a predilection for crawling into their hair or under clothing, biting in inaccessible places, such as the ankles and belt line. Tucking trouser cuffs into socks will normally prevent them from getting at the ankles. Black-flies are strongly influenced by colour – they find dark hues more attractive than pale ones, and blue, purple, brown, and black more attractive than white or yellow. A light-coloured shirt, therefore, is a much better choice of clothing than a dark blue one. In southern Canada, black-flies are on the wing from early May (coincident with the bursting of buds of forest trees, especially sugar maple, before mosquitoes appear in numbers) until mid-June (see Annex,

page 3).

There are more species of black-flies than of mosquitoes in Canada; over 100 have already been recorded, and there are more than have not even been named. Blackflies are more selective in their choice of host than are mosquitoes, and comparatively few species take human blood. Most species seem to feed only on the blood of birds and a substantial percentage apparently do not take blood at all, because their mouthparts have degenerated and appear useless for bloodsucking. It is the female of the species that are blood feeders.

Females deposit eggs, 200-800 per female, on vegetation just below the water surface. Larvae emerge from eggs and attach themselves to aquatic or emergent vegetation as well as rocks. Most black-fly larvae are filter feeders, with the larvae feeding on nutrients in the water as it flows by. Larvae pass through six stages before reaching the pupal stage.

Pupae are encased in a silken cocoon attached to vegetation or other objects in the stream. Adults emerge from the pupal case through a slit and float to the surface on a bubble of air. Some species mate as soon as adults emerge. The length of the cycle from egg to adult is variable, depending on the black fly species and water temperature. Emerging adults live from two to three weeks, to a long as 85 days. Almost all species of black flies in Canada have a single annual generation.



Female back-fly biting

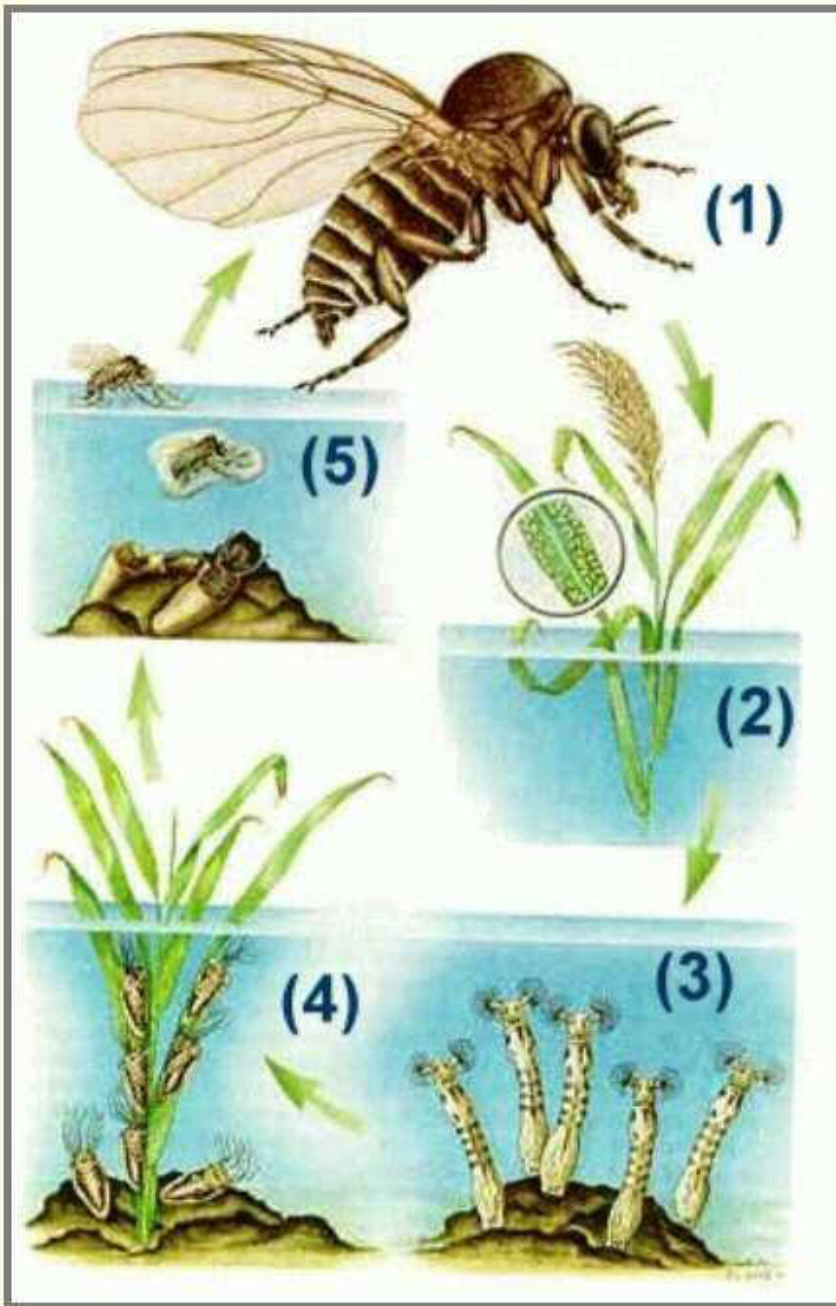


Can I Go Out in the Woods Today?

Black-fly season is manageable with appropriate dress. Light coloured clothing (pants & long-sleeve shirt). Head bug net draped over a brimmed hat (to keep net loosely hanging about your face).

Citronella insect repellent (non-toxic) effective in keeping black-flies from buzzing about your head. If using other types of insect repellent make sure it has DEET ¹ (30%, current Canadian regulated maximum amount) as the active component (ingredient).

1. N,N-Diethyl-meta-toluamide, also called DEET or diethyltoluamide, is the most common active ingredient in insect repellents.



Life Cycle of a Black-fly

[clockwise from top] – (1) adult female: (2) eggs laid on emergent vegetation at surface of flowing water; (3) larvae attached to stream bottom, with labral bushes. Usually called labral fans in this family, extended in feeding position; (4) pupae, each enclosed in its cocoon. Attached to submerged vegetation; (5) adult, enclosed in air bubble, escaping to surface of water from submerged pupal skin.


Adult black-flies are small insects that measure 1 to 5 mm in length, and possess a shiny thorax (middle of the fly) that ranges in colour from black to various shades of grey or yellow (see photo page 1).



Black-fly bites



ALGONQUIN CALENDAR OF NATURAL EVENTS

JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
 <p>Bear Cubs Born</p> <p>Deer Winter Yarding</p>	<p>Migrant Birds Returning</p>	<p>Blackflies</p> <p>Monarch Butterflies Return</p> <p>Bears Breeding</p> <p>Woodcock Peenting</p> <p>Spring Peepers</p>	<p>Raspberries</p> <p>Blueberries</p> <p>Cherries</p> <p>Mosquitos</p> <p>Sand Flies (No-see-ums)</p> <p>Deer Flies</p>	<p>Acorns</p> <p>Beach Nuts</p> <p>Fall Colours</p> <p>Deer Rut</p>	<p>Wolves Breed</p> <p>Lake Trout Hatch</p> <p>Bears Emerge</p> <p>Reptiles and Amphibians Emerge</p> <p>Lakes Break-up</p> <p>Wolf Pups Born</p>	<p>Trilliums Bloom</p> <p>Moose Calves Born</p> <p>Morels Ripen</p> <p>Bass Nesting</p> <p>Spring Colours</p> <p>Moose Aquatic Feeding</p>	<p>Loons Hatch</p> <p>Water Lilies Flower</p>	<p>Wolves Rendezvous</p>	<p>Beaver Making Food Beds</p> <p>Lake Trout Spawn</p> <p>Moose Rut</p> <p>Tamaracks Turn Yellow</p> <p>Lakes Freeze-up</p>	<p>Bears Den</p> <p>Snow Buntings Move South</p>	



Animal Art by J. Inglis

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