

# The Bright Side of Black Flies

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*Hermit Thrushes are among the birds that eat black flies.* photo © Meade Cadot

Life can feel so unfair this time of year. After waiting all winter long through bitter-cold temperatures, ice storms, blizzards, wind chills and darkness, spring is a wicked tease. Just when it finally gets gorgeous out with warm temperatures, sunshine and daylight, New Hampshire gets black flies.

Black fly season is relatively short, typically starting around late April and lasting through mid-June, but that doesn't make it any easier. Black flies can drive adults to their knees and bring children to tears. Their bite is painful, made by the sawing action of their mouthparts, and can cause itchiness, bleeding, swelling and in some cases, allergic reactions.

It might not be so bad if there was only one black fly at a time biting you. Then you might stand a chance. But it is the swarming that can drive a person mad. I'm sure I'm not alone when I say that I've dropped my garden rake and ran for cover, slamming my door, swearing never to step outside again. Once, I even accidentally swallowed a flock of black flies on a mountain bike ride and then coughed so hard I had to have hernia surgery.

There is no love lost between me and these bugs. But more than a few things about the black fly might help make New Hampshire's black fly season more tolerable.

## Black Flies as Bioindicators

Did you know that if you have black flies in your neighborhood, it means something really good about your community? Like many other fly species, black flies begin their life in the water. As larvae, they live in the many cool streams and rivers of New Hampshire. Highly sensitive to pollution, black flies are considered indicative of clean water. So, congratulations! If your backyard is filled with black flies, you probably have good water quality in your neighborhood.

During their larval stage, black flies are filter feeders, feeding on suspended bits of organic material in the stream's water column. The tiny grub-like larvae play an essential role in nutrient cycling of stream and river ecosystems. By ingesting bits of organic debris, the larva not only help keep rivers and streams running clear, they ultimately become protein-rich food for many larger invertebrates and vertebrates, including brook and rainbow trout. If you like to fish for trout, you might want to thank a black fly.

Mature larvae pupate into adults underwater and then catch a ride on air bubbles to the water's surface. That's when our trouble begins. After mating, the female black fly must have a blood meal to lay her eggs. Most female black fly species seek out mammals, while others will feed on birds. The males are actually pollinators. The next time you eat a New Hampshire blueberry, give a shout-out to the male black fly.

## Black Flies as Food Source

Adult black flies are an essential and desirable food source for our state's bats and birds. Warblers and thrushes depend on these bugs to feed themselves and their young. Other bird species that migrate through New England snap up black flies like protein bars, helping to refuel them as they journey north.

Since bats eat half their body weight in insects daily, black flies during the spring and summer provide bats with a plentiful food option. The little brown bat was once one of our most common bats in New Hampshire, but due to the high mortality of these little bats from a deadly fungal disease called white-nose syndrome, this bat needs all the help it can get. Bring on the black flies and let the surviving little brown bats grow strong again as they chase down and eat up scores of black flies.

## Tolerating Black Flies

This article isn't about loving black flies. It is about tolerance, however. If we want a world where we can have clear, clean water filled with shimmering trout, wild, juicy blueberries to toss into our mouths, warblers and thrushes raising their chicks in woods filled with their song and night skies dotted with the magical sweep and flutter of little brown bats, then black flies need to part of it.

Take the good with the hard. Put on your bug net and slather up with your favorite bug goop, and before you know it, New Hampshire's black fly season will come to a close. You might have some bites, and you might have run screaming back into your house to seek shelter from the swarm of black flies, but you will be OK. This, too, shall pass, and the world will be better. And if you really want to put a dent in the black fly population around your home, put up some bird boxes and bat houses. 🐾



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