

## **BLACK FLY CONTROL PROGRAM**

Black fly management is accomplished by applying a natural soil bacteria called Bti, to water sources where black flies breed. Bti stands for *Bacillus thuringiensis israeliensis*. Bti is a special formulation of common soil bacteria that is highly effective in controlling black flies and mosquitoes. Because it is extremely specific, Bti is considered one of the safest insect control agents ever developed. Other insects, birds, fish and mammals (including humans) do not have the stomach chemistry to be affected by Bti.

### **GLACVCD PROGRAM INCLUDES:**

- Monitoring for black fly larval occurrence and abundance.
- Applying Bti when larval numbers get above predetermined thresholds.
- Monitoring the effectiveness of treatment.

## **GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT**

**Call the District for Free Assistance!**

***If you are bothered by black flies, a State certified Vector Control Specialist will locate the source and treat the area if necessary.***



**District Headquarters**  
12545 Florence Ave.  
Santa Fe Springs, CA 90670  
(562) 944-9656

**Sylmar Branch**  
16320 Foothill Blvd.  
Sylmar, CA 91342  
(818) 364-9589

[www.glacvcd.org](http://www.glacvcd.org)

# **BEWARE of BLACK FLIES**



***These small, but menacing, biting flies are a nuisance to people and animals living, working, or playing near running rivers and streams.***

**GREATER LOS ANGELES COUNTY  
VECTOR CONTROL DISTRICT**



## What Are Black Flies?

These small flies are commonly called "buffalo gnats" because of their humped back appearance. Black flies are typically dark in color and appear in a variety of neutral shades from light gray to black.



Body length 1/8 to 1/4 in. depending on species.  
Actual size

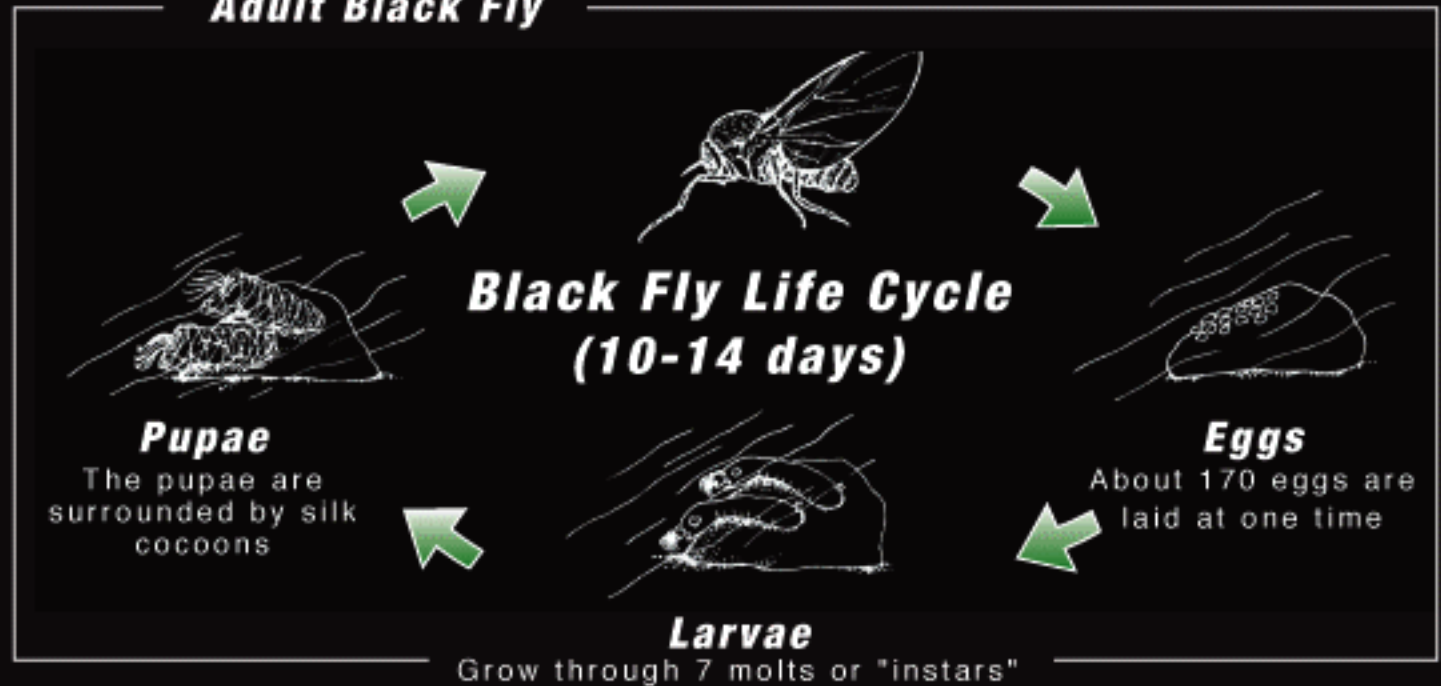
## The Bite

The painful itchy bite of the black fly is created when the female cuts a hole in the skin to suck blood from animals and people. Females will attack incessantly around the eyes, ears, scalp and occasionally on the arms and exposed legs. The pain and swelling of the bite are due to allergic reactions to foreign proteins and toxins that the female injects when feeding. Black flies do not transmit any diseases to humans in California, but can cause extreme discomfort and irritation due to their biting habits and/or great numbers.



Black fly bite to the eye, resulting in redness and swelling to the face.

## Adult Black Fly



## Black Fly Life Cycle

Black flies breed in flowing water from rivers and streams to irrigation ditches. After mating the female deposits the fertilized eggs on rocks or other substrate in swift flowing water. Larvae emerge from eggs and develop aquatically, feeding on algae and organic matter flowing by in the moving water for 7-10 days, then develop into pupae. Adults emerge from the pupal case through a slit and float to the surface on a bubble of air. Emerging adults live from 2-3 weeks. They are usually found from spring through fall, with the greatest numbers appearing in the late spring and summer. They are active during the day, with peak activity in the morning and early evening.

## Personal Protection

*Here are some suggestions to help reduce annoyance:*

- Avoid areas where black flies are active during the day.
- Wear (long pants and long sleeves) light colors, especially whites and tans. Wear a light colored hat.
- Apply insect repellent when outside. If you are bitten, avoid scratching and apply products to reduce itching.
- Black flies are sensitive to weather conditions. They are most active on cloudy, humid days with low wind.