

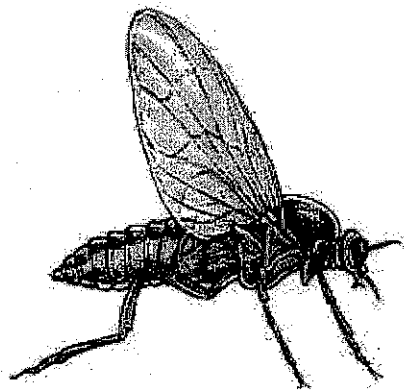
**** Municipalities are encouraged to share this information
with all the residents in their community****

Black Fly (Gnat) Suppression

on the Delaware River

Question and Answer Sheet

**Distributed by:
Pennsylvania Department of Environmental Protection
Black Fly Suppression Program**



Background

This Q&A sheet has been produced to help residents and local officials understand information pertaining to black fly control along the Delaware River. The handout was designed by personnel from Pennsylvania Department of Environmental Protection, Black Fly Suppression Program (PADEP, BFSP) and was approved by the New Jersey Department of Environmental Protection, Pesticide Control Program as per the Pesticide Control Regulations (N.J.A.C. Title 7:30 Subchapter 9.10(e)1.i.-2.ii.). This section of the regulations reads, in part, "Notification shall be mailed or delivered to the municipality's designated responsible official, such as the mayor, town administrator or town clerk" and will include "A Department approved [NJDEP approved] Question and Answer sheet for the program and each pesticide proposed for use, which explains what the agency does and how, where to get more information, what the populace may do to help mitigate the pest, general symptoms of exposure, and recommendations of how to avoid exposure to the pesticide."

What is the life cycle of black flies?

Black flies (commonly referred to as "gnats") have four stages of development - egg, larva, pupa and adult. Larval and pupal stages are spent in clean, oxygenated, flowing water. Female black flies deposit their eggs in rivers, streams and creeks. Different species of black flies develop over various times of the year. The eggs of most pest species in the Delaware River hatch in mid-April, emerge by May and cause nuisance until mid-September. Only adult female black flies bite. After emerging from the aquatic stages, adult black flies mate, and females seek a blood meal.

What does the PADEP, BFSP do?

The PADEP, BFSP was established in the mid-1980's under what was then the Pennsylvania Department of Environmental Resources. The focus of the program has been black fly surveillance and control throughout the state. The program is run as a cost share between PA state government and county governments wishing to be a part of the program. The state of New Jersey provided financial support when spraying first began on the Delaware River in 1996. However, New Jersey's financial support to the Pennsylvania program has not continued over the last several years. This puts the stability of the Delaware River program at risk. Pennsylvania runs the largest single black fly suppression program in North America. A private contractor that is supervised by the PADEP and permitted by NJDEP Pesticide Control Program conducts Delaware River treatments through aerial applications.

What control efforts are utilized by the PADEP, BFSP?

Generally, black flies are controlled most effectively in their aquatic larval stage. Larval control can be very effective because larvae are more concentrated and accessible than the adults. Products can be used to control adult black flies, but they are generally not as effective as products that control larvae. The larvicide used on the Delaware River is commercially known as Vectobac 12AS, which contains the active ingredient *Bacillus thuringiensis israelensis* (abbreviated "Bti"). This product is registered with both the USEPA and the NJDEP, which means that it is legal for use in New Jersey. All applications are performed by NJDEP licensed applicators. For more technical information on Bti or other pesticides, please refer to the NJ Department of Environmental Protection approved pesticide fact sheet (included in this packet).

What do I do if there are black fly problems around my home?

If black flies present a problem in your area and you are a Hunterdon County resident, contact the Hunterdon County Mosquito and Vector Control Program (HCMVCP) office at (908) 788-1351. The HCMVCP has recently worked in conjunction with personnel from Rutgers University to identify and document areas of black fly nuisance in Hunterdon County. If you live in Warren or Mercer Counties, contact Rutgers University Department of Entomology at 732-932-9437.

Where can I find more specific information on the activities of the black fly program and how will I be notified of the spraying?

Pennsylvania DEP's official Black Fly Suppression Program website can be found online at: <http://www.depweb.state.pa.us/blackfly>. Up to date information on the black fly program spraying activities along the Delaware River can found at the Hunterdon County Health Department's Mosquito and Vector Control website: <http://www.co.hunterdon.nj.us/health/westnile.htm>. Information about black flies in New Jersey can be found on the Rutgers University Department of Entomology website: <http://wwwrci.rutgers.edu/~insects/bfinfo.htm>. Information on these websites changes on an as needed basis over the course of the season.

Questions on the Delaware River suppression project, in general, may be directed to the PADEP regional biologist responsible for the contract. You may contact the regional biologist by phone at 484-250-5980.

In accordance with NJDEP permit requirements, community/area wide notification is made by posting public notice at public boat ramps along the Delaware River prior to a spray operation. Public notice is also published in two newspapers covering impacted areas of New Jersey as required under New Jersey pesticide control regulations.

Information Sheet on Black Fly Control Product

"Vectobac"

This sheet answers some basic questions about a black fly control product in use in your county. Your county mosquito control staff, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Vectobac and how is it used?

Vectobac is an insecticide product that is recommended for black fly control in New Jersey by Rutgers, The State University of New Jersey. It contains the soil bacterium "*Bacillus thuringiensis israelensis (Bti)*." The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Bti**-containing products to be very slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Vectobac is used to prevent black flies from hatching in rivers and streams. It acts on the larval or immature stage of the black fly in water before the flying adult emerges. **Vectobac** is used as an effective control in black fly management by preventing larvae from maturing as spraying for adult black flies is not effective.

How can I avoid exposure to Vectobac?

Risk to the general public from the use of **Vectobac** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Avoid direct contact with water bodies that have been treated.
- Move children's toys out of application areas.
- Move animals and their food and water dishes out of application areas.
- Stay away from application equipment, whether in use or not.

What are the symptoms of exposure to Vectobac?

Direct contact with eyes or skin may cause mild irritation or discomfort. The chance of experiencing these symptoms of exposure with proper use is low. You should contact your physician, other medical providers or the New Jersey Poison Information and Education System (**NJPIES**) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

How long will Vectobac last in the environment?

Because **Bti** is a biological agent, it tends to break down quickly in the environment. Its breakdown in water or soil usually occurs within hours of use.

Where can I get more information on Vectobac?

The following are resources for more information regarding **Vectobac** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:

New Jersey Poison Information & Education System
800-222-1222

For New Jersey pesticide regulation & misuse complaints:

NJDEP Pesticide Control Program **609-984-6507**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **732-321-6759**

For black fly recommendations:

Rutgers University, Department of Entomology **732-932-9437**

For local health information:

Hunterdon Co. Health Department **908-788-1351**

Warren Co. Health Department **908-689-6693**

Mercer Co. -

Ewing Township Division of Health **609-883-7619**

Hopewell Township Health Department **609-737-0120**