

## **WHY ARE THE TRAPS PAINTED BLUE?**

All traps are painted blue because the color blue has been proven to be the most attractive color to blood-seeking greenhead flies.

## **HAVE YOU HEARD ABOUT ARTIFICIAL OX-BREATH?**

The Cape Cod Greenhead Fly Control District, with funding through the Kelley Foundation, a study in 1992 to determine the effectiveness of adding a scent bait to the traps. Previous studies demonstrated that tsetse flies and mosquitoes were attracted to octenol, popularly known as artificial ox-breath. We found that by adding octenol to our traps we could attract up to three times as many flies as we were with the empty traps. Half of the traps are baited with octenol each year.

## **HOW MANY FLIES ARE CAUGHT IN A BOX TRAP?**

Anywhere up to 30,000 flies are found in each trap at the end of the summer.

## **THE CAPE COD GREENHEAD FLY CONTROL DISTRICT**

The Cape Cod Greenhead Fly Control District was formally established in 1945. The purpose of this project was and is to reduce the nuisance level of greenhead flies by decreasing the number of biting adult flies. Funding for the CCGCD comes from all of the towns that are part of Barnstable County.

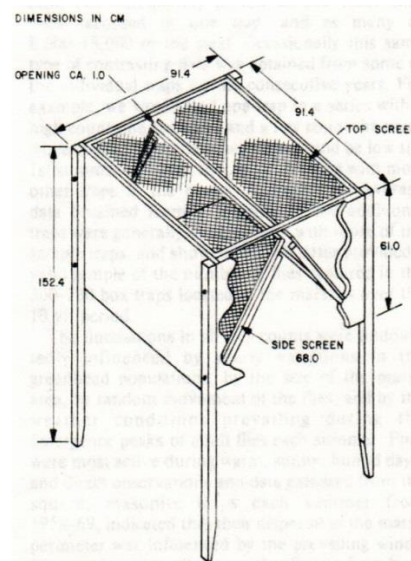


Fig. 1. - Diagram of the box trap.

## **THE GREENHEAD FLY**



**CAPE COD  
GREENHEAD FLY  
CONTROL DISTRICT  
259 WILLOW STREET  
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## **WHAT IS A GREENHEAD FLY?**

The salt marsh horse fly, often called the greenhead fly, actually describes two species, *Tabanus nigrovittatus* and *Tabanus conterminous*. Both species of flies are found on salt marshes along the Atlantic Coast from Nova Scotia to Florida. On Cape Cod, adult flies are most abundant from July through mid-August.

The entire lifecycle takes place on and around the salt marsh. The eggs are laid on salt marsh grass (*Spartina spp.*). After hatching, larvae either crawl down, or get washed off the blade of grass. The larvae then burrow into the marsh and live there for 1-2 years. After that time the larvae come to the surface of the marsh to pupate.

Adult males and females feed on sugary substances (i.e. nectarlike) for energy. After laying their first set of eggs, females begin to look for a bloodmeal. Female greenhead flies require blood for their second set of eggs for the same reason that female mosquitoes need blood. The blood provides them with protein that is used to develop eggs. Unfortunately, female greenhead flies are present and searching for blood on beaches of Cape Cod at the same time that most visitors are using beaches for recreation.

## **HOW DO THE GREENHEAD LIES FIND YOU?**

Female greenhead flies not only see you, but are attracted to you by your scent. They can smell the carbon dioxide and other chemicals that come out of you every time you exhale. This is also the way female mosquitoes find you. Haven't you ever wondered how that one mosquito can find you when the lights are out and you are in bed?

## **WHAT MAKES A GREENHEAD FLY BITE HURT?**

The greenhead fly, just like the female mosquito, injects her saliva into your blood when she first bites you. This saliva contains a chemical that keeps your blood from clotting or beginning to scab. The pain is your body's reaction to this foreign chemical. The bump that proceeds the bite is caused by the continued allergic reaction your body has to the fly's saliva.

## **WHAT ARE WE DOING TO CONTROL GREENHEAD FLIES ON CAPE COD?**

In order to control the number of greenhead flies, the Cape Cod Greenhead Fly Control District (CCGCD) has been using blue box traps.

Traps only attract females that are searching for a bloodmeal. The box trap has been used by the CCGCD for over 40 years. This box acted as a visual attractant.

## **WHERE ARE THE TRAPS PLACED?**

All box traps are placed on the salt marsh. Traps are not as effective when placed in yards because the majority of flies complete their lifecycle on or around the salt marsh. Further, the traps are not competing with any structures for the fly's attraction when the traps are placed on the marsh.

