

## ***City of Greenwood Mosquito Control Program***

A vector is an organism that can transmit disease to humans and animals. The mission of the City of Greenwood's Vector Control Program is to provide the citizens of the City with the most efficient and effective vector control possible. Specifically, we focus on controlling the mosquito population, utilizing integrated surveillance and control strategies such as:

1. Community education to reduce the potential for mosquitoes.
2. Preventative application of insecticides to attack mosquitoes prior to their emergence as adults (in larvae status).
3. Preventative application of insecticides to attack the adult mosquito population.
4. Trapping and monitoring mosquitoes in high concentration areas.

### **COMMUNITY OUTREACH**

Mosquito nuisance calls are taken throughout the mosquito season (typically March – October) Prior to the application of insecticides, an inspector visits the site to locate the source of the problem. If problems are located on a property, staff will educate the resident/owner of techniques to reduce the mosquito population in and around the home. Suggestions include:

- Ridding yard of standing and stagnant water (neglected/abandoned pools, pool covers, bird baths, pet bowls, toys, garden equipment, buckets, old tires, boat covers, etc.) to eliminate areas where mosquitoes breed
- Cleaning gutters that may be clogged (home and street)
- Removing standing water from roof areas
- Repairing leaking exterior faucets
- Addressing missing, damaged or improperly installed screens on windows and doors

In addition, the City provides year-round community outreach through the distribution of magnets and educational talks to home owners associations, garden clubs, churches and community groups. We also have year-round information on our website related to mosquito control. <http://www.cityofgreenwoodsc.com/departments/public-works/mosquito-control>.

### **ANNUAL MAINTENANCE**

The City of Greenwood is divided in 13 Maintenance Zones which are used for sanitation collection and mosquito control. Division of the City into Zones allows for better tracking and isolation of mosquito related calls and areas of treatment. We treat both larva and adult mosquitoes to exact the most productive response in population reduction.

#### **Mosquito Larva Control (Larvacide)**

Larvicide operations are conducted throughout the city to attack the mosquito at the weakest point in its life cycle and to prevent adult emergence. As larval surveys are performed, breeding sites are recorded on zone maps. Identified sites are treated throughout the mosquito season.

Treatment comes in the form of 180-day Larval Briquets placed in City creeks and known areas of stagnant/standing water. Depending on the season, it may also be necessary to later treat the same area with an additional 45-day Briquet.

The purpose of larvicide is to kill the mosquito before it becomes an adult.

**Adult Controlled Spraying (Adulticide)**

Adulticide operations are conducted by using ultra-low-volume (ULV) ground equipment to spray the affected area, during evening hours, to reduce the adult mosquito population. Areas to be sprayed are determined based upon citizen feedback/complaints. Once the location is identified, a perimeter is determined, and spraying of the identified area is conducted. Often, the application will cover the entire Zone in which the complaint was logged.

Prior to the application of Adulticide, bee keepers in the surrounding areas are notified, to protect the bee population from insecticides.

Our primary adulticide is permethrin.

**RESISTANCE MANAGEMENT**

Often, mosquitoes can build resistance to certain insecticides. To ensure our mosquito population continues to positively respond to the insecticides used, staff routinely consults with our insecticide manufacturer. If needed, insecticide resistance-management techniques are implemented based on their recommendations.

**SURVEILLANCE AND TRAPPING**

The City has two mosquito traps placed in strategic locations in the City. These traps are used to catch adult mosquitoes, which are sent to the SC Department of Health and Environmental Control (SCDHEC) for testing. SCDHEC uses these samples to determine if any mosquitoes in our area are carrying disease.

**OUTBREAK RESPONSE**

When a confirmed virus is reported, the report is then forwarded to Greenwood County Emergency Management Department. In partnership with Greenwood County EMD, other municipalities, Lake Management, SCDHEC and local bee keepers, a plan is formulated to control the mosquito population in a specified area, assist SCDHEC in controlling the spread of the virus and educate those in the immediate vicinity.

The City of Greenwood works closely with Greenwood County EMD, to help implement the Mosquito Borne Disease Response Plan, up to and including' serving on the Response Team and assisting neighboring jurisdictions with spraying. A copy of the Greenwood County Mosquito Borne Disease Response Plan is included as an attachment to the City's Vector Control Program.