

# FCF Participation in MDA's 2021 Mosquito Control Program

We have again signed up for the adult mosquito spraying program of Maryland's Department of Agriculture (MDA), part of the Department's broader mosquito control program aimed at preventing mosquito-borne diseases. Fishing Creek Farm is one of about 2100 communities that participate in the fogging program, which runs from May 26 to October 5, 2021. Spraying for adult mosquitoes is done at night using an ultra-low volume (UVL) spray to disperse tiny droplets (fogging) that do not coat surfaces, thereby minimizing the effect on other small organisms. Spraying is only done if an MDA employee determines it is necessary (considering "mosquito landing counts" and other data). It will not be conducted during rain, in wind speeds exceeding 12 mph, or if temperatures are above 89 degrees F. At the end of this announcement is a copy of MDA's *Standard Mosquito Control Operating Procedures*.

FCF will be assigned one evening per week for spraying; for several years, Monday evening has been our assigned evening, but MDA will not confirm this year's assignments until mid-May. *MDA also strongly recommends that all participating homeowners take proactive measures to reduce standing water in their individual yards, which will prevent mosquito breeding.* Additional information about MDA's overall mosquito control activities, the adult spraying program in particular, and recommended preventive measures is available on MDA's website at:

[http://mda.maryland.gov/plants-pests/Pages/mosquito\\_control.aspx](http://mda.maryland.gov/plants-pests/Pages/mosquito_control.aspx)

## Public health and habitat concerns

Our beautiful community includes both wooded areas and wetlands, which provide habitat for fish, birds, mammals, and insects like butterflies, fireflies, and honeybees. Unfortunately, wetlands are also a breeding ground for mosquitoes, which can be both a nuisance and, in some cases, a public health risk. Tiger mosquitoes have been found in our region since 1987 and can carry diseases such as West Nile virus and several kinds of encephalitis in humans, and heartworm disease in dogs. The MDA website notes that "West Nile virus has affected every region of Maryland and is now considered as being endemic throughout the state."

There are two primary pesticides used in the mosquito spraying: permethrin and piperonyl butoxide. While human health impacts did not exceed the EPA's thresholds for concern, the agency notes that permethrin is highly toxic to freshwater and estuarine aquatic organisms, honeybees, and other beneficial insects. Similarly, the EPA indicates that the use of piperonyl butoxide in mosquito abatement can pose a risk to aquatic organisms, invertebrates, and amphibians (frogs and lizards); mammals and birds have also shown negative impacts. The MDA website states that these pesticides are registered by EPA for mosquito control.

The MDA makes the following statement about their spraying practices: “We spray at night when bees and butterflies are not active. The droplets in our sprays average 15 to 20 micrometers. They are so small that they are acted upon equally by gravity and drag. They float in the absence of wind – just like a fog droplet. Because they are so small, they do not coat surfaces, so when bees and butterflies crawl on surfaces the next morning, those surfaces are not covered with our spray. Permethrin breaks down in sunlight. There is evidence that permethrin in our spray does not affect larger insects, like bees and butterflies. Bees have been studied extensively. There are no deleterious effects. There is much less information on moths, but since they are larger insects, they are probably not affected.”

**If you do not wish to participate in the mosquito spraying program:**

By default, all FCF homes are enrolled in the program when the community signs up. Any resident can apply for an exemption for their property. That exemption will have a 300 feet buffer on either side of the exempted property. To opt out of the mosquito control program, please submit the following form to MDA:

<https://mda.maryland.gov/plants-pests/Documents/MosquitoControlExemptionForm.pdf>

The form should be mailed to:  
Program Supervisor  
Mosquito Control Section  
50 Harry S. Truman Parkway  
Annapolis, MD 21401

**STANDARD MOSQUITO CONTROL OPERATING  
PROCEDURES – 2021**

**OPERATING PROCEDURES FOR SPRAYING OF ADULTICIDES** (Treatment for adult mosquitoes):

- **Regular Surveillance and Control of Adult Mosquitoes: May 26 – October 5 2021**  
Sunday-Thursday (A night of the week will be assigned to your community) Anytime between 7:00p.m. - 2:30 a.m.
- Spraying for adult mosquitoes will be **done only if a Maryland Department of Agriculture Employee determines it is necessary.**
  - Spraying **will not be conducted** during rain, in wind speeds exceeding 12 MPH, or temperatures above 89°F.
  - **Thresholds for Ground Based ULV Treatments:**
    - Landing Counts: 3 mosquitoes in a 2 minute count
    - Light Trap Collections: 12 female mosquitoes in an unbaited light trap  
24 female mosquitoes in a baited light trap
    - Conditions that threaten public health, such as mosquito borne disease
- | <b>Adulticide rate</b>   | <b>Formulation and application</b>   |
|--|--------------------------------------|
| <u>Permanone 30-30:</u><br>Permethrin mixed with Piperonyl Butoxide<br>Volume application) and Mineral Oil | Liquid<br>0.0031 lbs/acre (Ultra Low |

**OPERATING PROCEDURES FOR USE OF LARVICIDES** (Treatment for mosquito larvae):

- **County-wide Surveillance and Control of Larval Mosquitoes: April - October**  
Monday – Friday, 8:30 AM -4:00 PM
- **LARVICIDES TO BE USED (This list is subject to additions or other revisions):**

<b>Larvicide</b>	<b>Formulations</b>
<u>Bacterial Larvicides:</u>	
VectoBac and Aquabac: <i>Bacillus thuringiensis var. israelensis</i>	Liquid, Granular
Spheratax: <i>Bacillus sphaericus</i>	Granular
<u>Insect growth regulator:</u>	
Altosid (Methoprene)	Liquid, Briquet, or Pellets

- The **Mosquito Control Program** **does not spray for Midges** that swarm on homes, boats, trees and shrubs along many Anne Arundel County creeks and rivers. These non-biting insects develop in mud bottoms of slow moving water ways of low dissolved oxygen and will decline in numbers within a few weeks after they first appear.

- **Sarah Zastrow, Entomologist**  
[mosquito.control@maryland.gov](mailto:mosquito.control@maryland.gov)

**Phone: (410) 841-5870, Fax: (410) 841-5835**

**Monday – Friday, 8.30 a.m. - 4.00 p.m.**