

Lemon Fair Insect Control District (LFICD)

<https://www.lficed.org/>

Presentation to Addison County Regional Emergency Management Committee

February 14, 2024

Define difference between what the State via Vermont Agency of Agriculture, Food & Markets (VAA F&M) does and does not do and what a mosquito district does or tries to do.

VAA F&M: Vector Surveillance and Analysis in conjunction with the Department of Health.

LFICD: Nuisance surveillance. Mosquito abatement practices through IPM or IMM. Knock down mosquitoes as larvae before they emerge as adults using larvicide...

CHALLENGES:

- 1) The LFICD is made up of 3 towns; Bridport, Cornwall and Weybridge. The Lemon Fair River is the commons these three towns share.
- 2) Finances: Each of the towns contribute \$6,000.- (for the town of Bridport, that amount comes to about \$5.-/person.) The State of VT through the VAA F&M contributes \$70,000 each to the LFICD and the OCW. This amount has not changed in 13 years.
- 3) Resource Staff: Currently, I am the only employee of the LFICD. I hire and train two college interns for the summer as both field and lab technicians from June through August. The interns also assist with larviciding activity.
- 4) Residential needs: The expectation of the LFICD and its formation was to focus on floodplain mosquitoes and mosquitoes in the Cornwall Swamp. However, we have set up a complaint line and most complaints come from residents that don't live on or near the Lemon Fair River nor the Cornwall Swamp. Given the opportunity, I will conduct a site visit to a private property and even set up a CDC Light Trap to assess what mosquito species seem to be the issue. Then I can offer recommendations to the property owner as to what they might do to reduce the presence of mosquitoes on their property. ~ The number one complaint last year was, "I can't even get into my garden..." Many calls came from outside the three towns...
- 5) Lemon Fair River and Cornwall Swamp: Surveillance of the Lemon Fair River includes about 800-900 treatable acres. The Cornwall Swamp is currently mapped to treat up to 400 acres. TIMING is everything! Not all mosquitoes hatch at the same time. This requires vigilance in noting and surveillance trying to put a treatment scenario together that might treat the larger commons utilizing a helicopter service to conduct aerial larvicide. This is a limited resource. Currently the only service available to us is out of North Fork, Long Island...expensive. To bring them on and

justify the cost we need at least 800+ acres to light up. Our budget would allow for one treatment like this annually, maybe two. ~ However, mosquito hatches are a moving target. And not all the “dots” connect to call for an aerial treatment. For instance, sometimes surveillance reveals that only 2-5 acres of an area light up and then the next 25 acres, nothing. Then a 30 acre area lights up...

TREATMENT AND BMP'S GOING FORWARD:

- 1) There are products out there that are capable of treating mosquito larvae for 30 or more days at a time. (Dunks)
- 2) Mechanical drone technology: A drone has been created that is capable of a 40 lb. payload capacity and capable of treating upwards of 200 acres a day. Having access to this would help us “stamp out fires” in real time and stay on top of unsynchronized hatches. This technology is being used in as many as 17 states for mosquito control, weed control and other agricultural purposes that reduce soil compaction by tractors...
 - a. Currently, there is no one to our knowledge in all of New England utilizing this technology.
 - b. Challenge: Requires an FAA license to operate and if being used for mosquito abatement practices require a State Pesticide Applicators Certification.

A PROBLEM NOT GOING AWAY:

- 1) As we look to the future and shifts in weather patterns, particularly longer wetter seasons, warmer temperatures, mosquitoes are going to continue to become an issue, whether from a nuisance standpoint or from a vector that can spread fatal disease or alter someone's health indefinitely.
- 2) At some point, if the State does not take the reins on this, more local government will need to become engaged and work together to keep residence safe and help maintain the wellness of society...so that people can garden and recreate outside.
- 3) For any given answer I discover in the field or the lab, only more questions arise...with a concluding question, “What resources do I need to address this situation?”