

DRAGON MOSQUITO CONTROL, INC.

Frequently Asked Questions

What is the mosquito life cycle?

Mosquitoes go through four life stages: egg, larva, pupa and adult. The larvae and pupae live in shallow, stagnant water such as swamps, marshes, woodland depressions, vernal pools, retention ponds, ditches, etc. Some species utilize containers such as catch basins, tires, wheel barrows, bird baths or tarps.

How many species of mosquitoes are there in NH?

There are over 40 species of mosquitoes in NH. Some bite humans. Others species bite birds. One species prefers frogs. A handful of species will bite both birds and humans. These mosquito species are capable of transmitting diseases to mammals including humans.

How do you find mosquito larvae?

We sample the water using a device called a dipper. This stage of our work is called a larval survey. We encourage residents to request a larval survey of their wetland. If we find sufficient numbers of larvae in our sample, then treatment can occur. Not all wetlands support mosquito larvae. We only treat the water when we find larvae. We will not survey or treat private property without an invitation or permission from the land owner. We encourage residents to submit survey requests. You may email info@dragonmosquito.com or call the office at 603-964-8400 or click on <http://www.dragonmosquito.com/services/request>

What will this service cost me?

There is no additional charge for a larval survey or treatment of your wetland. We have been hired by the Town. We rely in part on the collection of survey requests for the establishment of a comprehensive list of permanent treatment sites. Most of our towns contain hundreds of listed sites. The development and refinement of this survey list leads to the most effective treatment program possible.

What do you use to kill the larvae?

The primary product that we utilize to kill mosquito larvae is the bacterium Bti (*Bacillus thuringiensis israelensis*). Bti works extremely well to kill mosquito larvae in standing water. The bacterium is applied in granular form with a motorized backpack spreader. The larvae will eat the bacteria and die shortly thereafter. More information about Bti can be found here:

- EPA Q&A Page (<http://www.epa.gov/opp00001/health/mosquitoes/larvicides4mosquitoes.htm>)
- Material Safety Data Sheet (<http://www.myadapco.com/res/pdf/msds/VectoBac%20CG%20MSDS.pdf>)

Why can't I put Dunks in my swamp?

The product known as Dunks is Bti. However, State Law prohibits anyone from applying pesticide to surface water. We have a State Special Permit which allows us to apply Bti to the water. The homeowner can use Dunks in containers such as an ornamental pool or bird bath.

How do you kill the pupae?

Pupae do not feed; therefore the bacteria will not work. We use a surfactant that creates a physical barrier on top of the water which prevents the pupae from getting air. The pupae drown. Surfactants are not poisons – but physical barriers. Our primary surfactant, Agnique MMF, is rapidly biodegradable, derived from plant oils, and substantially less toxic than DEET. More information about surfactants can be found here:

- EPA Q&A (<http://www.epa.gov/opp00001/health/mosquitoes/larvicides4mosquitoes.htm>)
- Manufacturer's site (<http://mosquitommf.com/default.htm>)
- Material Safety Data Sheet ([http://mosquitommf.com/Agnique MMF MSDS.pdf](http://mosquitommf.com/Agnique_MMF_MSDS.pdf))

Do you test mosquitoes for diseases?

Dragon does not test mosquitoes for diseases. We will trap adult mosquitoes and send them to the State Lab in Concord for disease testing. Only the adult mosquito can be tested. Larvae and pupae cannot be tested. The State begins testing mosquitoes July 1st.

Can you test the mosquitoes in my mosquito magnet?

No, the mosquitoes sent to the State Lab must be identified to species and separated by location, date of collection and species. This requires specimens to be in very good condition. Our traps keep the mosquitoes alive until we're ready to identify them under a microscope.

What diseases do mosquitoes carry?

Here in NH, Eastern Equine Encephalitis or EEE is the most common mosquito borne disease. West Nile Virus has also been found in NH but is not as widespread or as deadly as EEE. In 2009, Candia had the only human case of EEE in the state. Mosquitoes also carry dog heartworm disease.

What happens if mosquitoes are found carrying EEE in Candia?

Our goal in Candia is to reduce the population of mosquitoes by targeting larvae before they become adults. If mosquitoes caught in Candia test positive for EEE, then a number of options are considered.

1. Enhanced public notification and education
2. Increased trapping and disease testing of adult mosquitoes
3. Spot adulticiding at town owned property
4. Town wide road spraying of adult mosquitoes

We will only engage in spraying adult mosquitoes if we encounter a public health emergency late in the season. We're hoping that road spraying is not necessary but if it were, this activity would only begin after consultation with the Board of Selectmen and the Town Health Officer, Bill Hallock. Further notification will occur in advance of spot adulticiding at Town owned property or town wide road spraying.

Can my property be excluded from the road spraying?

Yes, you can. Just send us your request. Be sure to include your name, physical address, boundaries or road frontage, and a telephone number in case we need more information to verify your location. Write to: Dragon Mosquito Control, P.O. Box 46, Stratham, NH 03885

Where can I get more information?

If you're interested in receiving updates relative to NH Department of Health and Human Services mosquito related health advisories or EEE test results then sign up for alerts via email or Twitter. <http://www.dragonmosquito.com/news/2010/04/12/sign-alerts>

Information regarding insecticides can be found at <http://extoxnet.orst.edu/>

Feel free to visit our web site at www.DragonMosquito.com

The LD50 rating is a measure of toxicity. The higher the rating, the less toxic the substance.

For Example, the oral LD50 for Fluoride indicates that 125 milligrams ingested per-kilogram of body weight will prove toxic for 50% of test subjects.

