## The Florida Mosquito

A mosquito is distinguished by its annoying buzz and "straw-like" mouthparts referred to as a proboscis. SW Florida has billions and billions of them. The climate and geography are ideally suited for these insects. Females use this proboscis to feed on blood as well nectar, whereas male mosquitoes feed solely on nectar. Mosquitoes can vary in size and can often be confused with other flies (i.e., crane flies and midges)

Like other flies, mosquitoes undergo complete metamorphosis, which includes four stages: egg, larva, pupa and adult. Though only the adult stage poses a public health concern, mosquito control programs also work to control immature stages to interrupt the life cycle.



## Health Issues Brought on By Mosquito Transmission

In Florida, there are over 80 species of mosquitoes. Of these species, nearly a quarter are considered public health threats. Blood-feeding on humans and other animals, these risks are very real as the female mosquito can transmit several types of pathogens, including viruses, protozoans and parasitic worms due to the pathogens they may transmit, including endemic viruses (i.e., <u>West Nile virus</u> and <u>Eastern equine encephalitis</u>) and exotic viruses (i.e., <u>Zika</u>, <u>dengue</u> and <u>chikungunya</u>). In addition, many of these mosquitoes are considered pernicious to communities all over Florida. More than 50 mosquito species are in the Collier County area, and they have different habitats, flight ranges and are active at different times of the year. To humans, the nuisance factor alone is sufficient to make life at least unpleasant.

## **Mosquito Control**

Mosquito control programs work to suppress populations of mosquitoes by implementing "integrated mosquito management." This process includes crucial methods for mosquito abatement, including population surveillance, source reduction, and various types of treatments for immature and adult mosquitoes. As licensed pesticide applicators, mosquito control programs are regulated by the Florida Department of Agriculture and Consumer Services.

## **Collier Mosquito Control District (CMCD)**

Occasionally the sound of low flying planes / helicopters can be heard in the early evening hours. This is most likely CMCD diligently at work spreading organic mosquito control material called Merus 3.0. In addition, they spread granules of larvae control material to the swampy areas that are known to produce mosquitos. An important component in many of the products used to treat for mosquitos comes from Bacillus Thurngiensis (BTi), a naturally occurring bacteria that produces insecticidal proteins that are toxic to larvae but has no toxicity to people or pets. In addition to areal treatment, ground technicians spread hardy Gambusia or 'mosquito fish' in water bodies that are stagnant and difficult to get to. They have a large appetite and can consume up to 100 larvae per day.

In the wake of both Hurricane Ian and Hurricane Nicole residents can obtain free mosquito traps beginning Monday, Nov. 14, and are encouraged to call in advance to check availability. Click

here to see a list of pickup locations: <u>https://cmcd.org/free-mosquito-traps-available-after-hurricane-nicole-passes/</u> Mosquito populations increase about 7 to 10 days after a heavy rain, so placing them around homes and businesses then will help provide protection.

If you are experiencing a problem with mosquitoes, please report the problem at (239) 436-1000 so that CMCD can send a Field Technician to inspect the area.

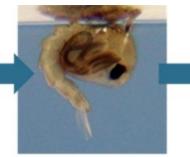
If you would like to get treatment notification, you can sign up here: <u>https://cmcd.org/spray\_maps/?notify</u>





Eggs

Larva



Pupa



Adult

Credit: Florida Medical Entomology Laboratory