

Habitat and Distribution

Originally native to Africa, Aedes aegypti has now established itself in tropical and subtropical regions around the world. They are believed to have arrived in North America through the triangular trade between Europe, North America, and Africa between the 16th and 19th centuries. In St. Lucie County, they can be found in urban environments near people where water is collected in containers such as tires, buckets, and birdbaths. They do not disperse well, generally residing within 200 meters of where they were born.

Biology

Aedes aegypti is a mosquito species closely tied to human activity. It prefers to lay its eggs in man-made containers, laying eggs on the side of such containers. Following a rain event, the submergence of these eggs in water will trigger them to hatch. Female aegypti strongly prefer to feed on humans. They are skittish feeders, frequently landing and probing before committing to blood feeding. They can take several blood meals during their lifetime. Primarily active at dusk and dawn, Aedes aegypti will also feed during the daytime if a person is nearby. In St. Lucie County, they are most numerous from late May to October, generally coinciding with the rainy season in Florida. This mosquito species can be identified by the "lyre"-shaped pattern on its thorax.

Medical Importance

Aedes aegypti is one of the most important mosquito-borne disease vectors. It can transmit several viruses, such as chikungunya virus, dengue virus, yellow fever virus, and Zika virus. Its preference to

feed on humans, use of man-made containers as breeding sites, and the fact that it can take several blood meals per life cycle make this species such an efficient transmitter of disease. While rare in the United States, diseases such as dengue are much more common in the Caribbean and Latin America. Travel-related cases can occur, so it is extremely important to take appropriate precautions when traveling to areas with high mosquito-borne disease transmission.

Management

The best way to manage Aedes aegypti is to deprive them of a suitable habitat to lay their eggs. Simply tipping and tossing containers in your backyard, cleaning bird baths biweekly, and storing used tires indoors can significantly reduce the likelihood of you ever encountering this mosquito. Screened porches and other barriers, such as strong fans, can prevent this mosquito from following you inside, further reducing the chances of getting bitten. St. Lucie County has also begun experimenting with specialized mosquito traps, intended to target the juvenile form of this mosquito and other man-made container breeders. Larvicide, in the form of soil-based bacteria lethal to mosquitoes, is also utilized to target larvae. As a last resort option, ULV adulticiding is conducted to directly reduce the population of adult mosquitoes.

If you are having significant mosquito problems or if you have any questions, you can reach St. Lucie County mosquito control services via telephone at 772-462-1692 or via email at mosquito@stlucieco.org. To determine when your area is scheduled for adulticide treatment, please visit www.stluciemosquito.org.