



Moist Conditions Make for Many Mosquitoes

By Dawn Pettinelli, UConn Home & Garden Education Center

Hot New England summers bring to mind trips to the beach, favorite ice cream stands, the taste of the first sun-ripened tomato, and of course, those pesky mosquitoes. The bountiful rains of July will likely give us an abundant crop of these annoying creatures out for our blood. Not only do they cause painful, itchy bites but mosquitoes in Connecticut are hosts of at least 3 diseases transmissible to humans.

Generally referred to as arboviruses (viral infections transmitted to humans by insects), they include West Nile Virus (WNV), eastern equine encephalitis (EEE) and Jamestown Canyon virus (JCV), which mostly affects deer and rarely humans. Symptoms of all three of these diseases range from none to mild flu-like symptoms to more serious illnesses with fever, fatigue, meningitis, encephalitis, coma and even death.

Human infection rates are very low and fortunately, for Connecticut residents, the state has a mosquito monitoring program managed by the Connecticut Agricultural Experiment Station that started June 1st. There are 108 trapping stations in 87 municipalities where mosquitoes are collected and analyzed for these 3 diseases. As of July 20, 2021, 91,470 mosquitoes have been tested and WNV was found in 2 municipalities and JVC in 6. Check out <https://portal.ct.gov/CAES> for regularly updated mosquito trapping results.

There are at least 54 species of mosquitoes in Connecticut but less than 50 percent of them pose threats to humans or livestock. All species have four life stages – eggs, larvae, pupae and adults. Only adult females ‘bite’. What she is actually doing is collecting a blood meal to supply protein for egg formation. A single female might lay over 250 eggs either individually or clustered in egg ‘rafts’. Some species may have up to four broods a year.

Water is essential for larvae and pupae development so typically eggs are laid in or near water sources, especially stagnant ones. Larvae feed on bacteria and organic matter. They then pass through a non-feeding pupae stage and eventually emerge as adults. This whole life cycle may take as little as 7 to 10 days if conditions are suitable. Some species of mosquitoes, however, lay

eggs in the fall that overwinter and hatch in the spring. Depending on the species, adults may live just a few weeks or a few months. A few species even overwinter as adults in protected areas.

Mosquitoes find you or another suitable host by sensing the carbon dioxide one exhales when they breath, body heat, and probably other physiological attractants. Many of us claim to be mosquito magnets while perhaps our spouse or friends are unbothered or at least less bothered by these critters. This is due to each individual having unique and different body chemistries.

Reduce mosquito encounters by making your surroundings less attractive to them and by wise use of repellents when necessary. Since mosquitoes require water for development, remove any sources of standing water on your property that you can. Empty out any buckets, pots, wheelbarrows, old tires, or other containers where water has collected over the last few weeks. Consider drilling drainage holes in recycling or other containers that permanently reside outdoors.

Empty, scrub and refill bird baths every few days. Do not leave water in wading pools for more than a week. Ornamental pools can be aerated or perhaps stocked with fish that feed on mosquito larvae. Mosquitoes typically cannot survive in chlorinated swimming pools but can breed if water collects in pool covers. Consider a biological larvacide, like Bti, in stagnant water sources that cannot be eliminated or in flooded low-lying areas.



Check gutters to make sure they are cleaned out and not clogged so rainwater can quickly exit. Examine window screens for holes and repair if necessary. Make sure screen doors are in good shape and close tightly.

There are a number of repellents on the market that are registered with the U.S. Environmental Protection Agency (EPA). They include DEET, picaridin, IR3535, permethrin and oil of lemon eucalyptus. While there are also a number of non-registered, botanically-based products out there, not all are effective so some experimentation may be necessary. No repellent works all the time against all species of mosquitoes. Always read directions before applying any repellent. Try to avoid going outside when mosquitoes are most active, usually from early evening until dawn. Wear long sleeved shirts, pants, and socks when weather permits to reduce exposed bare skin.

While we likely will have to deal with mosquitoes until the first frosts of fall, one can take steps to reduce exposure as well as doing our best to mosquito proof our homes and yards.

For your gardening questions, feel free to contact us, toll-free, at the UConn Home & Garden Education Center at (877) 486-6271, email us at ladybug@uconn.edu, visit our website at www.ladybug.uconn.edu or contact your local Cooperative Extension center.