

Mosquito Control In and Around the House



Life Cycle of the Mosquito

Egg: Floodwater mosquito eggs are laid singly in moist ground and remain dormant over the winter. If conditions are favorable, they will hatch when inundated by the spring that or summer rains. If conditions are not favorable, the eggs will remain dormant for a year or more.

Egg Raft: Permanent-water mosquito eggs are laid in rafts that float on water. This mosquito over-winters as an adult and will lay her eggs in any water-holding container.

Larva: The larvae of all mosquitoes live in water. Although mosquito larvae get their food from the water in which they live, they must come to the surface for air or, as in the case of *Mansonia*, obtain air from underwater portions of plants. The larvae period includes four developmental instars which usually require at least 4 to 10 days for completion. At the end of each instar the larvae sheds its skin or molts. The fourth instar is the mature larvae, and with the molt the pupae appear.

Pupa: The larvae and pupal stages are always found in water. The pupa is a resting stage in which the adult is formed.

Adult: Only the female bites, She needs blood to develop her eggs. She rests in cool, shaded places during the day to protect herself from the drying effects of the sun. She becomes active when disturbed or at dusk when she is attracted by light and will fly great distances for as bloodmeal.

Mosquito Control In and Around the House

If you and your neighbors in Somerset County don't like mosquitoes in and around your house and yard, there IS something you can do to help yourself.

There are 305 square miles in Somerset County; fortunately not all of this area breeds mosquitoes, but there are large areas capable of producing great numbers of mosquitoes periodically, mosquitoes with flight ranges of up to 10 miles or more. There are also many small areas, some as small as a pint jar, that can produce mosquitoes throughout the summer to plague local areas. This mosquito you see in and around your house most often and the mosquito you can do most to control is the northern house mosquito (*Culex pipiens*), the species this little brochure is concerned with.

Water is the key

Female mosquitoes lay from 100 to 300 eggs at a time, and it takes from 7 to 10 days to go from egg to adult. The important thing to remember is the larvae that hatch from the eggs MUST have standing or stagnant water to develop into adults. If there is no water, there will be no mosquitoes, at least none that are home grown.

The search for a breeding site

The female mosquito takes a bloodmeal and looks for a resting place so the eggs in her body can develop. A few days later she goes out to lay her eggs, and she **MUST** find standing or stagnant water on which to lay them. Polluted streams, catch basins, and standing surface water from septic systems can be used. Water that collects in buckets, old paint cans, jars, discarded tires, clogged roof gutters, or sump pump pits provides ideal spots for egg laying as do wading pools, birdbaths, untended swimming pools and ornamental pools. Ruts, puddles, foundation excavations, roadside ditches, and other low spots can become breeding places for thousands of mosquitoes.

What happens during the winter?

Female house mosquitoes emerging after temperatures drop in the fall do not often bite. They go into hibernation for the winter, looking for sheltered places like cellars, crawl spaces, sewers, storage sheds, garages or barns, places where they will be out of the weather until warmer times come in the spring. When the temperature rises sufficiently, the fertile female goes forth for a bloodmeal to start the cycle all over again.

What can you do to help yourself?

The most important part of mosquito control is denying the mosquito a place to breed. If there is no standing or stagnant water, there will be no breeding in the area. The northern house mosquito does not normally migrate far from the breeding site (usually less than a mile), so problems are most often local ones.

Treating the water with insecticides help in controlling mosquitoes, but treatments must be repeated and do not solve the problem since as soon as the treatment stops, mosquitoes return. Chemical control of mosquitoes is expensive and never as effective as the elimination of breeding sites.

To control mosquitoes in and around the home:

1. Eliminate unnecessary water holding containers, especially tires, large cans and bottles.
2. Keep water clean in children's wading pool and drain when not in use.
3. Keep ditches and streaming adjoining your property free of grass clippings, garbage, and other debris, which will obstruct the natural flow of the water.
4. Keep weeds and grass cut short during the summer months. Report vacant lots that are not maintained properly to city or local officials.
5. Make sure stored boats are covered or water drains out of them completely. Store small boats upside down.
6. Change water in birdbaths, fountains and troughs weekly.
7. Clean roof gutters.
8. Make sure septic waste water does not lie on the ground surface and cesspools are sealed with screened vents.

Other measures to take

Proper screening for windows and doors will help keep mosquitoes from coming into the house and feeding on you, your family and your pets. Aerosol sprays can be used in the house, but be sure to follow all precautions listed on the label of the container.

Outdoor areas are more difficult to treat. Foliage sprays on shrub mosquitoes rest in can be used, as can yard aerosols. There are mosquito coils and candles and area repellents that are spread on the ground, measures good only for a short time.

Commercial repellents provide personal protection, but be sure to read the label. Bug lights have been used with varying degrees of success, but they generally attract more moths than mosquitoes to an area where people are, at which time the people are far more attractive than the light.

Mosquitoes are not an essential part of a healthy environment.

Discourage mosquitoes from breeding in your neighborhood by eliminating trash and containers that may hold water, such as cans, jars and old tires.

Maintain rain gutters and down spouts; make certain that no water remains on flat roofs after rains.

Keep lawns, shrubs and weeds trimmed to eliminate hiding places for adult mosquitoes.