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Home Grounds, Gardens, Home Pests

Summer Time Mosquitoes

When your from the south, mosquitoes are just something you learn to live with, but something you will never get use to. As we are all so thankful for the many afternoon showers popping up in central Alabama, this will often increase the population and activity of mosquitoes. These insects can be a major nuisance and problem especially if you have late afternoon activities planned outdoors.

The best way to avoid mosquitoes is by scheduling outdoor activities before or after peak mosquito activity and by using repellents. Peak activity is usually in the late afternoon and at dusk and use repellents containing diethyl toluamide (DEET). Drenching oneself in repellent is not necessary. You need only enough repellent to "confuse" the mosquito so it cannot detect a suitable spot to feed. There are repellents that boast 95 percent DEET content; however, a repellent of this concentration is unnecessary to provide adequate protection, may result in skin irritation, and is costly. Concentrations of 10 to 15 percent DEET are recommended for adults; products containing less than 8 percent are recommended for children. Repellents that are DEET-free, contain citronella and are also effective.

Mosquitoes use odor and chemical cues to locate their food source. As the mosquito comes near a potential host, moist air from the host and visual cues become important. Carbon dioxide exhaled by animals, including humans, is an example of a chemical cue that mosquitoes use to find their hosts. Repellents work by "confusing" the mosquito, keeping it from landing on or biting the intended host.

If you have an influx in mosquitoes suddenly or are trying to prepare for a outdoor party or activity it is important to search out areas that are being used as mosquito habitat and breeding grounds. Mosquito eggs are always laid in association with water and where it is quiet and protected. Females may lay up to 100 or 200 eggs per batch and deposit an egg batch every 7 or 10 days. Eggs can take from days to months to hatch. In general, during warm periods and under favorable conditions, eggs will hatch in a few days. However, in areas that experience seasonal "flood-water" these egg can remain dormant and are capable of surviving for months out of water until they are flooded again. Other sites where eggs may be deposited include tree holes, temporary puddles, freshwater and salt marshes, and containers in which water stands, such as discarded tires, cans, pet water dishes, and bird baths.

You may not have containers with standing water, but your neighbor may, or water may be collecting in a ditch somewhere in the neighborhood. There are things homeowners can do to help prevent mosquito infestations and sanitation and control materials two of the best methods.

The first step in sanitizing is to eliminate the breeding sites. It is also important to manage vegetation because adult mosquitoes rest on dense vegetation during the day. Cut tall weeds, and keep shrubs and trees trimmed away from the house to increase air circulation. Other steps you can take include; cleaning debris from rain gutters, eliminate standing water on and around structures such as flat roofs, air conditioner units, and leaky pipes and faucets, change the water in birdbaths and wading pools weekly, and change the water in pet bowls daily.

For control products there are a number of products and materials that can be used alone or in combinations to control mosquitoes. These control methods can be directed toward either larvae or adults and therefore are categorized as larvicides or adulticides.

Larvicides- Products to control larvae which will prevent mosquitoes from hatching include; *Bacillus thuringiensis var. israelensis (B.t.i)* that is commercially available as Bactomos, Teknar, and Vectobac. *B.t.i.* can also be purchased as "mosquito dunks" that can be used in water that cannot be drained, such as unused swimming pools and retention ponds. *B.t.i.* is considered a "biological" method and poses a minimal threat to nontarget organisms.

Adulticides- Products to control adult mosquitoes include yard foggers which typically contain pyrethrins and can be set off shortly before outside activity and will provide temporary relief from mosquitoes. Also spray shrubs and the lower branches of trees where mosquitoes rest. Use insecticides registered for flying insects but that will not harm plants--for example, certain formulations of malathion, permethrin, or pyrethrins.

Pet owners should be concerned with mosquito control because mosquitoes transmit heartworm to dogs. Your veterinarian can prescribe a drug treatment that prevents the worms from reaching the adult stage in your dog.