

For general information or assistance in specific locations, please write:

Maricopa County Vector Control
3343 W. Durango, #1921
Phoenix, Arizona 85009
or call: 506-0700 (Office)
506-6616 (Complaints)

Mosquito-eating fish are available at no charge at the above address.

Comments: _____

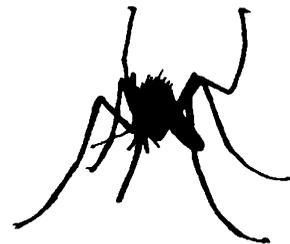
www.maricopa.gov/envsvc/water/vector.asp

TREATMENT OF BREEDING SITE

Source reduction is generally preferred, however, treatment may be needed on a temporary problem or on a site that cannot be eliminated.

1. Oil. An oil film on the water surface has been the traditional method of controlling mosquito larva and pupa. Commercial larviciding oil is available. A light film sprayed over water gives much better coverage than just pouring the oil in. Retreatment may be needed each week in permanent water. Don't just treat it once and forget it.

2. Chemical larvicide. With the development of safe, effective chemical and bacterial larvicides, the popularity of the more environmentally damaging oil larvicides has been decreasing. Trade names of some of the products now available from chemical suppliers include Altosid, Bactimos, and Vectobac. These come in various formulations suitable for a wide range of applications.



IMPORTANT: Whenever you apply any pesticide, be sure that the material you choose is labeled for the intended use, and that you read and follow *all* the instructions on the label. Do not use products that are not labeled as pesticides just because they are handy and you think they might work.

TREATMENT FOR ADULT MOSQUITOES

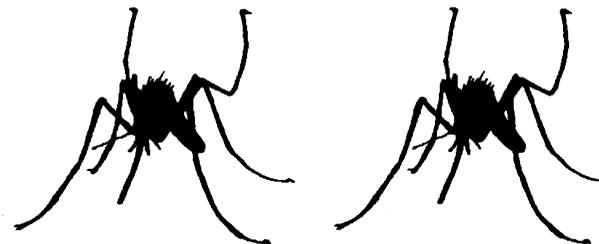
Killing adult mosquitoes is not as effective a method of control as elimination or treatment of the breeding site. When an outbreak occurs, however, several things can be done to make life more comfortable.

1. Screens. Be sure that window and door screens are tight and in good repair.

2. Sprays. Flying insect aerosols are effective indoors, but have a very limited effect outdoors. (Be sure to read entire label and use accordingly.) Small power foggers or mist sprayers will provide temporary relief outdoors but will require daily use if the source of mosquitoes is not eliminated.

3. Traps. Insect traps or electrocuters may help if properly placed. However, they may attract more insects to your yard or patio from other areas and add to the problem.

4. Repellents. Insect repellents will help if you must spend time outdoors when mosquitoes are present. Use these only according to label instructions, and remember that they can be washed off by swimming or heavy perspiration.



THE MOSQUITO PROBLEM

Here are some facts about mosquitoes and how to control them



FACTS ABOUT MOSQUITOES

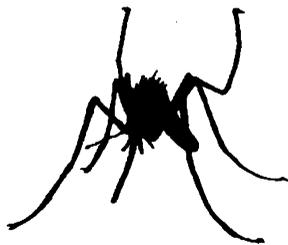
Mosquitoes have a serious impact on the health, comfort, and economic welfare of people. Some species transmit diseases to man and animals. In Maricopa County, there is particular concern with mosquito-borne encephalitis (sleeping sickness.) Large numbers of mosquitoes interfere with outdoor work and recreation, cause livestock to lose weight, and lower property values.

THE RESPONSIBILITY FOR MOSQUITO CONTROL

Everyone is responsible for eliminating and preventing mosquito breeding on his property. **Chapter III, Regulation 2. of the Maricopa County Health Code** states:

"No person shall cause, maintain, or within his control, permit any accumulation of water in which mosquitoes breed or are likely to breed. The owner, occupant, or person in control of any place where mosquitoes are breeding, or which constitutes a breeding place for mosquitoes shall take all necessary and proper steps to eliminate the mosquito breeding and to prevent its recurrence through the elimination of or the institution of necessary control measures at mosquito breeding sites."

Violation of the Health Code is a misdemeanor, punishable as provided by law.



THERE ARE TWO MAIN TYPES OF MOSQUITOES IN MARICOPA COUNTY

1. STAGNANT WATER MOSQUITOES

Importance

The Encephalitis carrying Culex mosquitoes are in this group.

Typical Breeding Sites

Tin cans, old tires, decorative ponds, bird baths, horse troughs, overgrown ditches, unmaintained swimming pools, open septic tanks, sewage and industrial waste ponds.

Breeding Site Selection

Eggs are laid in cluster directly on the surface of standing water. Continuous reproduction cycles as long as water stands and conditions remain favorable.

Adult Habits

Seldom seen in daytime, rests in shrubbery and other cool sheltered places. Active and biting during nighttime hours, indoors and out.

2. INTERMITTENT WATER MOSQUITOES

Vicious biters, responsible for most mosquito nuisance complaints.

Irrigation or rainwater that ponds and stands for more than three days, such as over-irrigated or poorly leveled yards and pastures, tail-water ponds, desert ponds, stock tanks, backed up washes and flood control drainage areas.

Eggs are laid on soil in areas where water has ponded, where they will lay dormant until flooded by water from the next rain or irrigation. Only one generation is produced per flooding.

Rests in open weeds and grass during daytime, but will rise up and bite if disturbed. Most active at sundown when they attack man and animals in swarms.

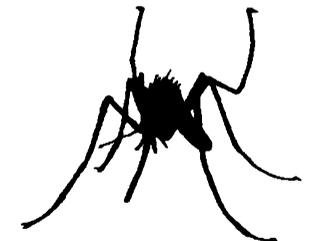
MOSQUITO CONTROL – WHAT YOU CAN DO

The best way to eliminate mosquitoes is to eliminate their breeding sites.

1. Get rid of all standing water on your premises. Discard unnecessary containers, including old tires, that may catch and hold water. Drain horse troughs, bird baths, small ponds, etc., weekly or add mosquito fish (available **free** from Maricopa County Vector Control) to any permanent body of water. Repair any water leak, hose, sprinkler system, or cooler, that may cause water to pond.

2. Control your irrigation. Fill low spots and level your yard or pasture. Don't over-irrigate. Water should never stand more than three days, even in tree wells. Ditches and culverts should be designed to drain out when not in use. Ditch banks and tailwater ponds should be kept free of vegetation and floating debris. If underground irrigation system does not drain, prevent mosquito entrance by closing valves and providing **tight** covers or screens on standpipes between irrigations.

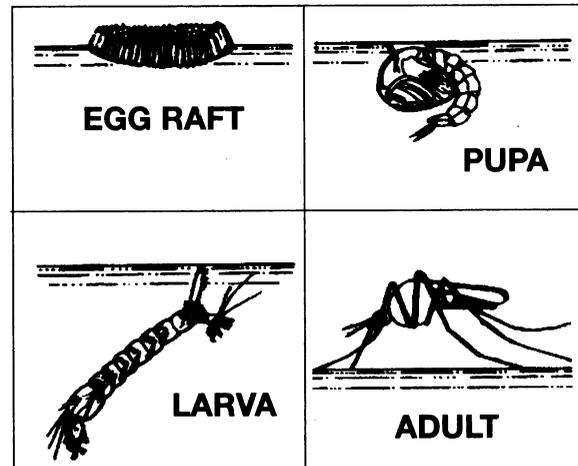
3. Miscellaneous. Close septic tanks tightly. Be sure that the cleanout plug or inspection hatch is not open even a crack. Drain unused coolers, water closets, wading pools, or any unused equipment that may be holding water accessible to mosquitoes.



Mosquitoes have four distinct stages in their life cycle.

1. EGG – Laid on water or on the ground where they remain until flooding occurs. Shortly after they are in water, the eggs will hatch into larvae.

2. LARVA – Initially very small but rapidly grows to a size of 1/4 inch or longer. The larger ones are easily seen wiggling in the water or resting at the surface, breathing through their air tubes. They will dive at the least disturbance of the water, even if a shadow is cast over them.



3. PUPA – Looks like a small seed resting in the water, but it will dive and move about rapidly with a jerking motion when disturbed. When fully developed, the adult will emerge from the pupal case ready to start the next generation. If the water dries up before the adult emerges, the mosquito will die.

4. ADULT – The female is the biting insect everyone is familiar with. She generally requires a blood meal before laying eggs that will hatch. She can fly several miles, if necessary, to get it. Her life-span may be 3 weeks to several months, during which time she will lay up to 500 eggs in batches of 50-100. The male usually is found around the breeding site and lives on plant juices.

The egg to adult time is largely dependent on the temperature, and can be as little as three days or less during the summer.