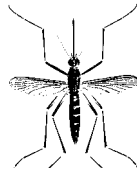


# MOSQUITO NOTES



## WESTERN TREE HOLE MOSQUITO

*OCHLEROTATUS SIERRENSIS*

### LIFE CYCLE

#### GENERAL INFORMATION

This specie is referred to as the “tree hole” mosquito because the immature stages occur most often in water collected in rot holes in trees.

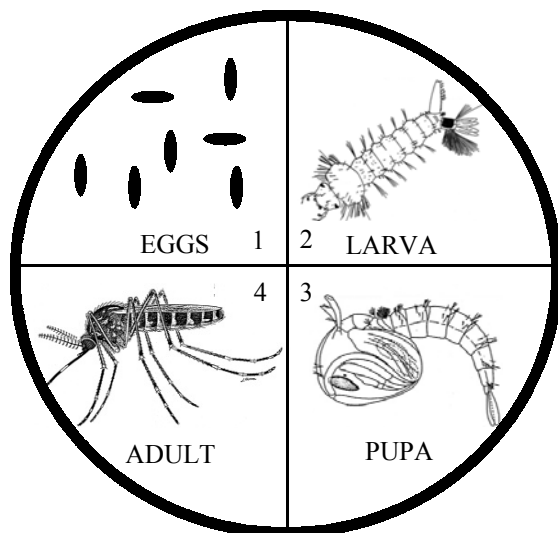
The adults are easily recognized by their small size, dark (almost black) color, pointed abdomen and brilliant white leg bands.

They are common throughout California, Oregon, Washington and parts of Idaho, Nevada, Montana and Utah. They occur in locations ranging from near sea level to over 9,000 feet in elevation.

Mosquitoes have four distinct life stages: egg, larval, pupal and adult as seen in the illustration. The larval and pupal stages are dependent on water for their survival and development.

The adult female deposits eggs individually on the damp sides of the tree hole in the late spring and summer. The eggs remain unhatched until soon after the tree hole retains enough water to flood the eggs. Some eggs hatch into larvae (wigglers), which feed on small organic particles and microorganisms in the water. At the end of the larval stage, the mosquito molts and becomes the pupa (tumbler). The pupa is active only if disturbed, for this is the “resting” stage where the larval form is transformed into the adult. This takes about three days during which time feeding does not occur. When the transformation is completed, the new adult splits the pupal skin and emerges.

Adults usually emerge in March or April, but can appear as early as February. They generally persist into June but may be found as late as September. The tree-hole must have water in it for the eggs to hatch and all mosquito developmental times are dependent on the temperature of the water in which they mature.



## HABITS (ADULT BEHAVIOR)

The females are avid, persistent biters of man. They prefer to feed out of doors during the daytime, usually in the shade, and during early evening hours. In most localities, biting females stay relatively close to the tree hole they came from. If you are troubled by these mosquitoes, look for breeding sites nearby.

Males feed on nectar and plant juices. Females may also feed on plant juices, but usually must have a blood meal in order to develop their eggs.

## ECONOMIC AND MEDICAL IMPORTANCE

These mosquitoes are frequently pests in residential and recreational areas, especially where large numbers of trees are present. Although tree hole mosquitoes can be a severe nuisance, they are not known to transmit any disease to man. They are the main vectors of dog heartworm (*Dirofilaria immitis*).

## CONTROL METHODS, PREVENTION AND CORRECTION

To prevent mosquito production, tree holes can be filled with an absorbent material. Crotches may be drained by cutting away wood from the side. If valuable specimen trees are involved, correction by a qualified tree surgeon may be desirable.

## BIOLOGICAL CONTROL

At the present time no effective biological control method is known, although this approach is currently being studied by various research institutions.

## CONTROL MEASURES

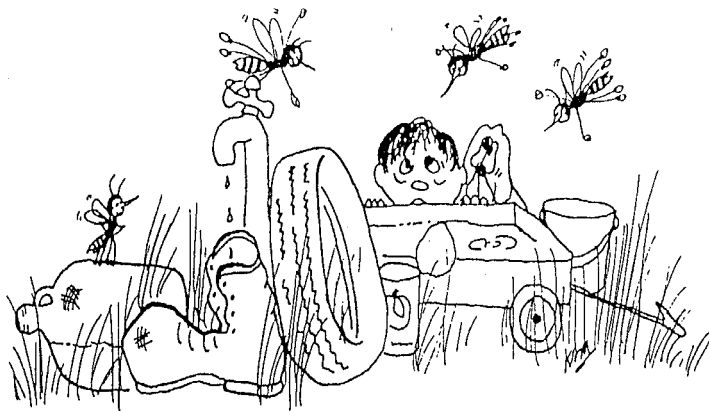
Because chemical control of this mosquito presents some technical difficulties, it is advisable to request control information from your nearest mosquito abatement district or public health agency. Agency personnel have knowledge of the proper compounds and application techniques to assure minimal environmental side effects. Public health agencies are generally able to provide information and assistance where organized mosquito control programs are unavailable.

It is important to remember that chemical control provides only temporary relief and is used by public agencies until other measures can be implemented.

Commonly available insect repellents may be helpful to people visiting areas where this mosquito is present.

## YOU CAN PREVENT MOSQUITO BREEDING

### MOSQUITO SOURCE...



### WHAT TO DO?

- EMPTY OR COVER RECEPTACLES THAT WOULD OTHERWISE HOLD WATER.
- PUT MOSQUITO FISH IN PERMANENT PONDS.
- STORE OLD TIRES INSIDE OR COVER THEM.
- CLEAN CLOGGED GUTTERS.
- MANAGE IRRIGATION WATER EFFECTIVELY.
- REPORT MOSQUITO BREEDING SITES.

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