

MOSQUITO BITES

Female mosquitoes take blood meals from reptiles, birds, and mammals. Blood is used to produce eggs. A mosquito bite can cause you to develop:

★ **Itching**

An allergic reaction to mosquito's saliva which is injected to prevent blood from clotting.

★ **Swelling**

Body sends extra blood to the bite area.

★ **Secondary infections**

Scratching a bite allows bacteria to invade the wound.

★ **Mosquito-borne diseases**

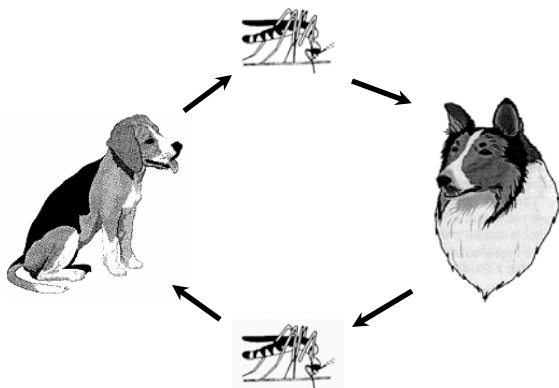
Encephalitis or Malaria

MOSQUITO-BORNE DISEASES

★ **Canine (Dog) Heartworm**

A worm that damages the lungs and heart of a dog. Symptoms are not evident until later stages of the disease. Dogs may develop a chronic cough, tire easily, and accumulate fluid. The heartworm parasite can cause lung, liver, and kidney damage or death. Mosquitoes become infected while feeding on other dogs, foxes, or coyotes.

DOG HEARTWORM TRANSMISSION CYCLE



PERSONAL PROTECTION FROM MOSQUITOES

- ★ Reduce outdoor activities during peak feeding periods (1 to 2 hours after dark).
- ★ Wear long pants and sleeves.
- ★ Apply insect repellent.

FIRST AID FOR MOSQUITO BITES

- ★ Wash bite with soap and water.
- ★ Apply anti-itch medication.
- ★ Apply cold cloth for swelling.
- ★ Watch for secondary infections.

For more information call:

MOSQUITO and VECTOR MANAGEMENT DISTRICT

of Santa Barbara County

OFFICE: 2450 Lillie Ave. * MAIL: P.O. Box 1389
Summerland, CA 93067

TELEPHONE: (805) 969-5050

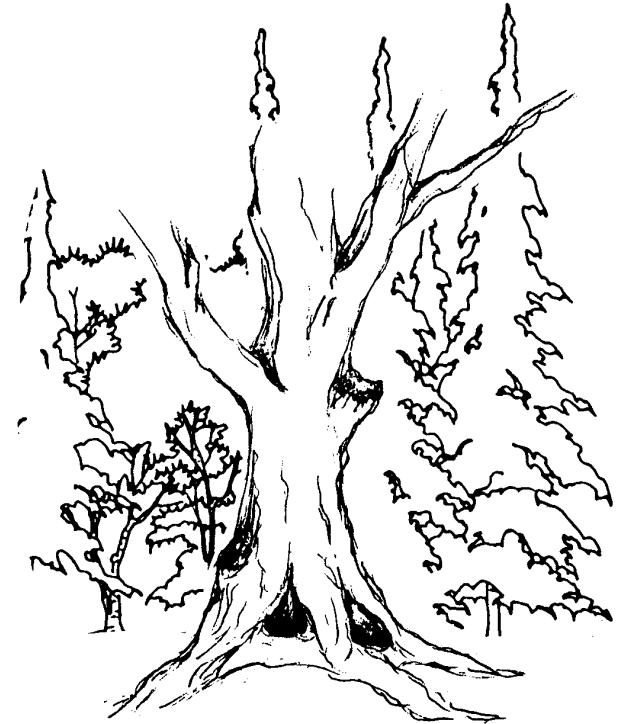
E-MAIL: mvmdistrict@mvmdistrict.org

Check out our Public Information Website:

www.mvmdistrict.org

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1/94

MOSQUITOES AND TREEHOLES



AN INDEPENDENT
SPECIAL DISTRICT
WORKING FOR YOU!

**MOSQUITO and VECTOR
MANAGEMENT DISTRICT**
of Santa Barbara County

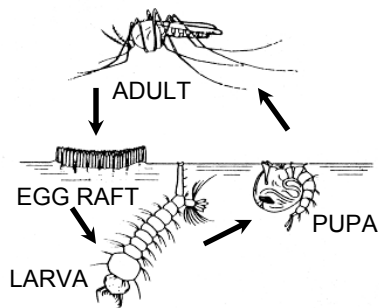
GENERAL INFORMATION

Treeholes are cavities that develop in trees which retain rain or irrigation water. In some treehole, water stands long enough to allow development of immature mosquito stages.

Mosquitoes are blood-sucking insects. Their biting habits can be irritating and often make outdoor activities unenjoyable. Mosquitoes are important because some types can transmit organisms that can cause diseases in pets, domestic animals, wildlife, and humans.

LIFE CYCLE

Mosquitoes have four life stages: egg, larva, pupa, and adult. Immature stages need standing water to complete their life cycle.



COMMON MOSQUITOES FOUND IN TREEHOLES

Fifty-two mosquito species occur in California. Immature stages of three mosquito species develop in tree rot holes.

★ Western Treehole Mosquito - pictured (*Ochlerotatus sierrensis*)

This mosquito can transmit Canine Heartworm to dogs and is a severe outdoor pest. It is distributed in the central valley, western Sierra, and coastal mountains and canyons of California. Immature stages develop in oak, sycamore, cottonwood, maple, walnut, olive, willow, and laurel tree rot holes.

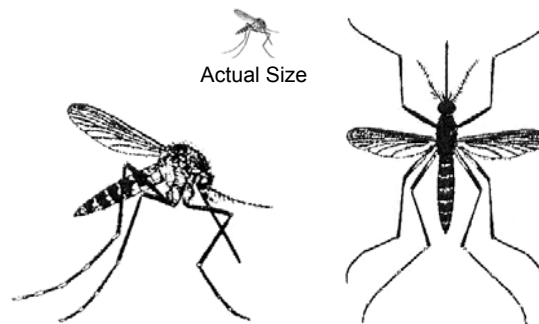
★ Desert Treehole Mosquito (*Ochlerotatus deserticola*)

This mosquito can be an outdoor pest. It is distributed in the western margins of the Mojave Desert. Immature stages develop in oak, sycamore, and cottonwood tree rot holes.

★ Riparian Treehole Mosquito (*Orthopodomyia signifera*)

This mosquito is not considered a pest. It is found in the central valley of California. Immature stages develop in cottonwood and willow tree rot holes.

WESTERN TREEHOLE MOSQUITO ADULT FEMALE



MOSQUITO CONTROL

When mosquito numbers become high or there is a disease threat, local mosquito abatement districts control the immature mosquito stages in the water.

★ Physical

A habitat can be modified to reduce standing water so mosquito immatures do not develop.

★ Biological

Natural beneficials such as backswimmers, beetles, and dragonflies can help to control mosquito immatures. Mosquito Fish can be introduced to feed on immature mosquito stages.

★ Larvicides

When natural predators and other methods cannot reduce mosquito populations, environmentally compatible materials are applied. A bacterial protein crystal (BTI), an insect growth regulator (methoprene), or surfactants that break water surface tension can temporarily control mosquito immatures.

★ Adulticides

Adult populations can be temporarily reduced with specialized equipment that disperses aerosol droplets of a plant extract (pyrethrum).