

HABITS

- Most common in August and September
- Migrating adults have been found in communities up to five miles away from their point of origin.
- Females:
 - Hibernate during the winter months.
 - Most active at dusk
 - Need a blood meal to get protein to develop their eggs.
- Males:
 - Do not bite humans
 - Feed on nectar and plant juices.

ECONOMIC AND MEDICAL IMPORTANCE

- Considered an important vector species.
- Only group of mosquitoes capable of transmitting malaria.
- Four species local to California - two are considered potential carriers of malaria.
- California has been free of malaria transmission for the past two decades.
- Re-introduction of malaria into California is possible without proper mosquito control.

CONTROL

Prevention and Corrective Methods:

- Preventing mosquitoes from breeding is the best method.
- When possible, remove sources of standing water by filling, dumping, ditching, or otherwise draining the source.
- Only rarely found in containers about the home.

Biological Control:

- The stocking of mosquito fish is often effective in sources such as fish ponds, pools, and watering troughs.
- Other biological control measures are currently being investigated.



Chemical Control:

- Chemical control should only be practiced by a trained mosquito abatement or health department official.
- Chemical control only provides temporary relief and is used only until other prevention methods can be used.
- Insect repellents may be useful if necessary to be in an area where these are present

ANOPHELES FREEBORNI

Western Malaria Mosquito



Fresno Mosquito and Vector Control District
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Fresno, CA 93707
(559) 268-6565

Fresno Westside Mosquito Abatement District
2555 N. Street P.O. Box 125
Firebaugh, CA 93622
(559) 659-2437

Consolidated Mosquito Abatement District
2425 Floral Avenue
P.O. Box 278
Selma, CA 93662
(559) 896-1085
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GENERAL INFORMATION

- The primary vector (carrier) of malaria in the western United States.
- Also called a “rice mosquito” because it often develops in the water of rice fields.
- Found along the Pacific coast from southwestern Canada to Mexico.

- Medium-sized
- Dull brown to black in color
- Two sensory organs on the head of the female are as long as the beak, making it appear to have three beaks.

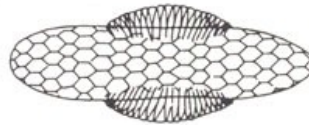
- Outer half of the wings have 4-5 spots that are easily seen with the eye
- Males resemble females but have bushy antennae and “claspers” on the tip of the abdomen.

Life Cycle

Mosquitoes have four distinct life stages. The first three stages are spent in the water.

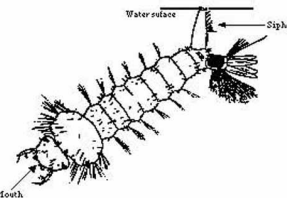
1. Egg

- Lays 150-200 individual eggs on the surface of the water
- Commonly found in lakes, streams, grassy irrigation ditches, agricultural tail-waters, and farm pond reservoirs.
- This stage lasts up to two days.



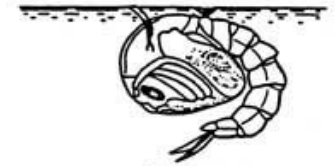
2. Larvae

- The eggs hatch into larvae (wigglers).
- Feed on small organic particles and microorganisms in the water.
- Hang from the water surface by the tip of their tail when they feed.
- This stage lasts up to 10 days.



3. Pupa

- The mosquito larva molts into an aquatic pupa (tumbler).
- Only active if it is disturbed.
- This is the “resting” stage of the mosquitoes life.
- This stage can last up to two days.



4. Adult

- Depending upon temperature and food in the water, development from egg to adult can take up to two to three weeks.
- Life expectancy of an adult female usually ranges between two weeks and a few months.

