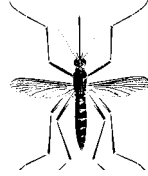


MOSQUITO NOTES



A FLOODWATER MOSQUITO

Ochlerotatus washinoi

LIFE CYCLE

GENERAL INFORMATION

Ochlerotatus washinoi is often referred to as a "snow" mosquito because it may occur in pools flooded by melting snow. It also occurs in floodwater habitats in the valley, foothills and along the coast.

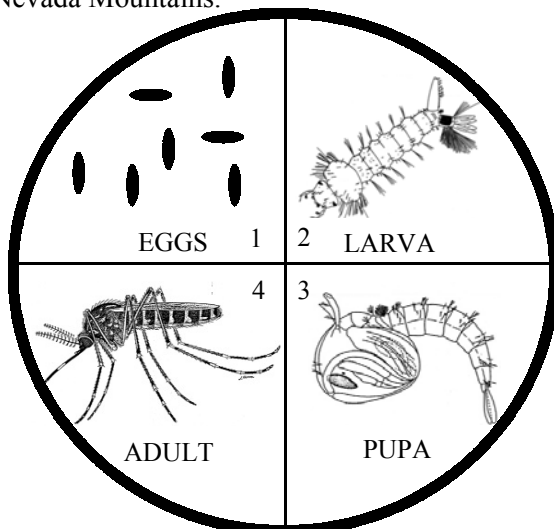
It is of medium size, dark brown in color, with bright white bands on the hind tarsi (feet) and white cross bands on the pointed abdomen that widen to lateral spots appearing brighter than the bands themselves.

This specie is found throughout the Western United States and Southwestern Canada. In California it occurs in floodwaters at sea level and in the foothills of the Coastal Range from Southern California to Humboldt County and certain areas of the Central Valley to higher elevations in the Sierra Nevada Mountains.

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 eggs are laid singly on the margins of rivers, streams, shallow lake areas; depressions formed from the melting snow, hoof prints and grassy meadow pools. The eggs hatch when these areas are flooded. All of the eggs may not hatch on the first flooding, and unhatched eggs can survive for several years.

The eggs hatch into larvae (wigglers), which then feed on small organic particles and microorganisms in the water. At the end of the larval stage, the mosquito molts and becomes the aquatic 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 two days during which time feeding does not occur. When the transformation is completed, the new adult splits the pupal skin and emerges. This often occurs on moist soil when pupae are stranded by receding waters. Under optimum conditions development from egg to adult takes about three weeks. However, all mosquito developmental times are dependent on the temperature of the water in which they develop.



HABITS (ADULT BEHAVIOR)

The adult females bite during the day and do not seem to show much preference for shade or bright sunny areas. As they are persistent biters of man, these mosquitoes can be very annoying to people visiting recreational areas during the summer months. The adult females apparently do not fly very far from their larval habitat.

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

This mosquito is primarily a pest mosquito in recreational areas. It is not known to transmit any disease in nature. However, this species could possibly transmit Venezuelan Equine Encephalitis (VEE) if it becomes established in California.

CONTROL METHODS, PREVENTION AND CORRECTION

The prevention of this mosquito is difficult as its' abundance is dependent upon the extent of flooding occurring in winter and spring of the year. Draining or filling small ponds and potholes can reduce local populations substantially where it is environmentally sound.

BIOLOGICAL CONTROL

The floodwater mosquito may be controlled by stocking mosquito fish (*Gambusia affinis*) in the larval source.



FEMALE

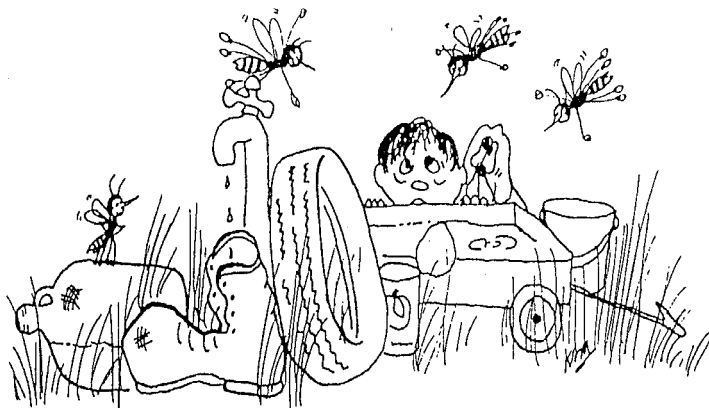
CONTROL MEASURES

Due to the often delicate environmental inter-relationships of some ponds, chemical control should only be practiced by trained mosquito abatement or health department personnel. These officials have knowledge of the proper compounds and application techniques to assure minimal environmental side effects. Public health agencies generally are 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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