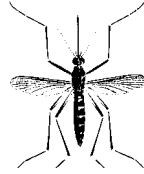


MOSQUITO NOTES



WINTER MOSQUITO

CULISETA INORNATA

GENERAL INFORMATION

Culiseta inornata is often referred to as the "winter mosquito" and (seldom) breeds during warm weather.

Adults are large, light brown in color and appear to have wings without scales, which makes them easily distinguishable from other mosquitoes. The tip of the abdomen is blunt, with inconspicuous white cross bands present on all abdominal segments when viewed from above.

The males of this specie are noticeably smaller than the females and lack the bushy antennae of most other male mosquitoes. This specie occurs throughout most of North America.

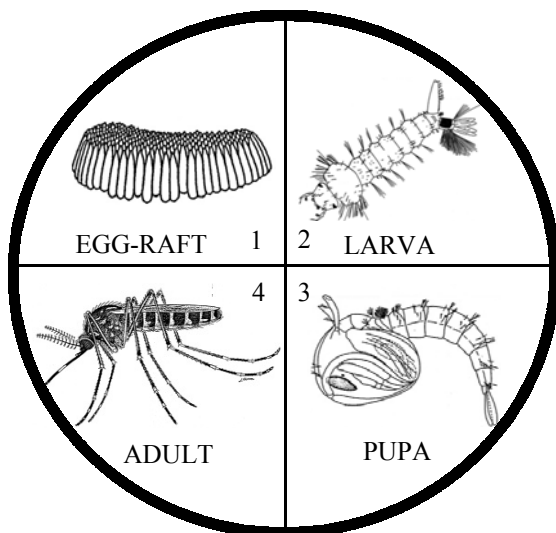
LIFE CYCLE

Mosquitoes have four distinct life stages as seen in the illustration, with the first three stages of *Culiseta* (egg-larva-pupa) being spent in the water. An adult female lays about 150-200 eggs in clusters called rafts, which float on the surface of the water until they hatch in about two days.

The eggs hatch into larvae (wigglers), which then feed on small organic particles and microorganisms in the water. About 5-14 days are required for larval development. 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.

Larvae are found in a wide variety of standing water from freshwater to moderate levels of salinity, alkalinity or organic pollution. Sunlit sources are preferred egg laying sites, but larvae may also be found in shaded sources. This species is generally found in ground pools but may occur in artificial containers.

Under optimum conditions development from egg to adult takes about 7 days. However, all mosquito developmental times are dependent on the temperature and food values of the water in which they develop.



HABITS (ADULT BEHAVIOR)

Females feed primarily on large domestic animals but on occasion will bite man. Active biting by this mosquito can occur during the fall (dusk being the most common time). They are active flyers and can disperse 5-10 miles from their emergence site.

ECONOMIC AND MEDICAL IMPORTANCE

Culiseta inornata has been found naturally infected with Western Equine Encephalitis virus (WEE) in Washington State. However, the combined factors of seasonal abundance, host feed pattern and lack of presence in endemic areas of California makes it highly unlikely of being an important vector of disease.

CONTROL METHODS, PREVENTION AND CORRECTION

Where breeding sites exist in standing or slow-moving water, corrective action to permanently eliminate them by such means as filling, pumping, ditching or draining is recommended. Containers holding water around the home should be checked weekly or emptied.

BIOLOGICAL CONTROL

Often the cool weather mosquito may be controlled by stocking mosquito fish (*Gambusia affinis*).



FEMALE

CONTROL MEASURES

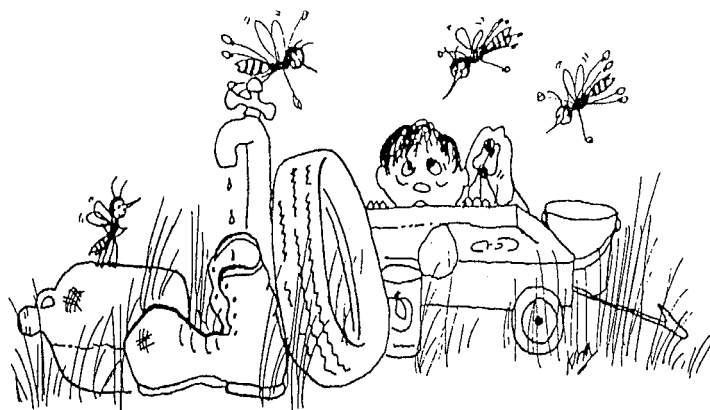
Due to the often delicate environmental inter-relationships of some ponds, chemical control should only be practiced by trained mosquito abatement or health department personnel. These officials have knowledge of the proper compounds and application techniques to assure minimal environmental side effects. 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 useful if it is necessary to be in an area where large numbers of this species exist.

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.

MARIN / SONOMA MOSQUITO
& VECTOR CONTROL DISTRICT
595 HELMAN LANE
COTATI, CA. 94931
707-285-2200 or 800-231-3236
www.msosquito.com