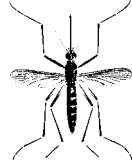


MOSQUITO NOTES



HOUSE MOSQUITOES

CULEX PIPIENS PIPIENS

CULEX PIPIENS QUINQUEFASCIATUS

LIFE CYCLE

GENERAL INFORMATION

These two subspecies are so similar that they will be treated here as one. They are commonly called house mosquitoes because of their often close relationship with humans and their habit of entering into houses and sometimes even breeding in containers indoors.

C. pipiens is a light brown, medium sized mosquito with a blunt-tipped abdomen. There are narrow white bands on the abdominal segments but none on the legs or proboscis (beak).

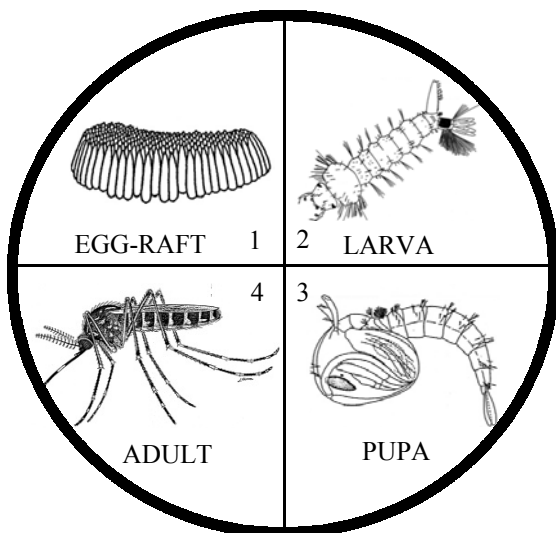
This is the most widely distributed mosquito species in the world. They are also widespread throughout the U.S. and California.

Mosquitoes have four distinct life stages as seen in the illustration, with the first three stages of *Culex* (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 one to two days.

Females usually prefer to lay eggs in standing, polluted water, such as sewage, street drainage, industrial wastes and backyard sources that include swimming pools, ornamental ponds, cooler drain-water and fouled water in containers. A wide variety of other water sources may also be infested with the aquatic stages of this common mosquito.

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. Under optimum conditions development from egg to adult takes about a week. However, all mosquito developmental times are dependent on the temperature of the water in which they mature.



HABITS (ADULT BEHAVIOR)

Outdoors, adult female *Culex pipiens* feed on both birds and mammals. When populations are high, females readily enter residences feeding on the human occupants after dark while they sleep. Males feed on nectar and plant juices. This species is capable of moving 3 to 5 miles seeking a host but is most commonly found near its aquatic habitat.

ECONOMIC AND MEDICAL IMPORTANCE

The house mosquito is considered a secondary vector of Western Equine Encephalitis (WEE) and Saint Louis Encephalitis (SLE) viruses in California. They can also create domestic, industrial and agricultural problems.

CONTROL METHODS, PREVENTION AND CORRECTION

Where possible, the best approach is to prevent mosquitoes from breeding by eliminating breeding sites. Around the home, make certain that all containers that hold rain or sprinkler water are emptied weekly or modified so they will not hold water. Check for broken or leaking pipes under homes.

BIOLOGICAL CONTROL

Often the house mosquito may be controlled in a source by stocking mosquito fish (*Gambusia affinis*).



FEMALE

CONTROL MEASURES

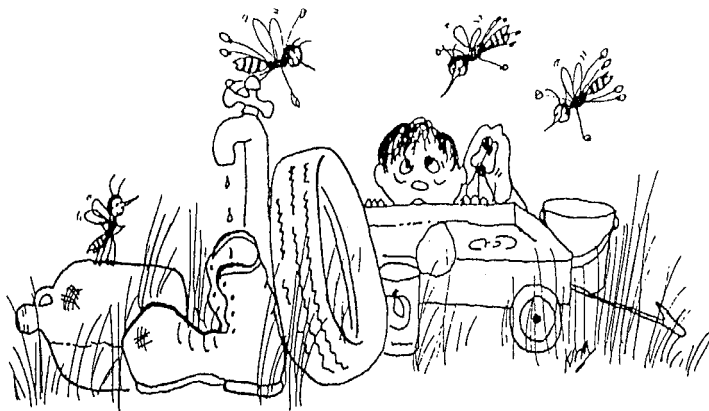
Due to the often delicate environmental inter-relationships of some ponds, chemical control should only be practiced by trained mosquito abatement or health department personnel. These officials have knowledge of the proper compounds and application techniques to assure minimal environmental side effects.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

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