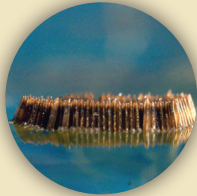


## THE MOSQUITO LIFE CYCLE

Mosquitoes have four distinct developmental stages: egg, larva, pupa and adult. The average time it takes a mosquito to develop from an egg to an adult is five to seven days. Mosquitoes require water to complete their life cycle. Prevent mosquitoes from breeding by eliminating or managing standing water.

### EGG RAFT

Most mosquitoes lay egg rafts that float on the water. Each raft contains approximately 100 to 400 eggs. Within a few days the eggs hatch into larvae.



### LARVA

The larva or "wiggler" comes to the surface to breathe through a tube called a siphon. It feeds on micro-organisms and organic matter in the water. In a matter of days the larva will molt (shed its skin) four times. On the fourth molt it will change into a pupa.



### PUPA

The pupa or "tumbler" cannot eat. It breathes through two tubes on its back. The adult mosquito grows inside the pupal casing and within a few days, when fully developed, it will split the casing and emerge as an adult mosquito.



### ADULT

The newly emerged adult rests on the surface of the water until it is strong enough to fly away and feed.



## Did you know...

- 1 Mosquitoes have existed for at least 210 million years.
- 2 Female mosquitoes find their victims through sight, smell and warmth. They can sense carbon dioxide and lactic acid up to 100 feet away.
- 3 Mosquitoes comprise less than 1 percent of a bat's diet.
- 4 The female mosquito may live as long as three weeks during the summer or many months over the winter in order to lay her eggs the following spring.



## OUR MISSION

The Marin/Sonoma Mosquito and Vector Control District, founded in 1915, protects the health and welfare of the communities it serves from mosquitoes and vector-borne diseases by utilizing cost-effective, environmentally responsible integrated vector management practices.

## OUR SERVICES

Our programs and services are funded through property taxes and benefit assessments and are provided at no additional cost to all residents of Marin and Sonoma counties.



**Marin/Sonoma Mosquito & Vector Control District**

595 Helman Lane

Cotati, CA 94931

Monday through Friday

7:00am to 3:30pm

707.285.2200

[www.ms mosquito.org](http://www.ms mosquito.org)



# MOSQUITOES OF MARIN AND SONOMA COUNTIES



PROTECTING PUBLIC HEALTH SINCE 1915

**This list contains the most common species of mosquitoes found in Marin and Sonoma counties.**

MOSQUITOES OF MARIN AND SONOMA COUNTIES BY SPECIES		COMMON NAME	LARVAL HABITAT(S)	BITING BEHAVIOR		APPROXIMATE FLIGHT RANGES	MEDICAL IMPORTANCE
				HOST(S)	TIME OF DAY		
Aedes	dorsalis	Pale marsh mosquito	Coastal salt marshes, inland alkaline areas	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Day and night	20 miles	<ul style="list-style-type: none"> <li>• Western equine encephalitis</li> <li>• Localized pest</li> </ul>
	sierrensis	Western treehole mosquito	Treeholes, tires, containers	<ul style="list-style-type: none"> <li>• Small mammals</li> <li>• Humans</li> </ul>	Dusk and day	Less than 1 mile	<ul style="list-style-type: none"> <li>• Dog heartworm</li> </ul>
	squamiger	California salt marsh mosquito	Coastal salt marshes	<ul style="list-style-type: none"> <li>• Humans</li> </ul>	Dusk and day	10–20 miles	<ul style="list-style-type: none"> <li>• Localized pest</li> </ul>
	washinoi	Flood water mosquito	Coastal ground pools, inland shaded pools, flooded habitats	<ul style="list-style-type: none"> <li>• Humans</li> <li>• Large mammals</li> </ul>	Dusk and day	Less than 1 mile	<ul style="list-style-type: none"> <li>• Localized pest</li> </ul>
Culex	tarsalis	Western encephalitis mosquito	Agricultural, commercial, man-made or natural sources	<ul style="list-style-type: none"> <li>• Birds</li> <li>• Mammals</li> <li>• Humans</li> </ul>	Dusk and dawn	10–15 miles	<ul style="list-style-type: none"> <li>• St. Louis encephalitis</li> <li>• Western equine encephalitis</li> <li>• West Nile virus</li> </ul>
	pipiens	House mosquito	Polluted water, septic tanks, catch basins, residential and commercial sources	<ul style="list-style-type: none"> <li>• Birds</li> <li>• Mammals</li> <li>• Humans</li> </ul>	Night	Less than 1 mile	<ul style="list-style-type: none"> <li>• St. Louis encephalitis</li> <li>• West Nile virus</li> </ul>
	erythrothorax	Tule mosquito	Ponds, lakes, and marshes with tules and cattails	<ul style="list-style-type: none"> <li>• Birds</li> <li>• Humans</li> </ul>	Dusk and day (shaded areas)	Less than 2 miles	<ul style="list-style-type: none"> <li>• West Nile virus</li> </ul>
	stigmatosoma	Banded foul water mosquito	Polluted water, dairy ponds, sewer ponds, log ponds	<ul style="list-style-type: none"> <li>• Birds</li> </ul>	Night	Less than 10 miles	<ul style="list-style-type: none"> <li>• St. Louis encephalitis</li> <li>• West Nile virus</li> </ul>
Anopheles	freeborni	Western malaria mosquito	Irrigation ditches, rain pools, margins of lakes and streams, rice fields	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Dusk and dawn	10 miles	<ul style="list-style-type: none"> <li>• Malaria</li> </ul>
	punctipennis	Woodland malaria mosquito	Cool, shaded, grassy pools in streams and creeks	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Dusk and day	More than 1 mile	<ul style="list-style-type: none"> <li>• Malaria</li> </ul>
	franciscanus	- none -	Shallow, sunlit pools with algae	<ul style="list-style-type: none"> <li>• Large mammals</li> </ul>	Dusk and dawn	Less than 1 mile	<ul style="list-style-type: none"> <li>• Occasional pest</li> </ul>
Culiseta	incidens	Cool-weather mosquito	Shaded, clear, natural or man-made sources	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Dusk and dawn	Less than 5 miles	<ul style="list-style-type: none"> <li>• Localized pest</li> </ul>
	inornata	Large winter mosquito	Sunlit ground pools or man-made sources	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Dusk and dawn	Less than 5 miles	<ul style="list-style-type: none"> <li>• Localized pest</li> </ul>
	particeps	- none -	Freshwater marshes, ponds and creeks, woodland pools	<ul style="list-style-type: none"> <li>• Large mammals</li> <li>• Humans</li> </ul>	Dusk and dawn	Less than 3 miles	<ul style="list-style-type: none"> <li>• Localized pest</li> </ul>