

Governing Board

A 7 member Board of Trustees appointed by each county and incorporated city in its jurisdiction governs the District. The Board meets monthly on the second Thursday at the Sutter-Yuba MVCD office, 701 Bogue Road, Yuba City, CA.

Board Member

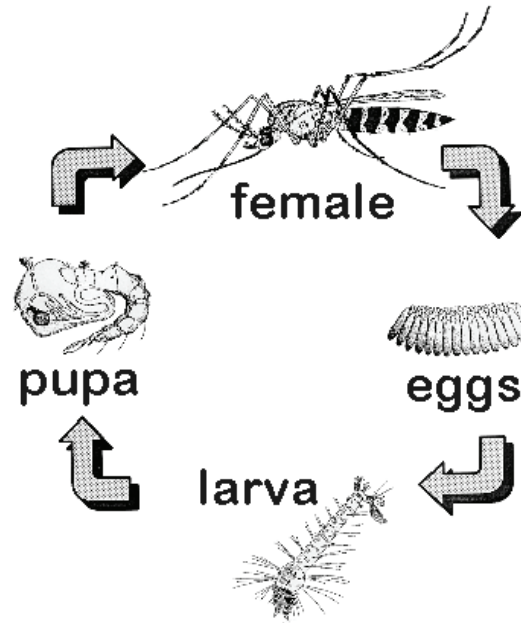
Representing

John Sanbrook	Sutter County
Bill Harris	City of Marysville
Erica Jeffery	Yuba County
Bob Coykendall	City of Yuba City
Norman Welker	City of Wheatland
David Schmidl	Sutter County
Charles Epp	City of Live Oak

District Staff

Ronald L. McBride	Manager
Cathy Burns	Administrative Assistant
Michael R. Kimball	General Foreman
Debra Lemenager	Entomologist
Jay Erwin	Fish Specialist
Mervin Hunt	Field Foreman
Steve Abshier	Field Foreman
Scott Houser	Field Foreman

Life Cycle of the Mosquito



General Information

- ◆ There are 23 different kinds of mosquitoes in the Sutter-Yuba MVCD.
- ◆ Only female mosquitoes bite and transmit disease.
- ◆ The female mosquito requires blood for the development of her eggs.
- ◆ All mosquitoes must have standing water in order to breed. They can breed in as little as 1/2" of standing water.
- ◆ Mosquitoes develop from egg to adult in 4-10 days. Adult mosquitoes can live as long as 1 month during the summer.

Prepared February 2006

Sutter-Yuba Mosquito And Vector Control District



701 Bogue Road, P. O. Box 726

Yuba City, CA. 95992

(530) 674-5456 ext. 0

www.sutter-yubamvcd.org

Historical Information

The Sutter-Yuba Mosquito and Vector Control District (SYMVCD) was established in 1946 to combat disease and public nuisance mosquitoes. The District was formed by a vote of the residents. We currently serve 706 square miles with a population of approximately 155,000 people. The cost for parcel owners is about 2¢ from every property tax dollar to fund mosquito control.

District Duties

The SYMVCD is responsible for controlling mosquitoes and vectors (animals that transmit disease-producing organisms). The District uses preventative methods, which lower mosquito populations to levels that reduce chances for the spread of diseases. The District's programs integrate three methods of mosquito control.

◆ Physical Control

Physically changing the environment, in which larvae occur to prevent, limit, or reduce mosquito production.

◆ Biological Control

The District makes use of natural enemies to manage mosquito populations.

◆ Chemical Control

The application of natural and man-made compounds to suppress mosquito numbers.

Vector Management Program

- ◆ SYMVCD provides a comprehensive mosquito management program.
- ◆ District staff annually responds to over 1,200 service requests.
- ◆ Over 2 million mosquito-eating fish (*Gambusia affinis*) are planted each year in 9,600 acres of potential mosquito breeding habitats.
- ◆ 72,000 acres are treated annually with environmentally compatible materials to suppress adult mosquitoes.
- ◆ 120,000 acres are treated annually with a toxin derived from bacteria specific for mosquitoes.
- ◆ Technicians identify and treat over 8,000 mosquito sources annually.
- ◆ Laboratory staff maintains 39 adult mosquito surveillance devices and annually identifies over 800,000 adult mosquitoes. Blood samples from six sentinel chicken flocks are tested every two weeks for encephalitis from May to October.

Mosquito-borne Diseases

Encephalitis (Sleeping Sickness)

Since 1945, 36 human cases of western equine (WEE) and St. Louis encephalitis (SLE) have been reported in residents of SYMVCD. For each laboratory confirmed case, an estimated 150 cases go undetected. Encephalitis was common in the District until the 1960's. Organized mosquito control and improved water management has greatly reduced the spread of this disease. Encephalitis is caused by a virus and there is no medical cure or vaccine for humans. The symptoms can range from mild fever and drowsiness to convulsions, coma and paralysis. The effects of the disease are most serious in infants and the elderly.

Malaria

Since 1974, there have been more than 420 cases of malaria reported to the Sutter-Yuba Mosquito and Vector Control District (SYMVCD). Most of these cases are from individuals who become infected outside of the U. S. (imported cases). In 1985, a mother and daughter from Yuba City were infected with the malaria parasite (locally acquired). The disease is caused by a protozoan, which invades red blood cells, causing them to rupture. As the disease progresses, victims experience fever, chills and sweating. In later stages of malaria, shock, kidney failure and coma can occur. The SYMVCD aggressively responds to local reports of malaria cases whenever they arise.

West Nile Virus

In 1999, West Nile Virus (WNV) surfaced in New York City and quickly moved across the country to enter California in 2004. The disease causes symptoms similar to WEE and SLE. WNV has shown more serious effects in people 50 years of age and above. California's Mosquito Control Districts are well prepared to mitigate WNV with long established, comprehensive disease surveillance and mosquito control methods. A human vaccine is not yet available. Other notable effects seen with WNV include an unusual increase in wild bird deaths, especially in Crows, Jays and Magpies. Horses are impacted as well. WNV can cause neurological damage and sometimes death in horses. A horse vaccine is widely available and highly recommended.