

# Butte County Mosquito & Vector Control District

Since 1948

2<sup>nd</sup> Quarter, 2022

Newsletter

## 2022 MOSQUITO SURVEILLANCE

The 2022 mosquito control season is now fully underway. The District has already seen normal to high numbers of mosquitoes in traps with rising populations identified in the valley, foothill, and mountain areas of Butte County.

The entomology department continues to monitor the District, searching for WNV and other mosquito-borne viruses, utilizing New Jersey light traps, gravid traps, carbon dioxide baited traps, sentinel chickens, mosquito pools, and dead birds.

The District's control and surveillance programs are fully staffed and operating at high capacity. Mosquito and Vector Control Specialists are focusing larvicide efforts on various mosquito-breeding sources:

### Urban

Storm Drains, Catch Basins, Swimming Pools, Containers, Tires, Gutters, Storm Water Channels, Etc.

### Rural

Roadside Ditches, Pastures, Sewer Ponds, Sumps, Canal Leakage, Containers, Tires, Tree-Holes, Etc.

### Agricultural

Rice, Wetlands, Orchard Runoff, Ditches, Pump Leaks, Containers, Tires, Wildlife Area Ponds, Etc.

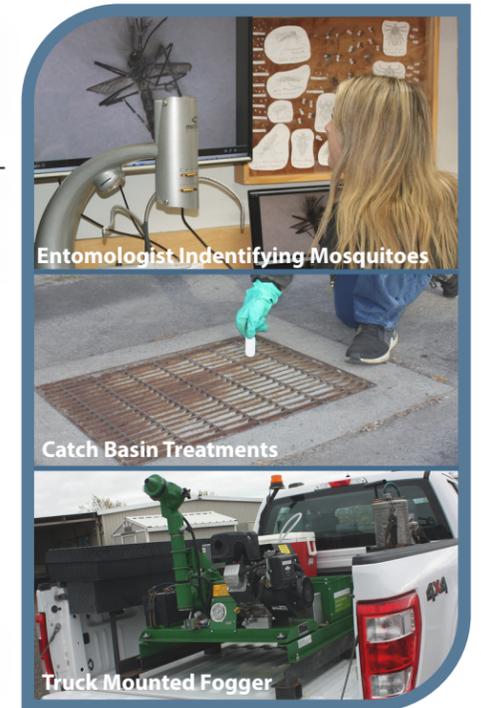
Adult mosquito control has commenced throughout the District, concentrating on areas with higher populations of mosquitoes and large numbers of service requests.

## 2022 WEST NILE VIRUS ACTIVITY

Year	Humans	Horses	Dead Birds	Dead Squirrels	Mosquito Pools	Sentinel Chickens
2019	5	0	1	0	45	34
2020	4	1	4	0	31	23
2021	12	0	2	0	80	26
2022	0	0	0	0	0	0
Totals	21	1	7	0	156	83

As of June 28<sup>th</sup>, 2022, none of our sampling techniques have shown positive for West Nile Virus. West Nile Virus has not been detected in Butte County.

However, an invasive species, *Aedes aegypti*, has been identified for the 3rd year in a row within Butte County. *Aedes aegypti* is the primary vector of diseases such as Yellow Fever, Dengue and Zika viruses. We currently do not have any of these viruses



Entomologist Identifying Mosquitoes

Catch Basin Treatments

Truck Mounted Fogger

## AERIAL OPERATIONS

	Rice	Wetlands	ULV Adulticide	Totals
Acres Treated	18455	1337	0	19792
Average per day	1249	53	0	1302



As of June 28<sup>th</sup>, 2022, Aerial Operations has treated 18,455 acres of rice and 1,337 acres of wetlands, 19,792 acres total. There have not been any late night aerial adulticide treatments, year to date.



Oroville, CA. 95965  
5117 Larkin Road

Butte County Mosquito and Vector Control District

## MOSQUITOFISH

may be requested by

Phone: (530) 533-6038

Website: [ButteMosquito.com](http://ButteMosquito.com)

Free mosquitofish are available at the following locations

Oroville	Chico
<b>BCMVCD Headquarters</b> 5117 Larkin Rd. (530) 533-6038	<b>BCMVCD Substation</b> 444 Otterson Dr. (530) 533-6038
<b>Garden Connection</b> 1740 Feather River Blvd. (530) 342-7762	<b>C Bar D Feeds</b> 3388 State Hwy 32 (530) 342-5361
<b>Other Locations</b>	<b>Magnolia Gift and Garden</b>
<b>Harshbarger Ace Hardware</b> 1626 State Hwy 99 Gridley, CA (530) 846-3625	1367 East Ave. (530) 894-5410
<b>The Pine's Yankee Hill</b> 11300 Miller Flat Rd. Concow, CA (530) 534-1265	<b>Wilbur's Feed</b> 139 Meyers St. (530) 895-0559
<b>Earthworm Soil Factory</b> 2552 Clark Rd. Butte Valley, CA (530) 895-9676	<b>Paradise</b>
<b>Hamilton City Fire Dept.</b> 4120 1 <sup>st</sup> St. Hamilton City, CA (530) 826-3355	<b>Deja Vu Gardens</b> 5424 Foster Rd. (530) 877-7341
	<b>Foothill Mill and Lumber</b> 1698 Wagstaff Rd. (530) 877-3395

## MISSION STATEMENT

The mission of the Butte County Mosquito and Vector Control District is primarily to suppress mosquito-transmitted disease and also to reduce the annoyance levels of mosquitoes and diseases associated with ticks, fleas and other vectors through environmentally compatible control practices and public education.

## CONTACT INFORMATION

Butte County Mosquito & Vector Control District

5117 Larkin Road, Oroville, CA. 95965

Phone: (530) 533-6038, (530) 342-7350

Fax: (530) 534-9916

Website: [www.BUTTEMOSQUITO.com](http://www.BUTTEMOSQUITO.com)

"FIGHT THE BITE!"

*This institution is an equal opportunity provider and employer.*

## MOSQUITO LIFE CYCLE

### There are more than 3,500 species of mosquitoes around the world

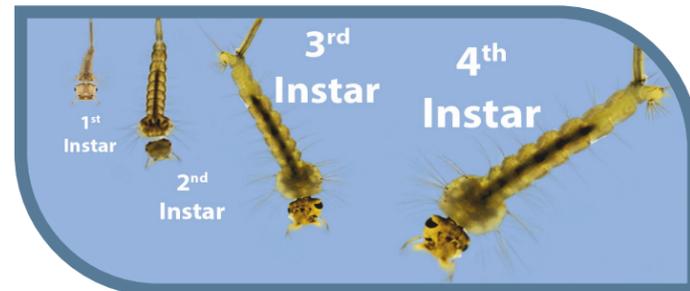
In California, we have about 50 species and of those, only a few are considered public health threats due to their potential to transmit mosquito-borne diseases to humans. People who have been bitten by a mosquito infected with viruses such as West Nile, Saint Louis Encephalitis, Dengue, and Zika may develop life-threatening or life-altering diseases. For the District and residents of Butte County to effectively reduce mosquito populations and the chance of getting a mosquito-borne disease, it is important to understand the habits and behaviors of the different mosquito species.

### All mosquitoes must have water to complete their lifecycle.

This water can range in quality and it can be in any container imaginable. The mosquito goes through four separate and distinct stages of its lifecycle: egg, larva, pupa, and adult. Some species can go through their entire life cycle in as little as four days.

#### Egg

Eggs are laid on or near water or where water will be. They may be laid one at a time or stuck together in rafts of 100-300 eggs. Most eggs hatch into larvae within 48 hours of coming into contact with water



#### Larva

Larvae live in water and breathe air from the surface. Larvae feed on micro-organisms and organic matter in the water. They shed their skin four times growing larger after each molt. The stages between molts are called instars. When the 4<sup>th</sup> instar larva molts it becomes a pupa.



#### Pupa

Mosquito pupae also float at the water surface and breathe air. When disturbed, they dive in a tumbling motion and then float back to the surface. The pupal stage is a non-feeding stage. This is the time the mosquito turns into an adult. It takes two days before the adult is fully developed.



#### Adult

Newly emerged adults rest on the surface of the water for a short time to allow itself to dry before taking flight. Female mosquitoes feed to get a sufficient blood meal to develop eggs. Male mosquitoes feed only on plant nectar. The life span of the adult mosquito usually depends on several factors: species, temperature, humidity, gender, and time of year. Males live shorter lives.

## 2022 PUBLIC EDUCATION CAMPAIGN

The District's 2022 public education campaign is underway with a few events already done. Gold Nugget Craft Faire in late April and Red Suspenders Days in late May were a big success.

All of the events that the District attends have an excellent insect display, as well as a mosquitofish and mosquito larvae display. At these events, the District hands out fly/mosquito swatters, tick identification cards, recyclable shopping bags, and mosquito repellent, free of charge.

The District partnered with Stott Advertising on a billboard campaign. This year's slogan "Prevent Mosquitoes and West Nile Virus", will rotate on eight billboards throughout the county from May through September.

The District has contracted with Action News Now and PBS, for a 30 second mosquito awareness animated public service announcement.

Also, the District will continue with its radio and print public service announcements. Radio ads run on four Deer Creek Broadcasting stations and four Results Radio stations. Newspaper and print ads are in circulation, detailing mosquito prevention measures and District contact information.

#### Gold Nugget Craft Faire April 23<sup>rd</sup> & 24<sup>th</sup>, 2022

This annual event was held at the Terry Ashe Recreation Center, Paradise, featuring a variety of crafts created by artisans from all over Northern California, Oregon, and Nevada. The District's booth, featuring pamphlets, bug display and fish display, was available for a large number of visitors.

#### Red Suspenders Days May 21<sup>st</sup>, 2022

This all-day annual event was packed with the Little League Pancake breakfast, vendors/food trucks, classic car show, bed races, parade, and live music. The District's booth, featuring pamphlets, bug display and fish display, was available for a large number of visitors.

