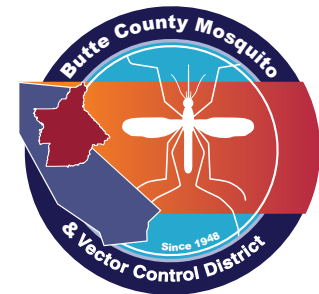




# BUTTE COUNTY MOSQUITO AND VECTOR CONTROL DISTRICT



2nd Quarter, 2021

Newsletter

## 2021 CONTROL AND SURVEILLANCE ACTIVITIES

The 2021 mosquito control season is now fully underway, and the District has already seen normal to high numbers of mosquitoes in traps located throughout the District. Rising populations of mosquitoes have been identified in the valley, foothill, and mountain areas of the District. The District's control and surveillance programs are fully staffed and operating at high capacity, utilizing every resource. Mosquito and Vector Control Specialists are focusing larvicide efforts on various mosquito-breeding sources including urban sources (storm drains, catch basins, un-maintained swimming pools, retention/detention ponds, etc.), rural sources (roadside ditches, pastures, sewer ponds, canal leaks, etc.), and agricultural sources (rice, managed wetlands, orchard runoff, etc.). Adult mosquito control has commenced throughout the District concentrating on areas with higher populations of mosquitoes and large numbers of resident generated requests. The entomology department continues to be the "eyes and ears" of the District searching for WNV and other mosquito-borne viruses through the testing of mosquitoes, birds, and chickens. Entomology staff is continuing to monitor adult and larval mosquito populations and vector-borne disease throughout the District utilizing New Jersey light traps, gravid traps, carbon dioxide baited traps, dippers, sentinel chickens, live mosquitoes, and dead birds.

## 2021 WEST NILE VIRUS ACTIVITY

As of July 1st, 2021, 3 mosquito pools have tested positive for WNV within the District. A mosquito pool is a group of mosquitoes, in this case 50, that were taken from a Co2 trap and sent in for testing at the University of California, Davis. There have been no human cases of WNV reported yet in the District for 2021. The District has also had no dead birds or sentinel chickens test positive for WNV this year.

	Humans	Horses	Dead Birds	Dead Squirrels	Mosquito Pools	Sentinel Chickens
2010	1	1	6	1	7	7
2011	3	0	0	0	1	20
2012	10	2	53	2	27	43
2013	24	0	42	1	38	57
2014	25	0	22	0	43	37
2015	55	0	38	0	101	37
2016	21	0	22	0	48	38
2017	3	0	5	0	49	31
2018	12	0	4	0	49	37
2019	5	0	1	0	45	34
2020	4	1	4	0	31	23
2021	0	0	0	0	3	0
<b>Totals</b>	<b>163</b>	<b>4</b>	<b>197</b>	<b>4</b>	<b>442</b>	<b>364</b>



Butte County Mosquito and Vector Control District  
5117 Larkin Road  
Oroville, CA. 95965

## MOSQUITOFISH AVAILABLE

The Butte County Mosquito and Vector Control District offers free mosquitofish for pickup at the following locations:

Rose Chapel Mortuary Crematory  
6382 Clark Rd  
Paradise, CA  
530-877-4923

C Bar D Feeds  
3388 Highway 32  
Chico, CA  
Phone: 530-342-5361

Hamilton City Fire Department  
4120 1<sup>st</sup> Street  
Hamilton City, CA  
Phone: 530-826-3355

Harshbarger Ace Hardware  
1626 State Hwy 99  
Gridley, CA  
Phone: 530-846-3625

Garden Connection  
1740 Feather River Blvd  
Oroville, Ca  
530-342-7762

Earthworm Soil Factory  
2552 Clark Road  
Butte Valley, CA  
530-895-9676

\* Mosquitofish are not to be planted in creeks, streams, and rivers.

Magnolia Gift & Garden  
1367 East Avenue  
Chico, CA  
530-894-5410

Foothill Mill and Lumber  
1698 Wagstaff Rd  
Paradise, CA  
Phone: 530-877-3395

The Pine's Yankee Hill  
11300 Miller Flat Road  
Concow, CA  
Phone: 530-534-1265

Wilbur's Feed  
139 Meyers Street  
Chico, CA  
Phone: 530-895-0569

Déjà vu Gardens Galore Nursery  
Of Paradise  
5424 Foster Rd  
Paradise ca  
530-877-7341

## 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 and 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.

# Mosquitoes

**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 agencies and residents 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 4th 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 about two days before the adult is fully developed. When development is complete, the pupal skin splits and the adult mosquito emerges.

## 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 are typically shorter lived than females.

<https://www.mvcac.org/vectors-and-public-health/mosquitoes/>

## 2021 PUBLIC EDUCATION CAMPAIGN

The District's 2021 public education campaign has started, and it already appears to be better, with more events, than the 2020 campaign. The District had a public education table at the Gold Nugget Craft Faire in Paradise and the Red Suspenders Day in Gridley. The District is also looking forward to the Butte County Fair in August.

All 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 also hands out, free of charge, fly/mosquito swatters, tick identification cards, recyclable shopping bags, and mosquito repellent.

The District also gives classroom presentations at local schools in Butte County. The classroom presentations include "Trouble with Ticks" and "Fight the Bite". The District has given four classroom presentations so far this year.

The District will again partner with Stott Advertising on a billboard campaign. This year's slogan is "Fight the Bite!". The six billboards will rotate throughout the county from May through September. The new billboard uses the District's new website address "www.ButteMosquito.com".

The District has also contracted with Action News Now, for a 30 second mosquito awareness animated commercial. Also, the District will continue with its radio advertising, and also it's print advertising.



District Brochures