

# Butte County Mosquito & Vector Control District

Since 1948

2<sup>nd</sup> Quarter, 2024

Newsletter

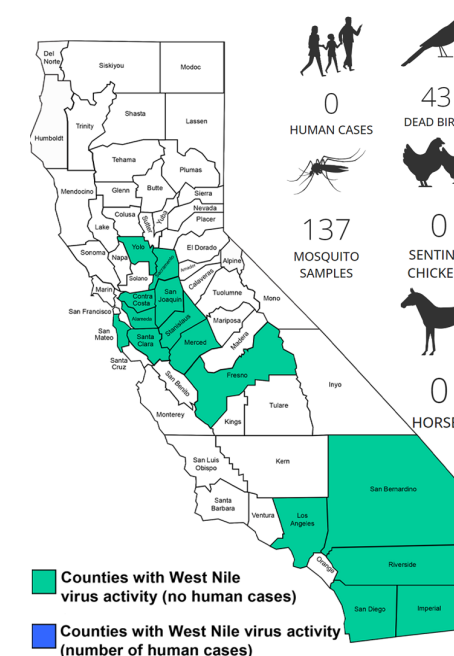
## MOSQUITO SURVEILLANCE

Mosquito control season is now fully underway. The District has already seen increasingly higher numbers of mosquitoes in traps with rising populations identified in all areas of Butte County. The entomology department continues searching for West Nile virus and other mosquito-borne illnesses, utilizing New Jersey light traps, gravid traps, CO<sub>2</sub> baited traps, sentinel chickens, mosquito pools, and dead birds. An invasive species, *Aedes aegypti*, has been identified within Butte County again. *Aedes aegypti* is the primary vector of diseases such as Yellow Fever, Dengue and Zika viruses. Butte County does not have any local transmission of these viruses. 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.



## WEST NILE VIRUS ACTIVITY



As of June 27<sup>th</sup>, 2024, West Nile virus (WNV) has not been found in Butte County using any of our sampling techniques.

WNV has been found in California, in 15 counties. Many in southern California and near the bay area.

## AERIAL OPERATIONS

As of June 27<sup>th</sup>, 2024, aerial operations has treated 3,437 acres of rice and 2,464 acres of wetlands. The District welcomes David Brandley, and additional Pilot II.

**3,437<sup>ac</sup>** **2,464<sup>ac</sup>**  
**Rice Wetlands**



Aircraft N6633K-JAWS



Oroville, CA. 95965  
5117 Larkin Road

Butte County Mosquito and Vector Control District

<p><b>MOSQUITOFISH</b> Requested By Phone or Website (530) 533-6038 www.ButteMosquito.com Free mosquitofish available for pickup at these locations:</p>	
<p><b>Oroville</b> <b>BCMVCD</b> 5117 Larkin Rd. (530) 533-6038 <b>Ace Hardware</b> 1845 Mitchell Ave. (530) 533-5600</p>	<p><b>Chico</b> <b>BCMVCD Substation</b> 444 Otterson Dr. (530) 533-6038 <b>C Bar D Feeds</b> 3388 State Hwy 32 (530) 342-5361</p>
<p><b>Gridley</b> <b>Ace Hardware</b> 1626 State Hwy 99 (530) 846-3625</p>	<p><b>Magnolia Gift &amp; Garden</b> 1367 East Ave. (530) 894-5410 <b>Wilbur's Feed</b> 139 Meyers St. (530) 895-0559</p>
<p><b>Concow</b> <b>The Pine's Yankee Hill</b> 11300 Miller Flat Rd. (530) 534-1265</p>	<p><b>Paradise</b> <b>Déjà Vu Gardens</b> 5424 Foster Rd. (530) 877-7341 <b>Foothill Mill &amp; Lumber</b> 1698 Wagstaff Rd. (530) 877-3395</p>
<p><b>Butte Valley</b> <b>Earthworm Soil Factory</b> 2552 Clark Rd. (530) 895-9676 <b>Hamilton City Fire Department</b> 4120 1<sup>st</sup> St. (530) 826-3355</p>	

**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  
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.

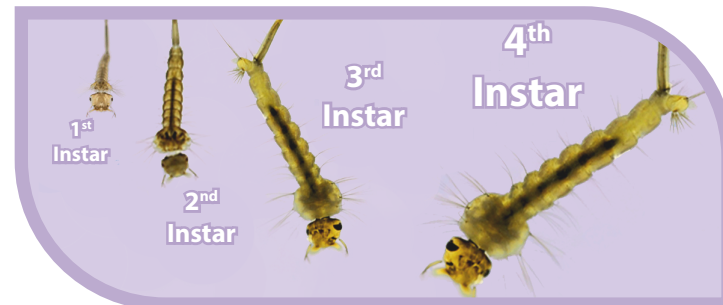
**All mosquitoes must have water to complete their lifecycle.**

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

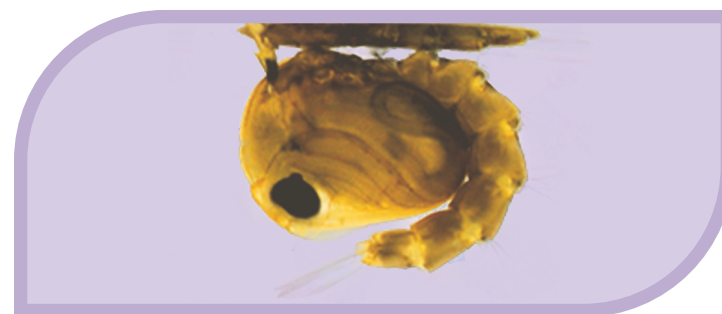
Eggs are laid on or near water or where water will be. They may be laid one at a time or stuck together in rafts of 100-300 eggs. Most eggs hatch into larvae within 48 hours of coming into contact with water.

Eggs vary in form between different species.



### 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 does not eat food. 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.

## PUBLIC EDUCATION CAMPAIGN

The District's ongoing public education campaign has been off to a strong start with several successful events already completed. The Home & Garden Show, Gold Nugget Craft Faire, and Red Suspenders Days were particularly well-received. These events featured an impressive insect exhibit, showcasing mosquitofish and mosquito larvae, along with complimentary items such as fly and mosquito swatters, tick identification cards, recyclable shopping bags, and mosquito repellent.

Additionally, the District participated in the State Park Week event at the North Forebay, further engaging with the community on mosquito awareness and prevention.

In collaboration with Lamar Advertising, the District has launched a comprehensive advertising campaign across various platforms. This includes a billboard campaign with the slogan, "Fight the Bite: Cover up. Repel. Eliminate.", displayed on six billboards rotating from May through September. New this year, the campaign also includes Bus and Bus shelter advertising throughout the county, as well as an electronic billboard advertisement.

Moreover, the District has partnered with Action News Now for a 30-second animated public service announcement focused on mosquito awareness, amplifying their outreach efforts.

Lastly, the District will continue its outreach through radio and print public service announcements. Radio ads are set to air on Deer Creek Broadcasting and Results Radio stations, while detailed information on mosquito prevention measures and contact details for the District will be featured in local newspapers.



**Chico Spring Home & Garden Show**  
**April 6<sup>th</sup> & 7<sup>th</sup>, 2024**  
*The largest home and garden show in the North State. Five buildings packed with vendors and outdoor displays at Silver Dollar Fairgrounds.*



**Paradise Gold Nugget Craft Faire**  
**April 27<sup>th</sup> & 28<sup>th</sup>, 2024**  
*This annual event was held at Terry Ashe Recreation Center, in Paradise, featuring a variety of artisan crafts from California, Oregon, and Nevada*



**Gridley Red Suspenders Days**  
**May 18<sup>th</sup>, 2024**  
*This all-day annual event in Gridley was packed with the little League Pancake breakfast, vendors/food trucks, classic car show, bed races, parade, and live music.*

