



**MOSQUITO and VECTOR MANAGEMENT DISTRICT
of SANTA BARBARA COUNTY**

DISEASE SURVEILLANCE REPORT

June 2021

Live Mosquito-Borne Virus Surveillance

Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	Mosquitoes per Trap Night	Pools Submitted	WSW Virus Test Result
Chino St.	5/23-6/3	8	BGS2	1	0.7	0	
Valerio St.	5/28-6/3	15	BGS2	1	2.5	0	
Orella St.	5/23-6/3	1	BGS1	1	0.2	0	
MVMD SumInd.	5/28-6/3	3	BGS1	1	0.5	0	
Santa Monica Creek	6/3-6/4	4	EVS	6	0.7	0	
Santa Monica Creek	6/3-6/7	28	Gravid	3	2.3	1	Negative
Crescent Drive	6/8-6/11	51	Gravid	3	5.7	1	Negative
Lompoc Valley/Mission Hills	6/9-6/10	16	EVS	12	1.3	0	
La Colina Road	6/14-6/18	16	BGS2 & BG Pro	4	1	0	
Santa Monica Creek	6/16-6/17	12	EVS	6	2	0	
Hot Springs Creek fish ladder	6/17-6/18	16	EVS	8	2	0	
Hot Springs Creek fish ladder	6/14-6/18	89	Gravid	3	7.4	3	Negative
More Mesa/Shoreline	6/21-6/22	20	EVS	5	4	2	Negative
More Mesa/Shoreline	6/18-6/24	107	Gravid	3	5.9	4	Negative
Paradise Road	6/23-6/24	225	EVS	11	20.5	5	Negative
UCSB/SBAir Bluffs	6/29-6/30	389	EVS	9	43.1	7	Pending
UCSB/SBAir Bluffs	6/28-7/1	218	Gravid	3	18.2	6	Pending
Chino St.	6/3-6/29	79	BGS2	1	3	0	
Valerio St.	6/3-6/29	50	BGS2	1	1.9	0	
Crescent Dr.	6/3-6/29	22	BGS2	1	0.8	0	
Orella St.	6/3-6/29	0	BGS1	1	0	0	
MVMD SumInd.	6/3-6/29	0	BGS1	1	0	0	
Oceano Wetland, SLO County	6/1-6/2	176	EVS	12	14.7	3	Negative
Chumash Park, SLO County	6/1-6/2	37	EVS	2	12.3	1	Negative

BGS2=Biogents Sentinel 2

EVS=encephalitis surveillance trap (CO²)

WSW=WNV, SLEV, AND WEE

**Aedes aegypti* present

BGP=Biogents Pro

California Arbovirus Bulletin

The California Department of Public Health, Vector Borne Disease Section, reported that 22 dead birds tested positive for West Nile virus in California in June. WNV was also found in 54 mosquito pools from nine counties. No human or horse infections were detected. No chicken seroconversions were reported. No St. Louis encephalitis virus or Western equine encephalitis virus activity was reported.

Arbovirus Activity in Santa Barbara County

Last month two dead birds from Santa Barbara County were tested for West Nile virus, and the results were negative. Thirty-one mosquito pools from 16 sites tested negative for WNV, SLE, and WEE.

The District currently maintains four sentinel chicken flocks in Santa Barbara County located at the Goleta Sanitary District, Mission Hills Community Services District, the Solvang City Wastewater Treatment Plant, and the U.S. Forest Service Fire Station in Carpinteria. Blood samples were taken the week of June 7 and the week of June 22; all results were negative.

Zika Virus and Invasive *Aedes* Mosquito Update

No *Aedes aegypti* mosquitoes were collected in Santa Barbara County in June. English- and Spanish-language posters with information about this mosquito were hung in the two neighborhoods where the mosquito has previously been documented.

There have been no Zika virus infections reported in California in 2021 to date.



Southern California Malaria Mosquito
Anopheles hermsi

Anopheles hermsi is the mosquito species responsible for two malaria outbreaks in San Diego in the 1980s. They are also possible West Nile virus vectors. Larvae in the genus *Anopheles* are identified by the lack of a breathing siphon, causing them to lie in the water horizontally. Female adult *Anopheles* mosquitoes are known for having two palps (accessory mouthparts) that are as long as the proboscis (the mosquito's long, needle-like mouthparts), so they appear to have three proboscises. *Anopheles hermsi* is identified by its four spots of dark scales on each wing. Females may travel more than five miles to feed on large mammals, including humans, at dusk and dawn. Larval stages are found in freshwater pools with emergent vegetation.

The Southern California malaria mosquito is morphologically identical to the Western malaria mosquito, *Anopheles freeborni*. These species were determined to be distinct by genetic studies. It is assumed that *Anopheles hermsi* occurs south of Monterey County. Researchers in San Mateo County aim to more accurately map the ranges of the two species. The District has collected ten sample *Anopheles freeborni/hermsi* mosquitoes from three locations in Santa Barbara County that will be included in their genetic analysis.