

MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

May 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
Lake Los Carneros	5/1-5/2	2	Gravid	3	0.7	0	Nesun
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Lake Los Carneros	5/1-5/2	11	EVS	6	1.8	0	
Crescent Dr.	5/6-5/9	45	Gravid	3	5	3	Negative
UCSB/SBAir Bluffs	5/12-5/13	373	EVS	12	31.1	1	Pending
Carpinteria Creek	5/13-5/16	15	Gravid	3	1.7	1	Pending
More	5/15-5/16	49	EVS	7	7	1	Pending
Mesa/Shoreline							
UCSB North Campus	5/20-5/23	23	Gravid	3	2.6	2	Pending
Open Space (NCOS)							
Mission Creek	5/22-5/23	8	EVS	7	1.1	1	Pending
UCSB/SBAir Bluffs	5/27-5/28	488	EVS	13	37.5	3	Pending
Bird Refuge	5/27-5/30	54	Gravid	3	6	2	Pending
Chino St.	4/23-5/23	9	BGS2	1	0.3	0	
Valerio St.	4/23-5/23	8	BGS2	1	0.3	0	
Crescent Dr.	4/20-5/6	4*	BGP	1	0.3	0	
Crescent Dr.	4/20-5/23	7*	BGS2	1	0.2	0	
Orella St.	4/28-5/23	0	BGS1	1	0	0	
MVMD SumInd.	4/285/23	0	BGS1	1	0	0	

BGS2=Biogents Sentinel 2; EVS=encephalitis surveillance trap (CO²); BGP=Biogents Pro WSW=West Nile, St. Louis Encephalitis, and Western Equine Encephalitis **Aedes aegypti* present

California Arbovirus Bulletin

The California Department of Public Health, Vector Borne Disease Section, reported that four dead birds tested positive for West Nile virus in May. None were from Santa Barbara County. No St. Louis encephalitis virus or Western equine encephalitis virus activity was reported.

West Nile Virus Activity

Two dead birds in Santa Barbara County were reported to the WNV hotline but were not accepted for testing.

Sentinel Chicken Flocks

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 May 10 and the week of May 24; all results were negative.

Zika Virus and Invasive Aedes Mosquito Update

Two *Aedes aegypti* mosquitoes were collected in Santa Barbara County in May. Both were trapped at addresses where the mosquito has previously been documented.

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

Tick Surveillance

Date	Location	Tick Species		
5/15/2021	Shoreline/More Mesa	0		
5/20/2021	Mesa x Los Carneros, NW corner	0		
5/20/2021	behind UCSB fire station	1 male Dermacentor variabilis		



Tules and the Tule Mosquito *Culex erythrothorax*

As the common name implies, tule mosquito larvae are found in ponds and marshes with tules like bulrush (*Scirpus californicus*) and cattails (*Typha latifolia*). Larvae can evade fish and other predators by staying in the narrows between the stems. As aptly described by its scientific name (erythro- comes from the Greek word *erythros* meaning "red" or "reddish") the adult mosquito's thorax (body region between head and abdomen where the legs and wings are attached) is a reddish-orange color. Adult females target bird and human hosts and are vectors of West Nile virus. They usually stay within two miles of their larval habitat. Local sources include the Andree Clark Bird Refuge next to the zoo, Lake Los Carneros in Goleta, the Sage Hill Campground in the Los Padres National Forest, and, of course, the "Tule Pond" located at the Santa Barbara Airport marshland south of the main runway. The Oceano wetland in San Luis Obispo County is also a wide expanse of tules. Although tules provide excellent shelter for mosquito larvae and makes sampling and treating for mosquito larvae difficult, they also provide food and habitat for red-wing blackbirds and other wildlife.