

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

# **DISEASE SURVEILLANCE REPORT**

August 2022

#### **Vector-borne Disease Surveillance**

Response to Goleta salt marsh breeding dominated trapping site choice in August. Time was also taken from surveillance for salt marsh inspection and treatment.

					Mosquitoes		wsw
Location	Date	Number of Mosquitoes	Type of Trap	# of Traps	per Trap Night	Pools Submitted	Test Result
UCSB/SBAir Bluffs	7/29-8/1	175	Gravid	4	14.6	4	-
UCSB/SBAir Bluffs	8/2-8/3	510	EVS	6	85	1	-
Henley Hall, UCSB	8/2-8/3	66	EVS	2	33	0	-
Lake Los Carneros, Goleta	8/2-8/3	31 <mark>*</mark>	EVS	4	7.75	0	-
Storke Ranch, Goleta	8/4-8/5	15	EVS	1	15	1	-
UCSB/SBAir Bluffs	8/4-8/5	422	EVS	10	42.2	3	-
Lake Los Carneros, Goleta	8/5-8/10	10	Gravid	2	1	1	-
Evergreen Park, Goleta	8/5-8/10	98	Gravid	2	9.8	3	-
Willow Springs, Goleta	8/12-8/15	19	Gravid	3	2.1	1	pending
Jalama Beach, Lompoc	8/16-8/17	82	EVS	5	16.4	2	pending
Refugio State Beach	8/16-8/17	7	EVS	5	1.4	0	
Mission Creek, SB	8/17-8/22	110	Gravid	1	4.4	3	pending
Chino St., SB	8/23-8/24	1	EVS	8	0.13	0	-
Chino St., SB	8/23-8/24	0	BGPro	2	0	0	-
Islay Park, San Luis Obispo, SLO County	8/24-8/25	24	EVS	3	8	1	pending
Islay Park, San Luis Obispo, SLO	8/24-8/25	4	Gravid	1	4	1	pending
Laguna Lake Park, San Luis Obispo, SLO	8/24-8/25	55	EVS	4	13.75	1	pending
Laguna Lake Park, San Luis Obispo, SLO	8/24-8/25	1	Gravid	1	1	0	-
Producer's Ditch, San Luis Obispo, SLO	8/24-8/25	31	EVS	3	10.3	1	pending
Old Garden Creek, San Luis Obispo, SLO	8/24-8/25	9	EVS	2	4.5	0	-
Carpinteria Creek,	8/26-8/29	3	Gravid	2	0.5	1	Pending
Crescent Ave., 93105	8/30-8/31	0	EVS	6	0	0	-
UCSB/SBAir Bluffs  BGS2-Riogents Sentinel 2 BG	8/30-8/31	64	EVS	3	21.3	1	Pending

BGS2=Biogents Sentinel 2

BGP=Biogents Pro

EVS=encephalitis surveillance trap (CO<sup>2</sup>)

WSW=WNV, SLEV, AND WEEV

BGS2=Biogents Sentinel 2 BGP=Biogents Pro \*320 Culicoides biting midges, 30 salt marsh mosquitoes

#### **California Arbovirus Detection**

In August, 1,132 WNV positive mosquito pools were reported throughout California for a 2022 total of 1,834. Ninety-two dead birds have tested positive for WNV; at this time last year, there were 155. Out of the total of 31 human WNV cases, two were fatal, and five were asymptomatic blood donors. Forty-six mosquito pools from central valley counties tested positive for Saint Louis encephalitis virus in 2022; there have been 3 human cases. No detections of Western equine encephalitis virus have been reported in California this year.

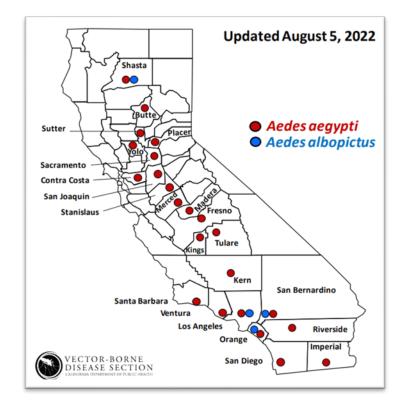
#### 2022 West Nile Virus Activity in California through July



#### 2022 West Nile Virus Activity in California through August



In August, three dead birds were reported in Santa Barbara County, but none were accepted for testing. Twenty-five mosquito pools from Santa Barbara County (23) and San Luis Obispo County (2) tested negative for encephalitis viruses.



# Invasive Aedes Mosquito and Zika Virus Update

No *Aedes aegypti* mosquitoes or other invasive *Aedes* species have been detected in Santa Barbara County, thus far in 2022.

Aedes aegypti mosquitoes are present in 22 California counties. Aedes albopictus is present in four. Aedes notoscriptus occurs in L.A., Orange and San Diego Counties. To date, there have been no human cases of Zika, dengue, or chikungunya, and 323 mosquito pools have tested negative, in California in 2022.

#### Triatoma protracta, winged adult

#### Copyright © 2015 petersvensonlund

#### Triatoma nymph



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## Adult bed bug



### **Kissing Bugs and Bloodsucking Conenoses** Triatoma species

Last month, a resident living on East Camino Cielo near Highway 154 brought a bloodsucking conenose bug to the District's office. It was found inside the home, and is suspected to be the cause of itchy bites received at night. The Western kissing bug, Triatoma protracta, is a relative of bed bugs that is nocturnal and feeds on blood. Kissing bugs, however, are about three times larger and have wings in their adult stage. They are often associated with wood rat (*Neotoma*) nests in foothill habitats, but will feed on a wide variety of animals, including humans. Allergic reactions to the saliva injected by the bug during blood-feeding occur and are sometimes fatal. In Central and South America, the kissing bug species *Triatoma sanguisuga* is the primary vector of the protozoan parasite Trypanosoma cruzi, which causes Chagas' disease. The parasite is transmitted when infected feces deposited at the itchy bite site is rubbed into the broken skin. In North America, it is theorized that Chagas' disease is uncommon because Triatoma species that occur here do not defecate near bite sites. Unfortunately, dogs in Southern Texas have been infected after eating the bugs.

