MOSQUITO and VECTOR MANAGEMENT DISTRICT of SANTA BARBARA COUNTY

DISEASE SURVEILLANCE REPORT

April 2020

Live Mosquito-Borne Virus Surveillance

Mosquitoes became very active following moderate rains early in the month followed by warm weather in the latter half of the month. Mosquito trapping for 2020 resumed this month.

Location	Date	Number of Mosquitoes	Number of Traps*	Mosquitoes per Trap Night	Pools Submitted	Result
Santa Barbara County						
UCSB/SB Airport Bluffs	04/01 – 04/02	1135	11	103	4	Negative
Shoreline Dr. x Orchid Dr. near horse stables	04/29 – 04/20	607	12	50	4	Pending

*Encephalitis Virus Survey (CO_2) traps.

West Nile Virus Activity
The California Department of Public Health's Dead Bird Hotline was reactivated in mid-April. No dead birds in Santa Barbara County were reported to the hotline or on the Dead Bird reporting website at: http://www.westnile.ca.gov/report_wnv.php.

There have been no reported cases of human infection with WNV this year in California. As of 5/1/20, three (3) birds have tested positive for WNV in California, all three were from Santa Clara County. No horses have tested positive for WNV in California. No positive mosquito pools were reported for the entire state. Mosquito trapping by districts across California was lower because of restrictions resulting from the statewide coronavirus stay-at-home order. No WNV activity of any kind has been detected in Santa Barbara County this year, to date.

St. Louis Encephalitis Virus Activity
No cases of humans infected with SLEV have been reported in California this year.

Zika Virus and Invasive *Aedes* Mosquito Update
CDPH releases their Zika reports on the first Friday of the month. No new cases of Zika virus infection were reported in April. As of May 1, there have been 746 travel-associated Zika virus infections in California since 2015. Neither yellow fever mosquitoes, *Aedes aegypti*, nor Asian tiger mosquitoes, *Ae. albopictus* (both known vectors of the Zika virus) have ever been detected in Santa Barbara County, to date. However, invasive *Aedes* are present in the following counties: Los Angeles, Orange, San Diego, Riverside, San Bernardino, Imperial, Kern, Kings, Fresno, Madera, Merced, San Joaquin, Placer, Sacramento, Stanislaus and Tulare.

Western Equine Encephalitis

There was no reportable WEE activity in California for April.

Sentinel Chicken Flocks
The District currently maintains 3 sentinel chicken flocks in Santa Barbara County located at the Goleta Sanitary District, Mission Hills Community Services District, and the Solvang City Wastewater Treatment Plant. Bi-

monthly blood sampling resumed in April and samples collected from chickens at these three sites on 4/13 and 4/14 tested negative for the presence of WNV, SLEV and WEE viruses. Results for samples collected on 4/27 and 4/28 are pending. One chicken flock location has been switched from the Carpinteria Sanitary District to the U.S. Forest Service Fire Station in Carpinteria. We are grateful to the CSD for hosting our sentinel chicken flocks for several years. Currently, there are no sentinel chicken flocks at the USFS Fire Station and the Los Prietos Ranger Station in the Los Padres National Forest Blood due to COVID-19 restrictions.

Asian giant hornet, *Vespa mandarina*

Photos courtesy of: Washington State Department of Agriculture, Bugwood.org

This large insect caused quite a stir when news stories and social media posts about it began circulating in early May. Despite the hype, these hornets are not overly aggressive towards people and animals and will only attack when they are agitated or threatened. However, they can inflict an extremely painful sting due to their large size and their potent venom can be lethal for those who are highly allergic to their sting or those who get stung multiple times. In the U.S. the Asian giant hornet has only been found in northwest Washington state. All four confirmed records of this introduced pest were reported in December 2019. The most worrisome aspect of this species is that it preys on honeybees. Attacks by the Asian giant hornet can destroy a honey bee colony in just a few hours. This hornet is distinguished from native wasps and hornets by its large size (1.5 to 2 inches long), large orange/yellow head with big eyes, and a striped abdomen. More information can be found at: https://wastatedeptag.blogspot.com/2019/12/pest-alert-asian-giant-hornet.html