



MOSQUITO and VECTOR MANAGEMENT DISTRICT of Santa Barbara County

DISEASE SURVEILLANCE REPORT

June 2019

Live Mosquito-Borne Virus Surveillance

Mosquito activity increased in some areas despite relatively mild weather conditions along the coast.

Location	Date	Number of Mosquitoes	Number of Traps	Mosquitoes per Trap Night	Pools Submitted	Result
Santa Barbara County						
Andree Clark Bird Refuge*	6/12 – 6/13	13	5	2.6	1	Negative
UCSB Bluffs*	6/12 – 6/13	2020	7	289	22	Negative
San Luis Obispo County						
Sinsheimer Park*	6/25 – 6/26	26	4	6.5	1	Pending
Sinsheimer Park**	6/25 – 6/26	0***	1	0	--	
The Villages*	6/25 – 6/26	33	4	8.2	1	Pending
The Villages**	6/25 – 6/26	0	1	0	--	
Islay Park*	6/25 – 6/26	45	4	11.2	2	Pending
Producer's Ditch*	6/25 – 6/26	88	3	29.3	1	Pending

*Encephalitis Virus Survey (CO₂) trap

**Biogents Sentinel trap (for catching invasive *Aedes* species)

***8 *Culicoides* sp. (biting midges) caught in trap

West Nile Virus Dead Bird Submissions

There were 4 calls to the Dead Bird Hotline for Santa Barbara County resulting in one submitted sample from a dead crow found in Los Alamos. Test results are pending. No other West Nile virus activity was detected in the county. No human cases of WNV infection in California were reported in 2019 as of June 30.

St. Louis Encephalitis Virus Activity

As of June 28, the California Department of Public Health (CDPH) has not reported any human cases of SLEV disease in California this year although 14 positive mosquito pools were reported this month from Fresno, Kern, Riverside and Tulare counties. SLEV activity has never been confirmed in Santa Barbara County.

Zika Virus and Invasive *Aedes* Mosquito Update

As of June 7, there have been 722 travel-associated Zika virus infections in California since 2015. Four new infections were reported in May. Neither yellow fever mosquitoes, *Aedes aegypti*, nor Asian tiger mosquitoes, *Ae. albopictus*, have ever been detected in Santa Barbara County, to date.

Sentinel Chicken Flocks

The District currently maintains 5 sentinel chicken flocks in Santa Barbara County located at the Carpinteria Sanitary District, Goleta Sanitary District, Mission Hills Sanitary District, Los Prietos Ranger Station in the Los Padres National Forest and the Solvang City Wastewater Treatment Plant. Blood samples collected on 6/10, 6/11, and 6/25 all tested negative for the presence of WNV, SLEV and Western Equine Encephalitis virus.



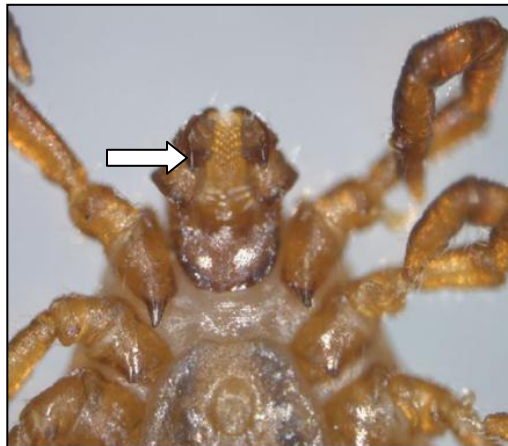
Photo credit: James Gathany/CDC/Anna Perçea 2018

Nymph and adult female, top view

Underside view

Asian longhorned tick, *Haemaphysalis longicornis*

Native to Asia, this tick species, also known as the bush or cattle tick, was first found in the U.S. on a sheep in 2017 at a farm in New Jersey. Since then it has been discovered in New York, Pennsylvania, Virginia, West Virginia, North Carolina, and Arkansas. Initial discoveries were often made on livestock so there is a high potential for this tick to spread throughout the country via transported livestock. They also feed on birds which can provide another way for them to reach new areas. It remains a mystery how the Asian longhorned tick got to the U.S. Two factors that make the Asian longhorned tick such a successful invader are that the female can reproduce without mating and they can survive freezing conditions. One report states a female can lay up to 2000 eggs. In Asia, this tick is known to transmit several viral and bacterial diseases including those that affect sheep and cattle. They can cause problems even without disease transmission because severely infested animals can suffer from anemia and even death from excessive loss of blood. This tick is called a “longhorned tick” because of the two prolonged spurs present on the mouthparts, as pointed out by the arrow in the photo below.



Closeup of *H. longicornis* adult female mouth parts. (Photo credit: Andrea Egizi, Monmouth County Tick-borne Disease Laboratory)