

# Santa Clara County Vector Control District

## Operations and Surveillance Report

### January 2019



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#### District Mission

To detect and minimize vector-borne diseases, to abate mosquitoes, and to assist the public in resolving problems with rodents, wildlife, and insects that can cause disease, discomfort, or injury to humans in the County.

#### Services Provided

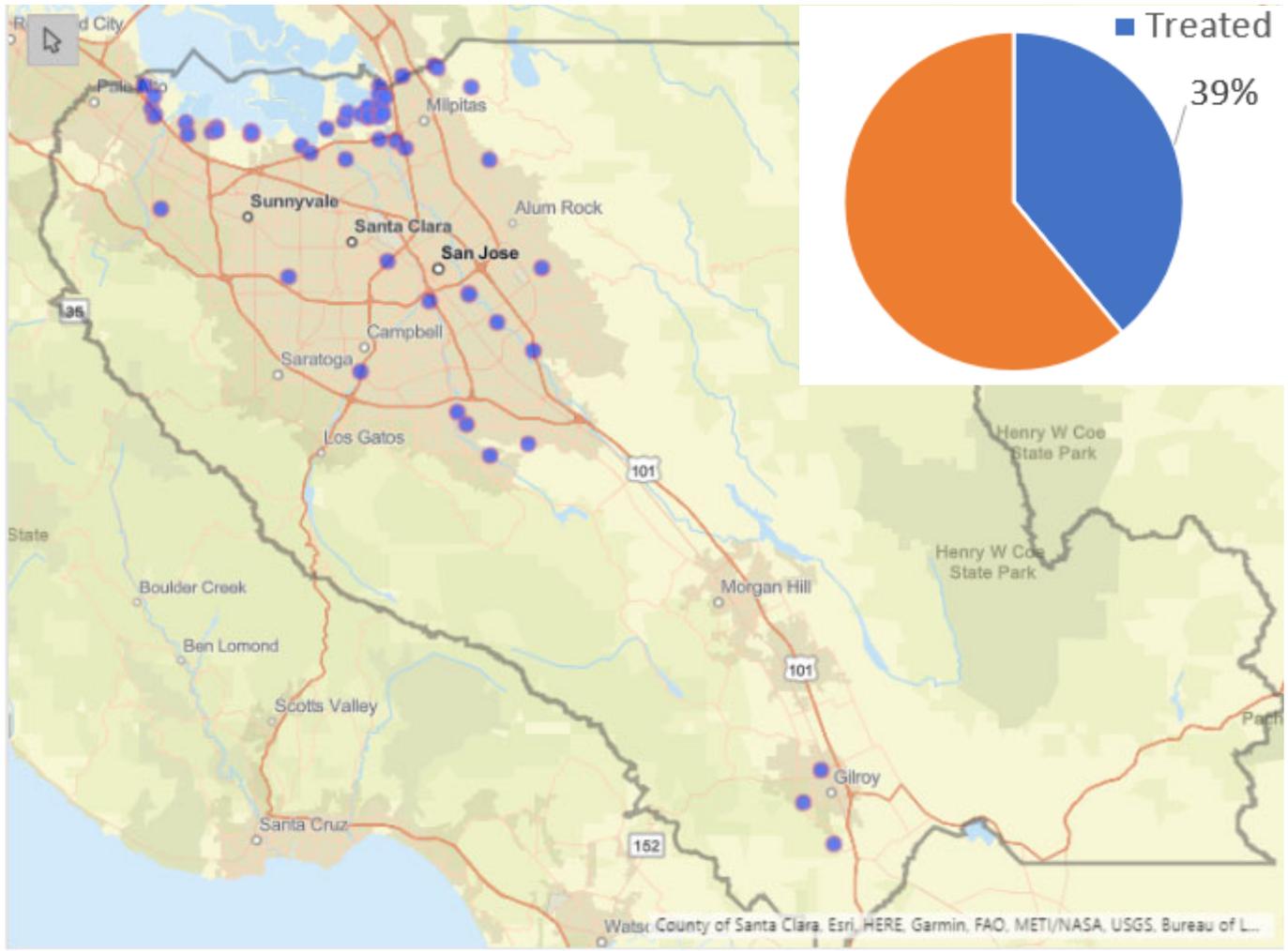
- Detection of the presence/prevalence of vector-borne diseases, such as plague, West Nile virus, rabies, and Lyme disease, through ongoing surveillance and testing
- Routine inspections and treatment, as necessary, of known mosquito and rodent sources
- Response to customer initiated service requests for identification, advice, and/or control measures for mosquitoes, rodents, wildlife, and miscellaneous invertebrates (ticks, yellowjackets, cockroaches, bees, fleas, flies, etc.)
- Free educational presentations for schools, homeowner associations, private businesses, civic groups, and other interested organizations
- Free informational material on all vectors and vector-borne diseases

#### Manager's Message

After rainy weather or floods, mosquitoes may be more abundant than usual, this is due to the filth and debris left by flood waters that help create excellent breeding conditions. Some mosquitoes may carry and spread serious illnesses, including West Nile virus (WNV) and encephalitis, and these diseases are dangerous health risks to humans and animals. The District reminds you to cover up at dusk and dawn, and to wear insect repellent when outdoors. If you notice mosquito breeding, please contact us and a technician will be happy to assist.

**(408) 918-4770**

**[sccvector.org](http://sccvector.org)**



District staff check and treat mosquito larvae in flooded street stormwater catch basins, curbs, natural breeding sources, and ponds. These sites hold standing water due to rainfall or urban runoff from domestic water usage. **During January, our staff inspected 159 locations and treated 62 of them. As temperatures decrease, mosquito lifecycles and their development slow down.**



The mosquitofish is a topminnow (*Gambusia affinis*) that is a natural predator of larval and pupal stage mosquitoes. In January, the District stocked mosquitofish in 3 locations. In the spring, the District will restart delivering free fish for stocking backyard sites like fountains, ponds, and rain barrels.

## Professional Development

### Continued Education

As one of the District’s missions to expand vector knowledge and increase professional development, our staff signed up for webinars to enhance their knowledge on pesticide use and their related risks. Staff also had the opportunity to take part in the Pacific Southwest Center of Excellence in Vector-Borne Diseases 2nd Annual Conference held at UC Davis, to further learn the most up-to-date research being conducted in the vector, public health, and vector-borne disease fields. Presenters included members from California Public Health Department, Center for Diseases Control, Scientists from UC Davis and UC Riverside, vector control agencies from Nevada, Utah, Hawaii, and California. The conference had over 100 attendees which posed for the photo to the right.



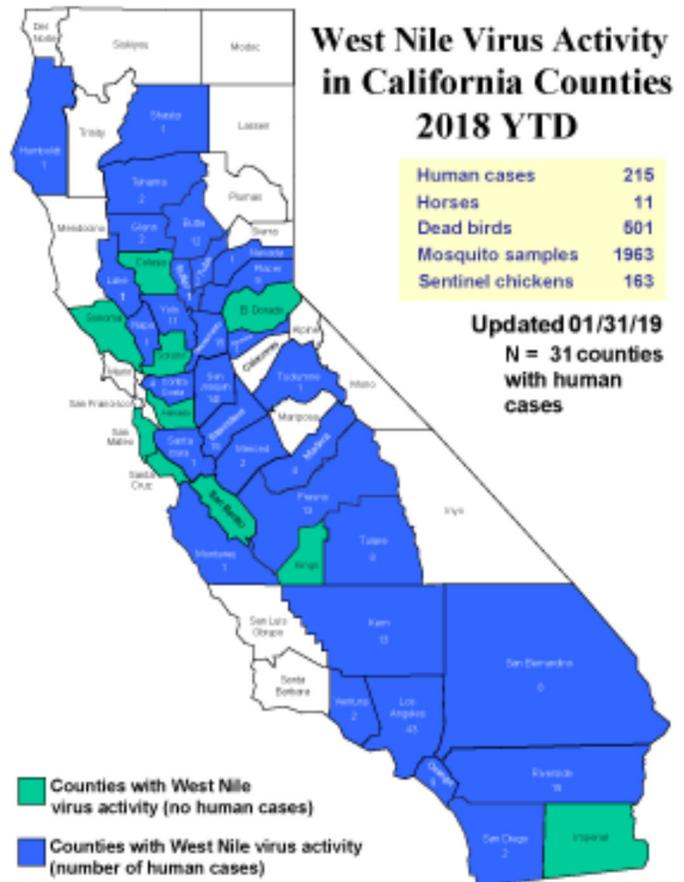
## West Nile Virus Surveillance

### Statewide

As of February 1, a total of 58 birds were tested. There were no positive West Nile Virus detections statewide.

### Santa Clara County

In January 2019, the District tested a total of 14 dead birds for West Nile Virus, Saint Louis Encephalitis and Western Equine Encephalitis—all results were negative. Bird species tested included four American crows, two California towhees, two red-tailed hawks, three unknown songbirds, one cedar waxwing, one song sparrow, and one yellow-throated warbler.



## Public Service Requests

Type of Service Request	Count
Rodents	61
Skunk	24
Coyote	15
Raccoons	14
Opossum	11
Mosquitoes	8
Gambusia (Mosquito Fish)	7
Neglected Pool	5
Other Invertebrate	5
Other Vertebrate	4
Other (see description)	3
Bed Bug	3
Cockroaches	2
Bats	1
Bees	1
Snake	1
Squirrels	1
Wasps/Yellowjackets	1
<b>Grand Total</b>	<b>167</b>

### Service Requests

During January, there were 167 service requests ranging from bats, wasps, and yellowjackets. Rodent issues continue to be the most common resident request, followed by skunks, coyotes and raccoons. Pictured below is a fungus gnat sitting on a mushroom found on the Hetch-Hetchy trail in the City of Mountain View (Photo courtesy of Andy Bentley).



### Insect Identification

During January, there were five samples submitted by the public for identification as “walk-in” requests. Four of the specimens were identified as two types of biting mites: tropical rat mite (*Ornithonyssus bacoti*) and *Haemolaelaps* species (pictured to the right). Both are ectoparasites commonly found on rats and only feed at night. They cannot sustain themselves on human blood alone, and will die out once rats are removed. If you notice rodents around your home or neighborhood, please call us for an inspection.



*Biting mite from the Haemolaelaps genus*

## Outreach Programs

During the month of January, our Health Educator provided educational hands-on presentations to more than 600 program participants in Santa Clara County. Program participants included Elementary students, teachers, and parents. Presentations are offered in individual classroom settings or school assemblies. If you are interested in hosting a presentation focused on vectors, vector-borne diseases, or wildlife, please contact our Health Educator, Hung Pham, at (408) 918-4794.



## Mosquito Trapping in January

Trap Type	Site Name	Species	Total
NJLT	Gilroy Ag Farm	None	0
	Hellyer Park NJLT	None	0
	Kelley Park NJLT	None	0
	Oakcreek Pump Station	<i>Culex inornata</i>	3
		<i>Culex tarsalis</i>	1
	Oka Road NJLT	None	0
	PAWC	None	0
	San Martin Coop Site	None	0
	Sunken Gardens NJLT	<i>Culex pipiens</i>	11
	Vector Control Yard NJLT	None	0
Westmont FFA	<i>Culex incidens</i>	6	
	<i>Culex pipiens</i>	2	
	Total		23

New Jersey Light Traps (NJLT) continued to be used during January to collect adult mosquitoes and other nocturnal flying insects attracted to 25 Watt light bulbs. Traps are usually left in the field anywhere between 14-29 nights, and are collected on a weekly basis by Vector Control Staff. Specimens collected are later identified at the Vector Control laboratory. In January, NJLTs captured a total of 23 specimens compared to 31 in December, 2018.





Santa Clara  
County Vector  
Control District

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## Vector Control History

The Vector Control District was formed in 1988 and is one of 12 special districts located in the greater San Francisco Bay Area charged with providing vector control per California health, safety, and government codes. The District is one of six in the State where the County Board of Supervisors acts as the trustee and oversees operations. Funding for District work comes from a county-wide property tax assessment.



***“A VECTOR is any animal that can transmit disease to animals or people.”***