

Santa Clara County Vector Control District Operations and Surveillance Report March 2018



<i>Table of Contents</i>	
	<i>page</i>
Manager's Message	1
Operations Report: Curbs, Catchbasins and larval mosquito surveillance	2
Operations Report: Neglected Pools and Mosqui- tofish	3
Invasive Aedes: Adult Mosquito Trapping	4
Tick-borne Disease and West Nile Virus Surveillance	5
Public Service Requests and Insect Identification	6

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 in humans.

Services Provided

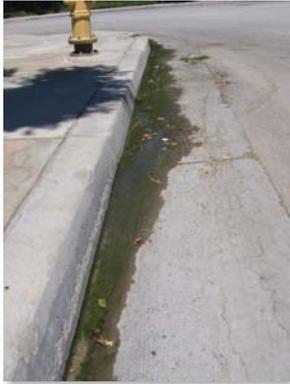
- Detection of the presence/prevalence of vector borne diseases, such as Plague, West Nile Virus, rabies, & Lyme disease, through ongoing surveillance and testing
- Routine inspections, and treatment as necessary, of known mosquito and rodent sources
- Response to customer initiated service requests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

Manager's Message

This District recognizes staff member Jose Chirino for Employee Excellence as a Vector Control Technician II. Jose has worked at the District for 11 years providing outstanding services to residents for mosquito control and rodent consultation.

Operations Report: Curbs and Catchbasins

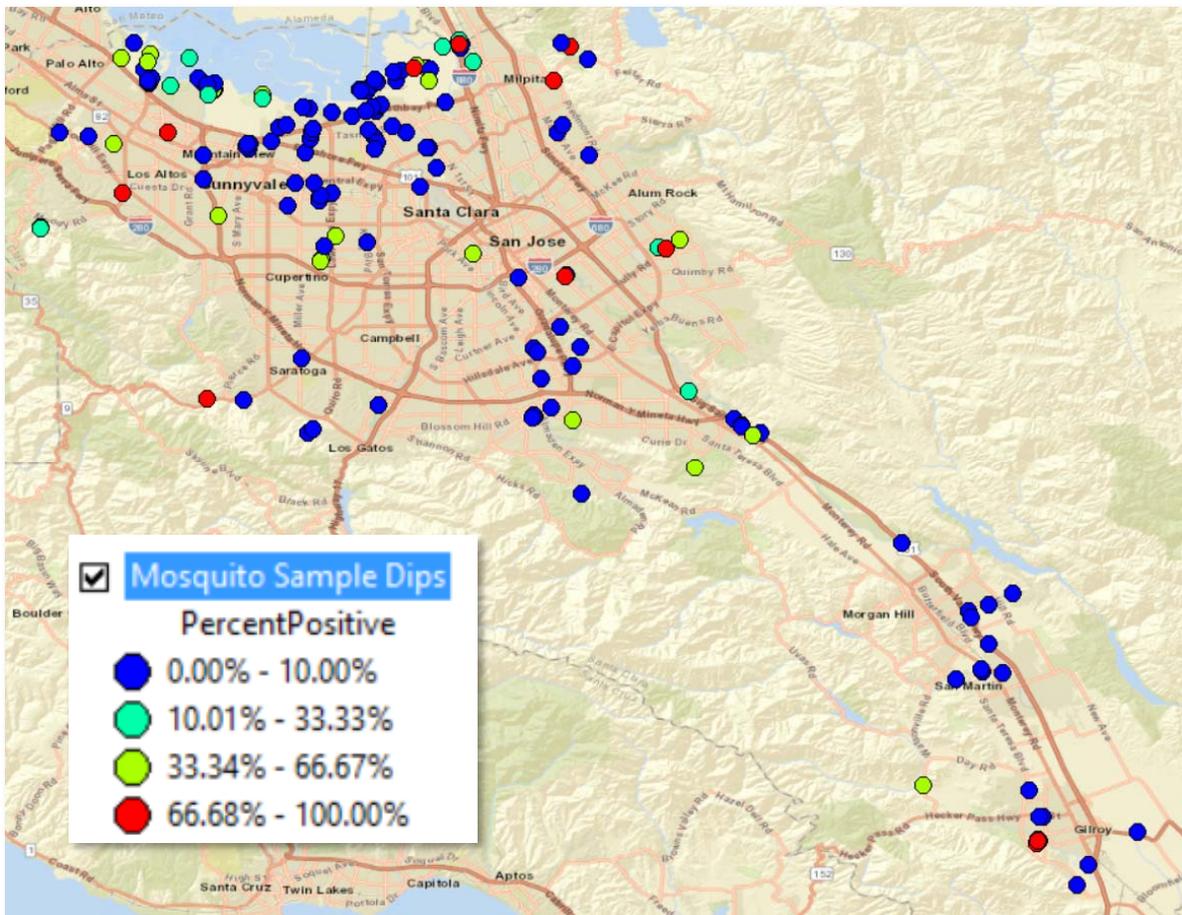
Street curbs



Stormwater Catchbasins

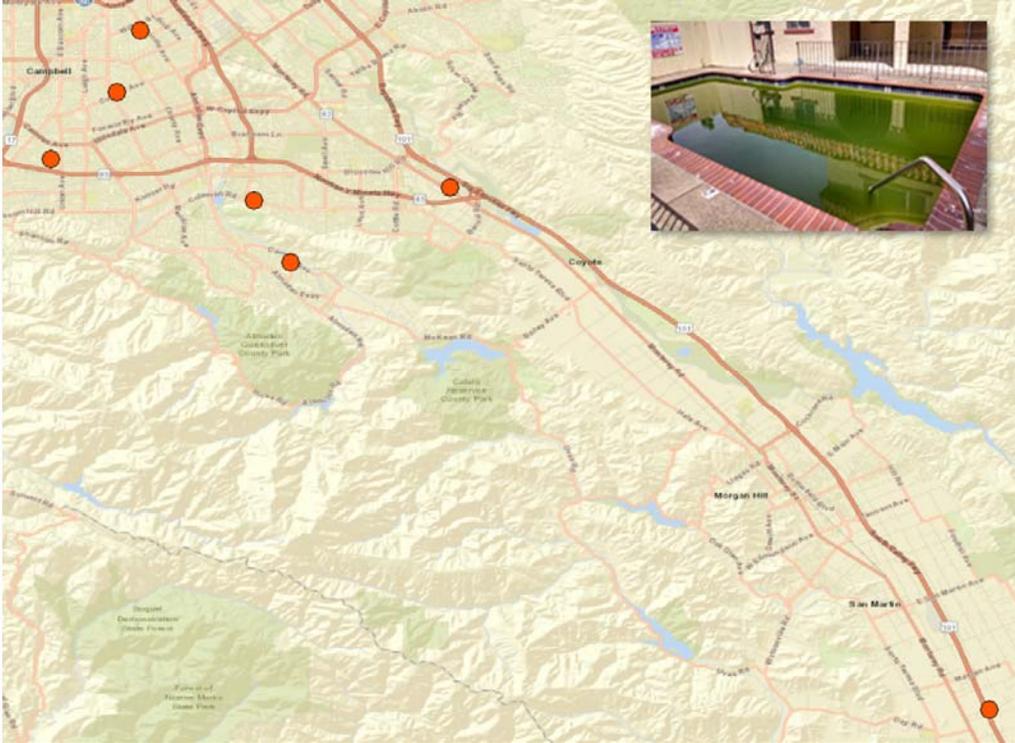


The District employs seasonal staff to check and treat mosquitoes in flooded street curbs and stormwater catchbasins. These sites hold standing water due to rainfall or urban runoff from domestic water usage. No operations in these habitats were conducted during March 2018.



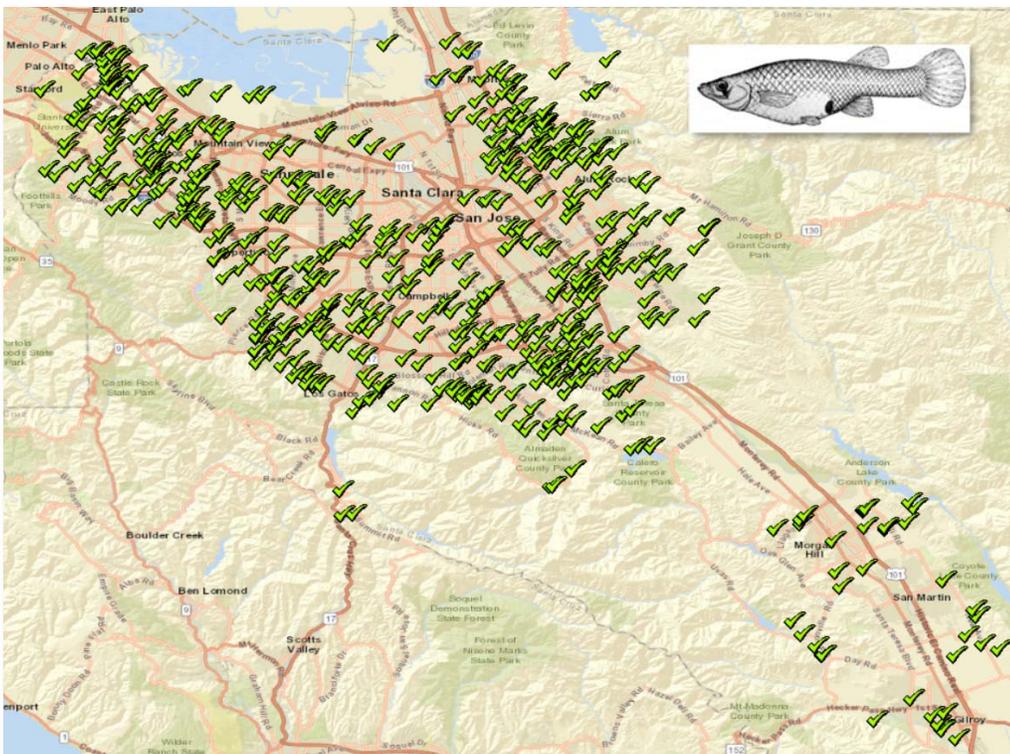
Mosquito surveillance picked up in March as the warmer weather came. The 164 locations included ponds, marshes, creeks and other flooded areas.

Operations Report: Neglected Pools



Stagnant water in neglected swimming pools can produce hundreds of mosquitoes and cause a local nuisance to neighborhoods. **The District inspected 7 pool locations during March.**

Operations Report: Biological Control with Mosquitofish



The mosquitofish is a topminnow (*Gambusia affinis*) that is a natural predator of larval and pupal stage mosquitoes. District staff deliver fish for stocking backyard sites like fountains, ponds, and rain barrels. **The District does not deliver fish during the winter. A total of 8,458 fish were delivered to 711 properties during 2017.**

Trapping Activities in December and January



Invasive Aedes Trapping
Continued efforts to find exotic mosquitoes, *Aedes aegypti* or *Aedes albopictus* during the winter months have employed the Biogents Sentinel trap that utilizes both visual and odor-based attractants.

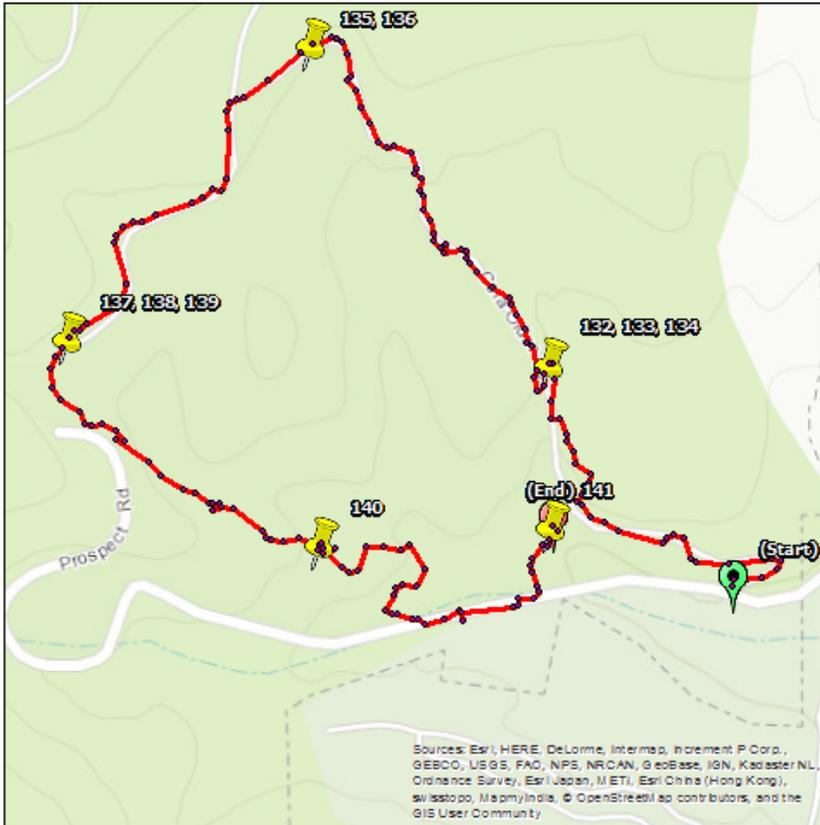
The BG Sentinel traps use a Human Odor Lure (lactic acid) to entice day-biting mosquitoes to enter the trap.



Typically the trap is left overnight or longer depending on battery or AC hookup.

Detection Method	Trap Nights	Positive Detections
Ovicup Trap	0	0
Biogents Sentinel Trap (BG-Sentinel)	50	0
Autocidal Gravid Trap (AGO or MAGO)	19	0
Public Submission of Day-biting mosquitoes Travel Cases (Zika, Chikungunya, dengue)	3	0

Tick Disease Surveillance



Seasonal surveillance for tick-borne disease is from November through March. Ticks were sampled from certain county, city and state parks with popular hiking trails. Staff utilized a phone app called GAIA GPS to measure distance and elevation travelled. Over 70 trails were sampled across the county for both Western black-legged and Pacific Coast ticks, the former is known



A female of Western black-legged tick,

West Nile Virus Update

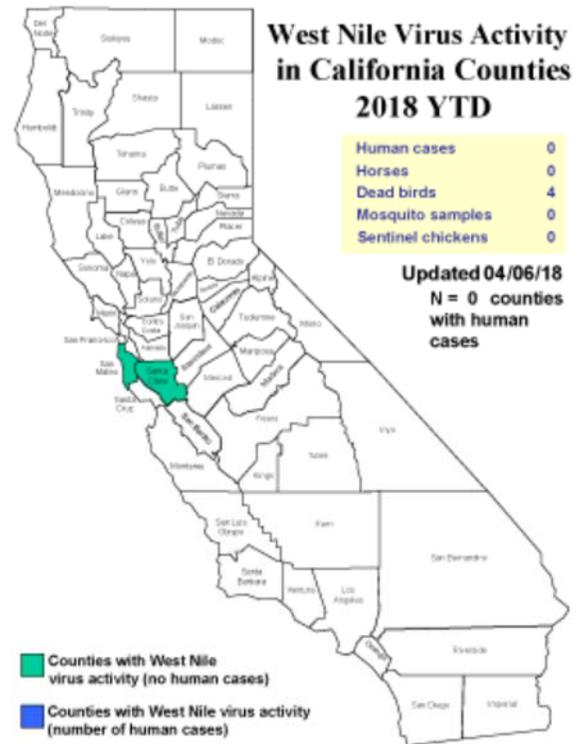
Statewide:

As of April 6th 1, 2018, 4 dead birds have tested positive for West Nile Virus (WNV) in California (see map at right). At this time last year, 3 positive birds had been reported.

No positive mosquito samples have been detected in the state so far this year. To date, no human cases have been reported this year.

Santa Clara County:

As of April 1, 2018, 52 dead birds have been reported in Santa Clara County. Of these reported birds, 17 have been tested for WNV and 2 were found positive. The Sentinel Chickens Program will start in April 2018



Count of bird_id species	test_status		Grand Total
	Negative	Positive	
American Crow		7	10
Cooper's Hawk		1	1
Dark-eyed Junco		1	1
Hawk		1	1
House Finch		1	1
House Sparrow		1	1
Sparrow		1	1
Unknown		1	1
Grand Total		14	16

Public Service Requests

Count of ItemID	
Issue	Total
Bats	3
Bed Bug	2
Bees	6
Coyote	13
Gambusia (Mosquito Fish)	20
Midges/Gnats	1
Mosquitoes	15
Neglected Pool	8
Opossum	5
Other (see description)	3
Other Invertebrate	3
Other Vertebrate	5
Raccoons	6
Rodents	58
Skunk	6
Squirrels	2
Wasps/Yellowjackets	4
Grand Total	160

During March there were 160 calls for service among a wide range of issues including rodents, mosquitoes, requests for mosquitofish, stinging insects (bees and yellowjackets) and wildlife. Services provided include home inspections for rodents or wildlife and phone consultations. Calls regarding rodents and mosquitofish were highest in frequency.

Insect Identification Service



Insect Identification

11

Eleven Insects were submitted by residents for identification during March including: drugstore beetles, silverfish, oriental cockroach, bedbugs, Western black-legged tick, booklice and tropical rat mites (as depicted on left). Those mites are associated with roof rats that enter homes; the mites disperse and bite residents causing severe itching that lasts from days to weeks. Residents are advised to address the rodent infestation in order to resolve the biting mite issue.

District Open House

Santa Clara County Vector Control District



OPEN HOUSE

Tuesday, April 17, 2018
10:00 AM - 3:00 PM
1580 Berger Drive
San Jose, CA 95112



The Vector Control District would like to welcome you to our 4th Annual Open House. This event marks 30 years of protecting public health and is aimed at educating the public about Integrated Pest Management and the importance of Mosquito and Vector Control.



- Mosquitoes, Ticks, Bedbugs, Wildlife
- Lab Tours
- Mosquitofish in Action
- Mock Backyard Inspection
- Insect Traps
- Bees and Beehives
- Rat & Mouse Control
- Insects that Feed on Mosquitoes
- West Nile Virus & Zika Virus Prevention
- Arts & Crafts
- Marshland Vehicles
- Other Activities

Bring Bugs and Insects for an ID!

Santa Clara County Vector Control District
(408) 918-4770
SCCvector.org



Santa Clara
County Vector
Control District
1580 Berger
Dr., San José,
CA, 95112
408-918-4770

Our District Mission is to detect and minimize vector-borne diseases, to abate mosquitoes, and to assist the public in resolving problems with rodents, wildlife, and insects of medical significance in Santa Clara County.



"A VECTOR is any animal that can transmit disease to animals or people."