



COUNTY OF SANTA CLARA VECTOR CONTROL DISTRICT

Operations and Surveillance Report

MARCH 2019

IN THIS ISSUE

MANAGER'S MESSAGE	2
SERVICES AVAILABLE	3
OPERATIONS REPORT	4 - 5
WEST NILE VIRUS SURVEILLANCE	6 - 8
PUBLIC SERVICE REQUESTS	9
PROFESSIONAL DEVELOPMENT	10
OUTREACH PROGRAM	11

KEEP WILDLIFE WILD

Learn how to not attract wildlife to your home.

With increasingly warmer weather, wildlife activity also rises. Mountain lions and coyotes adjust rapidly to changes in their environment and have come accustomed to humans. Follow these steps to avoid attracting wildlife to your home:

- Pick up fallen fruit
- Trim dense vegetation
- Secure garbage cans with locking lids

Visit sccvector.org for a full prevention list.



MESSAGE FROM THE MANAGER



Nayer Zahiri
County of Santa Clara
Vector Control District Manager

Spring time causes a variety of different animals to be active, including mosquitoes, wildlife, and Oak Tussock moths. Although they are more often an agriculture issue, Santa Clara County Vector Control District (SCCVCD) highly encourages the public to avoid touching these attractive caterpillars. They are mostly active during spring, and touching their “hairs” can cause skin irritation and dermatitis. They often hang from oak trees by a thread, and may also be seen in leaf litter or on the tree bark.

If you would like to have a caterpillar or any insect identified, SCCVCD offers free insect identification via picture or walk-in samples.

SCCVCD continues to detect and minimize vector-borne diseases, abate mosquitoes, and assist the public in resolving problems that can cause diseases, discomfort, or injury to the public of Santa Clara County.

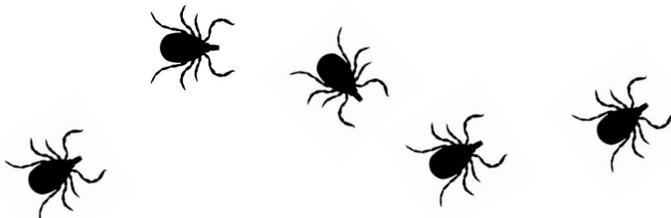
The prevention of vector-borne disease outbreaks remains the District’s primary goal and its most important responsibility to the public.

Respectfully,

Nayer Zahiri



Oak Tussock Moth



SERVICES AVAILABLE

SCCVCD is committed to protecting the public from vectors that are capable of transmitting diseases or creating a nuisance.

The services listed below are available for free to the public in Santa Clara County:

- 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, and others).
- Delivery of mosquitofish to control mosquito populations. Mosquitofish are a topminnow (*Gambusia affinis*) that is a natural predator of larval and pupal stage mosquitoes.
- K-12 educational presentations and hands-on activities tailored for individual classroom settings or school assemblies.
- Educational presentations for homeowner associations, private businesses, civic groups, and other interested organizations.
- Educational booths for community, corporate, or school events
- Informational material on all vectors and vector-borne diseases.



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

OPERATIONS REPORT

The District employs seasonal staff to check and treat mosquito larvae in flooded street stormwater catch basins, curbs, naturally breeding sources, and ponds.

These sites hold standing water due to the rainfall or urban runoff from domestic water usage.

Stagnant water in these areas, and in neglected swimming pools, can breed mosquitoes that can carry dangerous human diseases like West Nile virus.

The Santa Clara County Vector Control District actively monitors such locations to prevent these local nuisances from emerging and potentially spreading diseases.



March Updates

- Staff treated 74 locations throughout the County that were positive for mosquito larvae (Figure 1).
- Delivered mosquitofish to 34 locations to stock backyard areas like fountains, ponds, and rain barrels (Figure 2).
- Responded to 7 reports of neglected swimming pools (Figure 2).
- Inspected 33 locations for possible mosquito breeding (Figure 2).

OPERATIONS REPORT DATA

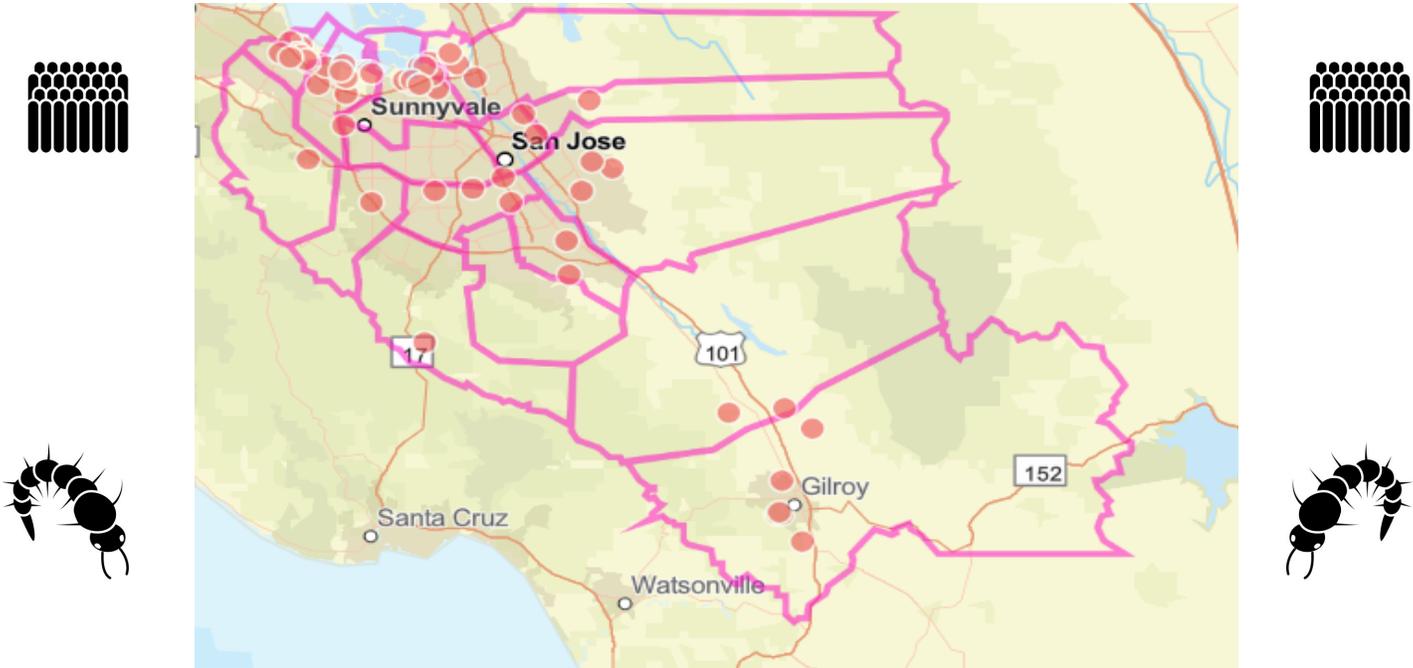


Figure 1. Areas treated for mosquito larva during the month of March.

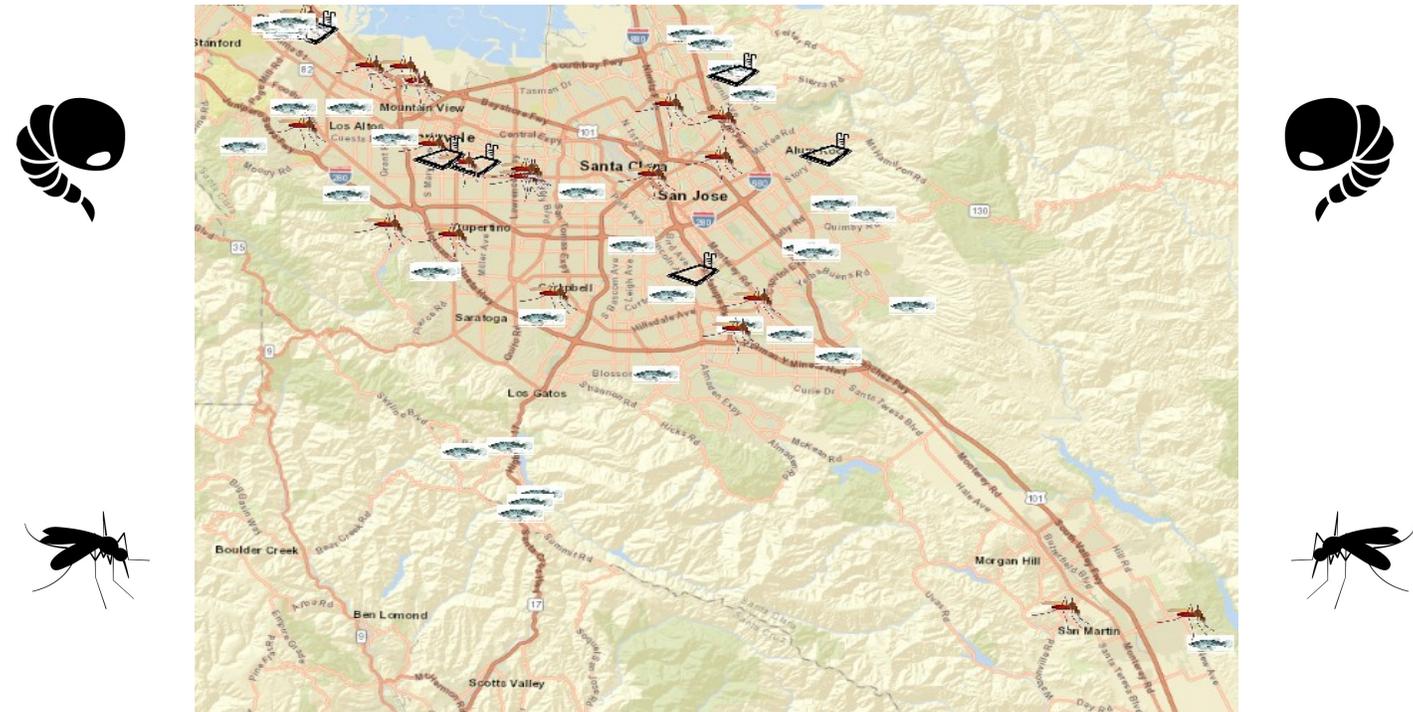


Figure 2. Locations of mosquitofish deliveries, reported neglected pools, and mosquito breeding locations.

WEST NILE VIRUS SURVEILLANCE

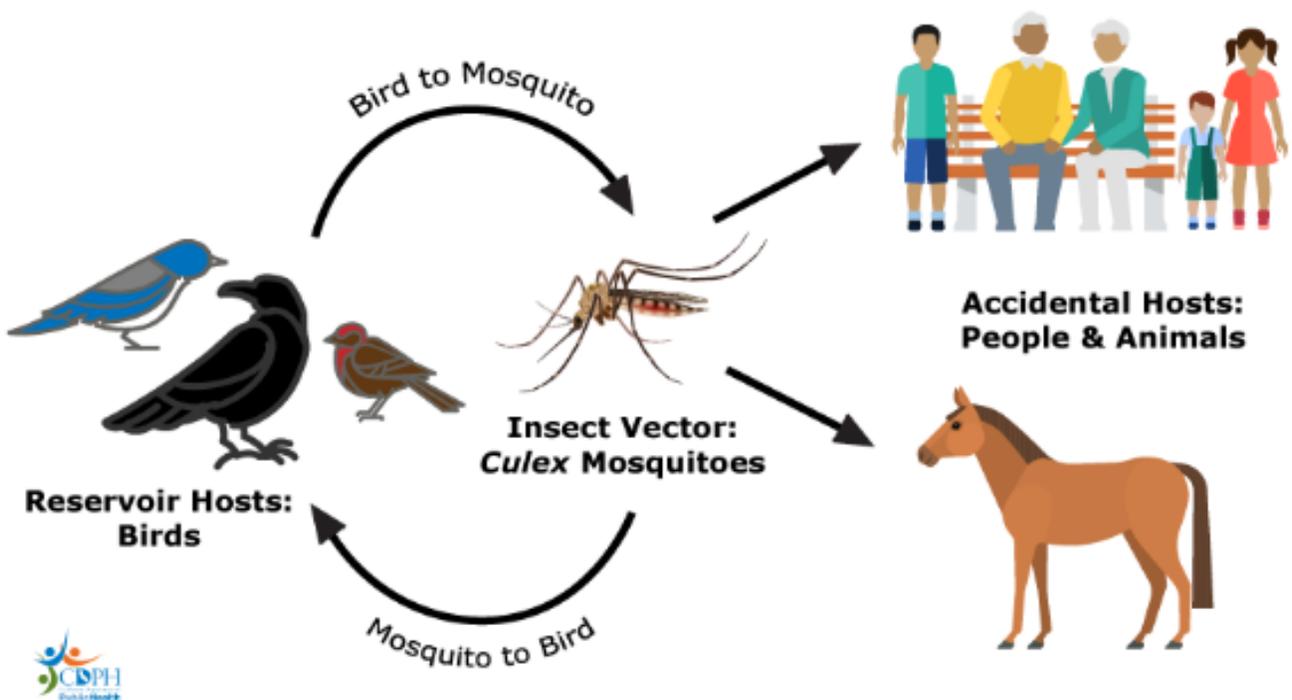
STATE WIDE

As of April 9, 2019, there were only two detections of West Nile virus in California. One positive bird was reported by San Diego County and there was one positive mosquito detection identified in Orange County. At this same time in 2018, there were two positive bird detections.

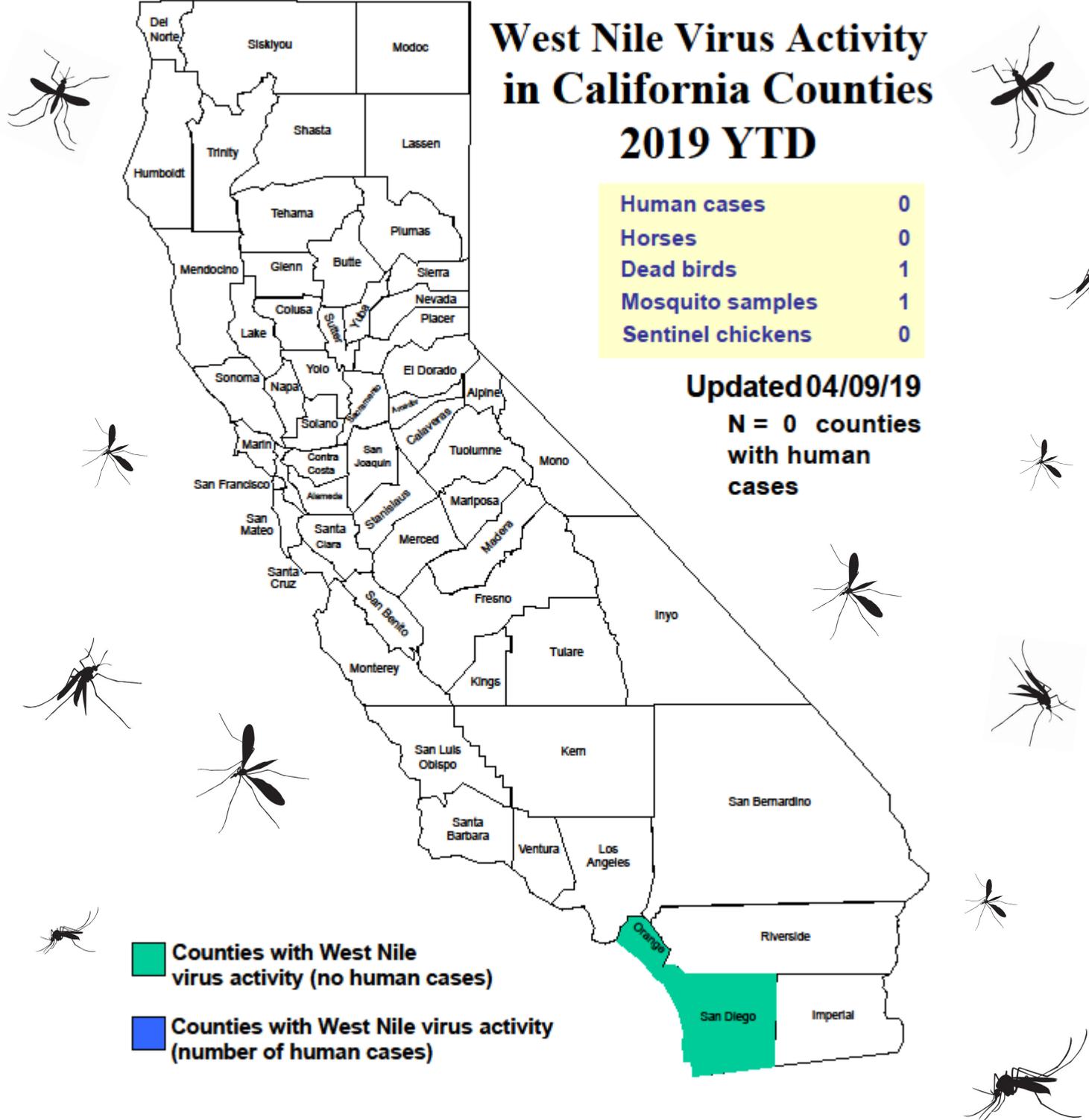
SANTA CLARA COUNTY

There have been no positive bird or mosquito detections in the County as of April, 2019. Surveillance programs are constantly running to ensure early detection of viruses.

West Nile Virus Transmission Cycle



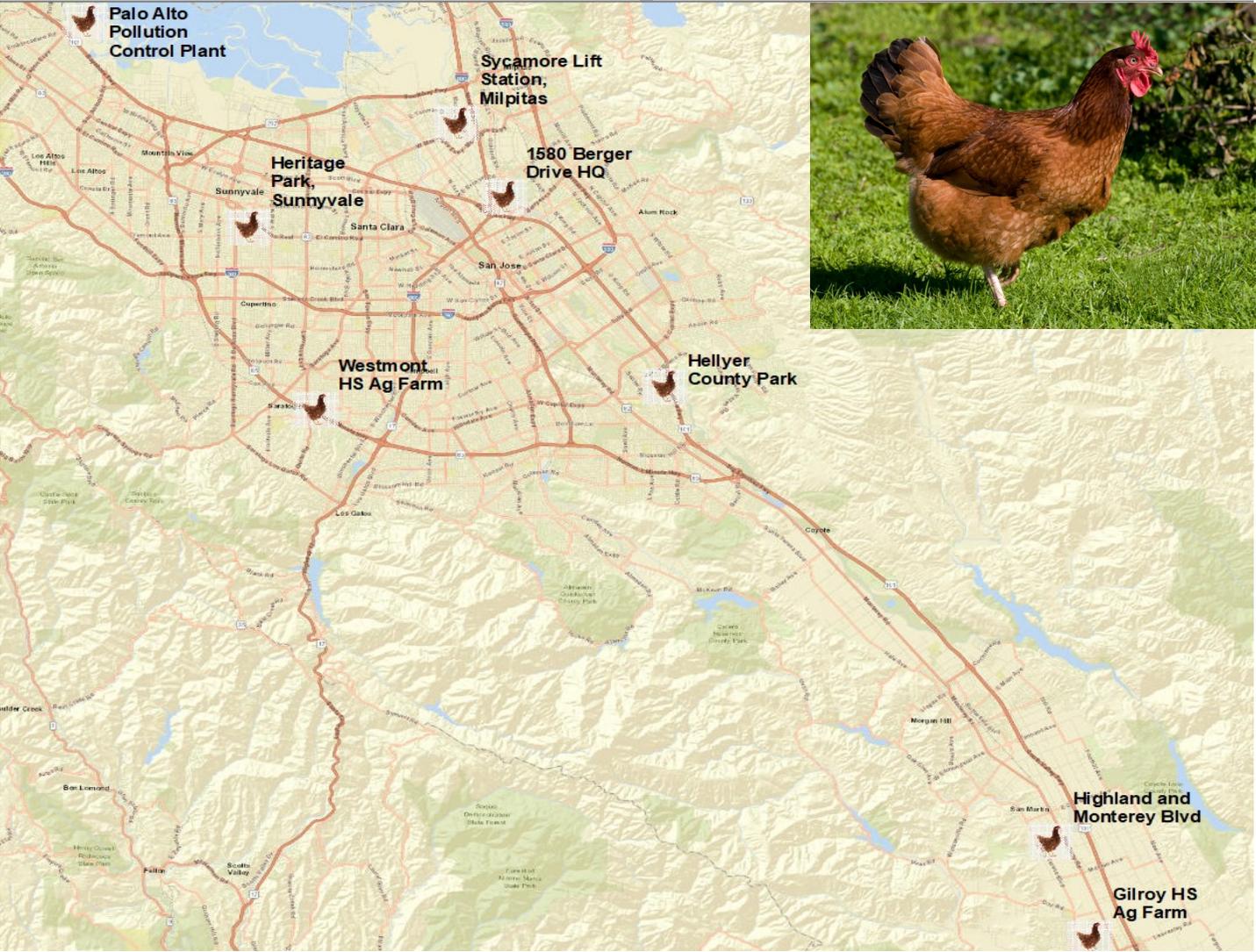
WEST NILE VIRUS SURVEILLANCE IN CALIFORNIA COUNTIES



WEST NILE SURVEILLANCE

SENTINEL CHICKEN PROGRAM

The District uses sentinel chickens to proactively monitor for West Nile virus (WNV), Saint Louis Encephalitis (SLE), and Western Equine Encephalitis (WEE) throughout the County. Fifty-six sentinel chickens, all Rhode Island Reds, were distributed among eight flocks across the County. Every hen is tested to ensure it is free of viruses or antibodies from a previous infection. The chickens continue to be tested twice a month for WNV, SLE, and WEE by the California Department of Public Health.



PUBLIC SERVICE REQUESTS

SERVICE REQUESTS

A total of 176 service requests were received during March. Rodents and mosquitofish are currently the most popular service requests, followed by mosquitoes and wildlife. Neglected and abandoned pools reports have also increased from previous months.

INSECT IDENTIFICATION

There were 18 requests submitted for insect identification during the March, which included a clothes moth larva (see below). Clothes moths feed on organic fibers such as wool, causing damage to clothing. Adult moths do not feed and acquire all of their nutrition during their larval stages. Their only goal upon hatching from their cocoons is to reproduce. Moth balls containing naphthalene or para-dichlorobenzene are effective in controlling these moths in closets and dressers.



Clothes moth emerging from is cocoon

ISSUE	TOTAL
Rodents	50
Gambusia (Mosquitofish)	34
Mosquitoes	22
Skunk	11
Coyote	10
Neglected Pool	7
Opossum	6
Racoons	6
Squirrels	5
Bees	5
Other Vertebrate	5
Wasps/Yellowjackets	3
Bats	3
Bed Bug	3
Other Invertebrate	3
Snake	1
Cockroaches	1
Other (see description)	1
TOTAL	176

PROFESSIONAL DEVELOPMENT

PROFESSIONAL DEVELOPMENT

The SCCVCD successfully passed the Annual Proficiency Panel for 2019. The program ensures quality and combability of arbovirus diagnosis testing of mosquitoes and birds for three diseases: West Nile virus, Saint Louis Encephalitis, and Western Equine Encephalomyelitis. The panel is overseen by the California Department of Public Health and prepared by the Davis Arbovirus Research and Training.



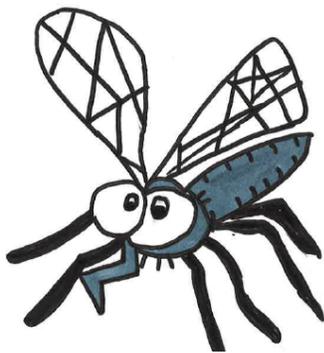
OUTREACH PROGRAM

OUTREACH PROGRAMS

Our Health Educator worked with more than 150 students from several middle schools, and provided educational information and materials on vectors and the prevention of vector-borne diseases. We also received student letters from John Muir Middle School, expressing their gratitude and newly found interests in vectors. Presentations and educational booths are available to schools, community groups, homeowner associations, and other interested parties for FREE. If you are interested in scheduling a presentation or educational booth, please call our Health Educator, Hung Pham, at (408) 918-4794.

Dear Dr. Hung,

I would like to thank you for your presentation about mosquitoes because it will aid us, know more about mosquitoes and how they lay eggs. During your presentation I discover that the female is bigger than the male. This is important because it shows us how to protect ourselves for mosquitos bite. In the future I hope you can teach us more about other insects. 🐛



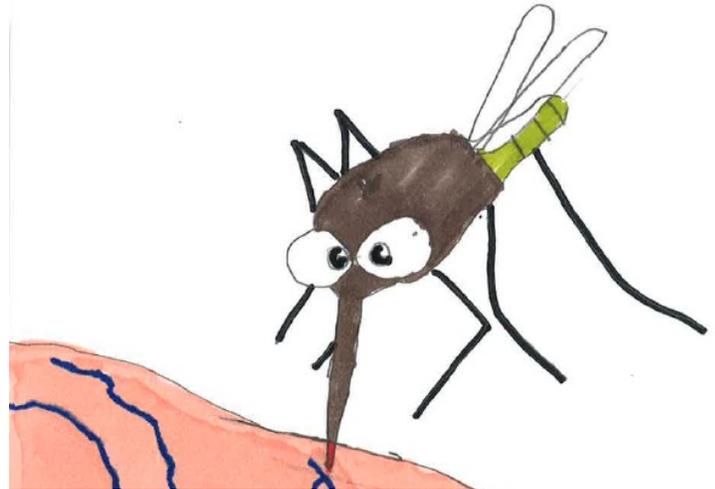
“

I would like to thank you for coming to Muir and talking about mosquitoes because its good to know about insects that could get us sick

”

Dear Dr. Hung,

I would like to thank you for knowing about mosquitoes. During your presentation I see mosquitoes. Late in life I imagine how much more closely. Thanks again,





Yellow fever mosquito — *Aedes aegypti*
(photo for educational purposes only)

MISSION

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

www.sccvector.org



@sccvcd