VECTOR CONTROL DISTRICT
COUNTY OF SANTA CLARA

MONTHLY REPORT

JULY AND AUGUST 2020

IN THIS ISSUE

NOVEL CORONAVIRUS (COVID-19)

Get the latest COVID-19 news straight to your inbox.

Sign up for the Public Health Dispatch newsletter that delivers the latest health information about our community. Additional resources are also available, such as:

- FAQs
- COVID-19 resources library
- County Services during COVID-19
- Home isolation and quarantine guidance

Visit http://bit.ly/NewsletterCOVID19 for more information or to subscribe to the newsletter.

MESSAGE FROM THE MANAGER

Nayer Zahiri
County of Santa Clara
Vector Control District Manager

As we continue to face challenges this year including bad air quality due to the wildfires and a continued pandemic, it is important to remember that vectors pose a health risk to our community as well. The current warm weather provides the perfect environment for mosquitoes to develop from eggs to adults in less than a week. The District continues eliminating mosquito breeding in public areas, but it is also important for everyone to do their part to eliminate accidental breeding in their homes.

Remember to dump and drain standing water at least once a week, as mosquitoes only need a cap of water to lay their eggs. Standing water can collect in old tires, tarps, buckets, and rain gutters. Other items like toys and wading pools should be put away when no longer in use. Rain barrels can also provide the perfect environment for mosquito breeding. Prevent mosquito breeding in rain barrels by making sure no water collects on the rain barrel lids, screening the valve opening, and covering the intake and overflow ports with 1/16 inch fine mesh.

As you add eliminating standing water to your to-do list, also remember to continue social distancing, washing your hands, and wearing your face covering. Together, we can over come all challenges, be it COVID-19 or a vector-borne disease.

Sincerely,

Nayer Zahiri

SERVICES AVAILABLE

The County of Santa Clara Vector Control District is committed to protecting the public from vectors capable of transmitting diseases or creating a nuisance.

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

- Advice, and/or control measures for mosquitoes.
- Phone consultations and advice for rodent infestations and/or wildlife activity.
- Insect identification and confirmation letter. Please mail specimens or email photos during the Shelter-in-Place order.
- Phone consultations for bed bug abatement.
- Yellowjacket and wasp control/nest removal in public areas.
- Dead bird pickup and testing for West Nile virus.
- Mosquitofish to control mosquito populations are available for front door delivery during the Shelter-in-Place order.
- Due to the Shelter-in-place order, school and community presentations, educational booths, and hands-on activities are on hold until further notice.

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

OPERATIONS DATA

MOSQUITO CONTROL: JULY

The District's staff checks and treats mosquito larvae in flooded street stormwater catch basins, curbs, naturally breeding sources, and ponds. These sites can hold standing water due to 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.

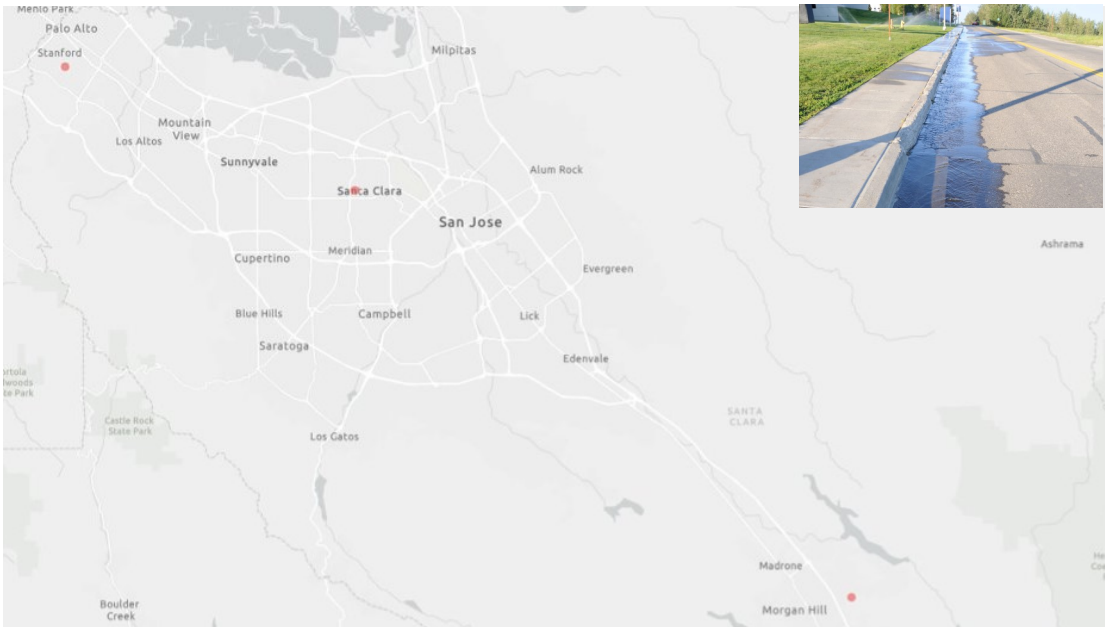
The County of Santa Clara Vector Control District actively monitors such locations to prevent these local nuisances from emerging and potentially spreading diseases.

Map 1. In July, staff inspected 4,693 catch basins and treated 461 that were found to contain mosquito larvae.

OPERATIONS DATA

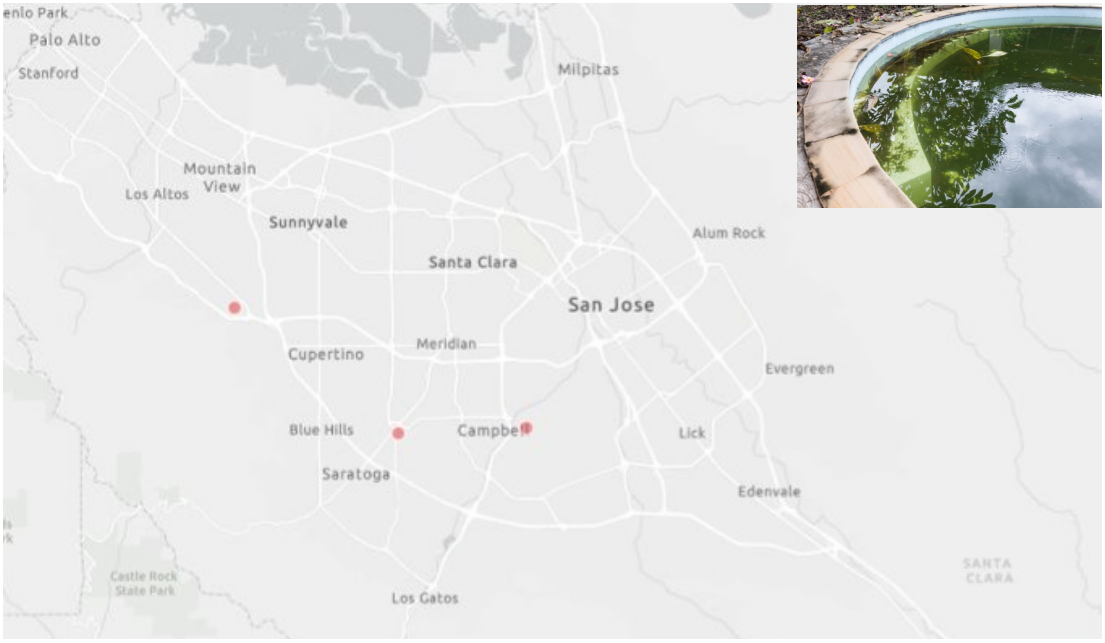
MOSQUITO CONTROL: JULY






Map 2. In July, 14 curb inspections were conducted and 3 were treated to control mosquito breeding.





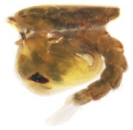

Map 3. Inspected 11 neglected pools and treated 3 that were found to be breeding mosquitoes.

OPERATIONS DATA

MOSQUITO CONTROL: JULY




Map 4. Inspected 263 different locations including man-made habitats such as ponds, creeks, and marshes, treating 108 that were breeding mosquitoes.



Map 5. Stocked 473 mosquitofish in a total of 37 locations.

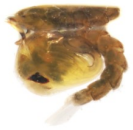
OPERATIONS DATA

MOSQUITO CONTROL: AUGUST


Mosquitoes need standing water to lay their eggs and can do so in as little as a bottle cap of water. Under ideal conditions, they can reach adulthood in less than a week. Due to their rapid development and the small amount of water needed to reproduce, it is especially important to actively monitor for mosquito breeding.

The District's mosquito program focuses on the use of Integrated Pest Management (IPM) to eliminate dangerous mosquitoes before they reach adulthood and start infecting people and animals.



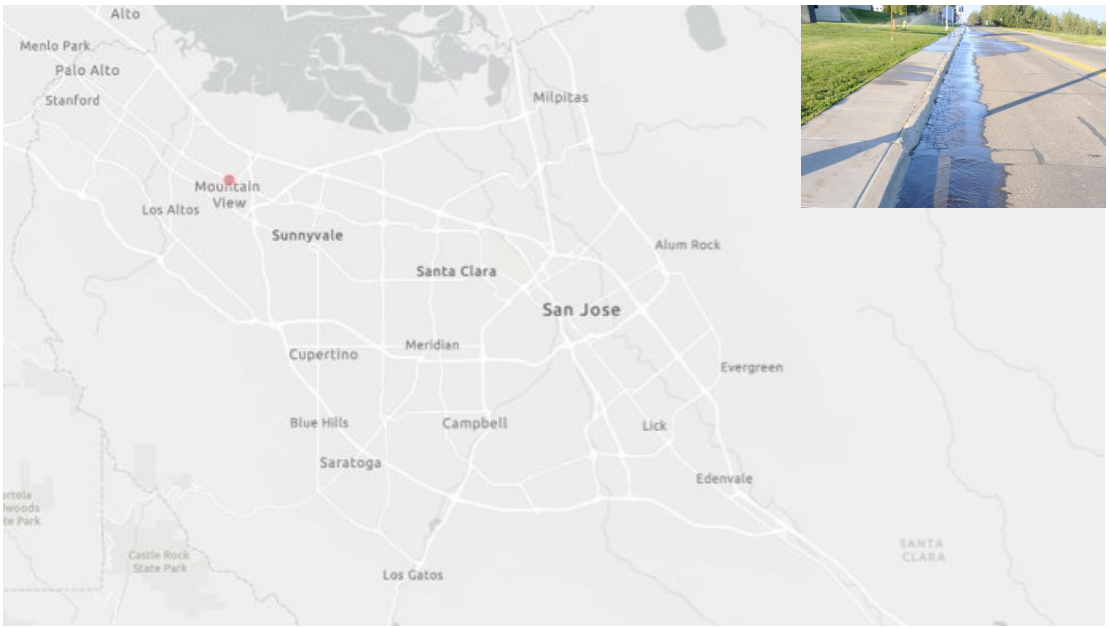



Map 6. In August, staff inspected 1,749 catch basins and treated 101 that were found to contain mosquito larvae.

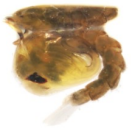
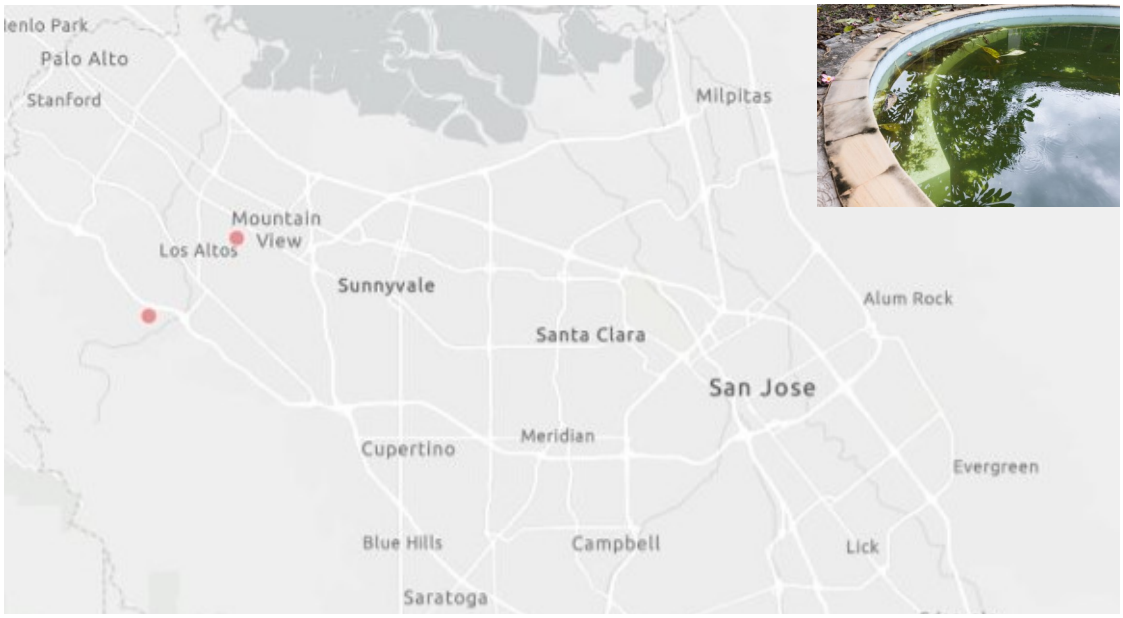
OPERATIONS DATA

MOSQUITO CONTROL: AUGUST






Map 7. In August, 5 curb inspections were conducted and 1 was treated to control mosquito breeding.

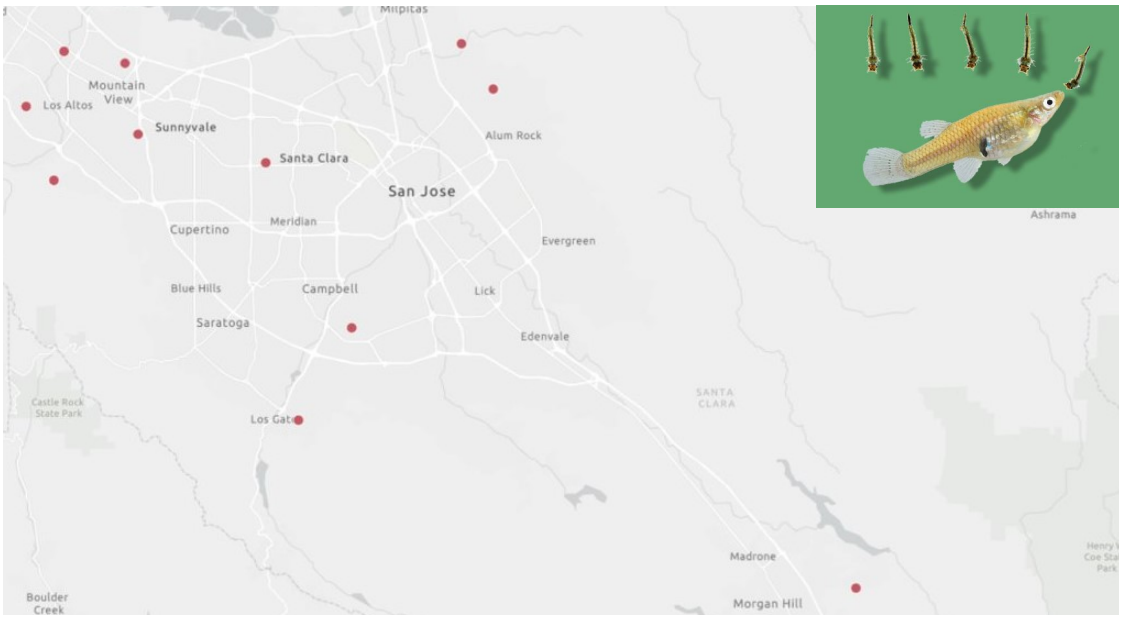





Map 8. Inspected 11 neglected pools and treated 2 that were found to be breeding mosquitoes.

OPERATIONS DATA

MOSQUITO CONTROL: AUGUST

Map 9. Inspected 179 different locations including man-made habitats such as ponds, creeks, and marshes, treating 50 that were breeding mosquitoes.



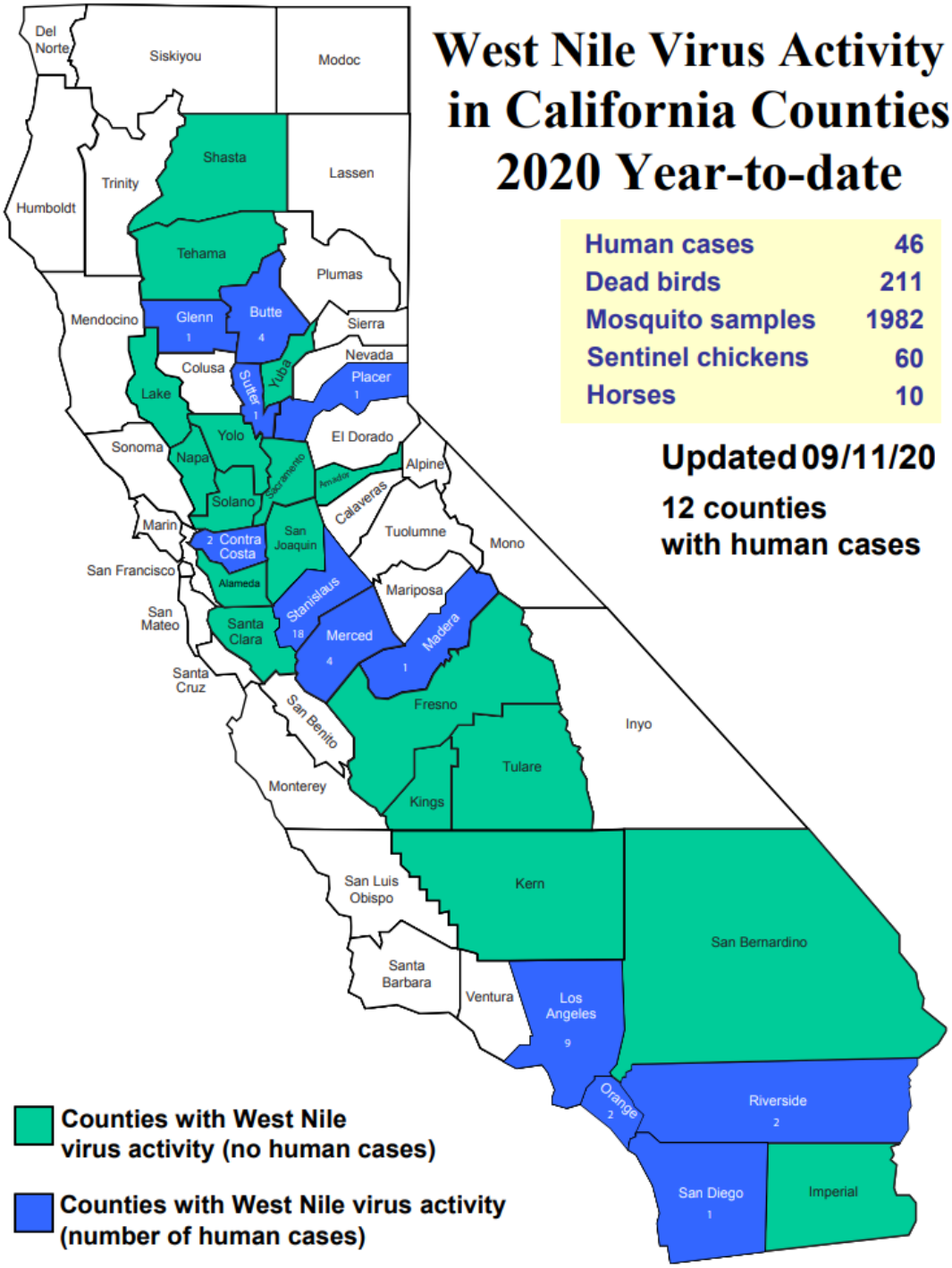
Map 10. Stocked 224 mosquitofish in 13 locations during August.

COUNTY OF SANTA CLARA | CONSUMER & ENVIRONMENTAL PROTECTION AGENCY
1580 BERGER DRIVE, SAN JOSE, CA 95112 | (408) 918-4770
WWW.SCCVECTOR.ORG

MOSQUITO-BORNE DISEASE SURVEILLANCE

STATEWIDE

At the end of June there were 2 West Nile virus (WNV) human cases in California, and by the end of August there were a total of 46 human cases. That is an increase of 44 human cases in a two-month period. Counties reporting human cases include Glenn (1), Butte (4), Sutter (1), Placer (1), Contra Costa (2), Stanislaus (18), Merced (4), Madera (1), Los Angeles (9), Orange (2), Riverside (2), and San Diego (1). To date, 211 birds from 17 counties have tested positive for WNV this year.



MOSQUITO-BORNE DISEASE SURVEILLANCE

SANTA CLARA COUNTY - DEAD BIRD PROGRAM

Diseases such as West Nile virus (WNV) are maintained through the transmission cycle between mosquitoes and birds. Certain birds are more susceptible to disease such as crows and jays. Reporting dead birds is one way you can help us detect the presence of WNV in our community. You can report dead birds online at WestNile.ca.gov or by calling 1-877-WNV-BIRD.

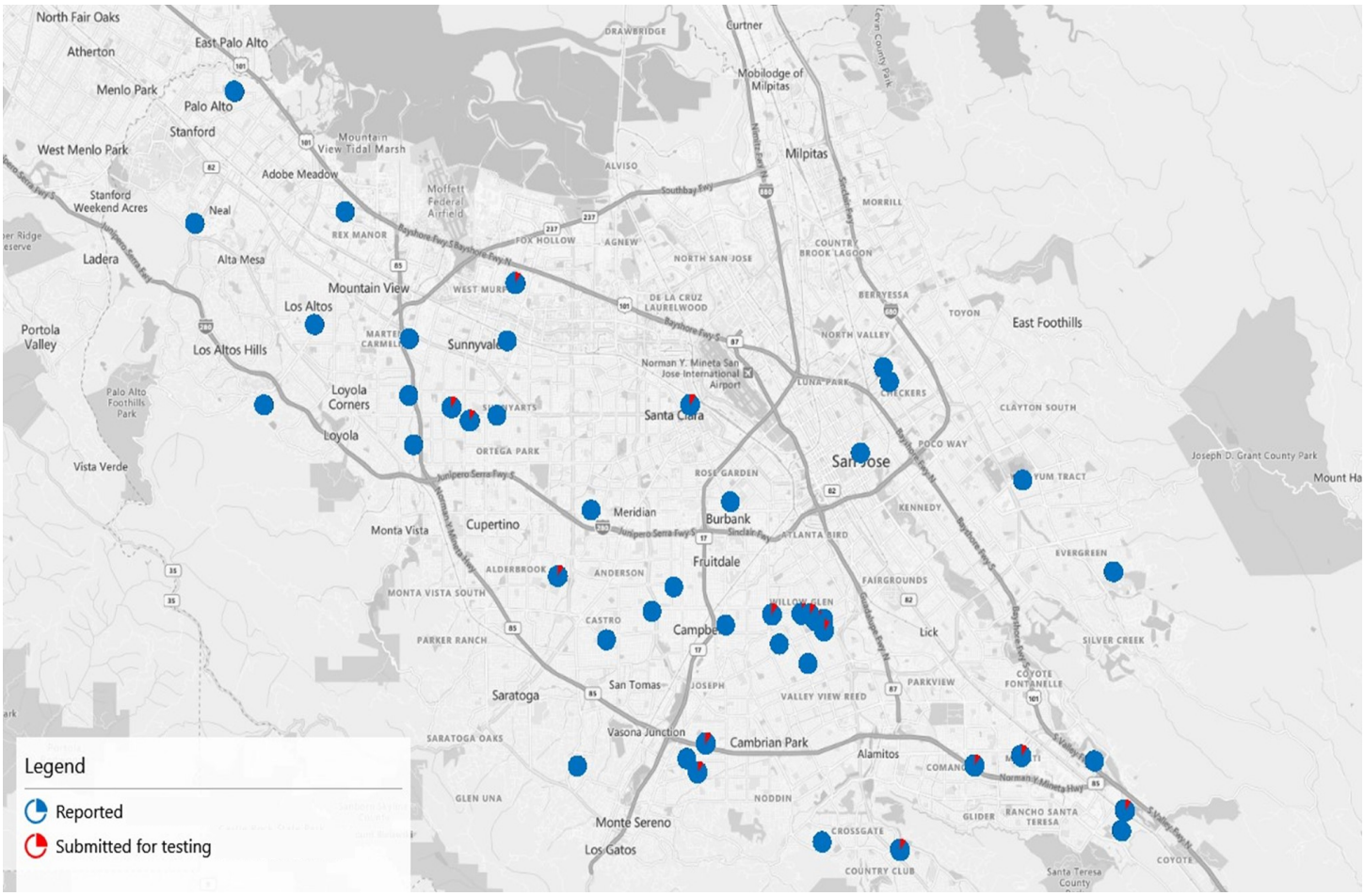
During July, 72 dead birds were reported and 30 were submitted for testing. All birds tested negative for West Nile virus. The dead birds were reported from Cupertino (3), Gilroy (4), Los Altos (9), Los Gatos (1), Mountain View (9), Palo Alto (5), San Jose (30), Santa Clara (5), Saratoga (2), and Sunnyvale (4).

July dead bird surveillance

MOSQUITO-BORNE DISEASE SURVEILLANCE

SANTA CLARA COUNTY - DEAD BIRD PROGRAM

In August, 50 dead birds were reported and 18 were submitted for testing. All birds tested negative for West Nile virus. The reports came from Campbell (3), Los Altos (3), Los Gatos (1), Monte Sereno (1), Morgan Hill (1), Mountain View (2), Palo Alto (1), San Jose (27), San Martin (1), Santa Clara (2), Stanford (1), and Sunnyvale (7).



August dead bird surveillance

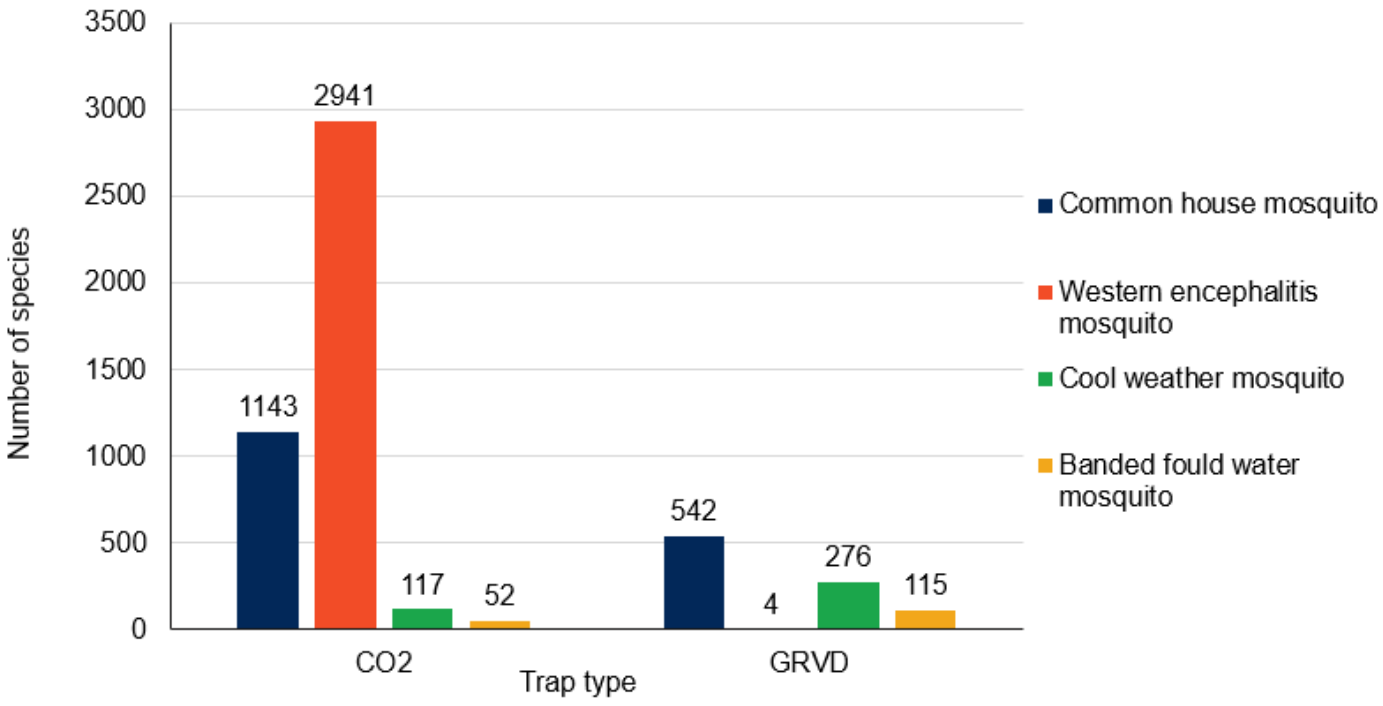
MOSQUITO-BORNE DISEASE SURVEILLANCE

ARBOVIRUS SURVEILLANCE

Mosquito trapping is used to monitor disease throughout the county. Abundance information is used to assist technicians in discovering mosquito issues. The County of Santa Clara County Vector Control District is currently using two methods to trap mosquitoes, which include the use of carbon dioxide (CO2) and gravid (GRVD) traps.

As stated in the name, the CO2 traps emit carbon dioxide to attract mosquitoes. The GRVD traps holds standing water with a mosquito attractant and are intended to attract pregnant mosquitoes. During July, a total of 4,253 mosquitoes were caught using CO2 traps and 937 using the GRVD traps. Species caught include the common house mosquito (*Culex pipiens*), Western encephalitis mosquito (*Culex tarsalis),* cool weather mosquito (*Culiseta incidens),* and the banded foul water mosquito (*Culex stigmatosoma).*

Mosquito species collected in July using carbon dioxide and gravid traps.

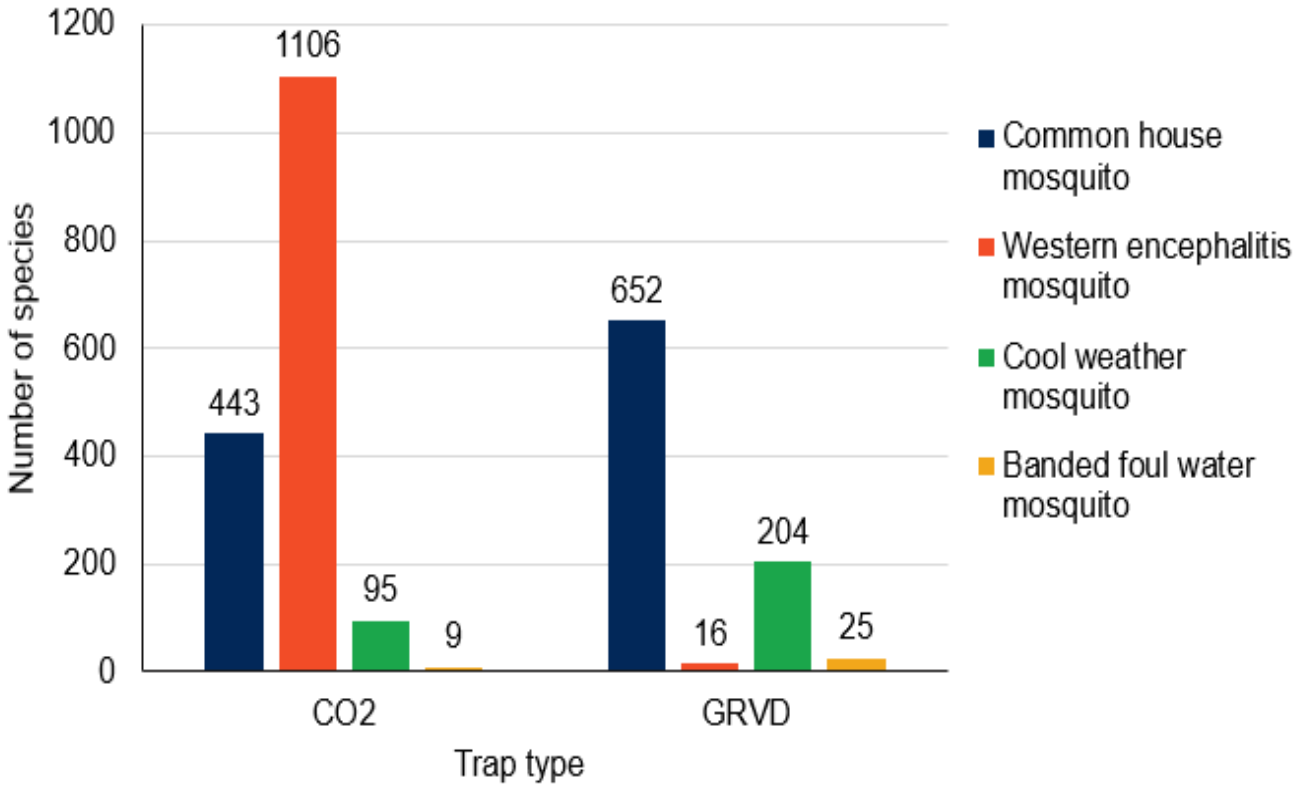


MOSQUITO-BORNE DISEASE SURVEILLANCE

ARBOVIRUS SURVEILLANCE

During August, mosquitoes collected included a total of 1,095 common house mosquitoes (*Culex pipiens*), 1,122 Western encephalitis mosquitoes (*Culex tarsalis),* 299 cool weather mosquitoes (*Culiseta incidens),* and 34 banded foul water mosquitoes. Traps used to collect mosquitoes included CO2 and GRVD traps.

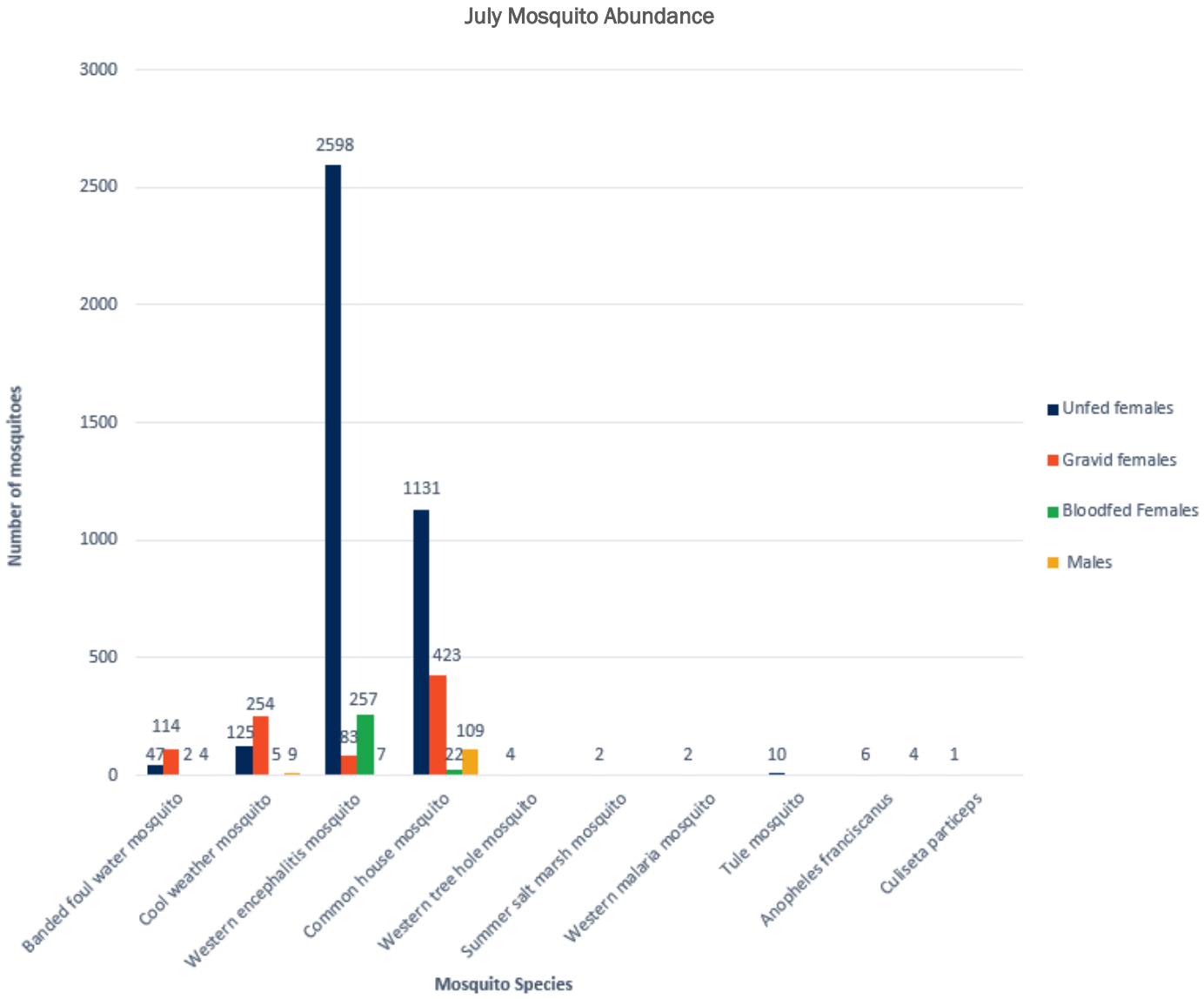
Mosquito species collected in August using carbon dioxide and gravid traps.



MOSQUITO-BORNE DISEASE SURVEILLANCE

ADULT MOSQUITO TRAPPING

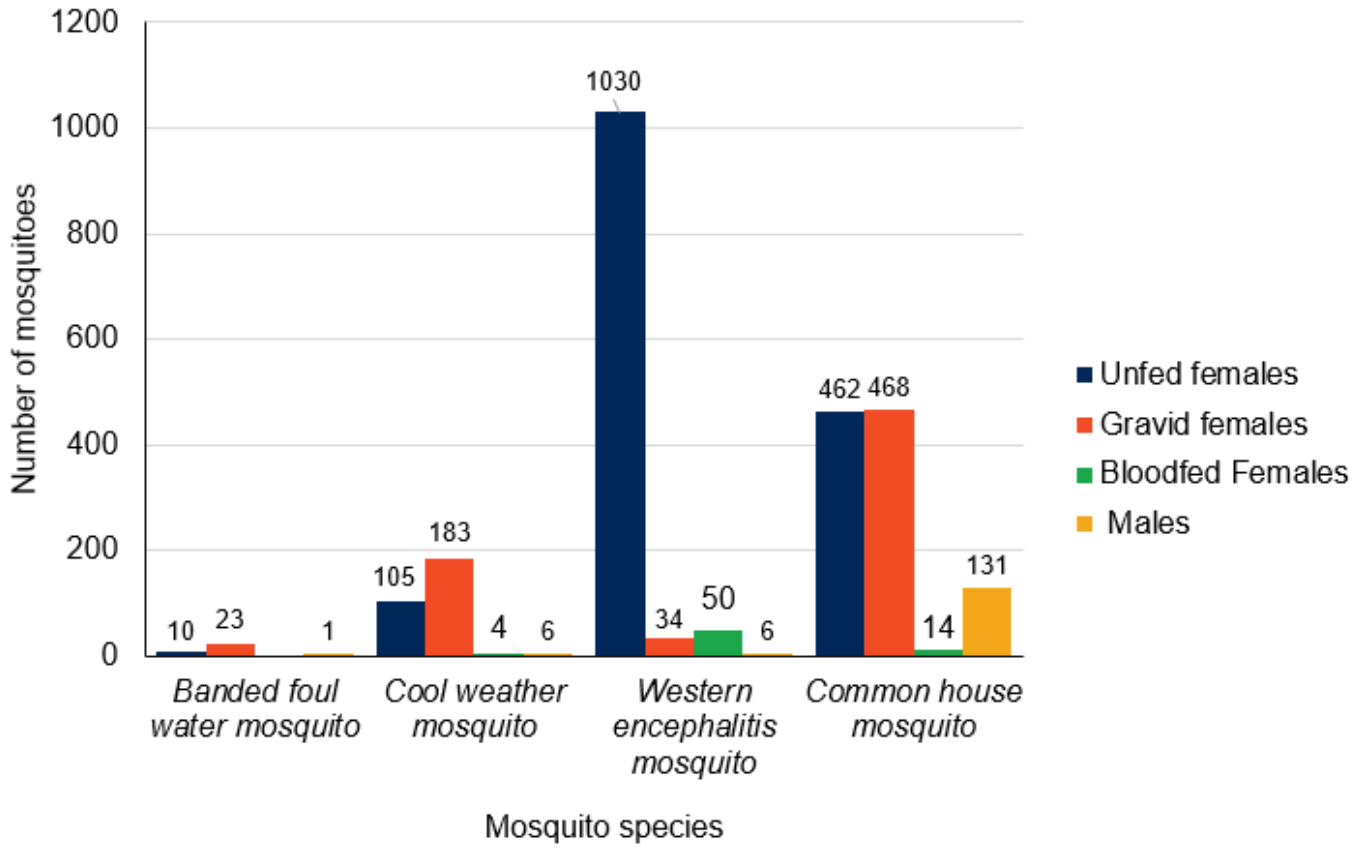
Western encephalitis mosquitoes (2,598) were the most common species caught in July, followed by the common house mosquito (1,131). The Western encephalitis mosquito's habitat ranges from clean to highly polluted waters. They are associated with floodwater, rain pools, and irrigation waters. The common house mosquito can be found in a variety of mosquito habitats such as polluted water, septic tanks, storm drains, fresh water pools, and other locations.



MOSQUITO-BORNE DISEASE SURVEILLANCE

ADULT MOSQUITO TRAPPING

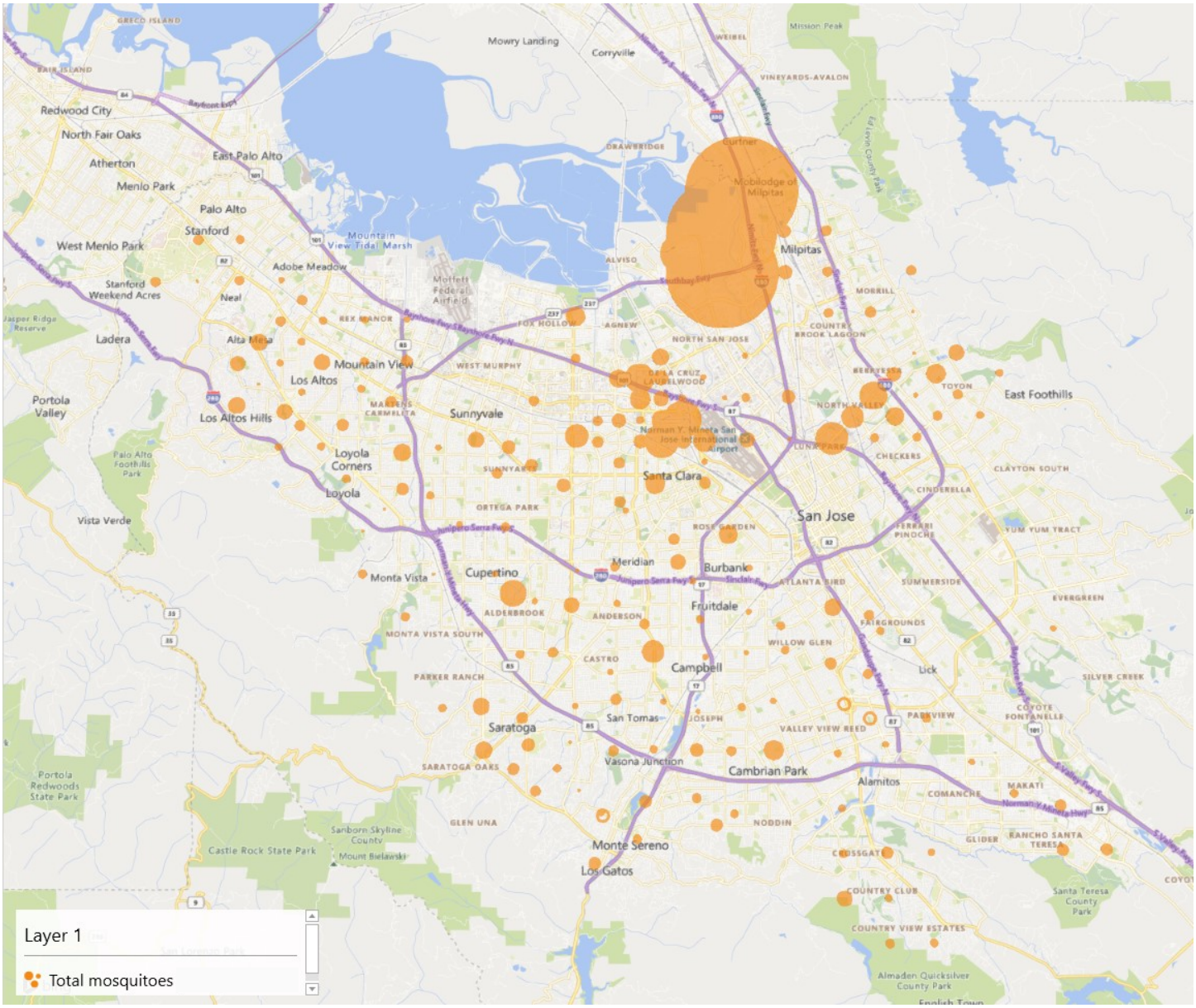
The highest amount of mosquitoes caught in August were Western encephalitis mosquitoes (1,030), followed by the common house mosquito (468). In determining species caught through surveillance trapping, technicians can narrow their search by determining the habitat in which that mosquito species is commonly found.



August Mosquito Abundance

MOSQUITO-BORNE DISEASE SURVEILLANCE

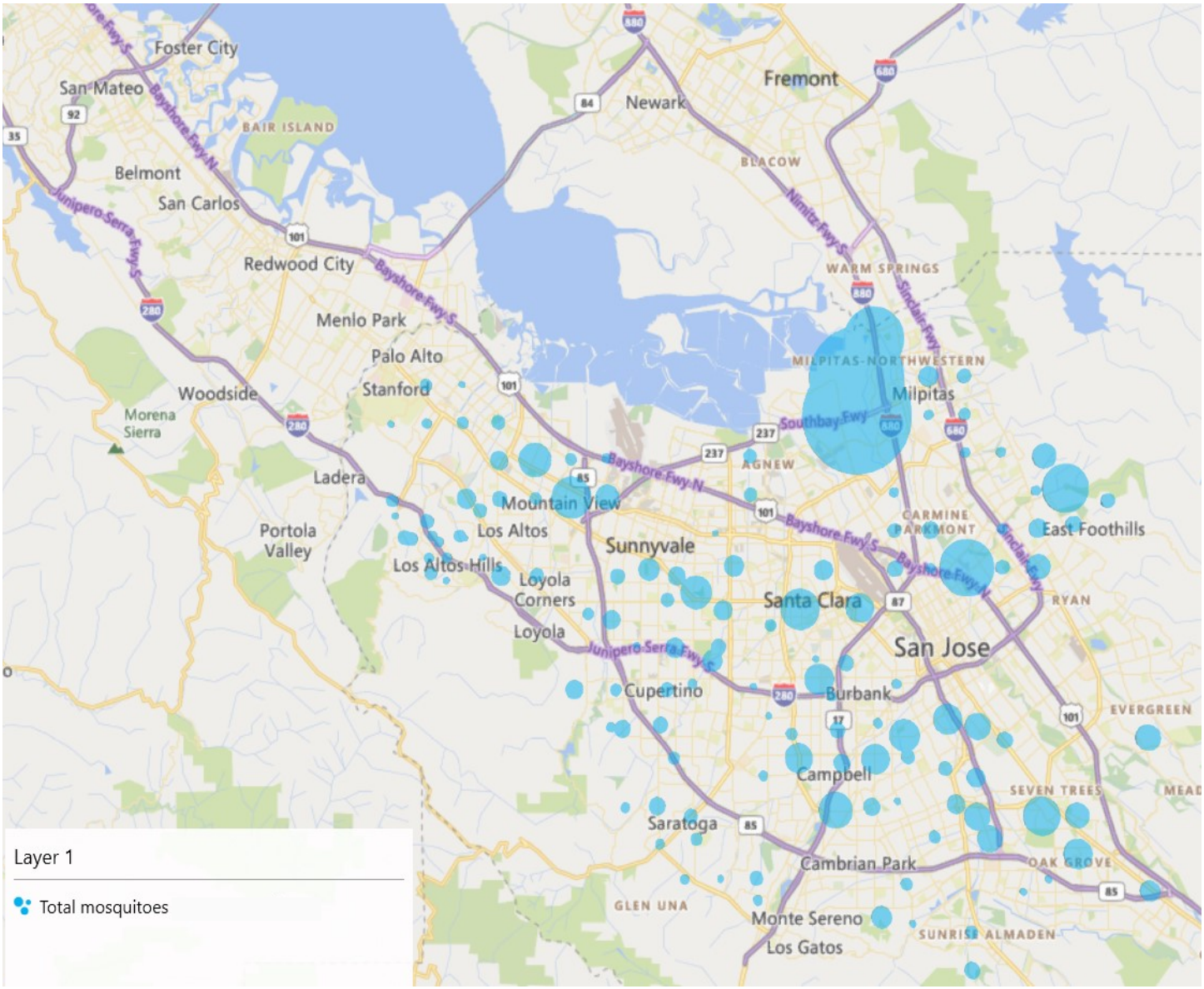
ADULT MOSQUITO TRAPPING



Sites sampled for mosquitoes in July 2020 - carbon dioxide and gravid traps were placed in about 314 sites to trap mosquitoes.

MOSQUITO-BORNE DISEASE SURVEILLANCE

ADULT MOSQUITO TRAPPING

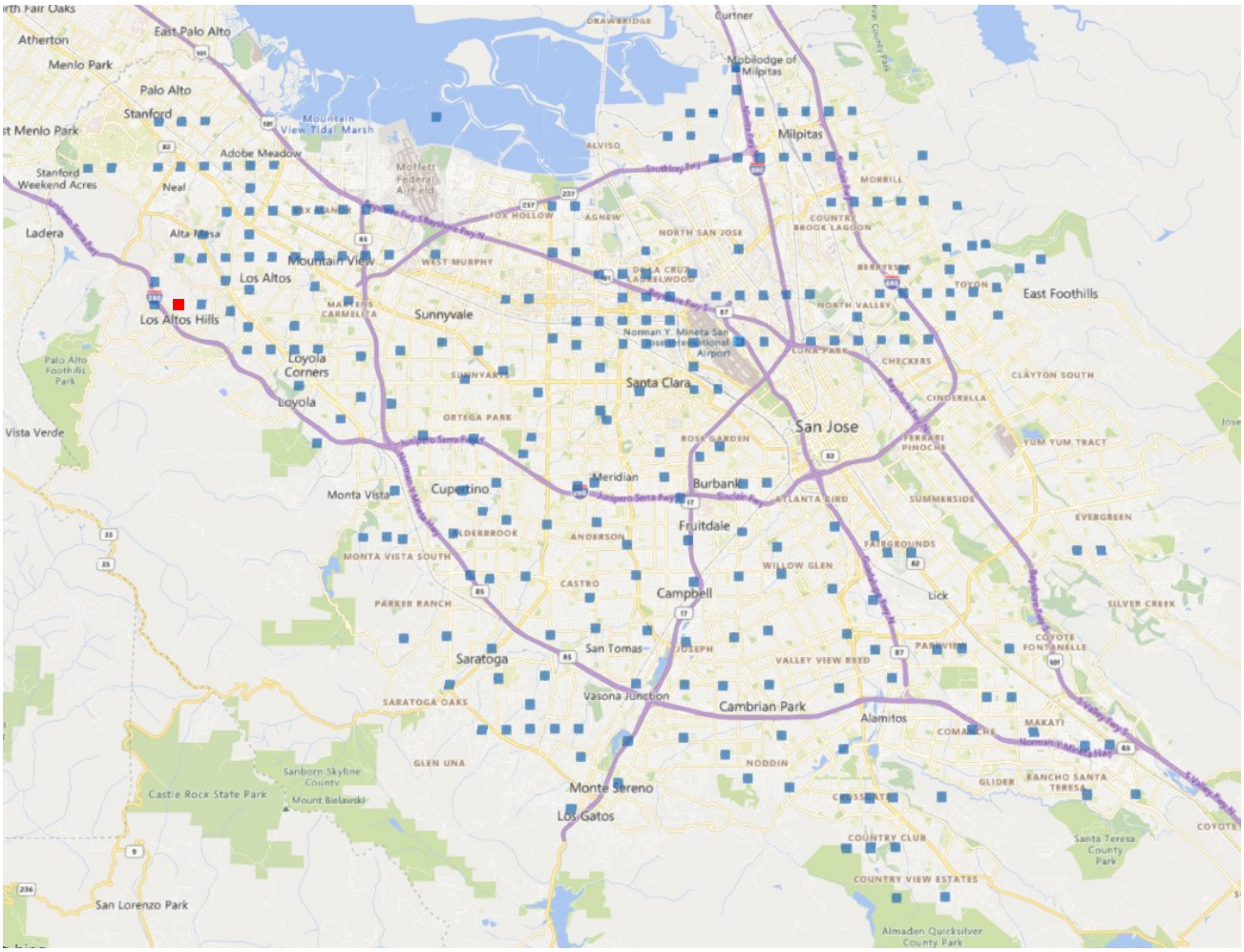


Sites sampled for mosquitoes in August 2020 - CO2 and GRVD traps were set in 443 locations

MOSQUITO-BORNE DISEASE SURVEILLANCE

ADULT MOSQUITO POOLS AND TREATMENTS

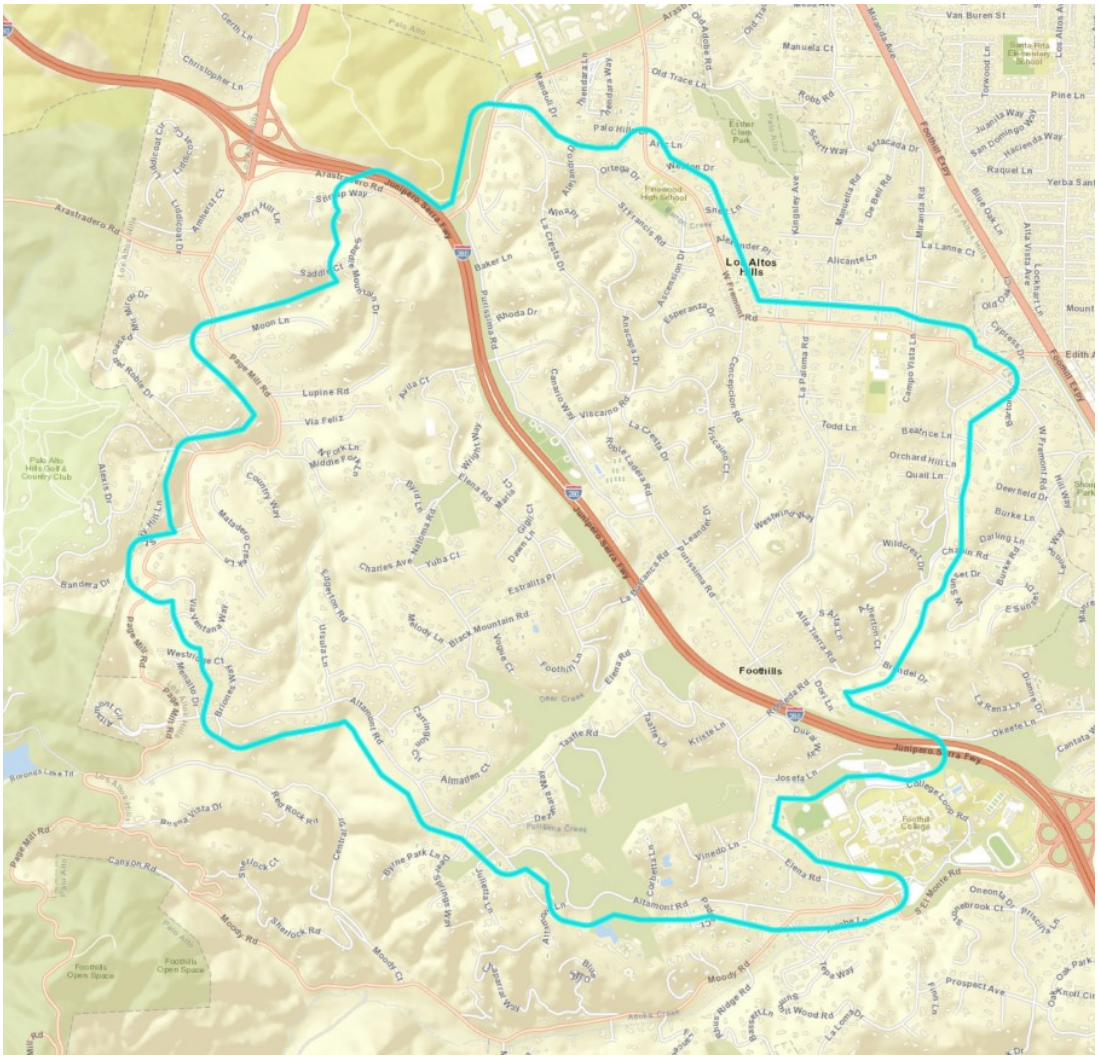
The District collects adult mosquito pools to test for mosquito-borne disease like West Nile virus (WNV), Saint Louis encephalitis (SLE), and Western equine encephalitis (WEE). A mosquito pool is a collection of mosquitoes (of up to 50 mosquitoes in each pool), of any species that are most likely to transmit or carry a virus. Currently, our pools are composed of the common house mosquito (*Culex pipiens)* and the Western encephalitis mosquito (*Culex tarsalis*). Mosquitoes collected at each site are pooled together depending on species type. Once they are pooled, the mosquitoes are tested to see if they are carrying any diseases. Between July and August, 518 mosquito pools were tested and only one pool tested positive, which prompted an adult mosquito treatment in early August.



MOSQUITO-BORNE DISEASE SURVEILLANCE

ADULT MOSQUITO POOLS AND TREATMENTS

The positive mosquito pool was detected in Los Altos Hills, which prompted an adult mosquito treatment in portions of the 94022 zip code. The treatment was centered at Purissima Road and Roble Ladera Road, and was bordered by Arastradero Road/Ladera Road (North), West Fremont Road (East), Moody Road/South El Monte Road (South), and Page Mill Road/Altamont Road (West). To receive notifications of adult mosquito treatments, visit https://bit.ly/VCDMosquitoAlerts.

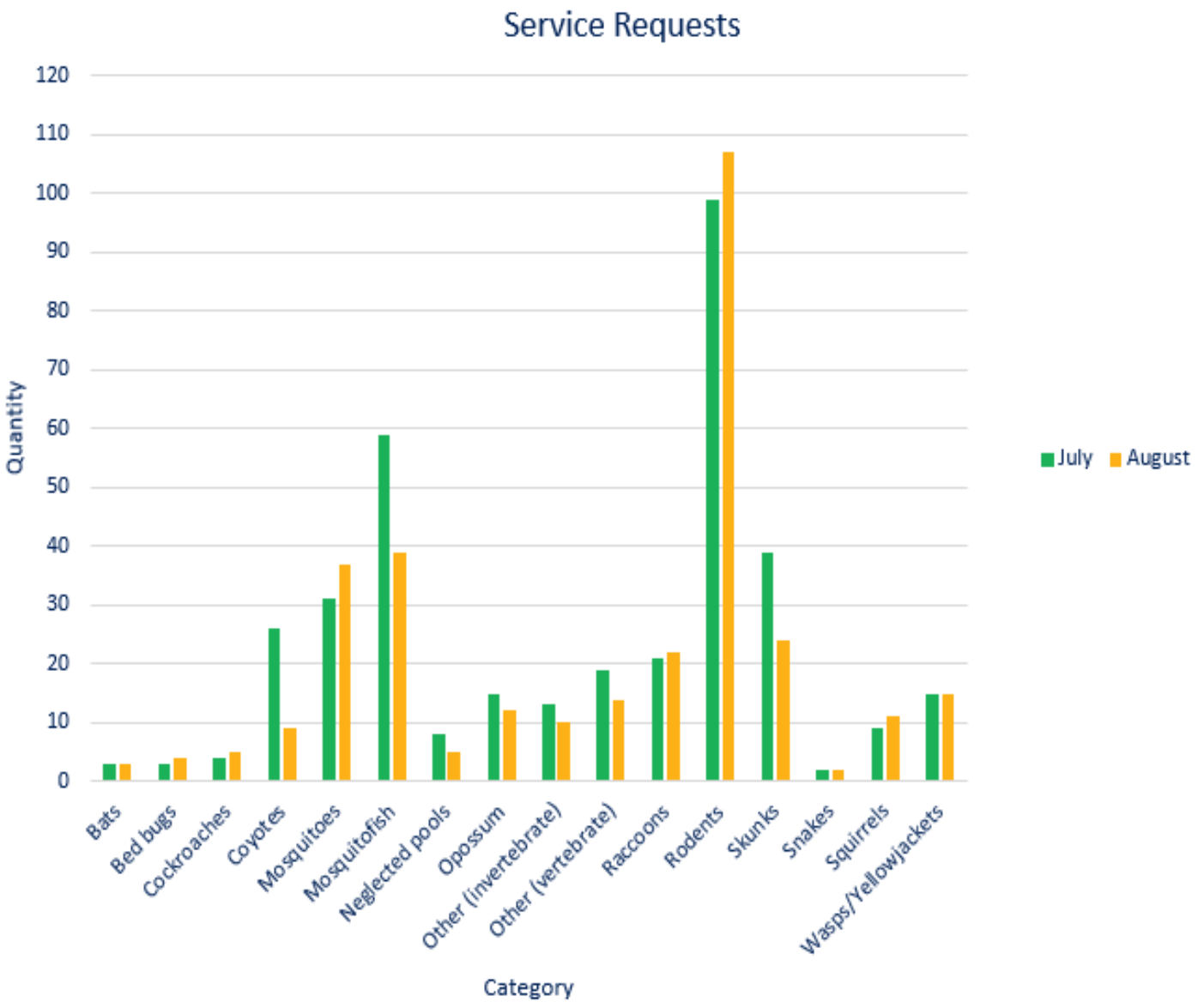


Area treated for West Nile virus on August 13, 2020

PUBLIC SERVICE REQUESTS

JULY SERVICE REQUESTS

The District received 366 service requests in July and 320 in August. For both months, the highest service requests received were for rodents with 99 requests in July and 107 in August, followed by mosquitofish requests with 59 requests in July and 39 in August.



STAFF DEVELOPMENT

CONTINUING EDUCATION

New challenges come with the new times we are living in, and that includes how to deal with vectors during a pandemic and how Vector Control District staff continue their field education. Staff training is composed of in-person training, conferences, and webinars, but due to the pandemic all staff training is now conducted online. In July, Vector Control District staff participated in several educational webinars hosted by the Environmental Protection Agency (EPA), Centers for Disease Control and Prevention (CDC), and UC Davis.

Topics discussed included tick threats and controls for camps and recreational land, mosquito public health threats and controls for campgrounds and recreation areas, and geospatial capabilities and tools for real-time data collection. In August, staff also participated in additional webinars focused on back-to-school challenges with pests, Integrated Pest Management (IPM) solutions, and best management of anticoagulant rodenticides.

Yellow fever mosquito (*Aedes aegypti*)

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