



COUNTY OF SANTA CLARA VECTOR CONTROL DISTRICT

Operations and Surveillance Report

MAY 2019

SKUNK ASSISTANCE

IN THIS ISSUE

Learn how to practice exclusion and prevent attracting wildlife to your home.

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Did you know skunks are attracted to a variety of food including eggs, berries, and pet food. Don't get caught in a *tight* situation and avoid attracting skunks by:

SERVICES AVAILABLE

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WEST NILE VIRUS
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- Cutting back brush
- Stacking firewood tightly
- Picking up fallen fruit
- Bringing pet food and water inside at night

BLACK FLY NUISANCE ISSUES

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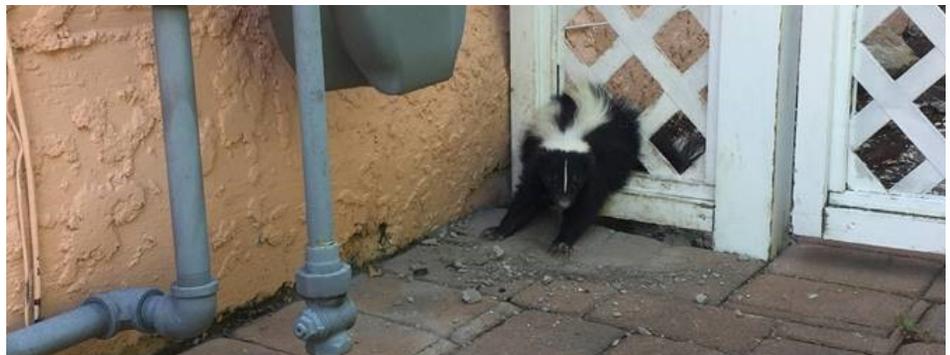
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Visit sccvector.org for more information.

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MESSAGE FROM THE MANAGER



Nayer Zahiri
County of Santa Clara
Vector Control District Manager

The Santa Clara County Vector Control District (SCCVCD) continues to monitor for diseases such as West Nile virus, Lyme disease, and hantavirus. Through efforts from our operations and surveillance teams inspecting creeks for black flies and catch basins for mosquito larvae, to our outreach team hosting educational booths at community events; our main goal continues to be maintaining a community that is free of vector-borne diseases.

During May, our team addressed black fly nuisance reports, hosted a larval mosquito identification workshop, released a television outreach campaign educating the public regarding mosquito prevention, and celebrated Lyme Disease Awareness Month through educational social media posts.

Our wildlife team continues to assist the public with wildlife reports, such as a skunk stuck on a fence, coyote and mountain lion sighting reports, and providing educational information and advice to prevent attracting wildlife.

We continue to encourage the public to contact us to report neglected pools, request an educational presentation or booth, or to schedule an inspection for mosquitoes, rodents, and wildlife.

Respectfully,

Nayer Zahiri



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:

- Customer 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*) and are 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 or insect that can transmit diseases to animals or people.

WEST NILE VIRUS SURVEILLANCE

STATE WIDE

As of June 21, there were 8 counties in California with positive detections for West Nile virus. Only five birds have tested positive statewide this year – suggesting a lighter than normal season for this arbovirus. Studies have shown that West Nile virus activity decreases following winters with heavier rainfall. A similar scenario occurred in 2017, when only fifteen positive birds were found in Santa Clara County that year. On the other hand, drought years yield higher West Nile virus activity. In 2014, more than 1,000 positive birds were detected in Santa Clara County alone.

SANTA CLARA COUNTY

A total of seven birds have been collected in Santa Clara County as of June 24, 2019 and all have tested negative for West Nile virus, Saint Louis Encephalitis, and Western Equine Encephalitis.



HELP PREVENT THE SPREAD OF WEST NILE VIRUS

REPORT DEAD BIRDS

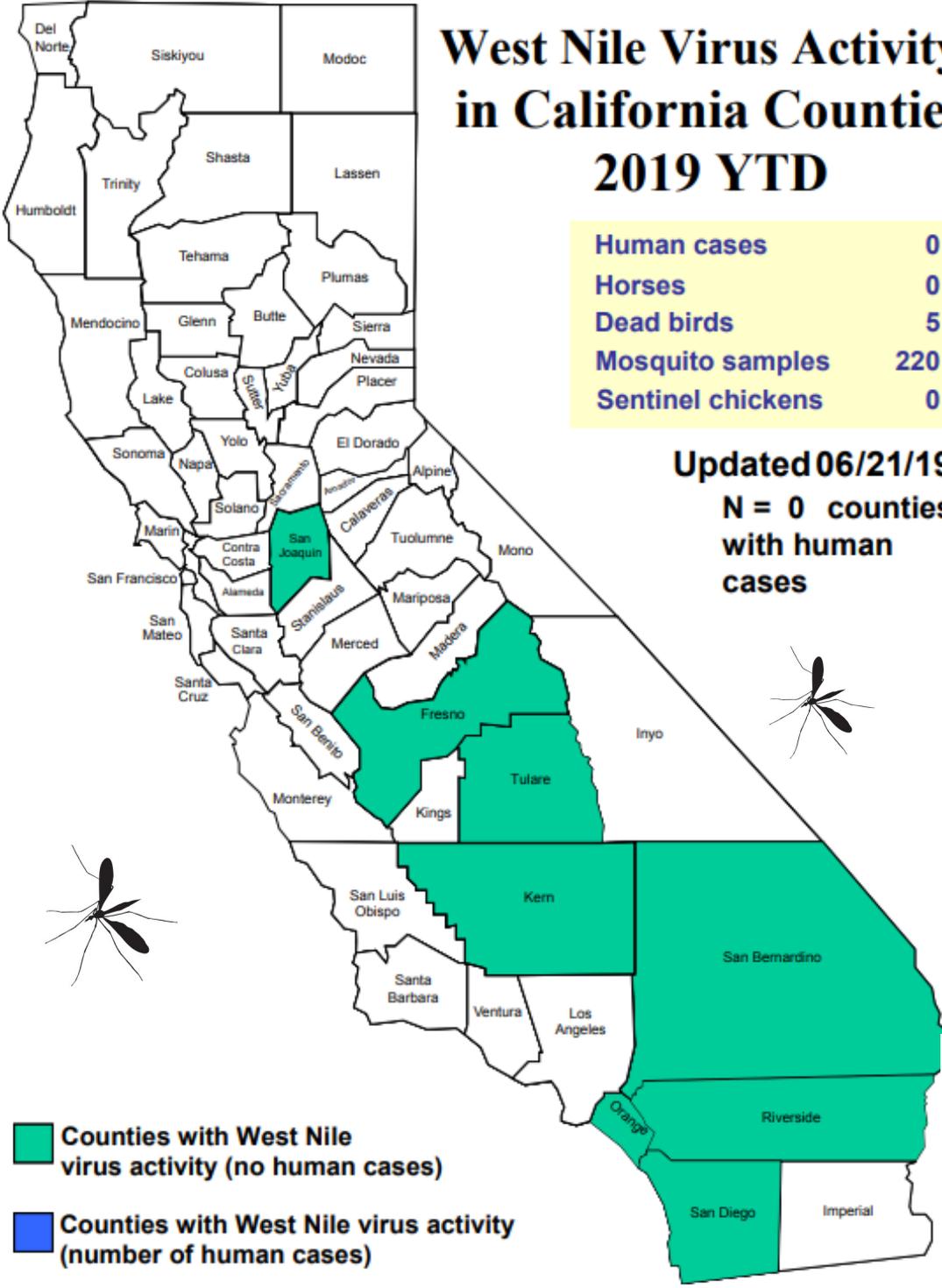
call 1-877-WNV-BIRD or visit www.westnile.ca.gov

WEST NILE VIRUS SURVEILLANCE IN CALIFORNIA COUNTIES

West Nile Virus Activity in California Counties 2019 YTD

Human cases	0
Horses	0
Dead birds	5
Mosquito samples	220
Sentinel chickens	0

Updated 06/21/19
N = 0 counties
with human
cases



Counties with West Nile virus activity (no human cases)

Counties with West Nile virus activity (number of human cases)

BLACKFLY NUISANCE ISSUES

MONITORING BLACK FLIES

Black flies (family Simuliidae) are prominent along Coyote Creek in Morgan Hill and Alamos Creek in New Almaden, and similar to mosquitoes, they also irritate residents nearby. Black fly adults bite and feed on blood, and persistently fly in front of the face causing irritation and sometimes an allergic reaction. Larval stage black flies cling to rocks, plants, and other submerged objects in creeks where they feed on microbes.



Most prefer turbulent water, particularly riverbeds with riffles present. Luckily, larval stage black flies can be treated with the same natural occurring larvicide that is used for mosquito larva, *Basillus thuringiensis var. israelensis*, also known as BTI. The treatment is drifted down stream and can be effective up to a quarter mile. These flies can produce multiple generations during a year and flourish when creeks are flowing and reservoirs are discharging after a rainy winter. Plastic caution tape attached to an anchoring rebar is used to sample immature blackflies (egg, larval, and pupal stages) in the flowing water and when abundant, can blacken the tape with thousands of larvae as seen in the photo to the left.



STAFF DEVELOPMENT

LARVAL MOSQUITO IDENTIFICATION WORKSHOP

To help refresh staff skills in larval mosquito identification, special workshops were held at the District lab using specimens from the District mosquito colony and field-collected samples. Thirty-five staff members attended separate workshops in small groups, and identified mosquito larva using dissecting microscopes and taxonomic keys. It is important for staff to become proficient in mosquito identification since pesticide application records should include mosquito species information, per the California Department of Public Health Cooperative Agreement. There are about fourteen mosquito species inhabiting the County, and many times more than one species can be found in a single habitat. For example, a neglected swimming pool was recently found to have three species present: *Culex pipiens* (Common House Mosquito), *Culex tarsalis* (Western Encephalitis Mosquito), and *Culiseta incidens* (Cool Weather Mosquito).



Mosquito larvae and pupa

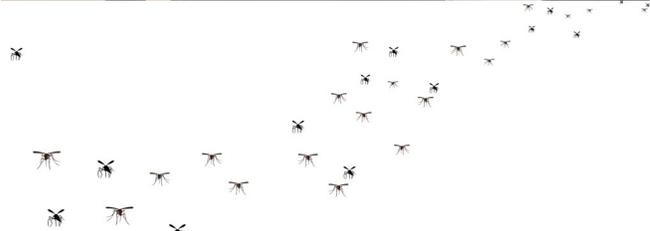
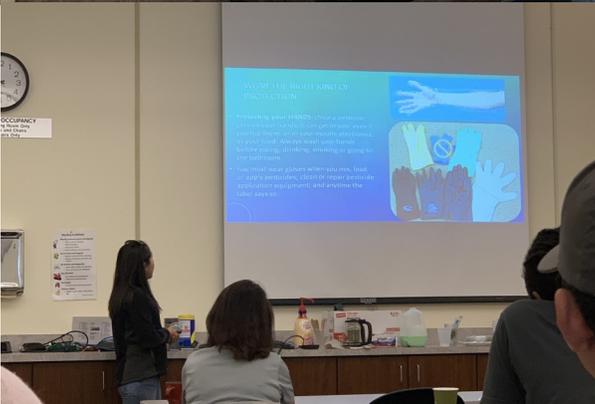


Mosquito larvae

GUEST SPEAKERS

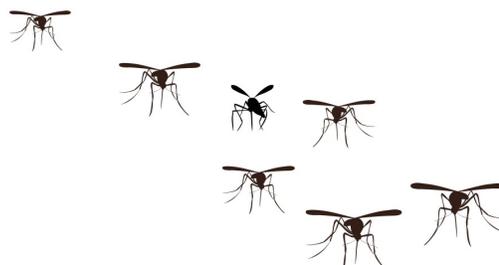
STANFORD PRESENTATION

Dr. Alan Launer from Stanford University provided a presentation to all vector staff regarding endangered species found in and around the Stanford campus. Dr. Launer explained Stanford has developed a habitat conservation plan to protect the California tiger salamander, California red-legged frog, and the common gartersnake all of which are either threatened or endangered species. It is important to partner and learn from local organizations our vector control technicians interact with on a regular basis.



PESTICIDE TRAINING

In May, all vector control staff received a pesticide training. It is essential that vector control staff receive a refresher course regarding the proper use of pesticides, correct storage, and use personal protective equipment. This training is required on a yearly basis and mandated by the State of California, which is listed in Title 3 California Code of Regulations, Section 6724.



OUTREACH PROGRAM

OUTREACH PROGRAMS

During the month of May, the District launched another outreach campaign and began educating the public on how to prevent mosquitoes through bus tails with Valley Transportation Authority (VTA), launched a television outreach campaign centralized to County residents, and began bilingual efforts with Spanish and Vietnamese radio stations. Our community outreach efforts saw staff participating in community fairs such as Animal Day in Prusch Park and the Viva CalleSJ fair. Our school education program was high in participation rates with more than 200 students learning about mosquito prevention. 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 Education Specialist, at (408) 918-4794.



Screen shot of television outreach campaign



VTA bus tail campaign



Staff at Viva CalleSJ Fair



Mosquito pupa in water
(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