

July—August 2010

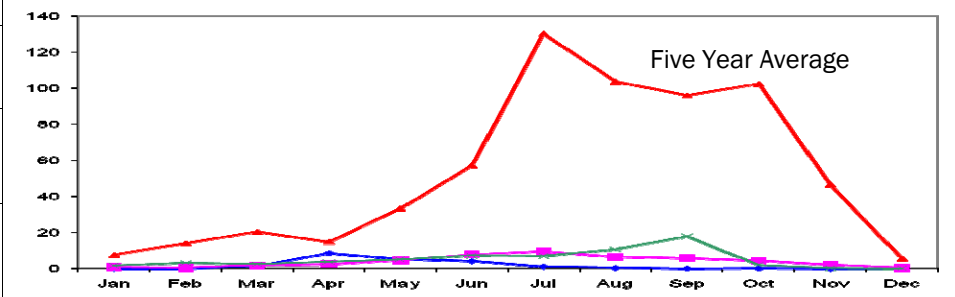
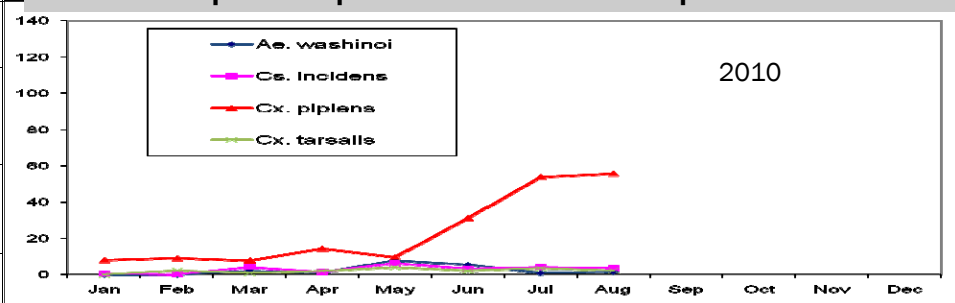


# Entomology Report



## Adult Mosquito Populations in CO2 Traps

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## Mosquito Control Operations

In July and August, mosquito control operations focused on catch basins, treating 68,095 in July and 78,960 in August. Creeks were inspected on a monthly basis and treated as needed. Technicians completed quarterly treatment of utility vaults in August (2,343 treated). Cattail marshes in Mills Field, Searsville Lake and Sharp Park were treated by helicopter on July 6 and 27, and August 17. Outer Bair Island was treated by hand on July 24th for summer salt marsh mosquitoes.

Sewage treatment plants in San Mateo, South San Francisco and Half Moon Bay were treated weekly throughout July and August.

Control of invasive cordgrass continued through July and August. Approximately 129 acres were treated in July and 64 acres in August. Applications were made by truck, Argo All-Terrain vehicles, and backpack sprayers.\*



A team of seasonal technicians crisscrosses the county during the summer months to treat catch basins using specially-modified right-hand-drive jeeps.

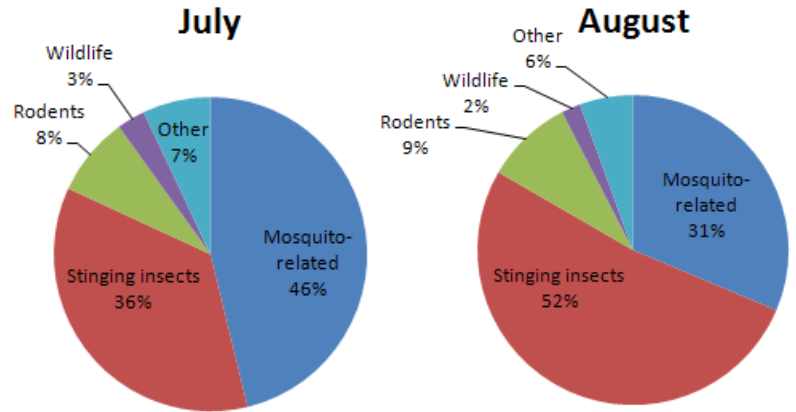
\*see photos of Argos in action on page 3!



## Service Requests

Reason for Request	# July	# Aug
Mosquitoes / standing H2O	58	49
Fish requests	21	13
Stinging insects	61	103
Rodents	14	18
Raccoons / other wildlife	5	4
Other insects / ticks	12	11
<b>TOTAL:</b>	<b>171</b>	<b>198</b>

District staff responded to 369 requests for service in the months of July and August. One-hundred forty-one of these requests were related to mosquitoes (mosquito complaints, requests for mosquito fish delivery, and reports of standing water).



## West Nile Virus Update

### San Mateo County:

West Nile virus was detected in two dead squirrels and one dead bird in San Mateo County this year. The squirrels were found in San Mateo and Redwood City; the bird (a raven) was found on the beach, at the mouth of Gazos Creek. The raven was a low level positive, indicating that it was not infected recently and may have been infected last year. Chronic infections such as this **do not** indicate an increase in WNV transmission risk for humans.

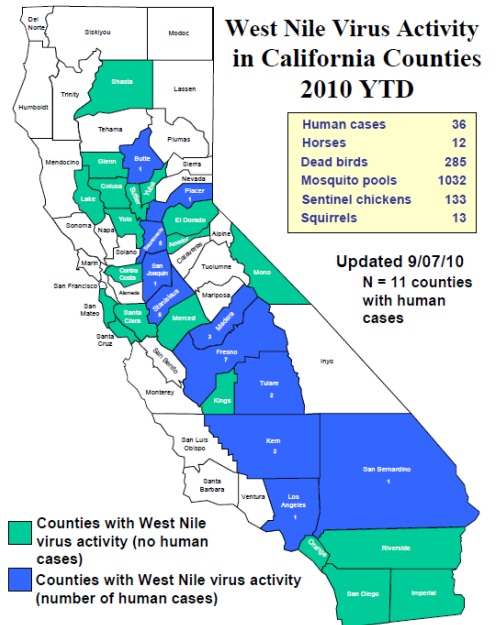
Altogether, 115 dead birds and 10 dead squirrels have been reported in the county this year. Seventeen of these birds and five of the squirrels were in suitable condition for testing.

The district asks residents to call to report birds or tree squirrels that appear to have been dead for less than 48 hours and are in good condition. They should contact the state's WNV hot line at **877-WNV-BIRD (2473)** or submit a report online at <http://westnile.ca.gov>.

### California:

As of September 3, 2010, there have been 285 (19%) West Nile Virus (WNV) positive dead birds in California this season. At this time last year, 390 birds (17%) had tested positive for WNV.

Twenty-three counties have submitted a total of 1,032 positive mosquito samples to the state so far this year. 133 sentinel chickens, twelve horses and thirteen dead squirrels have also tested positive. There have been thirty-five human cases of WNV reported so far this year in California from eleven counties (see counties shaded blue on map at right).





## Squirrels and West Nile Virus—FAQ

*Q: What types of squirrels can contract WNV?*

A: Tree squirrels, like many birds, are susceptible to WNV infections. Fox Squirrels, Eastern Gray and Western Gray Squirrels are all common in San Mateo County and all can be infected with WNV. Ground squirrels and chipmunks have not been known to become infected.

*Q: Can a person catch WNV from an infected squirrel?*

A: No. West Nile virus must be transmitted from an infected animal to a human by a mosquito carrying the virus. So you cannot be infected with WNV simply by being near a sick or dead tree squirrel.



Baby Eastern Gray Squirrels

*Q: Should I be concerned if an infected tree squirrel is found in my neighborhood?*

A: Not necessarily...but it is a good idea to take certain precautions. Because tree squirrels do not generally travel as far as birds, a WNV positive tree squirrel may mean infected mosquitoes are still nearby. The district follows up on reports of positive squirrels and birds by trapping mosquitoes in the neighborhood where the squirrel was found. Mosquitoes caught are tested for WNV. So far, no infected mosquitoes have been detected in the county. Residents are encouraged to wear insect repellent when outside at dusk and dawn, drain standing water around the home, and report other areas of potential mosquito breeding to the district at **650-344-8592**. Report dead tree squirrels and birds to the WNV Dead Bird Hotline at **877-WNV-BIRD!**

## Invasive Spartina Control

The district continued work this summer in cooperation with the California State Coastal Conservancy on the San Francisco Estuary Invasive Spartina Project. In the photos below, district operations and Conservancy staff use Argos to treat areas of invading cordgrass in salt marsh and surrounding mudflats. More information on the project can be found at <http://www.spartina.org/>.



## Upcoming Public Relations Events

- September 18 South San Francisco "Day in the Park"
- September 25 & 26 Pacific Coast Fog Fest (Pacifica)
- September 26 San Bruno Farmer's Market
- October 2 Brisbane "Day in the Park"



"An Independent Special District  
Working for You Since 1916"

SAN MATEO COUNTY  
MOSQUITO AND VECTOR CONTROL

1351 Rollins Road  
Burlingame, CA 94010

Phone: 650-344-8592  
Fax: 650-344-3843  
[www.smcmad.org](http://www.smcmad.org)

The San Mateo County Mosquito and Vector Control District is an independent, Special District funded by a property tax voted in by individual cities. Our mission is to safeguard the health and comfort of our citizens through a planned program to reduce mosquitoes and other vectors in an environmentally responsible manner.

	Extension
Robert B. Gay, Manager_____	12
Chindi A. Peavey, Laboratory Director_____	32
Angie Nakano, Vector Ecologist_____	31
Tina Sebay, Vector Ecologist_____	38
Theresa Shelton, Vector Ecologist_____	44
James Counts, Operations Director_____	16
Jo Ann Dearman, Finance Director_____	11

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

## Yellowjackets

During the warmer months of the year, yellowjackets are extremely active and might cause concern to residents who notice them flying around their homes. Some people may have read about a Massachusetts woman who fell on a nest last week and was stung over 500 times<sup>1</sup>! Although 500 stings is very rare, it is not uncommon to aggressively attacked and receive multiple stings when ground nests are disturbed. Some people are highly allergic to the venom and need to take extra precautions, such as carrying a self-administered epinephrine apparatus.

Yellowjackets are social wasps in the family Vespidae with yellow and black markings. They form nests in the ground, in trees or in crevices in buildings and walls. Each nest is occupied by thousands of workers and a queen. The queen lays eggs which are fed and cared for by the workers. In the summer, the workers are busy foraging for food for the young and sources of wood fiber to expand the nest. They frequently fly around people eating outdoors, especially if there are meats or sugary drinks.

Residents who have located a ground nest on their property can call the district to have the nest controlled. The nest entrance should be clearly indicated with a marker such as a stake, cone or chair so that the district staff can find it in a timely manner. A technician will apply insecticidal dust to the opening. The dust will be carried inside the nest by workers as they enter. In this way, the entire colony is controlled and the queen is eliminated. It may take a day or two for all of the yellowjackets to be killed, but control is more complete by this method and it minimizes the amount of pesticide in the environment.



*Paravespula pensylvanica*, a common yellowjacket species, feeds from a dish of bait.

1 <http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2010/09/07/national/a072027D21.DTL>