

February 2014

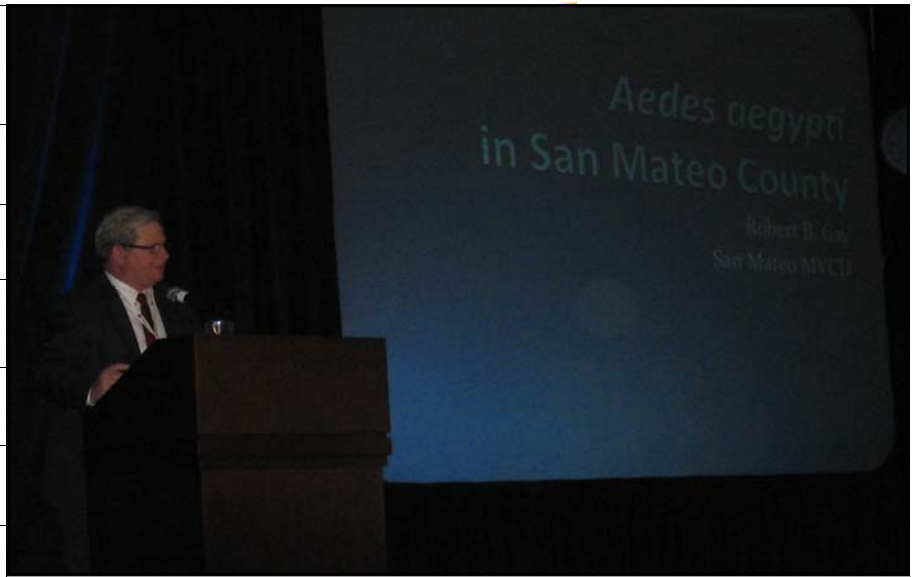


# District Report



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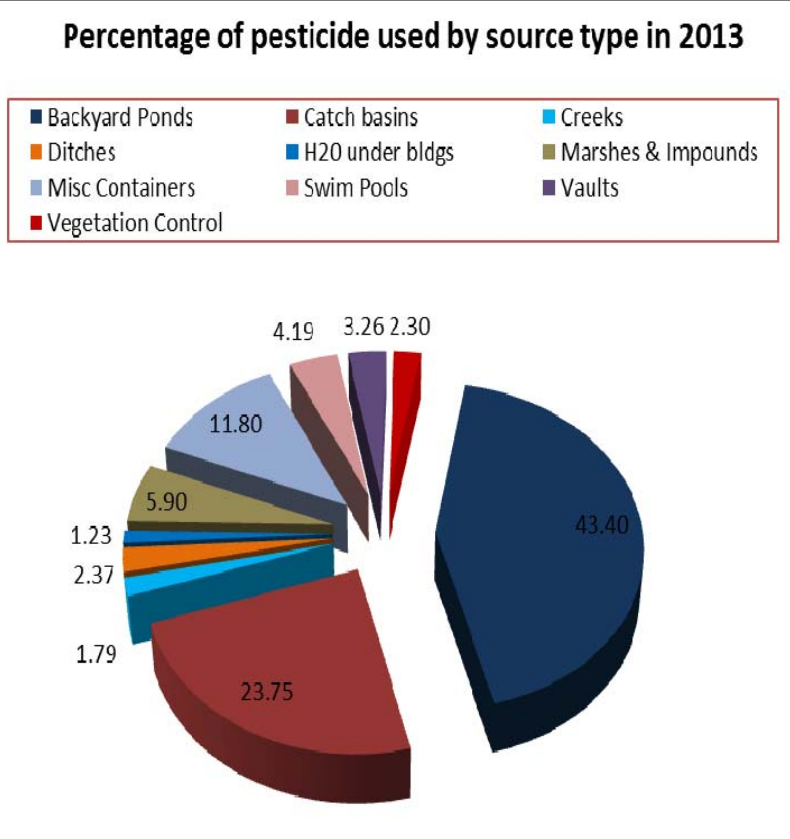
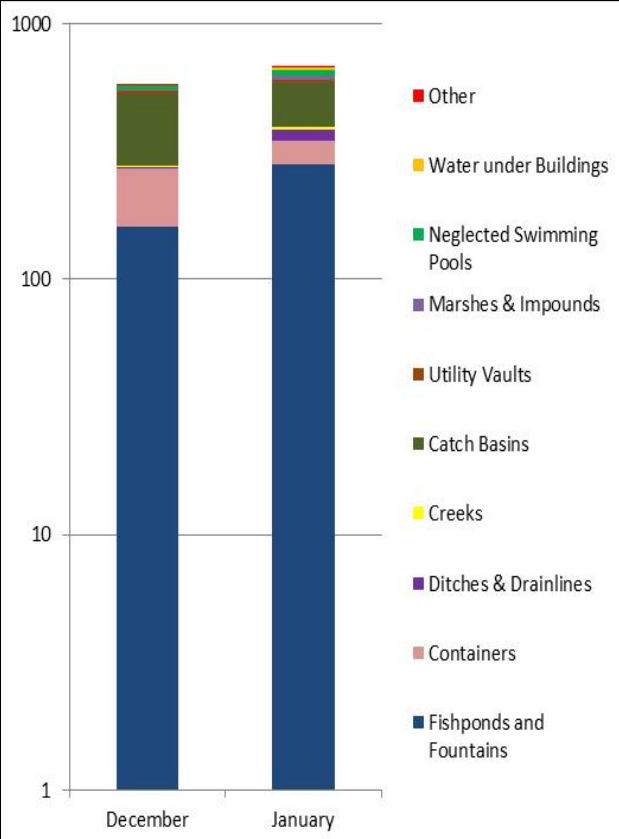
District Manager, Robert Gay, kicking off the Wednesday morning symposium at MVCAC 2014 in San Diego with an overview of *Aedes aegypti* surveillance and control activities throughout the 2013 season.

## District News

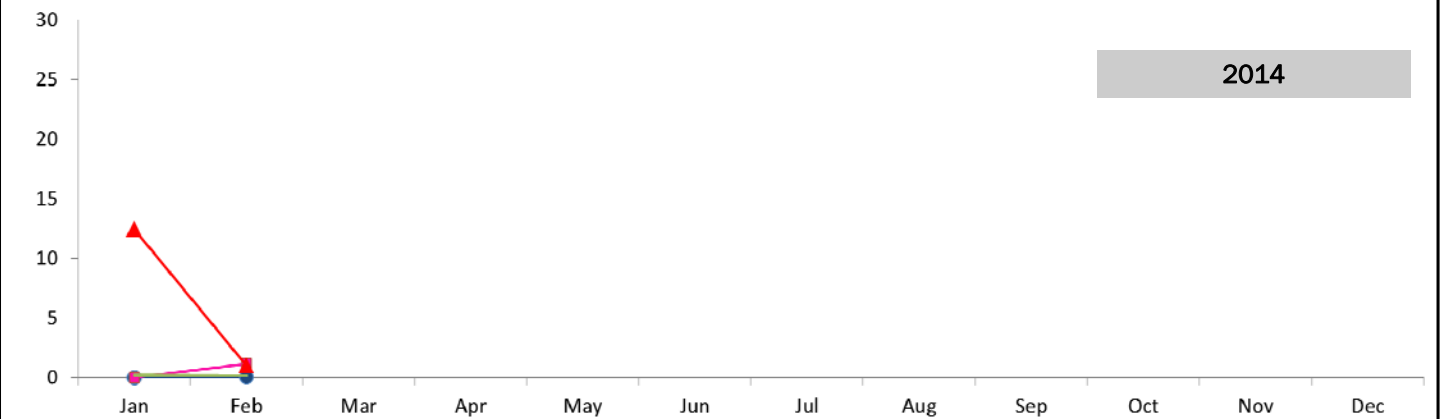
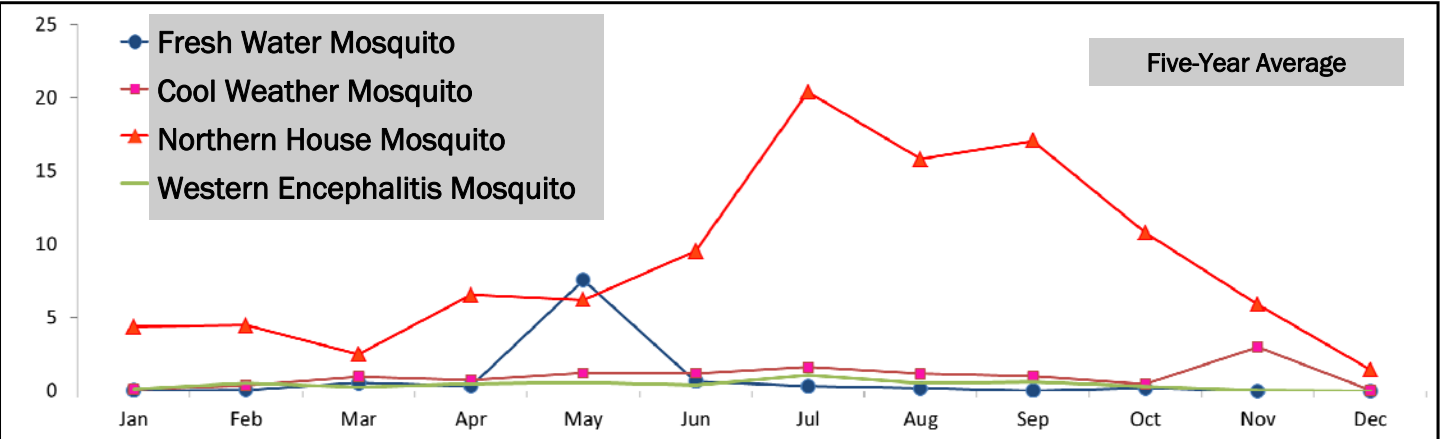
- The 80th annual international meeting of the American Mosquito Control Association (AMCA) was held in Seattle, Washington on February 2 - 6. In attendance were District Board of Trustees, Leon Nickolas (San Mateo), Steve Hedlund (Portola Valley), District Manager, Robert Gay, and Assistant Manager, Brian Weber.
- The 82nd annual state conference of the Mosquito and Vector Control Association of California (MVCAC) was held in San Diego on February 18 - 21. Many District staff from management, operations and the lab participated in talks and poster presentations.
- Lab Director, Dr. Nayer Zahiri and Lab Assistant, Warren Macdonald attended a hands-on workshop on real time polymerase chain reaction (RT-PCR) techniques. RT-PCR is a biochemical technology in molecular biology used in the District lab to readily identify any extracted DNA samples that exhibit the presence of viruses and bacterium of a public health significance to humans such as West Nile Virus and Lyme Disease.
- So far this season, lab staff have collected a total of 1,997 ticks (*Ixodes pacificus*) at 10 parks in the county. To be published in *Emerging Infectious Diseases* (March), a Stanford study (Salkeld *et al*, 2014) found *Borrelia miyamotoi* was just as abundant in the county as *Borrelia burgdorferi*, the bacterium for Lyme disease. According to the study's researchers, the eco-epidemiology of *B. miyamotoi* requires further scrutiny. The District's RT-PCR testing of all the ticks collected for the disease surveillance program is pending with the results to be released this season.



### Mosquito Sources Treated and Pesticide Use by Source Type in 2013



### CO<sub>2</sub> Traps - Number of Adult Mosquitoes Collected Within a 24-Hour Period





## District Balance Sheet - Consolidated Funds As of January 31, 2014

January 31, 2014

### ASSETS

#### Current Assets

##### Checking/Savings

1010 - Cash	6,402,366
1010A01 - Cash-VCJPA Property Contingency	36,903
1010A02 - Cash-VCJPA Member Contingency	317,978
1020 - Cash - Petty Cash	200

Total Checking/Savings 6,757,447

##### Accounts Receivable

1012 - 1012 - Accounts Receivable-001 10,658

Total Accounts Receivable 10,658

Total Current Assets 6,768,105

**TOTAL ASSETS 6,768,105**

### LIABILITIES & EQUITY

#### Liabilities

##### Current Liabilities

##### Accounts Payable

4300-1 - 4300-1 - Accounts Payable 12,536

Total Accounts Payable 12,536

##### Credit Cards

US Bank Credit Card -

Total Credit Cards -

Total Current Liabilities 12,536

Total Liabilities 12,536

#### Equity

32000 - Retained Earnings 6,107,309

Net Income 648,260

Total Equity 6,755,569

**TOTAL LIABILITIES & EQUITY 6,768,105**



## District Profit & Loss - Consolidated Funds As of January 31, 2014

				YTD Jan %	58%
				Balance	% of FY13/14 Budget
				Remaining	
REVENUES	MTD January-14	YTD FY13/14	Budgeted FY13/14		
1021 Prop. taxes, current, secured	86,213	915,217	1,521,718	606,501	60.1%
1024 PY Secured Rede	0	2,485	5,000	2,515	49.7%
1031 Prop. taxes, current unsecured	0	87,019	86,000	(1,019)	101.2%
1033 Prop. taxes, prior, unsecured	0	(4,115)	1,000	5,115	-41.5%
1041 Prop taxes CY secured SB 813	9,434	23,133	26,000	2,867	89.0%
1042 Prop taxes CY unsecured SB 813	0	0	650	650	0.0%
1043 PYSB 813 REDEM	0	0	1,400	1,400	0.0%
1045 Prop. taxes unsecured SB 813	0	0	320	320	0.0%
1046 1046 ERAF Rebate	261,332	261,332	215,000	(46,332)	121.5%
1521-11 VCJPA-Interest Income	0	1,816	1,500	(316)	121.1%
1521 Interest Earned	7,233	24,754	40,500	15,746	61.1%
1831 Homeowner Prop	3,839	5,484	5,500	16	99.7%
2031 Benefit Assessment	107,706	852,689	1,438,911	586,222	59.3%
2439 Mosquito Control Tax	36,882	278,961	464,181	185,220	60.1%
2451 Service Abatement Income	2,727	232,785	255,000	22,215	91.3%
2647 Misc Refunds/RDA/RPTTF	37,816	56,874	40,000	(16,874)	142.2%
2658-11 VCJPA-Misc Income	0	0	10,000	10,000	0.0%
2658 Other	5,966	263,092	48,000	(215,092)	546.1%
<b>Total Revenue</b>	<b>558,949</b>	<b>3,001,525</b>	<b>4,160,680</b>	<b>1,159,155</b>	<b>72.1%</b>
<b>EXPENDITURES</b>					
<b>Salary &amp; Benefits</b>					
4111 Regular Full Time	158,634	848,840	1,515,000	666,160	56.0%
4161 Regular Part Time	1,896	91,881	129,000	37,119	71.2%
4311 Social Security	229	6,421	10,000	3,579	64.2%
4321 Retirement	33,808	262,606	478,000	215,394	54.9%
4412 Health Insurance	31,229	198,772	369,000	170,228	53.9%
4414 Great-West Deferred Comp	500	6,500	13,000	6,500	50.0%
4415 Medicare Insurance	2,450	13,829	24,000	10,171	57.6%
4422 Dental Insurance	2,775	20,650	38,000	17,350	54.3%
4431 Vision Insurance Plan (VSP)	435	3,024	5,300	2,278	57.1%
4440 Employee Commute Benefit	370	2,536	5,500	2,965	46.1%
4442 Long Term Disability	866	5,935	11,300	5,365	52.5%
4451 Unemployment Insurance	7,846	12,249	18,000	5,751	68.1%
4621 AFLAC Insurance	662	3,564	6,500	2,936	54.8%
Subtotal	241,698	1,476,807	2,622,600	1,145,793	56.3%
<b>Services &amp; Supplies</b>					
5111 Pesticides	0	74,586	250,000	175,414	29.8%
5121 Clothing	870	10,724	23,700	12,976	45.2%
5156 Household	58	1,574	4,200	2,626	37.5%
5171 Medical/Laboratory	2,832	18,948	18,800	(148)	100.8%
5188 Other Misc (Union Bank Fee)	36	262	1,800	1,538	14.5%
5199 Office	1,203	7,329	20,100	12,771	36.5%
5233 Tools/Equipment	759	11,613	19,350	7,737	60.0%
5331 Memberships	200	15,964	18,845	2,881	84.7%
5416 Gasoline/Oil	2,602	35,803	67,000	31,197	53.4%
5428 Miscellaneous Repair	1,436	193,632	295,000	101,368	65.6%
5472 General Maintenance	1,151	2,995	9,300	6,305	32.2%
5631 Electric/Gas	1,941	14,233	20,900	6,667	68.1%
5635 Water/Sewer Disposal	220	5,761	9,700	3,939	59.4%
5721 Meetings/Conferences	4,991	33,847	91,800	57,953	36.9%
5856 Services/Consultation	10,351	134,296	238,600	104,304	56.3%
5966 District Special Expenses	5,127	23,355	123,750	100,395	18.9%
6712 Telephone	1,376	11,889	22,500	10,611	52.8%
6725 Liability Insurance	0	41,358	53,000	11,642	78.0%
6731 Other Insurance	0	119,443	102,100	(17,343)	117.0%
Subtotal	35,153	757,611	1,390,445	632,834	54.5%
<b>Fixed Assets</b>					
7211 Structures/Improvements	0	0	0	0	0.0%
7311 Equipment	95	118,848	144,300	25,452	82.4%
Subtotal	95	118,848	144,300	25,452	
<b>Total Expenditures</b>	<b>276,945</b>	<b>2,353,266</b>	<b>4,157,345</b>	<b>1,804,079</b>	<b>56.6%</b>
<b>NET INCOME</b>					
<b>Net Income</b>	<b>282,003</b>	<b>648,260</b>	<b>3,335</b>		



Mosquito & Vector Control Association of California (MVCAC) Conference 2014 - San Diego

The District was well represented at MVCAC this year with the majority of field operations and lab staff presenting talks and posters on a plethora of relevant topics. Great job everyone!



Assistant Manager, Brian Weber, describing the success of CERT for *Aedes aegypti* public outreach activities



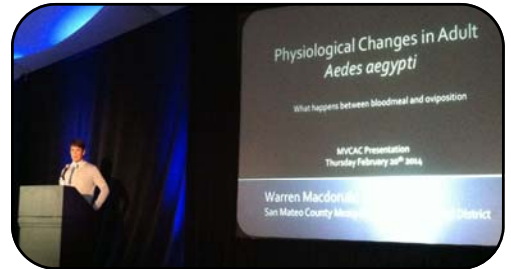
Lab Director, Dr. Nayer Zahiri presenting two talks: identification of *Aedes aegypti* in Menlo Park and susceptibility monitoring of mosquitoes to microbial and insect growth regulators



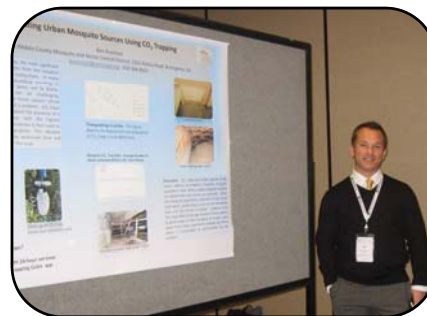
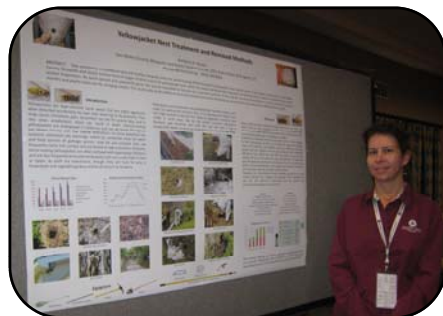
Vector Control Technician, David Allen, presenting snake biology information and safety strategies for field staff



Operations Supervisor, Casey Stevenson, sharing the benefits of using a bicycle for seasonal inspections in marshlands



Lab Assistant, Warren Macdonald, providing an detailed synopsis about the physiological changes that occur after *Aedes aegypti* take a blood meal



Left to right: Vector Control Technicians, Kim Keyser, Ben Rusmisl and Hector Cardenas presenting detailed information on *Yellowjacket Nest Treatment and Removal Methods*, *Triangulating Urban Mosquito Sources with CO<sub>2</sub> Trapping*, and *The Evolution of San Mateo County Cordgrass Over the Past 10 years*, respectively.



Vector Ecologist, Tina Sebay, discussing the surveillance traps used for *Aedes aegypti*



Summer lab intern, Destiny Phillips, highlighting the results of her 2013 Blackfly study



"An Independent Special District Working for You Since 1916"

SAN MATEO COUNTY MOSQUITO AND VECTOR CONTROL

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 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
Brian Weber, Assistant Manager_____	16
Nayer Zahiri, Laboratory Director_____	32
Tina Sebay, Vector Ecologist_____	38
Theresa Shelton, Vector Ecologist_____	44
Warren Macdonald, Laboratory Assistant_____	31
Rosendo Rodriguez, Finance Director_____	11

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

**USDA Partnership Annual Survey of U.S. Beekeepers: Declining Bee Population Trend**

Honey bees (*Apis mellifera*) provide critical pollination services that many plants including major agricultural crops are dependent on.

The U.S. honey bee population is continuing to decline according to the Bee Informed Partnership (<http://beeinformed.org>), in collaboration with the Apiary Inspectors of America (AIA) and the United States Department of Agriculture (USDA). Preliminary survey results to be published in a full report indicated "... 31.1% of managed honey bee colonies in the United States were lost during the 2012/2013 winter. This represents an increase in loss of 9.2 points or 42% over the previous 2011/2012 winter's total losses that were estimated at 21.9% ... This level of loss is on par with the 6 year average total loss of 30.5%."



Honey bee departing from a flower heavily laden with pollen on its legs. Photo credit: entnemdept.ufl.edu

Until there is scientific consensus on the cause(s) for the decline of the honey bee population and the remedy, there are many things that the community can do to support and encourage local honey bee populations. The San Mateo County Beekeepers' Guild provides classes and information resources such as which garden plants are most attractive to honey bees. In addition, the organization encourages the protection of local hives by providing hive relocation services for a nominal fee. To learn more information, the organization's website is [www.sanmateobeeguild.org](http://www.sanmateobeeguild.org)