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Annual Report

Vector: any insect or other arthropod, rodent or other animal of public health significance capable of causing human discomfort, injury, or capable of harboring or transmitting the causative agents of human diseases



C o n t r a C o s t a

M o s q u i t o & V e c t o r

C o n t r o l D i s t r i c t

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Foreword



The focus of the year was on West Nile virus (WNV). As we were gearing up for the effects of this mosquito-borne disease for the first time in history and planning an unprecedented response to protect public health, the state was trying to balance their budget by taking local funds dedicated for mosquito control. Fortunately, through effective education of legislators and the governors office by vector control personnel throughout the state and our state association and lobbyist, our funding was spared at the eleventh hour.

The Contra Costa Mosquito & Vector Control District (District) had been planning on the arrival of WNV for many years since its first detection in the United States in 1999 in New York City. District staff performed a fantastic job in preparing and implementing our Mosquito-borne Virus Surveillance & Response Plan. Seasonal staff was greatly increased and all departments put in the extra time needed to educate and prepare the public, seek out and control new and existing sources of mosquitoes, and provide needed surveillance and testing.

Assistance and cooperation from Contra Costa Health Services and various other cities and county agencies was greatly appreciated. A county task force was created with numerous meetings being held to identify all stakeholders and forecast various needs and outcomes. A Contra Costa County West Nile Virus Action Plan was created and a tabletop exercise was implemented to simulate various scenarios to escalating WNV detections and human cases. Additional cities enhanced their public nuisance codes to help in the battle against backyard mosquito sources.

The potential existed for human and animal contraction of the disease in the county. WNV was detected in birds, mosquitoes, and sentinel chickens throughout California. Likewise, human and animal infections were reported throughout the state, with Southern California the hardest hit. The San Francisco Bay Area was relatively spared with detection of the virus in only dead birds and one human case in Santa Clara County. WNV was detected in twenty birds in Contra Costa County during the year. Most believe that Northern California will be hardest hit in 2005. We are making additional preparations and adjustments based on 2004 experiences throughout California and are prepared to raise the bar in our effort to protect public health.

On a sad note, the District saw the passing of long-time Antioch trustee John Hall in September. John was appointed to the board in 1994, serving as president in 1999. Another dedicated trustee, Dr. David Jameson, was not reappointed by the Town of Danville. Dr. Jameson had served on the board since 1991. Both of these trustees contributed greatly to the District and will be missed.

Respectfully,

Craig Downs

General Manager

Principles

Vision

To be the lead agency in Contra Costa County for the detection and suppression of threats to public health from disease transmitting pests, and non disease transmitting pests (vectors) which disrupt public activities.

Mission

To protect public health and welfare through area-wide, responsive services and programs by:

■ *Community Value*

Providing essential District services to detect and suppress public health pests, and to reduce the chance of disease transmission and discomfort to the people who live, work, or enjoy outdoor activities within Contra Costa County

■ *Service Area*

Providing field services and administrative programs throughout the county, including all incorporated cities and unincorporated communities

■ *Public Confidence*

Delivering accessible, accountable, efficient and cost effective services to the public in all communities within the county

■ *Community Awareness*

Informing community leaders and public “customers” regularly about programs and services; linking educational programs to schools, public agencies, nonprofit organizations and private industry

■ *Environmental Commitment*

Complying with, by meeting or exceeding, federal, state, and local environmental standards that affect service programs

■ *Research*

Developing and/or testing new materials, methods and technologies to ensure quality control oversight on all services and programs, while anticipating resurgent and/or new introduced vectors, or vector-borne diseases

■ *Support Programs*

Integrating District programs and services with other related regional, state and federal public health agencies to ensure cooperative, cohesive program delivery

District Profile

In 1926, residents rallied together to form the Contra Costa Mosquito & Vector Control District to control mosquitoes responsible for epidemics of encephalitis and malaria, and to relieve severe outbreaks of salt-water marsh mosquitoes. During peak mosquito season, waterfront areas and schools were closed, recreational areas were abandoned, and realtors had difficulty selling homes. Some areas in the county were declared uninhabitable.

For over 75 years, the District has steadfastly surveyed and treated thousands upon thousands of mosquito breeding sources throughout the county, while considering, maintaining, and even enhancing the environment.

Today, our county is not only habitable, but encompasses a rich diversity of economic, agricultural, and recreational amenities. The mosquito-borne disease West Nile virus illustrates the importance of our organization as a public health entity and reminds us that mosquito control is as important today as it has ever been.



2004 Board of Trustees

Standing: Jeannette Mahoney, Richmond; Ronald Tervelt, Clayton; Myrto Petreas, Moraga; Dick Vesperman, San Ramon; Tim McDonough, Pinole; David Jameson, Danville; Jon Elam, President, Brentwood; Richard Means, Pleasant Hill; Nancy Brownfield, Walnut Creek; Diane Wolcott, Orinda; **Seated:** Russ Belleci, Contra Costa County; Richard Head, Oakley; John Hall, Antioch; H. Richard Mank, El Cerrito

Not pictured: Heather Gibson, Contra Costa County; Earl Mortenson, Concord; Daniel Pellegrini, Martinez; Jim Pinckney, Contra Costa County; Johnny Poon, Hercules

2004 Administrative Staff

Standing: Craig Downs, General Manager; Tina Cox, Accounting & Benefits Specialist; Steve Schutz, Scientific Programs Manager; Michael Yeater, Technology Technician; Eric Ghilarducci, Laboratory Assistant; Nancy Thurman, Administrative Secretary; Chris Miller, Biologist; Deborah Bass, Public Affairs Manager; Ray Waletzko, Administrative & Finance Manager; Gale Jirik, Operations Manager; Karl Malamud-Roam, Environmental Projects Manager

Not Pictured: Tom Fische, Mechanic



Field Personnel

Gale Jirik, Operations Manager

In 2004, the District's focus was on the arrival of West Nile virus. The District was certain that West Nile virus would arrive in Contra Costa County and we wanted to be fully prepared. The District had 10 full time technicians/inspectors working in mosquito control and six working in the vertebrate programs. In a normal year the District employs 3-4 seasonal employees. In 2004, the District hired 10 seasonal employees. A seasonal employee was assigned to each of the District's eight mosquito zones. We also assigned one technician to the rodent control program and one technician to the yellow jacket control program.

2004 Vector Control Technicians & Inspectors

Left to right, Standing:

Kirk Thill, Lead Vector Control Inspector; Nancy Harden; Steve Fisher; Sheila Currier; Lawrence Brown; Dave Obrochta; Carlos Sanabria, Lead Vector Control Inspector; Felipe Carrillo; Steve Perkins; Fred Walls; Joe Cleope; Patrick Vicencio; and Damien Clausen

Left to Right, Seated:

Reed Black and David Wexler

Not Pictured: John Chase



2004 Seasonal Aides

Left to Right, Standing:

Mike McCoy; James Marshall; Marcelino Molina; Ray Kelly; Patrick Keating; Daniel Yoon; Jason Descan

Left to Right, Seated:

Danielle Young; Danielle Peters; Gabriel Stevenson; Robert Stultz



Mosquito Control

Steve Schutz, Ph.D., Scientific Programs Manager
Eric Ghilarducci, Vector Ecologist

Mosquito / encephalitis virus surveillance:

During 2004, West Nile virus (WNV) was detected in every county in California, including 829 human cases (25 fatal) and 536 equine cases (230 fatal) (Fig. 1). WNV positive dead birds were found in every county, including 20 in Contra Costa County (Fig. 2). In response, we added up to 10 extra mosquito trap locations and submitted over 20,000 mosquitoes, 520 sentinel chicken blood samples and 140 dead birds for virus testing. No human or equine cases were reported in Contra Costa County, and aside from the positive birds, all our test results were negative. Due to cooler than average summer temperatures and our enhanced control efforts, light trap counts of the two primary WNV vectors, the encephalitis mosquito *Culex tarsalis* and the northern house mosquito *Culex pipiens* were average or below throughout most of the year.

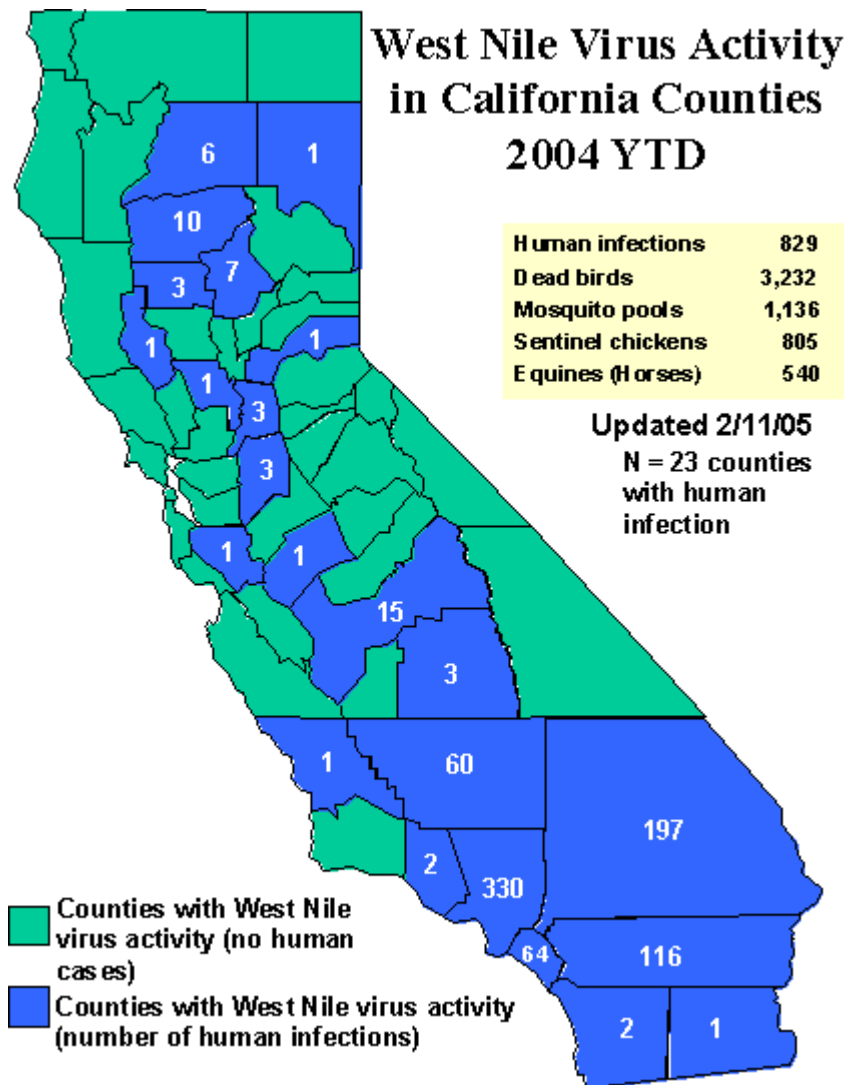


Fig. 1. West Nile virus activity in California, 2004 (courtesy of California Department of Health Services)

Mosquito Control continued

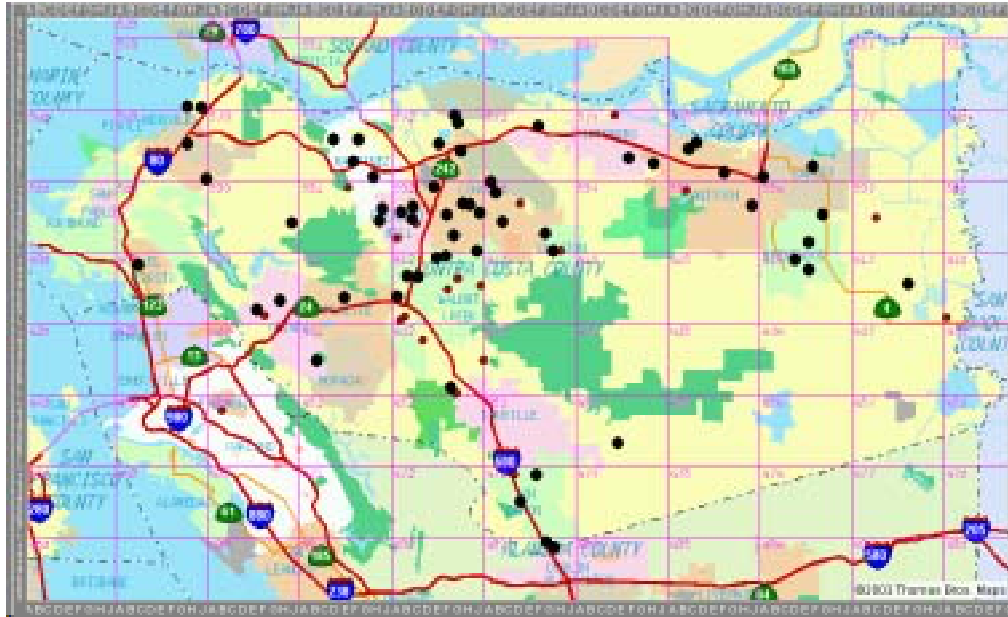


Fig. 2. Locations of WNV positive birds (small dots) and negative birds (larger dots), 2004

Special Projects

During 2004 we conducted a study on parity (reproductive) rates in a mosquito population in the Martinez waterfront area. The proportion of females that had previously laid eggs varied on a fairly regular 4-week cycle. This suggests that the sources of high mosquito trap counts in the waterfront area are under tidal influence. These results will help our field crews to locate and treat these sources.

In the Laboratory

- Operated 19 New Jersey light traps nightly, countywide
- Set 20 to 30 carbon dioxide traps weekly
- Identified 3,364 larval mosquito samples
- Identified and submitted 20,650 adult mosquitoes for virus testing
- Submitted 520 chicken blood samples from 4 sentinel flocks for antibody testing
- Processed 140 dead birds and 3 dead squirrels for West Nile virus testing
- Tested 114 dead birds for West Nile virus in our laboratory
- Provided weekly West Nile virus risk assessments based on the California West Nile virus Response Plan
- Handled 235 pest identification inquiries by the public.

Mosquito Control Continued

In the Field:

Gale Jirik, Operations Manager

Vector Control Technicians responded to 703 mosquito service requests in 2004, compared to 765 service requests in 2003. This decrease in service requests is unusual since mosquito control districts throughout the United States experienced a dramatic *increase* in service requests the first year the virus was present in their areas. Enhanced public education and extensive mosquito control efforts attributed to the decrease.

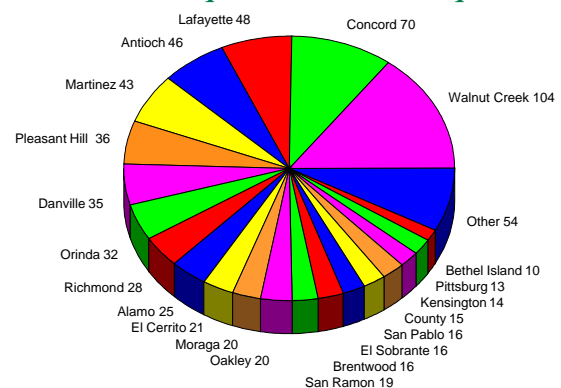
District New Jersey Light Traps showed that mosquito populations were well below average for most of the vector season. With the assistance of additional seasonal employees, mosquito control personnel were able to improve mosquito control efforts in their zones as well as broaden their search for additional mosquito breeding sites. District personnel conducted mosquito control assaults on Bethel Island, Jersey Island, Bradford Island, Holland Tract, PG& E Marsh near Pittsburg, the Concord Naval Weapon Station, the Martinez waterfront, and Chevron property in Richmond. These assaults included multiple personnel, all-terrain vehicles, and in some cases aerial treatments. One tree hole mosquito assault was conducted throughout the coastal mountain range for the control of the *Ochlerotatus sierrensis* species.

In 2004, four communities passed ordinances giving the District the ability to issue administrative citations for public nuisances involving mosquitoes and backyard water sources (pools, ponds, etc.). This brings the total to 10 communities, overall. Antioch, Brentwood, Danville, and Moraga have procedures in place allowing the District to write citations. Clayton, Pleasant Hill, Lafayette, and San Ramon are still in the process of implementing the process. In Richmond and San Pablo, though they passed the ordinances, city employees have decided that they

will write their own citations. The communities of Concord, Martinez, Pinole, Pittsburg, and Walnut Creek are conducting their own enforcement, with the District providing occasional assistance.

The District has the ability to abate nuisances on properties, as well. The District began the abatement process on one agricultural (irrigated pasture/hayfield) property in East County that was creating a significant mosquito problem. After a hearing, the leasee of the property improved his irrigation practices and made some improvements to the irrigation system on the property. The District received excellent cooperation from duck clubs in Contra Costa County in 2004 in minimizing mosquito populations.

2004 Mosquito Service Requests



municipalities not listed are < 9 requests

Ticks and Lyme Disease

Counts of the western black-legged tick were below average for much of the 2003/04 surveillance season, possibly due to low winter/spring rainfall (Fig. 4).

Due to a temporary reduction in our laboratory staff this summer, Lyme disease testing of ticks collected during the 2003/04 field surveillance season is not yet complete.

There were a total of 124 ticks submitted for identification by the public during 2004. Forty-five were identified as the western black-legged tick (the potential vector of Lyme disease). Of these, 11 were tested in-house using the IFA method (one positive) and 28 were submitted to IgeneX Labs for PCR testing (results no longer being reported to the district).

The District tests western black-legged ticks for free if they are brought live to the District. There is a \$55 fee to test dead ticks, since the test is completed off site by another laboratory.

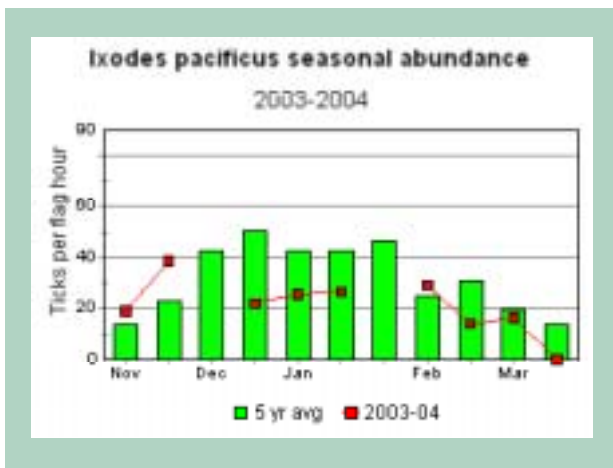


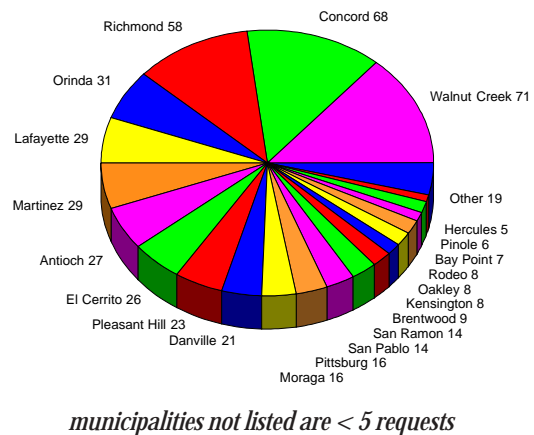
Fig. 3. Abundance of western black-legged ticks at regular surveillance sites in 2003/04 (line) vs. 5-year average (bars)

Rats & Mice

In 2004, vector control technicians responded to 1512 service requests compared to 1202 service requests the year before. In response to the high number of service requests in 2003, the District modified its program by mailing rat control and exclusion literature to service requesters to help them initially access and remedy the situation. If the property owner was unable to solve their rat or mice problem, then the District provided a property inspection. This allowed District employees more time to bait problem areas and provide additional community education. Preliminary results suggest that property owners are very satisfied with the services they received.

The District conducted two sewer pulse baiting projects that proved very effective in controlling rats in sewer systems, as well as baited public areas throughout the county for the control of roof and Norway rats. The District assisted city code enforcement in several communities to enforce nuisance codes and to abate nuisances. The District has the ability to write administrative citations in four communities in Contra Costa County.

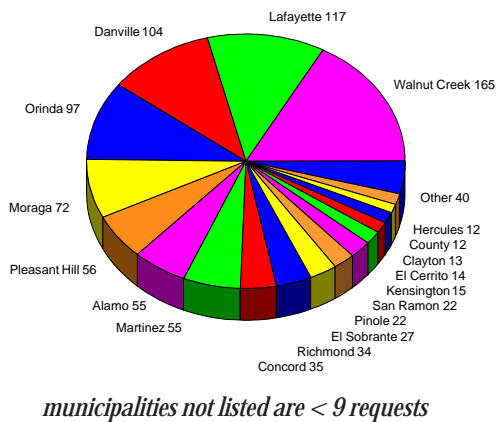
2004 Rats & Mice Service Requests



Yellowjackets

Vector control personnel responded to 967 yellow jacket service requests in 2004 compared to 634 service requests the year before. This was the second highest year ever for yellow jacket service requests. The District contributes the increase to a mild winter that created ideal conditions for queen survival. The District continued to use a seasonal employee during the summer months to control yellow jackets so that vector control technicians could better manage their zones for the control of mosquitoes.

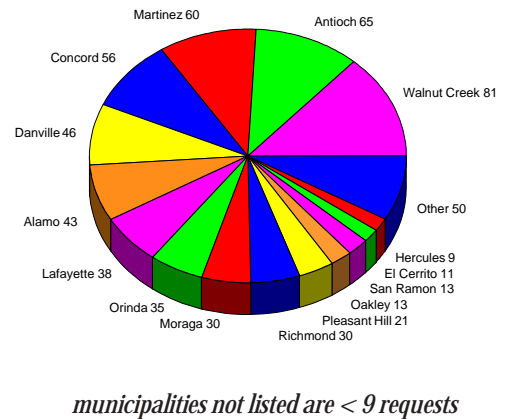
2004 Yellowjacket Service Requests



Skunks

Vector control personnel responded to 605 skunk service requests compared to 719 service requests the year before. The District attributes the decrease to exclusion work done by property owners resulting from District inspections, and potentially a decrease in the overall population of skunks in the county. The District conducts an inspection at every new service request and requires property owners to make improvements to their properties to discourage future skunk activity.

2004 Skunk Service Requests



Africanized Honey Bees

In 2004, Vector control technicians responded to 50 bee service requests compared to 39 service requests the year before. None of the bees were found to be Africanized. The District attributes the increase in bee service requests to the recovery of feral hives from the baroa mite that decimated populations in the late 1990's.

In 2004, Africanized honey bees were reported as far north as Madera County. It is extremely difficult to distinguish Africanized honey bees from European Honey Bees. Only after complex laboratory analysis, measuring of the wingspan, is it possible to state the probability that a group of bees is Africanized. The District is the lead agency in Contra Costa County for responding to and removing Africanized honey bees.

Fisheries Program

Chris Miller, Biologist

An ongoing priority of the District's Fisheries Program is cost-effective production and distribution of mosquitofish (*Gambusia affinis*), and in 2004 we distributed over 75,000 of these biocontrol agents for use in selected habitats in the county. About half of this number were stocked out (released) by District technicians, and the other half were given free to the public for use in ornamental ponds, horse troughs, stock watering tanks, and other confined water bodies. This year, over 500 Contra Costa County residents visited the District to obtain mosquitofish, a large increase over typical years, and a reflection of the public's willingness to help "fight the bite."

The District has also been a leader in developing potential new biological control agents for mosquito control, and this year we continued our research on Sacramento perch (*Archoplites interruptus*), a very promising alternative for areas where mosquitofish may not be effective or appropriate. This year we reached several goals regarding Sacramento perch and their use in mosquito control. Accomplishments include stocking three local ponds with perch at three different life history stages (larvae, juveniles, and adults), conducting food item preference studies, and refining aquarium spawning techniques.

In January 2004, 500 Sacramento perch were stocked at the south end of McNabney Marsh east of Martinez. The perch were about six months old and averaged 2 1/2 inches long (for a technical review of this study, please see the report Sacramento Perch Stocked in McNabney Marsh, on the District's website www.ccmvcd.dst.ca.us). Field stocking was conducted in order to provide data on survival, growth, and diet of juvenile Sacramento perch.

Unfortunately the marsh was drained in July, and it is unknown if they survived and reentered the marsh after refilling. On April 27th we stocked fourteen

older perch (657 days post hatch) in the nearby Mt. View Sanitary District's Moorhen Marsh pond A2. These sexually mature fish were released to evaluate reproduction and survival of offspring, and they were implanted with PIT tags (passive integrated transponder) to keep track of growth and possible migration to other ponds in the Moorhen Marsh system. Before stocking the pond with perch we collaborated with University of California, Davis scientists to survey the pond for other fish using an electrofishing boat. After stocking we used fish traps and seine nets to sample fish species. Although no Sacramento

perch were caught with these sampling methods, six species of fish, none of which are California natives, were collected (see Survey of the Diversity of Fish Inhabiting Moorhen Marsh & Adjacent Peyton Slough on our website for more information). We plan to resurvey this pond in Summer of 2005 to



Dr. Karl Malamud-Roam acclimating Sacramento perch, McNabney Marsh



University of California, Davis electrofishing boat in pond A2, Moorhen Marsh

evaluate reproduction of Sacramento perch in the presence of this nonnative fish community. Finally, on August 30th, 35,000 larval Sacramento perch were stocked in Concord in Montecito Pond, a storm retention basin for the adjacent housing development. This pond contains no other species of fish and breeds mosquitoes. This stocking was conducted to evaluate survival of larval perch and their diet.



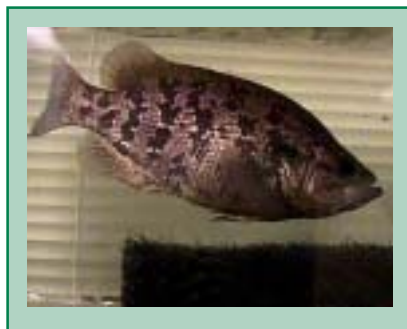
Larval Sacramento perch 90 hours post hatch

In our laboratory, we conducted a series of experiments on Sacramento perch to evaluate their food item preference. In the first study nine aquaria were filled with well water and three were stocked with three juvenile Sacramento perch each, three were stocked with mosquitofish, and three were left as controls. Twenty-four hours after placing fish in the aquariums 200 *Culex tarsalis* mosquito larvae of mixed ages were poured into each tank. Within 23 minutes all mosquito larvae were consumed in the Sacramento perch aquaria, while mosquitofish consumed mosquito larvae within 20 hours. In experiment two we used the same tanks and number of larvae (200) but added an alternative food (*Daphnia magna*) to each tank. Mosquito larvae were counted every hour during the first five hours and then intermittently until all larvae were consumed. Sacramento perch consumed all larvae in five hours while mosquitofish again took longer (up to 48 hours). *Daphnia magna* was still present in both Sacramento perch and mosquitofish aquaria after the mosquito larvae had been consumed, showing that Sacramento perch, like mosquitofish, will eat mosquitoes even when there is other food available. Experiment three was a duplicate of experiment two (200 mosquito larvae and 200 *Daphnia magna*), but with the additional data collection step of counting both mosquito larvae and *Daphnia magna* every

hour until both prey items were consumed. While in this study mosquito larvae were again consumed in 25 minutes by Sacramento perch, it was extremely difficult to count *Daphnia magna*, so the experiment was terminated. Finally, in experiment four *Daphnia magna* were added to aquaria at high densities, and one hour later mosquito larvae were added at high densities. No effort was made to count either prey item. Both Sacramento perch and mosquitofish began feeding on *Daphnia magna* when these were the only food in the

aquaria, and both species of fish began feeding on the mosquito larvae when these were added one hour later. Within approximately 20 hours Sacramento perch consumed all mosquito larvae, while mosquitofish required 72 hours to consume the mosquito larvae. *Daphnia magna* was still present in Sacramento perch aquaria for another 48 hours after mosquito larvae were consumed.

Confining mature male and female Sacramento perch together in small aquaria (aquarium spawning) continues to be a reliable method of producing large numbers of larval Sacramento perch. By manipulating the timing of light and dark (the photo period), we have learned how to produce larval perch all year, although these fish normally have only one reproductive season annually in nature. Using twenty gallon aquariums with appropriate materials and light, we produced hundreds of thousands of larval perch this year (one female produced 38,556 larvae in a single spawn). One challenge has been reliably distinguishing male from



Female Sacramento perch in 20 gallon spawning tank

female perch for pairing, and in one aquarium spawning experiment in August 2004, three of the six pairings were improper sex combinations. This problem has now been resolved as all brood stock perch have been implanted with PIT tags with their sex identified.

Wetlands and Environmental Program

*Karl Malamud-Roam, Ph.D.,
Environmental Projects Manager*

The District's Wetlands and Environmental program has four primary responsibilities: long-term control of mosquitoes and other vectors through improved land and water management; ensuring the District's compliance with environmental laws and regulations; working with legislators and regulators to improve the efficiency of these rules; and scientific research in support of the other tasks. During 2004, a particular focus was on improving federal environmental regulations governing District activities, as District staff served on the American Mosquito Control Association's Legislative and Regulatory Affairs committee.

The major mosquito "source reduction" project for 2004 focused on improving water flow and drainage in marshlands along railroad lines crossing Concord Naval Weapons Station. Channel maintenance projects also improved water circulation in Wildcat Marsh (North Richmond) and Martinez Regional Shoreline, and the District initiated a new program with East Bay Regional Park District to remove and recycle creosote-coated logs that had blocked channels in Point Pinole Regional Park. These areas can produce copious mosquitoes when the water stays still, but which are relatively free of mosquitoes while the water moves.

Ensuring that new wetlands do not produce vectors is also important. New wetlands are created or restored to enhance habitats for birds and other desired creatures, to reduce flooding, to mitigate for wetlands or creeks damaged during construction activities, to provide open

space or aesthetics, and, increasingly, to retain contaminated sediments from storm water. Unfortunately, in all cases there is the potential for producing mosquitoes and rats. Thus, the District's Wetlands program works with wetlands proponents, designers, and managers to ensure that their plans do not pose a threat to public health and comfort. Major activities in 2004 included collaboration with staff from the City of Orinda on new creek ordinances, with county staff on detention basins in the San Ramon Valley, with county and state staff on the new East Contra Costa County Habitat Conservation Plan, and with the Regional Water Quality Control Board and the county's

Clean Water Program to ensure that new stormwater regulations provide the District with notification of new facilities and access for vector inspections and treatment, and require regular maintenance on all facilities.

Interactions between District staff, legislators, and regulators this year focused largely on concerns about water pollution, pesticide safety, and endangered species. The District ensures compliance with existing

environmental rules through staff training, permit management (including a new five-year aquatic pesticide permit), and an annual environmental audit. At the same time, District staff is heavily involved in negotiating improvements in these rules and in supporting the scientific research needed to justify change. Specifically, District staff represented the American Mosquito Control Association in meetings with Congressional Representatives, with USEPA, and with Beyond Pesticides.



An excavator hard at work clearing an overgrown marsh channel

Public Affairs & Community Education

Deborah Bass
Public Affairs Manager

Combating mosquito-borne diseases such as West Nile virus is nothing new to the Contra Costa Mosquito & Vector Control District. We have been protecting public health for nearly 80 years doing just that. Our challenge lies in reaching each and every constituent to illustrate the importance of our relentless day-to-day mosquito control activities, and to illustrate each individual's crucial role in reducing mosquito breeding as well.

Several studies, most notably a recent telephone survey, concluded that most Contra Costa County residents are informed about West Nile virus and understand the seriousness of mosquito-borne diseases. Our West Nile virus newspaper insert proved to be our best communication effort. Inserted into the Contra Costa Times for subscribers and into non-subscribers' mailboxes, we reached every household in Contra Costa County. This "keeper piece" illustrates the history of our District, information and contacts regarding West Nile virus, and lists key activities that residents can do to reduce their risk of contracting the disease.

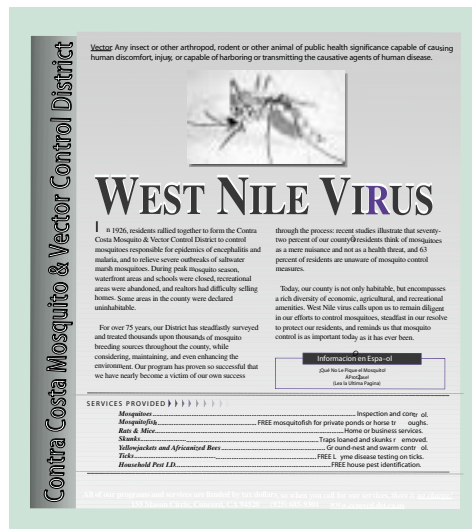
In order to meet the numerous demands for West Nile virus presentations, we developed a video for dissemination to various groups that also aired on local television daily. This 13 minute video was well received, especially from city and county entities that were able to play the video to various groups at their convenience. Many home owner associations used the video as well, ensuring that every occupant in their complex was aware of their role in reducing

mosquito breeding.

We worked extensively with the media to help educate our residents. Along with nearly 100 traditional interviews, we were guests on programs such as "CNN Local Headline News", "Bay Area People", and "Mornings on 2". We participated in the Mosquito & Vector Control Association of California's public relations committee, working closely with Lindsay Wagner of "Bionic Woman" fame to speak about West Nile Virus and vector control agencies. The public service announcement

was filmed at Ms. Wagner's very own home where she illustrates how easy it is to remove mosquito larvae from a planter saucer by simply dumping out the water. The public service announcement aired countless times across California on radio and television and included the statewide phone number 1-877-WNV-BIRD that allows California residents to report dead birds, learn about West Nile virus, as well as locate their local mosquito control agency by simply using their telephone to input their zip code number.

We continued to work in collaboration with local and statewide agencies to ensure that California residents understand the importance of mosquito control as well as individual responsibility for mosquito breeding sources on residential property. Backyard sources are often the number one source of mosquitoes in many counties, including Contra Costa.



Newspaper insert reached every household in Contra Costa County

Financial Statement

Revenues		
Account	2002/2003	2003/2004
Property Taxes	\$2,447,180	\$2,685,896
Contracts / Other	40,442	54,504
Interest Income	41,924	37,427
Benefit Assessment	1,465,225	1,565,664
Miscellaneous	4,500	141,018
Total Revenues	3,999,271	4,481,509
Expenditures		
Salaries and Wages	\$2,394,014	\$2,704,202
Operations	976,782	995,351
Capital	487,297	523,995
Total Expenditures	3,858,093	4,223,548

THE DISTRICT IS "SPECIAL"

The Contra Costa Mosquito and Vector Control District is a "special district".

How Independent Special Districts Work They are:

- * Formed by local residents to provide local services
- * Sanctioned by the State of California Government Codes
- * Entities often formed as the most economical means of providing public service
- * Independent, self-governed agencies governed by a board of directors
- * Operated as non-profit organizations
- * Responsible directly to the people:
 - ✓ Accountable
 - ✓ Accessible
 - ✓ Efficient

