

NORTHERN SALINAS MOSQUITO ABATEMENT DISTRICT

Protecting you from

THE
BITE



Mosquitoes 101

MOSQUITO SEASON IS UPON US – LEARN THE FACTS TO PROTECT YOURSELF AND YOUR FAMILY

Mosquito-borne diseases are among the world's leading causes of illness and **DEATH**.

19 SPECIES of mosquito inhabit Monterey County.

Mosquitoes are small but resilient! They have been around for **400 MILLION YEARS** and most are the approximate size of a dime.

Only female mosquitoes **DRINK BLOOD** from mammals and birds. The blood is required for egg development, not food.

There are approximately **3,500 DIFFERENT SPECIES** of mosquitoes and not all require blood meals.

WEST NILE VIRUS claimed 286 lives in the United States in 2012, making it the infection's deadliest year yet.

Some mosquito larvae can **LIE DORMANT** for months or even years before becoming viable upon contact with water.

Mosquito **REPELLENTS** with the ingredients DEET, Picaridin, IR 3535 or oil of lemon eucalyptus offer the longest-lasting and most effective protection.

Mosquitoes can **BITE** through tight-fitting clothing, even jeans. Wear loose-fitting, long-sleeve shirts and long pants when outdoors at **DAWN AND DUSK**.

Public Health Notice: DOUBLE THREAT

WHY CONTROLLING THE CURRENT MOSQUITO
POPULATION IS IMPORTANT

BY AMANDA CARAWAY

TWO NEW SPECIES OF MOSQUITO HAVE COME TO NORTHERN CALIFORNIA AND THEIR APPEARANCE HAS OFFICIALS AT THE NORTHERN SALINAS VALLEY MOS- QUITO ABATEMENT DISTRICT (NSVMAD) CONCERNED.

The two new species that represent a threat to local residents are the Yellow Fever Mosquito and the Asian Tiger Mosquito, which are responsible for sickness and death throughout the world. Concern stems from discoveries of these mosquitoes in close proximity to the Salinas Valley.

"The Yellow Fever Mosquito is an aggressive, day-biting mosquito and could very well take up residence here," says Ken Klemme, District Manager and Biologist for NSVMAD. "This mosquito can transmit many different diseases and has shown resistance to different classes of mosquito control sprays."

According to Klemme, the Yellow Fever Mosquito has been found in three counties close to Salinas Valley — Fresno, Madera and San Mateo counties.

Another aggressive day biter, the Asian Tiger Mosquito, has been a resident of California for a number of years. Diligent efforts are underway to contain the spread of this mosquito's population and prevent a more extensive invasion throughout California. Very tedious work, it places a tremendous burden on mosquito control resources.

Klemme cannot stress enough the importance of mosquito control, especially with advances in globalization that increase the chances of spreading diseases around the world more quickly. It's a big responsibility, and NSVMAD needs the public's help to do it.

"If people notice bites or dead birds and mosquito populations on their property, they should call 831-422-6438. Dead birds are indicators of mosquito-borne disease," Klemme says. "There is no charge for the NSVMAD to come to your property and provide consultation, education and treatment."

"We encourage the public to report unmaintained pools, unattended spas and other places that hold water," Klemme says. "We handle all calls with anonymity."

NSVMAD uses several methods to control mosquito populations including traps, mosquito larvae management and control.

"All of the products that we use are safe and many are certified organic," Klemme says.

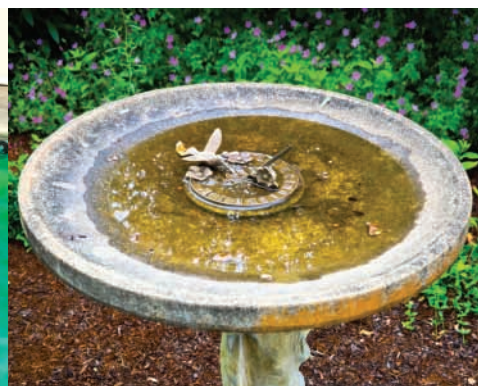
"We employ a variety of tools that afford our residents with an excellent level of control. We take pride in what we do to control the mosquito population while being good stewards of the environment."

"There is no charge for the NSVMAD to come to your property and provide consultation, education and treatment."

*– Ken Klemme, District Manager/
Biologist for the Northern Salinas
Valley Mosquito Abatement
District*



Unmaintained pools can become mosquito-breeding hotbeds. Call the NSVMAD for help.



Change standing water in backyard water features regularly to control mosquitoes.



NSVMAD District Manager Ken Klemme urges the public to report dead birds and standing water.

The Mosquito Threat CONTINUES in Monterey

NSVMAD WORKS TO STOP THE GROWTH OF MOSQUITOES AT THE SOURCE

BY AMANDA CARAWAY

THE NORTHERN SALINAS VALLEY MOSQUITO ABATEMENT DISTRICT (NSVMAD) WAS ESTABLISHED IN 1950 TO DEAL WITH THE THREAT OF MOSQUITOES AND THE DISEASES THEY CARRY.

NSVMAD is an independent special district that was formed at the request of the residents following a breach in the Elkhorn Slough that led to an invasion of Salt Water Mosquitoes.

Funding comes from property tax revenues and a \$5 annual parcel fee. The services that residents receive include surveillance, education and treatment, which are provided free of charge.

Mosquito abatement in Monterey County is important because of the public health risk associated with mosquitoes. The threat of mosquito-borne illnesses makes this issue a serious public health concern.

“We focus on trapping and identifying mosquito species as it assists recognizing potential carriers of life-threatening diseases,” says Ken Klemme, District Manager and Biologist for NSVMAD.

One of the first indicators of mosquito-borne disease activity is dead birds. Wild birds serve as a host for viruses that can be serious and potentially fatal in humans and other animals, including horses. Mosquitoes pick up the virus by biting infected birds and later transmit it to others. As such, calling to notify NSVMAD about dead birds is important.

NSVMAD’s comprehensive mosquito surveillance and control procedures work to help predict and prevent future disease outbreaks similar to the rapid spread of West Nile virus.

“Luckily there has been a low prevalence of West Nile virus this year in the Monterey area,” Klemme says. “It is impera-

tive to continue controlling these vectors to keep future growth of West Nile virus under control.”

In addition to West Nile virus, mosquito species found in California could be potential vectors for malaria and heartworm in dogs.

A popular tool that districts use is the release of natural predators of mosquito larvae. One such release is that of mosquito fish, which are voracious eaters of mosquito larvae

“Managing mosquitoes is truly important for the health and safety of our family, friends and pets”

– Toulia Hubbard, Administrative Services Manager for the Northern Salinas Valley Mosquito Abatement District



Dogs can contract heartworm from a mosquito bite.

and can be used in abandoned pools and other water sources of mosquito larvae. Residents can request delivery of the mosquito fish or pick them up at the office by appointment. These are two free services the district provides.

“We focus on managing known mosquito sources, rely upon education and public notification to keep the mosquito population down in the district,” comments Administrative Services Manager Toulia Hubbard. “Managing mosquitoes is truly important for the health and safety of our family, friends and pets.”

The public can protect themselves from mosquito bites by wearing loose-fitting, long-sleeve shirts and pants when outdoors at dawn and dusk. It is also important to use repellent on exposed skin. Please visit www.MontereyCountyMosquito.com for more information.

Defense Strategies

DISTRICT USES THREE
APPROACHES TO CONTROLLING
MOSQUITO POPULATION

The Northern Salinas Valley Mosquito Abatement District (NSVMAD) is responsible for controlling the growth of mosquito populations and preventing the spread of disease. The district uses three approaches to fight mosquitoes: surveillance, source reduction and biological/chemical control.

SURVEILLANCE

Through continuous surveillance and inspection, NSVMAD seeks to learn more about the mosquito populations in the area and reduce growth. This includes surveying water sources to look for mosquito eggs and larvae.

SOURCE REDUCTION

The NSVMAD periodically cleans and maintains water sources throughout Northern Monterey County. In addition, they work to thin vegetation in areas where mosquitoes are likely to be prevalent. Overall, this helps to control mosquito populations and aids in the recovery of threatened and endangered wildlife species.

BIOLOGICAL AND CHEMICAL CONTROL

The District supplies mosquito fish to control the growth of mosquito larvae. The fish are delivered to residents or can be picked up at the district office by appointment. Many of the chemicals used for mosquito control are derived from naturally occurring, sustainable sources. These chemicals are selected to affect only mosquito larvae.

PROTECT YOURSELF

Report Mosquitoes

THE NORTHERN SALINAS VALLEY
MOSQUITO ABATEMENT DISTRICT
RELIES ON RESIDENTS TO REPORT
POTENTIAL MOSQUITO
PROBLEM AREAS



GIVE US A CALL:
831.422.6438



VISIT US ONLINE:
www.MontereyCountyMosquito.com



SEND US AN EMAIL:
info@MontereyCountyMosquito.com



FIND US ON FACEBOOK:
www.facebook.com/MontereyCountyMosquito



OUR OFFICES:
342 Airport Blvd.
Salinas, CA 93905

**GET
FREE
STUFF!**

*Stop by for a tour
during regular
office hours*

SERVING OUR COMMUNITY

since 1950

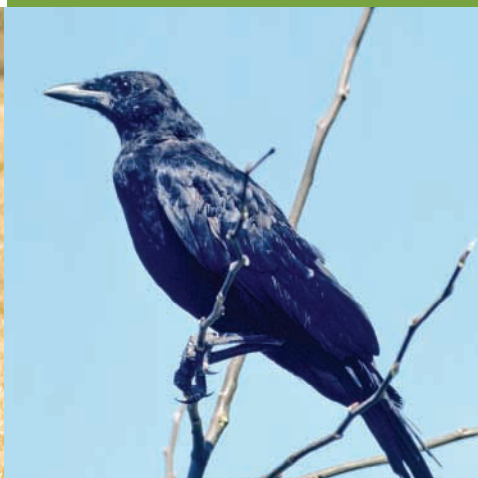


NSVMAD personnel in 1950, top, and in 1998, above.

**Photos courtesy of Northern Salinas Valley Mosquito Abatement District*



VACCINATE YOUR HORSES



CALL IN DEAD BIRDS



GET FREE FISH