WELCOME TO Humanizing Mosquito Control
MOSQUITOES ARE BAD NEWS!

In 2019, 917 cases of WNV in people were reported to the CDC.

MOSQUITOES ARE MINIMALLY ANNOYING AND CAN BE DEADLY! THE THREAT IS REAL.

Those of you in the business already know this - none of this is news to you, but it may be new information for your community members.

Your residents need to understand the potential threat posed by this invasive species and more importantly, HOW THEY CAN HELP YOU DO YOUR JOBS.
EDUCATE YOUR RESIDENTS

Image courtesy of GatesNotes.

We aren’t likely to see a Skeeternado movie anytime soon, so let us help you reach your community members through a custom newsprint publication you can:

- insert into your local papers
- mail directly to households

Our publications educate residents about:

- types of mosquitoes in your neighborhoods
- ways to safeguard homes and yards
- how to disrupt mosquito breeding cycles
- who your team is and what they do
- the importance of your district
- and more!

Now this is a movie I’d like to see.

— Bill Gates

HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
WHAT IS AN N&R PUBLICATION?

- 4 - 16 pages
- Combines strength of journalism w/ expertise of client
- Emotional profiles
- Informational sidebars
- Compels readers to action

**Benefits**
- Less expensive than an ad agency
- Outside perspective for client message
- Client has permission to reuse all elements of publication
- Newsprint = trustworthy
- Targeted distribution
- Digital assets included (pdf, flipbook)
- VERY UNIQUE – even sole- sourced by multiple CA counties
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting

HOW DOES IT WORK?

Step 1 - Storyboard
- We can come to you or meet remotely via Zoom or other web conferencing
- You bring several people with different points of view
- Converse about your needs, goals and challenges to determine best layout and content for publication
- Publication outlined in 2 hours!

Step 2 - Production
12-week process includes:
- Production Plan within 2 weeks
- Interviews/photography
- Design
- Two proofs

Step 3 - Distribution
How we distribute the publication:
- Insert into newspapers
- Mail to households and/or businesses
- Deliver directly to client
We have produced 20 publications for mosquito & vector control districts across the country!

The next slides showcase a few of our publications so you can see the important information we can help you share.

Please visit our website to see all the publications:

https://nrpubs.com/mosquito-vector-control/
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting

Living with West Nile Virus

West Nile Virus can be debilitating, fascinating, and lingering

A
fter testing all initial bird samples, mosquito contingency Plan West Nile (WNV) was deployed. This phase includes the identification of the mosquito vector and the implementation of control measures. WNV is transmitted to humans through the bite of an infected mosquito. Once a person is infected, they can develop symptoms ranging from mild illness to severe neurological conditions.

Living with Lyme Disease

Leaving Lyme Behind

Avoiding ticks is vital in preventing the spread of tick-borne diseases like Lyme disease.

The most information we have about what the risk is and how people can protect themselves, the safer we will be.

Joel Kissimpe (General Manager, Vector Control District)

Mosquito 101

From the dry climate to the arid landscape, mosquitoes are a common threat. More than 10 species of mosquitoes in California are of public health concern. Many of these species are carried by birds and other wild animals. The most common carrier of West Nile Virus is the bird.

“Lyme disease can be a very isolating situation.”

Joe Petten (Assistant Director of Health Education, Public Health Department)

Leaving Lyme Behind

A
fter running a long season in early summer, ticks are no longer active. This is the perfect time to take preventative measures. Preventing tick bites can be achieved through proper clothing, staying in known areas, and using insect repellents.

New approaches to tick prevention include tick avoidance techniques such as long socks, long sleeves, and tick repellents. These measures can help reduce the risk of infection and minimize the spread of tick-borne diseases.
HUMANIZING MOSQUITO CONTROL

Check Around The House
Vector prevention starts in your own backyard — but doesn’t end there

Outside
- Uncovered boots
- Clear out standing water
- Cover with a tarp
- Potted plants
- Drain water from bases once a week or keep them filled with water
- Fish ponds
- Block with mosquito barrier bricks
- Rain gutters
- Keep down to minimize water flow and prevent standing water
- Trash bins
- Cover any standing water
- Keep lighted
- Water troughs
- Block with mosquito barrier bricks
- Barbecues
- Keep covered

Inside
- Windows
  - Close when monitoring
  - You may need the windows closed and edge out
- Screen doors
  - Fix any holes to help mosquitoes escape
- Houseplants
  - Do not overwater plants and keep any
  - Bat boxes free from standing water
- Pot water dishes
  - Change water often

On Your Person
- RPA
  - Registered Insect Repellent
  - Apply products containing DEET, Picaridin, IR3535, Oil of lemon eucalyptus, Para-3, or Denselona
- Apply and reapply repellent as directed
  - When using DEET products, they are safe for pregnant and breastfeeding women.
- Wear long-sleeved shirts and long pants
  - outdoor areas are less likely to be exposed.
  - Avoid holding hands and sleeves
  - Wheelbarrows
  - Consider wearing a hat

Your Dog
- Tick
  - Check your pets daily for ticks
  - Create a tick-free zone for your pets
  - Apply pesticides to reduce ticks
  - Check for ticks daily
  - Keep your yard free of standing water
Proactive Protection

Simple steps can protect a home and family from being overrun by mosquitoes.

Reliable Repellents

HUMANIZING MOSQUITO CONTROL

HUMANIZING MOSQUITO CONTROL

Ask the Expert

Q&A with Dr. Elizabeth Andrews, Public Health Biologist with the Vector-Borne Disease Section of the California Department of Public Health

BY ANGE STROEGE

N&R PUBLICATIONS

Created for the 2020 AMCA 86th Annual Meeting
Protect Yourself Every Season
The best prevention is to plan early

SPRING

Ticks are constant in the valley during the spring months. They tend to nest in tall grasses and brush, so restrictions on moving lawn and rock debris are helpful. Repellent and screens are effective, especially on pets and areas where children are playing.

In the Southern Nevada region, mosquitoes are active in the spring months. The highcountry is less known for its mosquitoes, but the valleys are a different story. Weeds, grasses, and low-lying vegetation provide ideal breeding grounds.

SUMMER

The highcountry continues to see a decrease in mosquito populations in the early part of the season. Mosquito numbers and skin inoculation rates of mosquitoes are at their peak in the summer throughout the mountain regions of the valley. Avoid mosquito bites by using mosquito repellent, wearing light-colored clothing, and avoiding outdoor activities at dusk.

In the cooler months, ticks carrying diseases are especially common in the High Country. The region also experiences a week with harsh winter conditions — it is the time. The High Country has a compensation for all ticks and other insects in the environment.

FALL & WINTER

In the cooler months, ticks carrying diseases are especially common in the High Country. The region also experiences a week with harsh winter conditions — it is the time. The High Country has a compensation for all ticks and other insects in the environment. When ticks are prevalent, keep your environment clean and use candles to keep bugs away.

Contact Your Local Office

Placer Mosquito and Vector Control District
2021 Opportunity Drive
Roseville, CA 95678
888-768-2343 or 530-380-5444
placermosquito.org/contact-placer

Butte County Mosquito and Vector Control District Headquarters
5117 Larkin Road
Orchard, CA 95956
530-534-6088 or 530-534-3990
bcmdc.org/contact.php

Nevada County Environmental Health Mosquito and Vector Control
950 Maidu Avenue
Nevada City, CA 95959
530-265-1500
enhealth@co.nevada.ca.us

N&R PUBLICATIONS
HUMANIZING MOSQUITO CONTROL
Created for the 2020 AMCA 86th Annual Meeting
KNOW THE RISKS

Join the fight against the bite!

Fun mosquito facts
“I survived”
Pesticides – how safe are they?

PAGE 2

PAGE 3

PAGE 4
HUMANIZING MOSQUITO CONTROL

MOQUITO 101

Most people might view mosquitoes as pests, but they are actually incredibly important creatures that play a critical role in the environment. Here are some interesting facts:

- There are more than 800 species of mosquitoes worldwide, and 8 of these species are mosquito of the United States, and it is estimated that 80% of people infected would have symptoms that include headaches, body aches, joint pains, vomiting, diarrhea or rash. People without symptoms can last for weeks to months.

- People with symptoms may develop a neurologic illness such as encephalitis or meningitis, which can be transmitted in the environment. More than 80% of people infected with West Nile virus will develop symptoms of encephalitis or meningitis.

- According to the Centers for Disease Control and Prevention, West Nile virus is spread by infected birds.

- Symptoms associated with West Nile virus include headache, fever, neck stiffness, delirium, coma, seizures, weakness, and paralysis.

LIFE CYCLE OF A MOSQUITO

1. EGG: Female mosquitoes lay eggs on the surface of stagnant water where larvae will develop. When larvae hatch, they become adult mosquitoes, which then mate and continue the cycle.

2. LARVA: Larvae breathe air from the surface of the water and are also called paddlefish. They move in a zigzag motion, which is why they are often described as never-ending. The larva stage lasts from 6 to 14 days, after which they become pupae.

3. PUPA: After a few days, the pupa stage begins. It is during this stage that the mosquito undergoes metamorphosis, emerging as an adult mosquito. The pupa stage lasts for 5 to 10 days.

4. ADULT: Adult mosquitoes are the ones that we commonly refer to as mosquitoes. They feed on blood and store it in their bodies, which is how they pass on diseases. The adult stage lasts from 3 to 10 days, after which the cycle begins again.

JUST ONE BITE

That's all it took to turn one woman's life upside down

West Nile virus is spread by certain species of mosquitoes and can be transmitted to people by the bite of an infected mosquito. There are different strains of West Nile virus, with West Nile virus being one of the most common in the United States. According to the Centers for Disease Control and Prevention, it is estimated that 80% of people infected with West Nile virus will develop symptoms that include headaches, body aches, joint pains, vomiting, diarrhea or rash. People without symptoms can last for weeks to months.

N&R PUBLICATIONS

HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting

THE BUZZ ON PESTICIDES

BY RICHARD KELL

Scientist looks at the risks and benefits of controlling mosquito populations

“THE AMOUNT OF THESE PESTICIDES USED IN THE ENVIRONMENT

isn’t anywhere near the amount needed to cause any kind of illness in people.”

— Jennifer M. Hicks, PhD

FIGHT THE BITE

Around your home

Other Tips:

- Make sure doors and windows of your home are tight with weatherstripping.
- Avoid your environment with mosquitoes, which thing are drawn by natural light sources. You can thus avoid mosquitoes if you're not disturbed by light sources, as you are at home.
- Use screens on all doors and windows, and use insect repellents that contain the active ingredient DEET.
- Keep your environment clean and free of standing water.
- Remove any sources of water, such as old tires, gutters, and empty flowerpots, from your property.
- If you have a swimming pool, cover it to prevent mosquitoes from entering.
- If you're going outside, use insect repellent with the active ingredient DEET.
- Use air conditioning to keep your environment cool and dry.
- Keep your environment clean and free of debris and clutter.
- Keep your environment free of standing water, which mosquitoes need to breed.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of standing water, which is an excellent breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environment free of clutter and debris, which can serve as a breeding ground for mosquitoes.
- Keep your environm...
HUMANIZING MOSQUITO CONTROL

Finding the Right Mix

BY NADIANA CLAYTON

Integrated mosquito management controls population

"Much of it goes back to two things: public education and surveillance."

INTEGRATED MOSQUITO MANAGEMENT TOOLS

• Public education
• Surveillance
• Vector management
• Biological control
• Chemical control

Mosquito Abatement District - Davis

Since 1931, the Davis County Mosquito Abatement District (MCAD) has been protecting the public from mosquito-borne diseases. The district currently serves an area of approximately 2,600 square miles in Davis County and an estimated 390,000 residents. A resident-funded county agency, the district has treated 19.5 million acres since 1931. The district employs innovative approaches to mosquito control to ensure a safe and healthy environment for its residents.

Meet the Districts

Magna Mosquito Abatement District (MMAD) has been serving residents in the Magna area since 1967. The district serves an area of 30 square miles with a population of over 23,000. MMAD is dedicated to providing a safe and healthy environment for its residents through comprehensive mosquito control measures.

West Jordan Mosquito Abatement District (WJMD) serves an area of approximately 15 square miles with a population of approximately 50,000 residents. The district was established in 1958 and continues to work towards protecting the community from mosquito-borne diseases.

South Salt Lake Valley MAD

Since 1950, the South Salt Lake Valley Mosquito Abatement District (MAD) has been protecting the public from mosquito-borne diseases. The district currently serves an area of approximately 28 square miles in Salt Lake County and an estimated 18,000 residents. A resident-funded county agency, the district employs innovative approaches to mosquito control to ensure a safe and healthy environment for its residents.

Webster Mosquito Abatement District

The Weber County Mosquito Abatement District (MCAD) was established in 1935 to protect the residents of Weber County from mosquito-borne disease. The district currently serves an area of approximately 1,000 square miles with a population of over 145,000. The district employs a variety of methods to control mosquitoes, including aerial spraying, larvicide application, and biological control.

Salt Lake City Mosquito Abatement District

The Salt Lake City Mosquito Abatement District (SLCMAD) was established in 1930 to protect the residents of Salt Lake City from mosquito-borne diseases. The district currently serves an area of approximately 83 square miles with a population of over 220,000. The district employs a variety of methods to control mosquitoes, including aerial spraying, larvicide application, and biological control.
JOIN THE FIGHT AGAINST THE BITE

Your mosquito abatement district is here to protect you against mosquitoes and the harmful diseases they spread.

WHAT YOU CAN DO:
- Reduce sources: eliminate standing water around your home, such as birdbaths, tree and ornamental wells, etc.
- Use insecticides: apply a residual insecticide around your property
- Report standing water, report it to your local abatement district

WHAT YOUR MOSQUITO ABATEMENT DISTRICT CAN DO FOR YOU:
- Spraying programs: if you live near the areas of mosquito activity, your mosquito abatement district will schedule a service.
- Mosquito sampling: Many districts will sample mosquitoes for the presence of any vectors of disease, that is, the insects that can carry or transmit diseases to humans.
- Mosquito control: eliminate breeding areas, or control the populations of mosquitoes on your property, keeping a close watch on any potential mosquito population.

Visit the website of your mosquito abatement district to share your thoughts on this educational supplement.

Weber Mosquito Abatement District
250 N 1500 E
Clyde, UT 84311
- Monday – Friday, 7 a.m. - 4 p.m.
- 801-300-1100
- www.webermosquito.com
- Like us on Facebook

Mosquito Abatement District - Davis
855 19th St
Kaysville, UT 84037
- 801-644-3706
- dvm@mosquitoes.org
- www.davismosquitoes.org
- Like us on Facebook

Magna Mosquito Abatement District
2611 South 200 East
Magna, UT 84044
- Monday – Friday, 6 a.m. - 4 p.m.
- 801-265-7789
- magnamosquitoes@gmail.com
- www.magnamosquito.com

Salt Lake City Mosquito Abatement District
2002 W. Parleys Road
Salt Lake City, UT 84116
- Monday – Friday, 7 a.m. - 3:30 p.m.
- 801-366-4222
- www.slcmad.org

South Salt Lake Valley MWD
7850 Farnham Place
West Jordan, UT 84084
- Monday – Friday, 7 a.m. - 3:30 p.m.
- 801-366-4684
- www.ssrmad.org
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting

INSIDE:
- 15 facts you didn’t know about mosquitoes Pg. 2
- Life before mosquito abatement Pg. 3
- West Nile-virus vector Pg. 4
- What you can do to help Pg. 5

Fight the BITE
How you and mosquito abatement can help control the mosquito population

A Health Consideration
Mosquitoes transmits

N&R PUBLICATIONS
Did you know...

Interesting facts about nature’s little bloodsuckers

50:
Number of mosquito species

1:
Most common species

The brown mosquito with the greatest ability to spread disease is:
- Agua de tigre
- Aedes aegypti
- Aedes albopictus
- Culex quinquefasciatus
- Anopheles vespertilionis

The Asian tiger mosquito is now found in more than 30 states and is spreading to the west.

The Southern house mosquito prefers regions with high relative humidity and stays more than 30 inches above the ground.

Greater than 55 degrees:
Temperature where mosquitoes are commonly found

Mosquitoes only bite people who are moving

Mosquitoes do not bite humans

When a mosquito bites, it injects to itch and skin and may cause a person to become infected.

The bite of a female mosquito is usually more painful than the bite of a male mosquito.

The bite of a mosquito can transmit disease.

The most common diseases spread by mosquitoes are:
- Dengue fever
- Zika virus
- Yellow fever
- Malaria
- West Nile virus
- Encephalitis

Menacing Mosquitoes

Veterinarian shares what life was like before STPMA

Mosquitoes

Don’t Stand a Chance

District fights pesky insects with Integrated Mosquito Management approach

by Rick Aube

Mosquitoes are a major pest in the U.S., and they can cause serious health problems. In fact, mosquitoes are responsible for millions of deaths each year from diseases such as malaria, dengue, and Zika. That’s why it’s important to have effective methods for controlling mosquito populations.

One approach that has been gaining popularity is called “integrated mosquito management” (IMM). IMM is an ecosystem-based strategy that focuses on reducing the mosquito population through a combination of habitat modification, chemical control, and biological control.

Habitat modification involves creating a less hospitable environment for mosquitoes by removing standing water, reducing the amount of vegetation, and increasing the amount of open space.

Chemical control involves using pesticides to kill adult mosquitoes and their larvae. However, this approach is not always effective, and it can also harm other organisms in the ecosystem.

Biological control involves introducing natural predators of mosquitoes to help reduce their population. This can be done by releasing larvae-eating fish, or by using mosquito predators such as fish or amphibians.

By combining these three methods, IMM can provide a more effective and sustainable approach to mosquito control. As a result, it is gaining popularity in many communities around the world.

History of STPMA

The STPMA was established in 1943 to help control mosquitoes in rural areas. At that time, there were few options for mosquito control, and the STPMA was founded to provide a more effective and sustainable approach to the problem.

In the early days, the STPMA relied on hand-pumping and hand-spraying to control mosquitoes. However, as the population grew and more areas became urbanized, the STPMA began to use more advanced methods, such as aerial spraying.

Today, the STPMA relies on a combination of habitat modification, chemical control, and biological control to keep mosquito populations in check. This approach has been effective in reducing the number of mosquitoes in many areas, and it has helped to improve the quality of life for people and animals alike.
The Unlikely Threat

HUMANIZING MOSQUITO CONTROL

1. A new era in mosquito control

Q&A with District Director Chuck Palmisano

by Mel Jacks

What is the biggest misconception people have about mosquito control programs, and what do you think we can do to help change that?

Palmisano: There are several misconceptions about mosquito control programs that can be addressed:

1. Mosquito control is just about spraying莫斯科.
2. It is effective only in larval control.
3. It is not cost-effective.
4. It is not sustainable.

To address these misconceptions, we can:

1. Educate the public about the life cycle of mosquitoes and the importance of adult control.
2. Demonstrate the effectiveness of adult control methods, such as biting activity suppression and adulticiding.
3. Highlight the economic benefits of mosquito control, including reduced healthcare costs and improved public health.
4. Emphasize the importance of sustained funding and community support.

How much of a role must the public play in the success of mosquito control programs?

Palmisano: Community involvement is essential for the success of mosquito control programs. The public can help by:

1. Reporting mosquito activity and breeding sites.
2. Taking personal protective measures, such as using insect repellent and wearing long-sleeved clothing.
3. Supporting local mosquito control efforts through funding and participation.

Are there new technologies or methods being developed that will improve mosquito control programs in the future?

Palmisano: There are several promising technologies and methods being developed, including:

1. Targeted adulticiding using genetically modified mosquitoes.
2. Mosquito habitat modification and disruption techniques.
3. Improved larval control methods, such as biological control and improved pesticides.

What can the public do to help support mosquito control programs in their community?

Palmisano: The public can support mosquito control programs by:

1. Supporting local mosquito control efforts through funding and participation.
2. Reporting mosquito activity and breeding sites.
3. Taking personal protective measures, such as using insect repellent and wearing long-sleeved clothing.
4. Educating others about the importance of mosquito control.

Leadership of STPMAD

— N&R PUBLICATIONS

From page 53 of the 2020 AMCA 86th Annual Meeting Program}

"..."
HUMANIZING MOSQUITO CONTROL

Mosquito Control Matters

St. Tammany Parish Mosquito Abatement District is here to serve you by reducing mosquitoes and the harmful diseases they spread.

CONTACT THE DISTRICT TODAY!

Service boundaries

St. Tammany Parish Mosquito Abatement District serves all of St. Tammany Parish.
HUMANIZING MOSQUITO CONTROL

CREATED FOR THE 2020 AMCA 86TH ANNUAL MEETING

RESCATAR EL
CONDADO DE FRESNO

LOS RESIDENTES PUEDEN TOMAR MEDIDAS SIMPLES QUE AYUDARÁN A LOS DISTRITOS DE CONTROL DE MOSQUITOS Y VECTORES DEL CONDADO A CONTENER MEJOR A LOS MOSQUITOS AGRESIVOS

ESPECIALMENTE EN SU HOGAR

PUBLICACIONES N&R

UN TIPO DE MOSQUITO NUEVO Y AGRESIVO
HUMANIZING MOSQUITO CONTROL

MOSQUITOS:

El público debe trabajar conjuntamente con los distintos controles de mosquitos y vectores del condado para mantener abajo las poblaciones de insectos del condado de Fresno.

**VULNERABILIDAD**

Vulnerabilidad a las poblaciones de mosquitos,
- Identificar los espacios específicos de las áreas
- Identificar las personas con mayor riesgo

**PROBLEMA DE GESTIÓN INTEGRAL DE PLAGAS**

**REGLAS TOP**

- Reducir la humedad y mantener el uso de la luz solar
- Almacenar las piezas de madera y de tela

**REDUCIR LAS POBLACIONES DE MOSQUITOS**

En el año 2006, el Centro de Control de Vecindad de la Ciudad de Fresno, California, implementó la Estrategia de Insectos de Mosquito. Esta estrategia incluyó actividades para reducir las poblaciones de mosquitos en áreas residenciales y para garantizar la seguridad de la población. La cantidad de mosquitos ha disminuido significativamente desde entonces.

**IMPACTO:**

80% reducción en la población de mosquitos

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**MOSQUITOS:**

**MASS GLUCONOSURIA**

**MOSQUITOS:**

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.

**HUMANIZING MOSQUITO CONTROL**

Created for the 2020 AMCA 86th Annual Meeting

**LA PREVENCIÓN ES LA VITA E VITA PROBLEMAS**

Los vecinos deben adoptar una actitud conjunta para reducir las poblaciones de mosquitos.
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
LIBRE DE Molestias

CONDADO DE FRESNO!

PROTEGE A SU FAMILIA

- Use redes de malla largas cuando los mosquitos están activos (especialmente al anochecer y al amanecer).
- Utilice un repelente apropiado por el DDT y ahora aplicado en la ropa y el cuerpo.
- Mantenga la zona seca eliminando y tire de las hojas excesivas para eliminar.

SU HOGAR

- Repeler los mosquitos en los alrededores de su hogar.
- Repeler las redes de agua con jardín.
- Mantenga el agua fresca en las fuentes de agua para los mosquitos.
- Repeler los planos bajos de los planos con agua, todos los charcos contaminados de agua deben ser eliminados.

SU PROPIEDAD

- Quiebre completamente las zonas bajas que las inundan.
- Almacene las botellas y contenedores boca arriba.
- Coloque parapetos para mosquitos en los bordes de los ríos para el agua.
- Bote en el estanque para evitar la acumulación de agua.
- Utilice un mosquitero o ropa en todas las zonas de contacto.

HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
BENTON COUNTY MOSQUITO CONTROL DISTRICT

KNOW THE RISKS

INSIDE: Problems mosquitoes bring — Safe use of pesticides — What you can do to help!

A special advertising supplement

HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
ASSESSING THE RISK
THE SCIENCE OF MOSQUITO PESTICIDES
By Mike Blockey

EXPOSURE IS SO LOW IT WOULD TAKE 1,000 TIMES THE AVERAGE AMOUNT OF MODERN PESTICIDES USED BEFORE THE ENVIRONMENTAL PROTECTION AGENCY’S THRESHOLD FOR SAFE USAGE IS REACHED.

"HUMANIZING MOSQUITO CONTROL"

HUMANIZING MOSQUITO CONTROL

How are we non-persecutors?

This answer to the question can be found in the context of humanizing mosquito control. Non-persecutors, who focus on minimizing the ecological impact of mosquito control, often use methods such as targeted spraying or the release of sterile insects.

Non-persecutors argue that traditional approaches like the application of toxic chemicals can lead to unintended harm to non-target organisms and the environment. They advocate for strategies that minimize the use of harmful substances while still effectively managing mosquito populations.

Non-persecutors may argue that a more holistic approach is needed, considering the interconnectedness of ecosystems and the potential for indirect impacts of mosquito control practices. They may also emphasize the importance of public engagement and education to foster a better understanding of the complexities involved in mosquito management.

Non-persecutors often work with stakeholders from various sectors, including environmental groups, community organizations, and local authorities, to develop integrated pest management strategies that aim to reduce the ecological footprint of mosquito control efforts.

Non-persecutors advocate for the use of innovative technologies and approaches, such as the release of genetically modified mosquitoes or the use of targeted spraying, which can be more precise and less disruptive than broad-spectrum applications. These methods aim to minimize the impact on non-target species while still addressing mosquito populations effectively.

Non-persecutors believe that a shift in perspective is necessary to achieve a more sustainable and equitable approach to mosquito control. By focusing on minimizing the ecological impact, non-persecutors aim to create a more balanced and responsible approach to managing mosquito populations, ensuring that the needs of both humans and the environment are considered.

Non-persecutors are committed to engaging with the broader community, including public health officials, environmentalists, and the general public, to promote awareness and understanding of the complexities involved in mosquito control. This collaboration helps to ensure that solutions are developed that are both effective and environmentally responsible.
HUMANIZING MOSQUITO CONTROL

PROTECT YOURSELF WITH REPELLENTS

THE BEST WAY TO DEFEND AGAINST MOSQUITO BITES WHILE OUTSIDE

BY AMANDA CASSADY

Using repellents is one of the most effective ways to protect against vector-borne diseases. While there are a variety of insecticide products to choose from, it is important to use products that are safe for you and your family. Many products contain DEET, which is known to be safe and effective against mosquitoes, ticks, and other insects that can carry diseases such as malaria, dengue fever, and yellow fever.

Recent studies have shown that repellents containing at least 20% DEET provide the best protection against mosquitoes. However, some products may contain other active ingredients, such as picaridin or oil of lemon eucalyptus, which may offer longer-lasting protection.

When selecting a repellent, choose one that is suitable for your needs. Some brands offer different formulations for different age groups, such as children or pregnant women. Apply repellent to exposed skin and clothing outdoors to help keep mosquitoes away.

THE NUMBER ONE THING YOU CAN DO TO PREVENT MOSQUITOES IS TO NOT GIVE THEM A PLACE TO LAY THEIR EGGS AND BUILD "LAWNS"

By Angela Beehler, District Manager for Benton County Mosquito Control

Mosquito control is an important issue for all of us. To prevent mosquitoes from breeding and spreading diseases, it's important to keep our yards and outdoor areas clean and free of standing water.

Check your yard for any standing water, such as rainwater that has accumulated in containers like birdbaths, tires, and buckets. These containers can be a breeding ground for mosquitoes. Use mosquito control products, such as larvicides, to kill mosquito larvae before they can develop into adults.

WHAT CAN YOU DO TO PROTECT MOSQUITO CONTROL?

1. Keep your yard free of standing water by emptying out containers and pools regularly.
2. Use mosquito control products to kill larvae and adult mosquitoes.
3. Avoid being outside during peak mosquito activity times, when mosquitoes are most active.
4. Use insect repellents containing DEET or picaridin.

Q&A WITH ANGELA BEELLER

DISTRICT MANAGER OF BENTON COUNTY MOSQUITO CONTROL

ANSWERS YOUR QUESTIONS

BY MIKE BLOOM

What can you do to control mosquitoes in your area?

Angela Beehler: “There are several strategies we recommend for controlling mosquitoes. First, keep your yard free of standing water, which is a breeding ground for mosquitoes. We use larvicides to kill mosquito larvae and stand-alone traps to catch adult mosquitoes. We also conduct education campaigns to raise awareness about the importance of mosquito control.”

How effective are mosquito control programs in reducing mosquito populations?

Angela Beehler: “Mosquito control programs can be very effective in reducing mosquito populations. The level of effectiveness depends on various factors, such as the severity of the outbreak, the availability of resources, and the cooperation of the community.”

What role do citizens play in mosquito control?

Angela Beehler: “Citizens play a critical role in mosquito control. By regularly emptying out containers and pools, they can help reduce the breeding sites for mosquitoes. Additionally, they can use mosquito control products and follow best practices to protect themselves from mosquito bites.”

Angela Beehler is the district manager for Benton County Mosquito Control.

We are proud to be part of a team dedicated to protecting our community from mosquito-borne diseases. Our team works hard every day to ensure that your family and pets are safe from the dangers of mosquito-borne illnesses. Together, we can make a difference in the fight against mosquitoes.”

N&R PUBLICATIONS

HUMANIZING MOSQUITO CONTROL

Created for the 2020 AMCA 86th Annual Meeting
CONTROLLING MOSQUITOES
IN BENTON AND YAKIMA COUNTIES

Humanizing Mosquito Control

created for the 2020 AMCA 86th Annual Meeting
$\$ PRICING $\$

**PRE-PRODUCTION - FREE:**
- Storyboard where we come together with your team to plan the publication content
- Production plan which details the content, look and feel of the proposed publication

**PRODUCTION - $16,000 for an 8-page publication includes:**
- All writing, photography and graphic design
- Review/editing process
- Standard pdf
- Standard flipbook
- Permission to re-use every photo we take and story we write

**DISTRIBUTION - budget based on your needs - includes:**
- Printing - 5,000 (min) @ $.21 ea, 10,000 @ $.15 ea, 15,000 @ $.13 ea, 25,000 @ $.11 ea, 50,000 @ $.09 ea
- Delivery - average $150-$200/drop location
- Insertion into newspapers - average $.07/piece
- Mailing to homes and/or business - about $.30/piece

**ADD-ONS:**
- Translation - $8,000/8-page publication
- Social media package - $2,200 for 10 unique posts including 6 custom visual posts
- Graphics-based videos - $1,150/:30 length, $1,950/1:00 length, $2,250/1:30 length
- Video/social media package - $2,650 for :30 video, 6 unique posts including 3 custom visual posts
Questions? Interested in a publication?

Elizabeth Morabito

N&R Publications

Lead Marketing & Publications Consultant

elizabethm@newsreview.com

(916) 498-1234 x 1335