

# Annual Schedule

## March

### Field Studies begin

EMAD is busy checking for breeding sites. Once sites are identified their locations are mapped and larva density is documented

## April

**Larviciding begins** with Bti which is a biological or a naturally occurring bacterium found in soils. (Bti is short for *Bacillus thuringiensis* subspecies *israelensis*.) It contains spores that produce toxins that specifically target and only affect the larvae of the mosquito, blackfly and fungus gnat. Larviciding takes place throughout the season

## June

**Adult Mosquito fogging begins**, typically around the 15<sup>th</sup> of June, weather permitting

Fogging trucks run predetermined routes which do not include driveways or private property. You may see a truck fog someone's property, however this is only done on a case by case basis pending trap findings

The trucks run from 9:00pm to 12:00am Monday through Thursday, weather permitting. Sometimes our trucks will fog an area more than once a week if trap findings indicate an increase in our mosquito populations

## August

**Adult Mosquito fogging ends**, typically around the 30<sup>th</sup> of August

## MOSQUITO CONTROL

Several methods of mosquito control are used by the District:

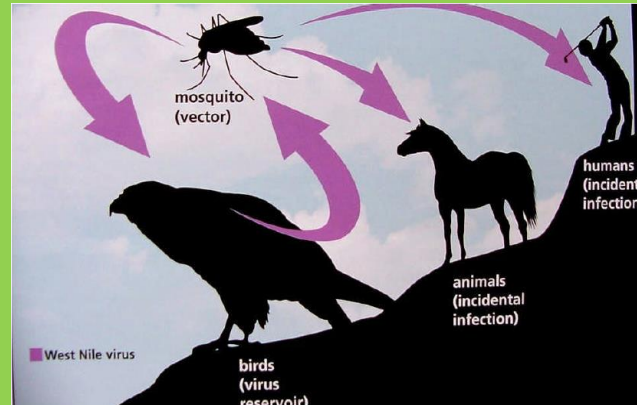
**Physical control** - improve water circulation or eliminate standing water

**Biological control** - use natural predators (e.g., fish), parasites, fungi, etc.

**Biorational control** - use bacterial agents and juvenile hormone mimics

**Chemical control** - Fogging/spraying for adults (adulticiding)

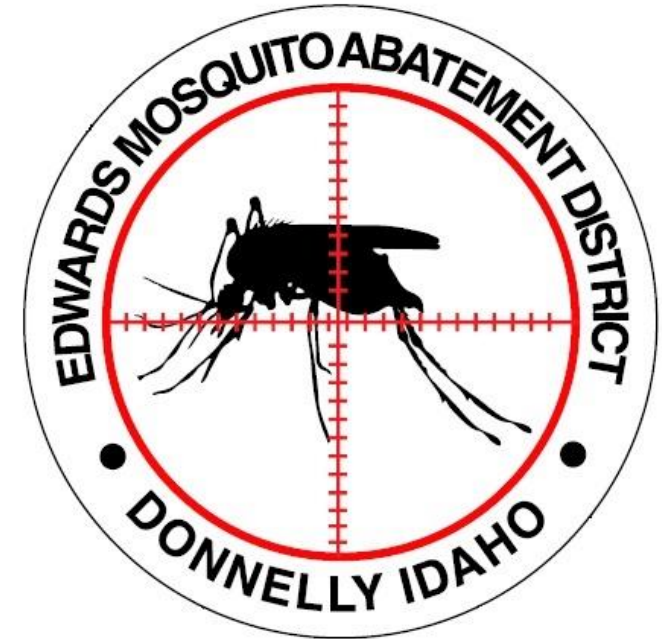
**Public education** - provide information on ways to eliminate mosquito breeding in and around the home and yard



Contact us at  
**208-325-4096**

or on the web at <http://www.emad-donnelly.org>

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[www.emad-donnelly.org](http://www.emad-donnelly.org)

## MISSION:

The Edwards Mosquito Abatement District (EMAD) goal/responsibility is to protect the public health from mosquito-borne illnesses within the District. To implement an Integrated Pest Management Program in coordination with Federal, State and Local agencies.

Operating in an environmentally safe, ecologically-sound and publicly accessible manner. We operate as a resource on mosquito biology, control, and prevention. With cooperation from the residents, the District will have a positive impact on the community.

## LARVICIDING PROGRAM:

- Wetlands and suspected mosquito breeding sites are monitored from March through September to determine the need for applications of environmentally sensitive products (typically Bti/Bs) to control and/or eliminate the larval mosquito. By controlling mosquitoes in their larval stage, the need for adult mosquito spraying is reduced.

## ADULTICIDING PROGRAM:

- When adult mosquito populations reach intolerable levels, truck mounted sprayers are used to reduce the adult mosquito levels in residential and recreational areas. EMAD has worked diligently over the past several years to achieve the goal of reducing the dependency on adulticiding by increasing the emphasis on larviciding, public education, source reduction and ditch maintenance.

## MOSQUITO MONITORING:

- New Jersey light traps: are used for monitoring local mosquito populations and are used to justify fogging applications
- CO2 Traps: CO2 is used as "bait" to lure more mosquitoes for the purpose of disease testing
- Larval collection
- Landing rates

## VECTOR BORNE DISEASE MONITORING:

- We use the rapid analyte measurement platform (RAMP). This system is an immunoassay test for West Nile virus (WNV) detection.
- Positive results are forwarded to the Department of Health and Welfare / Public Health Division

New Jersey Light Trap



EVS-CO2 Mosquito Trap

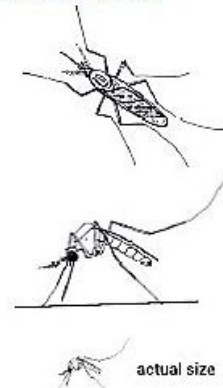


## MOSQUITO-MIDGE COMPARISON

Homeowners frequently call us to report mosquito problems. In many instances, what appears to be a mosquito is actually another kind of insect.

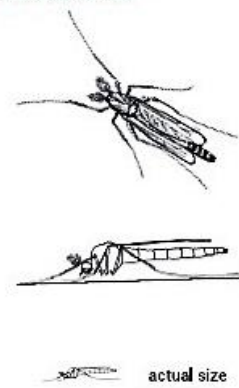
The most commonly encountered look-a-likes are midges (gnats). These insects frequently form swarms and are also attracted to lights. They do not bite or spread diseases, but can still be annoying.

### TYPICAL MOSQUITO



- Bites with its proboscis (needlelike mouthparts)
- Wings are slightly longer than body
- Always develops in standing water
- Rests on objects with its body above the surface
- Can carry diseases

### TYPICAL MIDGE



- Cannot bite (has no proboscis)
- Wings are shorter than body
- Develops in mud on the bottom of lakes and ponds
- Rests on objects with its body almost touching the surface
- Cannot carry diseases

## SOURCE

### REDUCTION/PREVENTION:

- Reducing or removing larval habitat by removing or disposing of anything that can hold water. Mosquito larvae are opportunistic and will create habitat in any container that holds water for more than a week. Empty and clean birdbaths and kiddie pools each week, cover or store inside anything that may capture and hold water, and dispose of or recycle any containers that are no longer needed.

### PUBLIC PARTICIPATION:

- Public participation is a crucial aspect of our monitoring program. No one knows the areas around their homes or neighborhoods as well as the residents that reside there. Persistent standing water, tree wells, natural/artificial containers. Your findings or concerns should be forwarded to our district office.
- Ditch maintenance seems to be a problem in some neighborhoods, mosquitoes need still, stagnant water to complete their metamorphosis from egg to adult. Please keep your ditches, culverts and man-made ponds cleaned out to improve water quality and increase water flow. This will greatly reduce the potential for mosquito breeding sites.

### THE MOSQUITO LIFE CYCLE

Mosquitoes have four distinct developmental stages: egg, larva, pupa and adult. The average time a mosquito takes to go from egg to adult is five to seven days.

