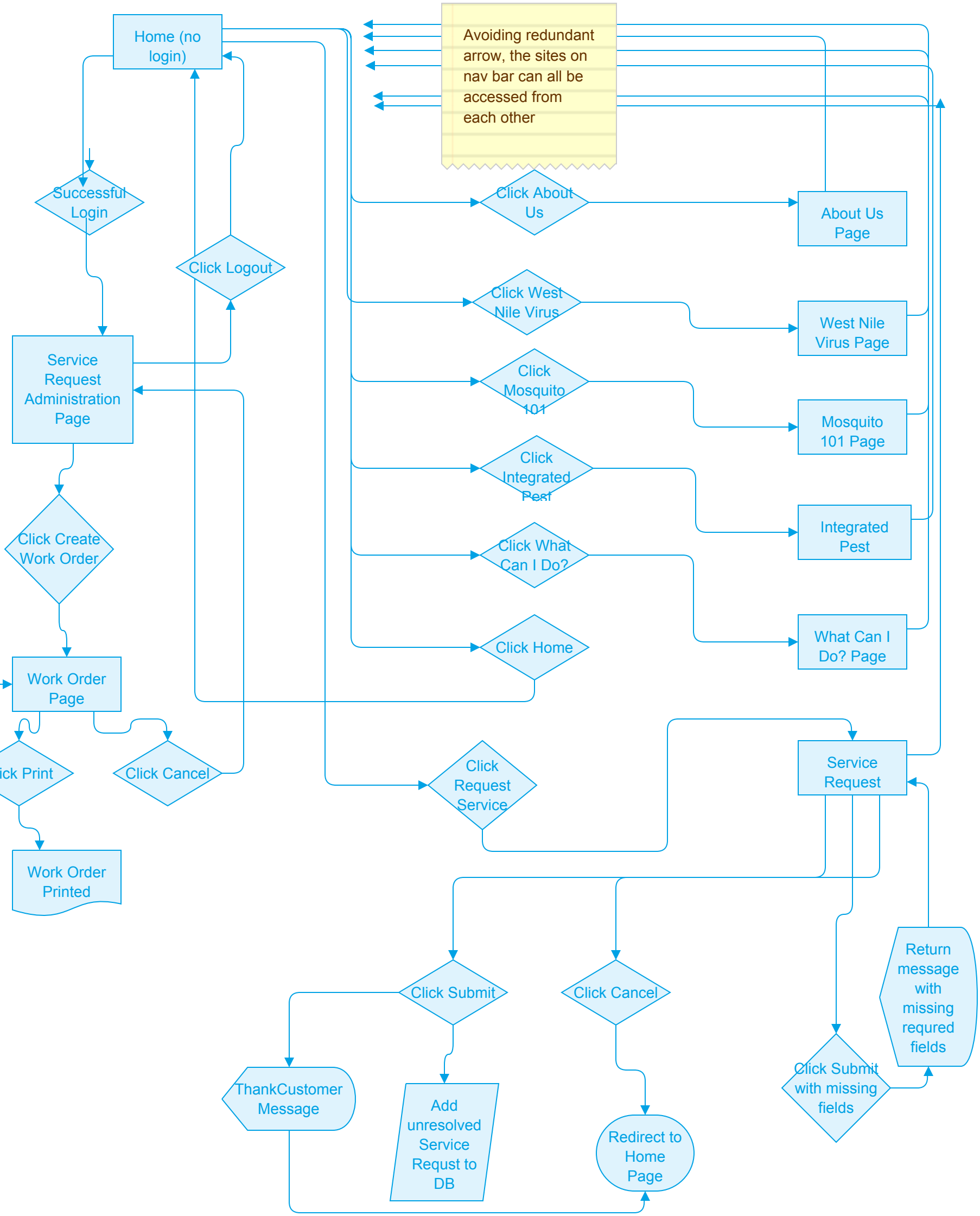
Flow Chart of Website Hierarchy



Email Address | Password | Login

Midway Abatement District

Jefferson County, Idaho

Request Service

Home | About Us | West Nile Virus | Mosquito 101 | Integrated Pest Management | What Can You Do?

Boundary Map and West Nile Virus Positive Locations

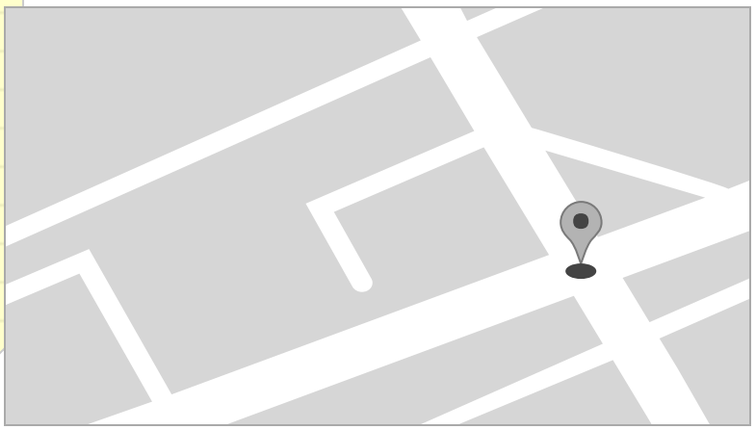
Recent news

news item 1

news item 2

news item 3

.....



Email Address | Password | Login

Midway Abatement District

Jefferson County, Idaho

Request Service

History:

Midway Abatement District started in 2007 as an interim Mosquito Abatement District (MAD) in response to the West Nile Virus outbreak of 2006. It covers all residents in Jefferson County not living within the boundaries of Roberts MAD or Jefferson County MAD (see boundary map). In 2009, the interim district became permanent, eventually adopting the name Midway Abatement District. Since its inception, Midway has contracted Clarke Environmental to provide comprehensive mosquito control services for the county including surveillance, larval control, and nightly adult treatments.

Midway Abatment Board

The Midway Abatement District board members convene for meetings on the second Wednesday of the month. Meetings are open to the public and are usually announced in the Rigby Star and occur at 6:30PM at the Jefferson County Courthouse.

President: Tyler Simmons
Secretary: Kacey Nield
Treasurer: Barbara Muggleston
Other members: Jason Kofoed, Dean Fullmer

Partnership with Clarke

Clarke is a global environmental products and services company. Our mission is to make communities around the world more livable, safe and comfortable. We do this by pioneering, developing and delivering environmentally responsible mosquito control and aquatic services to help prevent disease, control nuisances and create healthy waterways.

Site Manager: Wes Gruenberg

More info: www.clarke.com

P.O. Box 123 Rigby, ID 208.745.9049

Email Address | Password | Login

Midway Abatement District

Jefferson County, Idaho

Request Service

Overview

West Nile virus is a flavivirus (a genus of Japanese Encephalitis and closely related to Louis Encephalitis) commonly found in Africa, West Asia and the Middle East (it was first discovered in Uganda, Africa in 1937). It was discovered in the United States in 1999 in the New York City area and has been moving across the U.S. since.WNv is primarily a mosquito/bird disease, but incidental infections can occur with humans and many other animals. Mosquitoes become infected when they feed on infected birds, such as ravens and crows. After an incubation period of 5 to 15 days, the mosquito can then transmit the virus to humans and animals by biting them. Following this transmission, the virus multiplies in the bloodstream. In severe cases the virus crosses the blood-brain barrier, reaching the brain and causing inflammation of the brain tissue. This inflammation interferes with the central nervous system.

Surveillance

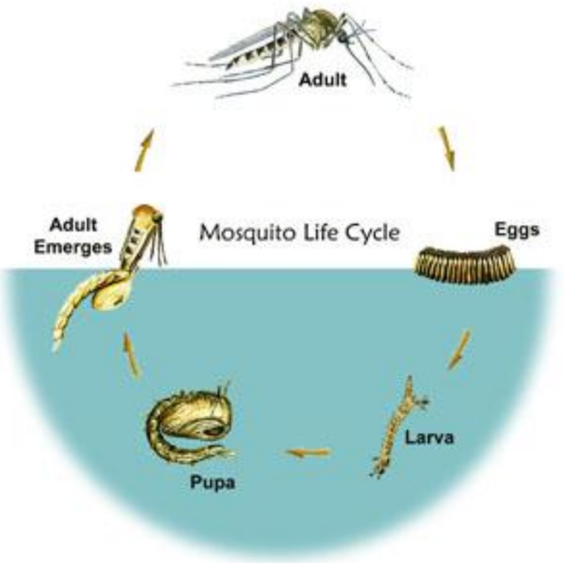
For the collection of adult female mosquitoes (male mosquitoes do not 'bite') BCMC uses dry ice CO2 traps. These traps are based upon a CDC (Centers for Disease Control) designed CO2 (carbon dioxide) trap. The top portion is a 1-gallon cooler with holes drilled in the bottom. Approximately 5 lbs of dry ice is placed into the cooler and as the dry ice sublimates carbon dioxide is released. Carbon dioxide is a long-range attractant for mosquitoes. A battery-powered fan hangs beneath the dry ice cooler and as the female mosquitoes approach the CO2 source, they are sucked into a catch bag. These traps are set out in the afternoon and then collected the following morning. The mosquitoes are then identified by species, counted, and some mosquito samples are tested for the presence of disease

Testing

Our In-house testing uses the RAMP (Rapid Analyte Measurement Platform) Reader West Nile virus test. The RAMP Reader is a highly accurate device that can provide relatively quick test results on either mosquito samples or throat swabs of dead birds. The system (test cartridge) uses specific antibodies to detect the presence of WNv antigens. Positive samples may be sent off to a state accredited laboratory for confirmation. State confirmation provides a higher degree of accuracy and rules out the possibility of false positives. Though the RAMP system is not 100% accurate, it is the most reliable system available to small programs that do not have full state-lab capabilities. RAMP provides quick results on field collected mosquito samples and serves as an 'early warning system' in our effort to detect WNV *before* it infects people, pets and/or livestock.

P.O. Box 123 Rigby, ID 208.745.9049

Mosquito Biology



Knowing the different stages of the mosquito's life will help you prevent mosquitoes around your home and also help you choose the right pesticides for your needs, if you decide to use them. All mosquito species go through four distinct stages during their life cycle:

- Egg - hatches when exposed to water.
- Larva - (plural: larvae) "wriggler" lives in water; molts several times; most species surface to breathe air.
- Pupa - (plural: pupae) "tumbler" does not feed; stage just before emerging as adult.
- Adult - flies short time after emerging and after its body parts have hardened.

The first three stages occur in water, but the adult is an active flying insect. Only the female mosquito bites and feeds on the blood of humans or other animals.

- After she obtains a blood meal, the female mosquito lays the eggs directly on or near water, soil and at the base of some plants in places that may fill with water. The eggs can survive dry conditions for a few months.
- The eggs hatch in water and a mosquito larva or "wriggler" emerges. The length of time to hatch depends on water temperature, food and type of mosquito.
- The larva lives in the water, feeds and develops into the third stage of the life cycle called, a pupa or "tumbler." The pupa also lives in the water but no longer feeds.
- Finally, the mosquito emerges from the pupal case after two days to a week in the pupal stage.

P.O. Box 123 Rigby, ID
Privacy Policy
208.745.9049
Website by WIG3 Designs

Midway Abatement District

Jefferson County, Idaho

An Integrated Approach to Mosquito Control

Successful mosquito management requires intervening at some point during the mosquito's life cycle before they bite and infect a human.The best approach to controlling mosquitoes takes advantage of every life stage of a mosquito to achieve control, using a unified approach referred to as integrated pest management (IPM).

Integrated Pest Management

IPM is a science-based, common-sense approach for managing pests and vectors, such as mosquitoes. IPM uses a variety of pest management techniques that focus on pest prevention, pest reduction, and the elimination of conditions that lead to pest infestations. IPM programs also rely heavily on resident education and pest monitoring.A successful IPM strategy can use pesticides. IPM uses a combination of ways to control mosquito populations with decisions based on surveillance, such as keeping track or count of the numbers and types of mosquitoes in an area. Surveillance is a critical component to any successful IPM program because the results from the surveillance will help determine the appropriate response to an infestation. Extensive infestations, or those where disease is present, merit a different response than will lower levels of infestations.Both CDC and EPA recognize a legitimate and compelling need for the use of chemical interventions, under certain circumstances, to control adult mosquitoes. This is especially true during periods of mosquito-borne disease transmission or when source reduction and larval control have failed or are not feasible.

A successful integrated mosquito control strategy includes several tactics to eliminate mosquitoes and their habitat. Four critical tactics include:
1. Remove Mosquito Habitats
2. Use Structural Barriers
3. Control Mosquitoes at the Larval Stage
4. Control Adult Mosquitoes

1. Remove Mosquito Habitats

An important part of mosquito control around homes is making sure that mosquitoes don't have a place to lay their eggs. Because mosquitoes need water for two stages of their life cycle, it's important to monitor standing water sources.

- Get rid of standing water in rain gutters, old tires, buckets, plastic covers, toys or any other container where mosquitoes can breed.
- Empty and change the water in bird baths, fountains, wading pools, rain barrels and potted plant trays at least once a week to eliminate potential mosquito habitats.
- Drain temporary pools of water or fill with dirt.
- Keep swimming pool water treated and circulating.
- If flood irrigating, do not over water and make sure water does not stand for long during warm weather. Mosquito eggs can hatch and larva can develop to pupa and then adults in just a few days.

2. Use Structural Barriers

Because mosquitoes frequently bite indoors, using structural barriers is an important way to reduce the incidence of bites. Examples of structural barriers include:

- Install window and door screens if they are not already in place.
- Cover all gaps in walls, doors and windows to prevent mosquitoes from entering.
- Make sure window and door screens are "bug tight."
- Completely cover baby carriers and beds with netting. Nets can be especially important for protecting a sick person from getting more mosquito bites, which could transmit the disease to other people.

3.Control Mosquitoes at the Larval Stage

The greatest impact on mosquito populations will occur when they are *concentrated, immobile* and *accessible*. This emphasis focuses on habitat management and controlling the immature stages (egg, larva, and pupa) before the mosquitoes emerge as adults. This approach maximizes the effectiveness of pesticide application and minimizes the use from widespread pesticide application. Larvicides target larvae in the breeding habitat before they can mature into adult mosquitoes and disperse. Larvicide treatment of breeding habitats helps reduce the adult mosquito population in nearby areas.

Culex pipiens mosquitoes can use natural locations or habitats (for example tree holes and crevices in plants) and artificial containers with water to lay their eggs. They lay eggs during the day in water containing organic material (e.g., decaying leaves, algae, etc.) in containers with wide openings. They prefer dark-colored containers located in the shade. Other sites where they may lay their eggs include: old tires, buckets, toys, potted plant trays and saucers, plastic covers and even places as small as bottle caps.

Egg and larva interventions are generally the most effective, least costly, way to control mosquitoes. However, these interventions are unlikely to be 100% effective, especially for mosquitoes like the *Culex pipiens* that breed in varied and scattered locations. In these cases, eliminating or treating all or even most standing water can be nearly impossible. Successful control efforts will need to supplement habitat removal with other means of control.Involvement of the community is essential to these interventions. Residents, neighbors, and landlords can all be proactive in eliminating standing water or alerting others to its presence to eliminate even the smallest sources of standing water.

There are a number of EPA-registered active ingredients used in larvicides. Choosing which larvicide to use in a given area is best done by experts and will depend on a variety of factors, including potential human or environmental risk, cost, resistance, and ease of use.

4. Controlling Mosquitoes at the Adult Stage

Using an EPA-registered pesticide is one of the fastest and best options to combat an outbreak of mosquito-borne disease being transmitted by adult mosquitoes. The pesticides registered for this use are known as adulticides. Adulticides are applied either using aerial applications by aircraft or on the ground by truck-mounted sprayers.

Aerial spraying techniques can treat large areas with only small amounts of pesticide and have been used safely for more than 50 years. These aerial sprays are been fully evaluated by EPA and don't pose risks to people or the environment when used according to the directions on the label. Mosquito adulticides are applied as ultra-low volume (ULV) sprays. ULV sprayers dispense extremely small droplets. The Duet insecticide, for example, uses 80 microns or less which means hundreds of thousands of droplets could fit inside something as small as one pea. The small droplet size makes the pesticide more effective, which means less pesticide is used to better protect people and the environment

.Extensive scientific research has been conducted by academia, industry, and government agencies to identify appropriate droplet sizes for individual compounds. The equipment nozzles undergo rigorous testing before being sold to the mosquito controllers. ULV applications involve very small quantities of pesticide active ingredient in relation to the size of the area treated.

There are a number of registered adulticides to choose from. Choosing which adulticide to use in a given area is a job best done by experts and will depend on a variety of factors such as the type of mosquito, whether the mosquitoes are resistant to particular types of pesticides, weather, etc.

P.O. Box 123 Rigby, ID 208.745.9049

Common Mosquito Breeding Sites

FIGHT THE BITE
Do Your Part

1. TIP, Toss & Drain Standing Water

2. Repair Holes in Screens

3. Wear Long Sleeve Shirts & Pants Outdoors

4. Wear Mosquito Repellant

Any type of container that holds standing water is the perfect breeding ground for disease-carrying mosquitoes.

Email Address | Password | Login

Midway Abatement District

Jefferson County, Idaho

Request Service

Home | About Us | West Nile Virus | Mosquito 101 | Integrated Pest Management | What Can You Do?

Name

Address

☑ Standing Wate

☑ Mosquito Annoyan

Please briefly describe the location of the standing water and/or the area in which you are having mosquito problems.

Submit | Cancel

Site Map

P.O. Box 123 Rigby, ID
Privacy Policy

208.745.9049
Website by WIG3 Designs

Midway Abatement District

Jefferson County, Idaho

Welcome back Administrator Logout

Service Request Administration

All | Unresolved | Resolved

Add Request

▼ Name	▼ Address	▼ Description	▼ Standing Water	▼ Night Spray	▼ Supervisor Notes	▼ Resolved?	▼ Work Order
John Doe	4004E 800N Rigby	I'm getting carried away by them skeeters	☐	☑	8/1 Sprayed	☑	☐
Mikey Complainer	750N 3950E Rigby	I left a bunch of water in a kiddie pool and also there are mosquitoes everywhere	☐	☑	7/15 dumped out pool and sprayed that night	☑	☐
Wendy Whiney	500N 3200E	WAHHHHHHH	☑	☑	treated pond on 7/5	☑	☐
Gary IrrigatesTooMuch	3100E 320N Rigby	Yeah I have been letting all this water sit in my pasture for a few days	☑	☐	Inspect for larva	☐	☑
Ronald Scott	4050E 800N Rigby	Go behind my house	☑	☑	Add to night route section 5 7/16	☐	☑

Select at least one service request to create printable work order

Create Work Order

Site Map

P.O. Box 123 Rigby, ID
Privacy Policy

208.745.9049
Website by WIG3 Designs

Midway Abatement District

Jefferson County, Idaho

Service Request Work Order

Technician Name

4/22/2012

▼ Name	▼ Address	▼ Description	▼ Standing Water	▼ Night Spray	▼ Supervisor Notes	▼ Resolved?
Gary IrrigatesTooMuch	3100E 320N Rigby	Yeah I have been letting all this water sit in my pasture for a few days	☑	☐	Inspect for larva	☐
Ronald Scott	4050E 800N Rigby	Go behind my house	☑	☑	Add to night route section 5 7/16	☐

Additional Instructions

Multi-line
textarea

Technician Notes

Print Back