



# Skeeter Scanner

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COMMITTEE



[www.mimosq.org](http://www.mimosq.org)

## President's Message

After enduring the past brutal winter, it is no surprise the cold weather is having trouble letting go of Michigan. I don't know about you, but I don't want to hear "Polar Vortex" anytime soon. The jet-stream needs to stay in Canada where it belongs. And yes there will be mosquitoes this spring; this in response to public thought that the cold killed most of them; alas, those mosquito eggs are tucked in the snow waiting for spring. Well enough about the weather for now, as mosquito control professionals the weather is always on our minds.



Thank you, to all the individuals that coordinated and attended another great MMCA meeting this past February in Lansing. Charles Dinsmore and the entire planning committee did a great job from the presenters and facilities to the food. A special thanks to the vendors for their support not only in the field but in supporting our association.

In 2014, the MMCA looks to service; training/consulting with local health departments in regards to mosquito-borne disease surveillance, as well as, refining our 7-F training session and the MMCA meeting. The MMCA should always be a resource for individuals or entities looking to address or ascertain the public health threat that mosquitoes pose. We will be conducting a training in basic disease surveillance with local health departments, those which have historical human incidences of West Nile virus. Thank you, to the Michigan Department of Community Health's Erik Foster for facilitating this training program. I assure our membership that the quality and re-certification opportunities will not change with respect to the MMCA's "7-F" training and our annual meeting. The Board will continue to ensure that these events continue to be financially healthy, accessible, and valuable to our membership. I would be remiss if I did not ask our members, if you need any support, information, or have ideas on how we may better serve please let us know.

I look forward to serving as MMCA President.

## MMCA Partners with AMCA for PESP Report.

In 1997, the American Mosquito Control Association became a "Partner" in the EPA's Pesticide Environmental Stewardship Program (PESP). The goal of this partnership program is to encourage reducing pesticide risk by encouraging the responsible and judicious use of control materials. The AMCA formed a PESP Working Group that developed criteria allowing State and Regional mosquito control associations to become a "PESP Partner under the AMCA's auspices".

The MMCA became a PESP partner in 2008 and continues as a PESP partner and, as such, must submit an annual report to the AMCA. This report is provided to the EPA and documents activities in which the AMCA is promoting PESP goals. A summary of the 2013 mosquito season, representing activities that took place in Bay, Midland, Saginaw, and Tuscola County mosquito abatement districts was filed with AMCA in January. Information included in the report consists of amounts of pesticide used, educational progress (i.e., number of presentations or numbers of students instructed), source reduction projects, and disease/mosquito surveillance.

The AMCA's PESP participation has been rewarded with the Association receiving a "PESP Excellence Award for pesticide risk reduction" in November 1999. In October 2003, the AMCA was chosen as a "PESP Champion for demonstrating outstanding efforts towards risk reduction and exhibiting an extraordinary level of commitment to our common goals". MMCA is a proud PESP partner.

## Huge Mosquitoes Spread Malaria Awareness

The first mosquitoes of the season are always the biggest, and this year, five of them are gigantic. These are the five big wooden mosquitoes spotted in the Fairbanks area during the months of



March and April. They move from yard to yard as part of the "Imagine No Malaria" campaign.

Fourth-, fifth- and sixth-graders who attend Fairbanks United Methodist Church are spearheading the project, part of a worldwide, multidisciplinary effort to stop malaria in Africa, where 90 percent of global malaria deaths occur.

Funds raised for "Imagine No Malaria" go toward purchasing insecticide-treated mosquito nets, establishing community-based malaria control programs, public education, outreach through radio communication and improving malaria treatment by revitalizing hospitals, clinics and community health workers across Africa.

These youngsters, called "Sprouts," are part of worldwide sponsors that include the United Nations' World Health Organization, the Bill and Melinda Gates Foundation, and the International Federation of the Red Cross.

## New Scrap Tire Site Controlled in Bay County

In early August 2013, Bay County Mosquito Control was informed by the MDEQ of a large scrap tire pile located in a woodlot in Beaver Township. Operations Supervisor Bob Kline was unaware of the massive pile and visited the site to verify it. Using old aerial maps from the Bay County GIS department, he verified that the tire piles have been in existence for many years.

Bob received permission from the present landowner to go back through the woods to get an idea of how large the pile was and to see if the tires were breeding. Once locating the area in the woodlot, Bob confirmed the existence of "thousands upon thousands" of tires in a heap and noted that the tires were not on Mosquito Control's listing of known tire sites.

Larviciding technicians were dispatched to the tire site on August 12 to check for mosquito larvae. Six technicians spent 2 hours treating the tires which were breeding high density larvae, stages 2-4. Abate 4E was used at the site, with tires being an

ideal habitat to use the temephos product, applied via a Hudson hand pump sprayer.

A re-check was done on the tires 15 days later with no breeding found, showing the effectiveness of the active ingredient temephos. Another check done on September 10 revealed only a few tires breeding again which were re-treated by hand using a small amount of Provec 1G Larvicide.

For 2014, BCMC will regularly check the tire pile and it has been added to the listing of regular larviciding sites. The property owner was recently awarded a nearly \$23,000 grant by the DEQ to assist in the tire clean-up. The owner stated the tires were left by the previous owner over 20 years ago.



## Scanner Articles Wanted

We are always looking for original articles and information for the Scanner. Please submit any suggestions to: [mbreasbois@scmac.org](mailto:mbreasbois@scmac.org).

## SCMAC New Director and Operations Manager

Bill Stanuszek and Isaac Blackmon were promoted into the positions vacated when Randy Knepper and Tom Anderson retired the first of the year, followed shortly by Mark Harten.

Bill Stansuzek joined Saginaw County Mosquito Abatement Commission in August of 2005 as Biologist. Previously Bill had worked for the Midland County Gypsy Moth Program and as a seasonal worker at Midland County Mosquito Control.

Isaac started working for Saginaw County in 1991 at the Commission on Aging. Isaac joined Saginaw County Mosquito Abatement Commission in 1994 as a field foreman.

These promotions and retirements leave openings at SCMAC, hopefully we will be at full staff soon.

## Why Anti-pesticide Campaigns do Unintended Harm

By Angela Logomasini

Black spots on roses and flea bites on kittens; blight fallen petals and overwrought Britons. These are just a few unfavorable things associated with critics attacks on pesticides.

While pesticides have risks that must be managed, they also provide important benefits to farmers, gardeners and consumers. These benefits are being lost in a politically correct sea of regulations and blind support for everything "organic."

News stories have begun to highlight just some of the problems associated with a foolhardy fear of pesticides. Let's start with a very unfavorable thing: black-widow spiders are increasingly finding a home among organically grown grapes.

In the early 2000s, Britons began finding these visitors on their grapes, thanks to a grower in the United Kingdom who decided that spiders were a good alternative to pesticides to control fruit-devouring bugs.

Here in the United States, a Whole Foods shopper was appalled to find one of these surly creatures nesting inside her bag of grapes during the 2012 holiday season. More recently, black-widow spiders appeared on grapes in supermarkets in Michigan, Wisconsin and Minnesota. The spiders are even showing up on non-organic grapes as growers try to reduce pesticide use because of bad public relations created by groups such as the Environmental Working Group (EWG).

EWG publishes an annual report demonizing healthy fruits and vegetables that contain traces of pesticide residue. The report places grapes, along with apples, peaches, blueberries and other superhealthy foods on a "dirty dozen" list simply because they contain a tiny bit more pesticide residue than do other foods such as onions.

Even though growing fruits may require more pesticides than growing onions, the levels are legal and too low to matter healthwise. In fact, both the U.S. Environmental Protection Agency and the Food and Drug Administration have pointed out that these foods are safe and healthy to eat.

EWG's hype and the appearance of spiders at retail outlets are not the only challenges for grape farmers. Wine-grape growers battle a host of pests that require them to strategically apply pesticides. Even the most politically correct organic farmers use so-called "organic" pesticides. And thank goodness they do, since wine is among many consumers' favorite things.

Yet sometimes organic pesticides don't work. The Fetzer wine brand has recently abandoned its organic certification to fight the "Virginia creeper leafhopper," an insect that feeds on grape leaves. After several applications of "certified organic" pesticides failed, Fetzer turned to a chemical called Imidacloprid, which belongs to a class of pesticides called Neonicotinoids.

Farmers and gardeners use Neonicotinoids to protect a wide range of plants from grains to fruits and vegetables to ornamental roses. Neonicotinoids can be applied to seeds, which eventually produces plants that systemically can fight off pests without the need for regular spraying.

Critics claim these products are responsible for the mysterious disappearance of honeybee colonies. But this problem existed before farmers began using these chemicals, and evidence is weak that Neonicotinoids have a significant effect in real-life settings. If you doubt this, read John Entine's superb Forbes.com series on the topic.

Ironically, while some beekeepers blame farmers, the beekeepers themselves understand the benefits of pesticides. In fact, many of them apply pesticides right inside the hive to kill the Varroa mite, which they know for certain is a real and major threat to the bees. "It's like chemotherapy," explains University of Maryland entomologist Dennis vanEngelsdorp in Scientific American. "They know [using pesticides in the hive] is bad, but it's a lot better than the alternative."

If we really want to help the honeybees and ensure continued food production, we need to focus on finding out what's really happening, using the best available science, rather than jumping the gun to ban products arbitrarily. Indeed, the replacement products may prove more toxic to bees if we are not careful.

A misguided ban on Neonicotinoids would not only hurt agricultural production, even our pets could suffer. These chemicals are used in products that protect them from disease-carrying vermin, such as fleas and ticks.

The "greens" unscientific attack on Neonicotinoids is the tip of the iceberg. They have pushed for bans on a host of pesticide products, including chemicals needed to fight disease-carrying vectors. These anti-pesticide policies mean more people may suffer from disabling and sometimes deadly insect-transmitted diseases, such as the mosquito-transmitted West Nile virus in the United States, as well as malaria overseas.

Rather than ban valuable products, we can manage pesticide risks using sound science and balanced approaches. This will produce more affordable food and less disease. Then we won't feel so bad.



Photo by: Doug Allen

**The mosquito control hiring process begins while still in the grip of a record breaking cold winter.**

# Board Meeting Highlights

The Michigan Department of Community Health is implementing a program to increase mosquito surveillance in areas of Michigan that have been hardest hit with West Nile virus. MMCA is offering support to MDCH to help train these users on trapping, identifying and testing mosquitoes to increase surveillance throughout the state.

The 28th Annual MMCA Conference had a successful turnout with 105 registrants. The 2015 conference will be held February 4-5 at Shanty Creek Resort in Bellaire. The Planning Committee is currently considering sites for the 2016 conference in Southeastern Michigan.

MMCA wishes a happy retirement to active MMCA members Randy Knepper, Tom Anderson, and Mark Harten of Saginaw County Mosquito Abatement Commission and Lee Mitchell of Toledo Area Sanitary District. Thank you all for your service to the Association!



**MICHIGAN MOSQUITO CONTROL ASSOCIATION**

## MMCA Board of Directors

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## 2014 MMCA Committee Chairs

### 2015 Planning Committee

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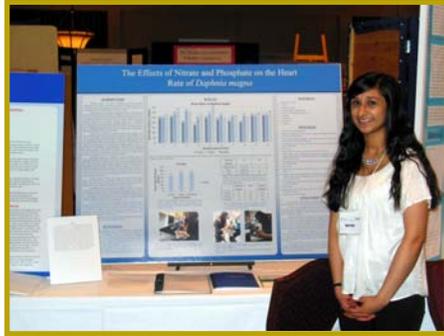
# MMCA Conference 2014

Gone but not forgotten.



## Great Lakes Bay Region Science, Technology, and Engineering Fair Winner

The MMCA has sent representatives for the past three years to the Great Lakes Bay Region Science,



Technology, and Engineering Fair (GLBRSTEF). The GLBRSTEF is a regional science competition that provides a great opportunity for the youth in the Great Lakes Bay Region to showcase their independent research in the areas of Science, Technology, Engineering and Math (STEM). It is the only middle and high school science competition in the region that offers an opportunity to display individual scientific talents through exhibits and demonstrations to professionals in STEM fields. As competitors in the GLBRSTEF, students have the opportunity to compete in subsequent state and international fairs. The GLBRSTEF not only encourages and inspires in youths the desire for scientific experimentation, but provides an educational experience that develops many skills essential for the 21<sup>st</sup> Century.

This year's competition took place at the Dow Event Center in downtown Saginaw on March 22. Margaret Breasbois and Mary McCarry of MMCA attended as judges and chose Nikita Patel, a sophomore who attends the Saginaw Arts and Sciences Academy as the winner of the \$100 award. The title of Ms. Patel's project was "The Effects of Nitrate and Phosphate on the Heart Rate of *Daphnia magna*"

## Upcoming Events

AMCA Annual 2014 Washington Conference  
May 5-7, 2014  
Holiday Inn & Suites  
Alexandria, VA

National Mosquito Control Awareness Week  
June 22-28, 2014

## 2014 William J. Lechel II, Memorial Scholarship Recipient

MMCA is proud to announce Courtney Weatherbee as the 2014 William J. Lechel II, Memorial Scholarship recipient. Ms. Weatherbee is from Jenison, Michigan, majoring in Entomology at Michigan State University. She plans on attending graduate school to pursue Forensic or Aquatic Entomology. Ms. Weatherbee also works with MSU'S A.J. Cook Arthropod Research Collection and volunteer's in the Bug House. Ms. Weatherbee's research was titled "Efficacy of an Ingestible Vitamin/Garlic Supplement as a Mosquito Repellant."



The goal of her study was to determine the efficacy of an ingestible vitamin/garlic supplement as a mosquito repellant using both lab tests and field trials. For the lab tests, landing rates were calculated for volunteer human subjects that placed their arm in a cage of approximately 100 *Aedes triseriatus* females before and after taking the supplement. Four separate field trials were conducted consisting of paired human subject volunteers. For each trial, one subject would take the supplement at least an hour prior to the trial, as recommended by the manufacturer, with the other subject serving as an untreated control. Subjects reversed roles the following evening. Each pair sat in a wooded area for 10-20 minutes and attempted to collect all mosquitoes that landed on them using a manual aspirator. The mosquitoes were then stored at -20°C and later identified and enumerated. Data from the lab tests showed slightly increased average landing rates after taking the supplement but this was not statistically significant. Field trial landing rates also showed no significant effect of treatment, with individual and date of trial accounting for most variation. Additionally, the types and relative abundance of mosquitoes collected were nearly identical from treated or non-treated individuals. In conclusion, the supplement appeared to be completely ineffective as a mosquito repellant against nuisance and vector species found in Michigan.



# News From Around The Districts

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## TUSCOLA

I believe everyone is thinking spring, however it appears that it may take its time in getting here. We have been busy making preparations for the start of the season with our hiring of seasonal employees and training and testing for the MDARD certification complete.

We are scheduling dates for our satellite scrap tire drives throughout the County. Ballot language is being reviewed for the request for millage renewal in August. We are awaiting the delivery of two new trucks which will complete the update of our fleet.

We are currently accepting requests for our long driveway program and Foremen will be checking no spray signage. Our pesticide orders have been placed, and we are looking forward to using a few new larvicides this season.

We hope to begin designing plans for the remodel of our building this spring with work to begin at the conclusion of the season; I have to say that seems a very long way off...

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Like others, we're patiently awaiting the end to a frigid, snowy winter so we can get out in the woodlots. As we write this article we're nearing the end of March and have yet to get out for any larval sampling. We just have too much ice and snow cover and the latest indications show that a slight warm-up is set for the end of March and early April so maybe we'll be out soon. Time will certainly tell.

Since announcing that applications were being accepted for seasonal employment in early February, we have collected quite a few. Interviews took place from early to late March and most positions are full. About half of employees from last season are actually returning.

## BAY

Last October we applied for a Michigan DEQ Scrap Tire Cleanup Grant and just found out that we were awarded \$3,750 to help defray the costs of our community scrap tire drives. February had us attending the MMCA 28<sup>th</sup> annual conference in Lansing. The 2014 Program Plan was compiled in February, followed by hosting the Mid-Michigan Technical Advisory Committee meeting on March 5. The comprehensive community outreach program plan was submitted to MDA, and we've been working on other community outreach documents as we gear up for the season. Updates to our hazard communication plan, including label and safety data sheet (SDS) changes, have been incorporated into our seasonal technician training program.

Control material bids were opened in January with prices seeing nominal changes compared to 2013. The two-year fixed wing aerial contract was awarded to Earl's Spray Service in Breckenridge.

Staff continue to update training materials, attend customer service presentations, watch AMCA webinars, revamp presentations that will soon be broadcast on our local Bay 3-TV (including the AMCA's "I'm One" program), order supplies, continue with maintenance projects and monthly storm water inspections, gather supplies for seasonal technicians, and send announcements to media and government offices in preparation for the upcoming season. Office staff is busy sending and receiving no spray, medical, and long-driveway notices as well as a myriad of other duties. We have also purchased and installed 13 new truck radios, purchased 7 hand-held radios, and had 21 older radios reprogrammed from analog to digital.

Looking forward to a successful 2014 season and hoping for steady, but small rainfall events without a deluge!

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Interviews for seasonal employment were completed in February and early March with our annual training session being held on March 21-22<sup>nd</sup>. Due to the continuation of fund constraints we have had to reduce our seasonal work force by two positions. We will no longer have a tire crew, which means residential tire pick-up is no longer offered; County residents will have to drop them off at our office or one of our three week-long tire drives. Our first substantial influx of seasonal employees is scheduled to report to work on Monday, May 5th.

Like last year, this spring has been very slow to warm up. After this long, very cold winter, we should expect nothing less. As of March 28<sup>th</sup>, the majority of woodland vernal pools are still frozen solid with snow still present. Normally we find our first larvae around March 22<sup>nd</sup>. Historically, our latest aerial larviciding was in 2003 when we started on April 28<sup>th</sup>.

Our Education Coordinator has already scheduled 189 classroom presentations at 42 schools. This year's Mosquito Abatement Challenge is a short story contest with the theme being "The Adventure of the Mosquito Avengers". All Saginaw County 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grade students are eligible to participate. Winners will receive their awards and recognition at the May Saginaw County Board of Commissioner's meeting.

This summer we will continue using a water-diluted ULV permethrin formulation; three trucks will use this product exclusively. Costs are now comparable with oil-based formulations and logic would predict that in the near future water-based products will be less expensive than oil-based formulations. SCMAC will continue our evaluation of *Bti/Bs* WDG formulations in catch basins. The Biology department will incorporate the TrapTech<sup>®</sup> mosquito lure into our arbovirus surveillance program.

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At the MMCA conference in Lansing Steve Manweiler from the Metropolitan Mosquito Control District observed that the spring weather has been quite variable of late. After the extremes we saw between 2012 and 2013 I have to admit he may be on to something. It certainly makes planning for a mosquito control season a challenge when you don't know if it will begin during March, April or May. I hope we hit a bit closer to average this year.

Whenever it is that we actually get started, our program should progress much the same as in the past few years. We will expand the area covered by our spring aerial program just a bit, but nothing significant will change. We plan to conduct field trials of two new (to us) B.t.i. formulations and continue evaluating the larvicide Mosquiron. The field crews will be pleased to see that we have a supply of Altosid extended residual briquettes so treatment of catch basins in heavy traffic areas can be "one and done". After that, we just try to respond to whatever Mother Nature throws our way. Of course, we now live in constant threat of West Nile virus. After two summers with a bit more activity, we hope for a return to the relative quiet of 2010 and 2011.

In addition to our regular mosquito control activities we will be cooperating with others in a few surveillance projects this year. The North American Mosquito Project (NAMP) is a USDA mosquito population genetics project investigating the genetics of *Culex tarsalis*, *Culex pipiens* and *Aedes vexans* populations throughout their respective geographic ranges. We don't see too many *tarsalis* here, of course, but I am sure that we will be able to provide them with more than enough Michigan *pipiens* and *vexans*. Meanwhile, a Saginaw Bay Watershed consortium is conducting surveillance for invasive weeds. As with the mosquitoes, we should, unfortunately, have no trouble identifying *Phragmites* populations in Midland County. Wouldn't it be nice if we could get a consortium interested in ridding us of invasive mosquitoes such as *Aedes japonicus*?

## Midland County Director Retiring

After 30 years working in Midland County Mosquito Control Tom can take no more of our shenanigans. His last scheduled day is June 20<sup>th</sup>. Originally Tom was from “Big Sky Country” and relocating to Midland County with its limited views was a big change. With Rick and Lacey grown and each having a daughter of their own in other parts of the US how much longer will Gail and Tom remain in Michigan is a mystery. His leadership at AMCA and MMCA during these difficult legislative times was greatly appreciated and will be sorely missed in the future. If you would like to say goodbye, a party in his honor will be held in Midland on June 19<sup>th</sup>. For information please contact Joyce at 989-832-8677.



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**Spring**