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**MMCA PUBLIC
INFORMATION
AND EDUCATION
COMMITTEE**



"We are a fluid association changing with science, regulations, and the needs of our membership." I stated that in my Message in the April *Skeeter Scanner*, and our MMCA Board proved that. This past year's Board was proactive and solution based, facing legislative, operational, and economic issues important to our membership. I would like to extend my utmost respect and thanks to the 2009 MMCA Board and those members that volunteered in the name of the MMCA. I write this "message" with a great sense of accomplishment and certainty that success will continue next year under incoming President Mary McCarry.



The MMCA was and still is confronted with issues new to the mosquito control landscape. Legislative changes at the Federal level, the probable requirement of NPDES permits in mosquito control operations; the closing of MDA regional offices and the effects on certification and re-certification; the stark economic reality in Michigan.

The Board contacted legislators and is currently working with the American Mosquito Control Association on the NPDES issue. We will keep our membership up to date as to changes and what their effects will mean to our profession.

Category 7F training was held on December 2nd in response to the need for recertification, in lieu of MDA regional office closure (four 7F credits given). What a success! We will have one or more this year, stay tuned. The MMCA also remains a committed partner in the discussion of future changes in MDA certification and testing.

The value of mosquito control was promoted through MMCA presence at numerous events, comprised of professional and public meetings, including MDA and EPA events. The MMCA joined the Michigan Association of Counties (MAC) realizing the opportunity to educate and campaign for community mosquito control. We must remain active promoters.

Another top-notch conference will be realized February 3rd & 4th in beautiful downtown Traverse City, please get those registrations in, if you've misplaced yours they are available on our website www.mimosq.org.

Thank you for the honor of serving as your president. Again, I would like to extend my gratitude and respect to the MMCA, the Board, and the many volunteers that have lent their talents and time to the betterment of the MMCA. Good luck to the incoming board, I have no doubts the MMCA will be active in 2010.

Lawmakers' Support May Aid Bid For High Court Review of Pesticides Suit

Senate agriculture committee Chair Blanche Lincoln (D-AR) and 36 other lawmakers are urging the Supreme Court to review a lower court ruling subjecting pesticide spraying to Clean Water Act (CWA) permitting requirements by arguing that the ruling misconstrues congressional intent, which could boost industry's bid for high court review.

In a Dec. 4 amici curiae brief to the Supreme Court, 30 House members and seven senators say the U.S. Court of Appeals for the 6th Circuit "substituted a deeply flawed reading of the [CWA] for that of the expert agency" in requiring water law permits for pesticides application in *National Cotton Council v. EPA*. The 6th Circuit in August denied a pesticide industry petition for an en banc review of the case, triggering the high court bid.

Legal experts say the brief by the lawmakers -- including 13 House Democrats and two Senate Democrats -- could boost prospects for Supreme Court review. "At the [certiorari] stage, the big issue is the importance of the legal issue. Amicus briefs can, for that reason, provide significant help by raising a cert petition's profile. Such a bipartisan group, without knowing anything more, strikes me as a useful amicus to that end," one law professor says.

The lawmakers argue that the 6th Circuit misconstrued the intent of the CWA and failed to consider its definitions in context with other federal law, namely the Federal Insecticide, Fungicide & Rodenticide Act (FIFRA), and say that Congress did not intend for the CWA permitting process to regulate pesticide uses.

The lower court vacated EPA's 2006 rule exempting agricultural pesticide users, state pest controllers and others who spray pesticides on or near water from having to obtain a National Pollutant Discharge Elimination System (NPDES) permit under the CWA. The court found that pesticides are pollutants and stem from a point source. "It is clear that but for the application of the pesticide, the pesticide residue and excess pesticide would not be added to the water; therefore, the

pesticide residue and excess pesticide are from a 'point source,'" the ruling says.

"The 6th Circuit failed to consider the meaning of 'pollutant' and 'chemical waste' in light of other federal regulatory efforts, particularly the system Congress specifically established decades before the CWA to regulate pesticides use, FIFRA," says the brief from 30 House members and seven senators.

The brief notes that Congress enacted "comprehensive revisions" to FIFRA three days after passing the CWA in 1972, and argues it is "extraordinarily unlikely" that Congress intended to ensnare pesticides application in the CWA's regulatory scheme without stating so clearly, because the laws were both under consideration at the same time. "At a minimum, one would expect Congress to speak clearly before subjecting such conduct to an additional layer of regulation." Relevant documents are available upon request.

The decision "likely will result in the single greatest expansion in the history of the NPDES program, resulting in approximately 5.6 million covered pesticide applications per year by 365,000 applicators. . . That figure is vastly greater than the current number of facilities authorized to discharge under individual permits (45,700)" or even other, larger categories of permits, the brief says. "The current number of NPDES permittees is 411,470 facilities. . . Thus, in a single stroke, the [6th] Circuit's decision virtually doubles the number of entities subject to NPDES permitting."

EPA estimates that the 6th Circuit's ruling will apply to some 5.6 million annual pesticide applications for 365,000 applicators, but the Obama EPA fought against the 6th Circuit initiating an en banc review of its decision, saying with a two-year stay it could implement the ruling.

Each lawmaker on the brief represents districts or states with sizable agricultural interests, including Senate agriculture committee Chairwoman Lincoln and fellow Democratic Sen. Ben Nelson (NE).

The five other senators are all Republicans and include agriculture panel ranking member Sen. Saxby Chambliss (R-GA), committee member Sen. Mike Johanns (R-NE), environment committee

ranking member James Inhofe (R-OK) and environment panel members Sens. Christopher Bond (R-MO) and David Vitter (R-LA).

The 30 House members on the brief include 13 Democrats, and the lawmakers urging high court review include politically influential figures and ranking members. The group includes seven Democrats and six Republicans from the House Agriculture Committee, including ranking member Rep. Frank Lucas (R-OK), and Republicans and Democrats from the transportation and appropriations committee, including transportation committee ranking member Rep. John Mica (R-FL). Key “Blue Dog” Democrat Mike Ross (D-AR) is also a member of the group.

Meanwhile, an industry coalition in a separate Supreme Court brief is offering the novel argument that the Cotton Council ruling could inadvertently hinder efforts to stop invasive species like gypsy moths and zebra mussels. Invasive species have caused untold damage to protected natural resources, especially in the Great Lakes region, and environmentalists have long fought to limit their spread, for example by urging EPA to strictly regulate ships’ ballast water discharges.

The industry coalition behind the Dec. 4 brief is headed by the Aquatic Ecosystem Restoration Foundation and includes the U.S. Chamber of Commerce, National Association of Home Builders as well as trade associations representing the cotton, cranberry, forest, corn, potato, sorghum, grain and rice sectors of agriculture. The Aquatic Ecosystem Restoration Foundation is headed by major corporations like Dow and BASF.

The groups’ brief first argues that the 6th Circuit in Cotton Council did not provide EPA enough deference under the legal Chevron doctrine, but then argues the real world implications of CWA regulation for pesticides use will prevent them from being effectively used to combat invasive species. “Fundamentally, it is unclear how EPA can possibly reconcile Congress’s objective to eventually eliminate pollutants [under the CWA] with the necessity of generally permitting pesticide application,” the brief says.

Farm Bureau Petitions U.S. Supreme Court on Pesticide Case

The American Farm Bureau Federation (AFBF) has filed a petition with the U.S. Supreme Court, asking the high court to review a lower court ruling that will otherwise impose Clean Water Act permitting requirements on the application of pesticides on, over or near water.

“Allowing the lower court ruling to stand would pose serious challenges to farmers battling pests,” said AFBF President Bob Stallman. “When pests strike, time is of the essence, and any length of time waiting for permit approval for products that are already approved would be disastrous.”

The problem stems from a January 2009 ruling by the U.S. Sixth Circuit Court of Appeals, which struck down a 2006 Environmental Protection Agency (EPA) rule that interpreted the Clean Water Act did not regulate most pesticide applications into, over or near “waters of the United States,” so long as the pesticide use complied with EPA’s requirements (such as EPA-approved label restrictions).

The practical effect of the Sixth Circuit decision is that almost all pesticide applications directly to water, over water, or “near” water will require a Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit. If the decision is allowed to stand, farmers and others who use pesticides, such as mosquito abatement districts, will be required to obtain permits in order to apply pesticides on or near water. Since EPA views “waters of the United States” very broadly – including wetlands and even some ditches – the decision could affect hundreds of thousands of farmers.

In its petition to the U.S. Supreme Court, AFBF argues that the EPA pesticide rule simply formalized how EPA and Congress have always addressed environmental regulation of pesticide use.

“Since Congress enacted the Clean Water Act in 1972, EPA has never subjected the use of pesticides to NPDES permitting,” explained Julie Anna Potts, the AFBF’s general counsel. “This court opinion dramatically changes the scope of the Clean Water

Act and will force farmers, public health agencies, and many others into burdensome, time-consuming, and costly permitting requirements that could seriously impair their ability to use pesticides to protect croplands and public health.

“AFBF submitted its petition to the U.S. Supreme Court to seek correction of a decision that threatens very real consequences for crop protection and public health,” Potts said. “Right now, the Supreme Court is all that is standing between us and broad new restrictions that will obstruct essential, often time-critical responses to pest and disease outbreaks.”

In its petition, AFBF warns that “even slight delays caused by permit requirements can result in less effective crop protection, the spread of pests and disease, and significant crop loss.” The petition also explains that effective mosquito control through pesticide use is our nation’s best weapon against mosquito-borne disease, cautioning “anything that significantly curtails the use of pesticides in, over, and near waters threatens public health with outbreaks of West Nile virus, encephalitis, Dengue fever, and other mosquito-borne diseases.” The petition stresses that “few decisions in the history of the CWA have had such a far-reaching and disruptive impact.”

Responses to the AFBF petition, and friend-of-the-court briefs in support of the petition, were due in early December. The Supreme Court is expected to decide whether to hear the case by the end of the year.

University of Notre Dame Requests Data for Research Project

History tells us the biological resources respond in profound ways when the climate changes. Because many species are strongly affected by climate, systematic changes in climate induce shifts in species’ distributions and abundance. Some of the species altered by climate change are pests—organisms that affect humans and their social and economic values. In the states surrounding the Great Lakes, for example, new pest species could emerge and existing species could shift in dominance. In the case of several mosquito species, the Great Lakes region captures the northern and eastern range boundary and thus could see changes in mosquito populations.

Toward an assessment of the potential effects of climate change on mosquitoes in the Great Lakes region, data collected will: 1) use known relationships between mosquito abundance and climatic factors to project changes in relative mosquito abundance; 2) use observational records to project future changes in invasive mosquito distributions; 3) collate long-term abundance records throughout the region to determine if recent climatic shifts are correlated with shifts in dominance of native mosquitoes; and 4) compile cost estimates of mosquito abatement by county in Indiana to enable economic interpretation of items 1-3. All of these analyses will be included in a synthetic assessment report (5) that discusses mosquitoes and climate change generally and explores ecological and public health consequences of future mosquito populations in the Great Lakes region.

We are asking for participation in a collaborative research project. Specifically, we are asking you to please share information about the presence and abundance of mosquito species that your organization has observed and recorded. We are using this information to understand the effect of climate on the distribution of several key mosquito species in the Great Lakes region and their potential responsiveness to climate change. To perform this study, we need information from as many locations as possible. Specifically, we are seeking data describing where several mosquito species live and how abundant they are in key sites across the Great Lakes region. To perform our analyses, we will compile mosquito surveillance records into a single, searchable database, which we anticipate will have long-term value to the mosquito control community.

If you have any questions about this research, please feel free to reach Dr. Jessica Hellmann by phone or email at any time please contact: 574-631-7521, hellmann.3@nd.edu

Silent Auction

Once again, we will be having a silent auction at our 2010 MMCA meeting. If possible, consider helping MMCA by donating unique gifts and ideas for this wonderful and exciting event. The proceeds will be used for the MMCA Scholarship Fund.

For More Information Contact: Melinda Moreno
morenom@baycounty.net

2010 MMCA Tentative Agenda, February 3-4, 2010 Traverse City, Michigan

Wednesday, February 3, 2010

- 8:00 am – 9:00 am Registration
- 9:00 am Welcome from MMCA President (2009) - Bill Stanuszek
- 9:05 am Vector Control Operations In Deployed Environments: Unique Challenges
Jamie Blow, PhD - Armed Forces Pest Management Board
- 9:50 am AMCA Update: 75 Years of Service
Douglas Carlson, AMCA President
- 10:10 am An Engaging Model For The Action Of Contact Repellents
Ned Walker, PhD - Michigan State University
- 10:25 am Break
- 10:45 am The Day Your Worst Nightmare Walks Into The Office – Mosquito Control
vs. Public Health? Lee Mitchell - Toledo Sanitary District, Ohio
- 11:00 am The Importance Of Algae To Larval *Aedes japonicus*
Amanda Lorenz – Michigan State University

Student Competition

- 11:15 am Gut Content Analysis Of Aquatic Hemiptera Using Molecular Techniques
Ryan Kimbirauskas – Michigan State University
- 11:30am *Wolbachia* in *Culex pipiens*: Is There A Relationship Between *Wolbachia*
Strain And Population Substructuring Or Host Selection
Rebecca Wright – Michigan State University
- 11:45 am Lunch (on your own)
- 12:45 pm Increasing Efficiency Using GIS Mapping
Charles Dinsmore - Midland County Mosquito Control
- 1:05 pm The Use And Efficacy Of Natular XRT In Abandoned Swimming Pools
Bill Stanuszek - Saginaw County Mosquito Abatement Commission
- 1:20 pm Environmental Stewardship Along Florida's Indian River Lagoon:
Balancing Mosquito Control And Natural Resource Interests
Douglas Carlson, AMCA President
- 1:40 pm MDA Update
Eric McCumber – MDA Region 2, Pesticide Specialist
- 1:55 pm Natular Larvicide Tests In Minnesota: 2008-2009
Stephen Manweiler, PhD - Metropolitan Mosquito Control District
- 2:10 pm Sequential Sampling And West Nile Virus Prediction
Danielle Donovan - Michigan State University
- 2:25 pm Vendor Presentations
- 2:50 pm Break

- 3:10 pm The Use Of Macroinvertebrates As Indicators Of Wetland Quality: A Case Study For Inland Wetlands In Michigan
Mollie McIntosh, PhD - Michigan State University
- 3:25 pm "Reduced Risk" Larvicides for Integrated Mosquito Management
Jack Petersen, PhD
Public Health Entomology Research And Education Center, Florida
- 3:45 pm *Aedes japonicus* Surveillance In Minnesota: 2007-2009
Scott Grant - Metropolitan Mosquito Control District, Minnesota
- 4:00 pm Common Mosquitoes of Michigan
Doug Allen - Midland County Mosquito Control
- 4:20 pm Mosquito Surveillance – Its Role in A Control Program
Mary McCarry - Bay County Mosquito Control
- 4:40 pm Mosquito Control Insecticides
Rebecca Brandt - Bay County Mosquito Control

Thursday, February 4, 2010

- 8:00 am Vendor Room Open
- 8:15 am Annual MMCA Business Meeting
- 9:00 am Community Events – Keeping Your Citizens Informed
Margaret Breasbois - Saginaw County Mosquito Abatement Commission
- 9:20 am Update on Clean Water Act and Related NPDES Permit Issues
Robert England - Michigan Pest Management Association
- 9:40 am Michigan Lyme Disease Update
Erik Foster - Michigan Dept. of Community Health
- 10:00 am Break
- 10:20 am Spatial Variation of Host Selection In *Culex pipiens* Mosquitoes
Gabe Hamer, PhD
Dept. Of Pathobiological Sciences, University of Wisconsin-Madison
- 10:40 am Preparing a Congested Flight Plan for Aerial Larviciding
Mike Schiffer - Al's Aerial Spraying
- 11:00 am How External Nitrogen Sources Affect Growth And Development Of The Tree Hole Mosquito, *Aedes triseriatus*.
Mike Kaufman, PhD - Michigan State University
- 11:20 am Silent Syndrome: The Long Term Effects on Memory & Function of Human West Nile Virus Infection
Sue Wehner, RN, PhD - Michigan State University
- 11:40 am Natular Stewardship Initiatives Over The Past Season
Jake Britton - Clarke, Roselle, IL
- 12:00 am Mosquito Arbovirus Testing In Michigan – 2009
Betsy Brouhard - Michigan State University
- 12:20 pm Concluding Remarks - Mary McCarry - MMCA President (2010)

Public Availability of Identities of Inert Ingredients in Pesticides

In response to two petitions seeking disclosure of selected inert ingredients on pesticide labels, based on hazard, EPA is initiating rulemaking to increase public availability of the identities of the inert ingredients in pesticide products. This action would assist consumers and users of pesticides in making informed decisions and reduce the presence of potentially hazardous ingredients in pesticides.

UC Davis Researchers Identify Dominant Chemical That Attracts Mosquitoes to Humans

Scientists at the University of California, Davis, have identified the dominant odor naturally produced in humans and birds that attracts the blood-feeding *Culex* mosquitoes, which transmit West Nile virus and other life-threatening diseases.

The groundbreaking research, published in the early online edition of the Proceedings of the National Academy of Sciences, explains why mosquitoes shifted hosts from birds to humans and paves the way for key developments in mosquito and disease control.

Entomology professor Walter Leal and postdoctoral researcher Zain Syed found that nonanal is the powerful semiochemical that triggers the mosquitoes' keen sense of smell, directing them toward a blood meal. A semiochemical is a chemical substance or mixture that carries a message.

"Nonanal is how they find us," Leal said. "The antennae of the *Culex quinquefasciatus* are highly developed to detect even extremely low concentrations of nonanal." Mosquitoes detect smells with the olfactory receptor neurons of their antennae.

STOMP

On the weekend of November 21st, the MSU malaria prevention group, Students Taking on Malaria Prevention, or STOMP displayed at the annual Autumn Fest on the campus of MSU. The group's goal is to earn the money necessary to adopt a village in Kenya and protect villagers from malaria, by screening the villagers' homes with mosquito netting.



MMCA Photo Salon

We plan to continue the photo salon as part of the evening entertainment at our MMCA conference in February, 2010. Please choose a few of your best shots and submit them for the photo salon. We expect to have cash and prizes for photos in the categories of: mosquitoes, mosquito habitat, mosquito control, surveillance and nature/wildlife. Digital photos (the preferred format) can be submitted to Tom Wilmot via email at: twilmot@co.midland.mi.us. If you are in the paper or slide photo mode, mail photos to Midland County Mosquito Control and they can be scanned. Thanks!



News From Around The Districts

BAY

Can't believe it's January already and a new decade has begun. Looking back at the last quarter, we wrapped up our season in early October with an end to official control operations. Since then we've been busy with the invoices, correspondence, cleaning, inventories/orders, equipment and vehicle repairs, and preparations for the 2010 season. The 2009 Annual Report has also been completed and will be presented to the Board of Commissioners as well as to the Mid-Michigan Technical Advisory Committee in March, 2010. It's available for viewing at our website www.baycounty-mi.gov/MosquitoControl.

We gladly took part in the MMCA's 7F Training Session in December, giving several presentations to the attendees. Hopefully, there will be continued interest in having these recertification seminars in the future.

The 2010 chemical order was compiled and bid specifications were sent out to vendors in early December in conjunction with Midland County Mosquito Control and Tuscola County Mosquito Abatement. Chemical bids will be opened in Midland in January and vendors will be notified.

We continue our community-outreach efforts, which include presentations at local elementary schools and planned updates and changes to the mosquito control web page. Database and map updates continue to take place.

In the next few months we'll be working on MMCA annual meeting presentations, the 2010 program plan, and the process of hiring new seasonal staff – always a challenge! And before we all know it, we'll be trudging through woodlots again looking for our little mosquito friends!

MIDLAND

The New Year is always a good time for reflection and for contemplation of future events. If you define success relative to our primary goal of protecting residents from mosquito-borne disease, then 2009 was a successful year for us all. There were no human cases of West Nile virus reported from Michigan. Be aware, though; while the number of human cases has tracked downward since 2002, the disease is not likely to disappear from the State anytime soon. WNV-positive birds and mosquitoes were seen in Michigan this year and we could be one warm summer away from another epidemic.

In furtherance of our mission to provide information about mosquitoes and mosquito control, the MMCA held a mosquito control training session in December. Over 30 pest management professionals attended the training and earned the 4 credits necessary to recertify in category 7F, mosquito control. If you missed that training, we hope to repeat the session next fall. Remember also that MDA recertification credits will be available for attendance at the MMCA's annual conference in Traverse City February 3 and 4. We hope to see you there.

Back here in Midland County, Joyce and Charles are continuing integration of Arc GIS information into our control operations. Parcel boundary information recently developed by our County GIS department will make it easier for field technicians to keep County residents informed about their activities.

Best of luck in 2010!

This winter has been a busy season for us. We are in the process of hiring a new permanent Administrative Assistant. The spray routes are currently being revamped which will allow us to more effectively treat the citizens of the county. Our employee manual has been redone. The insecticide bid opening will be in a couple of weeks. We will also be looking for bids to have our employee parking lot lighted and the agency lot repaired and resurfaced, as well as purchasing three new trucks.

Recently we also ordered new hand held radios for all of our technicians that are digital and have GPS tracking. This new system adds a level of safety for our employees when they are out of their vehicles.

It is hard to believe that in a short time the next mosquito control season will be starting. It seems that the past season just ended. This year we are excited to announce we will be adding a long drive program and a medical certification program to better serve our community.

We look forward to seeing all of you at the upcoming MMCA Conference.

Happy New Year!

As is typical for this time of year staff are busy on winter projects which include: repair and preventative maintenance of application equipment and vehicles; fabrication of new ULV spray equipment control boxes for truck cabs; body work on damaged vehicles; development of new customized spray route maps; installation of new automatic vehicle location (AVL) system; improvements to moped/quad trailer; and purchase and outfitting two new half ton vehicles for our fleet.

Our 2009 annual report has been completed and can be reviewed or printed from our website at www.scmac.org for those who are interested.

School presentations by our education department continue to be very popular. This school year our Education Coordinator has already scheduled over 170 classroom presentations at 41 schools. In an effort to minimize H1N1 flu transmission via display items brought into class we recently purchased a UV sanitizing cabinet that we can use daily on items taken into the classroom.

We have already secured permits to conduct our aerial larviciding program for spring mosquitoes on state game areas (Shiawassee River State Game Area & Gratiot-Saginaw State Game Area). It also appears that we have met the criteria this year for the federal refuge (Shiawassee National Wildlife Refuge) permit process. For once, these permits have been approved well in advance to our aerial program.

In the next couple months we will begin the process of hiring seasonal staff for the upcoming season, and we will also be implementing a new dress code for seasonal employees. Other projects will include revising and updating our yearly Program Plan; and sending out letters to citizens on our No Spray list and Medical Certification list.

As a sign of the times the County is also exploring the idea of Furlough Days for next year's budget. We will be following this issue closely as it winds its way through the political process.

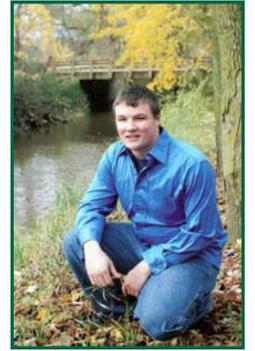
As always, winter projects seem to fly by and before long we will be looking at larvae in seasonally flooded woodland pools and another control season will be here!



Andrew Willson, 1st Place – Andrew currently attends Saginaw Valley State University where he is majoring in Biology with minor in Chemistry. His plans are to graduate from SVSU in 2012 and continue his education further at the University of Detroit Mercy Dental School.

Kennley Farrel Scholarship Winners

Cody Commons – Runner-up – Cody plans to attend college at Ferris State University, pursuing an Associate’s Degree in Cad Drafting and Tool Design Technology and continuing his education for a bachelor’s degree in Mechanical Engineering Technologies.



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Winter