



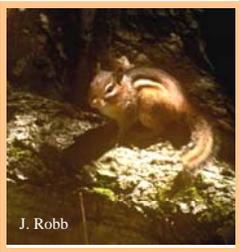
Skeeter Scanner

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PRESIDENT'S MESSAGE

Yes it is summer and it is Michigan – so the weather is unpredictable. Some areas of the state have had rain, some have not – some areas have been hit with spotty thundershowers, heavy rain or even hail while others remain dry. Generally, there has not been enough rain to result in the large hatches we had last summer. For that we can be grateful. The isolated areas that have had enough rain are localized and can be handled by foot crews and larviciding.



With the funding for WNV testing no longer available it is difficult to get current information as to WNV activity in Michigan. To that end a short phone survey was conducted of the Michigan Mosquito Control Districts and as of 7-9-07 the following have been tested or submitted for testing: 1326 mosquito pools, 18 crows (vec-test), 65 sparrow blood samples, and 153 blood samples from 10 Sentinel pheasant flocks. Currently there have not been any positive results. This is as would be expected as we are still early in the season, and have been short on rain. Michigan State University is not currently able to test for EEE, because the lab does not qualify as a select agent site.

The four Michigan Mosquito Control Districts held concurrent open houses on Wednesday, June 27th in celebration of National Mosquito Control Awareness week. Visitors to the districts included County Commissioners, Mosquito Control Board Members, MDA representatives, as well as John and Jane Q Public. Here in Saginaw many of our summer employees took the opportunity to invite their families to see where they work and what they do.

The MMCA is in the process of applying to become a partner in the Pesticide Environmental Stewardship Program (PESP) in cooperation with the AMCA. As members of the MMCA we can all agree that environmental stewardship is an integral part of responsible pest management practices. As partners with the AMCA in the PESP we will continue to work toward pest management practices that reduce the risks to humans and the environment and that reduce the use of pesticides where practical. As part of our voluntary participation in this program we will be asked to submit surveillance and pesticide use data to the AMCA for inclusion in their reports to the PESP.

Willie Cox's wife Mary Ann passed away after a short illness. We wish to offer our sincere condolences to Willie and his family for their loss. The family has requested that any donations be made to Tanner Trails Community Church, 2301 Tanner Rd., North Aurora, IL 60542, in Mary Ann's name.

Margaret Breaslow

Bites from Mosquitoes Not Infected With Malaria May Protect Against Future Infection

Science Daily A new study suggests that bites from mosquitoes not infected with malaria may trigger an immune response limiting parasite development following bites from infected mosquitoes. The researchers from the Center for Global Health and Infectious Diseases, University of Notre Dame, Indiana and the National Institute of Allergy and Infectious Diseases, Bethesda, Maryland report their findings in the May 2007 issue of the journal Infection and Immunity.

In the study researchers compared immune responses of mice preexposed to uninfected mosquito bites followed by bites from mosquitoes infected with the malaria parasite, *Plasmodium* spp. and those of mice only exposed to infected mosquitoes. Results showed that in the early stages, mice preexposed to uninfected bites exhibited reduced parasite burdens in the liver and they remained lower during the blood-stage of the life cycle of infection.

"These data suggest that the addition of mosquito salivary components to antimalaria vaccines may be a viable strategy for creating a Th1-biased environment known to be effective against malaria infection," say the researchers. "Furthermore, this strategy may be important for the development of vaccines to combat other mosquito-transmitted pathogens."

2008 Conference Suggestions for Speakers/Topics/Entertainment

The MMCA planning committee is looking for suggestions from the membership for speakers and topics for the 2008 conference. They are also looking for suggestions for entertainment. Please send any suggestions you may have to Mark Harten at: Mark@scmac.org

EPA To Move Ahead With Proposal That May Lift 'Minimum-Risk' Exemption

EPA is poised to move forward with a notice of proposed rulemaking that will either modify or eliminate the agency's current policy of exempting

pesticides from regulation if they pose a "minimum risk" to human health, agency and industry sources say -- marking a shift from the agency's recent decision to gather more information before responding to a petition that seeks to change the exemption policy.

An EPA source says "it appears the agency will go forward" with a notice of proposed rulemaking, noting that a petition filed by the Consumer Specialty Products Association (CSPA) last year "has merit." CSPA is an industry trade association whose members manufacture pesticides, disinfectants and other chemicals used in households, institutions, and industrial settings.

CSPA petitioned EPA to require a pesticide license for chemicals the agency has said pose minimum health risks to humans. The petition charged that some products falsely claim to kill mosquitoes, ticks or other pests that may carry disease and, because they are ineffective, could actually contribute to serious public health risks such as the spread of West Nile Virus.

The apparent decision to issue a proposal comes only weeks after EPA staff were told that more information was necessary before the agency could decide how to respond to the CSPA petition. The call for more information came after staff on May 16 briefed Office of Prevention, Pesticides & Toxic Substances Assistant Administrator James Gulliford. Since last year EPA has been weighing several potential responses to the CSPA petition, including regulatory action, industry and other observers say (Risk Policy Report, May 22, p1).

An industry source says EPA has now decided to move ahead with a proposal dealing with the "minimum risk" policy rather than waiting because it became clear the agency would need to collect all relevant information either way. A CSPA official says the group was unaware of any EPA plans to move ahead with a proposed rulemaking.

The EPA source says the agency expects to collect data on a variety of issues through the rulemaking process, including "how many products are out there that would be affected by this rule?" The source notes the agency "must justify the rationale for its action." Furthermore, the agency will be

developing a schedule for issuing the proposal, the source says, but could not offer a timeline.

Small chemical producers are fighting the CSPA petition, saying that eliminating the minimum risk licensing exemption could stifle research into less toxic alternatives to existing pesticide products. The small producers also charge that the trade association's petition to EPA is a business ploy aimed at eliminating alternatives to toxic pesticides (Risk Policy Report, Nov. 14, 2006, p5). Companies that manufacture "green" pesticides such as EcoSMART Technologies, Sergeant's, Bioganic Safety Brands and others have all said the petition is designed to put small companies at a disadvantage by having EPA burden them with time-consuming and costly research requirements that are unnecessary.

The industry source says it is not clear what impact the rulemaking will have for small businesses, noting that a lot will depend on what approach EPA takes in the proposal. The source says the impact on legitimate minimum-risk pesticide manufacturers may be minimal if EPA is trying to target "fly-by-night Internet companies" that make false claims about their products. However, the source says the 1996 EPA rule that created the minimum-risk exemption in the first place specified that the agency retained enforcement authority to address companies that make false claims.

In the past, EPA has agreed that it has the authority to enforce against companies making false claims.

The industry source says EPA may face considerable difficulty finalizing a rule granting the CSPA petition because "they're going to have to deal with reversing their own policy." The source adds that such a rule would also make it more costly "to get non-toxic pesticides out there," and that such a change "comes in the face of growing public interest" in organic and non-toxic products. EPA "may face significant public resistance," the source says.

Last year, state pesticide officials backed the CSPA petition, with the Association of American Pesticide Control Officials arguing in comments submitted to EPA that states have limited ability to enforce pesticide laws on companies making false safety claims (Risk Policy Report, Oct. 3, 2006, p9).

Abandoned Beehives Are a Scientific Mystery

In "The Hitchhiker's Guide to the Galaxy," just before Earth is destroyed to make way for a hyperspatial express route, all the dolphins in the world disappear, leaving behind just the message: "So long, and thanks for all the fish."

Around the world, honeybees are vanishing en masse, leaving their humans engaged in a furious attempt to figure out the meaning of their exodus. Entire colonies are following the Shakespearean stage direction, "Exeunt omnes." They're flying off and not returning. Commercial beekeepers open their hives and find them empty except for a queen, a few immature bees and abundant honey and pollen. The rest of the bees are simply gone, leaving behind not even dead bodies.

A third of our food supply is dependent on animal pollinators like the honeybee.

It turns out that not only does U.S. agribusiness grow more than 80 percent of the world's supply of almonds (who knew the world consumed so much marzipan?), but in February, when all those groves need to be pollinated, fully half of the commercial beehives in the entire United States are trucked to California's Central Valley on 18-wheelers. Big-time beekeepers constantly haul their bees all over the continent to service the next crop of apples, blueberries, watermelons or whatever. Their bees are the planet's hardest-working migrants.

Scientists have a hunch that this may be stressful. They do not yet have the data to prove it. But some commercial beekeepers seem to be hit harder than others, suggesting that their management practices may be a fruitful area of inquiry.

If this hypothesis were to hold up, the implication is that some corporate bees around the world are heir to a combination of problems that may or may not be faced by honeybees kept by small-time operators, not to mention the honeybees that have escaped into the wild. All pollinators are in decline, according to a recent National Academy of Sciences study. But it is by no means clear that colony collapse disorder affects any of the 17,000

other species of bees known to exist, or the 13,000 additional species of bees estimated to exist, not to mention the 200,000 other species of animal pollinators such as beetles, butterflies, moths, hummingbirds and even bats. This also leaves aside the two-thirds of the world's food that is pollinated not by critters, but by wind and rain, such as the grasslike crops that include corn.

West Nile Devastated U.S. Bird Species

West Nile virus or a similar disease could wipe out many of the U.S.'s backyard birds, profoundly changing some of the country's most familiar wildlife and ecosystems.

That's the finding of a new analysis of 26 years of data from the national Breeding Bird Survey data that reveal the dramatic effects of the 1999 arrival of West Nile virus in the U.S.

Lead author Shannon LaDeau of the Smithsonian Migratory Bird Center and her colleagues found that species that thrive near humans suffered extremely high death rates from the disease.

Up to 45 percent of crows died after the virus arrived, with robins, chickadees, and eastern bluebirds not far behind.

Some of these populations had been increasing before the virus hit, which is a good indication that West Nile caused the declines, the authors write.

The disease may not completely wipe out bird populations on its own, the scientists add, but it is an alarming addition to existing population threats such as climate change and habitat loss.

"They're our backyard species, and we haven't been watching them as much as we're watching the other species, because people consider them safe," LaDeau told National Geographic News.

The Benefits of Pesticides to Mankind and the Environment

The hazards of pesticides are well documented, but their benefits are largely ignored in published literature and the mass media. A recent brief poll of pesticide-related articles in published literature,

conducted by the authors, revealed a ratio of over 40 negative articles for each one that took a more positive view. Many point to health or environmental problems from accidental or deliberate exposure to pesticides, particularly pesticides with high mammalian toxicity or those that persist in the environment. These risks should not be ignored, and efforts must be made to minimize them through rigorous regulation and proper training for users, but we should not overlook the positive impacts of pesticide use. When pesticides are used rationally and carefully, in conjunction with other technologies in integrated pest management systems, it is more likely that their use will be justifiable.

Part of the explanation for the scarcity of articles highlighting the benefits of pesticides may be that when a product does exactly what the manufacturer says it does, it is not 'newsworthy'. We do not read about the wonders of gloss paint, but it remains a good way to protect exterior woodwork. Sometimes, it takes an accident or evidence of harm to stir the popular media into action and this applies to some extent to scientific literature too.

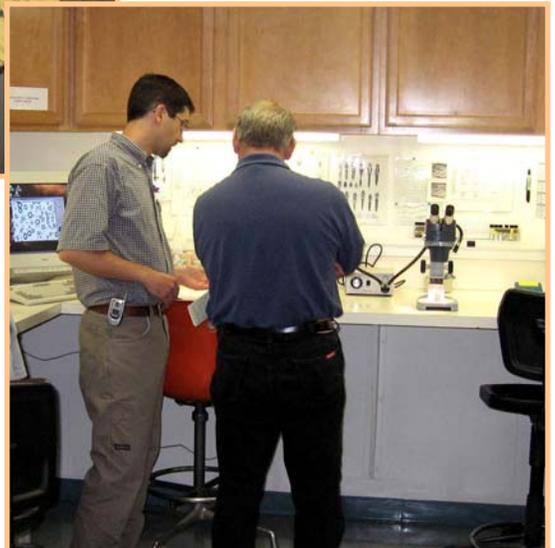
There are some exceptions to the predominantly negative view of pesticides—Lomborg and Bjorn (2001) wrote "if pesticides were abolished, the lives saved would be outnumbered by a factor of around 1000 by the lives lost due to poorer diets. Secondary penalties would be massive environmental damage due to the land needs of less productive farming, and a financial cost of around 20 billion US Dollars".

This paper does not attempt to quantify or rank the benefits, nor to balance the benefits from pesticide use against any negative consequences. Rather it focuses on the positive outcomes delivered by judiciously used pesticides, in order to inform a more objective assessment of costs and benefits. It arises from an extensive literature search, the preparation of a comprehensive review report and the compilation of an electronic database of pesticide benefits for Crop Life International. The key 100 or so articles will be available in the database, which will be publicly accessible via the Crop Life website, as well as the full review report and bibliography of all 360 references at:

[\(http://www.croplife.org/\)](http://www.croplife.org/)

Mosquito Awareness Week

District Open Houses



Origins of Mosquito Awareness Week

By Joe Conlon, Technical Advisor, AMCA

Since the discovery by Sir Ronald Ross in 1897 that mosquitoes transmit malaria, the control of mosquitoes has assumed significance far beyond the federally accepted goal of protecting the quality of life by reducing the hordes of biting insects. No longer would devastating outbreaks of malaria, yellow fever and dengue fever in the United States and elsewhere go unchallenged because of ignorance of their means of transmission. Realizing there now existed a way of obtaining a measure of public health protection heretofore unavailable, citizen groups began conducting referenda to establish special taxing districts to fund organized mosquito control activities. In the ensuing years, mosquito control personnel refined their methods through applied research and assisted federal and state agencies in developing certification criteria to ensure conformance to stringent safety standards. The result: the most technically proficient, professional vector control agencies in the world.

In fact, the AMCA is derived from rather humble beginnings as the “National Mosquito Extermination Society,” founded in 1903 but disbanded shortly thereafter. The need to grow national in scope became increasingly evident after the founding of the New Jersey (1913), Florida (1922) and California (1930) state associations, and led to the founding of the Eastern Association of Mosquito Control Workers in Trenton, N.J., on June 26, 1935, and its subsequent re-designation as the American Mosquito Control Association on March 16, 1944. The AMCA now boasts a membership of more than 1,500 from countries around the globe and is recognized as the premier professional association of its type on the planet. Indeed, over the years the mosquito control profession has enjoyed a long and proud legacy of community service in its pursuit of improved quality of life and a society free from the ravages of mosquito borne diseases that have afflicted our country in times past. This goal remains our primary focus and is fully consistent with the very finest traditions of public health.

That is why we celebrate our founding each year during Mosquito Awareness Week. This year Mosquito Awareness Week fell between June 24-30. Despite its name, National Mosquito Awareness Week remains primarily local in flavor, with agencies tailoring their programs to appeal to their specific constituencies. This may take the form of school presentations, booths at county fairs, or public service announcements. You all have a great deal of which to be proud, so never pass up an opportunity to educate the public at whose pleasure you ultimately serve.

Winner of Free 2008 Registration

Congratulations to Mike Rogers from Rose Pest Solutions for winning the free Registration for the 2008 Conference in Kalamazoo.

Michigan Reports Case of LaCrosse Virus

The Michigan Department of Community Health (MDCH) has positively identified the state's first case of LaCrosse virus for 2007 in a Wayne County woman. The woman first showed symptoms of the LaCrosse virus in early June, was hospitalized, and has since been discharged.

New York Finds EEE in Mosquito Pools Earlier Than Usual

Dr. Laura Kramer indicated that the EEE virus was isolated from a pool of *Culiseta melanura* mosquitoes collected on June 25. She indicated that although isolation of this virus from *C. melanura* from a swamp in central New York is not unusual, finding the virus this early in the season is unusual.

Surveillance of mosquitoes, which is conducted by the county Health Department and the state Department of Health (NY DOH), has been minimal so far this year because the weather has been so dry.

One wonders if this is a harbinger of early transmission by bridge vectors (mosquitoes that feed on mammals, carrying the virus out from enzootic swamp foci), with subsequent equine and human cases. Horse owners would be well advised to be sure that their animals are vaccinated.

Multiple Chemical Sensitivity Concerns

Thanks to the diligence of Bill Welsh and others at MPCA, it has come to our attention that the Governor has signed proclamations recognizing "Multiple Chemical Sensitivity" as serious concern, although no major medical group even recognizes the true existence of such a condition. A group of interested individuals met to discuss this and suggested that letters be sent to the governor and legislators, asking them to keep real science a priority would be appropriate. MMCA members may like to join in this endeavor.

This is a sample letter that could be signed and sent to your representatives:

We are a group of citizens from various science based industries coming together for a common concern. We appreciate the time and concern taken by the congress and the governor's office to officially recognize items, groups, and issues by commendations and commemorations.

Having reviewed some of the proclamations that are made, we would like to speak for science. We recognize it is indecorous to speak against

commendations as a rule, but those items and issues being recognized should bear some burden of proving their merit. The danger is that manufactured issues and spurious causes seek commendations from state governments for the purpose of building legitimacy where there was none.

In particular, we noticed that the week of May 6 had been designated Multiple Chemical Sensitivity Awareness Week. Having read the descriptions of symptoms and the plight of its sufferers, we agree they have great need, but few if any official entities and no mainstream medical associations recognize MCS as a legitimate medical condition that can be cured, treated, or even mitigated. There must be help for these people. Previous administrations have also come to the same conclusions. Allowing certain groups to manufacture legitimacy for their cause by attaining recognition from as many states as possible will not serve the sufferers of this condition. It points them in the wrong direction and unnecessarily burdens a vast number of industries, trades, and professions. The skilled professionals and trained scientists in areas of urban pest management, mosquito abatement, nursery and landscape professionals, as well as others not represented here work hard to improve the standard of living for all citizens.

E-Mailing the Newsletter

The MMCA board is planning on making our newsletter available to members from our website. Those members for whom we have an email address will be emailed a link to the newsletter. The newsletter will be available in PDF format and can be read online or printed for those who like to have something more tangible. On Thursday, June 21st we tested our email list by sending information on the Mosquito Control Awareness Week Open Houses at the four Mosquito Control Districts. This is the list we are planning on starting with. If you did not receive it then we do not have a current email address for you. Please let us know, by emailing Margaret Breasbois at mbreasbois@scmac.org.

If you wish to continue to receive the newsletter on paper, please contact me at 1-989-755-5751, or email me at mbreasbois@scmac.org.



News From Around The Districts

BAY

Dry is the word for Spring of 2007! Throughout the month of May only 2.6 inches of rain were recorded, compared to 4.35 inches in May of 2006 that triggered large hatches of *Aedes vexans* mosquitoes. The month of June, likewise, was dry for most areas of the county. Rainfall totaled 2.57 inches for June, but only 0.4 inches fell between June 6-26.

We continue to find of *Aedes japonicus* in light traps, gravid traps, and larval samples from containers and the Saginaw Bay bayfront.

Two training sessions were held May 4 and May 18, to educate seasonal staff in mosquito control operations and to prepare them to test with the MDA as certified technicians.

Public education efforts continued during this quarter with 3rd grade classes at McGregor Elementary School. We plan to run various presentations on Bay 3 TV within the next several weeks. These would include: Artificial Containers and Thunderstorms presentations.

Disease surveillance efforts continue with 100 mosquito pools submitted to date. Bay County residents call daily to report dead bird sightings. Ten birds have been tested with nine testing negative, and one pending. *Culex* species mosquito control in catch basins was completed in June and just began again in July using Vectolex.

Technicians continue working to fog adult mosquitoes. By and large, they were needed in northern Bay County where spring woodlots had produced large populations of *Aedes canadensis*, *Ae. vexans*, and *Ae. sticticus*. Crews have been shifted to the eastern county boundary, the Saginaw Bay, where cattail marsh habitats have produced numerous *Cq. perturbans*. Surveillance of adult mosquitoes has shown that most bothersome mosquitoes are breeding along the Bay at Pinconning Park and Bay City State Recreation area.

A scrap tire drive was held June 22 -23, 2007 at the Fairgrounds with 2,479 tires collected.

Three biology technicians attended the mosquito ID class that was sponsored by Saginaw County. They learned some new things and had a refresher at the same time.

TUSCOLA

Rain has been sparse thus far. We realize this could all change with one good thunderstorm. Consequently, mosquito numbers and calls for complaints have been down. There still is quite a bit of summer left and anything could happen.

We plan on at least two catch basin treatments this summer and we are adulticiding the urban areas about every two-three weeks to reduce *Culex* mosquitoes.

We still have some nuisance calls but primarily our larviciding efforts have been where the water is i.e. tires, cross country drains, swamps and sewage lagoons.

Monitoring for West Nile Virus (WNV) in corvids and mosquitoes has been negative to date.

We wish all a near mosquito-free, safe summer!

Normal weather conditions in March and April produced a substantial hatch of spring mosquitoes in mid-May. We began spraying for adult mosquitoes on May 14th and concentrated most of our efforts in those townships that are heavily wooded. By mid-June the spring mosquitoes had become insignificant. Due to the very hot and dry weather conditions we experienced in the month of June. Mosquito populations were low by late June as we had not received enough rain to produce any substantial hatch of summer or floodwater mosquitoes. The only habitats that were breeding mosquitoes were catch basins, abandoned pools, tires, and other miscellaneous containers holding water.

The State of Michigan has eliminated funding for testing of dead crows/blue jays for West Nile Virus so we have been conducting our own testing this year using VecTest kits. So far seven birds from Saginaw County have been tested for WNV with all being negative. As of this report no birds, mosquitoes, or humans have been diagnosed positive for WNV.

Our Education Department will again be busy this summer by participating in the following Saginaw County Parks activities: Children's Fun Day; Touch a Truck Day; and two Pond Life Study programs. Additional summer activities will include Birds, Bugs, Butterflies, and Blooms at the Saginaw Children's Zoo; Girl Scout day camp in Frankenmuth; and five day care presentations.

On June 27th our agency hosted an open house for Mosquito Control Awareness week which was jointly sponsored by the American Mosquito Control Association and the Michigan Mosquito Control Association.

We have already conducted two successful tire drives in May and June and our last tire drive for the year is scheduled for the week of July 23-27 from 1:00-7:30 p.m. Our agency hosted a blood drive on July 9th which was a great success.

SCMAC has been published – the book called “Mosquitoes - The True Story” was written by Randy Knepper and Margaret Breasbois to be used as a supplement for the Education Program. A copy of the full color, 31 page paper back book will be donated to each school and county library in Saginaw County.

Midland County got what I feel was a well-earned reprieve this year from the late spring rains and subsequent second wave of spring mosquitoes that we have seen for the last few years. The spring mosquitoes surge was not too bad and has pretty well gone by the wayside for this year. We are seeing quite a few *Coquillettidia perturbans* and the beginning of the summer's *Anopheles* in our light traps but, all in all, things are pretty quiet here.

We are entering another West Nile Virus season in Michigan. So far activity has been relatively slow to develop which may be causing people to relax the concern that has developed over the last few years. Whenever we send out information about West Nile Virus here in Midland County we include the plea for people to do what they can to help themselves: use repellent, clean up bodies of water, etc. but you have to keep after it continually. The elimination of State funding has put a serious dent into WNV surveillance in Michigan, but we will do some Vec-Testing on our own. So far we have seen only one suspect crow in Midland County and that tested negative. If anyone else out there that is doing surveillance gets evidence of WNV, please spread the word as much as possible.

The American Mosquito Control Association has asked those of us in the field to consider making any education brochures we may have available to the general public (for a fee, if necessary) so as to support our public education core mission. The intention is not for AMCA to stock any brochures, but to act as a gateway to those organizations that are willing to share theirs. If you have any educational materials that you would be willing to share, please let me know and I will get the information to AMCA Technical Advisor Joe Conlon.

SCMAC's Molly Mosquito Helps Raise Money for Bed Nets

Thanks again for loaning us Molly! She was a big hit and really helped us drive home the need for bed nets in Africa in a way that allowed the kids to connect with the project. All told, 62 kids participated in VBS and raised \$365.01. The nets cost \$10 a piece and the church will be adding \$34.99 to that total so that we can donate a full 40 nets.

If others would like to donate, take this on as a project themselves or just find out more information about the crisis itself the web address is www.nothingbutnets.net.

Krista Rowe
Christian Education Director
University United Methodist Church

