

PRESIDENTIAL ADDRESS GIVEN AT THE 69TH ANNUAL MEETING OF THE AMERICAN MOSQUITO CONTROL ASSOCIATION, MARCH 2003

AMCA AND YOU IN 2002-2003: IS THE CLEAN WATER ACT SWAMPING MOSQUITO CONTROL EFFORTS AGAINST WEST NILE VIRUS?

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The American Mosquito Control Association (AMCA), founded in 1935, is the recognized professional organization dealing with mosquitoes. Over the years our organization has grown and matured in efforts to provide comprehensive services for our members. I have decided to divide these services into 3 main categories for this presentation. These categories are information, which includes training and outreach, representation, and member services. I shall discuss each of these components of the AMCA.

INFORMATION (TRAINING AND OUTREACH)

Information, training, and outreach have always been the foundation of the AMCA. Information presented by members from around the world is shared with other members to further support sound mosquito control efforts. The latest research on mosquito-borne infections, in particular West Nile virus, help develop strategies to control these diseases. At this meeting we have symposiums on control methods using larviciding and adulticiding techniques, West Nile virus, legislation, and a Latin American session regarding the research and control work conducted in the Latin American/Caribbean region. A field day during this meeting has been arranged to demonstrate the latest techniques being used by mosquito control professionals for control of mosquitoes. There is a session on media relations, an increasingly important component of our operations. It is important to understand how to use the media to get our message out to the public in an informative manner so the public will understand what we do and why we do it. And, as we are meeting here, we have members reaching out to children in the community at a local school district to teach them about mosquitoes, the diseases they carry, and how they can help prevent them from occurring.

REPRESENTATION

The AMCA is comprised of 9 regions, with a member elected from within each region to represent

the needs and views of their constituency within the structure of the AMCA Board. Industry also has a voice, with an at-large member representing industry concerns elected to the Board level.

As of this Presidential Address, we have 1,483 members, about a 2% increase over last year at this time. Our largest increase has been in sustaining memberships, with an additional 17 members more than at this time last year.

The AMCA Board has a cabinet-level structure consisting of a President, Vice-President, President-Elect, 2 Past Presidents, and a Treasurer. The Board meets twice a year to discuss and vote on issues concerning the mission of the AMCA and its members.

MEMBER SERVICES

The primary benefits of membership in the AMCA are the services provided to its members. The AMCA publishes the *Journal of the American Mosquito Control Association*, a refereed journal composed of the latest research and operational notes regarding mosquito biology, ecology, systematics, and control as well as related topics in vector-borne diseases. The AMCA also publishes a newsletter 6 times a year to keep the membership aware of the issues your Board and the various members are working on. We have a web site that is currently undergoing changes. We should soon have a members-only forum on our Web site, as well as on-line publications of our *Journal*.

The AMCA is currently recognized by the United States Environmental Protection Agency (EPA) as a Partner in the Pesticide Environmental Stewardship Program (PESP), an effort to reduce the potential risks associated with pesticide use.

The most important benefit of belonging to the AMCA is likely the committee structure used to address issues affecting our members. However, being able to support committee action takes money and in some cases lots of it. For example, in the last few years we have seen a dramatic increase in general fund money and designated reserves being

used to address regulatory and legislative issues affecting our members' ability to control mosquitoes. While our funding situation within AMCA is much better than it was 5 years ago (we currently have a reserve estimated at \$280,000.00), we have spent over \$150,000 the last 2 years addressing a regulatory issue that will be the focus of the rest of my address.

THE CLEAN WATER ACT AND AMCA

The Clean Water Act (CWA) was adopted by Congress to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The goals of the CWA were to eliminate the discharge of pollutants by 1985 and ensure water quality that was both "fishable" and "swimmable" by 1983. In 1972, the CWA was amended to prohibit discharges of pollutants to waters of the United States from a point source unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. The permitting program was designed to track point sources, to monitor discharges from specific sources, and to require pollutant control to meet progressively stringent numeric effluent limitations.

These issues were of little concern to pesticide applicators until recent court cases at the Circuit Court of Appeals. In 2001, the Ninth Circuit Court ruled in *Headwaters Inc. v Talent Irrigation District* that an application of an herbicide to an irrigation canal required an NPDES permit. The NPDES permits had never before been required for the legal application of a federally registered pesticide. Court rulings in the Second Circuit Court of Appeals soon followed. While the Ninth Circuit Court ruling focused on the direct application of an herbicide to control weeds in a water conveyance channel, the cases before the Second Circuit Court dealt directly with the application of pesticides used solely for mosquito control. The cases brought before the Second Circuit also dealt not with applications of pesticides to waters, but instead dealt with the application of an adulticide aerosol for the control of adult mosquitoes by a mosquito control operation that might drift and "discharge" into a water way. Confounding the issue of pesticides and water even further was a case that soon followed in the Ninth Circuit against the Forest Service, and their application of a larvicide by air to control tussock moths in forest lands. This left many mosquito control programs being asked the following question: Do we apply (discharge), pesticides (pollutants), to aquatic sites (waters of the USA), using equipment (point source)? If the answer was yes, some people question whether or not the mosquito control program needed an NPDES permit for pesticide applications.

CLEAN WATER ACT PRODUCING MOSQUITOES AND PUBLIC HEALTH ISSUES?

In 1987 it was recognized that the CWA goals established could not be achieved without addressing urban discharges (i.e., storm water), which were estimated to be greater than 50% of the remaining problems in our waterways. Congress further amended the CWA to prohibit the discharge of any pollutant to waters of the USA from a non-point source unless authorized by an NPDES permit. Non-point sources are defined as diffuse, widespread sources of pollution including urban and industrial areas, roads, highways, parking lots, construction sites, mining, and livestock grazing. Non-point-source pollution can occur anytime water runs over land. For example, water runoff from storm events, snowmelt, or irrigation could all result in non-point-source pollution. Pollutants of concern included trash, sediments, toxic materials, metals, and the nutrients phosphorus and nitrogen. The 3 main targeted areas were industrial sites, construction sites, and municipalities.

An important difference between NPDES storm-water permits and NPDES permits from direct discharges is that storm-water permits do not contain numeric effluent limitations for water quality. However, they do require a reduction in runoff pollution, as well as an elimination of dry weather discharges. One significant component of the permit that affects mosquito control is that it must identify Best Management Practices (BMPs) to reduce or prevent discharges of pollutants into receiving waters.

A BMP, as used in this context, involves the structural, nonstructural, and managerial techniques recognized to be the most effective and practical means to reduce surface and groundwater contamination while still allowing the productive use of resources. Unfortunately, some of these BMPs have the potential to create a public health hazard by increasing habitat availability for aquatic stages of mosquitoes as well as creating harborage, food, and moisture for other reservoir and nuisance species. Examples of BMP treatment technologies include detention basins, media filter devices, swales, trenches, wetlands, and other similar devices. Now I ask you: Do any of you have mosquito problems associated with these types of habitats or devices? Are you prepared to address the mosquito problems associated with a significant increase in these treatment devices as CWA regulations are increased?

WHAT IS AMCA DOING?

Many experts believe the CWA and associated regulations are the most significant issues affecting mosquito control operations and their ability to control mosquito-borne diseases. When you combine a permit process that has the potential to dictate to you what you will use and how often you

will use it with another program that is actually increasing the number of mosquito development sites within your area, it is easy to see how we are on the verge of a public health disaster. The AMCA feels so strongly about this issue that we have spent over \$150,000 the last 2 years addressing this issue with the EPA and members of Congress. Some of the money was spent on a petition prepared and filed by the AMCA directly with the EPA, other funds have been directed to our legislative advocate to spend the time necessary on Capitol Hill and with the EPA to bring about change. The petition requests the EPA to do a rulemaking under the CWA to provide that the use of a registered mosquito larvicide or adulticide does not constitute the discharge of a pollutant from a point source to waters of the USA within the meaning of CWA and therefore does not require an NPDES permit. This petition was submitted January 16, 2003, and we continue to work with the EPA and members of Congress for the EPA to take a stance that recognizes the realities of mosquito control and the potential conflicts inherent between the Federal Insecticide, Fungicide, and Rodenticide Act and the CWA.

Legislative and regulatory issues will continue to

be an increasingly greater challenge in our efforts to protect the public in the manner that we are accustomed to. Issues with the CWA have been discussed, but we still need to work on other existing laws and the impacts they may have on our ability to control mosquitoes. Last year a bill was introduced that would expand mosquito control efforts throughout the country, and it was reintroduced this year as HR 342, the Mosquito Abatement for Safety and Health Act (Congressman Christopher John, Louisiana). Concerns related to funding of the public health provisions of the Food Quality Protection Act still need to be addressed to ensure we have the tools necessary to do our jobs.

All of these concerns have a direct impact on your ability to do your job, but none of them will be addressed unless we all work together. Dr. Gary Clark, in his presidential address, coined the phrase "All Members Contributing Actively" as another term for the acronym AMCA of the American Mosquito Control Association. It is the members of this association working collectively together on research, control methods, public relations, and legislative matters that will maintain sound mosquito control practices in our country and continue to provide our constituents protection from mosquito-borne diseases.