

Missouri Mosquito & Vector Control Association

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Missouri Mosquito News **Missouri Mosquito and Vector Control Association formed!**

Mark Ritter

On October 24th, 2000 the first meeting of the Missouri Mosquito and Vector Control Association (MMVCA) was held in St. Louis Missouri at the offices of the City of St. Louis Vector Control Field Office. Forty-five people from across the state were present to gather information and ask questions about Mosquito Control and West Nile Virus.

The program for the day was divided into a presentation by Mr. John Ryan of Clarke Mosquito Control Inc., and an organizational meeting for the association.

Mr. Ryan gave a one-hour presentation on West Nile Encephalitis on the eastern seaboard. He stated that it is expected that West Nile Encephalitis would reach the State of Missouri by two to three years. West Nile is an infectious Flavivirus that is transmitted from birds to humans through the bite of a female mosquito. West Nile Virus has a 10 to 12% mortality rate, with deaths usually occurring in the elderly and those with compromised immune systems.

The second half of the meeting was taken up with a discussion of what the State of Missouri Department of Health is doing to watch for Encephalitis. Dr. Howard Pue the Chief Medical Officer for the State's Surveillance Program addressed the group and brought them up to speed on the program he manages.

The group then agreed to form an association and a Board was chosen to get things moving. The following individuals volunteered to serve on the Board: Brian Boehmer (City of Washington), Joan Bradford (St. Louis

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County Health), Dr. Barry McCauley (St. Charles County Health), Lynn Denton (City of Independence Health Dept.), Larry E. Schaugnessy (City of St. Peters Health Dept.), Steve Craig (City of Independence Health Dept.), and Mark Ritter (city of St. Louis Dept. of Health).

The meeting stressed the lack of knowledge by some of Mosquito Control and the overwhelming desire for more information and training. The meeting broke up with the group agreeing to meet at Dr. Pue's offices in January in Jefferson City Missouri. The association would like to thank the following vendors for their support Clarke Mosquito Control Inc. for supplying the speaker and Van Waters & Rogers for catering the break.

MMVCA Board Meeting

Mark Ritter

Joan Bradford, Larry Schaugnessy, and Mark Ritter met on November 13th to plan for the January meeting (Board members; Craig, Boehmer, Denton, and McCauley were unable to attend). The Board was able to get non-profit incorporation papers filled out and ready to submit to the Secretary of State's Office. Two meeting dates in January were chosen for Dr. Pue to approve. Various structures for the organization were discussed and it was agreed to hold those until the general membership meeting in January. Election of Officers will take place at that meeting. The Board felt that the more central location in Jefferson City would be more conducive to a higher turnout of interested parties.

The Board is asking the membership to spread the word about the organization and to invite all interested parties to attend the January meeting. Please r.s.v.p. the meeting as we will have your lunch provided for and we will need to know just how many are attending. The meeting is planned to be from 10am until 3pm Thursday January 11th 2001.

New Pamphlet on Mosquitoes of Missouri

Larry Schanughnessy

A new pamphlet titled "The Mosquitoes of Missouri" will be available by the end of 2001 to aid Missourians in identifying our local Diptera. The pamphlet is based on the 1948 data collected by the Department of the Army. There has been no statewide survey of the Mosquito population since 1948.

As a result of this lack of material Dr. Barry McCauley set forth to update the record with his experience in Missouri's native Diptera. While no statewide traveling was done a thorough knowledge of what has happened since 1948 helped McCauley update the data. For instance there were no *Aedes albopictus* in North America at the time of the survey. With the *albopictus* invasion there was a severe drop in *Aedes aegypti* numbers as they were out competed in Missouri. Dr. McCauley was assisted by Larry Schanughnessy in his production of the pamphlet. The pamphlet will include a picture next to a description of the individual mosquito where possible. These pamphlets will be made available through the Missouri Mosquito & Vector Control Association and will be published by Clarke Mosquito Control. The pamphlet will be an invaluable aid in any surveillance program to allow professionals to more accurately apply control agents to adult and larval mosquitoes.

Why do Mosquito Control?

Mark Ritter

In the past in Missouri there were more active Mosquito Control programs than there are today. The drop in Mosquito borne illness can be laid as the major reason for the decline. But as the Encephalitis outbreak in 1975-76 in St. Louis pointed out it can return with a vengeance. The federal government came within hours of ordering the entire Mississippi and Missouri River basin aerially fogged in 1993 for adult mosquitoes.

Despite our luck in recent years with a lack of mosquito borne illness the movement of West Nile Encephalitis from a few boroughs in New York City in 1999 to half the eastern seaboard by 2000 finally brought home the need

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for control. In Missouri there are fewer than 25 active mosquito control programs. And of those programs none employ the full range of techniques that have become standard in the industry.

Mosquito Control can be a costly program to run particularly if the program operators have the "pump and dump" mentality. If mosquito complaints come in, in the past you just rolled out the trucks and indiscriminately sprayed areas with pesticides. This is costly and not overly productive.

To make our citizens safe Mosquito Control needs to be done using scientific practices. These practices first and foremost fall into the area of surveillance. To effectively fight mosquitoes you need to know what species they are. Are they day biters (*Aedes albopictus*-Tiger mosquitoes), crepuscular biters (early evening and dawn), or nocturnal biters. Are they strong flyers or weak ones? What kind of habitat do they prefer? Where do they breed? Knowing the answers to these questions can save you thousands of dollars in man-hours and pesticide costs.

Once you know the type of enemy you are fighting it may be far more cost effective to spend a few afternoons treating the farm supply store where the tractor tires are stored outside, or investigating the wet weather streams that run through your community. Getting them before they become adults is the most cost effective and safest program. However if you have areas where this cannot be done your answer is adult control. But for any program to be successful you have to integrate all three components together. Surveillance, Larvaciding, and Adulticiding must be mixed with public education. If you don't do this you may miss the next brood invading your community or have to face a group of citizens claiming that your program isn't working.

Lets remember the major reason you do Mosquito Control is to save human lives and to keep the human population from suffering the damage that an Arbovirus can inflict. With world travel becoming easier an infected person can travel from anywhere in the world and be in Missouri inside a 24-hour period. This places a strain on organizations whose duties call on them to protect the public from mosquitoes. It's not just West Nile we have to worry about either. In the past year, Texas has seen an outbreak of Dengue Fever and according to the World Health Organization many diseases thought

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beaten in North America are only a plane ride away.

There is help and the MMVCA is one source, the American Mosquito Control Association is another. Also the Centers for Disease Control and various vendors have help that is only a phone call away. Training can be had at three sources; the Florida Mosquito Control Association, Clarke Mosquito Control, Van Waters & Rogers, and the U. S. Dept. of Defense. But networking with others in your field is usually the best method for getting started.

Why do Mosquito Control? Ask the owner of the café with the outdoor patio, the little league coach, school principle, or look across the table this Sunday towards your parents. Mosquitoes can impact the economic, social, and health of your region. A good mosquito control program can be cost effective, environmentally responsible and an unseen shield of protection for your citizens. To not do it or to use ineffective controls, destroys your credibility, endangers citizens, and ultimately wastes money. If done right Mosquito Control can pay large dividends to your community!

Next MMVCA Meeting

The next statewide meeting of the association will take place on Thursday January 11th, 2001 in Jefferson City at Missouri Dept. Of Health Building 930 Wildwood Dr. Dr. Howard Pue the chief of the Missouri Dept. of Health's Surveillance will be our host. Clarke Mosquito Control Inc will provide luncheon. Speakers from Clarke, Van Waters & Rogers, and association members will give presentations. As a lunch will be presented please call Mark Ritter at 314-622-4253 or e-mail him at ritters@hotmail.com to let him know how many will be coming to the meeting. The time will be from 10am to 3pm for this important organizational meeting.

Minutes from the 10-24-00 MMVCA Meeting

The first meeting of the MMVCA had 45 people from 35 agencies and companies in attendance. A one-hour presentation on West Nile Encephalitis was held. After that the organization found out what the state was doing for mosquito and wild bird surveillance. The group then turned to questions about what the association should do and what form it should take. Most in attendance were asking for more training and general knowledge of Mosquito/Vector Control. Those in attendance filled out a questionnaire that described their programs and their level of mosquito control knowledge. The group formed a Board of Directors to organize the next meeting and a January meeting time was selected. Dr. Howard Pue-MO Dept. of Health agreed to host the next meeting. The meeting adjourned at 3pm.

NEXT MEETING MONDAY JANUARY 11 AT 10AM! It will be held at the Missouri Department of Health Building Conference Room A. The address is 930 Wildwood Drive Jefferson City Missouri. All are welcome please R. S. V. P. Mark Ritter at 314-622-4253 or at rittters@hotmail.com by December 29, 2000.

