

**MINUTES OF THE 445th MEETING  
OF THE STATE MOSQUITO CONTROL COMMISSION  
HELD AT THE NJ DIVISION OF FISH AND WILDLIFE, CHARLES O. HAYFORD  
FRESHWATER FISH HATCHERY, HACKETTSTOWN, NJ**

**AUGUST 16, 2011**

**MEMBERS PRESENT**

John Sarnas, Howard Emerson, Mark Mayer, Dr. Kenneth Bruder , Dr. George Van Orden, Tony Petrongolo, George Shivery, Dr. Mark Robson, Robert Kent, Secretary, and Claudia O'Malley, Technical Advisor. Due to various scheduling conflicts, John Surmay and Shereen Semple were unable to attend.

**OTHERS PRESENT**

Dr. Marc Slaff, Dr. Lisa Reed, Tadhgh Rainey, Scott Crans, Christine Musa and Eric Williges.

**CALL TO ORDER**

Chairman Sarnas called the meeting to order at 10:11 a.m.

**ROLL CALL**

Secretary Kent called the roll.

**OPEN PUBLIC MEETING ANNOUNCEMENT**

Secretary Kent reported that on August 10, 2011 the Secretary of State was sent an announcement for the August meeting to be held at the NJ Division of Fish and Wildlife, Charles O. Hayford Fish Hatchery, Hackettstown, NJ. A copy of the announcement was also sent to the Newark Star-Ledger, the Asbury Park Press, the Associated Press, the Atlantic City Press, the Bridgeton Evening News, the NJDEP Press Office and the NJDEP Office of Communication and Legislation in compliance with P.L. 1975, c. 231.

Chairman Sarnas thanked the members and attendees for attending the meeting as some had a considerable distance to drive.

**APPROVAL OF THE MINUTES OF THE JULY 19, 2011 MEETING**

Dr. Bruder moved and Dr. Van Orden seconded a motion to approve the minutes. Mr. Emerson had a correction to the July minutes with regard to his report from the ad hoc county assistance committee. The motion passed with Dr. Van Orden abstaining.

**CORRESPONDENCE**

07/21/11            Correspondence from Robert Kent, Secretary to Dr. George Hamilton, Rutgers University. Ref.: Funding of service contracts for the fiscal year 2011-12.

- 07/26/11 Correspondence from Robert Kent, Secretary to John Kranz, Superintendent, Middlesex County Mosquito Commission. Thank you for hosting the June meeting of the State Commission.
- 07/26/11 Correspondence from Robert Kent, Secretary to Richard Candeletti, Superintendent, Ocean County Mosquito Commission. Thank you for hosting the May meeting of the State Commission.
- 07/26/11 Correspondence from Robert Kent, Secretary to Dr. Peter Bosak, Superintendent, Cape May County Department of Mosquito Control. Thank you for hosting the July meeting of the State Commission.
- 07/28/11 Correspondence from Claudia O'Malley to Richard Candeletti, Superintendent, Ocean County Mosquito Commission. Ref.: Approval of replacement of boat trailer, repair to assigned amphibious rotary excavator and the assignment of a microscope and illuminator.
- 07/28/11 Correspondence from Claudia O'Malley to James McDonald, Sussex County Department of Environmental and Public Health Services. Ref.: Denial of a request to purchase a new flow control system to replace an existing, operable device.
- 08/01/11 Correspondence from Robert Kent, Secretary to William Reinert, Superintendent, Atlantic County Office of Mosquito Control. Ref.: Memorandum-of-Agreement for southern Vector Surveillance Program courier.
- 08/01/11 Correspondence from Robert Kent, Secretary to Dr. Peter Bosak, Superintendent, Cape May County Department of Mosquito Control. Ref.: Memorandum-of-Agreement for southern Vector Surveillance Program surveillance and specimen testing.
- 08/09/11 Correspondence from Claudia O'Malley, Technical Advisor to the Equipment Committee. Ref.: Items for consideration at the August general business meeting.
- 08/10/11 Correspondence from Robert Kent, Secretary to Secretary of State Hon. Kim Guadagno. Ref.: Announcement of the August Commission meeting at the State Fish Hatchery at Hackettstown.
- 07/11/11 Correspondence from Robert Kent, Secretary to Commission members. Ref.: Announcement of the August Commission meeting at the State Fish Hatchery at Hackettstown.

**FINANCIAL STATEMENT**

The financial statement for the new fiscal year was distributed and reviewed. The Secretary noted that there were several commitments reflected in the report including insecticides purchased for the Airspray Program and the repairs to equipment in Ocean County. The Chairman asked for a motion to approve the financial statement. Dr. van Orden moved and Mr. Emerson seconded such a motion which carried unanimously.

### **REPORT FROM THE SECRETARY**

The Secretary welcomed the attendees to the hatchery and offered a brief description of it and noted that a tour will be available after the business meeting. He reminded the membership that Superintendent Christine Musa and the Warren County Mosquito Commission will be hosting a tour of their facility at Oxford afterwards. The Secretary distributed several documents including many reprints on the subject of West Nile virus from the journal *Emerging and Infectious Diseases*. Mr. Kent noted a brochure recently received from a commercial fish hatchery which offers *Gambusia* mosquitofish @ \$1.00 apiece. The Secretary also informed the members that the NJ Mosquito Control Association has sent order forms for the *Proceedings* of the 2010 NJMCA meeting. The 2009 edition was also distributed to the members. Mr. Kent noted that the Department approved the hiring of another temporary secretary for the office. Finally, Mr. Kent announced that he had been approached by two documentary filmmakers who are interested in mosquito control, especially our biological control program, using fish. They wish to focus on disease and international responses to West Nile virus. They visited the state and interviewed hatchery personnel, Mr. Kent and Ms. Musa. It is expected that they will return during the course of the project to document more about the state and county programs.

### **REPORT FROM THE TECHNICAL ADVISOR**

Ms. O'Malley distributed her report. Since the last meeting there have been three larvicides by the Airspray Program; several had been scheduled and canceled. The season's acreage total so far is 25,114. The recent significant rainfall in the state coupled with a lunar tide has resulted in aircraft operations tentatively scheduled for Morris, Essex, Cumberland, Ocean and Atlantic Counties within the next few days. Temporary Flight Restrictions (TFR) from the FAA complicate the logistics of the flight operation in Atlantic County. Fish have been distributed in two counties (Passaic and Sussex) since last month, using Fathead Minnows primarily. Those recent stockings involved 3,550 fish; the total for the season so far tops 102,000 fish stocked in ten counties. The copepod portion of the Bio-Control Program is providing promising results. Ocean County executed some "super-stocking" of copepods on July 20<sup>th</sup>. These were stocked in an outflow structure of a storm-water detention basin. A similar stocking will take place in Burlington County. The technical advisor noted that over the course of time, as copepod populations stabilize, mosquito larval populations are undetectable. This evidence is in light of the point that copepods become benthic and may not be visible to the naked eye. In conjunction with personnel from Middlesex, Morris and Essex Counties, one of the helicopters used for larval control was calibrated at the Donald J. Sutherland, South Brunswick facility of the Middlesex County Mosquito Commission. Two different formulations were examined.

### **COMMITTEE REPORTS**

Legislative – Mr. Emerson reported no legislative activity, including that associated with the Clean Water Act and proposed new permit.

Equipment – Dr. Bruder had two items to recommend. The Morris County Mosquito Commission would like a temporary transfer of an all-terrain vehicle to be used during the time that S.M.C.C. # 130, the MarshMaster, is unavailable. The recommendation is to move a machine from Sussex County which has very few hours of usage recorded. The Committee also recommends the transfer of the ultra-low-temperature freezer recently surrendered by Rutgers University to the Ocean County Mosquito Commission which has requested the equipment. The recommendation regarding both pieces of equipment was unanimously approved by the members.

Research and Development – Dr. Van Orden noted his recent meeting with Dr. Brattsten and the review of data that she provided. He also commented on the response from Dr. Gaugler and the concerns associated with the proposal recently submitted for funding. All concerns were addressed and the proposal will now be handed off to the Budget Committee. Dr. Van Orden also raised his concerns about the continued development of stormwater facilities which have the potential to provide mosquito habitat. The chairman believes a study is in order and perhaps a proposal should be entertained for funding. The matter of correspondence associated with surveillance and control of the saltmarsh in the Great Bay region of the state was also discussed and will be considered by the committee.

Budget – No report.

Public Relations – No report.

Ad-hoc County Assistance – Mr. Emerson has contacted the four counties. There are no new demands or cuts. An inspector in Cumberland County who had been slated for layoff has been retained. There is no additional effort to reduce the effort to perform mosquito control. It was his observation that they have been responding very effectively to the recent rainfall events.

## **DEPARTMENT OF HEALTH & SENIOR SERVICES**

The following report was submitted by Ms. Semple to be presented in absentia:

The following report covers data up to Thursday night, August 11<sup>th</sup>.

### **Mosquito Testing:**

- A total of 4,402 mosquito pools were tested for WNV at the NJDHSS PHEL and CMDMC BSL3. All counties have submitted pools for testing at these labs. A total of 167 mosquito pools were positive for WNV in 18 counties. The only 3 counties with no WNV mosquito pools to date are: Atlantic, Cumberland and Salem. Species positive for WNV include *Culex pipiens*, *Culiseta melanura*, *Culex mix* (*Culex pipiens*, *Culex restuans* and/or *Culex salinarius*) and *Aedes albopictus*. As of this same date last year, we had over twice as many WNV positive mosquito pools, with 391 positive pools from 19 counties. And, it's worth noting, as of this time last year we tested nearly a thousand pools less (i.e., a total of 3,766 had been tested as of August 12, 2010).
- A total of 1,224 mosquito pools were tested for EEE. These mosquito pools were submitted from 10 counties including: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, Salem and Sussex. All pools have tested negative for EEE. Last year, the first EEE positive mosquito pool was identified from Cape May County and had been collected on July 12<sup>th</sup>. In total, as of this date in 2010, we had 7 EEE positive mosquito pools from 4 counties, including: Burlington, Camden, Cape May and Gloucester.

- A total of 777 mosquito pools were tested for SLE. These mosquito pools were submitted from 4 counties including: Burlington, Camden, Hudson and Essex. All pools have tested negative for SLE.
- A total of 70 mosquito pools were tested for LAC. These pools were submitted from 4 counties including: Cape May, Cumberland, Salem and Warren. All pools have tested negative for LAC.

### **Avian Testing:**

A total of 56 birds have been tested for WNV at the NJDHSS PHEL. To date, 9 counties have submitted these 56 birds, including: Atlantic, Burlington, Cape May, Cumberland, Gloucester, Monmouth, Morris, Ocean and Warren. Of the 56 birds submitted, 11 tested positive from 4 counties, including: Gloucester, Morris, Ocean and Warren. Over 80% of the WNV positive birds were crows. As of this time last year, nearly 5 times as many, or 54 birds, tested positive for WNV out of a total of 125 birds that had been submitted for testing.

### **Human Testing:**

The NJDHSS confirmed its first case of WNV and issued a press release following the identification of this case. The case occurred in a 50 year old male from Mercer County, who reported symptoms consistent with West Nile Fever. The resident stated his symptom onset occurred on July 3<sup>rd</sup>, however, testing reveals his onset date may have been closer to when his specimen was collected on July 20<sup>th</sup>. Even with the amended onset date of July 20<sup>th</sup>, this is the earliest WNV case we've had since 2003. The resident reported outdoor activity close to his home in Mercer County. He has since recovered from his illness. In addition to this case, a WNV presumptive viremic blood donor was reported from Burlington County, with a blood donation collection date of July 24<sup>th</sup>. In this situation, the person was asymptomatic but infection had been detected through screening of the blood donation prior to distribution. The donation has since been removed from the blood supply. As of this time last year, we had 5 human cases identified with onset dates ranging from August 6<sup>th</sup> to August 10<sup>th</sup>. And as a reminder, by the end of 2010, we had 30 human cases, including 2 fatalities.

**In summary, data thus far shows we have less WNV activity detected this year: compared to 2010, we have less than half the number of positive mosquito pools, nearly 5 times less positive birds, and 4 less positive humans. In addition, we have no EEE activity identified, compared to positive pools found in 4 counties as of this date in 2010.**

The Secretary added that the Superintendent of Mercer County Mosquito Control reported that the site of the human case was not one which appeared to be of significant habitat. There have been no mosquito issues there. Mrs. Semple had also distributed a report that a child in New York State had tested positive for Eastern Equine encephalitis. Mr. Emerson added that he had learned via a NY television outlet that the child had, in

fact, died. Mr. Crans had distributed information about a 64 year old woman in Jacksonville, Florida who had died as a result of West Nile virus.

#### **DEPARTMENT OF AGRICULTURE**

Mr. Mayer reported that the copepod colonies are doing well. He received a call regarding the discovery of the Scarlet Oak Sawfly in the vicinity of the Walkkill Wildlife Refuge. This insect is a native defoliator. The Asian Longhorn Beetle has been discovered in Ohio. The Emerald Ash Borer has been found in Montreal. All of Pennsylvania firewood has been quarantined. Traps for Emerald Ash Borer in New Jersey will be taken down this month and evaluated. It has not yet been found here.

#### **NEW JERSEY AGRICULTURAL EXPERIMENT STATION**

Dr. Robson extended an invitation to the Commission hold the September meeting at Rutgers, Headlee Labs. He added that graduate student Brian Johnson would present some of the information that he has gathered with Commission support. Dr. Robson recently attended a meeting of an E.P.A. Committee on Certification and Training Advisory Group. Representatives from all 50 states expressed distress regarding the process proposed with regard to a new (NPDES) permit via the Clean Water Act. Dr. Robson also expressed his appreciation for Dr. Van Orden's initiative to pursue an investigation into the continuing mosquito control problems with stormwater facilities.

Dr Marc Slaff reported that he had visited Atlantic Cumberland and Burlington counties and that he and Mr. Crans will be visiting Camden next. He reported on the status of county personnel with regard to certified identification specialists, surveillance light trap networks, record keeping, mapping processes, laboratory facilities and the response to West Nile virus data. There was extended discussion on aiding such counties.

Dr. Reed confirmed 186 positive WNV mosquito pools. There is no equine involvement and no Eastern Equine Encephalitis activity. Dr. Reed noted that New York State has experienced a human fatality however. She commented on the reduction in the number of positive pools for this time of the season; the number of *Culiseta melanura* is reduced, yet positives have still been detected. The predicted full moon tide and the floodwater from rainfall combine for a problematic situation.

Mr. Crans reported that the insecticide resistance workshop that had been scheduled has been rescheduled for October. The objective is to get baseline resistance data on new insecticides and how our mosquitoes are responding to them. He added that, with regard to recent training courses, students from Essex, Middlesex and Hudson had done well; 5 of the 6 students who took the mosquito biology course passed the certification exam. Mr. Crans inquired further about personnel at one of the counties. In response to questions he added that the new insecticides to be examined for resistance were such as "Natular". With Dr. Robson's acknowledgment, there will be a short presentation at the next Commission meeting, on the process of these resistance protocols.

## **ASSOCIATED EXECUTIVES OF MOSQUITO CONTROL WORK IN NEW JERSEY**

Mr. Williges reported that the Associated Executives met on August 3<sup>rd</sup> here at the hatchery. There were mixed reports about the status of West Nile virus and mosquito population levels. The difference in rainfall across the state accounted for differing reports. They will meet in September at the Monmouth County Mosquito Commission.

## **OLD BUSINESS**

The R & D Committee will discuss the Burlington County Great Bay area after this meeting.

## **NEW BUSINESS**

Chairman Sarnas announced the probable meeting site (at Headlee Labs) next month.

## **COMMENTS FROM THE GENERAL PUBLIC**

Ms. Musa inquired about the process memoranda-of-agreement between the state and other agencies. The Secretary reviewed the lengthy process of establishing agreements and contracts within the state government system.

The agenda for the remainder of the day, including a tour of the hatchery followed by a visit to and tour of the Warren County Mosquito Commission was reviewed.

## **ADJOURNMENT**

The meeting was adjourned at 11:23 a.m.