

NEW JERSEY MOSQUITO CONTROL ASSOCIATION, INC. NEWSLETTER

VOL. XIV NUMBER 1 January 2002

PRESIDENTIAL MESSAGE We are into our "winter programs", a well-deserved change from the hectic time of summer. A time that allows us to regroup and think about what we have experienced and what is coming down the pike. Surely this is a welcome change but for many of us it is still just as hectic.

While our goals of the summer involved protecting our public from the annoyance of mosquito bites and for some of us this mosquito annoyance overflowed into the potential transmission of disease to our public, there were many wrinkles, bumps, side steps, and just general problems encountered. The public's perception of mosquito control is changing before their eyes. No more can we nor in some cases, should we perform certain aspects of mosquito control like we did in the past. Our jobs are not just the physical aspect of mosquito control. Many members of the public and politicians screamed about our operations because of their misunderstanding of mosquito control and our lack of communicating with them. We have to respond to them. In many cases from what I have heard from you, we bent over backwards to answer and educate people about our operations. In most cases the public and politicians when spoken to in a face-to-face atmosphere listened and learned from us. This desire ---, push, to get our message out will go a long way towards serving us. If nobody knows what we do, it will be harder and harder to defend ourselves. We can't rely upon our professionalism and self-confident attitude of doing our jobs to the best of our ability to keep us alive as an organization. We need to continue to inform the people outside mosquito control why we exist and how we operate.

Because of the events of the past summer our goals of the winter should involve several things beyond our usual winter programs. One is to look back at happenings we were not satisfied with from last year and thinking of what we can do to fix them. Maybe the installation of a message machine to allow anyone at anytime to learn if you have planned an adulticide. Maybe contacting your county's information technology department to see if you can get a page(s) on the county's website dedicated to your operations. Maybe acquire new equipment. Additional equipment. Maybe the creation of an information packet to send out to all your municipalities outlining your operations. These are things you may have thought of to help avoid a repeat of a problem of last year.

A second goal for this winter is that we all have to learn the new pesticide control regulations. There are significant changes in these regulations. Unfortunately, due to the uniqueness of our enemy, the mosquito, and the need for the regulations to address a much larger business concern than just us, we have to adapt our operations to much broader concerns. This is a case of us educating ourselves. In order for us to lay claim to our professionalism we have to educate ourselves so we can accurately educate the people we serve.

The word, "education" constantly comes up in this message and my previous message. We cannot do our jobs completely and nobody will believe us when we do our jobs if education is not involved.

I look forward to seeing you at our state meeting and at the AMCA meeting for those able to go.

Rod Schmidt President, NJMCA

An Update on the Status and Distribution of *Ochlerotatus japonicus* in New Jersey

Jamesina J. Scott and Wayne J. Crans, Department of Entomology, Rutgers University

In the rest of the eastern United States, *Oc. japonicus* has undergone a similar expansion of its geographic range. In 1999, *Oc. japonicus* was collected from both artificial and natural containers in Connecticut, New Jersey, New York, Ohio, and Pennsylvania. By the end of 2000, *Oc. japonicus* had been found in 4 additional states (Maryland, Massachusetts, Rhode Island, and Virginia). This year, Delaware, New Hampshire, and Vermont reported collections of *Oc. japonicus*, bringing its current known range in North America to a total of 12 states (Figure 2). In addition to an expansion of its known American range, the larvae of *Oc. japonicus* have been collected from wider variety of habitats. Although they are found most commonly in artificial containers, tree holes and rockpools in Sussex and Warren Counties have been found supporting large populations of larvae. Less frequently, larvae have been collected from groundwater sources including tire ruts, street gutters, and catch basins. In approximately half of all larval collections, *Ochlerotatus japonicus* is the only mosquito species found in a container. When associate species are present, the most common are *Oc. triseriatus*, *Oc. atropalpus*, *Culex pipiens*, *Cx. restuans*, and *Anopheles punctipennis*. Other associate species collected less frequently with *Oc. japonicus* include *Ae. albopictus*, *An. barberi*, *An. quadrimaculatus*, *Cx. salinarius*, *Cx. territans*, *Orthopodomyia signifera*, and the predaceous species *Toxorhynchites rutilus septentrionalis*. This exotic species appears to be tolerant of cool temperatures. *Oc.* is the first container-dwelling species collected in the spring, and the last species remaining in the fall. In 2000 and 2001, the first larvae of the season were collected from tires in Bergen County, NJ during the third week of March, several weeks before any other species of container-dwelling larvae were collected in the state. Larvae, pupae, and adults persist into November, well beyond the first frosts, and the immature stages perish only when the water in their containers freezes completely solid. In New Jersey and states northward, *Oc. japonicus* overwinters in the egg stage. It remains to be seen if this species will overwinter as larvae in the more temperate southern states. Infusion-baited gravid traps continue to be the most effective and reliable method for collecting adult *Oc. japonicus* for virus. The known geographic distribution of the exotic mosquito *Ochlerotatus japonicus* in New Jersey since it was first identified from light trap collections in Ocean County, NJ in September 1998 (Peyton et al. 1999). Presently, *Oc. japonicus* is known from 18 of New Jersey's 21 counties (Figure

1). surveillance. Adults have also been taken with light traps, carbon dioxide-baited traps, and in biting collections, although these methods usually collect smaller numbers than gravid traps placed nearby. Interest in the potential role of this exotic invasive species in the American cycle of West Nile (WN) virus has been growing. Sardelis and Turell (2001) and Turell et al. (2000) have demonstrated that *Oc. japonicus* is an efficient vector of WN virus under laboratory conditions. Additionally, 18 pools of field-collected *Oc. japonicus* from four states have been positive for WN virus (1 pool from MA, 11 pools from NJ, 5 pools from NY, and 1 pool from PA).

References

APHIS, West Nile Virus in the United States, 2000 - Final Summary.
<http://www.aphis.usda.gov/oa/wnv/summary2000.html> Accessed 30 November 2001

- Crans, W.J., and J. McNelly. 1999. An Update on the Distribution of *Aedes japonicus* in the Northeast. Vector Ecology Newsletter 30(3): 14-15.
- Peyton, E.L., S.R. Campbell, T.M. Candeletti, M. Romanowski, and W.J. Crans. 1999. *Aedes* (Finlaya) *japonicus*, a New Introduction into the United States. J. Am. Mosq. Contr. Assoc. 15(2):238-241.
- Sardelis, M.R. and M.J. Turell. 2001. *Ochlerotatus j. japonicus* in Frederick County, Maryland: discovery, distribution, and vector competence for West Nile virus. J. Am. Mosq. Contr. Assoc. 17(2):137-141.
- Turell, M.J., M.L. O'Guinn, D.J. Dohm, and J.W. Jones. 2001. Vector competence of North American Med. Entomol. 38(2):130-4.

UPCOMING MEETINGS

Middle Atlantic Mosquito Control Assoc. - January 21-23, 2002 The MAMCA annual meeting will be held in Baltimore, MD. Visit the MAMCA homepage for more information

American Mosquito Control Assoc. - The AMCA/West Central MVCA will be held in Denver Colorado on Feb. 18-21, 2002. Check the AMCA website (mosquito.org) for more information.

New Jersey Mosquito Control Assoc. - Atlantic City's Trump Marina will be the location of the NJMCA Eighty-ninth Annual Meeting to be held on March 12-15, 2002. Please check the NJMCA website (njmosquito.org) for more information.

New Jersey Mosquito Control Assoc. - Annual Pesticide Applicator Training Sessions March 12 Atlantic City March 27 Rutgers University See NJMCA website (njmosquito.org) for information

ATTENTION!

First Call for Auction Items

There will be a Silent Auction at the annual meeting of the New Jersey Mosquito Control Association, Inc. in Atlantic City this March. All proceeds of the auction benefit the DM Jobbins Scholarship Fund.

We're soliciting donations of useful items, gift items, or, why not try to donate the most unique item to be auctioned. Also, insect related items seem to attract particular attention. Any questions call Bill Reinert, 609-645-5948 or email at reinert_william@aclink.org

People and Places - *Bill Fisher*

To hear the story told, in southern Jersey style, there was a time when the employees of the Salem County Mosquito Commission had no office to report to; rather they sat in the cabs of their pick-up trucks, until the Superintendent gave them their daily work assignment. A sign on the wall of the building that eventually was the home to the Commission reads: "We ditch diggers will be happy to start our work once we know four simple facts...how deep, how wide, how long and in which darn direction!"

Such was the simple philosophy of one of New Jersey's most successful superintendents, the just-retired William J. Fisher. Success may be measured in many ways. That Salem operates a full mosquito control program with one of the smallest budgets in the state, that they occupy one of the mosquito control communities most complete facilities, that they survive as one of NJ's last eight autonomous commissions, that he leaves an operation with the ability to accomplish any task that the future may hold, speaks volumes of his leadership there.

Bill came to the job, some 37 years ago, when the office was, as he would put it, "not much more than a finished corn-crib". Armed with fierce determination and enough intelligence so that "he never had to read from the bottom of his heel, instructions on how to pour water out of his boots", Bill learned on the job, what was to become his career. As one who checked the light traps, ran most any kind of equipment, supervised the crew and personally applied for whatever water-management permit they had to get, his career, produced an exceptional water management program, an aircraft operation, larval and adult pesticide operations and surveillance.

Now Salem has an office facility, which any of us would be proud of. Included are a conference room, laboratory, secretarial work station, inspectors office and a shop in which, if the tool is not available commercially, they can build it! When asked how this was accomplished, the superintendent is likely to respond that he has a crew that works harder than "come hell patch a mile".

And if you don't understand what that means...you ain't from south Jersey.

Bob Kent

NJMCA PHOTO SALON

Start organizing your pictures for the Photo Salon contest to be held during the NJMCA Annual Meeting in Atlantic City, March 13-15, 2002. Prizes will be awarded for the best picture in each category and also best in show. There will be a new category "Digitally Altered" added to the lineup this year.

NJMCA PROCEEDINGS

Available for purchase at \$10.00 each: Proceedings of the 87th Annual Meeting of NJMCA (held March 12-16, 2000) A separate index covering years 1970-2000 Proceedings of the 88th Annual Meeting (held March 5-8, 2001) Please contact Linda Dickson, Proceedings Distribution Manager (908-453-3585) or email ldickson@nac.net if interested in purchasing any of these Proceedings or past older Proceedings which cost \$5.00 each.

Application for Membership to the New Jersey Mosquito Control Association, Inc.

The undersigned hereby sponsor the named applicant for regular membership to the NJMCA:

Company/Organizati
on _____

Name _____ Title
(Dr., Director, Commissio
ner) _____

Work Phone: _____ Fax: _____ E-
Mail: _____

Address _____

Home Phone _____ Fax _____ E-
Mail: _____

Address _____

Sponsor _____ Sponsor _____

I would like to receive NJMCA Newsletters via: Home Mail ___ Work Mail___ Home E-mail___ Work E-mail___

Please send this application and dues of \$30.00 Payable to the *New Jersey Mosquito Control Association Inc.* to the following address:

New Jersey Mosquito Control Association Inc.
c/o Camden County Mosquito Commission
2311 Egg Harbor Road
Lindenwold, N.J. 08021