

the NORTHEASTER

Newsletter of the Northeastern Mosquito Control Association

October 2001



~ THE PRESIDENTIAL COLUMN ~

by John J. Smith

To put it bluntly it has been one heck of a summer. I

suspect most of the membership will be relieved when we get our first hard frost. I cannot wait, even though it will be the end of my tomato plants. I hope that by the time you read this newsletter you will be through with your 2001 mosquito As of late September, season. Massachusetts has reported nineteen confirmed West Nile Virus horse cases with four more presumptive cases and over nine hundred birds confirmed positive for West Nile Virus, mostly American crows. Connecticut has three confirmed human cases with two more waiting for CDC confirmation. All of the northeastern states have been dealing with the West Nile virus now that it has been found over the entire region. Across the eastern United States there have been twenty-eight people confirmed as being infected with the West Nile virus with one fatal case in Georgia. Some twenty-five states as of late September have isolated West Nile virus from birds and the Caribbean concerned with nations are proximate infections of West Nile in the Florida Keys. The prediction now is that West Nile virus will take up permanent residence. vear round. in the southeastern United States. Certainly the data collected in the Northeast shows that the West Nile virus is capable of over wintering here as well. My project also had the dubious distinction of collecting the first human biting mosquito (*Ochlerotatus japonicus*) infected with the West Nile virus in Massachusetts.

As if to make matters worst Eastern Equine Encephalitis (EEE) has made a come back this year. Several species of mosquitoes have turned up positive for EEE and I have the added distinction of having the first (and only to date in the Northeast) human case of EEE. A four year old girl was visiting family in the town of Canton when, the State Health Department believes, she was bitten by an infected mosquito. Fortunately she appears to be recovering.

Amazingly enough, given the levels of virus activity to date, this has also been a season of extraordinary (and well organized) efforts by those who would oppose mosquito control. I used to call these groups "environmentalists" but along with many of my fellow members I feel that this classification gives these individuals more credit than they deserve. I have been in the mosquito control field for over 21 years now and can honestly tell you that the membership is much more in-tune with the environment than many of these self proclaimed "experts". Other

than the increase in virus activity, I think this year will go down in history as a year where there has been a record amount of mis-information. false and outright (and propaganda purposeful) misleading of the general public relative to mosquito control issues. Conclusions from published literature, most of which has not been subject to the scrutiny of the scientific community, has been used to condemn well thought out and appropriately implemented vector control strategies. I could site many examples of this effort across the Northeast but let it suffice to say that I am deeply concerned that this effort will result in considerable damage to our vector control public health system.

I could not conclude this address without mentioning the events in New

York City, Pennsylvania and Washington DC which took place on September 11th. I was deeply affected by these terrorist attacks perpetrated on all those innocent people whose only crime was that they were at their work place working. It should be a wake up call to us all that life is precarious at best. Take care of family and friends. All else is trivial compared to what the families of these victims are going through. My heart goes out to them all.

As always, I wish to remind the membership that we, as members of this Association, are involved with efforts to improve public health each and every day, be it operational, commercial or within the academic arena. I cannot think of a more noble profession. I would like to wish each and every one of you the best of luck.

John J. Smith, President

~ IN MEMORY OF ~

<u>Frank S. Perrin</u>, 72, died Saturday July 7, 2001 at his home in North Falmouth. Mr. Perrin was born in Worcester, MA and retired to Cape Cod 15 years ago from Holliston, Mass. He was a 1954 graduate of the University of Massachusetts, earning a degree in entomology, and also served in the U.S. Army from 1955 to 1957. Mr. Perrin spent 20



years with Residex Corporation, eventually becoming the director of sales for this New Jersey-based company. He was also owner/operator of Hartney Spray Company, based in Norwood, Mass, where he supplied existing Mass. Mosquito Projects with products and equipment for many years. Mr. Perrin was a member of the Central Massachusetts Mosquito Control Project Board of Commission from its inception in 1974, over 27 years. During this time he also served 10 years as its Chairman. He was an active member of AMCA and NMCA since 1974,

attending many AMCA & NMCA Annual Meetings. The CMMCP Board of Commission and all it's employees will miss Frank and his contributions to mosquito control. Mr. Perrin leaves a wife Betty, three daughters, and four grandchildren.

~ NMCA 47th ANNUAL MEETING NEWS ~

The NMCA 47th Annual Meeting will be held from Monday, December 3rd to Wednesday December 5th at the Hawthorne Hotel in Salem, MA. A registration form is included in this newsletter. *Call (800) 729-7829 for reservations as soon as possible to book your room(s), they are filling fast.*

ROOM COST: \$115.00 per night

Please check their website at http://www.hawthornehotel.com for more details.

PLEASE DO NOT BOOK YOUR ROOM ONLINE, YOU WILL GET A MESSAGE THAT

THE HOTEL IS FULL. PLEASE CALL THE 800 NUMBER.

ARRANGEMENTS HAVE BEEN MADE WITH LOCAL BED & BREAKFASTS WITHIN WALKING DISTANCE FOR ADDITIONAL ROOMS; PLEASE ASK AT THE HAWTHORNE HOTEL RESERVATION LINE FOR MORE INFORMATION.

ROOMS ARE ALSO AVAILABLE AT THE KING'S GRANT INN, (978) 774-6800 IN NEARBY DANVERS, MA., LESS THAN A 10 MINUTE DRIVE. PLEASE REGISTER BY NOVEMBER 11 TO INSURE AVAILABILITY. COST PER ROOM IS \$99.00/NIGHT.

~ 13th ANNUAL PHOTO SALON ~

Submit one (or more) of your favorite photos in the 13th annual NMCA Photo Salon!! Compete with your peers to see who will be chosen the best in each category.

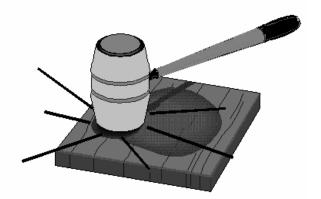
CATEGORIES:

- General Wildlife
- Other Insects
- Mosquito Habitat & Sampling
- Research Project
- Comical
- Wetlands Management
- Season Highlight
- Educational
- Landscape
- Best of Show



RULES:

- 1. each contestant may submit one entry in up to three categories.
- 2. slides must be labeled with contestant's name and address.
- 3. entries can be submitted at the NMCA registration table.
- 4. all entries must be submitted prior to Tuesday, Dec. 4th.
- 5. a panel of three judges will pick the winning entry in each category.
- 6. a prize will be presented to the winner in each category.
- 7. all entries will be available for pick-up on Wednesday, Dec. 5th.
- 8. no professional presentation slides can be entered.
- 9. no text slides, photos only.



DON'T FORGET!!

Items are always needed for the

Silent Auction!!

Please support NMCA with your donation.

THANK YOU

KNOW MOSQUITOES: NMCA has bought 40 AMCA Mosquito Board Games to sell at cost to interested NMCA members. This educational and entertaining game is aimed at 4th - 5th graders, but it contains a wealth of mosquito information for adults, too. The cost is \$15.00/game. Postage is approx. \$12.00/game. (Other means of more affordable delivery may be arranged.) Anyone interested should contact Al Gettman at (401) 789-6280 or through his e-mail at agettman@dem.state.ri.us



NMCA UNPLUGGED

We would like to try something new this year, a bit of entertainment for your dining pleasure...we are soliciting photos from the membership showing you in areas *other* than mosquito control - yes, we do have a life outside of mosquito control (some of us anyway)!! Pictures of your family, pets, travel photos, engaged in other activities, etc., will be made into a PowerPoint[®] presentation to run during the banquet... Please e-mail your photos (with captions) to John J. Smith at: ncmcp@ma.ultranet.com

~ SCHOLARSHIP ~

The NMCA Executive Board wants to remind everyone to consider candidates for the various scholarships, grants and awards that the NMCA offers to the membership each year (please see insert for applications for the McColgan Grant-in-Aid & Jobbins Scholarship):

- The Bob Armstrong Award: is given to a NMCA member for meritorious service to NMCA and mosquito control
- The McColgan Grant-in-Aid: will go to an individual whose work is directly related to the advancement of operational mosquito control: for example, Surveillance technology, Spray technology, Biological control, Physical control, Data processing.
- <u>The Jobbins Scholarship</u>: will go to a student whose work is in an area relevant to mosquito or biting-fly control in the Northeast; for example, wetlands biologyecology, entomology or vector parasitology. Studies may range in nature from purely ecological to strict vector control.
- The Dave Scott Memorial Award: This award is dedicated to the recognition of the fact that many advancements in our work come from the rank-and-file as a result of their time spent on the job, their experience and common sense. It may acknowledge an improvement in a procedure, a practice, any of the many operational strategies that we perform in mosquito control on a day-to-day basis.

PLEASE NOTE: The McColgan Grant-in-Aid & Jobbins Scholarship awards have been increased this year to a maximum of \$2,000. For more information on these awards, please contact Curtis R. Best, Scholarship/Awards Chairman at (508) 393-3055, or check the website at <www.nmca.org> on the Annual Meeting page.......Also, if you are conducting field trails, utilizing new equipment, involved in research, or are trying new or improved techniques that you think others in the membership might be interested in, please consider giving a presentation at the next NMCA Annual Meeting. You may contact Curtis R. Best, Program Chairman, (see number above). Share your results with the rest of the membership!!

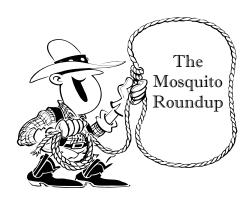
WEDDING BELLS ARE A RINGIN'.....

It is my distinct pleasure to congratulate **Doug Bidlack** and **Ellen Orrell** on their recent marriage, July 7, 2001.

Doug is the Entomologist for the East Middlesex (MA) MCP, and Ellen is the Entomologist for Plymouth County (MA) MCP. NMCA wishes them a long and happy marriage - CONGRATULATIONS!!

In this column, you will find **mosquito** and **arbovirus news** from the membership, from New England to New Jersey. Haven't submitted anything for this issue? Look for the contact information in this newsletter and submit news from your organization next time. A paragraph or two is all that's needed. Give it some thought.

- Ed.



Northeast Mass. Mosquito Control & Wetlands Management District Greetings All: Like everyone else, the focus of our program this past summer has been WNV. We began treating basins in early June, prioritizing areas where clusters of virus isolations



Aventis Environmental Science

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in birds occurred in 2000, and expanded out from those areas to treat as many basins as we could. We treated a total of 25,000. basins. It is interesting that although we did have a few random isolations in these areas, we did not have a recurrence of multiple isolations in close proximity. In 2001 the virus occurred in new areas. What this means is anybody's guess, but it appears that early intervention efforts may be a matter of chasing virus from one hot

spot to another. The Town of Andover was the hot spot this year, with 31 isolations in birds, and in three pools of mosquitoes, with similar circumstance in the bordering community of Tewksbury (which is part of the Central Mass Mosquito Control Project). As the season progressed, birds with virus were found in neighboring communities, appearing to be in a corridor of activity along the Merrimack River.

We have added six new municipalities to our program, and have two more

considering joining next year. Believe it or not, I have tried to discourage these municipalities from subscribing to the District's services solely in response to WNV. I encouraged them to join only if they want to be part of a comprehensive mosquito control program. Despite this, I'm quite sure they joined specifically because of the threat of WNV. So we've begun to gear up to service these new municipalities. We have hired three new full time employees, and Pete Young has returned as a seasonal ID specialist. At last year's NMCA meeting



I had the great fortune of meeting Esteban Luis Cuebas-Incle. Esteban is a Ph.D., Entomologist and volunteered his services this past summer. Esteban has agreed to return next season as our Entomologist.

WNV intervention has taken a toll on our overall program. Often what we do is taken for granted, sometimes even by ourselves. To paraphrase the cartoon character Charlie Brown, doing a good job at controlling mosquitoes is like wetting your pants in a dark suit. It gives you a warm feeling inside, but nobody really notices. This year

people noticed. The complaint I heard repeatedly from constituents this past season was, the mosquitoes are bad this year; where's the guy or girl who used to take care of the swamp out back? Off course the answer was, they are all treating catch basins. While the long-standing debate over whether what we do, when and how we do it is public health or nuisance control, the bottom line is these are the people who have supported our



programs. The ones who stand up at town meetings in support of mosquito control. In the upcoming months we will review our WNV intervention strategies and revise them for next season.

- Walter Montgomery, Supt.

Central Mass MCP - By the calendar, summer has ended. But I must say, this will be one to remember. WNV reared its ugly head once again, but not in areas from last year, where catch basin larviciding efforts were initially concentrated. The northern part of our service area, most notably Tewksbury, was the hot spot for us this year, with over 37 birds testing positive for the virus. MDPH stopped testing birds in early September, so this number was sure to have been higher. Intervention strategies I am sure played no small part in preventing the virus to cross over to the human or horse population. EEE

North Fork Helicopters, Ltd. John Sondgeroth (631) 734-5515 P.O. Box 1160 (631) 734-5641 Fax Cutchogue, NY 11935-0874

was also present this year, but surprisingly not alarming the public like in years past. 10 mosquito pools were presented with EEE, in species ranging from the old standby *Cs. melanura*, to more alarming species such as *Cq. perturbans*, and of course once again the *Culex* species. Here at CMMCP, we spent a great deal of time and effort making collections from gravid traps, and kudos must be sent out to Curtis Best, Staff Entomologist, who spearheaded this

campaign. I am sure he feels that without the Herculean efforts of our summer interns, Nicole Granger and Ross Courtemanche, this program would not have been as successful this year. Of course, I cannot forget to thank the various full-time employees who assisted Curt as well - thanks guys. Your help is always appreciated. One interesting note, we collected the first samples of *Toxorhynchites rutilus* ever found in

the CMMCP service area, in the town of Millbury. We were unsuccessful in our attempts to begin a colony in the Project laboratory, but it was interesting to watch their feeding habits. Having never seen one before, I was fascinated.

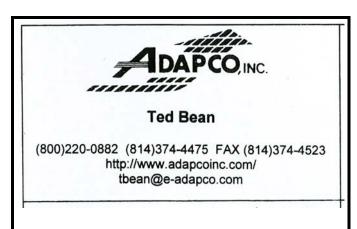
- Tim Deschamps, Asst. Supt.

East Middlesex MCP - The 2001 season continued an active period of expansion and

change driven primarily by the threat of West Nile Virus. Three communities joined the district bringing the total to 24 cities and towns.

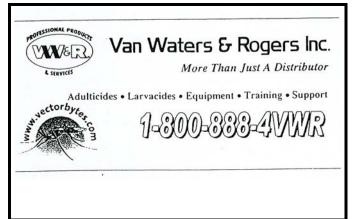
The catch basin larval control program was expanded to include 5 seasonal workers who applied Altosid Briquets or Vectolex CG from bicycles. The Project also conducted a season long evaluation on the efficacy of a new *Bacillus sphaericus* product, Vectolex WSP applied to catch basins.

Additional labor and gravid traps were



utilized in our surveillance program to expand our knowledge of *Culex* mosquito populations and to monitor West Nile Virus. In early June the first *Oc. japonicus* was collected in our district. By October *Oc. japonicus* had been collected in 10 communities located in the western half of the Project. The Project participated in a CDC study conducted by Paul Reiter on the efficacy of truck mounted ULV applications of Scourge to control *Culex* mosquitoes.

Our helicopter larval control program suffered a setback when a U.S. Fish & Wildlife



Manager reversed a 12 year policy of permitting aerial applications of Bti at Great Meadows National Wildlife Refuge Refuge. The Manager interpreted new Federal regulations as the basis for their determination concluding that Bti applications to control mosquito larvae were not compatible with their mission to provide a sanctuary for migratory birds. The Refuge is initiating a multiyear investigation designed to determine the impact Bti of

applications on aquatic invertebrate communities.

- David Henley, Superintendent

Norfolk County MCP The Norfolk County Mosquito Control Project has started to turn the corner into the fast approaching new age of mosquito control. We don't know exactly what mosquito control will look like in the next decade but we feel certain it will change significantly from what we've known in the past decade.

In an attempt to implement what may be future trends, we successfully launched our first countywide aerial larvicide this Spring. We plan to repeat this every year, with expanding acreage in the coming years. We missed an opportunity to perform a summer aerial larvicide and paid the price with the worst Aedes vexans outbreak since

1990. Neighborhoods along the Neponset and the Charles Rivers were hit hard. Due to

this outbreak, we did a lot of ULV applications in Norwood. Dedham, and Sharon. We again treated a fair amount of the counties rain basins with Altosid. Expanded gravid trapping this summer kept us all very busy. Seems that these traps gave us some interesting results - besides being misidentified as bombs. Inland water management suffered the most this summer. We only recently began some We have two Integrated projects. Marsh Management projects planned



for Quincy and Braintree. We expect the upcoming meetings to bring lots of new information. See you all in Salem.

- Dave Lawson, Asst. Director

<u>Division of Vector Control - Suffolk County DPW</u> - 2001 Was an eventful mosquito year in Suffolk County, with great fluctuations in mosquito populations and yet another appearance of West Nile Virus (WNV). There was an unseasonably early salt marsh outbreak in some locations in mid-June, followed by a period of low populations that lasted most of the summer. The last few days of August and the first week of September saw a second outbreak, but again it was not generalized. The second outbreak was most interesting, in that it took place in an area where there are no marshes on their mainland, so there are usually few problems there. This season, there apparently was unusually heavy breeding on some nearby marsh islands that are not larvicided, coupled with winds that allowed dispersal into populated areas. Overall, however, the aerial larvicide program (Altosid + Bti liquid) continued to give excellent control. Water management this winter will place a high priority on areas that were



WNV activity was less than 2000, with 51 isolations compared to 120 the previous year. However, WNV was locally intense, and did result in our first human WNV case, a 49-year-old woman who has recovered. This case occurred in an area that surveillance correctly identified as high risk, and a ground adulticide response was mounted. However, adulticiding near the eventual case location was severely limited due to the proximity of wetlands. Hindsight suggests that we

troublesome this past summer.

were close to having several more cases in the area. Aerial adulticiding was probably warranted, particularly since that technique would have controlled the mosquitoes in and adjacent to wetlands better than the ground application. *Coquillettidia perturbans* was the dominant human biter in this area, and was found WNV positive. Larval control



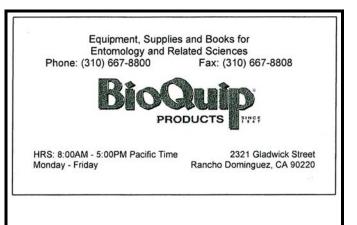
of *Cq. perturbans* in this and other areas will be given higher priority in 2002 than in the past. WNV was found in neighboring Nassau County in *Ochlerotatus sollicitans*, as well as in New Jersey and Connecticut. This suggests that this very aggressive mosquito could be a WNV vector. WNV was found in *Culex* and birds closer to the salt marshes this year than in any other year so far. This is an ominous development for this and other coastal programs, and we

should not assume we have seen the worst of WNV yet. There should no longer be any question of the public health significance of salt marsh mosquito control.

- Dominick Ninivaggi, Supt.

<u>Plymouth County MCP</u> - The 2001 season created new challenges for this Project. This year we treated 9,360 acres for spring brood mosquitoes utilizing our Cessna Ag-Wagon (7,920 acres) and for the first time, an additional 1,440 acres were treated by helicopter. Only 40 additional acres were treated for reflood (saltmarsh) during the summer. A total of 47,767 catch basins were treated in all of our towns for WNV

prevention. The first WNV positive bird was confirmed on July 12 (a month earlier than 2000!). As of October 4, 256 birds were confirmed positive for WNV. The Project's Bio-tech and Staff Entomologist were kept busy setting gravid and CO₂ traps for collections to be submitted to Mass. DPH. The State's first positive WNV horse case occurred in Lakeville on August 28. As of October 5, 18 of the 19 WNV positive horse cases have come from Plymouth County. On August 31 we ended our



ULV work for nuisance control with 9,673 requests for service, down slightly from 2000. Three limited ULV applications were made at dusk on 9/12, 9/13 and 10/4 at the request of Town Boards of Health within the confines of horse farms and fields where WNV positive cases were confirmed. This was the year that Project personnel were praying for frost and snow in September!! Hope to see you in Salem, MA in December so we can trade stories on the year form HE--!

- Ray Zucker, Asst. Supt.

~ PUZZLE PAGE ~

MOSQUITO WORD SEARCH

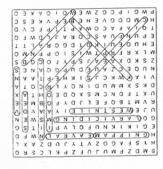
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Find these words in the puzzle above:

aedes backpack catchbasin cinereus dipper imago larvae larviciding mapping pupae

vexans westnile wetland

ANSWER



~ SUBMISSION INFORMATION ~

do you have news about your program, interest in writing a column, or any type of submission for me?? Please send it to me in any one of these ways:

• E-mail: TDeschamps@worldnet.att.net

• Fax: 508.393.8492 • Phone: 508.393.3055

• Snail Mail: c/o CMMCP 111 Otis St. Northboro, MA 01532

Attn. Tim Deschamps, Editor, the Northeaster

thank you in advance for any and all ideas - Tim D.



NORTHEASTERN MOSQUITO CONTROL ASSOCIATION

mosquito control for health and comfort

the Northeaster
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