

ASSOCIATION NEWS

PROGRAM *

Sixteenth Annual Meeting

AMERICAN MOSQUITO CONTROL ASSOCIATION

Meeting jointly with the

NORTHEASTERN MOSQUITO CONTROL ASSOCIATION

SOMERSET HOTEL

BOSTON, MASSACHUSETTS

Sunday, March 27, 1960

10:00 A.M. Board Meeting

Registration

Monday Morning, March 28, 1960

8:00 Registration

9:00 Opening Session

Presiding: A. D. Hess, President, American Mosquito Control Association
Addresses of Welcome; Announcements

10:00 Preliminary Business Meeting

10:15 Invitational Papers

Presiding: Hugo Jamnback, President, Northeastern Mosquito Control Association

THE SOVIET UNION AND OTHER EUROPEAN COUNTRIES AS
VIEWED BY A MOSQUITO WORKERHelen Sollers, Plant Pest Control Division, A.R.S., U. S. Department of
Agriculture, Washington, D. C.11:15 TWO DECADES OF PROGRESS AND PERSONALITIES IN MALARIA
CONTROL. ARCHIE D. HESS, PRESIDENT, AMERICAN MOS-
QUITO CONTROL ASSOCIATION.* See *Program Postscripts* for special notices.

Monday Afternoon, March 28, 1960

12:45-1:30 Northeastern Mosquito Control Association Business Meeting.

PANEL AND PAPERS

Presiding: Vernon Conant, Regional Director, North Atlantic Region, AMCA

1:30 **PANEL: EASTERN ENCEPHALITIS**

Moderator: Richard O. Hayes, CDC, U. S. Public Health Service, Taunton, Massachusetts

A. VIRUS VECTOR RESEARCH. Roy W. Chamberlain, Chief, Virus Vector Research Unit, CDC, U. S. Public Health Service, Montgomery, Alabama.

B. 1959 NEW JERSEY OUTBREAK. Daniel M. Jobbins, New Jersey Agricultural Experiment Station, Rutgers University, New Brunswick, New Jersey.

C. THE IMPORTANCE OF BIRDS AND BIRD MOVEMENT. Donald D. Stamm, Chief, Veterinary Research Unit, CDC, U. S. Public Health Service, Montgomery, Alabama.

D. CONNECTICUT STUDIES ON EASTERN ENCEPHALITIS. Robert C. Wallis, Connecticut Agricultural Experiment Station, New Haven, Connecticut.

E. ENDEMIC VIRUS ACTIVITY IN MASSACHUSETTS. Richard O. Hayes, Taunton, Massachusetts.

Questions and Discussion

Short Recess

3:30 to 5:30 Conference for Trustees and Commissioners. Concurrent with paper reading session. (See Program Postscript §.)

3:40 **SUBMITTED PAPERS**

1. SOME EVIDENCE OF LOCAL ORIGIN OF EEE VIRUS IN CENTRAL FLORIDA. Major Frank G. Favorite, Army Environmental Health Laboratory, Army Chemical Center, Maryland.
2. CURRENT KNOWLEDGE OF EASTERN ENCEPHALITIS IN MARYLAND. W. E. Bickley and R. J. Byrne, University of Maryland, College Park, Maryland.
3. A SENTINEL CHICKEN SHED AND MOSQUITO TRAP FOR USE IN ENCEPHALITIS FIELD STUDIES. M. B. Rainey, G. V. Warren, A. D. Hess, and J. S. Blackmore, CDC, U. S. Public Health Service, Greeley, Colorado.
4. FIELD OBSERVATIONS ON THE RELATION OF *CULEX TAR-SALIS* POPULATION DENSITIES TO ENCEPHALITIS TRANSMISSION RATES. John S. Blackmore, Louis C. LaMotte, A. D. Hess, Clarence A. Sooter, and Preston Holden, CDC, U. S. Public Health Service, Greeley, Colorado.

5. A MOSQUITO HOST PREFERENCE STUDY MADE WITH REGARD TO EASTERN ENCEPHALITIS IN MASSACHUSETTS. Richard O. Hayes, Taunton, Massachusetts.
6. MOSQUITO SURVEILLANCE AND ABATEMENT AT FT. DIX, NEW JERSEY DURING THE EASTERN EQUINE ENCEPHALITIS OUTBREAK OF 1959. Milton B. Flemings, Irving H. Waller, and Henry Estes, 1st U. S. Army, N. Y. City.
7. STUDIES ON THE BIONOMICS OF *CULEX SALINARIUS* COQ. IN DELAWARE II. HOST ACCEPTABILITY BY ADULT FEMALES. Frank J. Murphy and Richard F. Darsie, Jr., University of Delaware, Newark, Delaware.
8. SOME FACTORS INFLUENCING MOSQUITO LARVAL POPULATIONS IN UTAH. Jay E. Graham, South Salt Lake County Mosquito Abatement District, Iver E. Bradley, University of Utah, and Glen C. Collett, Salt Lake City Mosquito Abatement District, Salt Lake City, Utah.

Monday Evening, March 28, 1960

See Program Postscripts

Tuesday Morning, March 29, 1960

Presiding: Dr. A. D. Hess

8:30 **SYMPOSIUM: MOSQUITO CONTROL OPERATIONS**

Moderator: T. G. Raley, Selma, California.

Subjects will include insecticide barriers, catch basin treatments, granular larvicides, space spraying and fogging, aircraft applications, weed control, water management and wildlife, safety procedures, and ordinances of value in conducting urban mosquito control.

Participants will be Robert L. Armstrong, Superintendent, East Middlesex Mosquito Control Project, Cambridge, Massachusetts; P. Bruce Brockway, Jr., Superintendent, Toledo Area Sanitary District, Toledo, Ohio; Glen C. Collett, Manager, Salt Lake City Mosquito Abatement District, Salt Lake City, Utah; William M. Cox, Director, Galveston County Mosquito Control District, Dickenson, Texas; R. E. Dorer, Director, Bureau of Insect and Rodent Control, Virginia State Department of Health, Norfolk, Virginia; Howard R. Greenfield, Manager-Ent., No. Salinas Valley Mosquito Abatement District, Salinas, California; D. M. Jobbins, Research Specialist in Entomology, New Jersey Agricultural Experiment Station, New Brunswick, New Jersey; W. W. Warner, Director, Monroe County Anti-Mosquito District, Key West, Florida; Franklin C. Wray, Technical Director, Desplaines Valley Mosquito Abatement District, Lyons, Illinois.

10:30 Short Recess

10:40 **SUBMITTED PAPERS**

9. HYDRAULIC DREDGES FOR MOSQUITO CONTROL. Charles W. Blaney, Ellicott Machine Corporation, 1611 Bush Street, Baltimore, Maryland.
10. ESSEX COUNTY MOSQUITO EXTERMINATION COMMISSION'S METHOD OF MIXING INSECTICIDES AND LARVICIDES BY AERATION AND RECIRCULATION. Oliver C. Stivers, Essex County Mosquito Extermination Commission, Verona, New Jersey.
11. AEROPLANE APPLICATION OF GRANULAR PARIS GREEN MOSQUITO LARVICIDE. A. J. Rogers and C. B. Rathburn, Jr., Entomological Research Center, Florida State Board of Health, Vero Beach, Florida.
12. MALATHION FOGGING COMPOSITION FOR USE IN THERMAL AEROSOL DISPERSAL EQUIPMENT. R. D. Vartanian, J. B. O'Neil and R. B. Fortenbaugh, American Cyanamid Company, Princeton, New Jersey.
13. RESIDUAL EFFECTIVENESS OF INSECTICIDES APPLIED IN HOUSES IN TAIWAN, CHINA. P. T. Tseng, Taiwan Provincial Malaria Research Institute, Chao-Chow, Ping-Tung, Taiwan and D. J. Pletsch, Pan American Sanitary Bureau/WHO, Havre 30 (Piso 3), Mexico 6, D. F.
14. RESIDUAL EFFECTIVENESS OF SOME NEW INSECTICIDES AGAINST ADULTS OF *ANOPHELES QUADRIMACULATUS* SAY. G. C. LaBrecque, J. B. Gahan, and H. G. Wilson, Entomology Research Division, ARS, U. S. Department of Agriculture, Orlando, Florida.
15. RESIDUAL EFFECTIVENESS OF SILICA AEROGELS AGAINST MOSQUITOES (LABORATORY STUDIES). Don W. Micks, University of Texas Medical Branch, Galveston, Texas.

Tuesday Afternoon, March 29, 1960

1:30 to 3:30 Conference for Trustees and Commissioners.

Panel and Paper:—

Presiding: William E. Bickley.

1:30 **PANEL: MECHANICS OF MOSQUITO DISPERSAL.**

Participants: R. P. Dow, Greeley, Colorado; B. Hocking, Edmonton, Alberta, Canada; E. T. Nielsen, Vero Beach, Florida; M. W. Provost, Vero Beach, Florida, Chairman.

3:20 16. THE MIGRATORY EXODUS IN SALT-MARSH MOSQUITOES. Maurice W. Provost, Florida State Board of Health, Entomological Research Center, Vero Beach, Florida.

3:30 Final Business Meeting and Election of Officers, AMCA.

Tuesday Evening, March 29, 1960

6:30 Mixer

7:30 Banquet; Toastmaster, Joseph Pannone

Wednesday Morning, March 30, 1960

Presiding: Cdr. John M. Hirst.

8:30 **SPECIAL TOPIC: "INSECTICIDE RESISTANCE IN MOSQUITOES."**

1. SOME PHYSIOLOGICAL ASPECTS OF INSECTICIDE RESISTANCE IN MOSQUITOES. A. S. Perry, CDC, U. S. Public Health Service, Savannah, Georgia.
2. RESISTANCE IN *Aedes* AND *Culex* MOSQUITOES. William C. McDuffie, Entomology Research Division, A.R.S., U. S. Department of Agriculture, Beltsville, Maryland.
3. PAST, PRESENT AND FUTURE INSECTICIDE RESISTANCE IN MOSQUITOES. A. W. A. Brown, University of Western Ontario, London, Ontario, Canada.
4. DISCUSSION led by C. M. Gjullin, Entomology Research Division, A.R.S., U. S. Department of Agriculture, Corvallis, Oregon.

Short Recess

9:50 **SUBMITTED PAPERS.**

17. SUSCEPTIBILITY LEVELS OF SOME *Aedes Aegypti* (Linn.) LARVAE TO DDT AND DIELDRIN. Burton R. Evans, Quarantine Station, U. S. Public Health Service, New Orleans, Louisiana.
18. CROSS-RESISTANCE CHARACTERISTICS OF A MALATHION-RESISTANT STRAIN DEVELOPED IN *Aedes Aegypti*. A. W. A. Brown and Z. H. Abedi, University of Western Ontario, London, Ontario, Canada.
19. DISPERSAL OF INSECTICIDES FROM JET-PROPELLED AIRCRAFT. David L. Hayden, U. S. Navy Disease Vector Control Center, U. S. Naval Air Station, Jacksonville 12, Florida.
20. *Aedes Aegypti* IN INTERNATIONAL TRAFFIC AREAS. John H. Hughes, U. S. Public Health Service, Washington, D. C.
21. THE SIGNIFICANCE OF WATER HOLDING CAVITIES OF TREES AS MOSQUITO FOCI WITH SPECIAL REFERENCE TO *Aedes Aegypti* CONTROL PROGRAMS. John E. Porter, Quarantine Station, U. S. Public Health Service, Miami Beach, Florida; Robert Evans, New Orleans, Louisiana, and John H. Hughes, Foreign Quarantine Division, USPHS, Washington 25, D. C.

22. SOME OBSERVATIONS ON THE ANATOMY OF THE FEMALE REPRODUCTIVE SYSTEM OF *Aedes Aegypti* (LINNAEUS). Cyril J. Hodapp, Paul H. Schwartz, and Jack Colvard Jones, University of Maryland, College Park, Maryland.
23. MORE ABOUT *CULEX*. Franklin C. Wray, Desplaines Valley Mosquito Abatement District, Lyons, Illinois.
24. THE CHROMOSOMES OF MOSQUITOES. Osmond P. Breland, University of Texas, Austin, Texas.

Wednesday Afternoon, March 30, 1960

Presiding: D. M. Jobbins.

1:30 **SPECIAL TOPIC: BIOLOGICAL CONTROL.**

Invitational Papers

1. MICROBIOLOGY AND MOSQUITO CONTROL

Marshall Laird, Institute of Parasitology, Macdonald College, Quebec, Canada.

2. CONTROL OF MOSQUITOES WITH PATHOGENIC MICRO-ORGANISMS

William R. Kellen, California Department of Public Health, Fresno, California.

3. DISCUSSION led by B. Hocking, University of Alberta, Edmonton, Alberta, Canada.

2:30 **PANEL: IMPLICATIONS OF INSECTICIDE RESIDUES.**

Moderator: R. L. Vannote, National Advisor, A.M.C.A., Morris Plains, New Jersey.

Participants: W. C. McDuffie, Entomology Research Division, A.R.S., U. S. Department of Agriculture, Beltsville, Maryland; Joseph D. Sherman, C.D.C., U. S. Public Health Service, Savannah, Georgia; John L. George, Fish and Wildlife Service, U. S. Department of Interior, Patuxent Wildlife Research Center, Laurel, Maryland; Donald L. Collins, State Entomologist, New York State Museum and Science Service, Albany, New York.

Short Recess

3:40 **SUBMITTED PAPERS.**

25. THE REGIONAL APPROACH TO MOSQUITO CONTROL FROM THE ECONOMIC AND OTHER STANDPOINTS. Frank J. Bowden, Jr., Delaware Valley Council, Philadelphia, Pennsylvania, and Russell W. Gies, Mosquito Extermination Commission, Media, Pennsylvania.
26. NEWLY RECOGNIZED *Aedes Aegypti* PROBLEMS IN MANILA AND BANGKOK. W. McD. Hammon, and Albert Rudnick, Department of Epidemiology and Microbiology, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania.

27. OBSERVATIONS OF THE DISPERSAL OF *Aedes taeniorhynchus* IN EXTREME SOUTH FLORIDA AND THE EVERGLADES NATIONAL PARK. Frederick W. Harden, St. Lucie County Mosquito Control, Ft. Pierce, Florida, and Henry S. Chubb, Florida State Board of Health, Jacksonville, Florida.
28. CONTROL OF *Culicoides* IN SMALL PLOTS ON CAPE COD. William J. Wall, Jr., Cape Cod Mosquito Control Project, Hyannis, Massachusetts.
29. A REPORT OF A FLIGHT OF *Culex salinarius* COQ. Harold G. Russell, Jr., District Public Works Office, 5th Naval District, Norfolk, Virginia; John T. Lamb and R. E. Dorer, Virginia State Department of Health, Norfolk, Virginia.

4:50 **INVITATIONAL PAPER.**

A NEW NON-THERMAL INSECTICIDE FOG GENERATOR.

Clyde S. Barnhart, Engineer Research and Development Laboratories, Fort Belvoir, Virginia.

Wednesday Evening

7:00 Board Meeting

PROGRAM POSTSCRIPTS

§ THIS PROGRAM WENT TO PRESS ON FEBRUARY 9. ADDITIONAL DETAILS, such as designations of meeting rooms, names of speakers on Monday morning program, and other information not available on this date, will be included on the programs which will be distributed at the meetings.

§ COMMISSIONERS' CONFERENCE. A room has been reserved for meetings of Trustees and Commissioners for the discussion of mutual problems. Tables will be set up and space provided where representatives from each district may hold conferences with representatives from other districts.

Since this is the first time such a conference room has been available, no formal program has been planned. Future procedures will be dependent upon what is desired by the Trustees and Commissioners at this meeting.

Members should call this conference facility to the attention of interested personnel in this district. Commissioners and Trustees who attend the meetings are urged to take advantage of this opportunity and to arrange for someone from their district to be available at the district table for conferences with interested parties from other districts.

§ AN EVENING IN BOSTON—MONDAY EVENING: You can have an evening in Boston on your own; or you can stay at the hotel and see some mosquito control motion pictures and slides (7:30 p.m.); or you can join with others and accept an invitation from Carling's to visit their brewery (7:30 p.m., by bus). Information on these and other alternatives, including both educational and entertainment, available at registration desk.

§ ESPECIALLY FOR THE LADIES: Boston has so much to offer of historical, educational and scientific interest, that many visitors decide what they want to see and do well in advance, and do not wish to go on guided tours. For these individuals there will be someone at or near the registration desk to help you with directions. Most places which you will want to visit are readily accessible by subway, trolley, or bus.

For those who wish to join with others in guided tours, a special tour is being arranged, and there are several others which cover historic and other sites; there is also the "Freedom Trail" in downtown Boston, which can be covered wholly or in part on foot. Information at the registration desk.