1917). Low daily minimum temperatures 7°–10°C were reported near the Rhode Island collection area from September 12 to 18, 1985 by the National Oceanic and Atmospheric Administration (NOAA) Climatological Center, Newport, Rhode Island.

The most recent northern record of Ae. aegypti is by Bell and Benach (1973) who found a small breeding population in Croton Point, N.Y. Such northern introductions are generally attributed to accidental transport by air, rail or sea-going carrier. Reiter and Darsie (1984) claim that commercial containerized shipping and lights aboard ship increase the mobility of vector species. Sea transport is a likely mode for introduction of Ae. aegypti into the Portsmouth area; a probable source is the international shipping lane for the Port of Providence, 23 km northwest of the breeding site.

In view of the role of Ae. aegypti as a vector of yellow fever and dengue fever viruses and the past outbreaks of yellow fever in the New York and Boston area (Duffy 1968), the public health implications of a breeding population of Ae. aegypti in Rhode Island should not be ignored.

The authors gratefully acknowledge the field assistance of George Christie and Lisa Tewksbury and the technical expertise of Dr. R. A. Ward, Walter Reed Army Institute of Research, Washington, D.C., for confirmation of species identification.

References Cited

Bell, D. D. and J. L. Benach. 1973. Aedes aegypti in southeastern New York State. Mosq. News 33:248-249.

Carpenter, S. J. and W. J. LaCasse. 1955. Mosquitoes of North America (north of Mexico). Univ. of Calif. Press, Berkeley and Los Angeles. 360 pp.

Darsie, R. F., Jr. and R. A. Ward. 1981. Identification and geographical distribution of mosquitoes of North America, north of Mexico. Mosq. Syst. Suppl. 1:1-313.

Duffy, J. 1968. Yellow fever in the continental United States. Bull. N.Y. Acad. Med. 44:687-701.

Focks, D. A., S. R. Sackett, D. L. Bailey and D. A. Dame. 1981. Observations on container breeding mosquitoes in New Orleans, Louisiana, with an estimate of the population density of *Aedes aegypti* (L.). Am. J. Trop. Med. Hyg. 30:1329–1335.
Harwood, R. F. and M. T. James. 1979. Entomology

Harwood, R. F. and M. T. James. 1979. Entomology in human and animal health. Macmillan Pub. Co. Inc., New York. 548 pp.

Howard, L. O., H. G. Dyar and F. Knab. 1917. The mosquitoes of North and Central America and the West Indies. Systematic description, Part II. Carnegie Inst. Wash. Publ. 159, Vol. 4. Washington, D.C.

Reiter, P. and R. F. Darsie, Jr. 1984. Aedes albopictus in Memphis, Tennessee (U.S.A.): an achievement of modern transportation?. Mosq. News 44:396–399. Schliessmann, D. J. 1966. Progress report of the Aedes aegypti eradication program in the United States for 1965. Mosq. News 26:486–489.

Welch, J. B. and J. D. Long. 1984. Aedes aegypti collections in rural southeast Texas. Mosq. News 44:544-547.

AN EDUCATIONAL CAMPAIGN FOR MOSQUITO CONTROL IN LEXINGTON, MASSACHUSETTS

GEORGE A. SMITH, JR.

Lexington Board of Health, Town Office Buyilding, 1625 Massachusetts Avenue, Lexington, MA 02173-9998

In the summer of 1982 Massachusetts experienced an outbreak of Eastern equine encephalitis (EEE) with both human and horse cases reported. The Board of Health in the Town of Lexington, Massachusetts became directly involved in this issue when two human cases of EEE were confirmed within the environs of Lexington. One was an infant, in a contiguous town and the other was a teenager attending a Vocational High School in Lexington but resided elsewhere.

Because of these two human cases and a suspicious horse death, the Board of Health felt they had an obligation to respond to the outbreak in an expeditious and practical manner. After researching the facts the Board of Health responded to the EEE outbreak by joining forces with the East Middlesex Mosquito Control Project of Waltham, Massachusetts. A program and plan of attack was prepared and implemented.

This plan called for implementation of traditional mosquito control techniques which included mosquito surveillance, using both truck mounted and C.D.C. light traps, larviciding using both chemical and biological pesticides, water management techniques, and because of concerns about the use of pesticides by Lexington residents, a discretionary adulticiding mechanism. Last, but not least an extensive educational effort entitled "Fight Those Bites!" was provided.

Our educational effort, I feel, was a special effort and might be of some interest to the *Journal* readership. It required the efforts of myself, as Lexington Health Director/Mosquito Commissioner, Mr. David Henley, Superintendent of the East Middlesex Mosquito Control Project and a citizen's group "Parents Concerned About EEE" directed by Mrs. Linda Behar.

The theme of the campaign was "Fight Those Bites!" and consisted of a fact sheet on Eastern equine encephalitis in Lexington and a three brochure series providing generic "do-it-yourself" mosquito control practices and detailed information on Eastern equine encephalitis. A fourth brochure was developed on EEE for use in other towns in the East Middlesex Project and on Hanscom Air Force Base located partially in Lexington.

The fact sheet and brochure provided factual information, practical advice on the problem. The brochures incorporated graphics and bright colors to get the message across. They were distributed to the public through the public/private school systems, made available through day care and summer camp recreational programs, displayed at all of the swimming/bathing facilities in Lexington and were available at town offices, libraries, etc. We chose extremely bright colors to make them both attractive and hard to lose. The color choice generated much positive publicity for our effort.

In addition to the human aspect of the program we made an active effort to involve horse owners. We advised them of the problem and provided them with recommendations and information on the availability of a vaccine. We also prepared a brochure specific to the problems of the horse environment.

Lastly our education effort, which we will continue through 1986, included information updated weekly and made available via the local weekly newspaper, cable TV on the public access channel and an EEE/Mosquito information "Hot Line" was utilized to provide even more frequent updates as needed.

Eastern equine encephalitis is a serious disease, particularly as it impacts on infants, children and the elderly. In Massachusetts it is theorized as to be of cyclical duration lasting through three-year periods. Concern exists however, that these cycles appear to be growing closer together and much about the disease and its mosquito vector remains a mystery. At each outbreak it becomes evident that much more needs to be learned. Considering all of these factors, the Lexington Board of Health took the most appropriate action available under the circumstances.

We would like to take this opportunity to make copies of our brochures and fact sheets available to any Mosquito Control or Health Agency that might find them informative and/or useful. Interested parties can request copies by sending a large #10 envelope, self addressed, with 39 cents postage to the author of this note.

CULEX TARSALIS IN RHODE ISLAND

W. L. JAKOB, D. B. FRANCY AND R. A. LEBRUN^{2, 3}

In late summer of 1983, several equine cases and a suspect human case of eastern equine encephalitis (EEE) occurred in southern counties of the state. The Rhode Island Department of Environmental Management requested assistance from the Division of Vector-Borne Viral Diseases (DVBVD), Centers for Disease Control (CDC), Ft. Collins, CO, in assessing the risk of disease to humans. Although EEE is endemic in several northeastern states, no virus activity has been reported in Rhode Island since 1973, when three suspect equine cases and one positive pheasant case were recorded (Dr. R. Keenleyside, personal communication).

A team from the DVBVD conducted a rapid survey to evaluate mosquito populations and EEE virus infection rates in known and potential vectors. Surveillance, primarily using CDC light traps supplemented with dry ice (CO₂), centered at sites in Washington and Newport counties near populations of equines and in areas considered suitable for breeding of Culiseta melanura (Coquillett), the known enzootic vector. Collections began on August 20 and continued until September 7, when cool weather prompted cessation of activities. The survey confirmed widespread enzootic EEE virus activity throughout the area, which will be reported separately.

A collection at the Department of Environmental Management log cabin site in the Great Swamp (Washington County) on September 1, 1983, yielded a single female Culex tarsalis Coquillett, a new state record. No report of Cx. tarsalis is known from the neighboring states of Massachusetts and Connecticut, but it has been found in the nearby states of New Jersey (Lesser et al. 1977, Crans et al. 1979) and Pennsylvania (Briet 1970). The specimen has been deposited in the collection of the Department of Zoology, University of Rhode Island, Kingston, Rhode Island, LeBrun et al. (1983) list only pipiens, restuans, salinarius and territans as the Culex species occurring in the state.

¹ Division of Vector-Borne Viral Diseases, Center for Infectious Diseases, Centers for Disease Control, Public Health Service, U.S. Department of Health and Human Services, P.O. Box 2087, Fort Collins, CO 80522.

² Department of Plant Pathology and Entomology, Woodward Hall, University of Rhode Island, Kingston, RI 02881.

³ Rhode Island Agricultural Experiment Station Contribution #2288.