## CULISETA MINNESOTAE AND FURTHER NOTES ON AEDES AEGYPTI IN RHODE ISLAND

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ABSTRACT. Culiseta minnesotae is reported as a state record in Rhode Island. Follow-up surveys for Aedes aegypti after its initial isolation in 1985 have failed to recover additional specimens.

Recent interest in long-term mosquito control techniques in Rhode Island has led to extensive surveys of major breeding sites. As a result, species not previously reported in Rhode Island are being discovered. In 1985, Aedes aegypti (Linn.) larvae were isolated from a flooded gravel pit along the east shore of Narragansett Bay in Portsmouth, RI (Cookman and LeBrun 1986). The authors hypothesized that sea transport was the likely mode for introduction into this area. Seven follow-up sampling trips to the exact location and peripheral sites in 1986 failed to recover additional specimens. Regardless of how Ae. aegypti arrived in Rhode Island, there is no evidence to indicate it has survived in this environment.

On August 15, 1986, 10 Culiseta minnesotae Barr larvae were taken by dipping in narrow areas of open water in a cattail marsh roughly 50 m long, 10 m wide and 10 cm deep surrounding a pond in Portsmouth, RI. From these, 3 adult females and 2 adult males were reared. Large amounts of debris necessitated the creation of small collection pools by scooping out some of the debris with the dipper and allowing the water to settle.

Culiseta minnesotae has been reported from both Connecticut (Mallia 1964) and Massachusetts (Hayes 1961). The location of the breeding area in a small, barely accessible marsh and the difficulty to attract this species to either light traps or human bait (Graham 1969) may explain why it had remained undiscovered in Rhode Island. Recent emphasis on fundamental research as an integral part of mosquito control in the state has had, in this case, results beyond mosquito population management and lends support to the soundness of such work.

Species status for Cs. minnesotae has been subject to debate (Barr 1957, Maslov 1964, Wood et al. 1979). We follow Darsie and Ward

(1981) in considering it a distinct species. This report increases to 41 the number of mosquito species reported from Rhode Island (LeBrun et al. 1983, Cookman et al. 1985, Jakob et al. 1986, Cookman and LeBrun 1986). Voucher specimens have been placed in the collection of the Department of Zoology, University of Rhode Island, Kingston, RI.

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