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A First Record of the Occurrence of Culiseta (Culicella) silvestris minnesotae Barr (Diptera: Culicidae) in New York <sup>1</sup>

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The male and female of *Culiseta minnesotae* were described by Barr in 1957 and the larva and pupa by Price in 1958. This species was later grouped with *C. silvestris* Shingarev as a morphologically and geographically distinct subspecies by Maslov (1964) in his revision of *Culiseta*.

Barr listed several Minnesota counties as the known distribution for C. minnesotae and stated

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that at least some of the specimens reported as C. morsitans by Stage, Gjullin & Yates (1952) from the Pacific northwest (Washington, Oregon & Idaho) were actually C. minnesotae. Since then C. silvestris (= C. minnesotae) has been reported from several northern states and Canada including Alberta (Graham 1969, Connecticut (Mallia 1964, Wallis & Whitman 1968), Idaho and Montana (Nielsen et al. 1963), Illinois (Ross & Horsfall 1965), Indiana (Siverly 1965), Massachusetts (Spielman 1964, Hayes 1961, Main et al. 1968), New Jersey (Burbutis & Lake 1959, Hayes et al. 1962), Ontario (Stone 1965), Utah (Nielson & Rees 1959), and Wisconsin (Siverly & DeFoliart 1968a, b).

On July 16 and 28, 1970, the senior author collected two female C. silvestris from light traps being operated in Shelby, Orleans County, New York as part of a survey of the mosquitoes of New York. Independently, Army Preventive Medicine personnel, acting as part of the First Army Mosquito Surveillance Program, collected tour female C. silvestris from light traps in New York; one each from traps located at Stewart Airport, Orange County on June 12 and August 27 and at Camp Drum, Jefferson County on August 1 and 8. The latter four specimens were identified by the junior author and the specimens collected on June 12 and August 8 have been deposited in the New York State Museum collection along with those collected by the senior author.

Examination of the mosquito collections of the Suffolk County Mosquito Control Commission on Long Island by the senior author and Joseph Sanzone, entomologist for the Suffolk County Mosquito Control Commission, revealed that two specimens of C. silvestris had been misidentified as C. morsitans: 1 larva collected in Lake Ronkonkoma on May 28, 1969, and 1 female collected in a light trap in Calverton on September 25, 1969. The senior author also found one female C. silvestris labelled as C. morsitans in the Cornell University collection. This specimen had been reared from an immature stage collected at Cayuta Lake, Schuyler County, N.Y. on June 14, 1946. All identifications were confirmed by Dr. Alan Stone of the U.S. National Museum. This report brings to 56 the number of mosquito species recorded from New York (Jampback 1969, Mullen 1971, Vockeroth 1954, Wallis & Whitman 1971).

Since C. silvestris is not strongly attracted to man or light (Graham 1969) and the larvae are easily overlooked during routine larval collecting (Price 1961), the species may be more prevalent than is indicated by present collection reords. Little is known about the hosts of C. silvestris, although Hayes (1961) found that the species was attracted to and fed on a variety of small mammals and birds and that it preferred warmblooded animals to reptiles and amphibians.

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