

Mulla 1977) and a new serotype, *B. thuringiensis* var. *israelensis* has been found with a very high degree of toxicity for both mosquito (Goldberg and Margalit 1977) and black fly (Undeen and Nagel 1978) larvae. It is not yet known if alkalinity is a common factor in this toxicity. If this alkalinity is unique among stream dwelling insects, it might also be a useful characteristic in the formation of microencapsulated insecticides increasing specificity as demonstrated in methoprene (Altosid®) lab and field tests (Thompson and Adams 1979).

ACKNOWLEDGMENTS. This research was supported in part by the National Research Council of Canada Grant No. D-43.

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- National Museum of Natural History, Smithsonian Institution I recently examined specimens representing species of the genus *Culiseta*. As a result the following distribution records are reported:
- Cs. (Culicella) morsitans dyari* (Coquillett)
VERMONT: Laurel Lake near Jacksonville, VI-15-1952; 2 males collected and determined by H. D. Pratt. New state record.
- Cs. (Cuc.) silvestris minnesotae* Barr
ALASKA: Pt. Woronzof, Anchorage, June 10, 1964, stationary trap; 1 female collected by K. M. Sommerman. This specimen was labelled "*Culiseta morsitans dyari*?" by Dr. Sommerman. *Cs. s. minnesotae* has pale brownish bands both basally and apically on the abdominal terga; *Cs. m. dyari* has only basal bands, and the pale scales are distinctly white. New state record.
- Cs. (Culiseta) alaskaensis* (Ludlow)
NEVADA: Baker, Mt. Diablo Mer., 11-9-39, 1 male collected by T. O. Thatcher. New state record.
- UTAH: Escalante, no date; CCC Survey; 2 females. I assume that this collection was made in the 1930's. New state record.

ANTIBODY LEVELS IN BLACKBIRDS TO ST. LOUIS ENCEPHALITIS VIRUS

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Each winter in central and southern Kentucky large numbers of blackbirds congregate. Roosts consist of grackles, red-winged blackbirds, and starlings with smaller numbers of other species also seen. During the summer these roosts break up with the birds scattering across the region. Many of the species found in these winter roosts live in intimate association with man in the summer months, especially in suburban areas. Sentinel birds and trapped wild birds have routinely been used to monitor antibody levels to St. Louis encephalitis (SLE) in the bird population. These levels can then be used to predict the possibility of SLE outbreaks and the need for mosquito control spraying (McLintock 1976, Wong 1976). It was of interest to us to determine the level of anti-

NOTES ON THE GEOGRAPHICAL DISTRIBUTION OF THREE SPECIES OF *CULISETA*

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