OPERATIONAL AND SCIENTIFIC NOTES

NOTES ON THE CURRENT DISTRIBUTION OF *Aedes dorsalis* IN CENTRAL NEW YORK, 1969

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Medical entomologists have been interested in *Aedes dorsalis* (Meigen) ever since viruses of Western encephalitis (Hammon *et al.*, 1945) and California encephalitis (Reeves and Hammon, 1952) were isolated from wild caught females of this species.

The distribution of *Aedes dorsalis* in New York has been scattered, and it is considered rare in most of the State. Exclusive of Central New York it has been recorded by sparse collections in Albany, Niagara, Queens, and Rockland Counties (Barnes *et al.*, 1950).

Outside of the immediate Syracuse area it has been recorded in Central New York from Utica, Ithaca, and Baldwinsville. Most of the collections have been single, or at most, very limited numbers of the species.

An occasional *A. dorsalis* adult has been collected in the Syracuse area off and on since 1905. According to R. Means, larvae were collected by Jamnback in 1958 and in 1963 in the marshy southern border of Onondaga Lake. Salt deposits around this lake impart a salinity to some marshes in the area.

During 1968 and 1969, a series of light traps located at Syracuse, Baldwinsville, and Camillus, New York recorded significant numbers of *A. dorsalis*. The light trap at Camillus, New York collected 94 *A. dorsalis* during July 1968, and the light trap at the southern end of Onondaga Lake collected 59 specimens between July 22 and October 15. One specimen was collected in September at the Baldwinsville location. The relatively large numbers of adults in Camillus and Syracuse indicated a much more prolific breeding site than had thus far been located.

A small, but very prolific breeding site was found in the industrial complex near Solvay, New York during the summer of 1968. Later, on June 20, 1969, sites were found near Amboy, New York that were breeding large numbers (up to 200 per dip). These breeding sites, apparently ideal for this species, were shallow grass-lined pools bordering tailing ponds of the Solvay Process plant. The tailing ponds contain wastes that are high in salts, particularly NaCl and $CaCl_2$. Presumably leaching from these beds has contributed to the salinity of the adjacent pools. Total chlorides in these pools reached 85,000 mg/liter in September 1969, and the water had a pH of 7.2. (N.Y. State Health Dept. Laboratory, Syracuse Branch, September 1969). The high number of *A. dorsalis* breeding in the Solvay area was not reflected in light trap collections at Syracuse or Baldwinsville during 1969. The Camillus trap was not in operation during this season.

An aspirator collection of *Aedes dorsalis* on July 9, 1969 at Canton in St. Lawrence County, probably constitutes a new distribution record in New York. Since the single individual was collected, 4 specimens have shown up in light trap collections at Canton, New York, near the St. Lawrence Seaway, during the months of July and August 1969. The breeding site of this northern group of *Aedes dorsalis* has not, at the time of writing, been located.

The distribution of *Aedes dorsalis* in Central New York and its fecundity in preferred habitats, coupled with the discovery of its possible importance as a vector remind us that any mosquito distribution record may be significant in the light of new knowledge.

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ECOLOGICAL CONSIDERATIONS OF THE COHABITATION OF PITCHER PLANTS BY *Wyeomyia smithii* AND *Metriocnemus knabi*

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In late July, 1969, a clump of the pitcher plant, *Sarracenia purpurea* L. with six open pitchers was given to me by Dr. L. Martens of this department. This pitcher plant was of interest because in addition to containing the mosquito *Wyeomyia smithii* (Coq.) it also contained specimens of the midge *Metriocnemus knabi* Coquillett. Like *W. smithii* this midge is confined to pitcher plants during the larval portion of its life cycle (Johannsen, 1937).