

NEW STATE RECORD FOR *CULISETA IMPATIENS* IN MARYLAND¹

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ABSTRACT. *Culiseta impatiens* is reported for the first time from Maryland. Collections from the southwestern border of Fort George G. Meade extend the range of this species over 400 km farther south than previous records. Multiple collections from 4 separate traps during 2 years indicate a population of *Cs. impatiens* is probably established in the collection area.

On June 1, 1987, *Culiseta* specimens collected at Fort George G. Meade (FGGM), MD (Anne Arundel County) were identified as *Culiseta impatiens* (Walker). However, Darsie and Ward (1981), the source of the principal keys used, indicated that species was not found in Maryland. Bickley (1987) and Ward and Darsie (1982) also made no mention of that species occurring in Maryland. Fifty-six specimens were identified as this species and were obtained during 28 trap-nights of collection in 1987 and 1988. Trapping was done as part of a multi-agency surveillance project to monitor the threat of eastern equine encephalomyelitis (EEE) to humans and to captive endangered wildlife located on the adjacent Department of Interior's Patuxent Wildlife Research Center (PWRC).

Mosquitoes were trapped in 4 dry ice-augmented solid-state U.S. Army miniature light traps (John W. Hock Co., Gainesville, FL) placed at established sites (designated N-1, P-2, S-2 and S-4) along a 4.5 km stretch of the FGGM-PWRC boundary (7 to 11.5 km SE of Laurel, MD). All traps were located within the Big Patuxent River Flood Plain, 20–25 m elevation above mean sea level, in moderately open understory of second-growth forest. Shaded or semi-shaded pools of standing water were within 100 m of each trap and the pools remained wet nearly year round.

Each trap collected *Cs. impatiens* on 2 or more dates (N-1, P-2, S-2 and S-4 caught respectively 11, 22, 5 and 18 adult females). These multiple collections from 4 different traps during 2 years

indicate a *Cs. impatiens* population is probably established in the collection area.

A sample of these specimens was sent to the U.S. National Museum of Natural History, Smithsonian Institution, Washington, DC, in October 1988 for determination. Daniel A. Strickman of the Walter Reed Biosystematics Unit determined them to be *Culiseta (Culiseta) impatiens*. Two female voucher specimens were deposited in the National Mosquito Collection, with the following collection data: "Maryland, Ft. Meade, Trap P-2, 3 Jun 87, Ben Pagac."

This species breeds in deep, well-shaded pools, sometimes in polluted or "snow melt" water, and bites at dusk or in shaded areas (Carpenter and LaCasse 1955). It is common farther north, and occurs as far south as Missouri in the central U.S. (Darsie and Ward, 1981; Ralph E. Harbach, personal communication).

This note extends the distribution of *Cs. impatiens* more than 400 km farther south along the eastern U.S. seaboard than previous records. The closest prior published distributions of this species included New York (north of New York City) and far northwestern Pennsylvania.

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¹ Opinions or ideas expressed in this paper are those of the authors and do not reflect any official position of the Department of the Army or the Department of Defense.

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