

FIRST RECORD OF *CULISETA MORSITANS* FROM WYOMING

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ABSTRACT. *Culiseta (Culicella) morsitans* is reported for the first time from Wyoming, based on individually reared specimens collected in Yellowstone National Park.

Inspection of the original taxonomic literature, and state (Owen and Gerhardt 1957, Denke and Spackman 1990) and regional references (Carpenter and LaCasse 1955, Darsie and Ward 1981, Ward and Darsie 1982) failed to disclose previous records of *Culiseta (Culicella) morsitans* (Theobald) from Wyoming. Herein, we report the first record of *Cs. (Cuc.) morsitans* from Wyoming, based on individually reared specimens collected in Yellowstone National Park.

Seven larval specimens were collected by dipping. The larval collection was split, and larvae were transported to either the Division of Vector-Borne Infectious Diseases, Fort Collins, or the Department of Biology, University of Utah, Salt Lake City. Five larval specimens were individually reared to the pupal (one specimen died in the pupal stage) and adult stages (4 specimens). One 4th-instar larva was preserved in alcohol, and one specimen that pupated in transit was reared to the adult stage without associated skins.

Larvae were not abundant and were collected among the clumped bases of flooded semiaquatic grasses along the margins of a permanent pond. The pond had a diameter of approximately 50 m. The depth of the pond increased sharply from the margins to depths of more than 1 m, and lily pads and areas of open water were present in the middle. The pond was partially shaded on one side by trees, and the water was clear but stained brown from humic substances.

Adults of the Wyoming specimens are morphologically consistent with recent descriptions of *Cs. morsitans* (Carpenter and LaCasse 1955, Wood et al. 1979). Adults lack postspiracular scales, and the abdominal tergites lack apical pale scales or bands. The male genitalia present the distinctive diamond-shaped phallosome and long setae on the median lobe of the 8th tergite that are characteristic of *Cs. morsitans*. Larvae are also consistent with the present concept (Price 1958) of *Cs. morsitans* with characteristic setae branched as follows: seta 5-C with 5–6 branches,

seta 7-C with 7–9 branches, and ventral brush composed of 20–21 tufts.

Locality, specimens examined, and deposition of material: WYOMING (WY-19): Teton Co., Yellowstone National Park, pond 10 m from W side of road between Potts Hot Spring Basin and Bluff Pt., about 3.7 km N of entrance to West Thumb, 2,359 m, VI-24-93, L. T. Nielsen, H. M. Savage, and B. R. Miller. Two ♂ adults with associated larval and pupal skins, 2 ♀ adults with associated larval and pupal skins, one pupa with associated larval skin, one ♂ adult, and one 4th-instar larva. The following specimens are deposited in collections of the National Museum of Natural History, Smithsonian Institution: one ♂ adult with associated larval and pupal skins on slide (WY 19-3) and genitalia on slide (HMS #329); 2 ♀ adults with associated larval and pupal skins on slides (WY 19-1 and WY 19-6); and one ♂ adult with genitalia slide (HMS #330). The following specimens are deposited in collections of the University of Utah: one ♂ adult with associated larval and pupal skins and genitalia on slides; one pupa with associated larval skin in alcohol; and one 4th-instar larva in alcohol.

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