

SCIENTIFIC NOTE

First record of *Aedes (Ochlerotatus) spencerii* (Theobald) (Diptera: Culicidae) in the YukonDANIEL A.H. PEACH¹

Aedes spencerii (Theobald) (Diptera: Culicidae) is a small- to medium-sized mosquito with characteristic alternating dark- and pale-scaled wing veins that is a common inhabitant of grassland areas (Wood *et al.* 1979). It has two subspecies: *Ae. s. spencerii* and *Ae. s. idahoensis* (Darsie and Ward 2005). Males and females have been observed nectar feeding on catkins of willow (*Salix sp.*) (Knab 1907) and goldenrod flowers (*Solidago sp.*) (Philip 1943), and females are known to take blood meals from avian and mammalian hosts (Rempel *et al.* 1946). It has very rarely been found carrying western equine encephalitis (McLintock *et al.* 1970) and West Nile virus (Anderson *et al.* 2015).

Ae. spencerii overwinters in the egg stage and is one of the first mosquito species to emerge in the spring (Wood *et al.* 1979). Larvae are found in many habitats, including pools of water formed by heavy rainfall, floodwater, or snow-melt (Belton 1983). Larvae can develop rapidly at low temperatures, with pupae collected in mid-April near Ottawa, Ontario, when the larvae of other *Aedes spp.* were only half grown (Wood *et al.* 1979). One or more generations will develop per year; however, suitable drying and subsequent flooding of oviposition sites is necessary for the development of additional generations beyond the first (Wood *et al.* 1979). In some areas, females have emerged as late as September when these conditions are met (Philip 1943).

The known distribution of *Ae. spencerii* ranges roughly from the Great Lakes to central British Columbia, and from Colorado to Churchill, Manitoba. Scattered populations also exist in Ottawa, Ontario, as well as in the states of New York, New Jersey, and Oklahoma (Darsie and Ward 2005).

Two adult female mosquitoes attempting to bite the author were collected and placed in ethanol on August 28, 2016, near Lake Creek campground in the Shakwak valley of the southwest Yukon. The specimens were identified using the keys of Darsie and Ward (2005) and Thielman and Hunter (2007) as *Ae. s. spencerii* (Fig. 1) and *Aedes sticticus*. The collection site was mostly valley-bottom muskeg and riparian area with vegetation present, including black spruce (*Picea mariana*), unidentified mosses, lingonberry (*Vaccinium vitis-idaea*), willow (*Salix sp.*), and Labrador tea (*Rhododendron groenlandicum*). Many snowshoe hares (*Lepus americanus*) and American red squirrels (*Tamiasciurus hudsonicus*) were observed in the area. Growing nearby were patches of fireweed (*Chamerion angustifolium*) and stands of aspen (*Populus tremuloides*). Numerous small bodies of water were present in the vicinity, as was additional vegetation that the author did not note at the time. The southwest Yukon is home to patches of grassland, particularly in the Kluane Lake area (Laxton *et al.* 1996; Conway and Danby 2014). This *Ae. s. spencerii* specimen may have originated from some such nearby patch of grassland, or possibly from grassy patches along the margins of the nearby Alaska Highway.

Mosquito collecting in the Yukon and the species recorded there were last reviewed by Belton and Belton (1990). This is the first record of *Ae. spencerii* in the Yukon and confirms the presence of *Ae. sticticus*, which was previously uncertain (Belton and

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Belton 1990). Both specimens have been deposited with the Beaty Biodiversity Museum at the University of British Columbia.

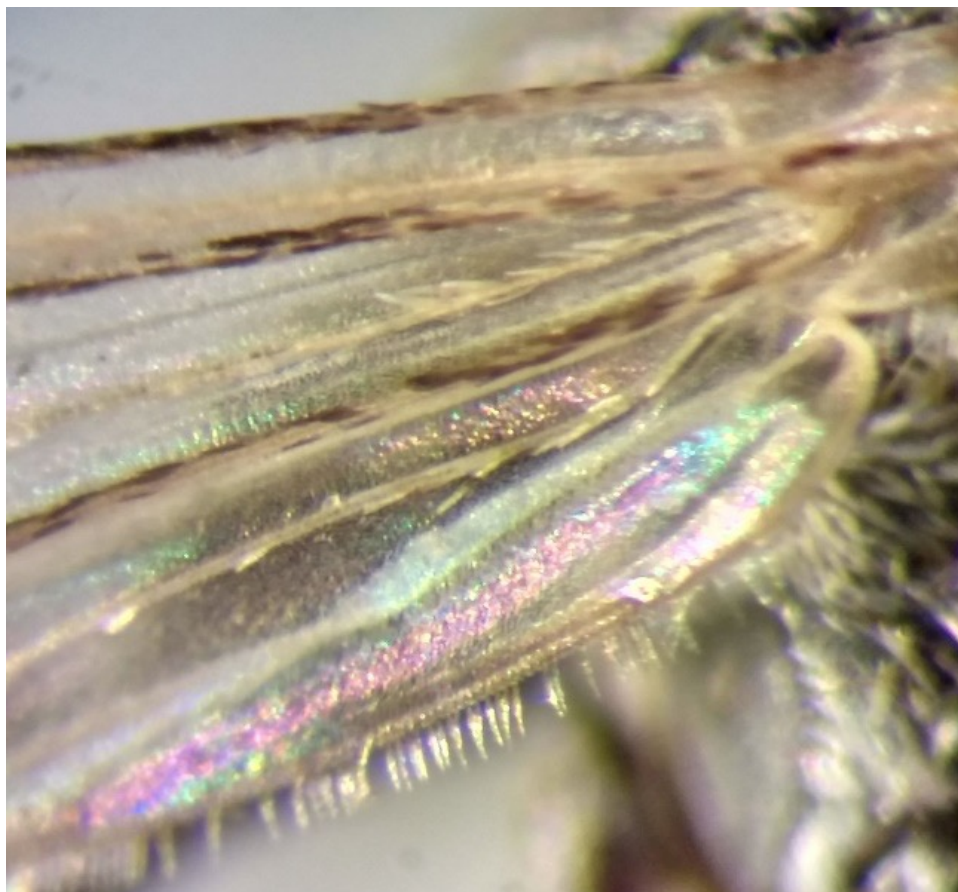


Figure 1. Close-up of characteristic alternating dark- and light-scaled wing venation of *Ae. spencerii*.

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