

Alaska Natural Heritage Program Conservation Status Report

Colletes consors – Cresson, 1868

Synonyms: Colletes pascoensis Cockerell, 1898; Colletes zonatus Viereck, 1903; Colletes mesocopus Swenk, 1907; Colletes myroni Cockerell, 1908

Taxonomy Notes: There are three valid subspecies in North America: Colletes consors consors Cresson, 1868; Colletes consors mesocopus Swenk, 1907; and Colletes consors pascoensis Cockerell, 1898 (ITIS, accessed September 28, 2023). One of the Alaska records is identified as C. consors mesocopus, the other two are identified as C. consors. We presume that all Alaska specimens belong to C. consors mesocopus, as this subspecies has a northern distribution in North America (see below).

Common Name: Kindred plasterer bee

ELCODE: IIHYM96180

Taxonomic Serial No.: 654928

Report last updated – September 28, 2023

Conservation Status

G5 S1

Occurrences, Range

Number of Occurrences: 3 occurrences, 5 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection)

AK Range Extent: 3,638 km²

Occupancy 4 km² grid cells: 3 occupied grids

Nowacki Ecoregions: Intermontane boreal

North American Distribution: We know little about the distribution and habitat preferences for this species in Alaska, only one recent occurrence, along a roadside in Kantishna, has been documented in the last decade (*Figure 1*). There is one older occurrence along a roadside in Fairbanks (1983), and one from Moose Creek Bluff in the Tanana Valley (1982).

Collletes consors occurs in Alaska and across much of Canada to New Foundland, across the western United States, in the Great Lakes region, and in the northeastern states (Ascher and Pickering 2023). According to GBIF (accessed September 28, 2023), the nominate subspecies occurs in several inland western states and Michigan; C. consors pascoensis occurs across the western United States, north to British Columbia and Alberta; C. consors mesocopus is a



northern subspecies, occurring in Alaska, British Columbia, and east across Canada to Quebec, south to Michigan, Maine, New Hampshire, Vermont, and New Jersey.

Ecology

Habitat: Known habitats in Alaska include river bluff and roadsides.

Host Plants: In Alaska, this species has been collected on Rubus idaeus and Solidago sp.

Life History: This is a solitary species that nests in the soil. *Colletes* are known as "polyester" or "cellophane" bees because they line their nests with a clear covering made from saliva and glandular secretions that is durable and resistant to mold and water (Wilson and Messinger Carril 2016).

Trends

Short-term: N/A, insufficient data

Long-term: N/A, insufficient data

Threats

Scope and Severity: Roadside populations may be at risk from physical disturbance. Additional data are needed to make informed conservation assessments for this species. Steppe bluff habitat faces threats of encroachment from invasive and native plant species (Flagstad et al. 2019). Climate change is likely to decrease the habitat size and range of the steppe bluff in Interior Alaska (Boucher et al. 2016).

<u>References</u>

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Boucher, T.V., J. R. Fulkerson, B. Bernard, L. Flagstad, T. Nawrocki, M. L. Carlson, N. Fresco. 2016. Terrestrial Coarse-filter Conservation Elements. In: Trammell, E.J., T. Boucher, M.L. Carlson, N. Fresco, J.R. Fulkerson, M.L. McTeague, J. Reimer, and J. Schmidt, eds. 2016. Central Yukon Rapid Ecoregional Assessment. Prepared for the Bureau of Land Management.

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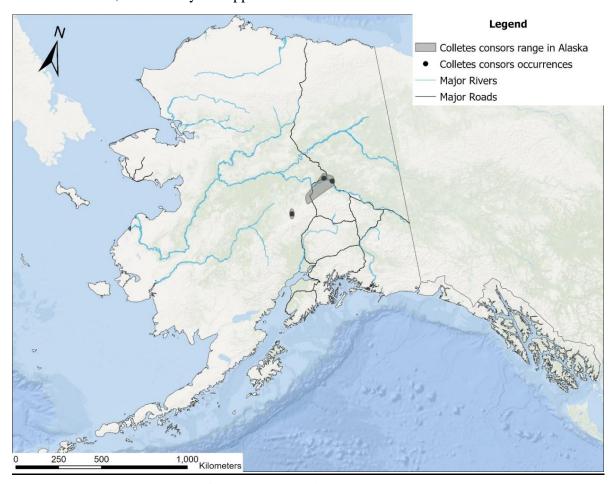


Figure 1 Range and occurrence of Colletes consors in Alaska

Photo Reference



Figure 2 © Copyright Laurence Packer 2014