

Alaska Natural Heritage Program Conservation Status Report

Colletes hyalinus – Provancher, 1888

Synonyms: Colletes hyalina Provancher, 1888; Colletes spurcus Viereck, 1903; Colletes fraserae Swenk, 1908; Colletes cauponarius Cockerell, 1929; Colletes gaudialis Cockerell, 1905

Taxonomy Notes: There are three subspecies in North America, Alaska falls in the range of the nominate subspecies, Colletes hyalinus hyalinus

Common Name: Translucent plasterer bee

ELCODE: IIHYM96030

Taxonomic Serial No.: 654625

Report last updated – September 27, 2023

Conservation Status

G5 S2

Occurrences, Range

Number of Occurrences: 7 occurrences, 19 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection; USDA-ARS Bee Biology and Systematics Laboratory)

AK Range Extent: 75,207 km²

Occupancy 4 km² grid cells: 7 occupied grids

Nowacki Ecoregions: Intermontane boreal, Alaska Range transition

North American Distribution: This species has a limited known distribution in interior and southcentral Alaska (Figure 1). More information on the current distribution of this species in Alaska is needed to inform an assessment of its vulnerability to threats. Colletes hyalinus ranges across northern North America, from Alaska and Yukon across Canada and the northern states to Maine and Newfoundland. The other two subspecies are restricted to the western states (Ascher and Pickering 2023).

Ecology

Habitat: Known habitats in Alaska include river banks, meadows, and open low scrub.

Host Plants: Chamaerhodos erecta



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. Most of the records are historical (1944-1991), only two records are relatively recent (2017, 2019).

Threats

Scope and Severity: Half the occurrences are in protected or natural areas and the others are in more anthropogenic and agricultural areas which may be vulnerable to physical disturbance or pesticides.

References

Ascher J.S. and J. Pickering. 2023. Discover Life bee species guide and world checklist (Hymenoptera: Apoidea: Anthophila). https://www.discoverlife.org/ (accessed September 27, 2023)

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Integrated Taxonomic Information System (ITIS). Available online: https://www.itis.gov (accessed September 27, 2023)

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University of Alaska Museum Insect Collection. http://dx.doi.org/doi:10.7299/X75D8S0H (records accessed March 8, 2023)

Wilson, J.S. and O. Messinger Carril. 2016. The bees in your backyard. Princeton University Press. Princeton, New Jersey. 288 pp.

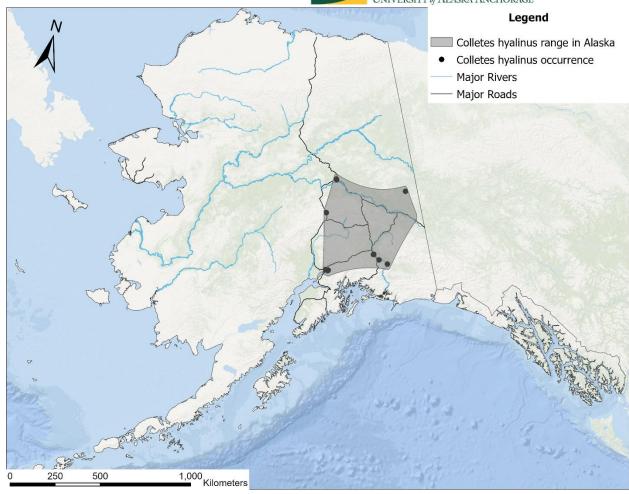


Figure 1 Range and occurrence of Colletes hyalinus in Alaska

Photo Reference



Figure 2 Hartmut Wisch / Discover Life



Figure 3 © Copyright Laurence Packer 2014