



Alaska Natural Heritage Program

Conservation Status Report

Colletes impunctatus – Nylander, 1852

Synonyms: *Colletes impunctata* Nylander, 1852; *Colletes lacustris* Swenk, 1906; *Colletes vicinalis* Graenicher, 1911

Taxonomy Notes: The Nearctic subspecies is *Colletes impunctatus lacustris* Swenk, 1906 (Kuhlman et al. 2009).

Common Name: Shiny plasterer bee

ELCODE: IIHYM96040

Taxonomic Serial No.: 654626

Report last updated – September 26, 2023

Conservation Status

G5 S4

Occurrences, Range

Number of Occurrences: 24 occurrences, 121 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection)

AK Range Extent: 452,242 km²

Occupancy 4 km² grid cells: 26 occupied grids

Nowacki Ecoregions: Arctic tundra, Intermontane boreal, Alaska Range transition, Coastal rainforests

North American Distribution: Holarctic species. This species has a broad distribution in Alaska from Arctic tundra to coastal rainforest (Figure 1). In North America the species has a northern distribution, from Alaska eastwards across Canada to Quebec and New Brunswick. In the lower United States, it is restricted to northern states from North Dakota east to Maine (Ascher and Pickering 2023).

Ecology

Habitat: Occurs in a variety of habitat types in Alaska including steppe bluffs, sand dunes, meadows, agricultural fields, and open mixed forest. It is often associated with sandy substrates such as river bluffs and relict sand dunes and many of the occurrences are in protected national parks and refuges.

Host Plants: Chamerion, Dryas integrifolia, Eurybia sibirica, Hedysarum boreale, Oxytropis campestris, Packera oregonensis, Rubus idaeus, Salix, Senecio.

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: Populations found in agricultural settings may be vulnerable to pesticides, and those along trails and roads may be affected by physical disturbance. 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).

References

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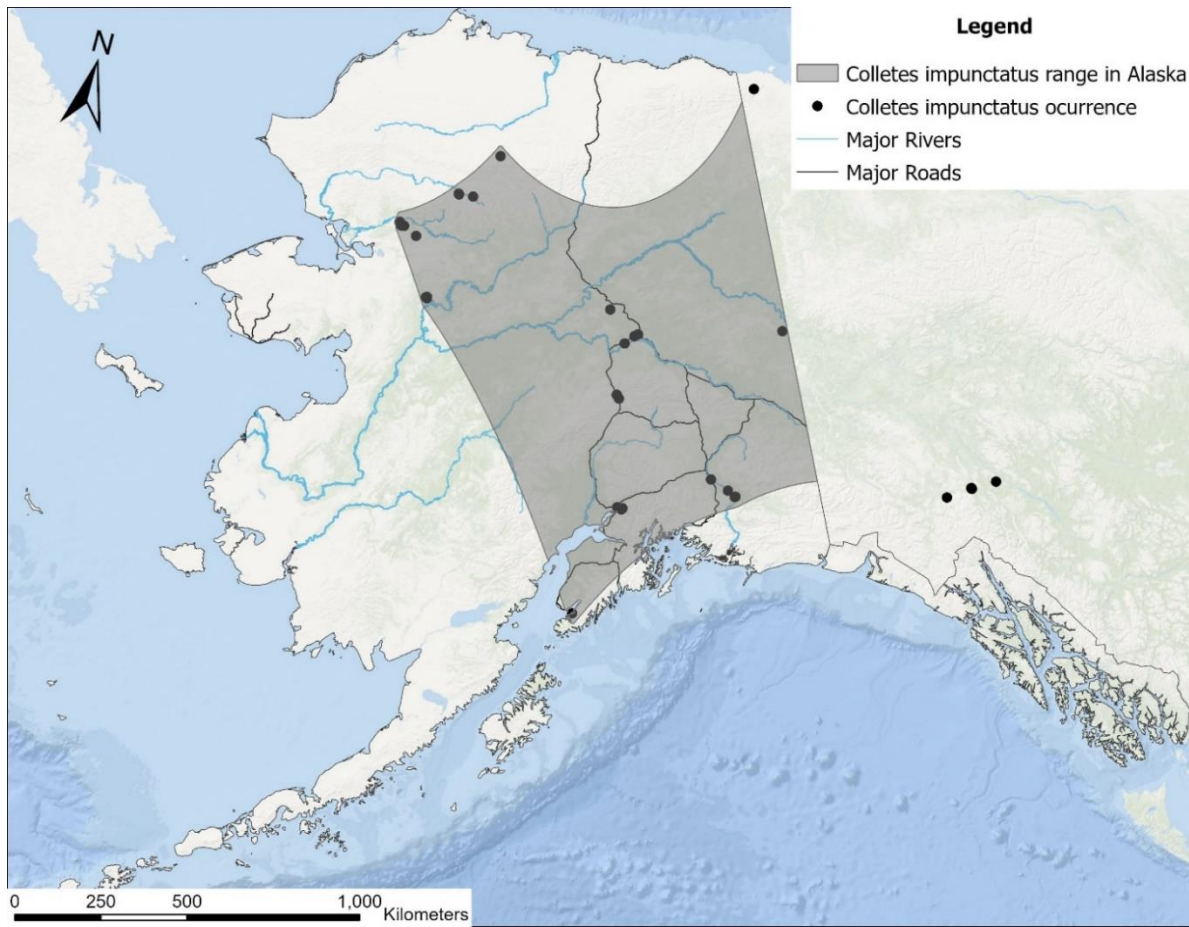


Figure 1 Range and occurrence of *Colletes impunctatus* in Alaska

Photo Reference



Figure 2 © Copyright Laurence Packer 2014