

Alaska Natural Heritage Program Alaska Center for Conservation Science UNIVERSITY of ALASKA ANCHORAGE

Alaska Natural Heritage Program Conservation Status Report

Osmia tersula - Cockerell, 1912

Common Name: Wide-banded mason bee

ELCODE: IIHYMA22K0

Taxonomic Serial No.: 715631

Report last updated – August 29, 2023

Conservation Status G5 S3

Occurrences, Range

Number of Occurrences: 23 occurrences, 52 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection; USDA-ARS Bee Biology and Systematics Laboratory)

AK Range Extent: 202,080 km²

Occupancy 4 km² grid cells: 24 occupied grids

Nowacki Ecoregions: Intermontane boreal, Alaska Range transition

North American Distribution: This species has a fairly broad distribution across interior and southcentral Alaska (Figure 1).

Alaska east across Canada to Newfoundland. In the lower United States: Oregon, California, Montana, Wyoming, Utah, and Colorado, Great Lakes region, and the northeastern states. There is an isolated record from Florida (Ascher and Pickering 2023).

Ecology

Habitat: In Alaska, this species has been documented in various habitat types including steppe bluff, dry tundra, muskeg, spruce forest, open mixed forest, shrub-aspen, and dry forb/graminoid herbaceous.

Host Plants: Penstemon

Life History: This is a solitary bee species. It has been observed nesting in wood and pithy stems, using chewed leaves for brood cell partitions (Cane et al. 2007).



<u>Trends</u>

Short-term: N/A, insufficient data

Long-term: N/A, insufficient data

Threats

Scope and Severity: This species has been collected in numerous habitat types and locations, most of them less vulnerable to human disturbance. Locations include two national parks and one national wildlife refuge. There is one occurrence from the USDA Research Station in Palmer (collected 1950) that may be vulnerable to pesticides.

References

Ascher J.S. and J. Pickering. 2023. Discover Life bee species guide and world checklist (Hymenoptera: Apoidea: Anthophila). <u>https://www.discoverlife.org/</u> (accessed August 29, 2023)

Cane, J.H., T. Griswold, and F.D. Parker. 2007. Substrates and materials used for nesting by North American *Osmia* bees (Hymenoptera: Apiformes: Megachilidae). Annals of the Entomological Society of America 100:350-358.

Global Biodiversity Information Facility. <u>https://ww.gbif.org</u>. GBIF occurrence download <u>https://doi.org/10.15468/dl.qdbe6u</u> (accessed April 20, 2021)

Integrated Taxonomic Information System (ITIS). <u>https://www.itis.gov</u> (accessed August 29, 2023)

NatureServe Explorer. https://explorer.natureserve.org/ (accessed August 29, 2023)

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

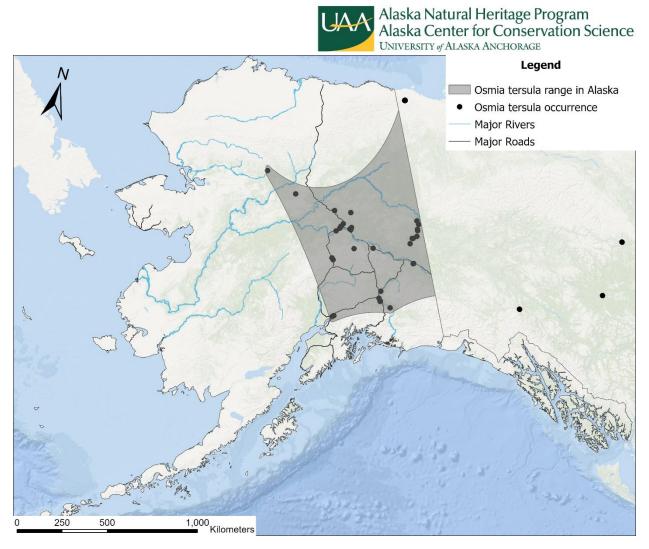


Figure 1 Range and occurrence of Osmia tersula in Alaska

Photo Reference



Figure 2 O Copyright Laurence Packer 2014