

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

# Alaska Natural Heritage Program Conservation Status Report

### Osmia laticeps – Thomson, 1872

Synonyms: Osmia hyperborea Tkalců, 1983

Common Name: Holarctic blueberry mason bee

ELCODE: IIHYMA2520

Taxonomic Serial No.: 1160766

Report last updated – August 29, 2023

Conservation Status

G5 S3

Occurrences, Range

*Number of Occurrences:* 9 occurrences, 12 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection)

AK Range Extent: 18,355 km<sup>2</sup>

Occupancy 4 km<sup>2</sup> grid cells: 8 occupied grids

Nowacki Ecoregions: Intermontane boreal

*North American Distribution:* This species has a limited known range distribution in interior Alaska, including four occurrences in Denali National Park and Reserve, and four occurrences along the Taylor Highway between Chicken and Eagle (*Figure 1*). More intensive sampling for solitary bees in other parts of Alaska will likely expand the known range for this species.

Holarctic species. In the Nearctic, it is known from Alaska east across Canada to Nova Scotia, including south to Ontario. In the lower United States, it is known from Michigan, Maine, New York, and Wyoming (Ascher and Pickering 2023, NatureServe Explorer 2023, Rightmyer et al. 2010).

#### Ecology

*Habitat*: In Alaska, this species has been documented in various habitat types including sandy steppe bluffs, shrub, tundra, and dry forb/graminoid herbaceous.

*Host Plants*: No host plant records from Alaska, but Rightmyer et al. (2010), citing a Swedish source (Nilsson 2009), state that this species is oligolectic on *Vaccinium*.

*Life History:* This is a solitary bee species. *Osmia* bees typically nest in pre-existing cavities in the soil, wood, or other substrates, but nesting substrate has not been recorded for this species.



<u>Trends</u> *Short-term:* N/A, insufficient data

Long-term: N/A, insufficient data

<u>Threats</u> Scope and Severity: Currently threat scope and severity are unknown.

#### 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)

Nilsson, L. A. 2009. The type material of Swedish bees (Hymenoptera, Apoidea) III. Entomologisk Tidskrift 130:43-59.

Rightmyer, M.G., T. Griswold, and M.S. Arduser. 2010. A review of the non-metallic *Osmia* (*Melanosmia*) found in North America, with additional notes on palearctic *Melansomia* (Hymenoptera, Megachilidae). ZooKeys 60:27-77.

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

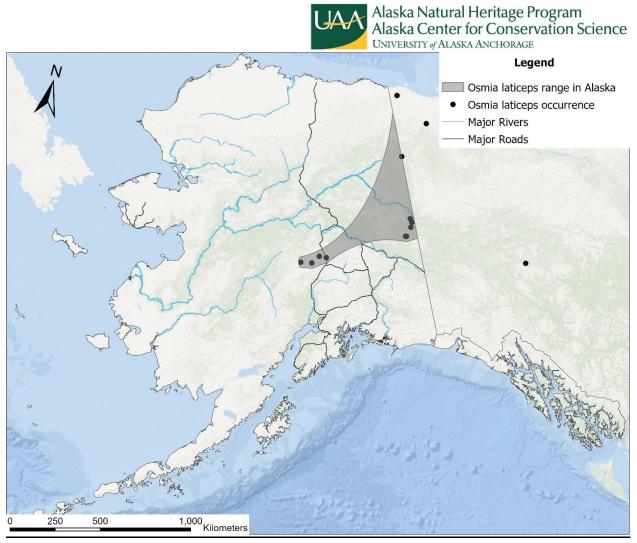


Figure 1 Range and occurrence of Osmia laticeps in Alaska

## Photo Reference



Figure 2 © Copyright Laurence Packer 2014