Alaska Natural Heritage Program
Alaska Center for Conservation Science
University of Alaska Anchorage

Alaska Natural Heritage Program Conservation Status Report

Osmia proxima – Cresson, 1864

Synonyms: *Osmia sericea* Cresson, 1864; *Osmia melanotricha* Lovell and Cockerell, 1907

Common Name: Friendly mason bee

ELCODE: IIHYMA2280

Taxonomic Serial No.: 715606

Report last updated – August 29, 2023

Conservation Status

G4 S3

Occurrences, Range

Number of Occurrences: 17 occurrences, 98 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection; USDA-ARS Bee Biology and Systematics Laboratory)

AK Range Extent: 151,307 km^2

*Occupancy 4 km^2 grid cells:*19 occupied grids

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

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

Alaska east to the Yukon and across Canada to Newfoundland. In the lower United States across much of the west to Montana and New Mexico. North Dakota east to Great Lakes region, down to Ohio and Georgia, east to mid-Atlantic and northeastern states (Ascher and Pickering 2023).

Ecology

Habitat: In Alaska, this species has been documented in various habitat types including steppe bluff, shrub-aspen, open broadleaf forest, and spruce forest.

Host Plants: *Hedysarum alpinum, H. boreale, Oxytropis campestris, Penstemon gormanii*

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).

Trends

Short-term: N/A, insufficient data

Long-term: N/A, insufficient data

Threats

Scope and Severity: Collected in numerous habitat types and locations, most of them less vulnerable to human disturbance, including in three national parks. 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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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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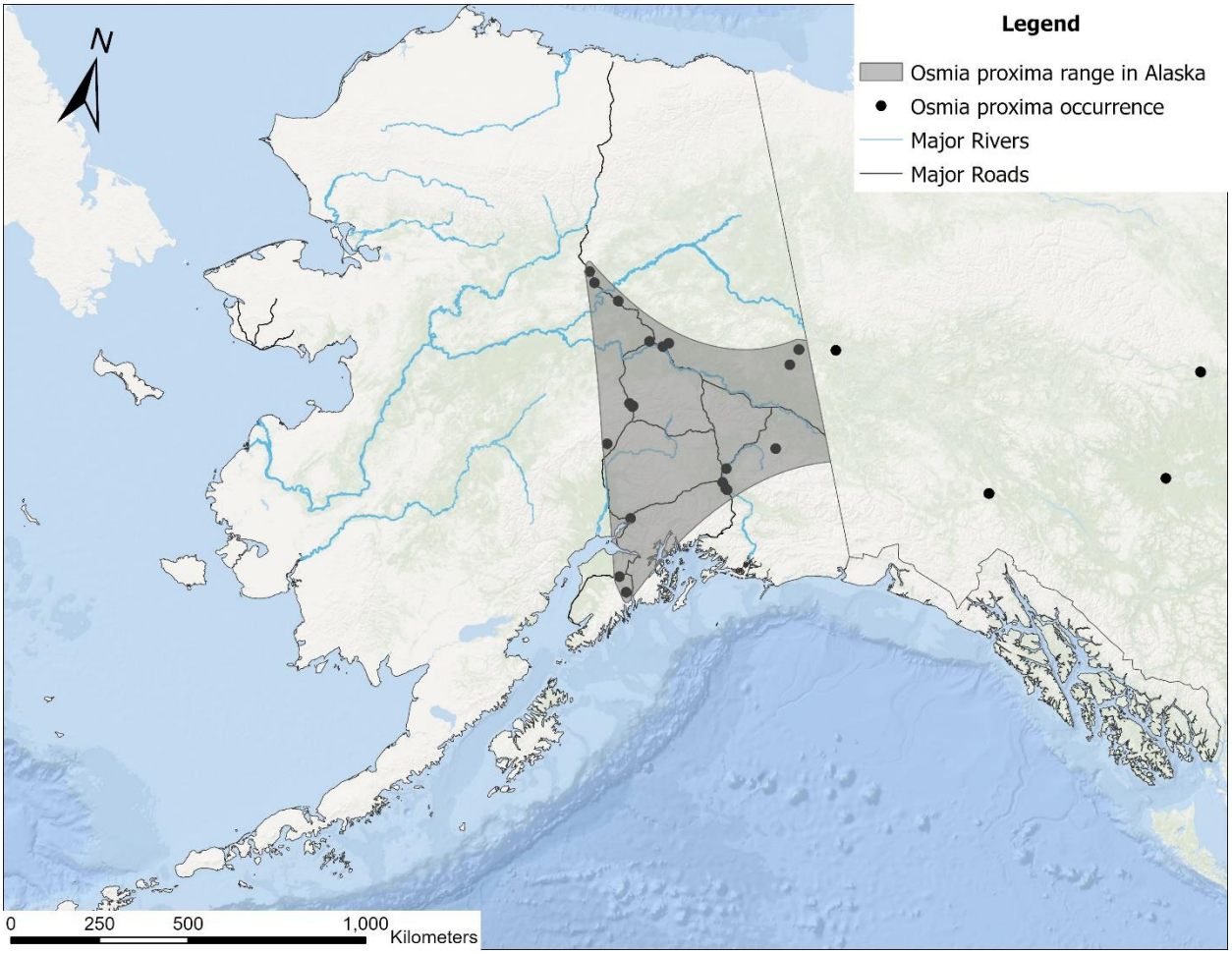

Figure 1 Range and occurrence of Osmia proxima in Alaska

Photo Reference

Figure 2 © Copyright Laurence Packer 2014