



Alaska Natural Heritage Program

Conservation Status Report

Megachile relativa – Cresson, 1878

Synonyms: *Megachile exclamans* Viereck, 1916; *Megachile aspera* Mitchell, 1924

Common Name: Golden-tailed leafcutter bee

ELCODE: IIHYMA9120

Taxonomic Serial No.: 762079

Report last updated – June 2, 2023

Conservation Status

G5 S3

Occurrences, Range

Number of Occurrences: 10 occurrences, 15 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection)

AK Range Extent: 267,329 km²

Occupancy 4 km² grid cells: 11 occupied grids

Nowacki Ecoregions: Intermontane boreal, Alaska Range transition

North American Distribution: This species has a wide distribution in Alaska (Figure 1) but more collecting will likely yield additional occurrences and expand range. Widespread throughout Canada (Sheffield et al. 2011) and the United States. Range extends from Georgia to Newfoundland in the east and California to the Yukon in the west, however it is absent from the Mississippi drainages in the central U.S. (Ascher and Pickering 2014).

Ecology

Habitat: Occurs in a variety of habitats, including steppe bluffs, sand dunes, black spruce muskeg, riparian meadows, gravel bars.

Host Plants: *Taraxacum officinale*, *Chamerion latifolium*, *Dryas integrifolia*

Life History: This is a solitary bee species, with individual females nesting in pre-existing cavities. Females line their nests with circular discs of plant leaves which they cut with their mandibles. Thus, females have three habitat requirements for successful reproduction: nesting cavities, nest lining materials, and enough suitable food plants for nectar and pollen (Sheffield et al. 2011).

Trends

Short-term: N/A, insufficient data

Long-term: N/A, insufficient data

Threats

Scope and Severity: Four occurrences are from protected areas (national parks and refuges). A few occurrences are in anthropogenic areas that could be exposed to physical disturbance of nest sites.

References

Alaska Bee Atlas. 2023. Alaska Center for Conservation Science, University of Alaska Anchorage.

Ascher J.S. and J. Pickering. 2014. Discover Life bee species guide and world checklist (Hymenoptera: Apoidea: Anthophila). <https://www.discoverlife.org/> (accessed June 2, 2023)

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

Integrated Taxonomic Information System (ITIS). <https://www.itis.gov> (accessed June 2, 2023)

NatureServe Explorer. <https://explorer.natureserve.org/> (accessed June 2, 2023)

Sheffield, C. S., C. Ratti, L. Packer, and T. Griswold. 2011. Leafcutter and mason bees of the Genus *Megachile* Latreille (Hymenoptera: Megachilidae) in Canada and Alaska. Canadian Journal of Arthropod Identification No. 18, 29 November 2011.

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

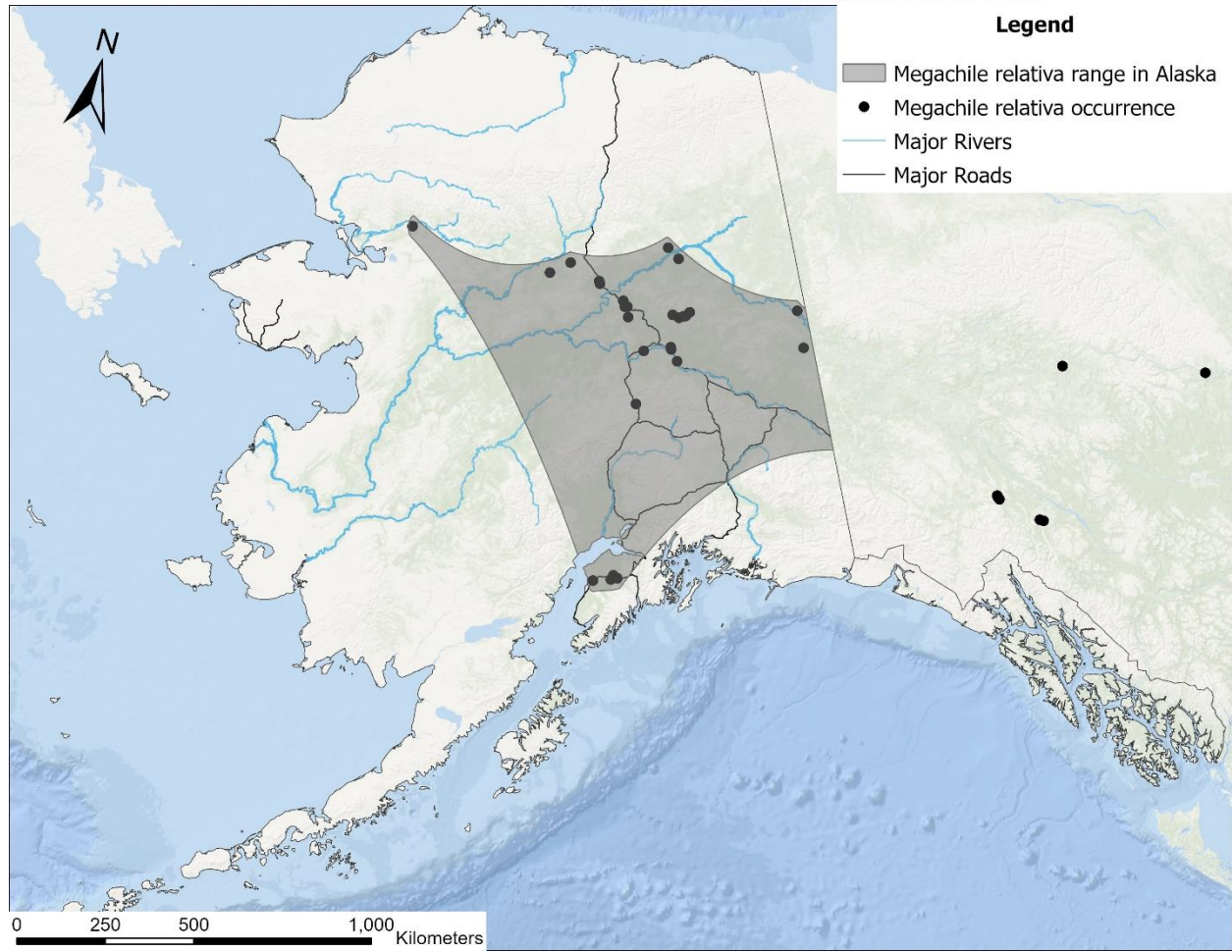


Figure 1 Range and occurrence of *Megachile relativa* in Alaska

Photo Reference



Figure 2 © Copyright Laurence Packer 2014



Figure 3 <ahref=<http://www.discoverlife.org>>
David Cappaert / Discover Life