

Alaska Natural Heritage Program Conservation Status Report

Hoplitis albifrons – (Kirby, 1837)

Synonyms: Chelostoma albifrons Kirby, 1837; Monumetha borealis Cresson, 1864; Monumetha obsoleta Cresson, 1864; Megachile oblonga Provancher, 1882; Andronicus hesperius Cockerell, 1903

Comments: There are three valid subspecies in North America. Based on records identified to subspecies, Alaska is presumed to have only *Hoplitis albifrons albifrons* (GBIF 2023)

Common Name: White-faced summer mason bee

ELCODE: IIHYMA6040

Taxonomic Serial No.: 715443

Report last updated – August 30, 2023

Conservation Status

G5 S4

Occurrences, Range

Number of Occurrences: 19 occurrences, 55 voucher records (University of Alaska Anchorage Entomology Collection; University of Alaska Museum Insect Collection; Denali National Park and Reserve Insect Collection; USDA-ARS Bee Biology and Systematics Laboratory)

AK Range Extent: 160,606 km²

Occupancy 4 km² grid cells: 21 occupied grids

Nowacki Ecoregions: Intermontane boreal, Alaska Range transition

North American Distribution: This species has a fairly widespread distribution through interior and parts of southcentral Alaska (Figure 1). Alaska eastwards across Canada to Newfoundland. In the lower United States across much of the west to South Dakota, Nebraska, and Texas, also in the Great Lakes region, and the northeastern states north to Maine and south to Pennsylvania (Ascher and Pickering 2023).

Ecology

Habitat: Occurs in a variety of habitat types in Alaska including steppe bluffs, open forests, dwarf shrub, and dry forb/graminoid herbaceous. About half of the occurrences are in steppe bluff habitats although the species is not known to require sand for nesting.

Host Plants: Hedysarum boreale, Penstemon, Taraxacum



Life History: This is a solitary bee. Females are presumed to nest in pre-existing tubular holes in stumps, logs, and woody stems, constructing brood cell partitions of chewed leaves (Michener 1947).

Trends

Short-term: N/A, insufficient data

Long-term: N/A, insufficient data

Threats

Scope and Severity: One record is from the UAF campus in a weedy area, another is from the USDA Research Station in Palmer, these populations may be vulnerable to physical disturbance or pesticides. Overall, the threat scope and severity for this species in Alaska appears low.

References

Ascher J.S. and J. Pickering. 2023. Discover Life bee species guide and world checklist (Hymenoptera: Apoidea: Anthophila). https://www.discoverlife.org/ (accessed August 30, 2023)

Global Biodiversity Information Facility. https://www.gbif.org. GBIF occurrence download https://doi.org/10.15468/dl.qdbe6u (accessed April 20, 2021 and August 30, 2023)

Integrated Taxonomic Information System (ITIS). Available online: https://www.itis.gov (accessed August 30, 2023)

Michener, C. 1947. A character analysis of a solitary bee, *Hoplitis albifron*s (Hymenoptera, Megachilidae). Evolution 1:172-185.

NatureServe Explorer. Available online: https://explorer.natureserve.org/ (accessed August 30, 2023)

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

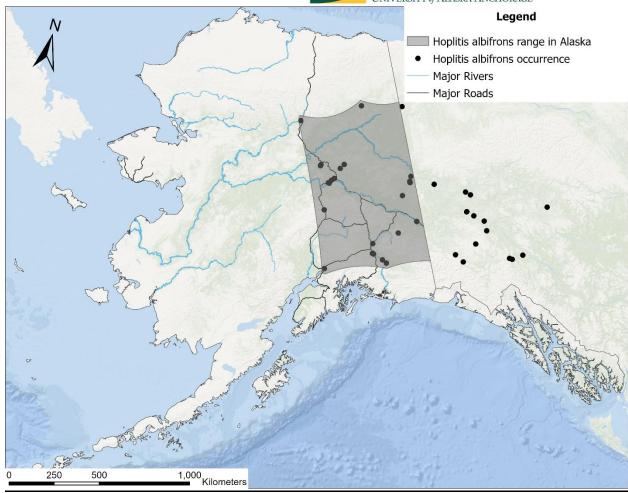


Figure 1 Range and occurrence of Hoplitis albifrons in Alaska

Photo Reference

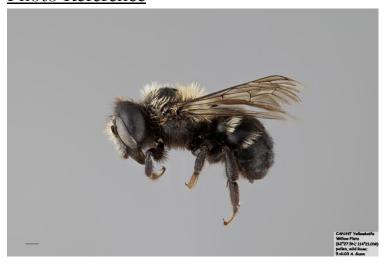


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