

Alaska Natural Heritage Program Conservation Status Report

Bombus flavidus Eversmann, 1852

Common Name: Fernald's Cuckoo Bumble Bee

ELCODE: IIHYM24370	Taxonomic Serial No.: 714801
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Synonyms: Psithyrus fernaldae Franklin, 1911; Bombus fernaldae - Franklin, 1911

Taxonomy Notes:

Report last updated - June 12, 2017

Conservation Status

G5 S4

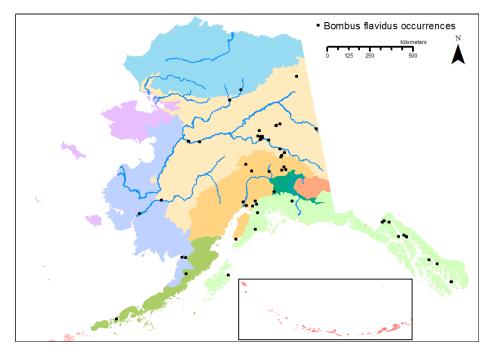
ASRS: not yet ranked

Occurrences, Range

Number of Occurrences: 59; number of museum records: 249 (University of Alaska Museum Insect Collection, Illinois Natural History Survey, Koch et al. 2015, American Museum of Natural History)

AK Range Extent: 871,996 km²; 4-km² grid cells: 62; In Alaska found from Brooks Range south to Interior, Alaska Range Transition and Coastal Rainforests. Also found on Kodiak Island and few occurrences west to Alaska Peninsula and YK Delta.

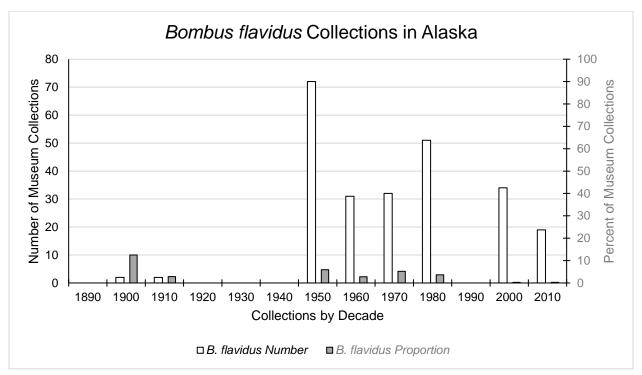
North American Distribution: Alaska, south to British Columbia, Pacific Northwest and California Coast and Sierra Mountains. Found in the Rocky Mountains. Few occurrences in north part of Great Plains. Also found in Europe/Asia.





Trends

Trends are based on museum voucher collections of all *Bombus* species. Short-term trends are focus the past two decades (2000's and 2010s), whereas long-term trends are based on all years. Data originate from museum voucher collections only and are summarized by decade. White bars indicate the number of voucher collections for the species. Grey bars indicate the percent of *Bombus flavidus* to all *Bombus* species.



Short-term/ Long-term: The number of museum collections in the past two decades is within the average collected, however the proportion appears to be significantly less (>10% change).

Threats [Variable]

Scope and Severity: Unknown.

Intrinsic Vulnerability: Not intrinsically vulnerable. Found widespread in Alaska and associated with multiple floral resources.

Ecology

Habitat: Boreal Forests and tundra.

Known Alaska Floral Resources: Achillea spp., *Epilobium parviflorum, Heracleum* spp., *Trifolium repens** *denotes non-native species

Nesting Behavior: unknown

Parasitism: Social parasite of other Bombus species.



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Ecological Integrity of Occurrences: Current and future Landscape Condition Models have occurrences intact with high ecological integrity.

Literature

GBIF.org (7th April 2017) GBIF Occurrence Download http://doi.org/10.15468/dl.nvc9vf

idigbio.org. (2017), 43395 records, accessed on 2017-03-01T21:39:42.991495, contributed by 10 Recordsets, Recordset identifiers:

http://www.idigbio.org/portal/recordsets/a6eee223-cf3b-4079-8bb2-b77dad8cae9d (43165 records); http://www.idigbio.org/portal/recordsets/271a9ce9-c6d3-4b63-a722-cb0adc48863f (56 records); http://www.idigbio.org/portal/recordsets/4f436daa-01d5-4be6-b5c3-fdd255677536 (51 records); http://www.idigbio.org/portal/recordsets/eaa5f19e-ff6f-4d09-8b55-4a6810e77a6c (37 records); http://www.idigbio.org/portal/recordsets/5e893602-84ca-4c8c-bac1-99111c777582 (27 records); http://www.idigbio.org/portal/recordsets/da67ebd9-52de-444d-b114-e23c03111ac6 (27 records); http://www.idigbio.org/portal/recordsets/69037495-438d-4dba-bf0f-4878073766f1 (12 records); http://www.idigbio.org/portal/recordsets/6539877e-82dc-485c-ad3d-038f383d5431 (9 records); http://www.idigbio.org/portal/recordsets/db4bb0df-8539-4617-ab5f-eb118aa3126b (6 records); http://www.idigbio.org/portal/recordsets/fc628e53-5fdf-4436-9782-bf637d812b48 (5 records)

Koch JB, Cordes N, Solter LF, Griswold TL, Ikerd HW, Cameron SA, Lozier JD, Strange JP, Stewart I (2015): US Bombus, contemporary survey data of North American bumble bees (Hymenoptera, Apidae, Bombus) distributed in the United States. v2.4. ZooKeys. Dataset/Occurrence. http://ipt.pensoft.net/resource?r=usbombus&v=2.4

Pampell, R., Sikes, D., Pantoja, A., Holloway, P., Knight, C., Ranft, R. 2015. Bumble Bees (Hymenoptera: Apidae: *Bombus* spp.) of interior Alaska: Species composition, distribution, seasonal biology, and parasites. Biodiversity Data Journal 3: e5085. doi: 10.3897/BDJ.3.e5085

Williams, P. H., Thorp, R. W., Richardson, L. L., & Colla, S. R. (2014). Bumble bees of North America: an identification guide. Princeton University Press.

Woodard, H. (Feb. 28, 2017). Personal communication, email of collection data.

University of Alaska Museum Insect Collection. http://dx.doi.org/doi:10.7299/X75D8S0H. (Records Accessed 24th February 2017).