

Alaska Natural Heritage Program

Conservation Status Report

Bombus flavifrons Cresson, 1863

Common Name: Yellow Head Bumble Bee

ELCODE: IIHYM24120	Taxonomic Serial No.: 714803
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Synonyms: *Pyrobombus flavifrons* Cresson, 1863; *Bombus pleuralis* Nylander, 1848

Taxonomy Notes:

Report last updated – June 12, 2017

Conservation Status

G5 S4	ASRS: not yet ranked
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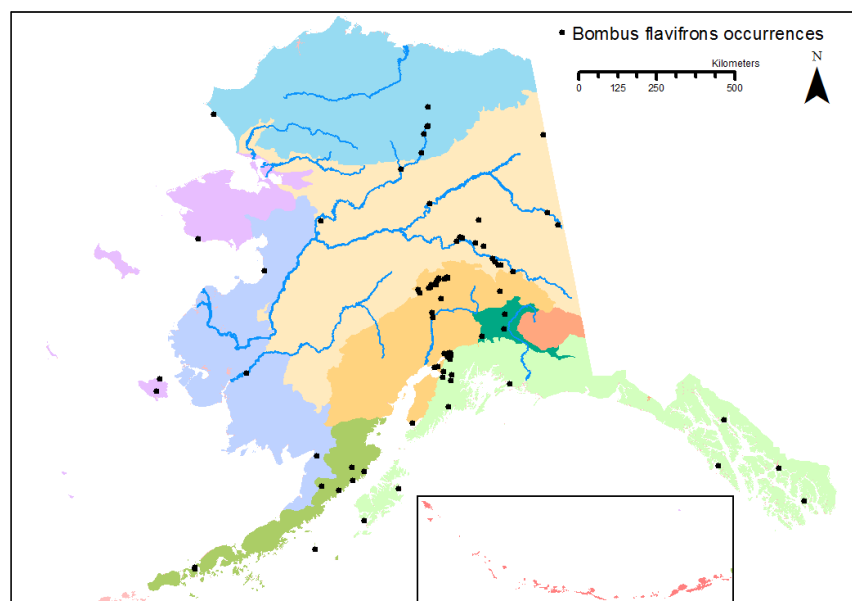
Occurrences, Range

Number of Occurrences: 80; number of museum records: 1706 (American Museum of Natural History, Ohio State University, Canadian National Collection, U.C. Riverside, Illinois Natural History Survey, University of Kansas, University of Alaska Museum Insect Collection, Koch et al. 2015, Smithsonian, Yale Peabody Museum).

AK Range Extent: 1,590,508 km²; 4- km² grid cells: 85; Wide distribution in Alaska. Found from the Brooks Range south to the Interior, Alaska Range, Alaska Peninsula, Kenai Peninsula, and Coastal Rainforest. Few scattered occurrences in YK Delta, Nunivak Island, Nome, Point Hope, and Kodiak Island.

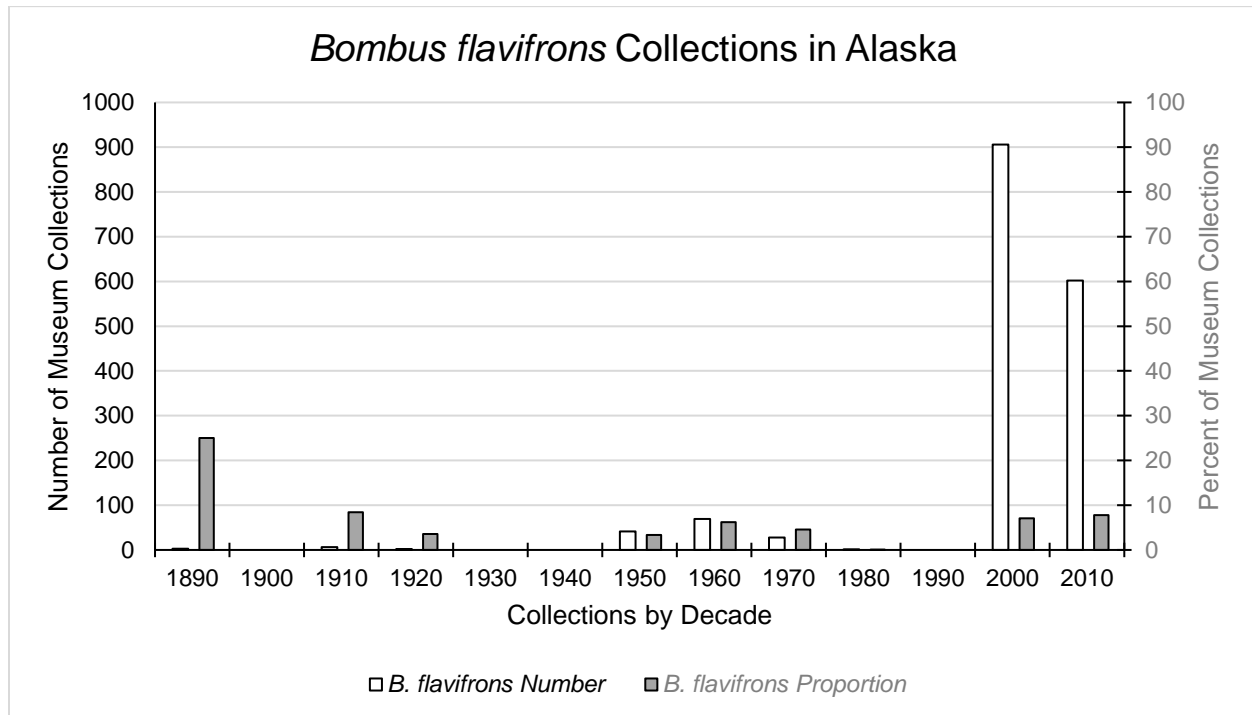
North American

Distribution: West of the Rocky Mountains. Alaska and Yukon Territory, south to British Columbia and the Pacific Northwest. California coast and Sierra Mountains and Great Basin region. Rocky Mountains and New Mexico. Scattered in northern Canadian Provinces.



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 flavifrons* to all *Bombus* species.



Short-term: Appears stable (<10% difference) in proportion of collections of the last two decades.

Long-term: Appears stable (<10% difference) in proportion of collections since the early 1900s. Was proportionally higher in 1890s, but there are 12 *Bombus* collected from that era.

Threats

Scope and Severity: unknown.

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

Ecology

Habitat: grassy areas, forests.

Known Alaskan Floral Resources: *Achillea* spp., *Chamerion angustifolium*, *Chamerion latifolium*, *Epilobium parviflorum*, *Hedysarum alpinum*, *Linaria vulgaris*, *Melilotus albus**, *Pedicularis labradorica*, *Potentilla* spp., *Trifolium repens**, *Vicia* spp.*

*denotes non-native species

Nesting behavior: Underground, sometimes on the surface.

Parasitism: *Bombus insularis*.

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/ea5f19e-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).