

# Alaska Natural Heritage Program

## Conservation Status Report

---

### *Bombus mixtus* Cresson, 1878

**Common Name:** Fuzzy-Horned Bumble Bee

<b>ELCODE:</b> IIHYM24160	<b>Taxonomic Serial No.:</b> 714822
---------------------------	-------------------------------------

*Synonyms:* *Pyrobombus mixtus* Cresson, 1878

*Taxonomy Notes:*

**Report last updated** – June 12, 2017

---

### Conservation Status

G5 S5	ASRS: not yet ranked
-------	----------------------

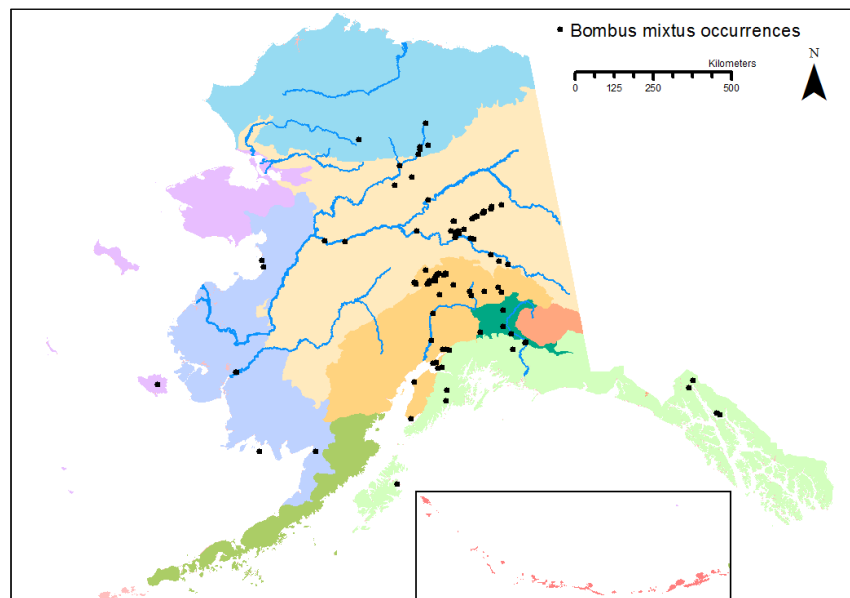
### Occurrences, Range

*Number of Occurrences:* 100; number of museum records: 1455 (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, Yale Peabody Museum).

*AK Range Extent:* 880,433.53 km<sup>2</sup>; 4-km<sup>2</sup> grid cells: 106; Wide distribution and common species. Found from the Brooks Range south to the Interior, Alaska Range, and Coastal Rainforest. Few scattered occurrences in YK Delta, Nunivak Island, Haines, Juneau, and Kodiak.

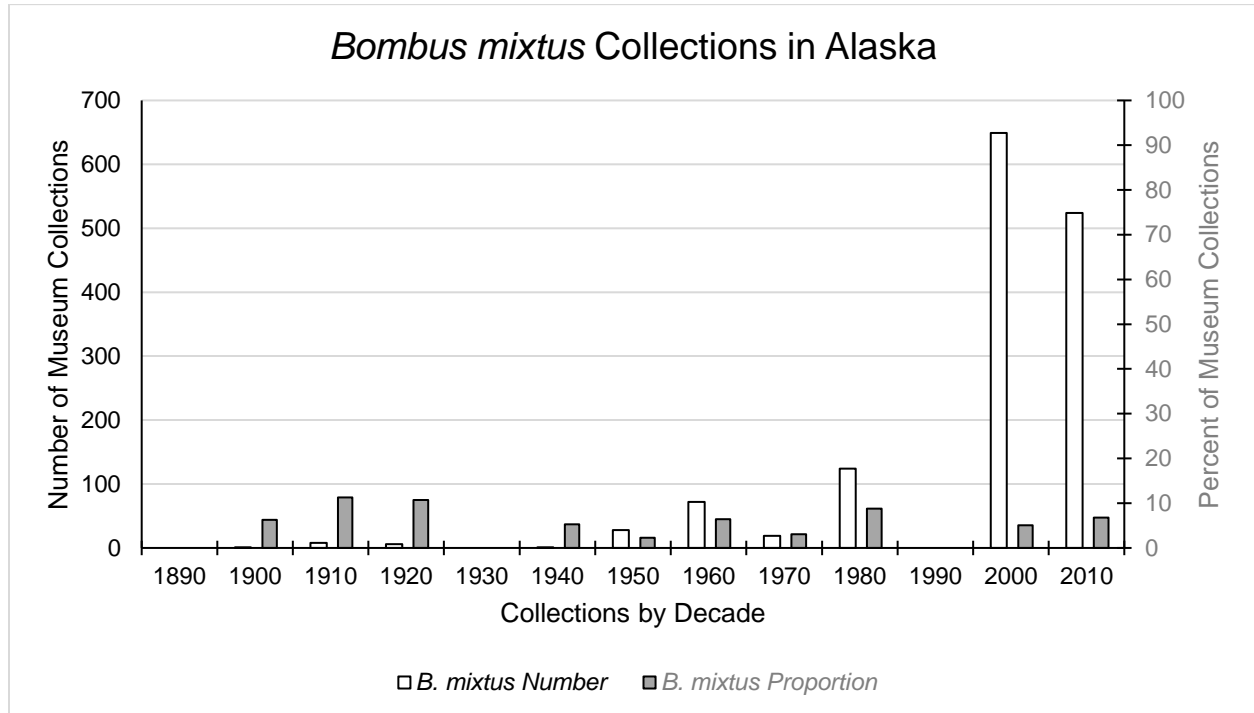
#### *North American*

*Distribution:* Wide distribution in western North America. Widespread in Alaska and southern Yukon Territory south to all of British Columbia and western Alberta. Common in Pacific Northwest, the Great Basin, and Rocky Mountains. Also in Sierra Mountains and California coast. Rare scattered occurrences in central and eastern 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 mixtus* to all *Bombus* species.



*Short-term:* Appears to be stable (<10% change) in proportion collected the last two decades.

*Long-term:* Trend appears to be stable (<10% change) in proportion collected since the early 1900s.

## Threats

*Scope and Severity:* Unknown.

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

## Ecology

*Habitat:* Open fields, grass meadows, shrub ecotones, mountain meadows

*Known Alaskan Floral Resources:* *Arnica lessingii*, *Chamerion angustifolium*, *Chamerion latifolium*, *Epilobium parviflorum*, *Hedysarum alpinum*, *Hedysarum mackenzii*, *Melilotus albus*\*, *Trifolium repens*\*.

\*denotes non-native species.

*Nesting behavior:* Above and below ground, also known to be on ground surface.

*Parasitism:* Unknown

*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).