

# Alaska Natural Heritage Program

## Conservation Status Report

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### *Bombus sylvicola* Kirby, 1837

**Common Name:** Forest Bumble Bee

<b>ELCODE:</b> IIHYM24200	<b>Taxonomic Serial No.:</b> 714840
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*Synonyms:* *Pyrobombus sylvicola* Kirby, 1837; *Bombus gelidus* Cresson, 1878

*Taxonomy Notes:* Very similar to *B. lapponicus* and are often mislabeled *B. sylvicola*. They are separate taxa. Recent data of North America taxa provided no evidence for *B. lapponicus* as a separate species being present in North America. However *B. lapponicus* likely occurs in Alaska but data is incomplete at this time (Williams pers. com.). Further investigation of museum collections and collection surveys in western Alaska are warranted.

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

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### Conservation Status

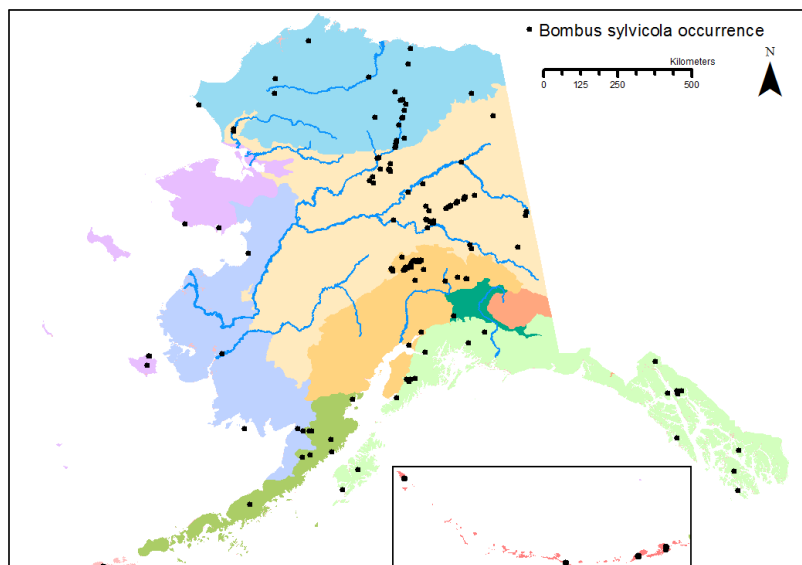
G5 S5	ASRS: not yet ranked
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### Population, Occurrences, Range

*Number of Occurrences:* 156; number of museum records: 854 (American Museum of Natural History, Cornell University, University of Kansas, U.C. Riverside, Ohio State University, Illinois Natural History Survey, Kenai NWR, University of Alaska Museum Insect Collection,, Koch et al. 2015, Yale Peabody Museum). Noted to be very common species (Williams 2014).

*AK Range Extent:* 1,608,515 km<sup>2</sup>; 4-km<sup>2</sup> grid cells: 157; Wide distribution in Alaska from the arctic coastal plains to Seward Peninsula and YK Delta to Alaska Peninsula and the Adak Island, Interior and Coastal Rainforest.

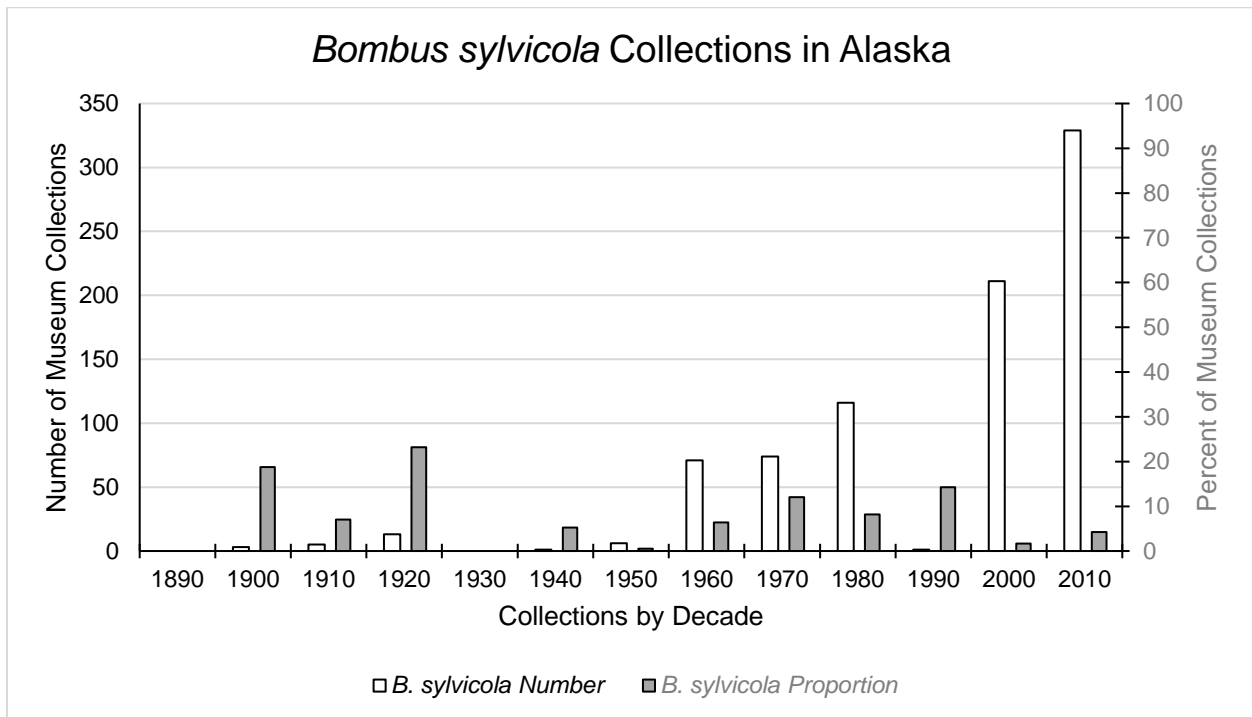
*North American Distribution:* Alaska and the High Arctic of Yukon, N.W. Territory, Nunavut and eastward to Quebec and Newfoundland. Also from Alaska southward in British Columbia to the Pacific



Northwest, Sierra Mountains, Great Basin, and the Rocky Mountains.

## 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 sylvicola* to all *Bombus* species.



*Short-term:* Slight increase but not significant (<10% change) in proportion collected.

*Long-term:* Historically, above 10% of all collected *Bombus* species. Significant (>10% change) decline in proportion since the 1900s.

## Threats

*Scope and Severity:* Unknown.

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

## Ecology

*Habitat:* Tundra, Boreal Forest, open grasslands and meadows, alpine habitat especially in Lower 48.

*Known Alaskan Floral Resources: Achillea millefolium, Arnica lessingii, Astragalus alpinus, Chamerion angustifolium, Chamerion latifolium, Epilobium parviflorum, Hedysarum alpinum, Hedysarum boreal spp. mackenzii, Melilotus albus\*, Oxytropis arctica, Oxytropis sp., Polygonum bistorta, Potentilla sp., Salix sp., Senecio lugens, Taraxacum officinale\*, Trifolium repens\*.*

\*denotes non-native species

*Nesting behavior:* Mostly underground

*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 24<sup>th</sup> February 2017).



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