

Alaska Natural Heritage Program

Conservation Status Report

Bombus lapponicus sylvicola Kirby, 1837

Common Name: Forest Bumble Bee

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

Taxonomy Notes: Recently *B. sylvicola* was determined to be conspecific with *B. lapponicus* and therefore treated at a subspecific level as *B. lapponicus sylvicola* (Martinet et al. 2019, Sikes & Rykken 2020). *B. lapponicus lapponicus* may occur in Alaska but data is incomplete at this time (Williams pers. com.). Further investigation of museum collections and collection surveys particularly in western Alaska are warranted.

Report last updated – November 2, 2020

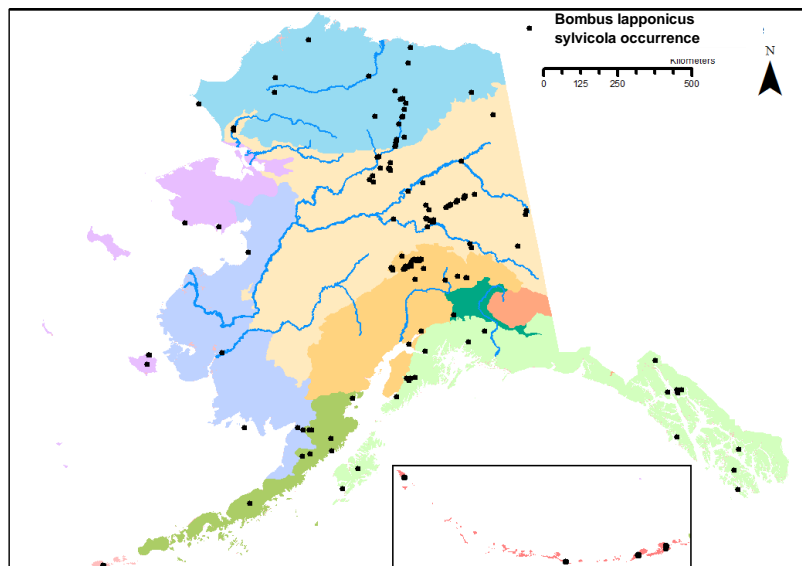
Conservation Status

G5 S5

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).

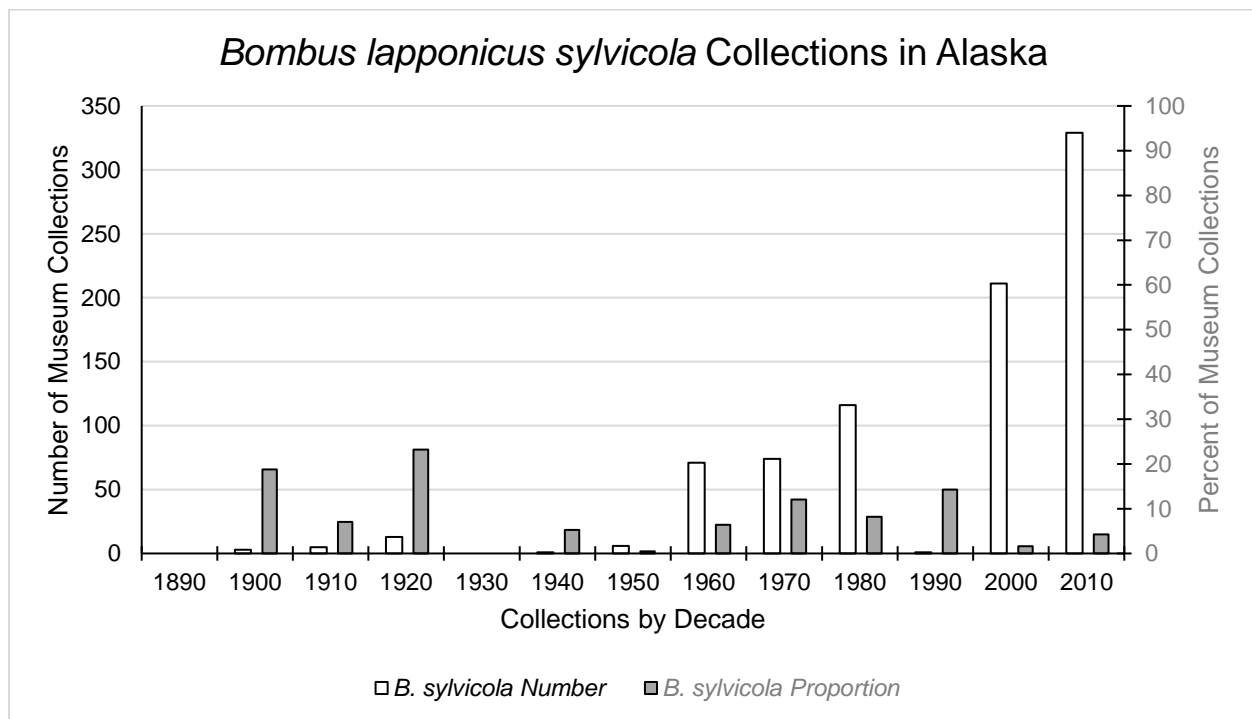
AK Range Extent: 1,608,515 km²; 4-km² grid cells: 157; Wide distribution in Alaska from the arctic coastal plains to Seward Peninsula and YK Delta to Alaska Peninsula and the Adak Island, Interior and Coastal Rainforest.



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)

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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.

Sikes, D., and J. Rykken. 2020. Update to the identification guide to female Alaskan bumble bees and a summary of recent changes to the Alaskan bumble bee fauna. AKES Newsletter 13: 31-38. doi:10.7299/X7GH9J8D.

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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).