

Alaska Natural Heritage Program

Conservation Status Report

Bombus cryptarum (Fabricius, 1775)

Common Name: Cryptic Bumble Bee

ELCODE: IIHYM24500	Taxonomic Serial No.: N/A
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Synonyms: *Bombus moderatus* Cresson, 1863

Taxonomy Notes:

Report last updated – June 8, 2017

Conservation Status

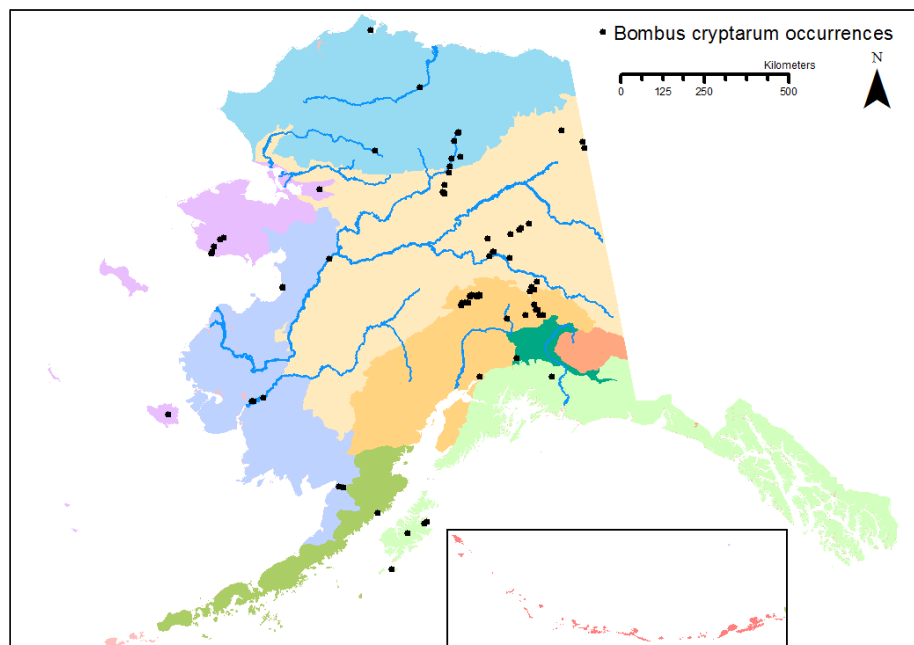
G5 S4	ASRS: not yet ranked
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Occurrences, Range

Number of Occurrences: 72; number of museum records: 725 (American Museum of Natural History, Ohio State University, Canadian National Collection, U.C. Riverside, Illinois Natural History Survey, University of Alaska Museum Insect Collection, University of Alberta Museums, Koch et al 2015, Yale Peabody Museum)

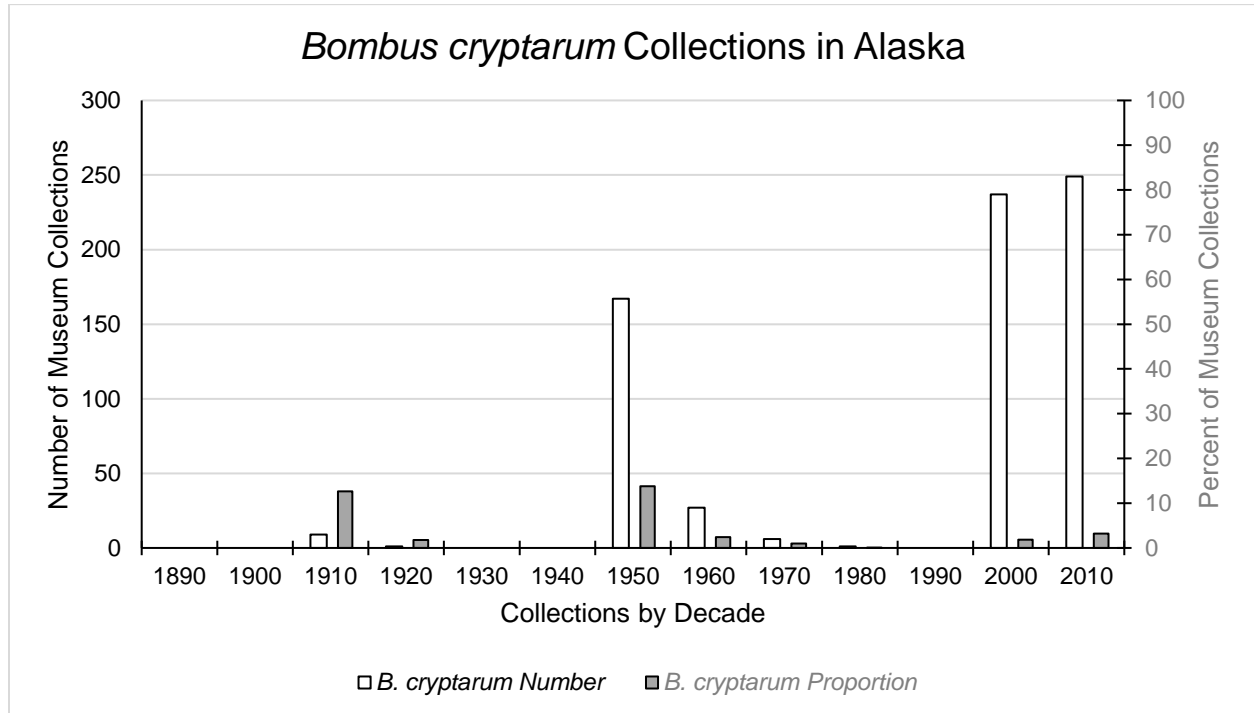
AK Range Extent: 1,095,693 km²; 4-km² grid cells: 78; Widespread across Alaska except Coastal Rainforests, but found on Kodiak Island. Occurs from the Arctic south to the Interior and Seward Peninsula and YK Delta. Also in Alaska Range Transition and few occurrences on Alaska Peninsula and Copper River Basin.

North American Distribution: Occurs in Alaska, Yukon and Northwest Territories and south to northeastern British Columbia and south western Alberta. One occurrence in Baker Lake Nunavut.



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 cryptarum* to all *Bombus* species.



Short-term/ Long-term: There were more collections of *B. cryptarum* in the last two decades ($n=237$ and 239 respectively) than in the 1950s ($n=167$), however, the proportion is nearly significantly less (>10% decline). There appears to be a decline from the 1950s with a slight increase with more vigorous collection efforts in the last two decades.

Threats

Scope and Severity: unknown.

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

Ecology

Habitat: Tundra and Boreal Forest.

Known Alaskan Floral Resources: *Aconitum delphiniifolium*, *Chamerion angustifolium*, *Chamerion latifolium*, *Epilobium parviflorum*, *Hedysarum alpinum*, *Melilotus albus**, *Pedicularis labradorica*, *Pedicularis sudetica*, *Potentilla* spp., *Rosa acicularis*, *Trifolium repens**

Nesting behavior: below ground

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).