

Bombus suckleyi (Suckley Cuckoo Bumble Bee)



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Taxonomy

- **Class:** INSECTA
- **Order:** HYMENOPTERA
- **Family:** APIDAE
- **Genus:** Bombus
- **Scientific Name:** *Bombus suckleyi* Greene, 1860
- **Common Name:** Suckley Cuckoo Bumble Bee
- **Synonyms:**
- **Taxonomic Name Source:**

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Critically Endangered](#)
- **Nature Serve Global:** [G2](#)
- **NHNM State:** S1
- **NM Endemic:** NO

Description

Bombus suckleyi is a medium-sized bumblebee species with a distinctive black body and pale yellow or white bands on its thorax and abdomen (Ascher and Pickering 2023). This species is a parasitic bumblebee, known for its cuckoo-like behavior, where it invades the nests of other bumblebee species (primarily in the *Bombus fervidus* and *Bombus occidentalis* complexes). It does not establish its own colonies, instead relying on other species for worker bees to rear its young (Goulson 2010). Unlike other bumblebees, *Bombus suckleyi* lacks the pollen baskets found in worker bumblebees, since it does not need to forage for pollen to provision its own nest (Williams *et al.* 2014).

Habitat and Ecology

As a parasitic species, *Bombus suckleyi* depends on the presence of healthy populations of its host bumblebees to survive. The species has been known to parasitize nests of *Bombus occidentalis*, *Bombus fervidus*, and *Bombus terricola* (Williams *et al.* 2014). This bumblebee prefers open habitats such as grasslands, meadows, and forest edges where host species are abundant. Its lifecycle and behavior are closely tied to the health and availability of these host species' nests.

Geographic Range:

Bombus suckleyi was historically widespread across much of North America, particularly in the western United States and parts of Canada. However, the species has suffered significant range contractions in recent decades (Hatfield *et al.* 2014). Observations of this species are now rare, and it has become increasingly difficult to find in areas where it was once common, such as the Pacific Northwest, northern Great Plains, and mountainous regions of the western U.S. (Hatfield *et al.* 2014). In New Mexico, *Bombus suckleyi* has been reported, though records are few. Data indicate sporadic sightings, particularly in northern and higher elevation areas, such as near the Sangre de Cristo Mountains (GBIF.org 2024, iNaturalist 2024).

Conservation Considerations:

In 2020, this species was petitioned for listing under the Endangered Species Act (Center for Biological Diversity 2020). The species received a positive 90-day finding, which means the US Fish and Wildlife Service agrees listing may be warranted. Therefore, the species is "Under Review" and the status review process has been initiated (USFWS 2021).

Threats:

The decline of host species such as *Bombus occidentalis* due to factors like habitat destruction and diseases is a critical threat to *Bombus suckleyi* (Hatfield *et al.* 2014).

In addition, since 2000, the Southwest US has seen the worst drought in 1200 years (Williams *et al.* 2022). Drought can reduce the abundance of flowering plants on a landscape scale, and also reduce pollen and nectar quality (Wilson Rankin *et al.* 2020). Drought conditions have been shown to reduce the diversity and abundance of native bees (Hung *et al.* 2021, Minckley *et al.* 2013).

Population:

The population of *Bombus suckleyi* has experienced dramatic declines across its range, with many local populations presumed extinct (Williams *et al.* 2014). The current population is extremely fragmented, with only a few confirmed sightings in recent years across its historic range. The cause of these declines is likely linked to the decline of its host species, *Bombus occidentalis*, and other host species that have also suffered population decreases due to habitat loss, pesticide use, and disease (Williams *et al.* 2014).

References:

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 - US Fish and Wildlife Service (USFWS). 2021. Endangered and Threatened wildlife and plants; 90-day findings for three species. *Federal Register* 86: (25833-25836).
 - [Center for Biological Diversity. 2020. Petition to list Suckley's Cuckoo Bumble Bee \(*Bombus suckleyi*\) under the Endangered Species Act and concurrently designate critical habitat. Center for Biological Diversity: \(43\). \[https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/petition/895.pdf\]\(https://ecosphere-documents-production-public.s3.amazonaws.com/sams/public_docs/petition/895.pdf\)](#)
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More Information