

Bombus morrisoni (Morrison Bumble Bee)



Collin Haffey,

Taxonomy

- **Class:** INSECTA
- **Order:** HYMENOPTERA
- **Family:** APIDAE
- **Genus:** Bombus
- **Scientific Name:** *Bombus morrisoni* Cresson, 1878
- **Common Name:** Morrison Bumble Bee
- **Synonyms:**
- **Taxonomic Name Source:**

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Vulnerable](#)
- **Nature Serve Global:** [G3](#)
- **NHNM State:** SNR
- **NM Endemic:** NO

Description

Bombus morrisoni is a medium to large-sized bumblebee with even, short, bright, yellow hair. Its thorax is primarily yellow with some black markings, and the abdomen has alternating yellow and black bands (Ascher and Pickering 2023). It is adapted to arid and semi-arid environments, which distinguishes it from other North American bumblebee species. In New Mexico, it is often observed in dry, open areas where its preferred plants, including sagebrush and wildflowers, are found.

Habitat and Ecology

In New Mexico, *Bombus morrisoni* typically inhabits arid and semi-arid regions, including desert scrub, sagebrush steppes, and high-altitude prairies. It is a generalist forager, visiting a wide range of flowering plants for nectar and pollen, including rabbitbrush (*Chrysothamnus* spp.), sunflowers (*Helianthus* spp.), and various species of cacti. The species nests primarily underground, often in abandoned rodent burrows, and is active during the warmer months of the year (Ascher and Pickering 2023, iNaturalist 2024). Example food plants include *Asclepias*, *Astragalus*, *Chrysothamnus*, *Cirsium*, *Cleome*, *Ericameria*, *Helianthus*, *Melilotus*, and *Senecio*. Males perch and chase moving objects in search of mates (Williams *et al.* 2014).

Geographic Range:

This species is found throughout the Mountain West, ranging from California to the east of the Sierra-Cascade Ranges and extending into southern British Columbia. It is also present in the Desert West, particularly in the highlands, and stretches as far east as New Mexico and Texas, reaching northward to western South Dakota (Williams *et al.* 2014). There are recorded occurrences in 21 different states (Chesshire *et al.* 2023). Sightings are concentrated in developed, evergreen open canopy, and mixed evergreen deciduous shrubland ecosystem types (Chesshire *et al.* 2023).

In New Mexico, it is primarily observed in the central and northern parts of the state, especially in desert and high desert areas, with over 1,300 occurrences reported (Chesshire *et al.* 2023).

Conservation Considerations:

In 2023, this species was petitioned for listing under the Endangered Species Act (Killingsworth *et al.* 2023). As of December 2024, the US Fish and Wildlife Service had not yet published a 90-day finding, suggesting whether the petition presented substantial scientific information indicating action may be warranted.

Threats:

Threats to the Morrison bumble bee include habitat degradation and fragmentation due to livestock grazing, wild fire and fire suppression regimes, urban development, agricultural intensification, and energy development and mining. Pathogen spill over from commercial bumble bee colonies, may also be driving declines in this species (Killingsworth *et al.* 2023).