

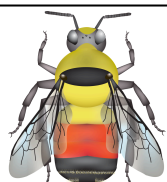
Quick Field Guide to Female Bumble Bees in Montana

Please note: Each species may have many color forms. This guide shows only some of the common color patterns. This guide is for female bumble bees only and is meant to be only an introduction to species in Montana. Visit bumblebeeatlas.org for links to more comprehensive identification guides and resources.

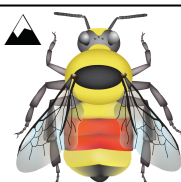
Red/orange on T2-T3



B. huntii
Hunt



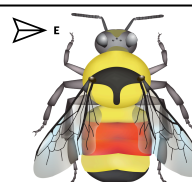
B. melanopygus
Black-tailed



B. sylvicola
Forest



B. bifarius
Two-form



B. ternarius
Tri-colored



B. rufocinctus
Red-belted

Red/orange on T3-T4



B. flavifrons
Yellow head

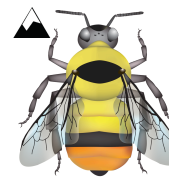


B. centralis
Central

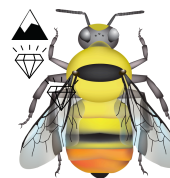
Red/orange on T4-T5



B. mixtus
Fuzzy-horned



B. frigidus
Frigid



B. kirbiellus
High country

T1 yellow

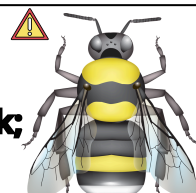


B. impatiens
Common eastern



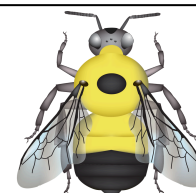
B. bifarius
Two-form

T1-T2 black; T3 yellow; T5 white

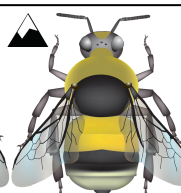


B. occidentalis
Western

T1-T2 yellow

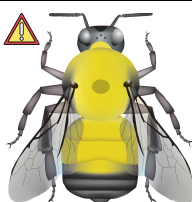


B. vagans
Half-black



B. sitkensis
Sitka

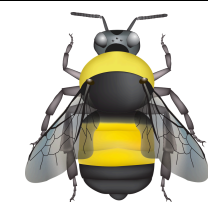
T1-T3 all or mostly yellow



B. morrisoni
Morrison

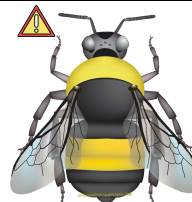


B. nevadensis
Nevada

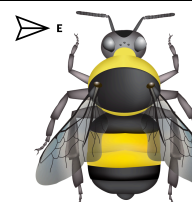


B. pennsylvanicus
American

T1 black, T2-T3 yellow



B. terricola
Yellow-banded



B. auricomus
Black and gold

T1-T4 yellow



B. borealis
N. Amber

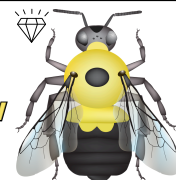


B. fervidus
Yellow



B. appositus
White-shouldered

T1 yellow; T2 some yellow or brown



B. bimaculatus
Two-spotted

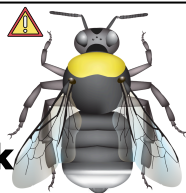


B. griseocollis
Brown-belted



B. rufocinctus
Red-belted

T1-T3 all or mostly black



B. occidentalis
Western



B. fervidus
Yellow

Cuckoo bumble bees

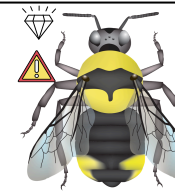
No pollen basket on hind leg.
T1-3 all or mostly black.
Look at the color of hair on face/head.



B. insularis
Indiscriminate



B. flavidus
Fernald



B. suckleyi
Suckley

Key to Symbols: (more information can be found on the back of this page)



Species of concern
due to population decline



High elevation



Found primarily
in eastern MT



Uncommon

Steps in Identifying Bumble Bees to Species

Please note: Bumble bees identification can be tricky. Many species have multiple color patterns, and several species look very similar. Hairs can appear faded or worn, making it hard to see key features. This guide is designed to be a quick, visual reference to species in Montana. For accurate identification, you may need to consult a more detailed guide. Check out our recommended resources at bumblebeeatlas.org.

1. Determine if the bee is male or female.

This guide is for female bees only.

- **Female:** Has a pollen basket on hind leg (shiny, concave, hairless area); 6 abdominal segments
- **Male:** Has no pollen basket on hind leg; 7 abdominal segments; some with very large eyes

2. Determine if the bee is a cuckoo bumble bee.

- Cuckoo: No pollen basket on hind leg; hind leg is instead convex and covered with hairs.

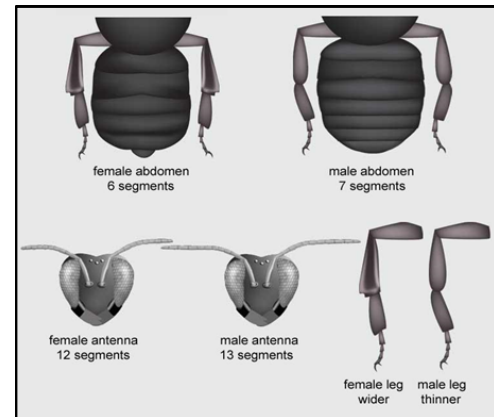


True bumble bee (left) vs. cuckoo bumble bee (right). Note the difference between concave, hairless pollen basket (left) and hairy, convex leg (right). Photo: USGS BIML

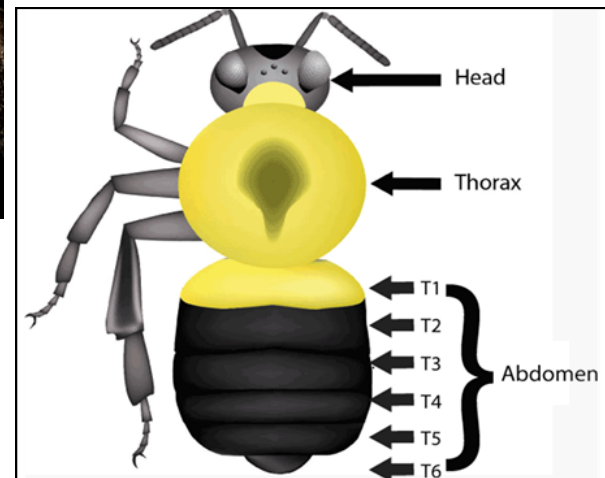
3. Look carefully at the hair color and pattern on the head, thorax, and abdomen.

- **Head:** What color is the front of the face and top of the head? Are the hairs all the same color or is there a mixture of black and yellow?
- **Thorax:** Is there a band, dot, or other pattern between the wings? Is the front of the thorax the same color as the back of the thorax? What color is the side of the thorax under the wing?
- **Abdomen:** What color is each abdominal segment? Is each segment one solid color or is there some other pattern (e.g. a line down the middle, a crescent shape in the middle, a fringe on the side).

4. Other characteristics use to identify a bumble bee to species include the size of its cheek, the color of its wings, the presence/color of hair on the underside of the abdomen, and the placement of its simple eyes. Please try to capture all of these features in your survey photographs!



Characteristics of male vs female bumble bees.
Illustrations: Elaine Evans/Xerces Society.



What is a tergite? Tergites (T1-T7) are abdominal segments. Females have 6 tergites, males have 7. The tergite nearest the thorax is Tergite 1 or "T1" and the terminal segment is Tergite 6 or "T6." Tergite color patterns help identify bumble bees to species.



Symbol and Terminology Descriptions:



Species of concern: Evidence-supported rare or declining species that are in need of conservation.



High elevation: Species typically occur in montane meadows above ~6500 feet.



Eastern U.S. Species typically found east of the Rocky Mountains.



Uncommon: Species occur infrequently or in low abundance.