

Steps for Identifying a Bumble Bee:

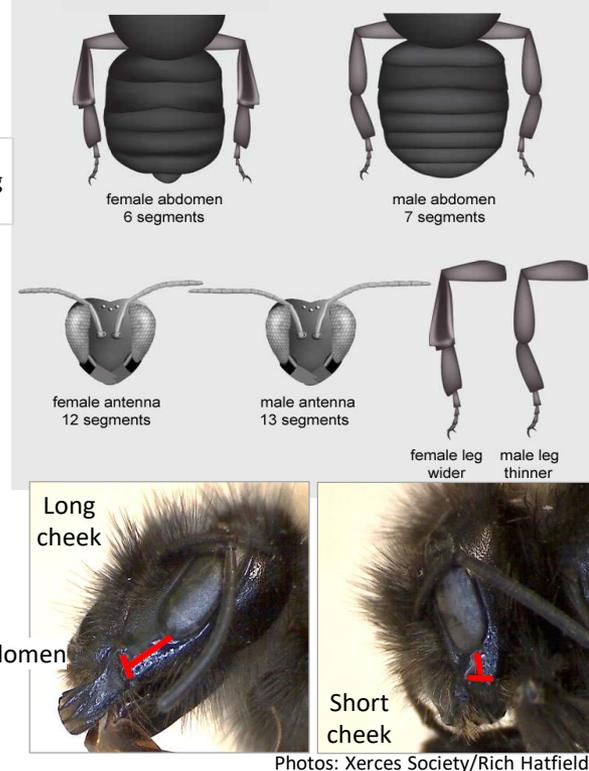
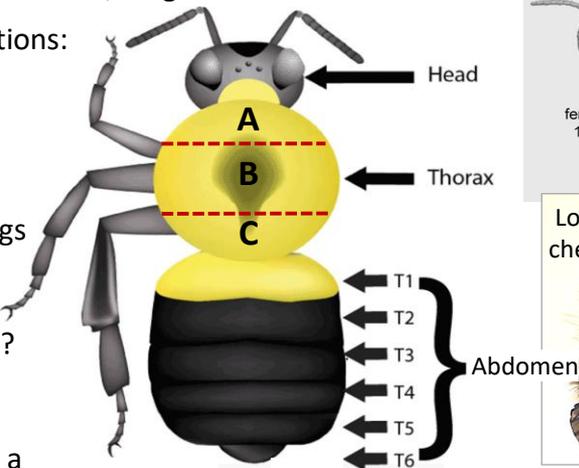
1. After determining you have a bumble bee (not a carpenter bee, wasp or fly) check to see if it is a female or a male, and if it is a cuckoo bee.

- Female: pollen basket on hind leg (shiny, hairless zone); 6 tergites
- Male: No pollen basket on hind leg; 7 tergites; some with bulgy eyes
- Cuckoo: No pollen basket on hind leg, instead with dense, long hair

Male Identification:
Visit BumbleBeeAtlas.org
for alternative guides.

2. Examine the **hair color and pattern** on the following sections:

- Head:
 - Front of the face
 - Top of the head
- Thorax:
 - Front of (A), between (B), and behind (C) the wings
 - Side of thorax/under the wings
 - Is there a circle or stripe between the wings (B)?
 - Is there a black notch or "v" behind the wings (C)?
- Abdomen:
 - What color is T1? T2? T3? ...T6?
 - Does the color cover the entire tergite or is there a pattern to (i.e. crescent shape or gap in the center)?



3. Examine the cheek length; is it long or short?
4. Make sure your photos show the features in the above checklist.

Symbol and Term Descriptions:

Uncommon: Species occurs infrequently or in low abundance.

Species of Conservation Concern: Evidence-supported rare or declining species that are in need of conservation. These species are prioritized when planning conservation efforts.

Occurrence Maps: Includes records dating from 1900-2021 that were in the Bumble bees of North America occurrence records database as of October 2021 (Richardson, L.L.). Maps subject to change as we learn more.

Tergite: A tergite is an abdominal segment. 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." Hair color of T1-T6 helps determine the species.

Look-alikes!

- **American vs Black-and-Gold Bumble Bee:** American has black hairs on top of the head, Black-and-Gold has yellow. T1 of American is often times ½ black and ½ yellow, Black-and-Gold is all yellow.

Photos need to include: Top of head and T1

- **American (Male) vs Yellow Bumble Bee (Male):** American has mixed hair colors (yellow and black) behind the wings and on the sides of the thorax, while the Yellow bumble bee has yellow hair in these areas. Often, T7 of American will have orange coloration.

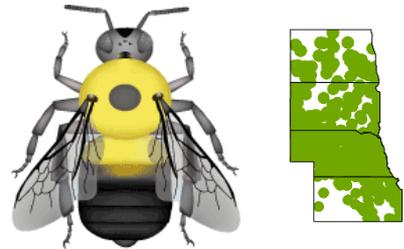
Photos need to include: Thorax (top and side) and T6/T7

Bumble bee illustrations: Paul Williams (identification and color patterns), Elaine Evans, Rich Hatfield (bee body design).

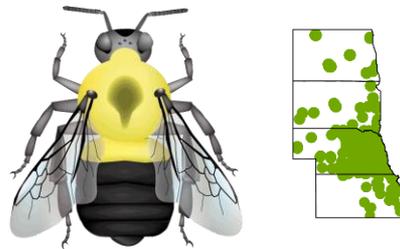
Identification Guide to Female Bumble Bees of Kansas

This guide separates bees into two sections based on the color of the first tergite: (1) T1 is yellow or (2) T1 is black. See reverse side for instructions on how to use this tool and how to photo document identifying features for the Atlas.

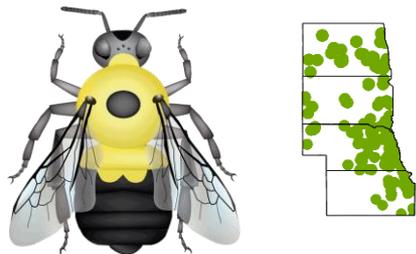
If first abdominal segment (T1) is yellow:



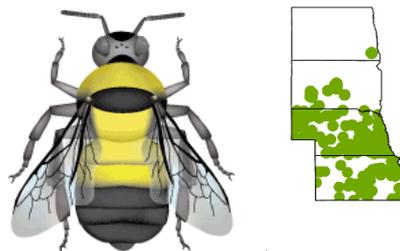
Bombus griseocollis
Brown-belted Bumble Bee
T2 color is crescent-shaped



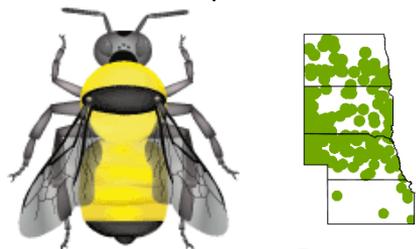
Bombus impatiens
Common Eastern Bumble Bee
Thorax with teardrop shape



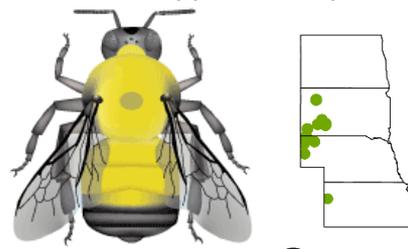
Bombus bimaculatus
Two-spotted Bumble Bee
Yellow "W" shape on T2



Bombus fraternus ♦
Southern Plains Bumble Bee
T1/T2 hairs appressed/lay flat



Bombus fervidus Ⓞ Ⓢ
Yellow Bumble Bee
Black hairs on top of head
Males very similar to *B. pensylvanicus*

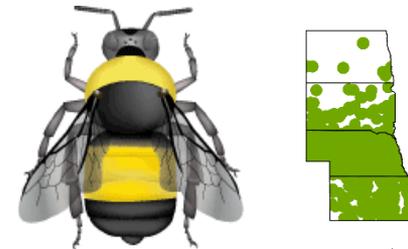


Bombus morrisoni Ⓢ
Morrison's Bumble Bee
Top of thorax all yellow

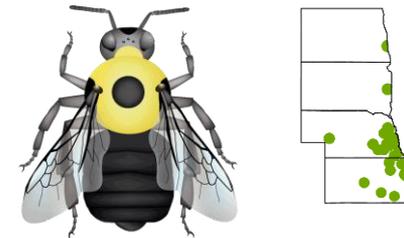
If first abdominal segment (T1) is black:



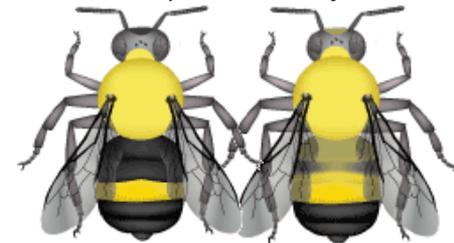
Bombus auricomus Ⓞ
Black and Gold Bumble Bee
Yellow hairs on top of head
Very similar to *B. pensylvanicus*



Bombus pensylvanicus Ⓞ ♦
American Bumble Bee
T1 often ½ black, ½ yellow
Males very similar to *B. fervidus*



Bombus variabilis ♦
Variable Cuckoo Bumble Bee
Very short hair



Bombus citrinus Ⓢ
Lemon Cuckoo Bumble Bee
All yellow thorax

Key

- Ⓢ Uncommon
- ♦ Species of Conservation Concern
- Ⓞ See reverse side for look-alike species
-  Occurrence records for species (2021)