

Nebraska Bumble Bee Identification Guide (Females)

This guide separates bees into three sections based on the color of the first tergite: (1) T1 is yellow, (2) T1 is yellow AND the body has orange coloration, or (3) T1 is black. See reverse side for an ID checklist.

Key (See reverse side for descriptions)



Common T = Tergite



Species range
in Nebraska

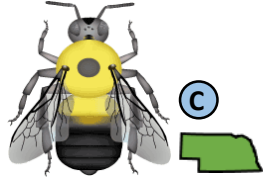


Species of Greatest Conservation Need

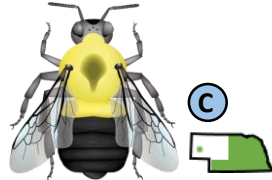
If first abdominal segment is yellow:

With orange coloration:

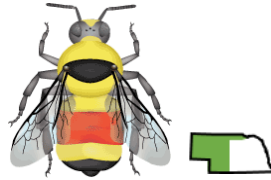
If first abdominal segment is black:



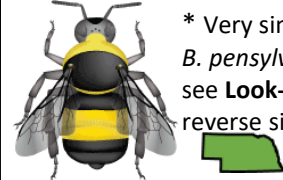
Bombus griseocollis
Brown-belted Bumble Bee
T2 color is crescent-shaped



Bombus impatiens
Common Eastern Bumble Bee
Thorax w/ teardrop shape



Bombus huntii
Hunt's Bumble Bee
T1+T4 orange, T2-3 yellow



* Very similar to *B. pensylvanicus*, see **Look-alikes** on reverse side.



Bombus auricomus
Black and Gold Bumble Bee
Yellow hairs on top of head



* Males very similar to *B. fervidus*, see **Look-alikes** on reverse side.



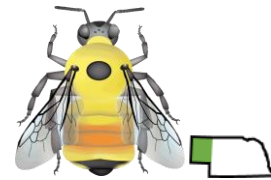
Bombus pensylvanicus
American Bumble Bee
T1 often 1/2 black, 1/2 yellow



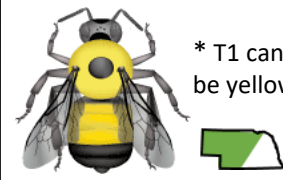
Bombus bimaculatus
Two-spotted Bumble Bee
Yellow "W" shape on T2



Bombus vagans
Half Black Bumble Bee
Spot on thorax is black/yellow



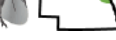
Bombus rufocinctus
Red-belted Bumble Bee
Color extremely variable



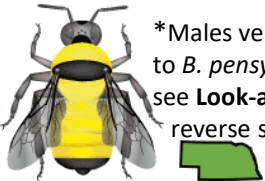
* T1 can also be yellow



Bombus nevadensis
Nevada Bumble Bee
Large; Mainly central/west NE



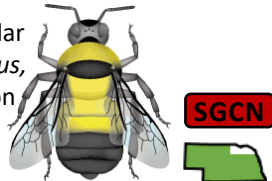
Bombus citrinus
Lemon Cuckoo Bumble Bee
Very northeastern corner of NE



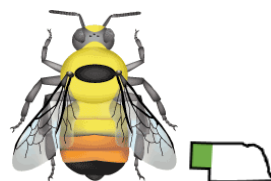
* Males very similar to *B. pensylvanicus*, see **Look-alikes** on reverse side.



Bombus fervidus
Yellow Bumble Bee
Black hairs on top of head



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



Bombus centralis
Central Bumble Bee
T1-2 yellow, T3 orange



Bombus insularis
Indiscriminate Cuckoo Bumble Bee
Montane species; Uncommon here



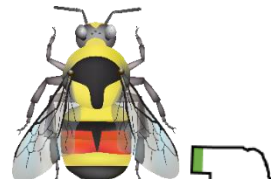
Bombus occidentalis
Western Bumble Bee
T6 white



Bombus morrisoni
Morrison's Bumble Bee
All yellow thorax



Bombus appositus
White-shouldered Bumble Bee
White/pale hairs on shoulders



Bombus bifarius
Two Form Bumble Bee
Hair short and even



Bombus suckleyi
Suckley's Cuckoo Bumble Bee
Uncommon in NE

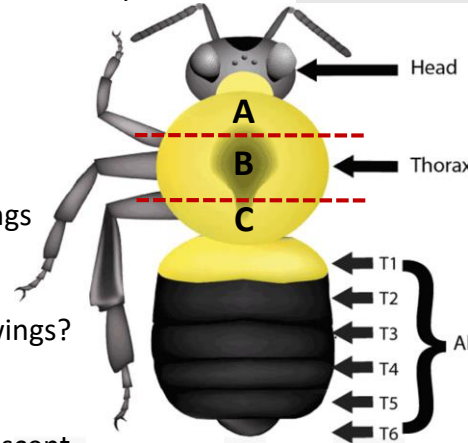
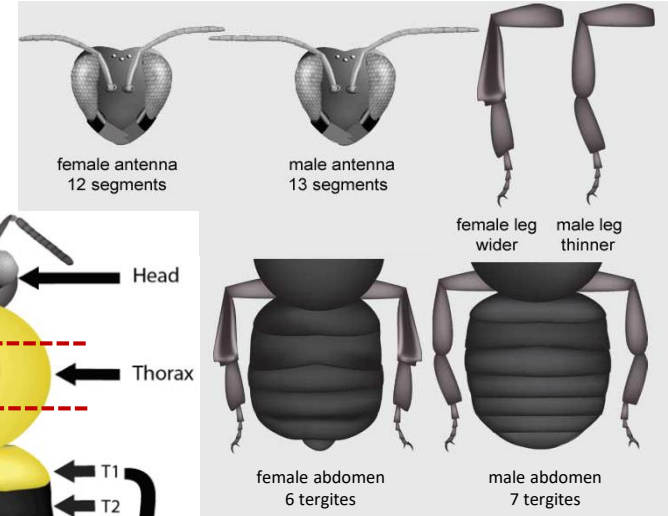


Bombus variabilis
Variable Cuckoo Bumble Bee
Very short hair; Uncommon

Steps for Identifying a Bumble Bee:

- 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
- Examine the **hair color** on the following sections and record if it is black, yellow, mixed (black and yellow), orange, or white:
 - 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?
 - Is there a central black notch in the behind the wings?
 - Abdomen:
 - What color is T1? T2? T3? ...T6?
 - Does the color cover the entire tergite or is it crescent-shaped? Is there a gap of color in the middle or on the edges of one or more tergites?
- Make sure your photos show the features in the above checklist.

NEBRASKA BUMBLE BEE ATLAS



Male Identification:
Visit the Atlas website
(NebraskaBumbleBeeAtlas.org)
for alternative guides.

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 Black-and-Gold is all yellow, whereas American is often times ½ black and ½ 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, Yellow bumble bee does not. Often, T7 of American will have orange coloration.
Photos need to include: Thorax and T6/T7

Key Term Descriptions:

Common: A species that is common and abundant throughout its range.

Tergite: A tergite is an abdominal segment. Females have 6 tergites, males have 7. The tergite nearest the thorax is called Tergite 1 or “T1” and the terminal segment is called Tergite 6 or “T6.” The hair color of each tergite helps determine the species ID.

Species of Greatest Conservation Need (SGCN): An SGCN is an evidence-supported rare or declining species that is in need of conservation. The Nebraska Game and Parks Commission prioritizes these species when planning conservation efforts.

Bumble bee illustrations on front and back: Paul Williams (identification and color patterns); Elaine Evans, Rich Hatfield (bee body design)