

Guide to Minnesota Bumble Bees: Females



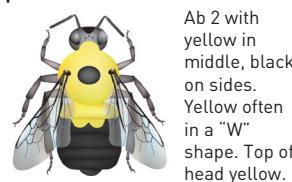
UNIVERSITY OF MINNESOTA EXTENSION

This guide is only for females (12 antennal segments, 6 abdominal segments, most have pollen baskets, no beards on their mandibles). Color patterns can vary. Bumble bees are depicted in relative size. Ab = abdominal segment

E Endangered: at risk of extinction **U** Uncommon: few records in MN **C** Common **D** Declining: populations dropping
Population status from IUCN and MN records as of 2022

Many yellow hairs between wings, 1st abdominal band yellow (may have black spot in center of thorax)

1. Black on sides of Ab 2, yellow or rusty in center



Bombus bimaculatus
two-spotted bumble bee

C



Bombus griseocollis
brown-belted bumble bee

C

2. All other Ab black



Bombus impatiens
common eastern bumble bee

C

3. Ab 2 brown center surrounded by yellow



Bombus affinis
rusty patched b b

E

4. No obvious spot



Bombus perplexus
confusing bumble bee

U

5. Ab 1-3 yellow on thorax

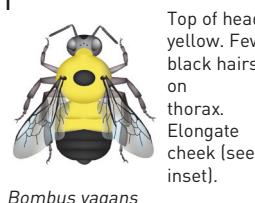


Bombus nevadensis
Nevada bumble bee

U

Many yellow hairs between wings contd.

6. Ab 2 entirely yellow and ab 3-6 black



Bombus vagans
half-black bumble bee

C



Bombus sandersoni
Sanderson's bumble bee

C

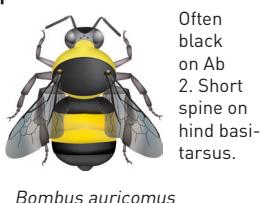


Bombus affinis
rusty patched bumble bee

E

Rear of thorax predominantly black. Hairy abdomen.

1. Large size, long face



Bombus auricomus
black and gold bumble bee

U

2. Small size, round face



Bombus pensylvanicus
American bumble bee

D



Bombus terricola
yellowbanded b b

D

Black stripe between wings. Few if any yellow hairs at wing base.

1. Yellow on Ab 1-4



Bombus fervidus
yellow bumble bee

C



Bombus borealis
boreal bumble bee

C

2. Orange/red on all of Ab 2-3



Bombus ternarius
tricolored bumble bee

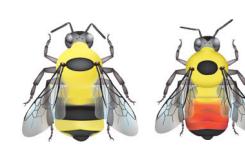
C

3. Ab 1 & front edge of Ab 2 yellow. Ab 3 red or black. Ab 4-5 red, black, or yellow.

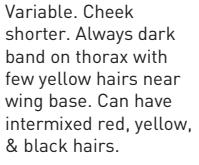


Bombus huntii
Hunt's bumble bee

U



Bombus rufocinctus
red-belted bumblebee



U

Black stripe between wings contd.

4. Orange/red on Ab 4-5



Bombus frigidus
frigid bumble bee

U

5. Yellow on Ab 1-2



Bombus fraternus
southern plains bumble bee

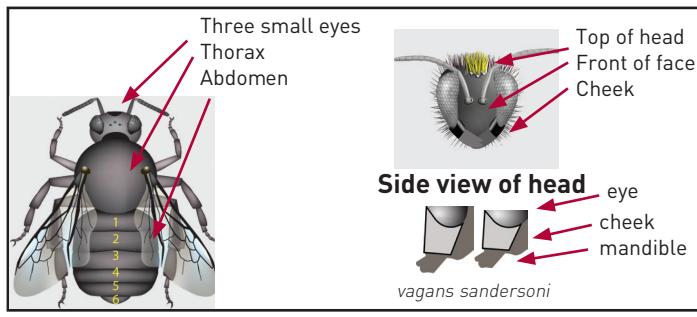
D **U**

6. Ab 1 yellow. Ab 2-3 red/black



Bombus melanopygus
black tail bumble bee

U



Much of abdomen lacking hair, no pollen baskets, wide head. Uncommon at flowers.

1. Black top of head



Bombus ashtoni
Ashton's cuckoo bumble bee

E

2. Yellow top of head and top of thorax yellow



Bombus citrinus
lemon cuckoo bumble bee

C

3. Yellow top of head and rear thorax black

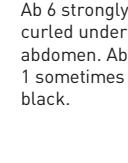


Bombus insularis
indiscriminate cuckoo bumble bee

E



Bombus flavidus
Golden cuckoo bumble bee



U

Guide to Minnesota Bumble Bees: Males



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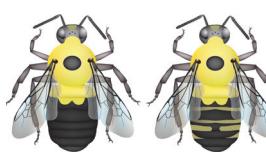
This guide is only for males (13 antennal segments, 7 abdominal segments, mostly seen in late season, no pollen baskets, beards on their mandibles). Color patterns can vary. Bumble bees are depicted in relative size.

Ab = Abdominal segment Ant = Antennal segment C Common E Endangered D Declining U Uncommon

Population status from IUCN and MN records as of 2022

3rd abdominal segment black AND thorax with some yellow near wing base

1. Black on sides of 2nd Ab, yellow or rusty in center



Bombus bimaculatus
two-spotted bumble bee

C

Ab 2 with yellow "W" shape in middle, black on sides. Eyes not large. Sometimes yellow intermixed with black on Ab.



Bombus griseocollis
brown-belted bumble bee

C

Ab 2 with yellow in middle, bordered by rusty brown in a swooping shape. Large eyes.

2. 2nd Ab black



Light lemon yellow hairs on top of head & thorax.

3. 2nd Ab brown centrally



Center spot on thorax with sometimes faint V shaped extension back from middle.

4. 2nd Ab entirely yellow and Ab 3-6 black



Bombus vagans
half-black bumble bee

Ant 3 is long. Black hair on thorax limited to central spot.



Bombus sandersoni
Sanderson's bumble bee

Ant 3 is short. Short hairs on back of Ant 2 & 3. Sometimes many black hairs on thorax.



Bombus fraternus
southern plains bumble bee

Large eyes.

U D

5. Sides of thorax brown. Wide head.



Bombus variabilis
variable cuckoo bumble bee

E

Abdominal segments 1-3 yellow, 4-7 with black or orange

1. Black spot in center of thorax



Bombus citrinus
lemon cuckoo bumble bee

Wide head. Thorax with black extension back from center.



Bombus auricomus
black and gold bumble bee

Large eyes. Ab 4-7 black. Hair on thorax varies, black in center or all yellow. Sometimes yellow on Ab 4.



Bombus nevadensis
Nevada bumble bee

U

2. No obvious spot on thorax



Variable color patterns.

Bombus perplexus
confusing bumble bee

Black stripe between wings. Few if any yellow hairs at wing base.

1. Ab 1-4 yellow



Bombus fervidus
yellow bumble bee

Black top & front of head. Sides of thorax yellow.



Bombus borealis
boreal bumble bee

Yellow top & front of head. Sides of thorax with brown.



Bombus pensylvanicus
American bumble bee

Ab 7 sometimes black

D



Bombus insularis
indiscriminate cuckoo b.b.

Ab 1-4 yellow. Wide head.



North MN

C



Far western MN

U



North MN

U



Bombus ternarius
tricolored bumble bee

C



Bombus huntii
Hunt's bumble bee

U



Bombus frigidus
frigid bumble bee

North MN

U

Black stripe between wings contd.

4. Ab 1 yellow. Ab 2-3 red/black

Bombus melanopygus
black tail bumble bee

U

Head length medium. Dark hairs mixed with light on front of thorax.

Bombus flavidus
Golden cuckoo bumble bee

Variable color. Sometimes more black on Ab, orange at tip. Wide head.

Bombus rufocinctus
red-belted bumble bee

Ab 1 & front edge of Ab 2 yellow. Ab 3 red/black. Ab 4-5 red, black, or yellow.

Rear half of thorax black

1. Ab 1 black

Bombus terricola
yellowbanded bumble bee

D

2. Ab 1 yellow

Bombus ashtoni
Ashtons cuckoo b.b.

Ab 1 yellow. Wide head. Side of thorax usually dark.

E

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