



BUMBLE BEE BRIGADE

Advanced ID: Cheeks, Hair, & Eyes



wiatri.net/inventory/bbb



Cheek Length

- Cheek length (also called face length, head length, or oculo-malar area) refers to how long the cheek is compared to the width of the cheek.
- Cheek length varies by species, but it can be difficult to determine without clear views of the face.
- Cheek length is most obvious in bees with very short or very long cheeks.

Short

affinis

griseocollis

rufocinctus

terricola

Long

auricomus

borealis

fervidus

pensylvanicus

vagans

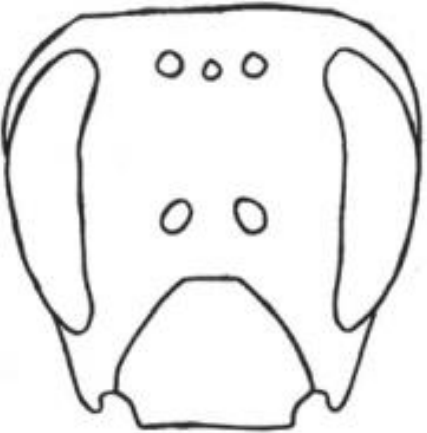
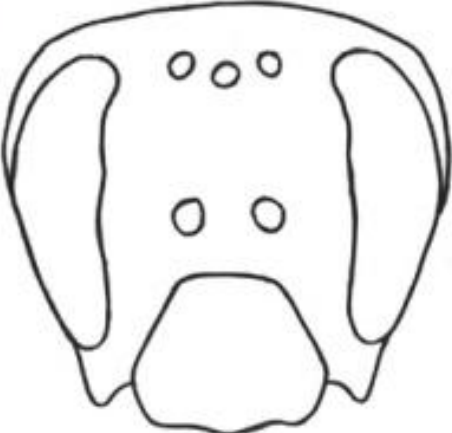
Cheek Length

Short Cheek

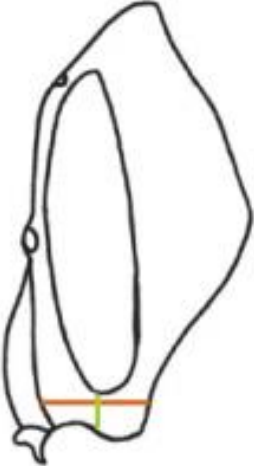
Medium Cheek

Long Cheek

Front View



Side View



Length



Width



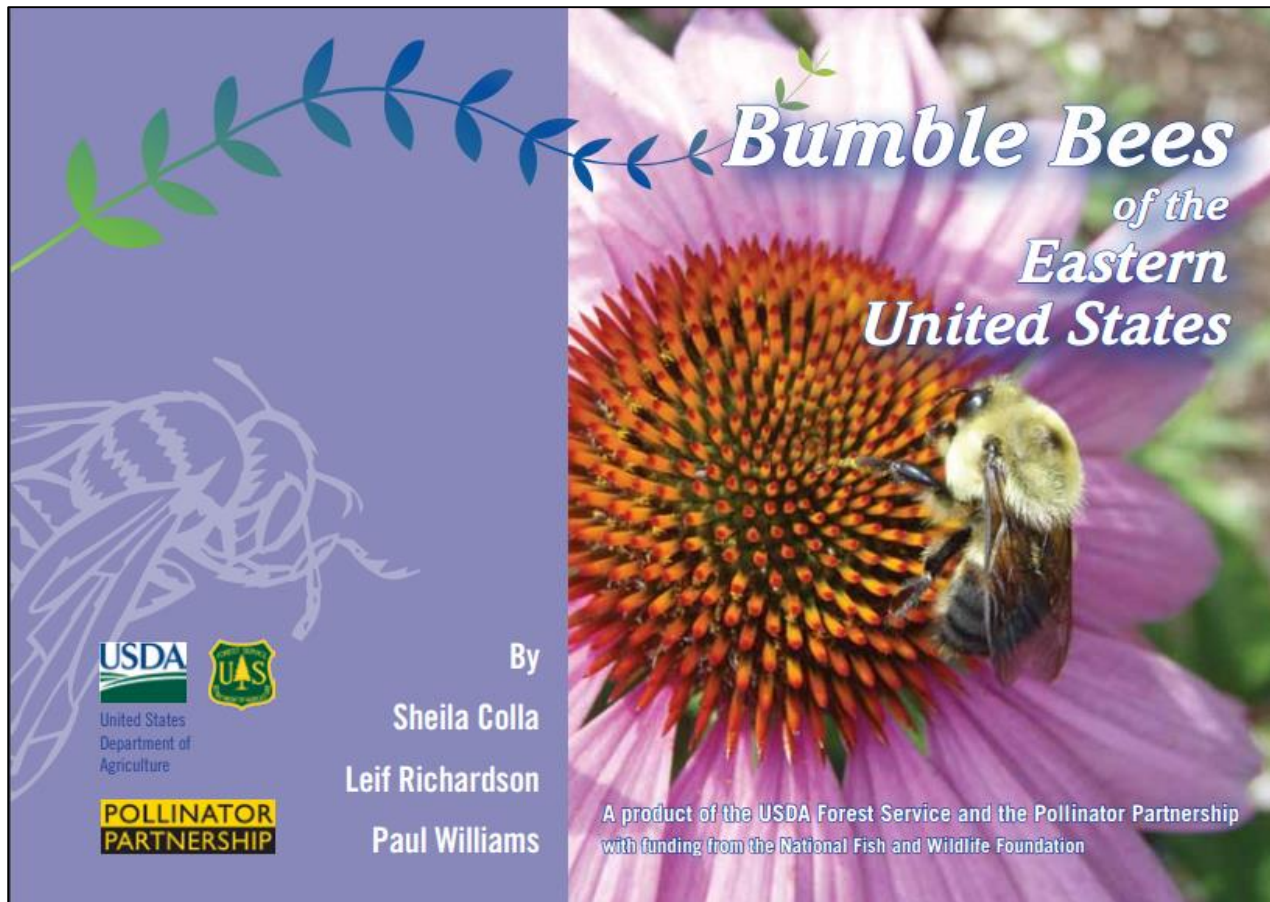
Length shorter than width

Length equal to width

Length longer than wide

Cheek Length

- [Bumble Bees of the Eastern United States](#) contains photographs showing the cheek length of many of Wisconsin's bee species.

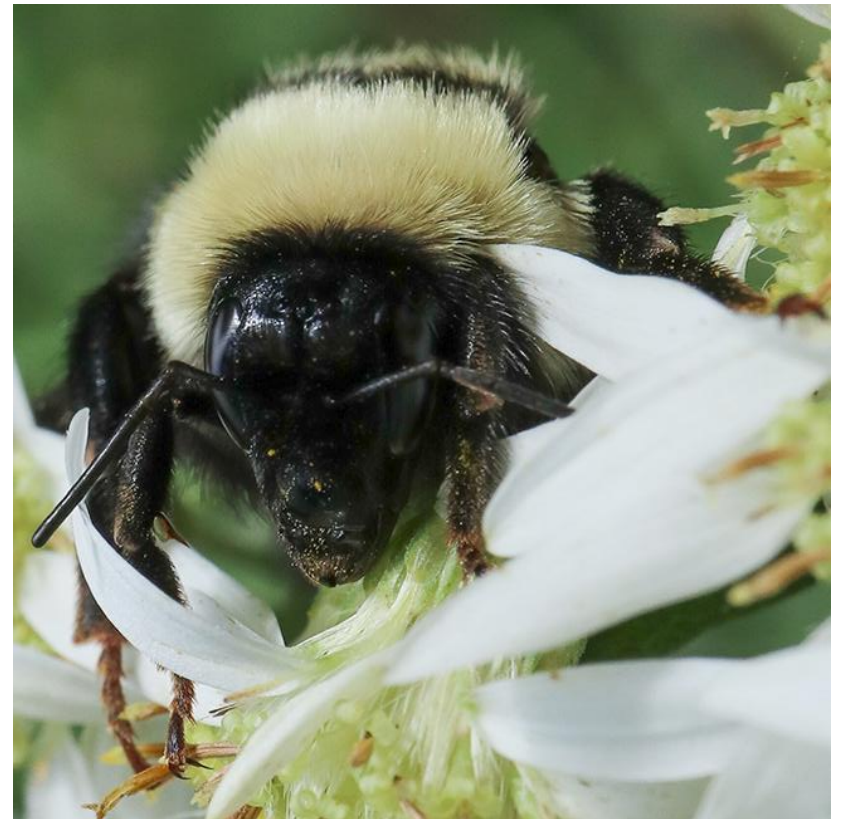


Cheek Length

Short Cheek (*rufocinctus*)



Long cheek (*fervidus*)



Cheek Length

Short Cheek (*terricola*)



Long Cheek (*fervidus*)



Cheek Length

Short Cheek (*rufocinctus*)



Long Cheek (*vagans*)



Hair Length

- Hair length can vary greatly by species and by sex.
- In many cases, males have longer hair than females.
- Like with cheek length, hair length is most obvious in bees with very short or very long hair.

Short

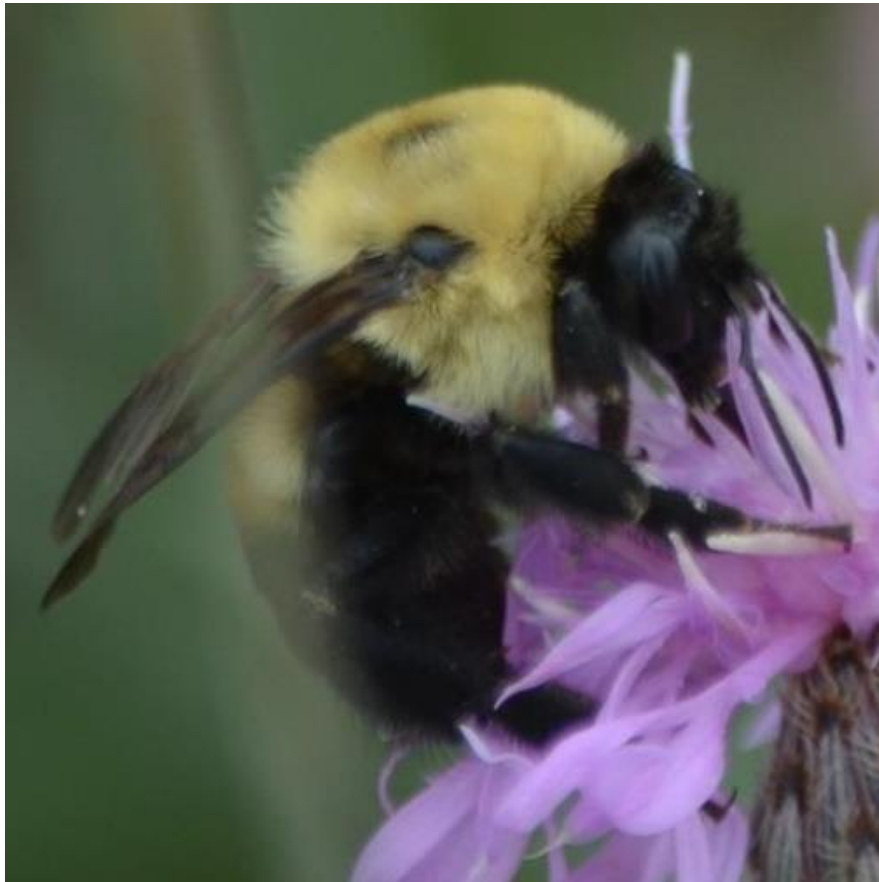
auricomus
griseocollis
pennsylvanicus

Long

perplexus
vagans

Hair Length

Short Hair (*griseocollis*)



Long Hair (*vagans*)



Hair Length

Short Hair (auricomus)



Long Hair (perplexus)



Eye Size

- The males of three species have enlarged eyes:
 - auricomus- greatly enlarged
 - griseocollis- greatly enlarged
 - rufocinctus- somewhat enlarged
- Auricomus and griseocollis male eyes appear clearly enlarged from almost any angle. Rufocinctus males must be viewed at the correct angle to note the enlargement.
- Sometimes the black of a bee's eye blends into the black of its face, making it difficult to tell how large the eye is. When using eye size in identification, be sure to only consider the eye itself.

Eye Size

Greatly enlarged
(auricomus male)



Normal sized (auricomus
female)



Eye Size

Greatly enlarged
(griseocollis male)



Normal sized (griseocollis
female)



Eye Size

Somewhat enlarged
(rufocinctus male)



Normal sized (rufocinctus
female)

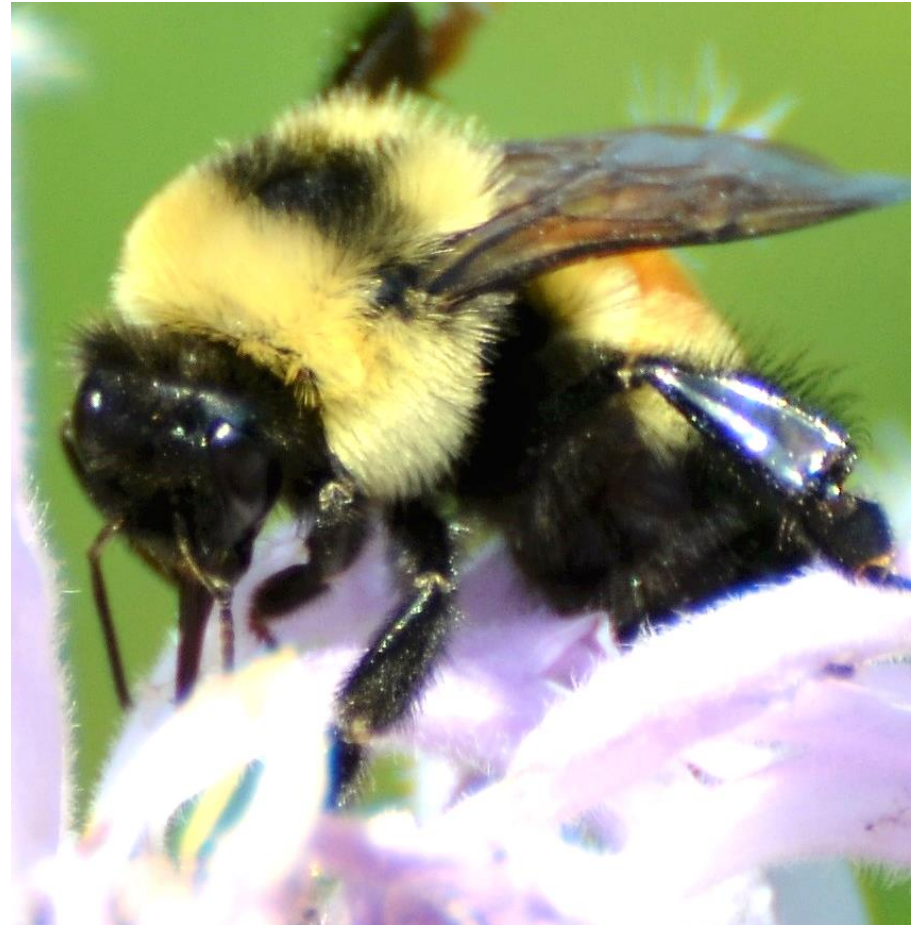


Eye Size

Somewhat enlarged
(rufocinctus male)



Normal sized (affinis female)



Tips

- Look at other people's photos. You can view all photos submitted to the Bumble Bee Brigade in the [Explore Data](#) section of the website. Search for observations of a specific species or species-sex combination to view examples of different cheek lengths, hair lengths, and eye sizes.
- Look for these characteristics in the field as well as in your photographs. Some can be tricky to see at a distance, but others (like greatly enlarged eyes) can be very apparent.