

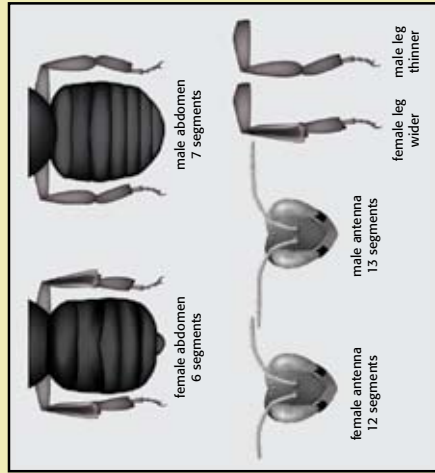


Photo by Ilona Loser

## POCKET GUIDE TO IDENTIFYING THE RUSTY PATCHED BUMBLE BEE BOMBUS AFFINIS

THE XERCES SOCIETY FOR INVERTEBRATE CONSERVATION

www.xerces.org/bumblebees



### IDENTIFYING BUMBLE BEES

Determine whether the bee is male or female. Females have 6 abdominal segments versus 7 in males. Females have 12 antennal segments versus 13 in males. Female hind legs are wider than male hind legs.

Females are found through spring, summer, and early fall. Workers and queens are both female. Males can be common in late summer and early fall. Females have pollen baskets (an indentation onto which they sometimes pack pollen) on their hind legs, and shorter antennae and abdomens. Males sometimes have larger eyes and longer hair.

### IDENTIFYING BOMBUS AFFINIS



Male

Worker

Workers and males have a distinctive rusty brown patch on the front half of their second abdominal segment. The hair on their heads is mostly black. On the thorax, black hairs extend from a central patch in the middle of the thorax out towards the wings and centrally in a narrow V towards the rear.



Queen

Queens are similar to workers except they are larger in size and do not have the rusty patch on the abdomen.

### OTHER COMMON BUMBLE BEES OF EASTERN NORTH AMERICA

There are around 20 bumble bee species present in eastern North America. Females of some of the most commonly found bees are pictured here. Some species pictured have varieties with different coloration.

For more identification information, visit [www.discoverlife.org](http://www.discoverlife.org) and [www.bugguide.net](http://www.bugguide.net)



*Bombus auricomus*

*Bombus pensylvanicus*

*Bombus fervidus*

*Bombus fraternus*



*Bombus rufocinctus*



*Bombus rufocinctus*



*Bombus terrarius*



*Bombus citrinus*  
(cuckoo bee)



Black-headed short-faced bee



Yellow-headed long-faced bee

*B. vagans* workers and *B. citrinus* males have yellow hair on the top of their heads while *B. affinis* have black hair on the top of their heads. In addition, *B. vagans* have a longer face than do *B. affinis*.

*B. affinis* and *B. vagans* females, and *B. citrinus* males have yellow hair covering most of the first two abdominal segments. However, *B. affinis* workers have a rusty patch on the second abdominal segment.

*Bombus vagans* worker *Bombus citrinus* male (cuckoo bee)



### SIMILAR BEES WITH YELLOW AT THE REAR OF THE SECOND ABDOMINAL SEGMENT



*Bombus griseocollis*



*Bombus bimaculatus*



*Bombus impatiens*

### SIMILAR BEES WITHOUT YELLOW AT THE REAR OF THE SECOND ABDOMINAL SEGMENT

### HISTORIC RANGE OF BOMBUS AFFINIS



Map based on Milliron 1971, *A Monograph of the Western Hemisphere Bumblebees*.

The rusty patched bumble bee was once common in the eastern United States and the upper Midwest. They can still occasionally be found in isolated patches, but *B. affinis* has disappeared from most of its former range in recent years. Your efforts to search for this bee will help document their current range. The Xerces Society and scientists studying declining bumble bees will use this information to promote conservation of remaining *B. affinis* populations.

If you find *Bombus affinis*, please contact [bumblebees@xerces.org](mailto:bumblebees@xerces.org). Visit [www.xerces.org/bumblebees](http://www.xerces.org/bumblebees) for more information.

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