DISTINGUISHING BLACK-BODIED RED-TAILS

Bumblebees with entirely black bodies except for red tails, and no yellow bands.

Queens/gynes (large, robust, antennae relatively short)





Bombus lapidarius queen

Bombus rupestris female



Bombus ruderarius queen

Lapidarius queens are large and rather rectangular in top view with a dense, deep-black and velvety hair pile, a crimson-red tail and clear wings. Ruderarius queens are smaller, rounder and fluffier-looking with an orange-red tail and also have clear wings. They have a much longer face than lapidarius. Rupestris females are large and slim with a body surface that shines through the black hairs, a larger box-shaped head, dark wings and an orange-red tail. Only the first two species have pollen baskets because rupestris is a cuckoo bee that does not collect pollen (see below). Rupestris females fly with a deep hornet-like buzz.



Hind legs of *Bombus lapidarius* (left), *B. ruderarius* (centre) and *B. rupestris* (right). *Bombus lapidarius* has a pollen basket fringed with black hairs; *B. ruderarius* has a pollen basket fringed with orange-red hairs; *B. rupestris* has unmodified hind tibiae with short black hairs and lacks a shiny pollen basket.

Workers (resemble small queens, antennae also relatively short)







Bombus ruderarius worker



Bombus lapidarius old, sunbleached worker

Workers of *lapidarius* and *ruderarius* are much more difficult to separate than queens, having a similar size and furriness. In a glass tube you should be able to check the colour of the pollen basket hair fringe (black in *lapidarius*, orange-red in *ruderarius*) and the length of the face (much longer in *ruderarius*). Tail colour is unreliable because it fades in both species as they become older and more sun-bleached, and the tail can become yellowish or cream-coloured in the oldest individuals (which will also have tattered wing edges as a clue to their age).

Males (larger than workers with much longer antennae, never carry a pollen load)



Bombus ruderarius male



Bombus rupestris male

Bombus ruderarius and rupestris are the only bumblebee species that produce black males with a red tail, and it is only a proportion of their males that look like this as the majority have pale collars and pale abdominal bands. These two look very similar in the field but rupestris averages larger and has a more prominent, box-shaped head with smaller and more widely separated eyes. The genitalia are very different (see Field Guide). Both species have orange hairs on the hind tibiae and this often results in male rupestris being recorded as ruderarius.