

# Shrill carder bee

*Bombus sylvarum*



## Description

The characteristic high-pitched (shrill) buzz of this bee species is a useful diagnostic tool for identification. This rare species of bee is only known from a handful of sites in south Wales and southern England, and are threatened mainly due to a loss of flower-rich grasslands.

These bees are straw-coloured with a dull reddish-orange tail, a black band between the wings, and black stripes on the abdomen. They are one of the smallest bumblebees in Britain, queens are around 17mm long, whereas the workers and males are much smaller (c. 12mm).

Nests are usually made in thick tussocky grassland vegetation near the ground. Shrill carder bees emerge late in the season, queens don't appear until May, and worker bees are seen from mid-June to September. Males and daughter queens emerge late July to September. The new queens mate, then hibernate and then emerge the following May to start the cycle again.

## What they eat

The shrill carder bee is a long-tongued bumblebee and has a strong association with long tubular flowers. They eat nectar and pollen taken from plants such as bird's foot trefoil, red clover, hedge woundwort, black horehound and red bartsia.

## Where and when to see them

- Shrill carder bees can be seen between May and September.
- These bees favour species rich grassland, grazing marshland, coastal dunes, and brownfield sites.
- Use your ears, and listen out for their high-pitched buzz.

## Legal status

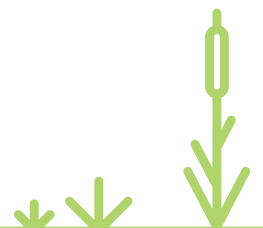
The shrill carder bee is listed as a Priority Species on the UK Biodiversity Action Plan (UKBAP), and is included under Section 7 of the Environment (Wales) Act 2016 as a Species of Principle Importance in Wales.

## Field signs to look for

Listen out for the loud high-pitched buzz. The queens tend to produce a higher pitch than the workers and males.

## Similar species

The colouring and high-pitched buzz mark it out from other bumblebees. The table below shows how it compares to some other carder bees.



<b>Shrill carder bee</b> ( <i>Bombus sylvarum</i> )	<b>Common carder bee</b> ( <i>Bombus pascuorum</i> )	<b>Brown-banded carder bee</b> ( <i>Bombus humilis</i> )
Small, 0.9-1.3cm length.	Medium, 1.0-1.3cm length.	Medium 1.0-1.3cm length.
Greyish-green with a dark area between the wing bases and black stripes across the abdomen.	Brighter ginger/chestnut colour. A dark area in the middle of the thorax but it does not run between the wing bases.	Ginger coloured with a brown band along the base of the abdomen. No black hairs on abdomen, but there are some black hairs above the wing bases.
Tails are a dull orange colour.	No clearly delineated tail.	No clearly delineated tail.
Make a high-pitched buzz, and the queens fly very quickly.	No high-pitched buzz.	No high-pitched buzz.
Queens come out of hibernation in May.	In the south, queens come out of hibernation in late March. In the north, it is delayed until May.	Queens come out of hibernation in May
Needs open flower-rich habitats e.g. coastal grazing marsh. species rich grassland, vegetated shingle and brownfield sites.	A wide variety of habitats used. It is also common in gardens and urban environments.	Many habitats used, but prefers open, drier, warmer sites e.g. coastal heathland & flood defences, vegetated shingle & brownfield sites
Rare and localised to Gwent, Glamorgan, Pembrokeshire, Somerset, & Thames corridor.	Widespread & common.	Scarce. Intermittent populations along south and west coasts of England & Wales.

## Did you know?

The shrill carder bee is named for its high-pitched buzz.

## Other Surveys

BeeWalk Survey Scheme: <http://www.beewalk.org.uk/>

## Links

Bees, Wasps & Ants Recording Society (BWARS): <http://www.bwars.com/bee/apidae/bombus-sylvarum>

Bumblebee Conservation Trust: <https://www.bumblebeeconservation.org/>

Buglife: <https://www.buglife.org.uk/bugs-and-habitats/shrill-carder-bee>

The Wildlife Trusts: <https://www.wildlifetrusts.org/wildlife-explorer/invertebrates/bees-wasps-and-ants/shrill-carder-bee>

Back from the Brink: <https://naturebftb.co.uk/the-projects/shrill-carder-bee/>

