



## Species in the Biodiversity Action Plan (UKBAP)

Seven bumblebees have Biodiversity Action Plans. All are long-tongued bumblebees specialising in deep-nectary flowers.

**Shrill carder bumblebee, *Bombus sylvarum*.** Has undergone a rapid decline and is now largely confined to only 5 remaining meta-populations.

**Brown-banded carder bee, *Bombus humilis*.** Now it is mainly coastal in south-west England and south Wales. It also occurs on Salisbury Plain and the Thames Gateway. Elsewhere, current populations are few and scarcely viable.

**Great yellow bumblebee, *Bombus distinguendus*.** Now largely confined to the Hebridean islands, the north coast of Scotland and Orkney.

**Large garden bumblebee, *Bombus ruderatus*.** Has become one of the rarest and most endangered bumblebees, with very few sites left.

**Short-haired bumblebee, *Bombus subterraneus*.** Last recorded in 1989, it is now believed to be extinct in Britain.

**Moss carder bumblebee, *Bombus muscorum*.** Now more common in Scotland and Ireland where it has been restricted to the linear grassland habitats close to sea walls and flood defences.

**Red shanked carder bumblebee, *Bombus ruderarius*.** Has possibly been confused with the superficially similar *Bombus lapidarius*, thus its true distribution remains uncertain. Population has suffered a sharp decline.

## Bumblebees

**Bumblebees are vital for pollinating our wildflowers and crops such as apples and raspberries. Unfortunately these popular and hard-working insects are in decline and urgent action is required to save them.**

Bumblebees have undergone a rapid decline in their range and population. There are 25 species native to the UK, but three are now extinct and six species have declined by at least 80% in recent years. This is largely due to changes in our countryside, such as loss of habitat and intensive agricultural farming.

In other places, such as the south east, local populations of the rarer bumblebees are being threatened by the loss of valuable flower-rich "brownfield" sites for housing and retail development.

### Everyone loves bumblebees

Bumblebees are one of the most charming and attractive groups of insect in Britain. Their fluffy appearance and gentle, bumbling flight is a common feature of our summer gardens and wildflower meadows. Bumblebees also have a crucial role to play in pollinating many of our flowers and agricultural crops, such as raspberries and broad beans; and unlike other insect pollinators, they can be seen foraging out earlier and later in the day collecting nectar and pollen to feed their brood.





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## Bumblebees in decline

Despite their popular appeal, bumblebees have undergone a rapid decline in their range and population – at least nine species are of conservation concern, and one, the Short-haired bumblebee (*Bombus subterraneus*), has not been seen since 1989 and is presumed extinct.

The reasons for the decline have been attributed to the loss of habitat from intensive agricultural farming, collateral pesticide damage, and insensitive development. The latter is especially true in the Thames Gateway area (London, south Essex and north Kent), where the construction of tens of thousands of new homes on brownfield sites is threatening to destroy large areas of flower-rich sites upon which bumblebees and other invertebrates depend.

This could in time lead to further extinctions of British bumblebees. But all is not lost. Gardens, parks and brownfield sites continue to provide important habitats for bumblebees, especially if they are managed specifically for wildlife.

## Bumblebees in the UK

Bees are part of the very large insect Order, the Hymenoptera, which also include wasps, sawflies and parasitic wasps. There are 267 species of bee in Britain, which, apart from the bumblebees, are mostly solitary, lacking workers.

Bumblebees belong to the family Apidae, named after the Latin for a bee, *Apis*.

All our bumblebees are in the genus *Bombus*, which is derived from the Latin word *Bombus*, meaning 'booming'. Until recently the cuckoo species were put in their own genus *Psithyrus*, but this is now reduced to a subgenus.

The 25 bumblebees found in Britain comprise of:

- 6 cuckoo species
- 5 carder species
- 14 underground nesting species

Though our fauna is small, 10 subgenera are represented, so details of life style are varied.

Eleven species contain a total of 24 subspecies occurring in Britain and Ireland. The carder bees have the greatest number, with 6 subspecies of Moss carder bee (*Bombus muscorum*) alone. These subspecies are recognisable as geographically restricted variants in colour patterns of body hairs. The Outer Hebrides, Orkney and Shetland in particular are noteworthy for subspecies.

Three species are now extinct (all underground nesters):

- **Apple bumblebee** (*Bombus pomorum*), only known at Deal, Kent, and last seen in 1864.
- **Cullem's bumblebee** (*Bombus cullumanus*), formerly with scattered records in the southern part of Britain, was last recorded in 1941.
- **Short-haired bumblebee** (*Bombus subterraneus*) distribution contracted to Dungeness, Kent, where last seen in 1989. Subsequent intensive searches have drawn a blank.

One species is a recent addition:

**Tree bumblebee** (*Bombus hypnorum*), has been found in the Southampton area and Hertfordshire in very recent years, with some flourishing nests. It is brown with a white tail so very distinctive and can confidently be regarded as a new colonist in Britain.