



The brown-banded carder bee *Bombus humilis* is pale yellow in colouration with a faint band of slightly darker hair on the abdomen. It nests on the surface of the ground at the base of long vegetation, or occasionally underground in redundant small mammal burrows. It has most often been recorded in areas of grassland supporting a large number of plant species with long corolla flower types, notably those belonging to the plant families *Lamiaceae* (mint and deadnettle family) and *Fabaceae* (pea family).

It is one of a number of bumblebee species showing a drastic reduction in range and abundance, as a result of the loss of this habitat in the modern agricultural landscape. However, it appears to be able to survive in less extensive areas of flower-rich habitat when compared with other bumblebee species.

It was previously a widespread species, found as far north as Yorkshire and Lancashire. However, by the 1970s it had disappeared from most of its northern and inland localities. The species has continued to decline in the eastern half of England, where it is now local and sporadic. It is still readily found along the South-West coast of England and on the South coast of Wales.

#### Threats

- Loss of extensive, species rich grasslands through agricultural intensification
- Habitat degradation and fragmentation
- Neonicotinoid pesticides and use of herbicide
- Lack of knowledge of habitat requirements
- Disease transfer and competition from non-native forms of *Bombus* used for pollination in greenhouses
- Transmission of diseases from honeybees to wild bees
- Persecution of wild bees
- Lack of nesting sites
- Limited breeding success

#### Current Action

- Agri-environment schemes including sowing of wildflower seed mixes
- Management of some SSSI (NE)
- Bumblebee Conservation Trust (advice and monitoring)
- National Pollinator Initiative
- HWT Pollinator Initiative

|   | Objective  | Action |
|---|--|--------|
| A | Monitoring existing populations and locating further populations                         | 4      |
| B | Maintain viable populations  | 2      |
| C | Increase suitable forage and nesting habitat   | 1,2,3  |
| D | Protect known colonies through targeting funding and protection through planning process | 2      |

|   | Actions  | Target |
|---|--|--------|
| 1 | Increase the awareness of the rapid decline of wild bees   | Annual |
| 2 | Work with Herefordshire Council to ensure habitat remains in favourable condition                  | Annual |
| 3 | Produce advice for the public and land owners through creation of a pollinator education programme | 2020   |
| 4 | Locate colonies through public surveys (BeeWalk)   | 2020   |

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|--------------|---------------------------------------|
| Lead Partner | DEFRA                                 |
| Key Partners | HE, Bumblebee Conservation Trust, HWT |