

Grouped plan for Bumblebees

*Large garden bumblebee *Bombus ruderatus* and
brown-banded carder bumblebee *B. humilis**

This Species Action Plan sets out to maintain and improve populations of bumblebees on Caravan Club-owned sites, and has been drafted for Club Site Teams and Site Wardens. It provides background information on bumblebees and makes recommendations on sympathetic habitat management for these species.

Introduction

Many UK bumblebee species have suffered massive declines in the last century; three are already extinct. If this continues, we risk losing these beautiful insects, and the plants which need bumblebees for pollination. The large garden and brown-banded carder bumblebees are particularly under threat, but their conservation will also protect many other bumblebee species.

The Caravan Club audit revealed that 99 Club sites may potentially support these species

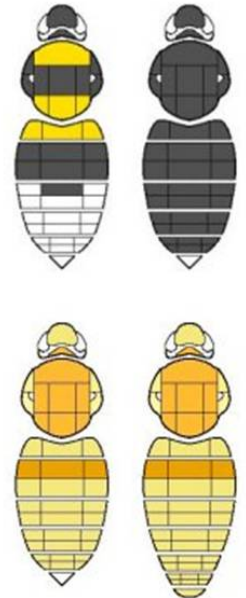
How to recognise these species

Large garden bumblebee (top)

- Banded with familiar yellow and black stripes
- Size variable, but bigger than most other bumblebees
- Different colour forms occur; all-black varieties may be found, others have orange body fur or a white end to the abdomen
- Prefer grassland sites with diverse wildflowers. Often found at the coast

Brown-banded carder bumblebee (bottom)

- Lighter in colour than most bumblebees, with an orange-brown body and paler abdomen
- Has an obvious dark brown band at the front of the abdomen
- The common carder bumblebee looks similar but has a chestnut-coloured body
- Often found near brown-field sites



Credit: Natural History Museum

Current status

- The large garden bumblebee has declined by 95% since 1960 and is on the verge of extinction in the UK. The species is also declining across Europe
- The brown-banded carder bumblebee has declined by 50% since 1950, and is now found mainly in the south-west
- Factors causing loss or decline:
 - Loss of habitat through redevelopment and agricultural intensification: e.g. excessive use of fertilizers and pesticides allow grass and nettles to out-compete wild flowers; loss of hedgerows and ditch banks in which queen bumblebees build nests
 - Misguided fear of bumblebees from gardeners, who destroy nests to remove bees
 - Habitat fragmentation, which isolates bumblebee populations

Ecology/management requirements

Habitat: large areas of grassland with diverse wildflower communities. Nests are built underground or at the surface, especially around undisturbed hedges and grassy banks. Queens hibernate underground, and found new colonies in the spring.

Food: Adult bumblebees feed on nectar, and collect pollen for their larvae. Flowers from the mint and pea family (e.g. red clover, bird's foot trefoil, kidney vetch, white dead-nettle and viper's bugloss) are favoured nectar sources.

How to look after these species

	Site safeguard and management	Species management and protection
DO'S	<p>DO <u>Maintain and extend bumblebee habitat</u> on Club sites that currently contain bumblebees. The most important habitat is grassland containing varied native wildflowers, which includes many different (or long-flowering) types of native plant species</p> <p>DO <u>Ensure that flowers are available</u> for bees to feed on during spring, summer and autumn by encouraging the growth of diverse types of wildflowers. Suitable seed mixtures (e.g. Cotswold Grass Seed's Pollen & Nectar Flower Legume Margin Mixture) are available online</p> <p>DO <u>Maintain large areas of bumblebee feeding habitat.</u> Where possible, these should cover at least 1 ha (100 x 100 m) and should be well connected with other foraging areas, e.g. hedge lines, streams or tree belts</p>	<p>DO <u>Avoid using fertilizers, herbicides and pesticides</u> at Club sites</p> <p>DO <u>Replace any lost bumblebee habitat</u> with suitable habitat (grassland with diverse native wildflowers) close by, for use by resident populations, and / or re-colonising bumblebees</p> <p>DO <u>Set up and carry out a single, hour-long, bi-monthly, bumblebee survey</u> at sites where the bees (or suitable habitat) are present, regularly throughout the spring, summer and autumn, so that changes in their numbers or distribution can be documented</p> <p>DO <u>Report any records</u> of these bumblebees to the Bee, Wasp and Ant Recording Society, (BWARS: http://www.bwars.com), and the Local Biological Recording Centre (http://www.nbn-nfbr.org.uk/nfbr.php)</p>
DON'TS	<p>DON'T <u>Use fertilizers, herbicides and pesticides</u> at Club sites suitable for bumblebees</p>	<p>DON'T <u>Mow suitable habitat (grassland with wildflowers) too often.</u> Cut each area only once (late in summer) and cut areas in rotation (i.e. not at the same time)</p>

For further information on these species visit:

The Caravan Club Biodiversity Action Plan (BAP) for bumblebees: <http://www.caravanclub.co.uk>

Online key: http://www.nhm.ac.uk/research-curation/projects/bombus/key_colour_british/alphabetic_list.html