

Shrill Carder Bee *Bombus sylvarum*

Species Action Plan



One of the rarest and most threatened bumblebees in England and Wales. It has undergone a major decline in the second half of the 20th Century and is now found in only five isolated population areas, with the Gwent Levels a stronghold. The shrill carder bee is a late-emerging and long-tongued species which favours foraging plants of the pea, mint, broomrape and daisy families. It is associated with open, often tall grassland sites with a varied sward structure and a high density of diverse forage sources. Little is known of nesting and hibernation sites, but ensuring these are provided in close proximity to abundant forage is thought to be key.

Status

- Species of Principal Importance Section 7 Environment (Wales) Act 2016
- Priority Species UK Biodiversity Action Plan (2007)
- ✤ Nationally Notable B review by Falk (1991)

Threats

- ♦ Inbreeding and loss of genetic diversity \rightarrow increased risk of local extinction
- Loss and fragmentation of flower-rich mosaic habitats drivers: inappropriate or lack of management; development pressures
- Climate change and extreme weather events such as flooding and drought
- Other interrelated threats may include: an inability for bees to disperse and track with climatic shifts; phenological shifts caused by climate change impacting foraging; pesticides; pathogens; and possible competition and disease risk from commercial bee populations.

Current Action

- Natur am Byth (2023-2027)
- Pollinating the Levels (Living Levels, 2018-2022)
- SSSI management across the Gwent Levels
- Bumblebee Conservation Trust advice, monitoring and 'Conservation Strategy for Shrill Carder Bee in England and Wales 2020-2030'
- DEFRA National Pollinator Strategy (2021-2024)
- Wye Valley AONB A Priority Species for their Action Plans

	Objectives	Action
A	No net loss of occupied area for existing populations	1,2,3,5
В	Populations increasing in occupied area, abundance and viability	1,2,3,5
С	Habitats increased in size, quality, resilience and connectivity	2,3,5
D	Knowledge and understanding of the species increased, leading to appreciation, sense of responsibility and action	1-5

	Key Actions	Target
1	Establish annual surveys on GWT reserves; signpost volunteers towards public surveys (specific Shrill Carder Bee survey protocols) to monitor existing colonies	2025
2	Produce/distribute advice booklet and work with key stakeholders to ensure appropriate habitat management	2026
3	Undertake survey and mapping to identify populations, key areas and opportunities to build connectivity	2027
4	Increase awareness through media and publishing platforms, talks, events, training	2030
5	Respond to potentially damaging developments through the planning process; campaign for better site protections	2030

Lead: Gwent Wildlife Trust

Key partners: TBC