# Community Science Bumblebee Transect Survey Guide



This guide provides information about how to conduct the Bumblebee Transect Survey in moorlands. If you're new to the survey, visit our website for information about why we're doing it and how you can get involved.

www.moorsforthefuture.org.uk/community-science

Moors for the Future Partnership, The Moorland Centre, Edale, Derbyshire S33 7ZA

#### Where and when to survey

Surveys are done along fixed routes (transects), all or some of which can be surveyed monthly between March and October each year. They should ideally be surveyed between 11am and 5pm when the weather is warm and/or sunny with little wind and no rain. We will regularly update our website with recommendations of which transects you could survey.

#### Take with you

- A map of the transect you intend to walk (available from our website). This shows the habitat sections the transect is divided into for recording.
- A recording form (available from our website).
- A camera, if available, to take photographs to verify your sightings.
- You may also find a pair of binoculars useful to get close up views of bumblebees.

# Conducting the survey

- Please fill in the information at the top of the recording form. When, where and who is important.
- Walk the transect at a slow and steady pace, only recording bumblebees in the area 4m ahead of you, 2m to each side and up to 2m above the ground. Ignore any outside this area.
- When walking on wide paths, keep to the side so that your search area includes vegetation.
- As you walk, keep a tally of the number of each of the three target species you see, plus the total number of other species. If you are not confident in identifying the target species at first, just record the total number you have seen. This is still valuable data.
- Make sure you record sightings in the correct section of the transect (see map or guide for details).
- Do not linger in areas where you think you might see more bumblebees this is cheating!
- If you are in a group, have two spotters at the front. Others walking behind can fill in the recording form and identify bumblebees that have been seen.
- When you reach the end, record the finish time of your survey at the top of the form.

Remember to submit your results through our website or by post as soon as possible.

# Health and Safety

Before setting out, ensure ALL members of your group:

- Have read and understood the Risk Assessment on our website www.moorsforthefuture.org.uk/bumblebee-surveys
- Have checked the weather forecast and dressed appropriately. Always wear sturdy boots.
- Have let someone know where you are going and what time you expect to return.
- Know what to do in an emergency and that at least one of you has a fully charged mobile phone and a small first aid kit.

# Bilberry bumblebee

A cold-loving species of uplands which is expected to decline in the Peak District in response to climate change.

- Queens (16 mm long), males (14 mm) and workers (12 mm) all have the same colouring
- Over half of the base of the abdomen is red and there are two lemon yellow bands on the thorax
- Worker shown in illustration



#### Tree bumblebee

First seen in the UK in 2000, it is rapidly expanding its distribution northwards. Expected to increase in abundance and distribution in the Peak District.

- Queens (18 mm long), males (16 mm) and workers (14 mm) all have the same colouring
- Black head, thorax tawny to dark brown and white tip to black abdomen
- Worker shown in illustration



# Red-tailed bumblebee

A widespread and common species also expanding northwards. Less common in the uplands but this may alter with climate change.

- Queens (20-22 mm long) and workers (11-16 mm long) all black with an orange-red tail
- Males (14-16 mm long) also have yellow facial hairs and yellow bands on the thorax
- Worker shown in illustration



LOTTERY FUNDED

Illustrations © Chris Shielo

Thank you for your involvement in the Moors for the Future Partnership's Community Science Project, an important initiative to collect long-term data to help us understand how moorlands and the species they support are responding to climate change. For information about other surveys you can get involved in visit www.moorsforthefuture.org.uk/community-science



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