



Task 1: Create a sketch of the area you will be surveying. Try to include all of the main features in the landscape. This should include any natural features (trees, hedges, grass, ponds etc) and also any man-made features (buildings, paths, walls, fences etc).

Do not worry – field sketches are not meant to be a work of art or to take the place of a photograph. Add labels to your key features to help other people understand your sketch.

Task 2: Use the **UKHab habitat classification** (on page 2) to identify the types of habitats in your sketch. Choose the descriptions that best match your survey area and add the codes to your sketch. (e.g. If your sketch includes a hedge, add the code 'h' to indicate 'Heathland and shrub'.)

Draw your sketch of the area here:

Code key

g Grassland

w Woodland & forest

h Heathland & shrub

c Cropland

u Urban

s Sparsley vegetated land

r Rivers & lakes

UKHab habitat classifications

Code	Habitat	Definition	Includes	Does not include
g	Grassland	Land with more than 75% cover of green, non-woody plants, such as grasses.	Playing fields, pastures (farm land with grazing animals)	Woody plants such as trees, shrubs and hedgerows.
w	Woodland & forest	Land with more than 25% cover of tall trees.	Natural woodland, plantations, trees in parks etc	Hedgerows, small trees under 5m tall.
h	Heathland & shrub	Land with more than 25% cover of shrubs, small trees or any woody species below 5m tall.	Hedgerows of any height, heather moors.	Trees above 5m tall.
c	Cropland	Land used to grow crops or flower for commercial purposes.	Farmland with crops, recently ploughed fields, orchards.	Farmland with crops, recently ploughed fields, orchards.
u	Urban	Land that has been built on or altered by people.	Buildings, roads, industrial areas, gardens, parks, allotments.	Farmland, woodland, playing fields.
s	Sparsley vegetated land	Land with very few or no plants.	Rocky areas, cliffs, coastal habitats (beaches, dunes, shingle, mud)	Man-made surfaces such as tarmac or gravel.
r	Rivers & lakes	Freshwater (not salt water) on the land's surface.	Rivers, streams, ponds, lakes and canals.	Waterlogged land such as bogs and marshes.

Task 3: Complete a vegetation survey by collecting data from your site, using the equipment provided. Record the data onto the data collection form, page 4.

Equipment required:



Quadrat



Ruler



Pen/pencil



Data collection form

Where to place your quadrat

Choose up to 10 random locations within your survey area to place your quadrat and carry out your data collection. Try to spread your locations across the site.

Grass / not grass



Grass: Has narrow, flat leaves with straight edges that end in a point.

Not grass (wildflower plants): These usually have broader leaves of various shapes and sizes. Anything that is not narrow and flat, with straight edges, is probably not grass.



Speedwell

Sheep's sorrel



Dandelion

Clover



Quick test: Can you find the areas in this image that are not grass? Put a circle around any leaves you think are wildflower plants.



Feature	Points			Quadrat scores										
	0	1	2	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Subtotal
Height of tallest vegetation	Less than 3cm	3–6cm	Over 6cm											
Vegetation structure	Whole area is roughly the same height	1 or 2 distinctly different heights measured in area	3 or more different heights measured in area											
% area covered with wildflower plants	Less than 5%	5–20%	More than 20%											
Number of different colours of flowers	0	1 or 2	3 or more											

What does your habitat score mean? (Circle the one below that matches your score.)

0–2

There are lots of small changes you could do to make this space bumblebee friendly!

3–6

Your space is already bumblebee friendly, but some small changes could make it **even better!**

7–8

Wow! Your site is already fantastic for bumblebees. Keep up the good work!

Total quadrat score	
No. of quadrats surveyed	
Total quadrat score / No. of quadrats	

Habitat score

How to collect data and use the data collection form

Height of tallest vegetation: Locate the tallest piece of vegetation within your quadrat, regardless of whether it is grass or any other type of plant. Use your ruler to measure its height. Use the points boundaries on the data collection form to award a quadrat score of 0, 1 or 2.

Vegetation structure: Take a close look at the height of the vegetation, across the whole area of the quadrat. It may help to get closer to ground level. Does the height of the vegetation stay roughly the same across the whole of the quadrat, or does it rise and fall? You can use your ruler to check the height of the vegetation in different parts of the quadrat, if you are unsure. Use the points boundaries on the data collection form to award a quadrat score of 0, 1 or 2.

% area covered with wildflower plants: Firstly, take a close look at the shape of the vegetation in your quadrat. You need to identify what is grass and what is not grass. Use the 'grass / not grass' resource to help you with this. Imagine all of the areas of 'not grass' grouped together, would they take up less than 5% of your quadrat, between 5% and 20% or more than 20% of the whole quadrat? Use the points boundaries on the data collection form to award a quadrat score of 0, 1 or 2.

Number of different colours of flowers: Look for any flowers within your quadrat. Flowers come in all sorts of shapes and sizes, so look out for anything that is obviously not the leaf or stem of a plant. Count how many different colours of flowers you find. It is possible that there will be no flowers in your quadrat, so this would be recorded as 0 colours. Use the points boundaries on the data collection form to award a quadrat score of 0, 1 or 2.

Getting your habitat score and what it means

Total quadrat score: Add up all of your quadrat scores from each row to get your subtotals. Then add all of the subtotals for each row together to get your total quadrat score.

No. of quadrats surveyed: This is the number of different locations you collected data from. This will vary depending on how much time you had, up to a maximum of 10 (i.e. Q1–Q10).

Total quadrat score / no. of quadrats: Divide the total quadrat score by the number of locations you collected data from. This will give you the average habitat score for your site.

What does your habitat score mean?

0–2: There are lots of small changes you could make to make this space bumblebee friendly!

3–6: Your space is already bumblebee friendly but some small changes could make it even better!

7–8: Wow! Your site is already fantastic for bumblebees. Keep up the good work!

