

### What has been happening?

We are delighted with the response to the survey this year and thank you to all the schools who have contacted us for materials. Last year a few people reported trouble uploading expedition results onto our virtual meadow. We have looked at this and hopefully remedied any technical issues that some of you may have experienced. However, if you do have any difficulties then please email your results directly to us at [wildaboutplants@plantlife.org.uk](mailto:wildaboutplants@plantlife.org.uk) and we will upload them for you.

### IDENTIFYING WILD FLOWERS

There are over 2300 wildflower species (types of wildflowers) in the UK and many look similar. So just how do we tell wildflowers apart. Dominic Price, a botanist at Plantlife tells us his top tips:

- \* Check the colour and shape of the flower and count how many petals it has.
- \* Look at the leaves. What is their shape and size? What are the leaf edges like and are there any hairs?
- \* Look at the stem. What shape is it? Are there hairs. How are the leaves arranged around the stem?
- \* What habitat is the plant growing in - a woodland, field, near a stream or on a mountain? Wild plants that are growing in woods are unlikely to be found growing in fields or on beaches so looking at the habitat is really important.



## CAN YOU SPOT THE FAMILY TRAITS?

Some of our Bee Scene flowers are related to each other and belong to the same family. This means that they share certain characteristics. Of the four plants below, two are on our Bee Scene plant list.. All four plants are common and in the same family– *Lamiaceae*. Despite the name, **dead-nettles** are not in the same family as stinging nettle which is a relief! **Ash is setting you a challenge!** When you go out on your Bee Scene expedition this year we think you will see at least one of these wild plants. Can you complete the table below by circling the correct observations. Answers will be available on our Bee Scene web page from late May onwards.



Can you complete my challenge?



## CHARACTERISTICS OF THE LAMIACAE

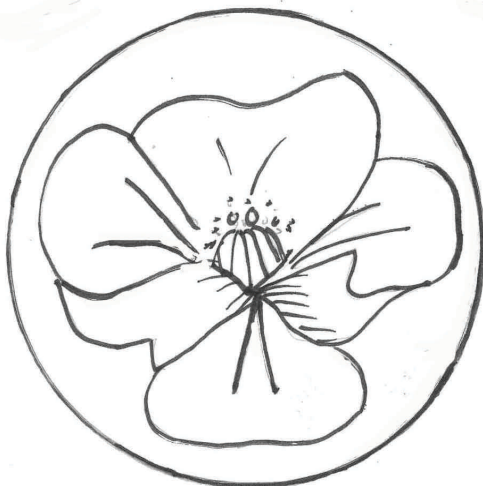
Stem	Square	Circular	Triangular
Leaf position on stem	Spiralling around the stem	Opposite each other	All on one side of the leaf
Leaf shape	Heart shaped with smooth edge	Long and thin	Heart shaped with serrated edges
Hairs	No hairs at all	Hairs on leaf only	Lots of small hairs
Flower shape	Open with five distinct petals	Tube shaped	Like a daisy

## MAKE A SET OF BEE RINGS

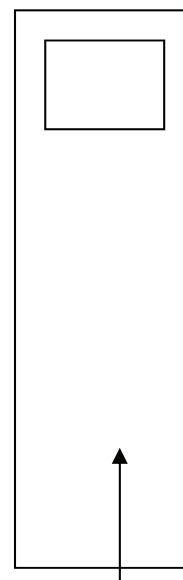
**Daisy says 'Why not try making a bee ring set?'**

Last year the Wild About Plants team worked with Oxford Botanic Gardens to run a Bee Scene week for schools local to the Oxford area. Kate Castleden at Oxford Botanic gardens developed this fun activity which illustrates how different types of bumblebees prefer different shaped flowers.

Remember long tongued bees prefer cone or tubular flowers like foxglove, comfrey and clover and short-tongued bees prefer open flowers like brambles, dog-rose and meadow crane's bill. We have provided the templates here for your flower drawing (tube shaped = foxglove; open shape = meadow crane's-bill) and the long and short tongued bees. Once you have coloured your flower decide whether it is visited by a long or short tongued bee and select the correct bee. Then you can make your matching rings, a flower for a finger on one hand to be visited by the correct bumblebee ring worn on the other hand.



Use strips of paper with sticky tape to make a ring to fit your finger then stick your bee on one finger and matching flower on the other!



Put double sided sticky tape on one end then secure your circle to it!

## FUN AND GAMES

Last year the Countryside Survey ([www.countrysidesurvey.org.uk](http://www.countrysidesurvey.org.uk)) discovered that bumblebee populations were continuing to decline. This is because of a number of reasons.

Organisations like Plantlife and the Bumblebee Conservation Trust are trying to support bumblebee populations through planting wildflowers and restoring meadows and grasslands which traditionally had lots of wildflowers in. We have provided a game below which is fun and will help pupils understand why shrinking habitats and a loss of wildflowers are affecting bumblebees.

## SHRINKING HABITATS

**Setting up the game** - Lay out enough small mats on the ground that everyone in the class can huddle on one e.g. 6 mats with space for 4-5 pupils to huddle on. Explain that the mats represent wildflower meadows (land) and that the pupils are all bumblebees. If you cannot get to a wildflower meadow you cannot collect pollen and nectar (bumblebee food) which means that you cannot survive. Pupils must decide whether to add or take away a mat at each stage.

**Stage 1** Everyone must run around (no hanging out besides the mats) until you blow the whistle. When you blow the whistle everyone must go and stand on a mat- *make sure all your busy bumblebees can stand on a mat.*

Then read out sentence 1 (below). Pupils must decide whether you need to take away a mat or add a mat. *You will need to take away a mat.*

**Stage 2** Then ask the pupils to run around again and blow the whistle. What has happened? The bumblebees that cannot stand on a mat must go and stand at the edge and are not involved in the next round.

Read out sentence 2. Pupils must decide whether you need to take away a mat or add a mat. *You will need to take away a mat.* Continue as before.

**Stage 3** Get the pupils running around again and then blow the whistle. What has happened? Send the bumblebees not standing on a mat to join the others and read out sentence 3. *Add a mat*

**Stage 4** Get the pupils running around again and then blow the whistle.

What has happened? Perhaps there has been some jostling to get on the mats or **competition**. When resources like food are scarce animals compete - different species of bumblebees will compete for food and some bumblebee species are more likely to die out. **Why not think of some other scenarios?**

**Sentence 1:** The population of the country is growing and more land must now be used to grow crops. What do pupils think this will mean for land available to grow wild flowers?

**Sentence 2:** More houses are needed for the growing population. What do the pupils think this will mean for land?

**Sentence 3:** A conservation charity buy some land and plant some wildflowers. Should you take away or add a mat?

### Discussion questions

- \* Ask pupils why bumblebee populations are declining?
- \* Is it the farmer's fault?
- \* How do they think we could help bumblebees?

