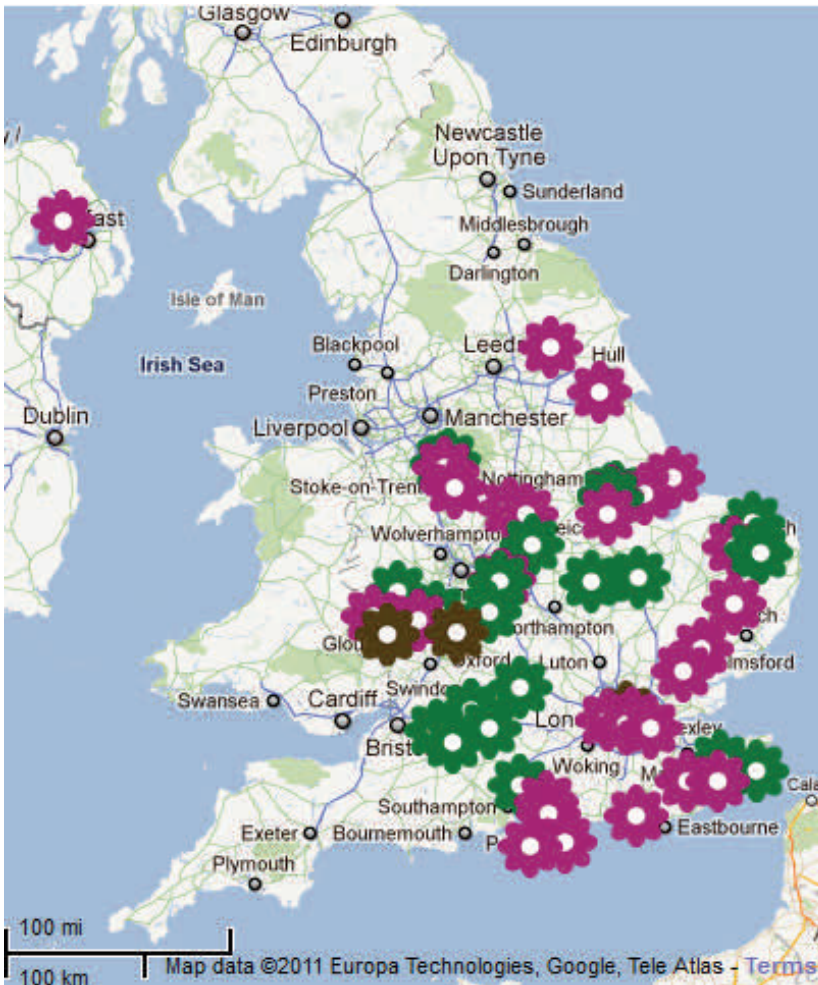


## BEE SCENE NEWSLETTER OCTOBER 2011

## RESULTS SPECIAL - Buzzy Bees do it again!



In 2011, 1300 children and 182 adults went on a Bee Scene expedition and uploaded their results onto the virtual meadow. Now that all the results are in, the meadow is looking beautiful and in full flower.

This year we not only asked you to look at which flowers were in your area and whether your area was good for bees, but we also asked you to look at the density of flowers – *i.e.* how many were in your area. Read on for the results.

See the map for yourself at [www.wildaboutplants.org.uk/beescene](http://www.wildaboutplants.org.uk/beescene).

## The results - what did we discover?

**59 expeditions** took place

**4 areas** were **not good** for bees

**24 areas** were **good** for bees

**31 areas** were **very good** for bees

## Flower density

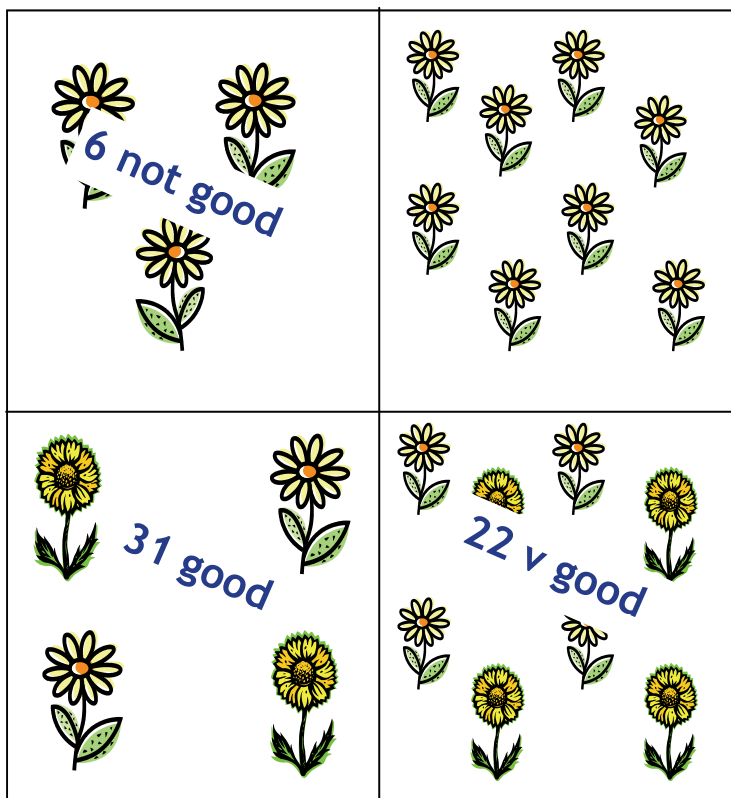
We asked you to decide which of the pictures to the right your survey area looked most like. The areas with a larger number of plants can support more bees than the areas with fewer flowers.

6 areas were not good for bees, 31 areas were found to be good for bees and 22 areas were very good for bees.

Results from the survey were very good as four of the six areas that had low density, and therefore were not good for bees, were the same areas that had few plant species.

You thought that most other areas were either good or very good with high numbers of flowers in your survey area.

Find out below what some schools have been doing to improve flower density in their school grounds.



## Pupils improving school grounds for wildlife

This year we really appreciated all the feedback that pupils and teachers gave us and were very interested to find out just how much pupils and teachers were doing to help wildlife in their school grounds. We also heard from some of you that through improving your school grounds by planting wild flowers and leaving areas of grass to get longer, you had noticed an increase in bumblebees in your school grounds between 2010 and 2011. Here's what two schools did to improve their school grounds:

### St Michael's Nursery and Infants School

“St Michael's Nursery & Infants School have had great fun again this year completing a survey recording how many different flowers they could find in the school environment. The children noticed the improvement with the addition of a vegetable garden created by the gardening club and the planting of flowers since last year's survey. The children were pleased with the results, on completion of a bee survey the children noticed the increase in bees especially on the flowers the bees are attracted to. The children have worked hard improving their environment by adding a bug hotel, making bee homes and planting a variety of saplings to develop our school grounds. We look forward to planting sunflowers and continuing to ensure our school grounds give us lots of opportunities to enjoy and learn.”

### St Alban's Primary School

“We spent an afternoon surveying our school grounds. We saw over 50 bees, mainly white tailed and red tailed bumbles. Although our grounds are good for bees, we have decided to plant some more clover. Also our Year 6 children designed and planted up a bee garden. This was shown at RHS Wisley and is now part of our minibeast area. Year 2 have really enjoyed looking at bees this summer, especially the pollen bags!”

We thought we would answer some of your common questions about creating wildflower areas. Read on for more information and for activity ideas.

## Creating a wildflower area - your questions answered

You may remember that in the report we sent out to you in October 2010 (<http://www.wildaboutplants.org.uk/wp-content/themes/plantlife/content/BeeSceneReport2010.pdf> ) we talked about fragmentation and wild flower corridors. This explained why creating wild life areas in your school grounds is not just good for your school grounds but also the wider world. You don't need to have a large space to create a wildflower area, but you will need an open, sunny space.

### Q - How do I know what wild flowers are native in my area and where can I get wildflower seeds from?

A - It is best to grow wild flowers that grow locally as they will grow happily and be suitable for local wildlife. Flora Locale ([www.floralocale.org](http://www.floralocale.org)) can help you with this; they list seed companies who state that they supply locally sourced seeds.

### Q - We have a grassy area in the school grounds, can we make it into a wild flower meadow?

A - Yes, it is possible to convert a lawn into a wildflower meadow. Cut the grass very short, remove all cuttings and scarify with a rake. Then either scatter seeds in the autumn on a calm day (you will only need one or two teaspoonfuls of seed per square metre) or plant out seedlings in the spring.

### Q - We have an area of bare ground. How can we make this into a wildflower area?

A - Wildflowers prefer nutrient poor soil and so it is best to remove 5cm of topsoil if possible and rake over until fine. Leave the soil to see what comes up from the existing seed bank and remove any 'weeds'. Sow wildflower seeds in late August.

### Q - How do I manage a wildflower area?

A - Wildflower areas require very little looking after. Mow the wildflower area in the late summer when the wildflowers have set seed and are past looking their best. Remove cuttings once the birds have finished with the seeds and mow again at the end of the winter. Leave the meadow to grow throughout the spring and summer months.

### Q - Where can I get more information from?

A - More advice is available from Plantlife at [www.plantlife.org.uk/things\\_to\\_do/grow\\_wild](http://www.plantlife.org.uk/things_to_do/grow_wild)

### MAKE A SEED BOMB (for planting seeds in hard to reach areas)

Remember - these are for use in gardens and school grounds only. Never sow seeds in the wild.

#### Ingredients

Wildflower seeds Soil Flour Water Mixing bowl

1. Mix water, soil and flour in a bowl until it forms a dough
2. Roll dough into small balls and then roll in wildflower seeds
3. Leave to dry overnight
4. Once dry, throw seed bombs in to hard to reach areas
5. Wait for it to rain and your seed bombs to crack open and seeds to grow!!!

Don't forget to think about the time of year you are making your seed bombs and which seeds will grow at that time of year.



# BEES IN URBAN (TOWNS OR CITY) ENVIRONMENTS

Plantlife



This year many of the schools taking part in our survey were based in towns and cities and many of them thought that their school grounds or local green space could actually be very good for bumblebees. This means that you found lots of different types of wild flowers in these areas which have different shapes and are different colours.

Earlier on in the summer there was a story in the news about the fact that our towns and cities could be better for pollinators such as bees and butterflies than the countryside! There are a number of reasons for this and we thought it would be interesting to look at one of these reasons in more detail and suggest some activities that you could do to explore this reason too.

## Towns and cities are warmer than the countryside—you investigate

Did you know that the temperature in towns and cities is often warmer than the temperature in the countryside? This is known as the **urban heat island effect**. Because towns and cities are warmer plants will flower earlier in the year and flowers will last later into the year. This means that bumblebees have a longer period of time in which to gather their pollen and nectar. You can investigate the urban heat island effect in your school grounds and community.

### EXPERIMENT 1

On a warm day in full sun use a thermometer to take the air temperature and ground temperature outside next to the south facing wall of your school building (note do not do this if the area is in the shade).

Now move to the school field and take the air temperature and ground temperature there.

- Where were temperature readings higher?
- What does this tell you?

### EXPERIMENT 2

On a cold day use a thermometer to take the air temperature and ground temperature outside next to the south facing wall of your school building.

Now move to the school field and take the air temperature and ground temperature there.

- Where were temperature readings higher?
- What does this tell you?

## EXPERIMENT 3

On a day when a cold night (below freezing) is predicted put a measured volume of water in a beaker (the beaker should be no more than two thirds full) and leave it outside your school building on the ground next to a south facing wall.

Fill another beaker with the same volume of water and leave it in the middle of your school field. The next day, first thing in the morning, collect both beakers and see which one has the most ice in.

- Which beaker had the most ice in?
- What does this tell you?



## EXPERIMENT 4

Take two pieces of card approximately 10 cm by 10 cm. One should be **black** and one should be white or covered in aluminium foil. The black card represents the buildings in towns and cities and the other piece of card represents the open countryside. Place both pieces of card (you will need to weigh them down) in a sunny place in your school grounds and leave them in full sun for an hour. Then come back and measure the temperature of the card.

- Which piece of card was warmer?
- Why do you think this is?

**Note - this experiment will not work on a breezy day. Do you know why this is?**

## EXPERIMENT 5

In late spring / early summer fill two shallow pots with compost and sow some seeds (vegetables or flowers) as instructed on the packet on / in the compost. We recommend radish, lettuce or bean.

Now place one pot of seeds in full sun in a place that does not get shady next to your school buildings or on the concrete part of your playground and the other on your school field. Remember to keep watering your pots regularly and with the same amount of water for a **fair test**.

- In which pot did the seeds germinate first?
- Why do you think this is?

## Schools Bee Scene Winners 2011

The first school in each region to upload their Bee Scene survey results won a selection of books

East Midlands—Alconbury Home School  
South East—Challock Primary School  
East—West Earham Infant School  
Yorkshire and Humber—Tickton CE Primary  
London—Paddington Green Primary School  
South West—Corsham Primary  
West Midlands—Hindlip C of E First School  
North West—Bosley St Mary's School  
North East—no winner!

Sign up for the 2012 Bee Scene survey at  
[wildaboutplants.org.uk](http://wildaboutplants.org.uk)

