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## Urban Pollinators Project Update Newsletter Winter/Spring 2013

Hello, and welcome to the Urban Pollinators Project update newsletter! We're rapidly approaching the third and final field season, so now is the perfect time to update you on our progress. We have a brief update on the results of our first year's work, where we examined which habitats are most beneficial to pollinators at the landscape scale. In 2012 we undertook a city-wide study to find the 'best' and the 'worst' urban habitats for pollinators. This included a garden survey, which we will be repeating again this year (more information is on page 2). Finally, in 2013 we're moving our focus to investigate the benefits of planting urban flower meadows, and have a summary of what we're planning on page 3.

### Which habitats are best for pollinators?

In 2011 we investigated how insect pollinators in urban areas compare to those found in farmland (which makes up 70% of the UK land area) and nature reserves. We carried out pollinator and flower surveys in 12 towns and cities across the UK, making a total of 36 sites (12 towns and cities x 3 habitats each). It took four teams of fieldworkers six months to complete the surveys, in which time they collected over 10,000 insects!

We are currently in the process of preparing that data from these surveys for submission as an academic paper to a scientific journal, and we will provide a summary of the results as soon as the paper has been accepted for publication. Until then, watch this space if you are interested in finding out more!



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Sampling insects in urban habitats in Bristol



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Sampling insects at Earls Hall Muir Nature Reserve, Dundee

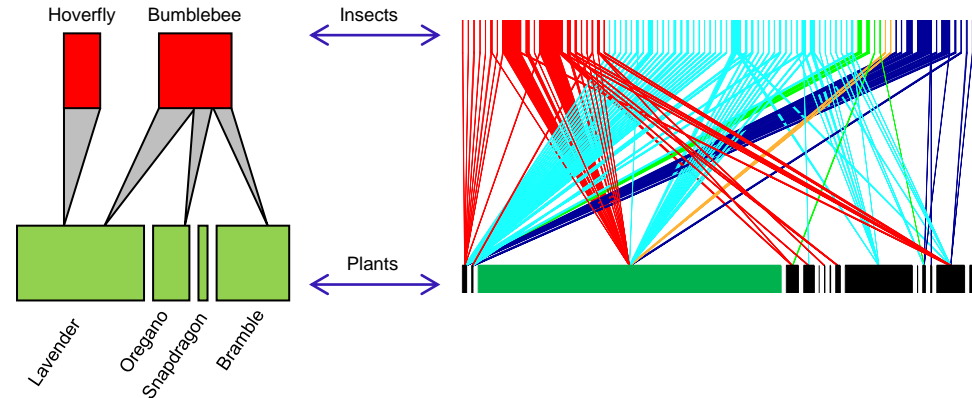


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Sampling insects on the Reading farm

## Garden Surveys

Despite the wettest summer for 100 years, we visited **400** gardens across the four project teams in 2012. In each garden we carried out a pollinator survey to see which insects were visiting the garden, and also which flowers they were feeding on. By collecting this information we are able to make complex food webs, known as 'visitation networks'. Here is an example:



The picture on the left is a simplified cartoon of a visitation network – like a food web, the insects are represented by the bars at the top (in red), and the plants are on the bottom row (in green). The grey triangles show which insects feed on which plants. The picture on the right is a real visitation network.

By studying these networks we can gain information about which plants are the most important to the insects visiting them, and also the relative importance of different pollinators for the plants. This information can then be used to develop recommendations that wildlife organisations and local councils can use to inform their conservation strategies and management plans.

**Thank you** to everyone who allowed us access to their garden in 2012, and for completing the garden management questionnaire!

### The Garden Surveys are back for 2013!

Due to the wet summer last year we are planning to revisit all the gardens we surveyed last year to boost our data sets and help our analyses. This will also allow us to gather important information about early emerging pollinators, such as bumblebees and solitary bees. This means that we will be resurveying gardens from April onwards – please look out for your local teams who will be contacting you to arrange a visit very soon!



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Collecting pollinators in a Leeds garden

We are still processing the data collected in 2012 and in future newsletters will be able tell you which plants are favoured by pollinators. However, after visiting 400 gardens we have a good feeling for the plants which pollinators like to visit. Here are a few examples:



## Urban Flower Meadows

In 2013, the final year of the project, we are working in partnership with local councils in Bristol, Leeds, Reading and Edinburgh to create 15 flower meadows in each location. We will use these to investigate the impact of increasing pollinator-friendly flowers on pollinator populations in urban areas. We are planting two different seed mixes, an annual mix and a perennial mix.

**Annual meadows:** Five annual meadows were planted in each urban area in 2012, using a mixture of native and non-native flowers. With colourful displays from June – September they proved very popular with both pollinators and local people. We will be re-sowing these five meadows in the same locations again in 2013, and also creating five new locations in each area.

**Perennial meadows:** Five native wildflower meadows were planted in each urban area in 2012. Since perennial meadows are slower to establish they may not have looked particularly attractive in the first year, but will be flowering from May onwards in 2013..

To find your local meadow please visit our website where we have links to all the meadow locations: [www.urbanpollinators.org](http://www.urbanpollinators.org)



It's important for scientists to communicate their research, and to help us keep people updated about the progress of the project we've embraced Twitter and created a project blog.

Each of our four field teams has a Twitter account so you can keep up with the progress of your local teams throughout the summer. Some are still tweeting over the winter!

Bristol team @BrisUrbPolls      Reading team @ReadingUrbPolls  
 Leeds team @LdsUrbPolls      Edinburgh team @EdinUrbPolls

Each team contributes to the blog throughout the summer, with posts about fieldwork, interesting finds or items of interest relating to pollinators. Over the winter the Reading team have been posting interesting articles on topics ranging from winter plants for pollinators to identifying animal footprints in the snow. Visit regularly to keep up-to-date: [www.urbanpollinators.blogspot.co.uk](http://www.urbanpollinators.blogspot.co.uk)

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The Urban Pollinators Project is funded jointly by a grant from BBSRC, Defra, NERC, the Scottish Government and the Wellcome Trust, under the Insect Pollinators Initiative

