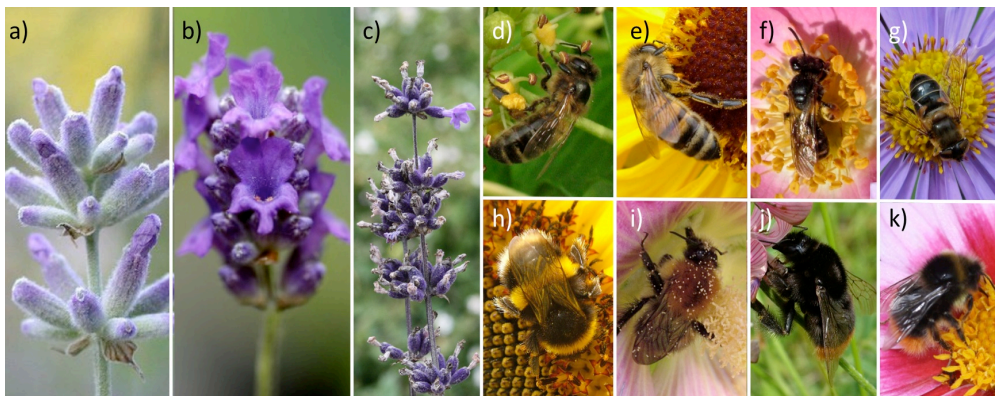


How to Determine Good Garden Plants for Bees

Parks and gardens can benefit wildlife. For example, garden flowers provide nectar for bees and butterflies. Nectar and pollen need not be from native British species to benefit British bees. But which garden plant varieties are good for bees? Although lists are available they are generally incomplete. Well-known plants good for bees, such as lavender, are generally included but many good varieties are omitted. This is understandable given the many thousands of varieties available. However, it is simple to determine good plants for flower-visiting insects. All you have to do is count them on flowers as they forage.



Lavender flowers a) in bud; b) full-bloom; c); end of bloom.

Insects on flowers d,e) honey bees; f) wild bee; g) bee mimic hover fly; h-k) bumble bees.

Select five or more varieties blooming nearby at the same time. If possible, include one variety that you already know is good for bees, such as lavender, marjoram or borage. It is also useful to study plants that you think will not be attractive to confirm this, and for comparison. Pelargoniums are generally little visited by insects. The plants may already be growing in your garden or a park. Try to use a patch not a single plant, so that you have a reasonable area of each variety, if possible 0.5m x 0.5m or more. Measure the patch areas.

With the help of the Information Sheet on "Learning About Bees & Flowers by Looking" and other materials, learn how to identify the following six main categories of flower-visiting insect: honey bees, bumble bees, other bees, hover flies, butterflies and moths, other insects. You can now count insects on each patch by taking "snapshots". That is, quickly count the number of insects on each patch when you arrive. Visit each patch making snapshots, and return to the first patch to make 5-10 snapshots in a single session. By leaving a few minutes between snapshots at the same patch you will not make the mistake of

counting the same insect twice while it sits on the same flower. Repeat 1-2 times per week across the whole flowering season, ideally from first to last bloom. Make snapshots during good weather so that the insects are active.

After each plant variety has been followed throughout its bloom, determine the total numbers of insects and the totals per category. Divide these by the area per variety in square metres. This will give you the numbers across the whole flowering period per square metre and will allow you to compare the different varieties even if the patches were different sizes. If you have more than one patch per variety, combine the numbers for both insects and area.

Now look over your results, and if it helps make a graph or table. The plant varieties will likely vary both in the total numbers of insects and their categories. For example, both lavender and borage attract bees, but lavender generally attracts more bumble bees than honey bees, borage the reverse. If you have included varieties known to be attractive or non-attractive, such as lavender and Pelargonium, compare these with the others to see where they lie.

If you don't have enough time to compare plants across the whole blooming period then try to compare plants in full bloom. You can even count insects on flowers in garden centres when choosing what to buy. Bee friendly plants do not cost more to buy and are no less attractive or difficult to grow. Watching and listening to bees foraging in your garden is an ideal way to relax!

Did You Know?

- * The total area of urban parks and gardens in Britain equals one whole county.
- * Bees are easy to attract to garden flowers—plant them and the bees will come.
- * Garden flowers that bloom in the summer are especially useful to the bees.
- * Don't worry—bees foraging in gardens are very unlikely to sting.
- * Some flowers are bred for unusual shapes or additional petals, such as "cactus" and "pom-pom" dahlias, but this reduces their production of pollen and nectar for bees.

How Amazing!

- * Honey bees will fly up to 12km from hive to flowers, and commonly fly several km.
- * Britain has over 250 bee species, many of which can be seen in gardens and parks.
- * Some flower-visiting insects, especially hover flies, mimic bees for protection.

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LASI does research on honey bees and social insects, trains students, and provides outreach to beekeepers, schools, and the public. This Info. Sheet was written by Francis Ratnieks, Professor of Apiculture, & M. Garbuzov. ©2012

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