



Date: 19/11/2015

Author: Claudia Watts (GiGL Officer)
The Royal Parks Ecology Team

The Royal Parks Pollinator Strategy

Background

There are at least 1500 species of insect pollinators in the UK. Most are native species of bumblebees, solitary bees, wasps, moths, butterflies, beetles and flies, with the honey bee *Apis mellifera* normally being domestic stock managed in hives by beekeepers. When plant pollen sticks to the bodies of flower visiting insects, it gets transferred between the flowers they visit. This fertilises the plants in the process, allowing them to reproduce and grow fruits and seeds.

Pollinators are essential for biodiversity and our wider environment. They maintain the diversity of wild flowers and support healthy ecosystems, particularly by helping plants to produce fruits and seeds which birds and other animals rely on. They are not only of enormous value to agriculture, but are also valued and appreciated by the public and, as part of our natural world, contribute to our health and well-being. Unfortunately pollinators face many pressures, including habitat loss, pests and diseases, extreme weather, competition from invasive species, climate change and pesticide use.

Pollinator populations have been in decline over the past half century or more. Of the 26 bumblebee species recorded in the UK 80 years ago, two are no longer present and another six are now found in a much smaller area of the country. Most butterflies associated with semi-natural or flower-rich habitats have shown clear declines since the 1970s, although some less specialised butterflies have increased in number or expanded in range. Declines in numbers of many moths have also been observed, particularly in the southern half of Britain.

An independent scientific review of the published evidence commissioned by Defra in 2013 identified the loss of flower-rich habitat associated with past intensification of agriculture, urbanisation and industrial development as the likely primary cause of the recorded decline in diversity of wild bees and other pollinating insects. In the London area loss of natural and semi-natural habitat to urban and suburban development over many years has had negative impacts on biodiversity and has reduced the availability of food, shelter and nest sites for pollinators. However, studies indicate that provision of flower-rich habitats, such as meadows, within the landscape can help maintain pollinator diversity as they support pollinators by providing good sources of nectar and pollen throughout the summer and also shelter and nest sites. Conserving our remaining flower rich habitats also brings other benefits including protecting threatened plant populations and the wildlife that depends on such habitats. Pests and pathogens were identified as the key threats to managed honey bees, although past loss of flower-rich habitat was also considered important.

Actions

In order to play a part in reversing the decline in pollinator populations, the Royal Parks is looking to improve conditions in the following areas.

Increase forage resources for pollinator species

- Leave more long grass/meadow areas in less formal parts of the parks to allow native flora to flower and set seed. Work to improve the quality of these areas to increase floral diversity and reduce the dominance of coarser grasses
- Investigate whether shorter turf can be cut a little higher to allow flowering species such as daisy, bulbous buttercup, selfheal, speedwell, to flower and provide food for pollinators in areas which are otherwise unwelcoming to these species
- Working with the B-Lines project, introduce decorative “urban meadows” of pollinator-friendly flowering plants, not necessarily native species, to increase the attractiveness of the parks to both insect and human visitors
- Aim to select formal bedding plants according to their ability to provide forage for pollinators, e.g. select single rather than double bloomed varieties
- In woodland and marginal areas, plant and encourage a native understorey of flowering plants such as hawthorn, blackthorn, honeysuckle, particularly in parks which are deer grazed
- Avoid planting new specimens of tree species which can be damaging to bumblebee species, such as *Tilia petiolata*
- Ensure that there are flower resources available throughout the year, from early spring and through the winter, e.g. celandines, willow, primroses, grape hyacinth (early spring); ivy and hebe in autumn; Mahonia in winter

Improve habitats for nesting and overwintering pollinators

- Acknowledge the importance of bare ground areas for ground-nesting species. Ensure that not all paths and desire lines are hard surfaced or re-turfed, as these are important nesting areas
- Keep some areas of long grass throughout the winter as a refuge for insects. Cutting should be carried out in rotation to ensure that the uncut areas do not become rank and lose floral diversity
- Where possible, install suitable bee ‘hotels’ to encourage mining and leafcutter bees to nest
- Leave patches of nettles and other larval food plants for breeding butterflies and moths

Reduce pesticide use

- Wherever possible, aim to reduce the use of pesticides using integrated and more sustainable approaches for weed control and pest management that can have a damaging effect on beneficial insects as well as pest species.
- Review pest control policy with respect to wasp nests

Monitor bee health

- Ensure that any honeybees kept in the parks are regularly checked and treated for varroa mite and other diseases to minimise the risk of spreading disease to other hives or native wild pollinators

Participate in local/regional/national pollinator projects

- Where possible, act as a delivery partner on projects aimed at increasing the diversity and abundance of pollinating insects.