Pollinator Trail



Welcome to the Pollinator trail brought to you by the Irish Bee Conservation Project (IBCP) in association with the Irish Heritage Trust and the Office of Public Works. The trail consists of 12 stations, each having a particular relevance to Pollination and Biodiversity.



For more information at each station scan the QR code by opening the camera on your mobile phone and simply holding it over the QR code. This will bring up a link to the IBCP website. Press the link and more information on the station will be revealed. Android phone users may need to download a free QR code reader from your App Store.

The Irish Bee Conservation Project

The Irish Bee Conservation Project (IBCP) was established to provide information to communities regarding bee habitat requirements and to increase the survival of all species of native Irish bees through research, ecology support, education and biodiversity protection. We work to protect Irish Honey Bees, Bumblebees and Solitary Bees. The Irish Bee Conservation Project is entirely run by volunteers and is a Company Limited by Guarantee. More information is available on our website: **www.ibcp.ie**

The four main initiatives of IBCP



More information on Fota House, Arboretum and Gardens is available at Fota House: www.fotahouse.com Fota Arboretum & Gardens: www.heritageireland.ie





Pollinator Trail



Hosted by

Fota 💼 🕈 🛠 House, Arboretum & Gardens An Irish Heritage Trust Property



Pollinator Trail

1 Fota House, Arboretum and Gardens

Fota House is Ireland's finest example of Regency period architecture with superb neoclassical interiors. The main house dating from 1820, remained the sole ownership of the Smith-Barry family for 155 years and today the Irish Heritage Trust shares the compelling life story of this family and their household staff with our visitors. Fota Arboretum contains an internationally recognised collection of trees from all parts of the world. Some are considered to be the finest examples of their type growing in Europe. First planting began in the 1840s and continues right up to the present day. The Arboretum & Gardens are cared for by the Office of Public Works.

2 What is pollination?

All plants with flowers completely rely on two types of pollination for reproduction. Self-pollination is the primary type and occurs when pollen grains fall directly from the anther into the stigma within a single flower. Cross-pollination is the transfer of pollen grains from one flower to another. Bees are important pollinators, but insects, moths, butterflies, beetles, wasps, ants, birds, bats also act as pollinators.

3 The Bee Lodge

The Bee Lodge is specifically designed by the IBCP and has the purpose of housing Native Irish honeybees *Apis mellifera mellifera* (also known as black honeybees or brown honeybees). Can you see the Bee Lodge? There are over 40 Bee Lodges located around Fota Island and the work of the IBCP will see increasing numbers of lodges throughout Ireland as the project develops – keep an eye out for them!

4 Plants good for pollination

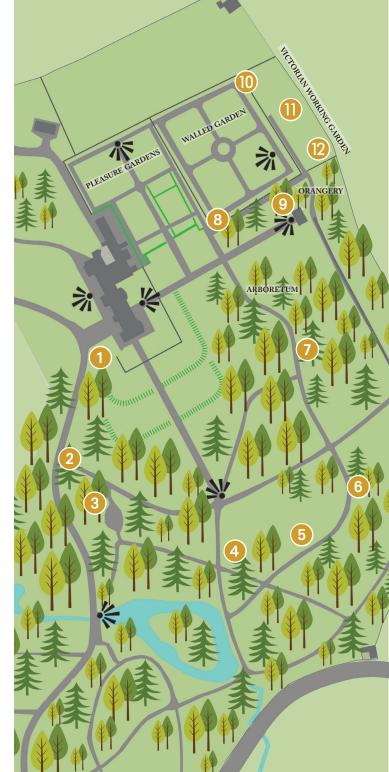
While native plants provide food for pollinators, here in the Arboretum some of our plants were introduced from abroad, but still make a valuable contribution to our native wildlife. Those shown at this station are a small sample. Other plants worthy of consideration are Snowdrops, Primrose, Hazel, Willow and Cotoneaster to name but a few.

5 Are all plants good for pollinators?

Not always. Over many decades some plants have lost their natural benefits to pollinators due to breeding. Multi-petal flowers can also have a negative impact if they prevent access to the pollen. Some Hydrangea varieties have been developed with sterile flowers, so again are of limited benefit to our natural pollinators.

6 The Queen Honeybee

The Queen Bee is possibly the most important figure in a hive. Without her the colony cannot thrive as she produces the Worker bees, who go on to care for her and also collect the food necessary for the hive to survive winter. A hive will usually have only one Queen. The Lime tree is described as the 'Queen of Honey Plants'.



7 The Drone Honeybee

A Drone is a male bee whose only function is to mate with a Queen, thereby making her capable of producing fertile eggs. Unfortunately for the Drone he has a relatively short life cycle as the act of mating ultimately leads to his death. Manuka Honey is produced from the flowers of a *Leptospermum* or 'Tea Tree' plant. Keep an eye out for some growing beside the path, as you approach the next station.

8 The Worker Honeybee

There can be as many as 50,000 worker bees in a strong, healthy hive. Without them the colony cannot thrive. They carry out a range of functions from caring for the Queen, her eggs and rearing the young as they grow. This south facing wall has an extensive planting of Fuchsias along its length – a fantastic source of nectar for bees over many months.

9 Trees that support pollinators

The *Phellodendron chinense* var. *glabriusculum* growing at this station is teaming with bees when in flower during the summer. Trees can also be a source for resin, which is the main ingredient in Propolis. Bees produce this substance and use it as a glue to seal gaps and cracks in their home.

10 Solitary Bees

There are 98 different species of solitary bees in Ireland. Unlike social bees, most solitary female bees prefer to make their nest alone with no assistance from other individuals. Solitary bees find or make holes themselves to lay eggs in. Some dig tunnels in the ground while others nest in south facing stone walls, masonry, wooden structures or commercially available bee boxes.

1 Pollinating plants in the Victorian Working Garden

There are many examples of good pollinating plants in the Victorian Working Garden. They include Fuchsia, Digitalis (Foxglove) and Wallflower but there are so many more as you walk by the borders or inside the beautifully restored Victorian glass houses which supplied Fota House with fruit and vegetables in the past and are now home to a beautiful array of plants.

12 The IBCP Observation Hive

As you now reach the last stop on the tour, take a look at the Observation Hive specially designed by the IBCP. It allows you to see the work of bees as they go about their daily chores. You may be able to identify the Queen, Drone and Worker bees.

