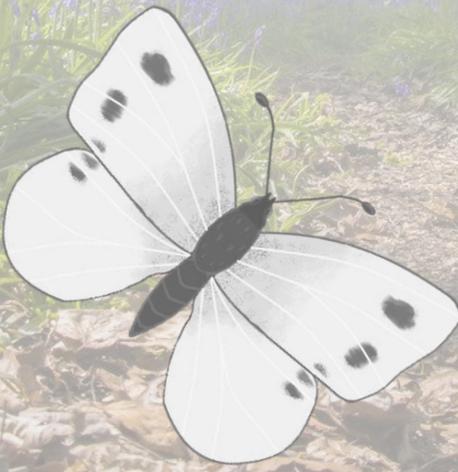




Garden Pollinators

Pollinators your plants might attract



Why are pollinators important to consider?

Pollinating insects are a very important part of our eco-system. As well as contributing to the overall life of the garden, they are crucial in the pollination of flowers, they utilise and digest pollen and may also provide a food source for various predators.

Many of our native pollinators are in steep decline due to increased urbanisation, more intensive agricultural processes and a general reduction in wildflowers. It is vital that we all consider our pollinators and help to conserve them by planting flowers and plants that they will use to survive. If we don't do this soon, we could face hundreds of species going extinct which would lead to an irreversible destruction of our native eco-system.

Plants for Pollinators aims to open up the world of pollinator-friendly plants to anyone and everyone. How ever large or small your garden or window box space is, there will be plants in our list that you can plant in order to do your bit for our pollinators!

Pollinator Icons

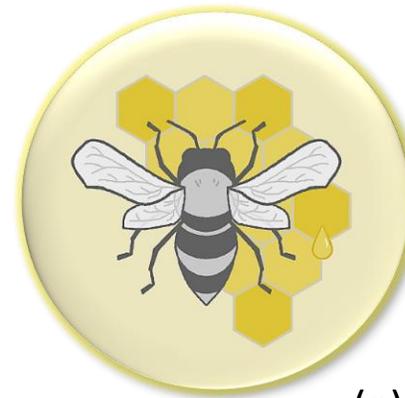
Our data on pollinators has been collected from studies spanning over a decade. Pollinator symbols appear when plants are proven to be good nectar plants for certain insects.

It should be noted that all bee and hoverfly data is ours but lepidoptera data is partially taken from Butterfly Conservation.

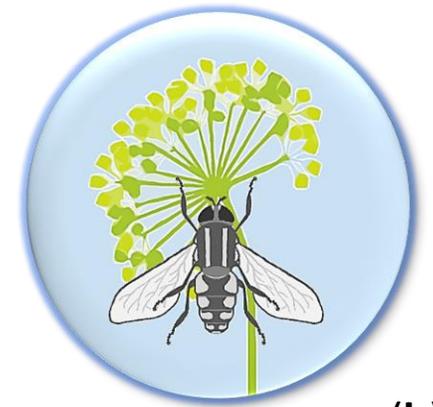
Our data spans a wide range of different insect species. For simplicity, these species have been condensed into six easy icons to represent them:

- | | | |
|---------------|------------------------------------|------------------|
| a) Honeybees | c) Bumblebees | e) Moths (Only) |
| b) Hoverflies | d) Butterflies
(Includes Moths) | f) Solitary Bees |

The next pages will describe each of the insect groups:



(a)



(b)



(c)



(d)



(e)



(f)

Honeybees

Here at the garden, honeybees are very important to us. We currently have 17 hives spread across three locations around the site and, as well as producing honey, these bees are an important part of our garden eco-system. Honeybees are highly eusocial meaning they form large colonies of tens of thousands of bees.

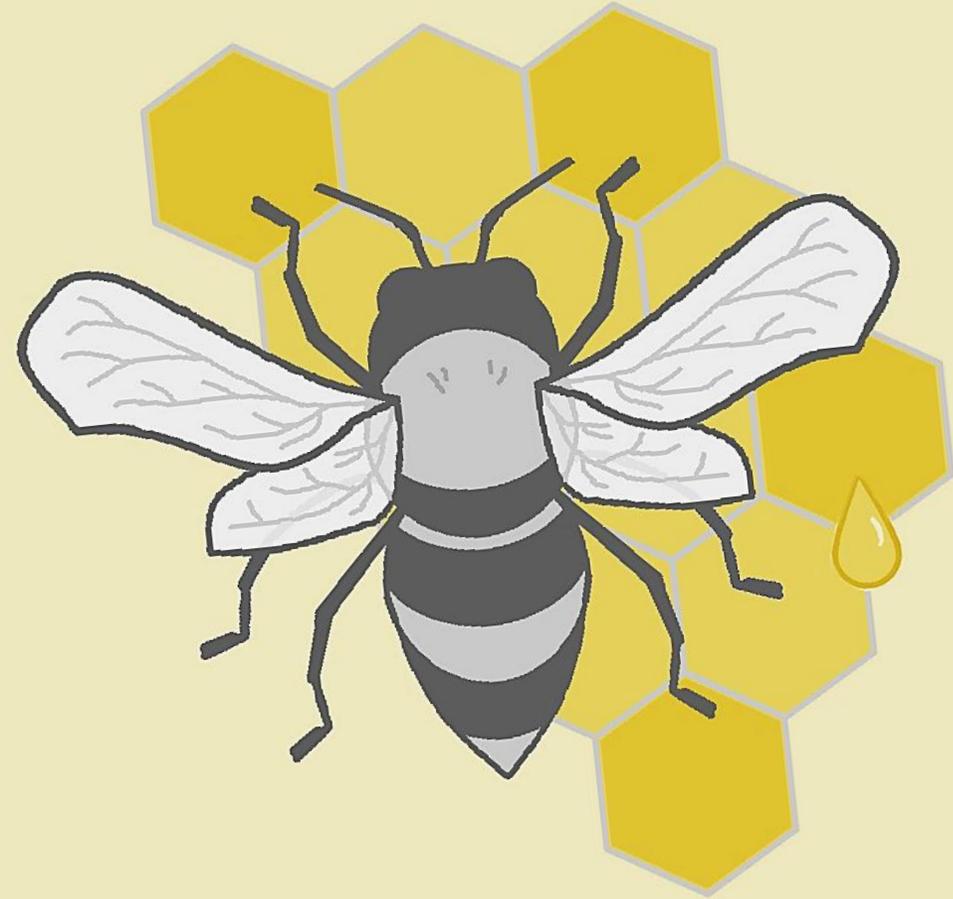
The females (drones) collect nectar from the flowers around our site. Data on which plants are good for honeybees largely comes from studying this honey to determine where the nectar was collected from and, thereby, ascertaining which plants are great, nectar-rich plants for honeybees!



Family: Apidae
Tribe: Apini
Genus: **Apis**

Sociality: Eusocial

Popular Plant:
Brambles



Bumblebees

Bumblebees are some of our most familiar wild bees. Most species are eusocial and live in small colonies of between 50 and 400 in underground nests. Unlike honeybees, bumblebees do possess the ability to sting more than once, however, they usually lack the aggression to do so.

Bumblebees are some of the fuzziest bees in the garden. There are seven very common species:

Buff-tailed Bumblebee
Common Carder Bee
Early Bumblebee
Garden Bumblebee
Red-tailed Bumblebee
Tree Bumble Bee &
White-tailed Bumblebee



Family: Apidae
Tribe: Bombini
Genus: **Bombus**

Sociality: Eusocial

Popular Plant:
Scabious



Mining Bees

Mining Bees are one of the four common Solitary Bee groups. In a family of their own, these bees will burrow into the ground and create little piles of earth surrounding their holes. This behavior earns them the name of the mining bees. Each bee will live by itself in a burrow which is why they are known as solitary.

There are over fifty UK species of mining bees but here are five common ones that you might see in your gardens:

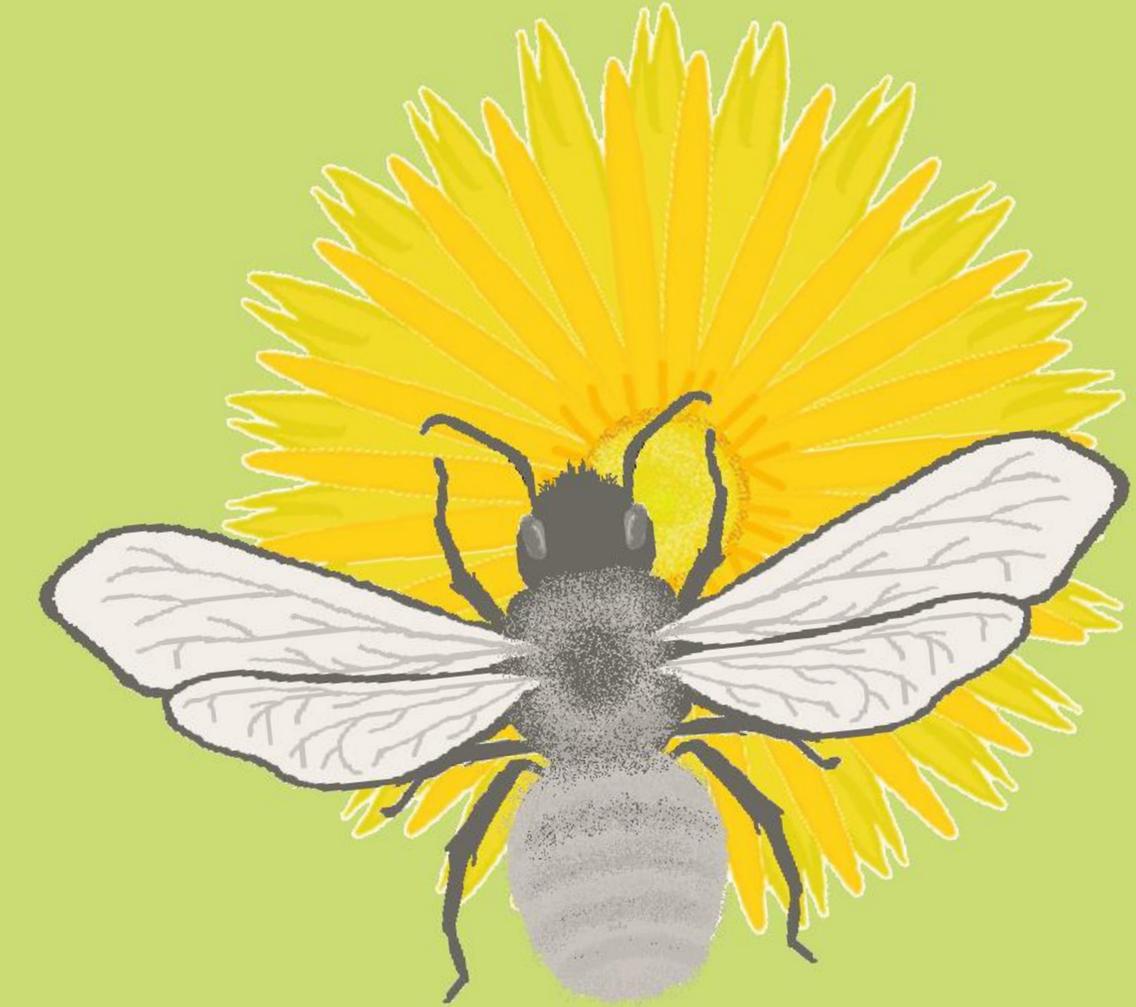
Ashy Mining Bee
Chocolate Mining Bee
Gwynne's Mining Bee
Ivy Mining Bee
& Tawny Mining Bee



Family: Andrenidae
Tribe: Andrenini
Genus: **Andrena**

Sociality: Solitary

Popular Plant:
Dandelion



Plasterer Bees

Plaster Bees are another group of Solitary Bees. In a family of their own, the female bees of this genus will line their nests with a cellophane-like material to protect them from the rain. This behavior earns them the name of the plasterer bees. Most species prefer Daisy family flowers while some prefer Ivy or Heather.

Plasterer Bees are a lesser spotted group of solitary bees but there are still at least four species that you may be able to find in your gardens:

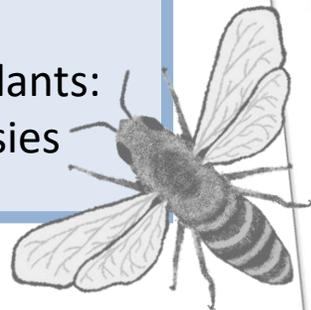
Common Plasterer Bee
Davies' Colletes Bee
Heather Colletes Bee
Ivy Bee



Family: Colletidae
Tribe: Colletini
Genus: **Colletes**

Sociality: Solitary

Popular Plants:
Ivy, Daisies



Mason Bees

Mason Bees are another group of Solitary Bees. They are probably the most widely spotted group of solitary bees. Mason bees tend to live in existing crevasses rather than creating burrows of their own, however, some do use mud to fill in the gaps which acts like bricks when hardened. This building technique earns them the name of mason bees.

Mason Bees are quite common. They love to utilize 'bee hotels' and there are three species that you may be able to find in your gardens:

Red Mason Bee (common)
Blue Mason Bee &
Spined Mason Bee

Wool Carder Bee (Related Genus)



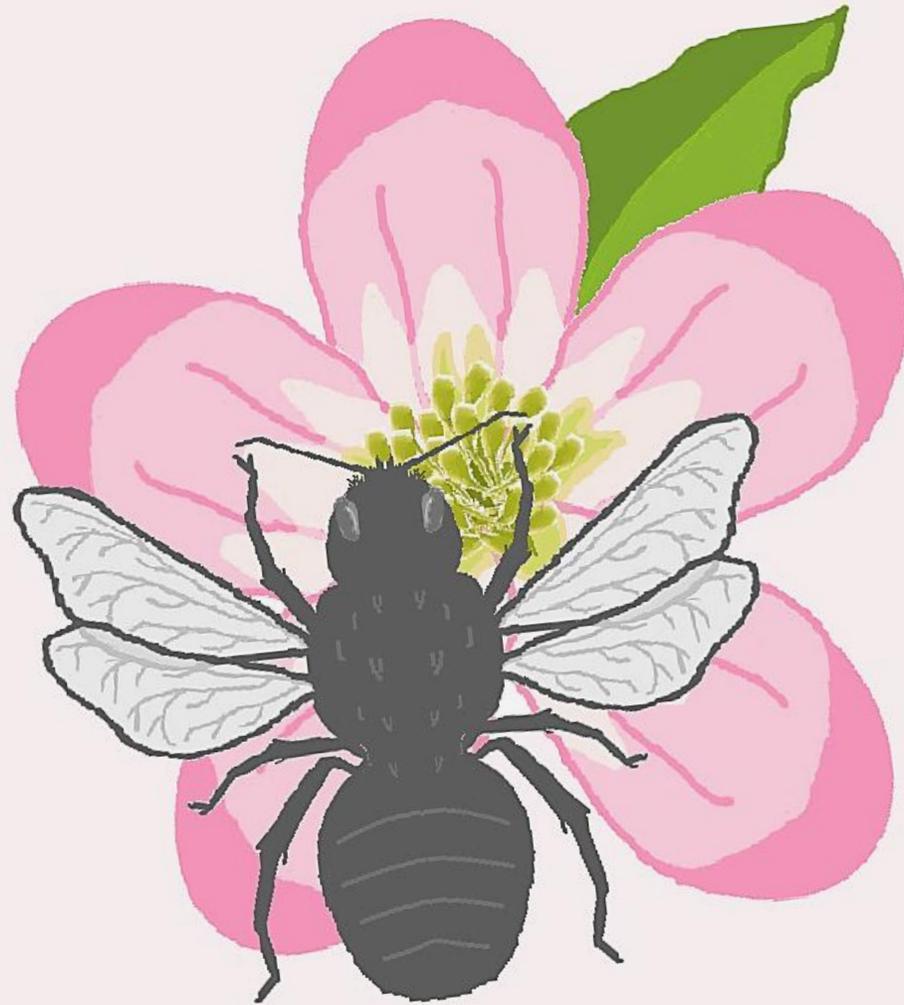
Family: Megachilidae

Tribe: Osmiini

Genus: **Osmia**

Sociality: Solitary

Popular Plant:
Apple Blossom



Furrow Bees

Furrow Bees are the final group of Solitary Bees. They are the smallest of the common bees and are mostly solitary but some species interact in a small colony-like manner. Both common genera form underground burrows.

Most bees in genera *Halictus* and *Lasioglossum* are called Furrow bees. Some are also called Mining bees but are unrelated to *Andrena* species. Furrow bees are generally identified by their small size but, due to this, identifying species is nigh-on impossible. Here are a few of the most common ones:

- Bronze Furrow Bee
- Common Furrow Bee
- Orange-footed Furrow Bee
- Orange-legged Furrow Bee



Family: Halictidae
Tribe: Halictini
Genera: **Halictus & Lasioglossum**

Sociality: Slightly Eusocial or Solitary

Popular Plant: *Leucanthemum*



Hoverflies

Hoverflies are a diverse group of insects, related to flies, but very useful as garden pollinators as they feed on nectar in the same way that bees do. Hoverflies are often, but not always, black and yellow to mimic bee species. This mimicry is used to ward off predators as hoverflies have no sting but attempt to look like bees to fool predator species

The most common genus of Hoverflies is *Eristalis*. There are four common species in this genus.

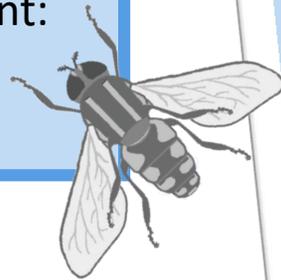
Other genera include *Volucella* (bumblebee mimics), *Sericomyia*, *Cheilosia*, *Chrysotoxum* and *Rhingia*. There are around 26 common garden species to spot.



Family: Syrphidae
Tribe: Various

Sociality: Solitary

Popular Plant:
Fennel



Butterflies

Butterflies are important pollinators in the Superfamily Papilionoidea. They are day-flying and feed on nectar using their proboscis. There are six key families:

Families:

- Hesperiidae (Skippers)
- Lycaenidae (Blues, Coppers, Hairstreaks)
- Nymphalidae (Aristocrats, Fritillaries)
- Papilionidae (Swallowtails)
- Pieridae (Whites, Yellows, Orangetips)
- Riodinidae (Duke of Burgundy, Metalmarks)

Popular Plant:
Buddleja

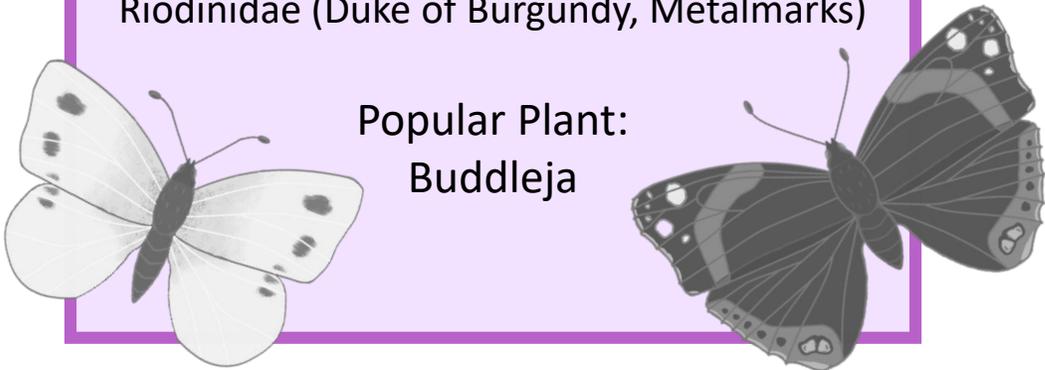


Image shows examples from the Nymphalidae (top) and the Pieridae (below)



Moths

Moths are also very important pollinators. All lepidoptera species except those in the Superfamily Papilionoidea are classed as moths. They can be night or day-flying. All plants listed as being good for butterflies will also be good for at least some moth species. There are 67 UK-native families

Some of the common, more impressive moth families include:

- (Sphingidae)
- Hawkmoths
- (Zygaenidae)
- Burnet Moths
- (Saturniidae)
- Emperor Moths
- & Erebidae (includes Cinnabar & Tiger Moths)
- (Geometridae)
- Geometer Moths (Includes the magpie moth (pictured))

All Lepidoptera
Except those in the
Superfamily
Papilionoidea

Popular Plant:
Evening Primrose

