

## Bees in Caerwent

How many different types of bees are there? Would you be surprised to know that there have been over 270 different species of bee recorded in Great Britain and Ireland (though some are now sadly considered extinct), that there is only one species of honey-bee and that there are 27 species of bumblebee? Over the past three years we have allowed our lawn to develop into a meadow and last year we witnessed an intriguing sight of a cluster of bees in a mating ball.



This piqued our interest and this year we decided to try and identify as many different species as possible. So far, the count is eight bumblebee species, six others and, of course, the honey-bee, as well as three non-bees which try hard to impersonate bees (two species of bee-flies and a bee hoverfly).

Identifying bumblebees was a good starting point. At the simple level this requires noting their colour-coding of their bands: the Garden bumblebee is typically yellow-black-yellow-black-white, whilst the Tree bumblebee is orange/ginger-black-white and the Carder bumblebees are pale.



Garden bumblebee



Tree bumblebee



Shrill carder bee

Typically, bumblebees are the first to emerge from over-wintering as they can shiver to keep warm and it is the queens who emerge first to form a nest and start laying eggs. The queens are the largest (16mm for the queen Garden bumblebee) and workers the smallest (~13 mm for the worker Garden bumblebee).

The most numerous bee genus are the *Andrena* mining bees with ~67 species in Great Britain and Ireland. As their name suggests they are ready to excavate nests in loose soil. Other species include the plasterer bees (*Colletes*) who line their nests with a cellophane like substance to make their nests waterproof and fungus resistant, Mason bees which chew leaves to partition nests, and *Nomad* bees who look like wasps and lay their eggs in the nests of other bees.



Orange tailed mining bee



Early *Colletes*?



Common furrow bee

So, how to tell a bee from a wasp - many bees have a “furry” nape (except those bees which want to look like wasps!) - and from a hover-fly or bee-fly? – mainly by their flight pattern but also because flies have one pair of wings whilst bees have two.



Bee fly (*Bombylius discolor*)



Bumblebee hoverfly



Wasp

And finally, what of the honey-bee? How to distinguish these from our other species? The honey-bee has a more cylindrical body like someone who has lost their waist through enjoying life.



So, what have learned from our year of watching for bees? Mainly that there is more diversity out there than we were aware of and that it is quite fun stopping and looking at the little things.

List of species identified so far:

<i>Apis mellifera</i>	Honey bee
<i>Andrena Haemorrhhoa</i>	Orange tailed mining bee
<i>Andrena barbilabris</i>	Sandpit mining bee
<i>Anthophora plumipes</i>	Hairy footed flower bee female
<i>Bombus humilis</i>	Brown banded carder bee
<i>Bombus pascuorum</i>	Common carder bee
<i>Bombus sylvarum</i>	Shrill carder bee
<i>Bombus hortorum</i>	Garden bumble bee
<i>Bombus hypnorum</i>	Tree bumblebee
<i>Bombus lapidarius</i>	Red tailed bumblebee
<i>Bombus pratorum</i>	Early bumblebee
<i>Bombus terrestris</i>	Buff-tailed bumblebee
<i>Colletes Cunicularis</i>	Early colletes
<i>Lasioglossum calceatum</i>	Common furrow bee

Of these the Brown banded carder bee and Shrill carder bee are considered “Species of Principal Importance” as their numbers decreased significantly during the 20<sup>th</sup> Century, presumably due to changes in farming practices, the loss of suitable habitats and possibly the types of pesticides being used. We hope that both our garden and the Caerwent field can its own little way hopefully provide a haven for our native bee species to recover.

Useful reference book: Field guide to the Bees of Great Britain and Ireland (Steven Falk)