



Pollinator Identification chart

This chart can be used to help you identify some of the different groups of invertebrates that visit your wildflowers.

For the purpose of this survey we have categorised pollinating invertebrates into six groups:

Bumblebees



Honeybee and solitary bees



Hoverflies and other flies



Beetles



Butterflies and moths



Wasps

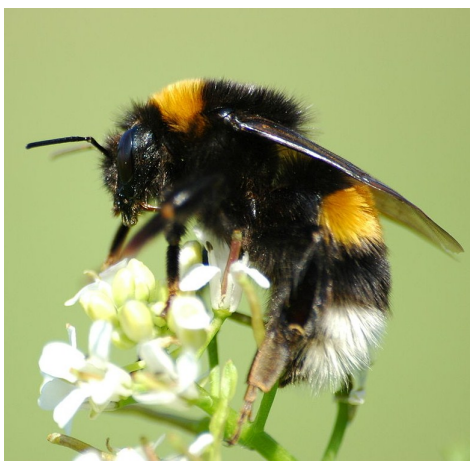


Bumblebees



Garden Bumblebee (*Bombus hortorum*) © OPAL

- Larger than the honeybee and other bees, always furry, robust looking and fly with a deep buzz.
- Social insects with large queens but smaller males and workers.
- Our common bumblebees usually have tails that are either white, red, buff or brown and some have yellow bands.
- The back leg has a pollen basket which may have a ball of pollen stuck to it.
- Cuckoo bumblebees are parasites on social bumblebees. They lack workers and have simple hind legs.



Buff-tailed bumblebee (*Bombus terrestris*) © Vera Buhl



Common carder bumblebee (*Bombus pascuorum*) © André Karwath



Red-tailed bumblebee (*Bombus lapidarius*) © www.gardensafari.net

Honeybee and solitary bees



Honeybee (*Apis mellifera*) © Aphaia



Solitary Bee (*Osmia rufa*) © OPAL

- Mostly smaller than bumblebees
- You can distinguish such bees from mimicry flies by their long antennae.
- Honeybees vary in colour from all-black to orange banded and rather wasp-like, and they have pollen baskets on the hind legs.
- Over 200 species of solitary bee are found in Britain and include mining bees that nest in underground burrows; and mason and leaf cutter bees that often nest in wood or walls.
- Bees feed their young on nectar and pollen, and in honeybees these are combined to create a liquid 'honey'.
- Gardens are brilliant places to observe solitary bee such as the Red mason bee and various leaf cutter bees.



Tawny mining bee (*Andrena fulva*) © Nigel Jones



Red mason bee (*Osmia rufa*)
© Nigel Jones



A leaf cutter bee (*Megachile centuncularis*) © Bernhard

Wasps



Common Wasp (*Vespula vulgaris*) © OPAL

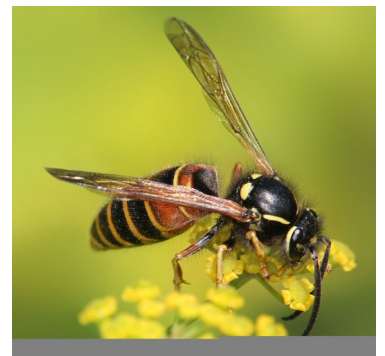
- Most social wasps are bright yellow and black banded with yellow on their face and legs. Some solitary wasps can be black and yellow too.
- There are about 250 types of solitary wasps in Britain.
- Wasps feed their young on animal matter—usually other insects.
- Solitary wasps come in a variety of colours, shapes and sizes, ranging from large, black and yellow striped species to tiny black or metallic red and green species.



Rudd's ruby-tailed wasp (*Chrysis ruddii*)
© Roger Key



A mason wasp (*Ancistrocerus parietum*)
© Nigel Jones



Red wasp (*Vespula rufa*)
© Richard Bartz

Beetles



Soldier Beetle (*Cantharis rustica*) © OPAL.

- Hard and protective forewings (elytra) to protect the delicate hind wings.
- Wing cases meet in a straight line making a T-shape.
- The wing cases of true bugs (Hemiptera) meet in an X or Y shape.
- See below photos of common body shapes of beetles that visit flowers.



7-Spot Ladybird (*Coccinella septempunctata*) © OPAL



Rose chafer (*Cetonia aurata*)
© Roger Key



Flower beetle (*Oedeomera nobilis*) © Alan Stubbs

Hoverflies and other flies



Marmalade Hoverfly (*Episyrphus balteatus*) © OPAL

- Large eyes (may almost fill the head).
- True flies (Diptera) have one pair of wings (other insects have two pairs).
- Antennae usually much shorter than those of bees and wasps.
- Hoverflies are often brilliant mimics of bees and wasps but cannot sting. They often hover close to flowers.
- Many other sorts of flies like to visit flowers too such as bluebottles.
- See below common body shapes of flies and hoverflies.



Drone fly (*Eristalis tenax*) © Roger Key



Hoverfly (*Volucella pellucens*) © OPAL.



Large narcissus fly (*Merodon equestris*) © Steven Falk

Butterflies and moths



Peacock Butterfly (*Inachis io*) © Butterfly Conservation



6 - spot burnet (*Zygaena filipendulae*) © Andrew Whitehouse

- Long antennae
- Two wings on each side (but sometimes look just like one)

Difference between a butterfly and a moth:

- **Butterflies** usually fly during the day, have 'clubs' on the end of their antennae, and at rest, wings are closed vertically above the body.
- **Moths** usually fly at night (but some fly during the day), have pointed and often feathery antennae and generally rest with their wings folded over the body.



Red Admiral © Butterfly Conservation



Small Tortoiseshell Butterfly (*Aglais urticae*) © Butterfly Conservation



Holly Blue (*Celastrina argiolus*) © Roger Key