

Garden Hoverflies

Please read these notes

- This document is intended to be a guide to identifying common species of hoverfly found in gardens. It is aimed at people who have no previous experience of identifying hoverflies. It is not comprehensive and focusses on those species which can be identified in the field; or from good photographs or flies taken alive and examined in a container. Where microscopic details are needed to separate similar species this guide will not help. Instead refer to the "Further Information" page.
- There are over 280 species of hoverfly in the UK and an average suburban garden could contain over 40.
- The first part of this document explains how to tell if an insect is a hoverfly. It then goes on to explain a few terms that are used to describe the critical features used in identification. The main body of the document describes the hoverflies and identification features and pitfalls. Finally there is a reference to further information. We are lucky in the UK in that there are two excellent identification books and very good resources on the internet and in Facebook groups.
- Not all hoverflies are black and yellow and not all black and yellow flies are hoverflies!

Is it a hoverfly?

A bee



Long, multi-segmented antenna

A short antenna fly



Shorter, 3-segmented antenna, often with bristle protruding from top or end of 3rd segment (some flies have long, thin segmented antennae Eg craneflies and mosquitoes but all hoverflies have 3-segmented antennae)

Is it a hoverfly?

Other Insects

Other orders of flying insects have two pairs of wings. Bees and wasps have their fore and hind wings attached to each other so may look like only one pair. They do not have halteres.



Fore wing
Hind wing

A Fly

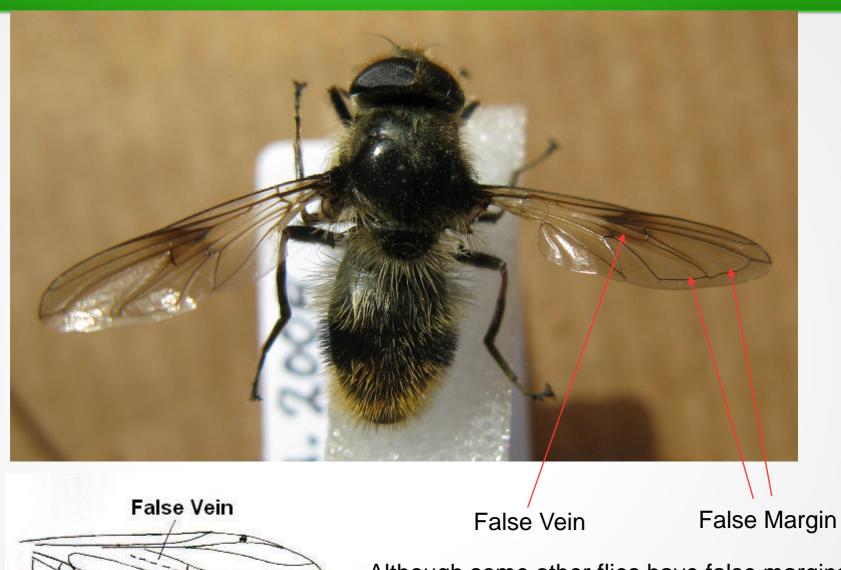
All true flies (Diptera) have only 1 pair of wings and a pair of halteres where the hind wings would be in other flying insects. The halteres look like little lollipops sticking out from behind the wings

Haltere



A conopid fly, not a hoverfly

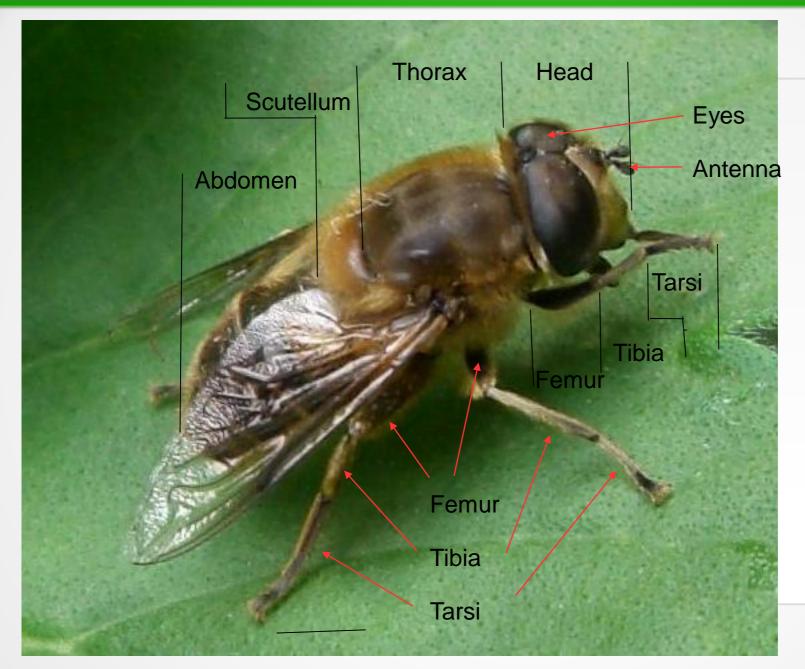
Is it a hoverfly?



False Margin

Although some other flies have false margins to their wings, they do not have this combination

The main parts of a hoverfly



The forehead, above the antennae is called the "frons". The area below the antennae and above the mouth margin is the "face"

In many, but not all hoverflies, the eyes of the male touch on the top of the head, whereas in females there is a gap between the eyes.

This is a male.

The Marmalade Hoverfly Episyrphus balteatus



Identification notes

The only UK hoverfly with double black bands on each abdominal segment.

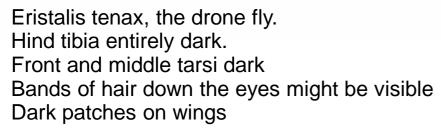
Very variable in size and abdomen colour – varies from nearly black to bright orange.

Can fly at any time of year.

Large numbers in Summer boosted by migration from the continent.

The Two Large Eristalis Species







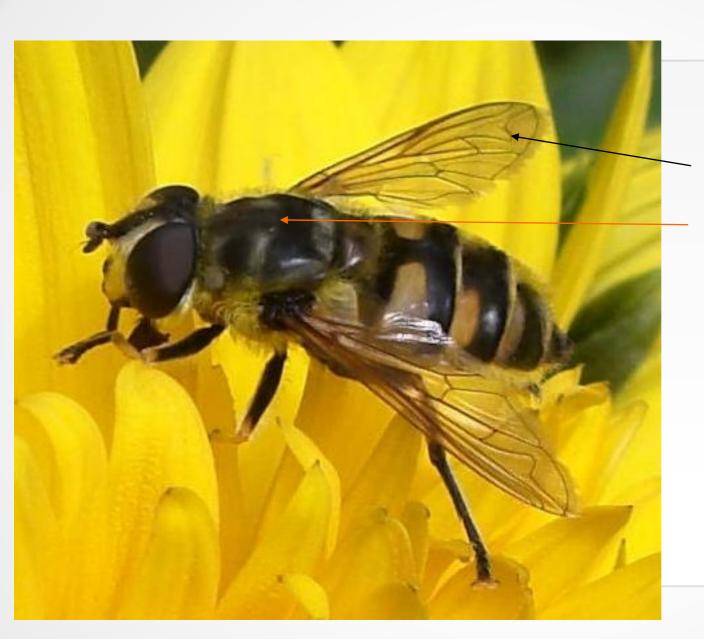
Eristalis pertinax.

Hind tibia pale in basal half and dark in apical half.

Front and middle tarsi yellow No bands of hair on eyes Dark patches on wings like E. tenax.

Both look like drone honeybees. Often hover near bushes. Common in Spring but E. tenax can be found most of the year. All Eristalis species and related flies have a distinct loop in the longest wing-vein.

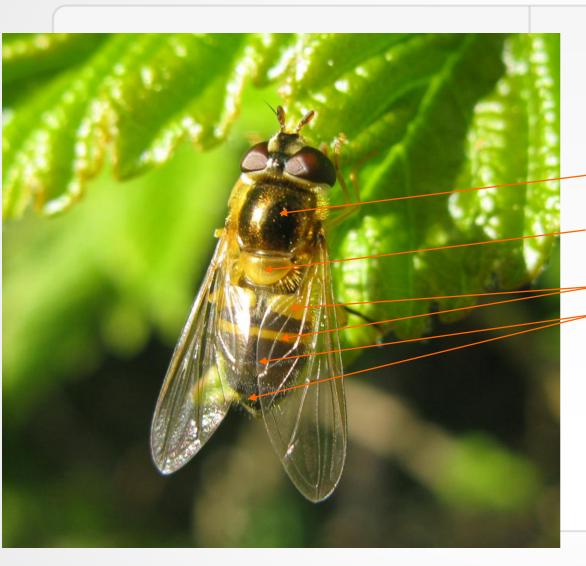
Myathropa florea - the Batman Hoverfly



Fairly large and brightly coloured Loop in long vein

"Batman" logo on thorax, a black patch partly broken by whitish bars

Epistrophe eligans – a common Spring species



Smaller than the previous two species and less hairy. No loop in long wing vein.

Shiny bronze thorax

Bright yellow scutellum

Yellow marks on segments 2 & 3 but not on 4 and 5. (segment 1 is under the scutellum)

Syrphus Species



There are three Syrphus species that might occur in the garden and they are difficult to separate unless you catch them and look at them closely. They are characterised by yellow scutellum and moustache-shaped yellow bars on the abdominal segments.

They are Syrphus ribesii, S. vitripennis and S. torvus.

Female S. ribesii have an entirely yellow hind femur.

Male S. torvus have a dense covering of hairs on their eyes.

Refer to "Britain's Hoverflies" for details of the other sexes and species.

Leucozona lucorum and Volucella pellucens

These are very distinctive Spring and early Summer species. Both have black and white abdomens and dark wing clouds.



Thorax shiny black and scutellum dark

Bumblebee Mimics

Several species of hoverfly are convincing bumblebee mimics. Remember that bees have long, thin multi-segmented antennae. Hoverflies have 3-segmented antennae with an arista (a bristle-like structure coming from the top or end of the antenna.) In the case of Volucella species of hoverfly the arista is distinctly plumose – feather-like.

A number of these species have different colour forms imitating red-tailed and white-tailed bumblebees so colour pattern is not very helpful in identification.

Check the wing venation – is there a loop in the long vein? The leg colours – are they all black or black and yellow?

Only four bumblebee mimics are included, the ones most likely to be found in gardens, but be aware of the possibility of others.

Bumblebee Mimics Merodon equestris



Merodon equestris is known as the large bulb fly as its larvae mine the bulbs of Narcissus and Daffodils and sometimes other bulbs.

Loop in long vein of wing

This combination is unique in the bumblebee mimics

Legs all black

The hind femur is thick with a triangular flange at the end.

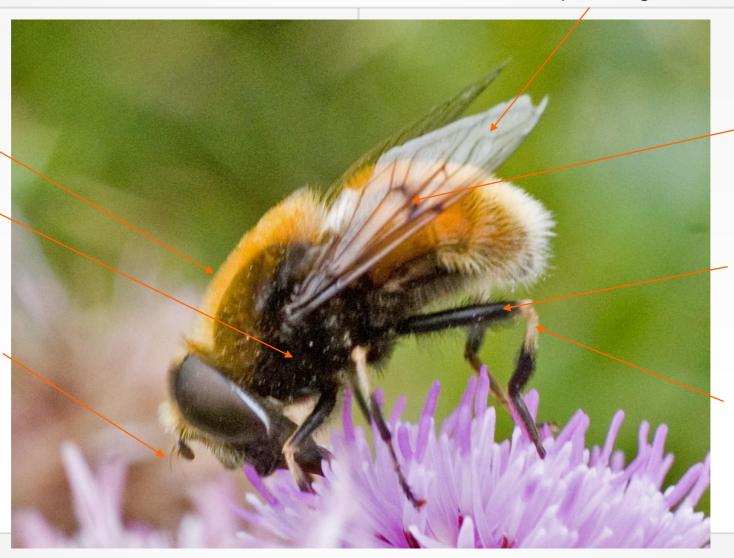
Bumblebee Mimics Eristalis intricaria (= intricarius)

This species often found near water

Loop in long vein

Ginger top and black sides to thorax

Arista not plumose



Hind femur

narrow

Dark

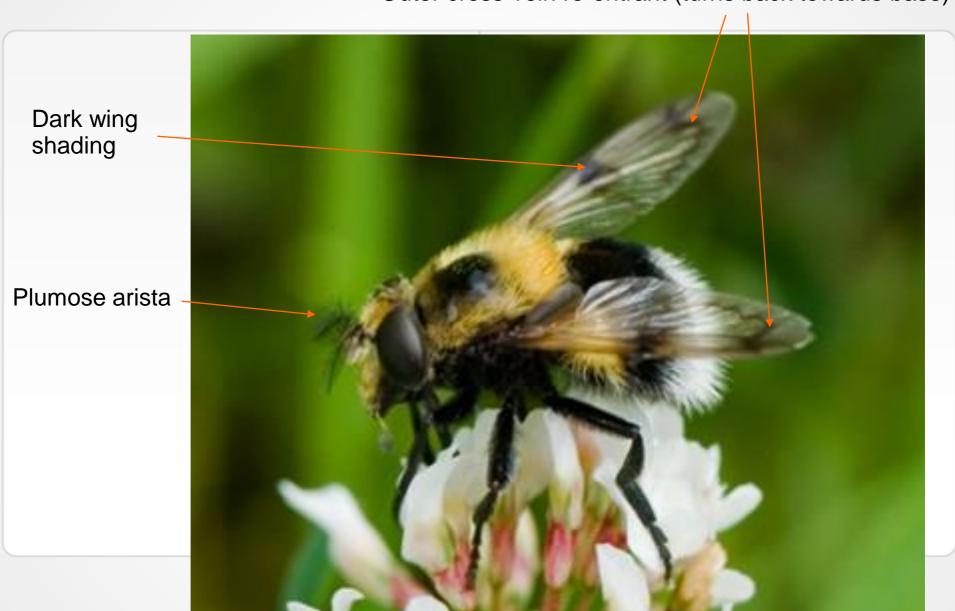
wing

cloud

Hind tibia partly pale

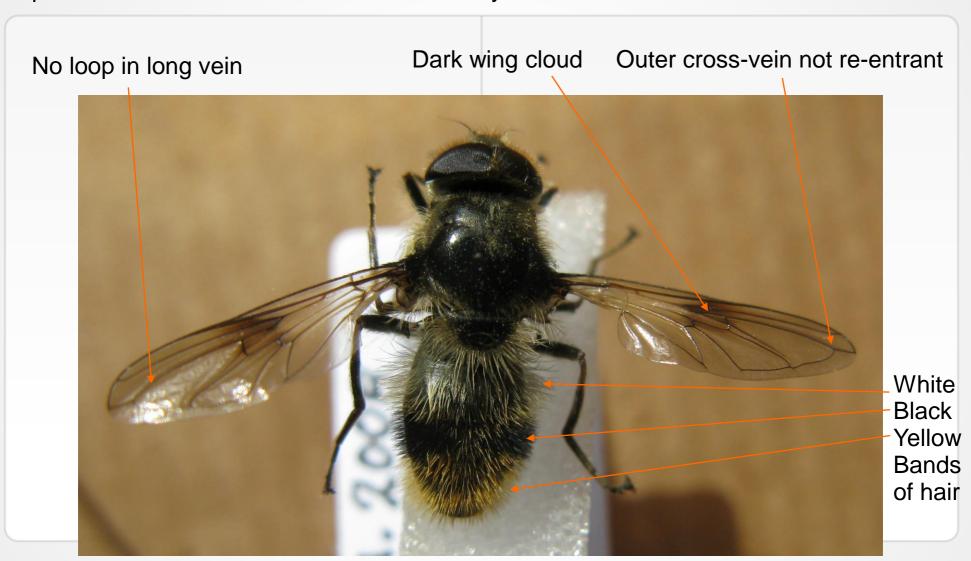
Bumblebee Mimics Volucella bombylans

Outer cross-vein re-entrant (turns back towards base)



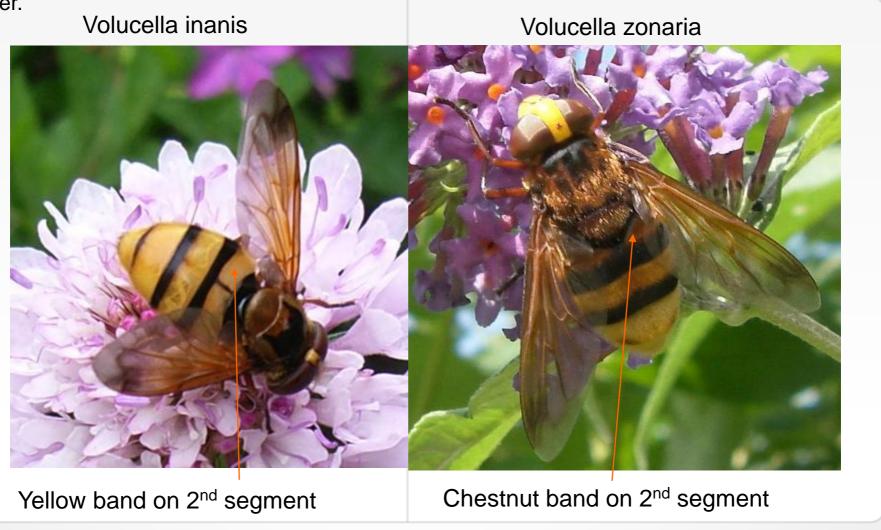
Bumblebee Mimics Cheilosia illustrata

A poor bumblebee mimic but furrier than many hoverflies.



The Two Large Volucella Species

These are usually active in mid to late Summer, frequently visiting Buddleja flowers. They are large and good wasp/hornet mimics. V. zonaria is about the size of a hornet, V. inanis is slightly smaller.



Like all Volucella the upper outer cross-vein on the wing is re-entrant and the antennae are plumose - see V. bombylans above.

Helophilus pendulus

Associated with ponds but does range widely. Two other Helophilus species are possible:

H. hybridus has more yellow on the abdomen and H. trivittatus is larger, more lemon-yellow and with an all yellow face. See Ball and Morris for more details.

Loop in long vein

Yellow stripes on thorax



Black bands reach side of abdomen (they do not in male H. hybridus).

The Bacchini

These are the small black and yellow and black and silver hoverflies See Ball and Morris for identification as there are several species that are likely to occur in gardens. All have black scutellums and black faces.



Baccha elongata – long, narrow abdomen with yellow band. Flies low in vegetation.

Short antennae separate from similarly shaped wasps and ichneumons.



Melanostoma have front tarsi that are narrow and cylindrical. Females all have triangular spots like these.



Platycheirus males have distinctly expanded front tarsi. Females flattened but not so distinct.

Rhingia – the "Heineken" Hoverflies

"Heineken" because they can reach the parts of flowers other hoverflies cannot reach! They have long facial extensions, which protect a long proboscis.



Further Information

Field Guides

"Britain's Hoverflies" by Ball and Morris
Very good guide to the species that do not need a microscope for identification and are reasonably frequent in their habitats.

"British Hoverflies" by Stubbs and Falk Better coverage of species but assumes you have a pinned specimen to key out.

Websites – <u>UK Hoverfly Recording Scheme</u>

Facebook Group: UK Hoverflies – will help with identification problems

Recording:

Bedfordshire and Luton Biodiversity Recording and Monitoring Centre
Cambridgeshire & Peterborough Environmental Records Centre
Northamptonshire Biodiversity Records Centre

Plants to attract Hoverflies

Generally, hoverflies like open, flatter flowers as they mostly have short proboscises to access nectar. Daisy (Asteraceae) and umbellifer (Apiaceae) families are good. Also attractive are:

Apple and other fruits, including bramble.

Herbs like marjoram, mint and fennel.

Buddleja

Open, single-flowered roses and geraniums

Daffodil and Narcissus if you let the leaves die down naturally will attract Merodon

Ivy – very important for late season hoverflies

Flowering grasses and plantains for Bacchini hunting ground aphids