

What do I want to investigate?

When walking in my local park I saw lots of flowers of different sizes, shapes, colours and arrangements.



I want to find out if flowers from different plants are visited by a similar types of insects, or if there are some types of insect that only visit certain flowers.

Planning my Investigation

Planning my question

My investigation question

I am trying to find out if flowers are visited by similar types of insects, or if there are some types of insect that only visit certain flowers.

Make a prediction

I predict that different flowers will be visited by different insects that are most attracted to them and suited to feeding from them.

Method – doing your experiment

What will I do?

Choose three/four types of plant in the local area that have flowers. For each plant:

1. Select an area of flowers to study.
2. Observe it for two and a half minutes, identifying and record the types of insects visiting it.
3. Hold the clear bag open, under the flowers and give the stem/branch a shake for 5 seconds, fold the top of the bag over and identify and record any creatures trapped inside. Release the creatures, then repeat with three different groups of the same flower.

What will you need to keep the same?

The day and time – try to collect the data for each plant within an hour or so, so that the conditions do not change too much.
The method and time taken observing.
The size of observation area. Choose a flower, or group of flowers that are roughly the size of a circle you make with your hands.

What will you observe or measure?

The different Orders of insect visiting each plant.

Equipment – What will I need?

Pencil; Paper to writing findings on; Insect identifying chart/tool; A large, clear food bag; A stopwatch/ phone timer.

How will you record your findings?

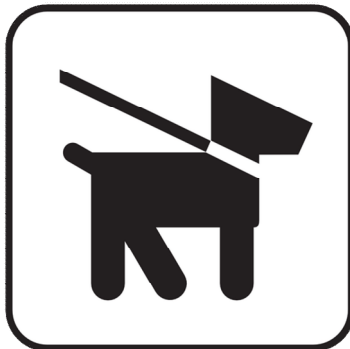
In a table, with a column for each flower type.

Keeping Safe

Take a grown up with you when out and about



Avoid dog poo and dangerous litter



Watch out for stinging nettles and spikey plants



Wash hands with soap for 20 seconds when you get home



The flowers I studied

You can choose different flowers found in your outside space.

Hawthorn

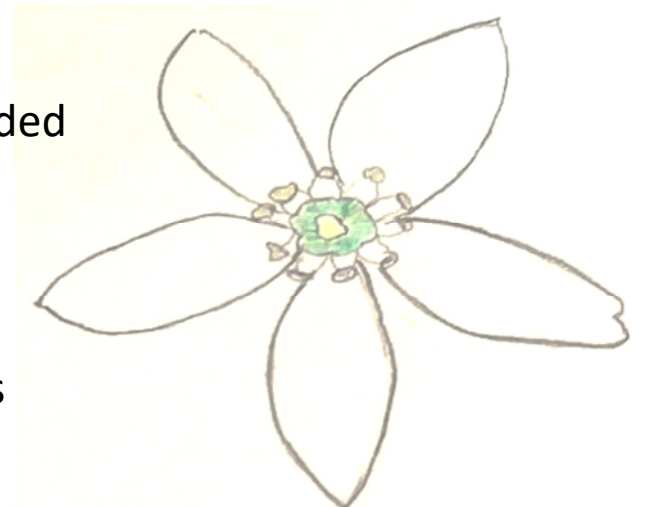


Open, flat flower

5 round white petals

Arranged on tree in clusters

Mexican Orange



5/6 long rounded
white petals

Open, flat flowers

Arranged on a bush near to other flowers

The flowers I studied

You can choose different flowers found in your outside space.

Buttercup



5 yellow petals

Bowl-shaped flower

Each plant may only have a few flowers

Cow Parsley

Flowers arranged in umbrella shaped clusters

Tiny, open, flat flowers



5 white petals

Results

Plant Types	Buttercup	Cow Parsley	Hawthorn	Mexican Orange
Insect types identified	Flies True Bugs	Flies True Bugs	Bees Beetles Flies True Bugs	Bees Flies
Notes	True bug = Aphids	Flies and bugs seen all very small True bugs = Aphids	Red tailed bumblebee	Honey Bee Buff-tail Bumblebee Also identified two spiders

Interpreting my results:

- I saw **flies** on all the flowers. I wonder if they are less fussy about which flowers they visit.
- I found **true bugs** (aphids) on all but one of the plants, so maybe they are also less fussy about the plants they visit. I only found these from shaking the plants so can't be sure they fell off the flowers.
- I only found one **beetle**, on one type of plant. I wonder if they are just less likely to be on flowers or if there was some other reason I did not find more of them.



- I only saw **bees** on two of the types of flower. These flowers were both white, flat and open, and of a similar size. I suspect that bees are more fussy about which flowers they visit.

Evaluating my investigation:

- I can't draw firm conclusions from my results as I didn't observe the flowers for very long. In my next investigation I would spend more time observing the flowers, and would investigate more different flowers of the same type, to get more reliable results.
- I would like to focus on the different types of bees visiting the Hawthorn and Mexican orange flowers. I saw different bees on each. I wonder if only certain types of bees visit certain flowers.
- I collected my data on quite a cool (11°C) and windy afternoon. In future I would try to collect data on a warmer, less windy day.

What other improvements would you make?

Things to do next



Make changes and improvements to this investigation and try it again.



Plan and conduct your own investigation.



Take part in a citizen science project, contributing to real life research. The [BBC website](#) has some good information on what is out there.

Acknowledgements

We hope you enjoyed learning about insects. This is one of a series of resources from the HOPE collection of British insects at the University of Oxford Museum of Natural History.

You can find more about the Hope for the Future Project on our website: oumnh.ox.ac.uk/hope-future

Picture credits:

Cover image and image details: ©OUMNH

Wasp, ladybeetle: Adobe Stock

All other images are in the public domain [CC0](https://creativecommons.org/licenses/by/4.0/) or the property of the author

