

What's Under Your Feet?

We're taking part in a mass citizen science project to help the British Trust for Ornithology learn more about the tiny creatures that live underground, known as soil invertebrates.

Here's what we unearthed in the spring experiment...

Date and time of dig:

.....

Location of the dig:

(e.g. school playing field)

.....

BIRDS

The most common birds we spotted were: (optional)

1

2

3

WHAT'S THE BIG IDEA?

Some British birds are in decline, but nobody really knows why. What we do know is birds eat soil invertebrates, so this study is investigating if their availability is linked to the decline in bird numbers.

WEATHER

Days since last rain:

.....

DID YOU KNOW?

In March, there's often a 'hungry gap' for insect-eating birds – particularly if it's cold – as invertebrates aren't as active so birds struggle to find food. Is this reflected in your results?



The top 3 birds spotted in March 2016 were: Blackbird, Magpie and Wood Pigeon.

INVERTEBRATES

Total number of earthworms found:

The most earthworms found by one school in March 2016 was **212!**

Most common-sized earthworm found:

The majority of earthworms collected in March 2016 measured **2-4 cm.**



If all the earthworms that had been collected in March 2016 were spread out in one line, they'd measure the length of **3.5 jumbo jets!**

What other invertebrates did we find?

1

2

3

DID YOU KNOW?

When the ground dries out in the summer, earthworms burrow deeper into the soil. So they're more likely to be abundant in spring and autumn – when it's wetter – than summer. Does this tally with your results?

Total weight of earthworms collected:



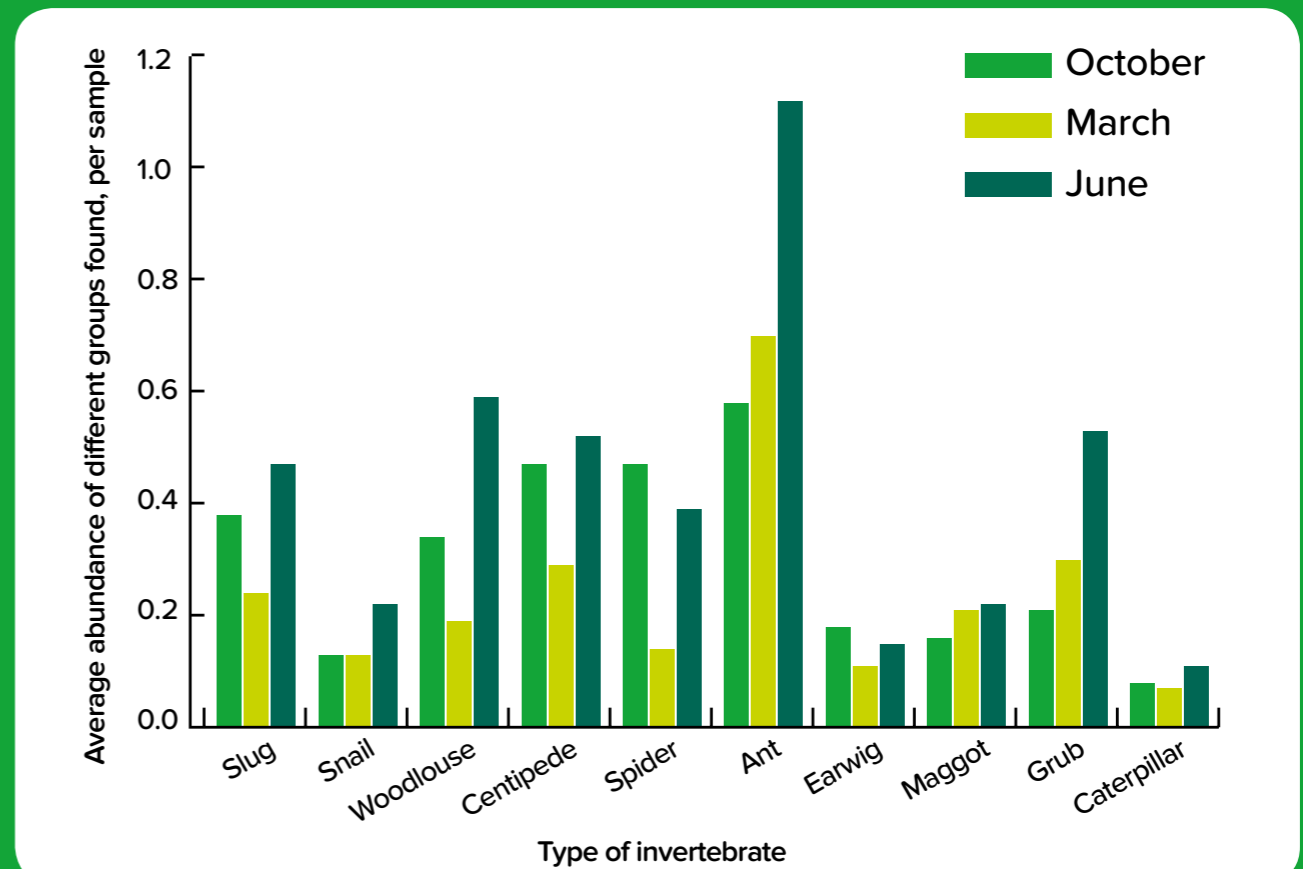
The total weight of earthworms in the March 2016 experiment came to 358 grams – that's heavier than **two tubes of crisps**, but slightly lighter than a **large can of baked beans!**

How many invertebrates did we find?

Create a bar chart below from your invertebrate data. If you only dug up one soil sample, plot the 'number of invertebrates found' against 'type of invertebrate'. If you have results from more than one soil sample, find the average for each invertebrate type and plot the 'average abundance of different groups found, per sample' instead.



The graph below shows the average abundance of different groups found, per sample, for digs carried out in 2015/2016, the first year of the experiment. How do your results compare – for March and against the rest of the year?



How can there be less than one insect in an average sample? The graph on the right shows a 'per sample' average for each invertebrate type. The reason why most have a value less than one is because one of each type usually wouldn't be found in every soil sample. So if we look at March 2016, an average sample contained 0.2 maggots. Of course that doesn't mean everyone found 0.2 of a maggot! But instead, that for every 5 samples, 1 maggot would typically be recorded (5 samples x 0.2 maggots per sample = 1 maggot).

Want to join in? Our next dig takes place on
Contact for more information.