

Helping your children choose books they will love



LoveReading4kids.co.uk is a book website created for parents and children to make choosing books easy and fun

Opening extract from **Insects**

Published by
Usborne Publishing Ltd

All Text is Copyright © of the Author and/or Illustrator

Please print off and read at your leisure.



Usborne Quicklinks

The Usborne Quicklinks Website is packed with thousands of links to all the best websites on the internet. The websites include information, video clips, sounds, games and animations that support and enhance the information in Usborne Internet-linked books.

To visit the recommended websites for Naturetrail Insectwatching, go to the Usborne Quicklinks Website at www.usborne-quicklinks.com and enter the keywords: **naturetrail insectwatching**

When using the internet please follow the internet safety guidelines displayed on the Usborne Quicklinks Website.

The recommended websites in Usborne Quicklinks are regularly reviewed and updated, but Usborne Publishing Ltd. is not responsible for the content or availability of any website other than its own. We recommend that children are supervised while using the internet.



A young
bush cricket

CONTENTS

How to be an insect spotter

- 8 Look up, look down
- 10 Introducing insects
- 12 Other creepy-crawlies
- 14 Looking for insects
- 16 Growing and changing
- 18 Using a field guide
- 20 Being an insect detective
- 22 Tricky spotter tips

Watching insects

- 26 Moving around
- 28 Wonderful wings
- 30 Insect munchers
- 32 Insect eyes
- 34 Taste tests
- 36 Breeding time
- 38 From egg to butterfly
- 40 Insect chatter
- 42 Blending in
- 44 Let's bee together
- 46 Ants at home

Out and about

- 50 Gentle insect hunting
- 52 Insect experiments
- 54 Keeping creepy-crawlies
- 56 Building a butterfly house
- 58 Keeping an insect diary

Insects all around you

- 62 Indoors and outdoors
- 64 An insect garden
- 66 Towns and parks
- 68 Creatures to spot
- 70 In the dark
- 72 In the ground
- 74 Alien invaders


Insect habitats

- 78 Woodlands
- 80 Creatures to spot
- 82 Ponds, lakes and streams
- 84 Creatures to spot
- 86 Heathland
- 88 Wetlands
- 90 Flowery grassland
- 92 Glossary
- 94 Index
- 96 Acknowledgements

How to be an insect spotter

Not all the tiny scurrying, creeping or flying creatures you'll see are insects. You can tell an adult insect by the fact that it has six legs and three main body parts, plus a few other bits, such as feelers.

Don't worry about getting confused, though. This section will help you tell the difference between insects and other creepy-crawlies, and between adult insects and their young.

A detailed photograph of a high brown fritillary butterfly perched on a purple thistle flower. The butterfly's wings are spread, showing a pattern of orange, black, and white spots and markings. Its body is brown and hairy, and its long antennae are visible. The background is a soft, out-of-focus green.

A high brown fritillary butterfly perching on a thistle flower



Look up, look down

As an insect spotter, you're spoiled for choice. There's a whole miniature world beneath your feet... and in the trees, and in the air above your head. It would be a tough challenge to walk in the park in summer and *not* spot any insects.

IMPORTANT INSECT SPOTTING TIPS

- Search carefully and try not to harm flowers and twigs when you're looking for insects.

- Always put logs and stones back where you found them. They're often homes for bugs.

- You have a better chance of finding insects if you move slowly and quietly.

- Be patient. You can discover a lot just by waiting and watching.



Large white butterflies like these ones are very common, especially in gardens, woods and fields.

A creepy-crawly world

We tend to think of Earth as our own planet, but humans are vastly outnumbered by insects. For every single human being, there are 1.5 billion insects. And that's before you start counting other kinds of creepy-crawlies, such as spiders, snails and worms. (There's more about those on pages 12-13.)

There are about a million known types of insects in the world and thousands of new species of insect are discovered every year. Scientists estimate there might be up to eight million different types of insects, so the ones we already know are just the tip of the iceberg.

Man's pest friends

Insects can be our worst enemies and our best friends. They munch on crops and spread diseases, but they can be very helpful, too. They're nature's recycling team, getting rid of waste so it doesn't pile up.



Dung beetles eat animal dung. So do their young.



Earthworms help break down rotting leaves into soil.



Burying beetles bury the bodies of small animals such as frogs.

They may not look as cute as other creatures, but insects are very creative. They build nests, make paper, cause explosions, cultivate gardens, capture other creatures as slaves, and even farm them, just like we farm cattle.

AMAZING FACTS

- If a beetle fell off the Empire State Building it wouldn't die, it would bounce.

- Some ants "milk" insects called aphids, stroking them so they release a sweet liquid called honeydew. This sounds pretty, but it's aphid poo!

- Hungry bugs eat 20 per cent of all the crops humans grow. That's two out of every ten fields.

Gypsy moth caterpillars are serious pests to trees. They are extinct in the UK, but common in the rest of Europe. They can give you watery eyes or a runny nose if you touch them.

