

Whether observing the wildlife in your garden or the nature around you out on your walk, you can start a wildlife diary anywhere at any time!

Some ideas for your diary:

- Start taking an interest in phenology (the changing of the seasons) and record the first leaf changing colour, first snowdrop in spring, the first butterfly you see and the dates in which you see them. You can observe changes in climate as these events become earlier and earlier each year.
- Collect some leaves and study what trees different leaf types come from.
- Do some wildlife drawing, poetry or artwork take a good look at the wildlife around you. You can always take photos and draw from them when you get home.
- Observe the behaviour of wildlife, for example the hierarchy of birds at the bird feeder or map out the favourite foods of your garden wildlife.
- Make a colour chart each month of the flowers and trees then look back at the end of the year and see how the colours change across the seasons.
- Look at different beetle shapes and compare their characteristics.
- Write down the way a bird sounds or the way it flies, for example a
 woodpecker flies in a very up and down wavy motion and a yellow hammer
 sounds like it is saying "a little bit of bread and cheese".

The world is your oyster when it comes to a wildlife diary! There is plenty of inspiration online about things you can include. Just let your imagination go wild and jot down something once a day or whenever inspiration takes. This is a flexible exercise designed to help you notice the things around you and improve your nature observation skills. If you don't want to get your diary muddy, you could always take scrap pieces of paper with you outside to do your drawings and notes and come back and add them into your diary later. If you are not able to go outside, you can do research online about wildlife and jot it down in your diary. For example, you could do some research about the different foods that an insect eats then follow this up with observations when you next go outside.





Life cycles are the different stages of life for a living thing. In science, it is usually displayed as a circular diagram showing each stage in words and/or pictures. A life cycle is presented as a circle to show that the process is cyclical from birth, through the different stages of adolescence then into the reproductive stage and starting the cycle again.

SIMPLE LIFE CYCLE

Most animals including fish, mammals, reptiles and birds have very simple life cycles:

- They are born either alive from their mother or hatched from eggs.
- They grow up and no full transformations occur.
- These animals have three stages before birth, young and adult. The young are typically similar to the parent, just smaller. The young slowly 'grow' to become adults.

INCOMPLETE METAMORPHOSIS

Animals that undergo a metamorphosis such as amphibians like frogs and newts have a slightly more complicated life cycle. They undergo a metamorphosis (a big change) for example:

- Egg they are usually hatched from eggs.
- Larva/tadpole they spend their 'childhood' under water, breathing with gills.
- Adult they grow into adults and move to the land, breathing with lungs.

COMPLETE METAMORPHOSIS

Animals that undergo a complete metamorphosis such as butterflies have four stages in their life cycle and undergo the greatest change of all:

- Egg unborn stage.
- Larva young stage, this is when most of the feeding is done (they usually look like worms).
- Pupa inactive (no feeding) stage between larva and adult stages (usually well camouflaged).
- Adult final, breeding stage (they usually grow wings).

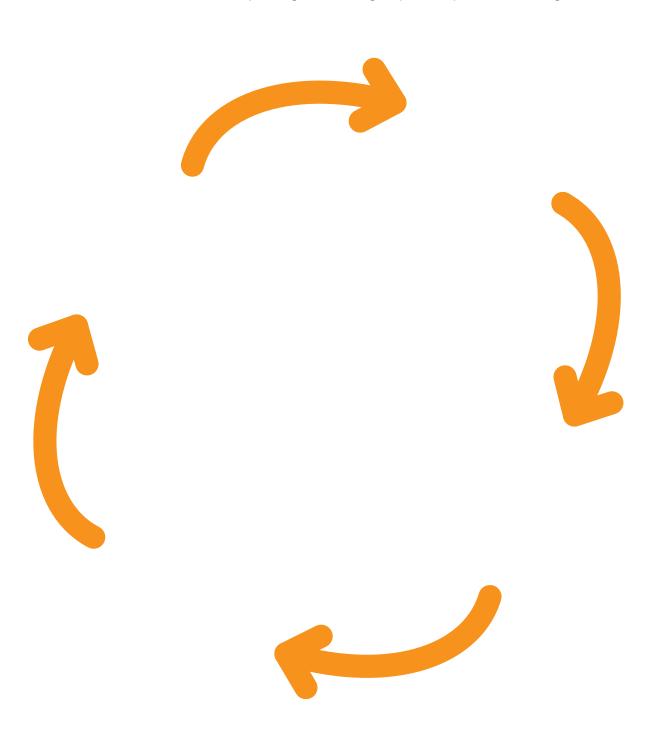
Animals that go through a complete metamorphosis go to bed looking one way and wake up a completely different creature. **Wow!**





LIFECYCLE ACTIVITIES:

Using the lifecycle template below and the picture cards on the next page, see if you can work out the different lifecycle stages of the dragonfly, butterfly, bluebell and frog.



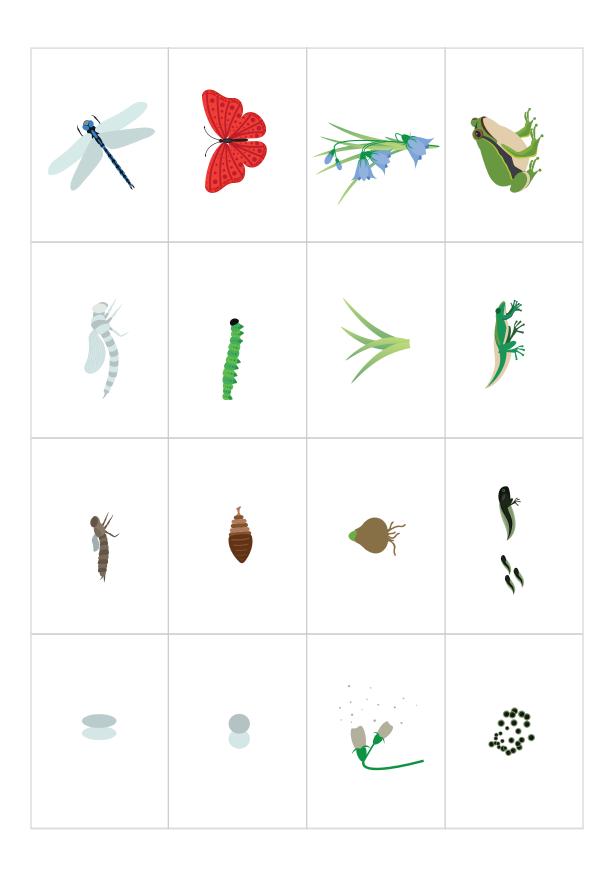


ACTIVITY 2







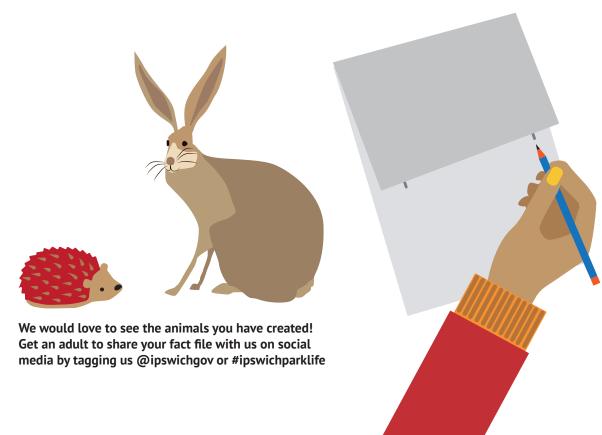




This activity is fun, creative and educational! This is a two-person activity, so you will need another person to help you.

To do your species mix up all you need is a pencil and a piece of paper.

- **1** Fold your piece of paper in half. You will take it in turns to draw a different wild animal found in the UK. Do not tell the other person what you are drawing! Make sure that you only draw half the animal, with the connection on the fold.
- **2** When the first person has drawn their animal, make a mark on the other side of the fold where the animal should connect so they know where to draw their animal.
- **3** You can either have one person draw the head and one person draw the back half, or you can both draw heads (it will be fun to work out how the animal would live in the next part of the challenge!).
- 4 Now the second person draws their half of the animal.
- **5** Once your animal is complete, open up your paper and see what combination you have.
- **6** Now look at the features of your animals and work out what adaptations they have. Do they have large ears to hear predators coming? Do they have sharp claws and long legs for fast running? Do some research into your animal if you do not know.
- 7 Now try to work out what habitat your animal would live in and write a fact file for your species.





In this activity, you will make a comic strip about a wildlife superhero!

Think of your favourite piece of British Wildlife and all the adaptations that it has to survive. These are the way the animal behaves or features of the animal's body that helps it survive by looking for food, escaping predators etc.

For example, garden spiders make webs to catch their prey, hares are superfast to escape predators and barn owls are silent fliers so their prey doesn't hear them! Then think of how these animals could use their adaptations to become superheroes!

Also think about who their archenemy would be! Could Super Slug with his super sticky trails have a nemesis The Horrid Hedgehog? Or could Super Spider have a nemesis the Evil Doctor Robin always hot on his tail?

Draw a comic in the template below of your superhero and its supervillain. Remember to add a bit of a story and describe it in the box underneath each picture.

If you enjoy this activity, you could do a whole comic book based around the adventures of your superhero animal and supervillain. For a twist, you could write the comic from the villain's perspective too.



We would love to see your comics, get an adult to share your stories and characters with us on social media by tagging us @ipswichgov or #ipswichparklife



Draw your comic here! Starting in the box top left and writing a little piece of the story under each image in the smaller box below.

I	





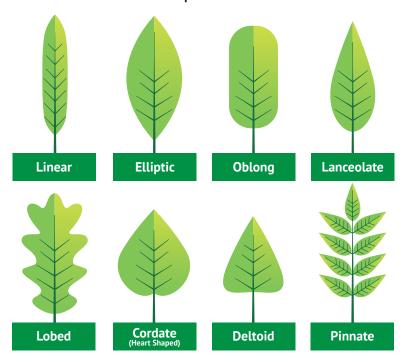
Age 10 and under

In the UK we have over 70 species of tree and each one is subtly different. You can usually tell a tree apart from others based on a few key hints:

1 Does the tree produce fruit or seeds? What do they look like?

2 What colour and texture is the bark?

3 What shape are the leaves?



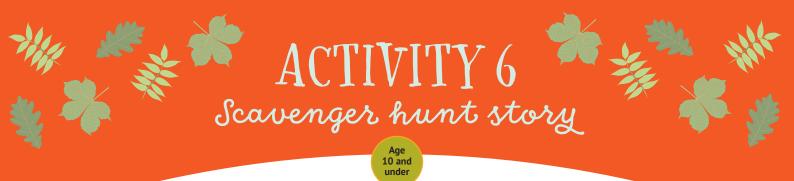
One of the easiest ways to start learning different types of trees is through their leaves. Although there are a few which are very similar, most of them are different enough to be able to learn the difference.

Leaves are the way in which trees produce food for themselves. They convert light into food in a process called photosynthesis. The leaves contain a green substance called chlorophyll (this is what makes most leaves green) which absorb carbon dioxide - a type of gas in the air. Along with water, they turn this into something called a carbohydrate which the tree uses as food – we also get carbohydrates by eating plants like potatoes. During this process the tree produces oxygen which we breath in!

Trees are very hungry plants and want to get as much light as possible to get as big as they can. Trees will stretch as high as they can and then produce lots of leaves to get as much sunlight as possible. Different trees have produced different shaped and sized leaves to absorb as much light as they can.

Above is a diagram showing the names for the different shapes of leaves. Knowing what shape your leaf is can help identify what kind of tree it is. For example, a triangular shaped leaf known as a deltoid leaf usually belongs to a type of birch tree, whilst linear leaves are often willow trees and lobed leaves are usually oak trees.

Now see if you can find a leaf that matches each of the leaf types above. Then do some research to see if you can work out which type of tree the leaf came from.



This is a fun story writing activity. On a walk around your garden or local park see how many of the following natural items you can find:

- Acorn
- Root
- Leaf
- Twig
- Bark
- Bud
- Fern
- Moss
- Insect
- Spider
- Feather
- A white flower
- A conker or chestnut

Once you have found all your items, draw a picture or take a photo so you remember what they looked like. Then write a short story that includes all of the items in the list. Be as creative as you like – it could be a story about an acorn man who lives in a house made of leaves and twigs, or it could be about an animal discovering all these things in the woods. Remember to be very descriptive about the items and be creative.

If you want to involve your friends you could each write part of the story, split the items in two and both write part of the story. You will need to discuss the characters and theme of the story first and decide who will start and who will finish the story.



Get creative! We want to read your stories! Share them with us on social media using the tags @ipswichgov or #ipswichparklife

For another creative writing challenge, produce a newspaper about the events that happen in a pond during a day. Think of a title for your newspaper and headlines for your stories, e.g. "Diving Beetle Attacked". Include imaginary interviews with the pond residents, write about their day-to-day concerns and about any dramatic events that may have happened. Draw pictures to illustrate your stories. Include special features such as articles on fish, news from other ponds or a weather report.

Here are a few creatures that live in ponds to give you some ideas:

- 1 Diving Beetle
- 2 Tufted Duck
- **3** Water Vole
- 4 Water Scorpion
- 5 Pike
- 6 Freshwater Mussels
- **7** Little Egret
- 8 Water Shrew
- 9 Water Fleas
- 10 Dragonfly Larvae

Let your imagination go wild! Think about the kind of things you might hear in the news. It doesn't have to be bad news either, it could be a good news story like "Baby water vole rescued" or "Water flea has record number of babies".

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