

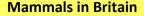
Welcome to the first British Nature Guide e-magazine for families and children. It includes articles, fact sheets and activities for adults to read and discuss with children aged from 4-12 years.



Birds in Britain

Around 200 different species of birds breed in Britain each year.

Some birds live here all year round. The bird on the left is one of them, a Greylag Goose.



About 100 different mammal species have been seen in Britain, including seals, dolphins, deer, bats and mice.

The mammal on the right is one of them, a Hedgehog.



Wildflowers in Britain

We have lots of beautiful wildflowers in Britain. They are often found in woods and in hedgerows, but many can be found in gardens, including the Snowdrops on the left.



Moths in Britain

There are 2600 species of moths in Britain. Most fly at night so we don't see them.

A moth to look for in the spring is the Herald. (right)



In this children's e-magazine

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You will find lots of activity sheets in this e-magazine. Please try to save paper, ink and electricity by only printing out the pages that you need.

Just for fun

In North America I am called a Bug. In Britain I am called a Bird.

In fact I am a beautiful red Beetle.

What am I?

(You will find the answer at the bottom of the next page)

Please don't feed Hedgehogs bread and milk. It isn't good for them.

If you want to feed Hedgehogs in your garden leave out a bowl of fresh water and a dish with some tinned dog or cat food. (But not with fish in it) You can also leave out crushed dog or cat biscuits.

Some places sell food specially made for Hedgehogs. You might like to use this.



There are three similar looking white butterflies in Britain, often referred to as Cabbage Whites.

The caterpillars of the Small White and the Large White do in fact feed on cabbages, but the caterpillar of the Green-veined White (pictured above) prefers to feed on wild plants, usually leaving cabbages alone.

Foxes in London

The Red Fox (Vulpes vulpes) is a beautiful and intelligent creature which is fascinating to observe. If you live in London you will not need to go far to see a fox as there around 15,000 living in the city. Only Bristol has more foxes per square mile than London.





How did foxes come to London?

As London grew in size during the 1930s, foxes began to move in to the outskirts of the city from the neighbouring countryside as they discovered there was plenty of food and shelter to be found. In time they adapted to their surroundings and travelled further into the heart of the city where they are now a common sight.

What do foxes eat?

Foxes can find a wide range of food in the city including fruits and vegetables to help them maintain a varied diet. In the gardens, allotments and green spaces of London they can find mammals to eat including rats, mice and field voles along with small birds and feral pigeons. They also take advantage of exposed refuse sacks.

Are foxes dangerous?

Some of the foxes on the streets of London can be bold but most retreat under cover when humans approach. Attacks by foxes are very rare and they generally keep out of the way of domestic pets such as cats and dogs, though rabbits and guinea pigs should be kept in hutches to ensure their safety.

How long do foxes live?

Most urban foxes live two to three years. They breed once a year and usually have a litter of four to five cubs which they raise in a protected spot known as a 'den' (in London this might be under a garden shed). The cubs are born in early spring and those who survive stay with the vixen (female fox) until the autumn. The male is known as the 'dog fox' and brings food to the den for the vixen and cubs while guarding against predators.

Why do foxes have long bushy tails?

Foxes use their tails to help keep their balance, to communicate with other foxes and even to help keep them warm in the winter.

What is the best way to learn more about foxes?

Keeping a close eye out for foxes and watching them closely when they appear will help you make your own exciting discoveries.



I am sure that you have seen stories about Climate Change or Global Warming on the television?

When we burn coal, oil, petrol and wood as fuels, the fumes go into the earth's atmosphere. These fumes are called greenhouse gases. Factories, planes, cars and lorries produce a lot of greenhouse gases.

These gases form a layer around the world's surface, a bit like a blanket, and keep the heat in. This causes the air temperature to increase.

It might sound quite worrying, but there are lots of things we can do to put it right.

Here are three things that we can do to help.

Turn off lights when we leave rooms.

Don't waste food.

Buy a reusable drink bottle and fill it from the tap. Don't buy bottled water.

To find out how these things help go to page 19



The answer to the just for fun quiz on page 3 is a Ladybird (picture above)

Bird Migration

Birds like the Robin and the Bluetit (below) live in Britain all year round. They have got used to our warm summers and cold winters. They do not migrate.





Birds like the Snow Bunting and Barnacle Goose (below) spend the summer in countries further north, like Iceland and Greenland.

When the weather there starts to get cold they fly south to Britain to spend the winter here.





Birds like the Swallow and the Yellow Wagtail (below) only visit Britain in the summer when it is warm and there are plenty of insects for them to eat. There are not many insects in Britain in winter, so these birds fly south to warmer countries in Africa to feed on insects there instead.





Dandelions are very important for our bees and other flying insects, especially at the beginning of the year when there are not many other flowers for them to feed on. Dandelions are wildflowers not weeds.

Please let some grow in your garden.

Reading activity sheet for children who are new to nature aged 4-7

I am a Wasp



I am a **Wasp**.

I am yellow and black.

I can **fly**.

I can **sting**.

This **yellow** and **black Wasp** can **fly** and **sting**.

A copying activity sheet for children who are new to nature aged 4-7

First steps into nature – wildflowers and colours

| Read | Сору |
|---------------------|------|
| Red Poppy | |
| Blue Bluebell | |
| Yellow Dandelion | |
| White Daisy | |
| Pink Clover | |

There are lots of pretty wildflowers growing in our countryside.

Some flowers are very small.

Why not have a look for some on your school playing field?

Tell your teacher about what you find.

Don't be a litter dropper Be a litter picker upper

This page is for older children who want to help to save wildlife

Don't be a litter dropper

Plastic litter in the sea, on the seashore, in parks and along the side of paths is not just horrible to look at, it is also dangerous to wildlife

Creatures as big as whales and dolphins are swallowing plastic toys and bottles when they are feeding.

Gulls are picking up plastic sweet wrappers from the surface of the oceans and fields. They are eating it themselves, or feeding it to their chicks.

Turtles like to eat jellyfish. In the water a plastic bag looks just like a jellyfish, so the turtles eat them.

Fish are eating the smaller pieces of plastic that are drifting in the rivers and seas.

Hedgehogs, voles, seals and birds are getting plastic bags and ties wrapped around their necks.

What happens to all of these animals?

It is a shame, but unless they are rescued, most of them will die.

Please take your plastic litter home and put it in the recycling bin.

Be a litter picker upper

Some litter can be dangerous to touch. If you want to pick up litter talk to an adult about it first, and ask them to go with you.

Do not pick things up with your hands.

Do not pick up broken glass.

Do not pick up anything that looks like a needle, like the ones a doctor or nurse might use.

If you see anything else that looks dangerous, tell an adult. Do not try to pick it up yourself.

Take a big bag or bucket to put the litter in and wear thick gardening gloves.

Use a long handled litter grabber to pick things up.

Pick up sweet wrappers, plastic bags, tin cans and plastic bottles.

When you have finished put your litter in a recycling bin.

By being a litter picker upper you will make a place tidy and you will save the lives of lots of animals.

Butterfly facts for children aged 8-12

A butterfly has four wings, two are forewings at the front, and two are hindwings at the back.

It has two long antennae sticking out from the head. It uses the antennae to detect the scents of flowers and other butterflies in the air.

It has a body made up of a thorax and an abdomen. They are both covered in hair.





A butterfly has three legs on each side of its body and large eyes on the side of its head.

The head, the wings and the legs are all connected to the thorax, which is the front part of the body.

The thorax contains powerful muscles to work the wings.

The abdomen is the long thin back part of the body. It is connected to the rear of the thorax.

The words below are the main parts of a butterfly.

Fill in the missing letters to complete the words. Some are quite difficult.

g A_t_n_a_ T_o_a_ W_n_s

You can find the answers on page 13

Trees and the environment for children aged 8-12



Silver Birch trunk and bark



Maple leaves

Trees can grow very big and they can live for hundreds of years, some can even live for thousands of years.

Trees are very important for insects, birds and mammals.

Trees are useful to people as they produce most of the oxygen we need to breathe and the wood we need to build our houses and furniture.

Trees take carbon dioxide from the atmosphere. When trees are cut down and burned the carbon dioxide they have taken in is released back into the atmosphere. Carbon dioxide is also produced by burning coal to make electricity, and by the engines in cars and lorries when they use petrol. Too much carbon dioxide in the atmosphere is a bad thing. Growing trees is a good way to keep the level of carbon dioxide down.

Trees use the sun's rays, water from the ground and carbon dioxide from the atmosphere to grow. As trees grow they produce oxygen. They do this by a process called photosynthesis.



Holly Berries



Horse Chestnut Blossom



Oak acorns

A few interesting facts about trees in Britain

An Oak tree can live for more than a thousand years and produce around 5000 acorns every year. Birds, squirrels, mice and pigs will all eat the acorns.

People do not eat acorns as they have a bitter taste and can cause an upset stomach.

Fir trees can grow to more than 60m in height, which is the same height as a twenty storey building.

Big trees can weigh as much as 50 tons. Don't forget they also grow underground. The roots hold the soil in place and stop them from being washed away when it rains.

A big old tree can produce enough oxygen each day for three people to breathe.



Beech Tree

The parts of a tree

Trunk

Roots

Bark

Branches

Twigs

Leaves

Blossom

Seeds

Fruit such as

apples

Nuts such as acorns

A nature crossword game



Fill in the missing letters

| A small mammal with whiskers | | | 0 | | S | | |
|--|--------|---|---|---|---|--------|---|
| Like a butterfly, but flies at night | | | | h | | | |
| An amphibian, covered in warts | | | | | a | | |
| A small brown garden bird | | r | | | | | |
| Looks like a Crow, but has a long white bill | | | | | 0 | | |
| A large white waterbird | | | | | | | n |
| Not always welcome when it is buzzing around your house | | | | f | | | |
| Has gills and swims in rivers, lakes and the sea | f | | | | | | |
| | | | | | | | |
| Grows in the ground | | | р | | | n | |
| Grows in the ground Has a beak and is covered in feathers | | | р | r | | n | |
| Has a beak and is covered in | | | р | r | е | n | |
| Has a beak and is covered in feathers | b | | p | r | е | n | |
| Has a beak and is covered in feathers A mammal with antlers | b e | | p | r | е | n | |
| Has a beak and is covered in feathers A mammal with antlers Can sting A small brown insect with big | | | p | - | е | n t | |
| Has a beak and is covered in feathers A mammal with antlers Can sting A small brown insect with big pincers Small black insect that lives in | | | p | - | e | | |

Have you filled in all the letters? Well done. Now all you need to do is find these four words hidden on the page, Wasp, Otter, Spider and Owl.

Finished? Now go to page 14 to check your answers

What do we want? - Bees!

Why do we want them?

Because without bees we would not be able to grow most of our

- Vegetables
- Berries
- Fruit
- Garden flowers
- Wildflowers





When do we want them? Now!

What do bees do that is so important?

Bees pollinate our plants by taking pollen from one plant to another as they visit different flowers to feed. This pollen fertilizes other flowers so they can produce seeds to grow new plants.

There is a food that we would not have without bees. Fill in the missing letters to find the answer:-

H___Y

You will find the answer in the section on Honey Bees on the next page





Why do plants produce nectar and pollen?

They produce nectar to attract bees and other insects.

They produce pollen to fertilize other plants.

What do we want? Bees! (page two)

There are lots of different types of bees

Here are a few

- Bumblebees
- Honey Bees
- Solitary Bees
- Sweat Bees
- Mining Bees
- Mason Bees
- Carpenter Bees

Bumblebees collect nectar and pollen on special hairs on their legs and take it back to their nests to feed their young.

Bumblebees are very important pollinators as they have to visit hundreds of flowers every day to collect enough food to feed their colony.

Honey Bees collect nectar and carry it back to the hive and store it in honeycombs.

The bees fan the nectar with their wings until most of the water has evaporated from it, leaving the thick syrup which we call honey.







What plants do bees like best?

Dandelion, Buttercup, Bluebell, Foxglove, Poppy and Lavender are good plants to have in your garden. They will attract lots of bees and other insects.

A useful tip for attracting bees

Don't cut the lawn every week. This gives dandelions, daisies and other small wild plants time to flower.

Here are 12 different mini-beasts (they are all called invertebrates because they do not have a skeleton)

Can you name them all?

Write your answers in the boxes below the pictures.

You can check your answers on page 14.

Good luck!



Write your answers below

Answers to butterfly body parts missing letters quiz on page 8

Abdomen

Head

Eyes

Legs

Antennae

Thorax

Wings

| write your answers below | | | | |
|---|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Don't forget to check your answers on the next page | | | | |

The stages of a butterfly's life

A butterfly starts out as an egg.

When the egg hatches it becomes a caterpillar.

The caterpillar eats leaves and grows very quickly. When it is fully grown it either spins a cocoon around its body, or sheds its outer skin to become a chrysalis.

A butterfly starts to grow inside the cocoon or chrysalis. When it is fully grown it breaks out.

Butterflies only live for a short time. The females lay eggs and the whole process starts again.

This process is called metamorphosis.

The answers to the mini-beast photo quiz on page 13 are below

| Earwig | Beetle | Fly |
|-----------|--------|-------------|
| Ant | Snail | Dragonfly |
| Butterfly | Slug | Caterpillar |
| Ladybird | Wasp | Spider |

Do you like watching birds?

Why not see how many different species you can see in a day?

Write them down so you don't forget.

Something beginning with B

I can think of Bugs and Butterflies

How many more creatures can you think of that begin with a B?

Why not write them down on a piece of paper?

The answers to the nature crossword game from page 10 are below

| A small mammal with whiskers | | m | 0 | u | s | е | |
|--|---|---|---|---|---|---|---|
| Like a butterfly, but flies at night | m | 0 | t | h | | | |
| An amphibian, covered in warts | | | t | 0 | a | d | |
| A small brown garden bird | W | r | е | n | | | |
| Looks like a Crow, but has a long white bill | | | r | 0 | 0 | k | |
| A large white waterbird | | | | S | W | а | n |
| Not always welcome when it is buzzing around your house | | | | f | 1 | У | |
| Has gills and swims in rivers, lakes and the sea | f | ī | S | h | | | |
| Grows in the ground | | | р | ı | а | n | t |
| Has a beak and is covered in feathers | | b | Ĭ | r | d | | |
| A mammal with antlers | | | d | е | е | r | |
| Can sting | b | е | е | | | | |
| A small brown insect with big pincers | е | a | r | W | Í | g | |
| Small black insect that lives in large colonies | | | | a | n | t | |
| A common wildflower with white petals and a yellow centre | d | a | i | S | У | | |
| A small horse | | | | р | 0 | n | у |



Not for fire-breathing Dragons, instead we will be looking for Dragonflies

There are lots of different sorts of Dragonflies in Britain. Only a few have the word Dragonfly in their name.

Some are very small and they are called Damselflies and Demoiselles. Some are large and they are called Hawkers, Chasers, Skimmers and a few are actually called Dragonflies.

Even though they have lots of different names they are all types of Dragonfly. It can be quite confusing.





There are quite a few species of Damselflies. They can be red, green or blue.



To the right there are pictures of Banded Demoiselles

The male is blue and the female is green.





Dragonflies live near ponds, rivers, canals and lakes. They usually fly close to the water. You have the best chance of seeing them on warm days in spring and summer.

Water can be dangerous. Ask an adult to take you to look for Dragonflies. Do not go alone.

Below you will find pictures of four more species

A Norfolk Hawker A Broad-bodied Chaser A Black-tailed Skimmer A Hairy Dragonfly





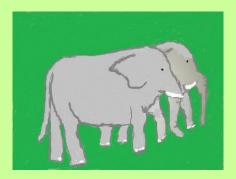




For fun, for knowledge, for nature and for children

The world's wildlife is in trouble

Elephants need our help



There are two kinds of elephants, one that lives in Africa and another that lives in Asia.

African Elephants are the heaviest land animal in the world, the male can weigh up to 6000kg and grow to over 3m tall.

Asian Elephants can grow to nearly the same height as their African cousins, but they rarely exceed 5400kg in weight.

An easy way of telling the two species apart is to look at the size of their ears. African Elephants have much larger ears.

Elephants are vegetarians. They eat huge amounts of grasses and plants, as well as leaves from bushes and trees. They will even peal bark off trees to eat.

An adult can eat more than 100kg of food a day.

The numbers of both species of elephants have reduced over the last 100 years.

At the beginning of the last century there were several million African Elephants living in the wild, there are now only about 400,000.

In the last hundred years Asian Elephant numbers have gone down from 200,000 to around 35,000.

About 100 elephants are killed every day by poachers for their ivory tusks.

As the human population increases in Africa and Asia the people need more land to grow their food.

This leaves less land for elephants.

Whales need our help

There are lots of different types of whales living in our oceans. They are very intelligent creatures.

Some countries still hunt and kill whales. Other whales are captured and put in to small aquariums where they are made to do tricks for people to watch.

There is a lot of plastic rubbish in the oceans and a lot of whales have died because they have eaten plastic.

Some whales are killed when ships collide with them.

The whale in the picture below is a Humpback.



Polar Bears need our help

These snow white bears live in the Arctic around the North Pole. Most of them are found in Alaska, Greenland, Russia and Canada.

They hunt seals by walking for miles out onto the frozen sea. Because Climate Change is making the seas warmer there is less sea ice and the bears cannot get to the places where the seals live.

Polar Bears are finding it hard to catch enough food for themselves and their cubs.

In the spring birds build nests



This Coot has built her nest out of reed stems and grasses. It is near to the water. She lays about eight eggs. The eggs in the nest are called a clutch. The parents sit on the eggs to keep them warm. If the parents are scared away the eggs will go cold and the chicks inside will die. If you see a nest do not get too close or you might scare the adults away.

When the chicks hatch from their eggs they cannot fly. They rely on their parents to protect and feed them. They are able to swim just a few days after hatching and they are then able to leave the nest and to follow their parents. They all return to the nest to sleep for a few nights. When birds sleep together in groups this is called roosting.

About a month after hatching the chicks are nearly fully grown. They can fly and feed themselves. They no longer need their parents and will move away to find a different pond or river where they can live.



Coot a few days old (above)



Coot a few weeks old

A reading activity for children who are new to nature aged 4-7

I am a **butterfly**



I am a butterfly.

I have wings.

I can fly.

My wings are orange and brown.

This **butterfly** can **fly**. It has **orange** and **brown wings**.

How many legs do I have?

(answers at bottom of page)

| Spider | Mouse |
|-----------|--------|
| Bird | Ant |
| Butterfly | .Snail |

Explanation about Climate Change from article on page 4

The good news is that

we can all do something to

help our world

How does turning off the lights when we leave rooms help to save the world?

If we use less electricity our power stations burn less coal and gas. Less greenhouse gases are produced and we stop the earth from heating up as quickly.

How does not wasting food help to save the world?

A lot of petrol is used by tractors in fields and lorries on roads, growing our food and bringing it to the shops.

This produces a lot of greenhouse gases. If we didn't waste food, then less tractors and lorries would be needed and less greenhouse gases would be produced.

How does using a reusable drink bottle help to save the world?

Bottled water is heavy and it takes up a lot of space. Lots of lorries are needed to transport bottled water from factories to the shops. These lorries create a lot of greenhouse gases. If we all used a reusable drink bottle filled with water from a tap, instead of bottled water, then a lot less greenhouse gases would be produced.

How many legs?

Spider has 8, Mouse has 4, Bird has 2, Ant has 6, Butterfly has 6, Snail has 0



Ladybirds are often named after the number of spots on their backs.

Can you guess the name of the one above?

Yes, you are right. It is a two-spotted Ladybird.



On sunny and warm days in the spring make sure to watch out for butterflies. They will often bask in the open on a fence, a wall or a leaf.

The one in the photograph above is called a Small Tortoiseshell. They have not been doing too well in Britain over the last few years. They used to be quite common, but now they are becoming rare in some areas.

A Bluetit



Bluetit facts

Bluetits are very small birds. When fully grown they weigh only slightly more than a 50p coin.

They eat small insects and seeds, and like to peck tiny pieces from peanuts.

Bluetits are one of our most common birds and often visit parks and gardens. They will nest in boxes in gardens. Male and female Bluetits look the same.

The words below are all colours you can see on a Bluetit. Fill in the missing letters to find the colours.

Y_I_o_ B_a_k B_u_ G_e_n

(Answers across the page)

Wie

Climate Change - the next 100 years

What will happen if we don't reduce the amount of greenhouse gases being produced by our lorries, factories and planes?

There will be a lot more very hot summers. There will be water shortages.
Sea levels will rise, causing flooding in coastal areas.
There will be lots more bad storms and hurricanes.

To discover lots more nature activity and fact sheets, visit the Resources for Children pages on

www.britishnatureguide.com

In the next issue you will find

Nature fact sheets

Nature activity sheets

What do we want? Trees!

Nature crossword game

Tiger facts

Is palm oil a good or a bad thing?

A look in a rock pool

Butterflies in our gardens

Six different Ladybirds to look for

Photo identification quiz



Crab Spider (above)

Crab Spiders are common around the Mediterranean. This one is yellow. It is hard to see on the flower. It sits still and waits for a fly to land. It grabs the fly and kills it with poison before eating it.

We do find Crab Spiders in Britain in the summer. Look for them on bright yellow flowers.

The answers to the Bluetit colours missing letters test

Yellow, Black, Blue, Green and White

Amazing nature

Some geese can fly at heights of over 10,000 metres. High enough to fly over the Himalayas. This is nearly as high as passenger planes fly.

Thank you from all of our team for taking the time to read this e-magazine.

If you have enjoyed it, please tell your friends about it.

Let's make the world smile by doing everything we can to look after it



British Nature Guide

Please remember to tell everyone to look after our world