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Our world is worth saving for children everywhere

Garden
butterflies

Nature
crossword

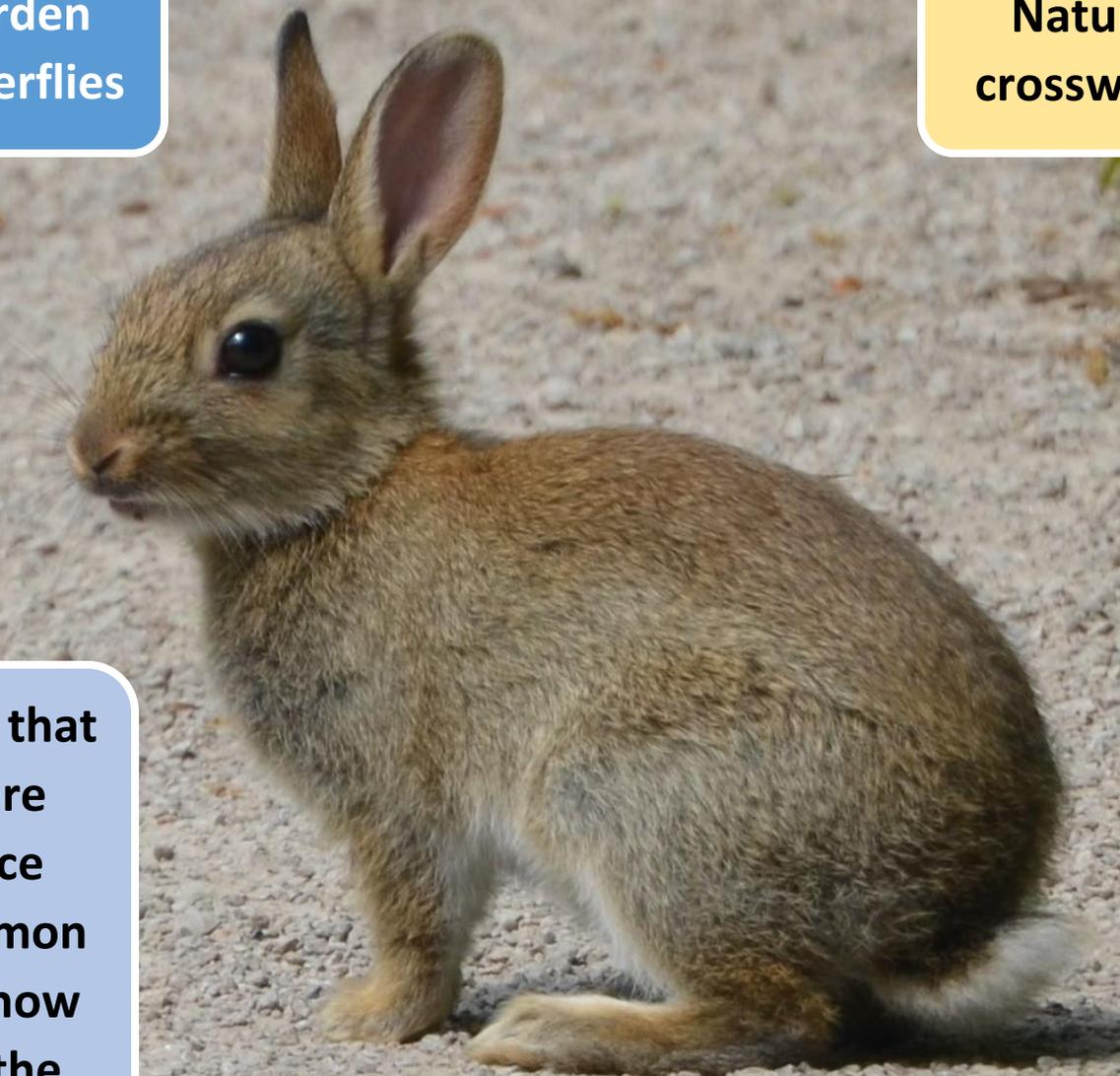
Birds that
were
once
common
are now
on the
Red list



**For fun, for knowledge, for
nature and for children**

Families and children e-magazine #2 – Summer 2019

Six
Ladybirds
to look for
this
summer



Welcome to the British Nature Guide summer 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.

The Lapwing (right) used to be a familiar sight over all of Britain, but numbers, particularly in England and Wales, have greatly reduced. A hundred years ago the main threat was egg collecting for food, today intensive farming practices do not leave enough rough areas for them to breed in.



The Common Frog (left) likes damp areas, especially near ponds where it lays its eggs in spring. A Frog's eggs are called Frogspawn. The eggs quickly hatch into Tadpoles. Tadpoles only have tails, but they soon grow legs and the tail starts to shrink. Within about four months they look like a tiny frog.



Some wildflowers can look very pretty, but be quite prickly. One of these is the Bristly Oxtongue. It has yellow flowers which look like Dandelions but the leaves are said to look like Ox tongues and are covered in sharp spines. This is a plant to look at but not touch.



One of the strangest looking moths that you might find over the summer months is the September Thorn. This moth is reasonably widespread, although most people will not have seen one. They are attracted to lights at night, so you might just find one near a front door or security light.



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.

High flying ducks

After reading this article you might look at Mallards in a different way



Mallards



Ruddy Shelduck

Sometimes in nature all is not as it appears. Seeing Mallards fly across a pond in your local park, landing in a fluster with wings flapping, the last thing you might imagine is their soaring to great heights, far above where most ducks have ever ventured! However from 1963 (when a Mallard was sadly struck by a jet over Nevada at 21,000 feet /6,400 metres), for the next fifty-four years they held the record as the highest flying ducks on the planet.

Amazingly in 2017 satellite data recorded a flock of ducks flying even higher, migrating over the Himalayas at 22,000 feet/6,800 metres. They were found to be Ruddy Shelducks, similar in size to Mallards and mainly present across Asia with a smaller population in southeastern Europe. If you are very lucky you may see one of these distinctive orange/brown ducks in Britain where they are found in waterfowl collections and on very rare occasions in the wild.

Why do birds sometimes fly so high?

Although birds generally fly low to avoid strong winds and predators, by climbing high during migration they can take advantage of the jet stream (a fast flowing air current at high altitudes) and the cooler conditions to make swift progress without becoming dehydrated. Scientists have also concluded that some species have adapted to fly at heights where oxygen levels are low, enabling them to fly over mountain ranges without taking a lengthy detour.

As recording methods become more advanced it may be that these two remarkable duck species are soon observed at even greater heights, though they may never compete with Bar-headed Geese, the highest flying waterfowl of all who on their migration from Mongolia to India have been known to reach an astonishing 29,000 feet /8840 metres!

A nature crossword game

Fill in the missing letters



Has flippers and live by the sea. Not a real Lion.	S					O	
A fish that sounds like the bottom of your foot							E
Look like cat's tails and grow from Pussy Willow trees in the spring		A		K			
A baby Hare			V				T
Also called Killer Whale	O						
Can be mistaken for a mouse	V		L				
A baby Eel			V		R		
Lives in burrows and has long ears			B	B			
Grows on Oak trees in autumn							N
Has a honking call				O		E	
We get our eggs from these		H				E	
Hoots at night		W					
Lives in soil and wriggles				M			
A prickly leaf							Y
A baby pig		I					
Type of tree found in churchyards				E			

Have you filled in all the letters? Well done. Now all you need to do is find these five words hidden in the answers on the page, Nest, Clover, Tree, Cow and Mole.

Finished? Now go to page 14 to check your answers

Six different types of Ladybirds to look for

We have lots of different species of Ladybirds in this county. Not all are red with black spots. Here are six to look out for this summer.



Seven-spot Ladybird



22-spot Ladybird



Orange Ladybird



Water Ladybird



Kidney-spot Ladybird



Cream-spot Ladybird



This might not look like a Ladybird, but it is in fact the larva of a Seven-spot Ladybird. The larvae of all of the species look slightly different.



When a larva is fully grown and ready to turn into an adult it attaches itself to a fence or leaf and turn into pupa (as above). After a few weeks an adult Ladybird will emerge.

Ladybirds might not look like beetles, but that is what they are.

Ladybirds eat aphids, which are very small insects. Aphids can damage plants, so most gardeners like Ladybirds.

Adult Ladybirds can fly, they keep their wings hidden under their hard outer casing.

Adult Ladybirds can live for more than a year, they spend the winter months hibernating in dry sheltered spots in our houses, garages or sheds.

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



I am a **caterpillar**.

I am **green**.

I eat **leaves**.

When I grow up I will turn into a **moth**.

This **green caterpillar** eats **leaves** and will
turn into a **moth**.

First steps into nature

Where mammals live



A **Fox** digs a hole in the ground to live in.
This is called a **den**.



A **Squirrel** builds a stick nest to live in.
This is called a **drey**.



A **Mole** lives underground in a tunnel.
It digs out a **nest chamber** to sleep in.



A **Rabbit** digs a hole in the ground to live in.
This is called a **burrow**.

Fill in the missing words

A Fox lives in a _____

A Squirrel lives in a _____

A Mole sleeps in a _____

A Rabbit lives in a _____

State Birds of the United States

Many Americans value their birdlife with each of the fifty states having its own state bird as shown below (photographs included of those the British Nature Guide team has managed to catch up with on visits so far)

Alabama Northern Flicker 	Alaska Willow Ptarmigan 	Arizona Cactus Wren 	Arkansas Mockingbird 	California California Quail 
Colorado Lark Bunting 	Connecticut American Robin 	Delaware Blue Hen Chicken 	Florida Mockingbird 	Georgia Brown Thrasher 
Hawaii Nene 	Idaho Peregrine 	Illinois Northern Cardinal 	Indiana Northern Cardinal 	Iowa American Goldfinch 
Kansas Western Meadowlark 	Kentucky Northern Cardinal 	Louisiana Brown Pelican 	Maine Black-capped Chickadee 	Maryland Baltimore Oriole 
Massachusetts Black-capped Chickadee 	Michigan American Robin 	Minnesota Common Loon 	Mississippi Mockingbird 	Missouri Eastern Bluebird 

State Birds of the United States (continued)

Montana Western Meadowlark 	Nebraska Western Meadowlark 	Nevada Mountain Bluebird 	New Hampshire Purple Finch 	New Jersey American Goldfinch 
New Mexico Greater Roadrunner 	New York Eastern Bluebird 	North Carolina Northern Cardinal 	North Dakota Western Meadowlark 	Ohio Northern Cardinal 
Oklahoma Scissor-tailed Flycatcher 	Oregon Western Meadowlark 	Pennsylvania Ruffed Grouse 	Rhode Island Rhode Island Red 	South Carolina Carolina Wren 
South Dakota Ring-necked Pheasant 	Tennessee Mockingbird 	Texas Mockingbird 	Utah California Gull 	Vermont Hermit Thrush 
Virginia Northern Cardinal 	Washington Willow Goldfinch 	West Virginia Northern Cardinal 	Wisconsin American Robin 	Wyoming Western Meadowlark 

Maybe you are planning your own family visit to the USA. If so why not start a table like the one above and see if you can find of some of the state birds that have eluded us so far? And good luck keeping up with the roadrunner!

As a starter, can you name the Top 3 most popular state birds in the United States based on the table above?

(Answers on next page)

Just for fun

What is this bird?

I am a bird and I live in Britain.

I have orange feathers, I have blue feathers and I have white feathers.

I have a long dagger-like beak.

I fly low and fast across the water.

I dive into the water to catch fish.

Go to page 20 for the answer

Red-and-black Froghopper



This insect is called a Froghopper, that is because if you get too close it will hop away just like a Frog.

It is not very big, only about 1cm long.

It likes tall plants and long grass.

Why not look out for one this summer?

A baby chicken is called a chick.

We have special names for the babies of the birds and animals listed below. Do you know what they are?

Duck

Deer

Fox

Goose

Whale

Seal

You will find the answers on page 21

18 different species of bats live in Britain. They are all specially protected and should not be disturbed or harmed.

The bat below is a Natterer's Bat which was captured by a trained bat expert doing a survey on bat populations.

Natterer's Bats have big ears and whiskers on their chin. They hunt at night and eat flying insects, like midges and flies.



Answers to the question on the previous page about American state birds

1st: Northern Cardinal (seven states)

2nd: Western Meadowlark (six states)

3rd: Mockingbird (five states)

Only 32 species of tree are native to Britain.

Ladybird drawing and fact sheet



Draw your own Ladybird in the box below and colour it in. You can copy the picture above if you like.

Ladybird Quiz

There are only three colours on this Ladybird. Fill in the missing letters below to find the colours.

r_d

b_a_k

w_i_e

This Ladybird has seven black spots on its red wing cases, three on each side and one in the middle.

Ladybirds feed on small insects called aphids.

Ladybirds are beetles.

Ladybirds keep two wings under their shells.

Ladybirds can fly really well.

Ladybirds have six legs.

Which bird am I? (A test for older children)



Pied Wagtail



Swallow



Magpie



Cormorant

Above you can see pictures of four birds. You will find these birds in Britain in the summer. Circle the bird's name in pencil if you have seen one of them.

The Pied Wagtail eats insects which it catches near the ground. It wags its tail as it walks. It will roost in trees or on the tops of buildings. It lives in Britain all year round.

The Swallow eats insects which it catches in the air, sometimes quite high in the sky. It only comes down to the ground to collect mud to build its nest. It is a summer migrant, spending the winter in Africa.

The Magpie is a big and noisy bird. It eats fruit, seeds, small birds, eggs and mammals. It is often seen on the ground searching for food. It lives in Britain all year round.

The Cormorant eats fish which it catches from the sea, or from lakes or rivers. It is often seen sitting on a post near to water with its wings stretched out, drying its feathers. It has webbed feet to help it to swim. It lives in Britain all year round.

Using the information in the table below work out which line is for a Magpie, which is a Pied Wagtail, which is a Cormorant and which is a Swallow. Write your answers in the spaces under the heading - Which bird am I?

I eat insects	I have the letter P in my name	I hunt for food near to the ground	I have webbed feet	I am a summer migrant	Which bird am I? Write my name in the box below.
Yes	Yes	Yes	No	No	
Yes	No	No	No	Yes	
No	No	No	Yes	No	
No	Yes	Yes	No	No	

A look in a rock-pool



On a sunny warm day in the summer there is nothing better than taking a look in a rock-pool on the beach. You might need a net and a bucket to keep some of your finds in.

Try to find some crabs. Small crabs can have quite soft shells so be careful not to hurt them. All crabs have pincers which can give you a nip. Please remember that they are only trying to protect themselves against the giant creature that is trying to pick them up (YOU).

Look out for Sea Anemones which often live in rock-pools. Some are red and some are green. When they are out of the water they look like blobs of soft jelly, but under the water you can see all of their tentacles. Please don't try to pick these up, you could hurt them.

Small fish often get stranded in rock-pools. Some will bury themselves in the sand to hide from you.

If you do catch anything in your bucket please make sure that you don't keep it too long and put it safely back into its pool before you leave.

Something beginning with F.

I can think of Flamingo and Ferret.

How many more creatures can you think of that begin with an F?

Why not write them down on a piece of paper?

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

Has flippers and live by the sea. Not a real Lion.	S	E	A	L	I	O	N
A fish that sounds like the bottom of your foot				S	O	L	E
Look like cat's tails and grow from Pussy Willow trees in the spring	C	A	T	K	I	N	S
A baby Hare	L	E	V	E	R	E	T
Also called Killer Whale	O	R	C	A			
Can be mistaken for a mouse	V	O	L	E			
A baby Eel	E	L	V	E	R		
Lives in burrows and has long ears	R	A	B	B	I	T	
Grows on Oak trees in autumn			A	C	O	R	N
Has a honking call		G	O	O	S	E	
We get our eggs from these	C	H	I	C	K	E	N
Hoots at night	O	W	L				
Lives in soil and wriggles	W	O	R	M			
A prickly leaf			H	O	L	L	Y
A baby pig	P	I	G	L	E	T	
Type of tree found in churchyards			Y	E	W		

Butterflies in our gardens

If you live in northern Scotland you will not find as many butterflies in your garden as someone who lives on the south coast of England.

This is because the winters are more severe in the north and many butterflies cannot cope with the colder winter and the shorter summer. That does not mean you will not see butterflies in northern Scotland.

Scotland has some very special butterflies including the Scotch Argus, Mountain Ringlet and Chequered Skipper.

On the right are pictures of four butterflies to look for in gardens in the far north of Britain.



Green-veined White



Common Blue



Red Admiral



Dark Green Fritillary

As you get down to southern Scotland, northern England and North Wales the numbers of butterflies which might visit your garden increases. If you are lucky you might find a Holly Blue patrolling a Holly bush, or a Small Tortoiseshell on Lavender or other garden flowers.

Other butterflies to watch out for are Comma, Peacock, Large White, Small Skipper, Gatekeeper and Brimstone.



Holly Blue



Small Tortoiseshell

In the southern counties of England and in South Wales there is the greatest variety of butterflies. Marbled White is a resident species and Clouded Yellow is a visitor from Europe.

Other special butterflies to look out for in the south are Silver-spotted Skipper, Wood White, Adonis Blue, Black Hairstreak and Painted Lady.



Marbled White



Clouded Yellow

What do we want? Trees?

What do trees do for us that makes them so important?

Trees produce the oxygen we breathe.

Trees take carbon dioxide and other dangerous gases from the atmosphere.

Trees provide shade in the summer.

Trees are home for birds, mammals and insects.

Trees produce the wood we use in building.

Trees hold the soil in place and stop it being washed away by heavy rain.

Forests and woodlands cover more than 40% of the land in the European Union. These forests absorb over 400 million tons of carbon dioxide each year.

In Finland the forest cover is over 71%

In Sweden the forest cover is about 67%

In Britain the figure is only about 12%. The government has decided to plant 11 million more trees in England. More are being planted in Scotland and Wales as well.

To slow the rate of global warming we need to stop cutting down trees and we need to plant hundreds of millions, if not billions, more trees all over the world.



This is a Purple Hairstreak butterfly. It spends all of its life on Oak Trees, usually flying around the very top.



This is a Little Egret. It is a type of heron and it catches fish to eat, but makes its nest in the top of trees.



This is a Red Squirrel. It eats bark, nuts and pine cones and spends most of its time climbing trees.



Why not ask your teacher if your class can plant a tree in the school grounds?

Why not go for a walk in the woods?

Take a pen and some paper, or a notebook, and try to write down all the things you see, hear and smell.

For example can you see any insects, or hear any birds singing, or smell any wildflowers?

Note down the colours of any flowers you see. Draw a picture if you can and try to identify them when you get home.

The most important thing is to look at the trees. Look at the shapes of the leaves and that will help you to work out what species you have seen.

Hundreds of different species of insects can make their homes in a single Oak Tree.

Birds of Conservation Concern – Red List

Due to the impact of changes in our environment and climate the leading conservation organisations in the UK have carried out a review of the current status of our bird species. Each species has been placed on a list, either **Red** (highest conservation priority), **Amber** (medium conservation concern) or **Green** (least conservation concern). We have become so used to seeing some species in gardens, on woodland walks and by the seaside that it can be quite a shock to discover that their numbers are decreasing and their future is now threatened.

Below are three examples of birds you are probably very familiar with. Each has now been placed on the **Red** list.



The **House Sparrow** has been such a cheerful presence in our gardens for so long that it is hard to imagine its future being insecure. While there are still around 5 million pairs which seems an impressive number, this contrasts with 12 million pairs in the 1970s. This rapid decline has been attributed to changing agricultural practices meaning less insects (their staple diet) along with pollution and predators (cats and foxes) in cities.



Song Thrushes sing so beautifully and at times so loudly that we can easily get the impression that they are still flourishing in our parks and woodland where a century ago they even outnumbered blackbirds. Sadly, this delightful species is in serious decline due to the loss of the habitat it depends on (bushes and trees providing cover). Shy and solitary in nature, Song Thrushes have also proven difficult to attract to the garden bird table.



Noisy, abrasive and bold in claiming any food on offer, the **Herring Gull** can seem a dominant presence on the seashore but it would not be the same without them. Unfortunately they too are in steep decline with the UK breeding and wintering population having fallen by 60% in the last 25 years. Oil pollution and a change in fishing practices have been a factor, leading Herring Gulls inland to less healthy food sources such as landfill sites.

How much do you know about wildlife?

A test of reading and knowledge for 6-10 year olds



Read the following information carefully and then answer the questions in the boxes at the bottom of the page.

A butterfly is an insect. It has six legs and four wings. It can fly. It visits flowers and it feeds on nectar.

A spider is an arachnid. It has eight legs. It builds sticky webs. It cannot fly. It catches flies to eat.

A heron is a bird. It has two wings and it can fly. It has two long legs. It eats fish which it catches with its sharp beak.

A Fox is a mammal. It has four legs and a long bushy tail. It cannot fly. It hunts for its food and eats Rabbits.

	How many legs do I have?	Can I fly?	What do I eat?	I am
Heron				A bird
Butterfly				An insect
Fox				A mammal
Spider				An arachnid

Is Palm Oil a good thing or a bad thing?

This article is intended for discussion with older children

Palm Oil can be found in many of the things we use on a daily basis, including bread, crisps, breakfast cereals, hair shampoo, soap and even some types of chocolate. Almost half the products on supermarket shelves could well have Palm Oil in them.

There have been calls for Palm Oil to be banned because large areas of tropical rainforest are being cleared in order to grow this crop.

There are other oils which could be used instead of Palm Oil, but far more Palm Oil can be produced per hectare of plantation than any of the other oils. If we switched to the other oils far more land would be needed to supply world demand for oil.

Most of the Palm Oil we use comes from just two countries, Indonesia and Malaysia. Both of these countries have cut down large areas of tropical rainforest and replaced them with Palm Oil plantations.

The WWF (World Wide Fund for Nature) is encouraging these countries to move to the production of CSPO (Certified Sustainable Palm Oil) grown on land that has not been cleared of forest in the last 20 years.

The WWF estimates that there are millions of hectares of land which has been cleared of forest in the past that could be used to grow Palm Oil.

Palm Oil is not only used in foods and cosmetics it is also used in animal feeds, as a biofuel in vehicles, for cooking and it is burned to generate power.

Some of the many animals threatened with extinction in the wild if rainforests continue to be cleared for Palm Oil.

Orangutan

Sumatran Elephant

Bornean Pygmy Elephant

Sumatran Rhinoceros

Sunda Clouded Leopard

Sunda Pangolin

Forest destruction is often talked of in terms of football pitches. It is estimated that an area the size of three hundred football pitches is cleared of tropical rainforest every hour. Much of this destruction is to create more Palm Oil plantations.

Palm Oil could be produced in a sustainable way, without destroying the world's precious rainforests.

As consumers we need to put pressure on manufacturers to only use CSPO (Certified Sustainable Palm Oil). There might be a slight increase in cost of some items we buy, but that would be a small price to pay to protect the rainforests and the creatures which live in them.

Many species of birds, insects, plants, mammals, reptiles and amphibians will be pushed to extinction if deforestation of the tropics continues.

One of our nearest relatives, the Orangutan could well be one of the first to disappear in the wild.

Is Palm Oil production a good thing or a bad thing for the world?

If tropical rainforests continue to be destroyed and replaced with Palm Oil plantations, the answer has to be bad.

If Palm Oil producers can be persuaded to use land that has been cleared in the past, the answer could be good. But they need to change their ways very quickly before all the rainforests and their animals are gone.

Photo identification quiz

Below are pictures of nine birds, insects, animals and plants. How many can you identify?

Write your answers in the boxes under the pictures.



1.



2.



3.



4.



5.



6.



7.



8.



9.

You will find the answers on page 21

The answer to the just for fun bird question on page 10 is Kingfisher (Pictured below). Well done if you worked out the answer for yourself.



Do you know the names of all the birds you see each day?

If you see one you don't recognise, check in a book at home or in the school library.

Write down the names of all the birds you have seen. That will help you to remember.

Tiger facts

(for older children)

There is only one species of Tiger

This species is divided into six sub-species, all slightly different from each other and living in different areas. Tiger numbers have increased slightly over the last few years, but they are still threatened by poaching, conflicts with farmers and habitat loss.

The Siberian Tiger is the biggest.

The Indian or Bengal Tiger is the most numerous.

The Indochinese Tiger is darkest in colour.

The Sumatran Tiger is the smallest.

The Malayan Tiger only lives in the Malayan Peninsular.

The South China Tiger is the rarest.

There used to be three other subspecies, but these are now extinct. The Caspian Tiger has not been seen in the wild since the 1970s, the Balinese Tiger has not been seen since the 1950s and the Javan Tiger was hunted to extinction in the 1970s.

About 4000 tigers still live in the wild, of these nearly 2500 are Bengal Tigers living in India.

Tigers do not all live in the wild

There are more tigers in captivity in the United States of America than there are tigers living in the wild in their natural ranges in Asia. Between 5000-7000 tigers are being kept in zoos or as dangerous pets in the USA.

China also has a large captive population with more than 6000 tigers in zoos, circuses and breeding farms.

Mute Swans



Mute Swans are our biggest water bird. They have orange bills and black faces.

The male is called a cob.

The female is called a pen.

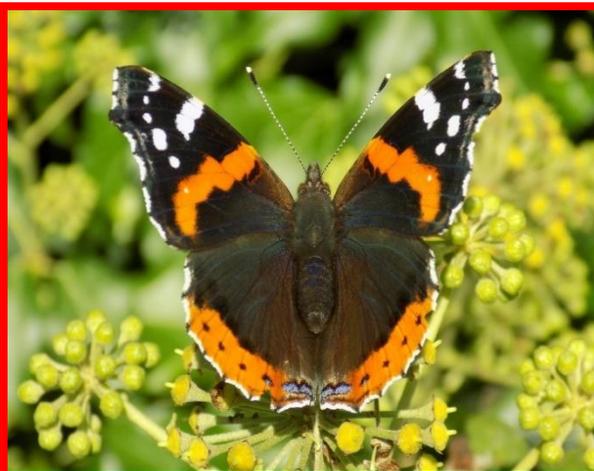
Young swans are called cygnets.

They are called Mute Swans because they are one of the quietest types of swans.

They build a huge nest near the edge of a river, lake, pond or canal. The female will lay between four and seven eggs.

They will hiss at anyone who gets too close to their nest or their chicks. Please keep well away.

Swans eat grasses, seeds and water weeds. It is best not to feed them bread, try sweetcorn, lettuce or spinach instead.



There are four colours on this Red Admiral butterfly.

Fill in the missing letters in the next box to find the colours.

e
_l_c_
_h_t_
_l_e

Birds don't all fly

More than 60 species of birds have lost the ability to fly.

The most famous was the Dodo.

Can you think of any more?

The answers to the baby animals quiz on page 10

A baby duck is a duckling

A baby deer is called a fawn

A baby fox is called a cub

A baby goose is called a gosling

A baby whale is called a calf

A baby seal is called a pup



You might think that Emperors, Dukes and Admirals sound like important people.

Well they probably are, but they are also the names of some of our most beautiful butterflies.

Purple Emperor

Red Admiral

Duke of Burgundy

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

In our autumn issue you will find

Nature fact sheets

Nature activity sheets

Nature crossword game

Autumn bird migration

Autumn leaves

Photo identification quiz

Birds of Conservation concern - Amber list

The bird above is a Ring-necked Parakeet. It is one of our most colourful birds.

Some birds were brought here from India as cage birds and about 40 years ago some escaped. Now we have our own wild population.

They live mainly in the south of Britain, but they are gradually moving north and may soon be a common sight all over the country.

The answers to the photo identification quiz on page 19

1. Robin
2. Fox
3. Butterfly (Small Tortoiseshell)
4. Daisy
5. Woodpigeon
6. Rat
7. Ladybird (Seven-spot)
8. Poppy
9. Starling

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**