## Conservation Education

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### Contents The Season of Spring Spring flowers Insects... 4 Amphibians... 5 Birds. 6 7 Mammals... Is Spring getting earlier? 8 Things to do ... Helpful Websites

Small Beginnings – During the long, dark days of winter Nature appears to be at a complete standstill. Then the months of February and March bring the lighter evenings and produce the first real stirrings in the countryside.

These small beginnings take the form of buds and catkins on the trees, early spring flowers and other plant life.

The snowdrop, primrose, violet and coltsfoot are but four of the wild flowers to be seen, while a warm February and March will help to bring out catkins on trees such as hazel, silver birch, alder and sallow. The leaves of bluebells will now be pushing up through the woodland leaf litter and there will be other signs that spring is on its way. For instance, birdsong will become more noticeable as time progresses.

The 14th February marks St. Valentine's Day, perhaps the most romantic day of the year (and one of the most expensive!). Long ago it was believed that this was the day on which all the birds chose their mates for the year. In fact, the 14th February was originally the feast day of the Greek god Pan. The second day of February was once thought to be the lowest point of mid-winter, with brighter times to look forward to.

Deep underground at this time of year there are other "small beginnings" taking place, for the sow badger will be giving birth to her cubs in a warm and snug sett, while up on the surface the dog fox can be heard barking. The eerie and quite bloodcurdling answering scream of the vixen has probably been responsible for many a nightmare on a cold, clear February night, when sounds carry over long distances. The month of March takes its name from Mars, the Roman god of war – and it certainly can be a turbulent month,

> with gale force winds and generally long stormy periods. It is rather like a war between the weakening winter and upthrusting new spring life. However, the month does have one or two redeeming features, including the first day of spring (usually the third week) and "turning the clocks forward on hour" on the last weekend of the month, when

British Summer Time starts again and we begin to enjoy the lighter evenings.

Meanwhile, all around us those "small beginnings" are increasing in tempo as the countryside begins to blossom and come to life. Birds are well into their pairing and nestbuilding rituals by now and we begin to notice the "dawn chorus" as the birds stake their claim to their chosen territories.

Now we really know that summer is on its way!



# The Season of Spring

#### What is a Season?

Here in Great Britain the year can be divided up into four sections, each one with a different type of weather.

These four regular weather changes are known as seasons and we call them spring, summer, autumn and winter.

Some areas in the world have only two seasons - usually known as a wet one and a dry one – and there are other areas, such as the tropical rainforests, where they have the same weather all through the year.

#### Why does Britain have four Seasons? Our planet Earth rotates slowly around on its axis (an

imaginary line round which the Earth turns) and the Earth is tilted at an angle on this axis. During the course of a year, the Earth moves around the sun. At different times of the year, different parts of the Earth are tilted towards the sun. Britain lies in the area of the Earth we call the Northern Hemisphere. When we are experiencing the coldest weather of the year, winter, the North Pole (the top end of the axis) is tilting away from the sun, the sun is low in the sky and day length is short.

However, when the North Pole is tilting towards the sun, the sun is higher in the sky and therefore the Northern Hemisphere receives more light and heat, making the days longer and the weather warmer - the season of summer!

Between the coldest and the warmest seasons are the ones in between - spring and autumn. Spring brings its warmer weather as the North Pole is slowly tilted towards the sun. Summer fades into the cooler autumn weather as the North Pole is gradually turned away from the sun.

#### Are there four Seasons in other parts of the world?

Yes, on the opposite side of the world, in the Southern Hemisphere, countries like Australia also experience four seasons but they are opposite to those happening in the Northern Hemisphere. For example, whilst Britain is in the middle of winter, Australia is experiencing the high temperatures of summer!

#### The Signs of Spring

Here in Britain, the season of spring officially begins in March and continues throughout the months of April and May, although the first signs of spring are usually seen as early as February. Spring weather can vary from day to day warm, cool, wet, dry, sunny, cloudy, windy but as the temperature and day length increase, the weather shows a gradual but definite change. The weather is not the only thing that changes

with the seasons - the lives of plants and animals are also affected as the temperature and daylight length changes with each season.

It is usually the behaviour and activities of the plants and animals in the countryside and in our gardens that tell us that spring has begun. Even as early as February there are signs to look out for, such as yellow catkins fluttering on hazel trees, snowdrops pushing up through perhaps still-frozen ground and male birds singing to establish their territories. In the south of England. where spring starts earlier than it does in the north, frogs may even start laying their eggs (frogspawn) in ponds during February.

In the following pages you will find more details about the spring activities of some of our plants and animals.

## Spring Flowers

Spring flowers get their name because they flower in the spring. This simplicity hides a very clever strategy on the part of the plants concerned.

Most spring flowers are at home in deciduous woodland, and tend to be fairly small plants. Spring is the best time for them to be exposed to the maximum sunlight possible before the leaves of trees above them reach their full size. In summer, when the trees attain their full canopies, there is little light available on the woodland floor. Bv this time, the spring flowers have already completed their reproductive cycles for the year. Many spring flowers are brightly coloured, as they need to be noticed by passing pollinators, like flies, bees and other insects.

Primrose The flowering of primroses is a real sign that spring has arrived, and that warmer weather is on the way. The Latin name for the primrose is primula vulgaris, with primula meaning 'first rose' and vulgaris meaning 'common'. In fact, primroses are a lot less common than they used to be, mainly as a result of overpicking. Primroses produce two kinds of flower, and it is only when pollen is transferred from one kind of flower to the other that seeds are produced. In the Middle Ages, a drink made from primroses was used as a remedy for gout and rheumatism. The roots were used to cure headaches, and the flowers

were even used to make love potions.

Bluebell The bluebell is one of the most common British spring flowers, and they can appear in spectacular blue mists across woodland floors from March onwards. They enjoy the moist, mild oceanic climate Britain offers them, but they are rare throughout the rest of

the world, and the bluebell is now a protected species in the UK. Bluebells are not only blue – white or pink flowers can also be found in natural populations.

Trees in Spring

There are thousands of different tree varieties in the UK, but only 33 of them are native. That means that they arrived in the UK from mainland Europe during the ice age (about 5,000 years ago) without the help of man.

Since then many other trees have been introduced and colonised happily. During the winter deciduous trees lose their leaves so there is noticeable difference between winter and spring as the trees produce flowers, grow new leaves, and wildlife appears to return to the woodland area.

> Hazel Hazel is a common

first signs of spring is the sight of brilliant yellow catkins hanging from the leaf-less branches of a hazel tree.

deciduous woods, especially with oaks, ash and birch. It is also a nev open out into member of the birch family and typically grows three to six metres tall. Often you will find it with a number of trunks branching out at ground level making it look more like a bush than a tree.

Hazel has smooth, shiny, greyish-brown bark which peels off in strips as the tree gets older. The trunks are often covered in mosses, lichens and liverworts. The twigs are covered in long stiff hairs and the buds are smooth and oval shaped. As early as January, the yellow catkins appear - they've actually been there since last summer but they remain dormant and green until spring. New leaves will not appear until April or May. Catkins are the long male flowers which hang down in clusters and are full of pollen. The female flowers are tiny red tufts on brown buds and they appear on the same branches as the males. The wind causes clouds of pollen in early spring but pollination will only be successful between different trees. If a female flower is pollinated it will grow into a hazelnut in the late summer. Some of the nuts get taken by squirrels, woodpeckers and other small animals, some of them will be buried

or dropped and forgotten and grow into

saplings the following spring.

Did you know that hazel is the only native tree to produce edible fruit - the hazel nut? Hawthorn

Hawthorn is another native deciduous species. It is sometimes called the

'May' tree - probably because this is the month that the hawthorn really looks its best. The hawthorn is often a tangle of branches and green leaves covered in a crown of sweetsmelling blossoms in spring and red berries (or haws) in the autumn.

The hawthorn really comes into its own in late spring and heralds the beginning of summer. In early April young bright-green, oval-shaped leaves unfurl, gradually become darker on top and paler underneath as the spring passes into summer. Spring also sees the arrival of fragrant five-petalled white flowers that grow in clusters.

An estimated 150 species of insect make their home in the hawthorn: the flowers in particular attract flies and beetles, which make the tree an ideal habitat for birds and small mammals.



# Insects in Spring

A minibeast with six legs and a body divided into three parts - a head, a thorax and an abdomen - belongs to the group we know as insects. Minibeasts are correctly known as invertebrates, which are animals without backbones, and also includes creatures such as spiders, earthworms, centipedes, slugs and snails.

Insects are the most numerous animals in the world. In fact, there are more **species** (kinds) of insect in the world than of all other species of animals put together!

Rainforests have more species of insect than anywhere else but even here in Britain, the animal you are most likely to meet is an insect - there are over 22,000 species! They are found in almost any British habitat (a place where animals and plants live), often in great numbers. They even live in our homes!

What are these thousands of insects up to during spring? As with any other animal, the life of an insect is affected by the season of the year, and it has to adapt to the changes in its environment. Many insects cope with the cold of winter by hiding away somewhere and sleeping until the warmth of spring wakes them up. Some butterflies, queen wasps and bumble bees, slugs, snails and many caterpillars (the larvae of the butterflies and moths) overwinter by sleeping - a type of sleep called torpor. They hide under logs, stones, inside

garden sheds, even in corners of the rooms in our houses. They do not freeze to death because their body fluids have special chemicals that act rather like the antifreeze in a car radiator.

Some species of butterfly and moth lay their eggs in the summer, then they die, but their eggs lie hidden away all through the winter. When the weather warms up in the spring, the eggs hatch and the caterpillars emerge. Yet other species overwinter as a pupa

(chrysalis) and emerge as an adult butterfly or moth in the spring.

Overwintering butterflies, such the brimstone, small tortoiseshell and peacock, may be seen fluttering about in March, even on a warm day in February. They search for spring flowers to feed on their energy-rich nectar.

If you peer up into the canopy of a deciduous tree (one that loses its leaves in the autumn) when the fresh, young leaves are opening up, you may spot huge numbers of tiny moth caterpillars.

Look out for the peacock butterfly on warm days in early spring! This beautiful nsect spends the winter hibernating in garden sheds and may even come into ses looking for an undisturbed corne

eaters), feeding on the new leaves. Before they manage to eat all the leaves and harm the tree, many of the caterpillars will be preyed upon by birds, which now have hungry young to feed. In turn, these birds may be eaten by larger, more aggressive carnivores (meat-eaters). This sequence of events is an example of one of the many food chains that take place amongst a community of plants and animals in a habitat. Here is a particular example:-

Oak leaf

These have hatched from overwintering

eggs and they are **herbivores** (plant

Oak Beauty Moth Caterpillar

Blue Tit Sparrowhawk

Another insect often spotted flying lazily about in the early spring sunshine is the fat, furry bumble bee. Only the large queen bees survive the winter and, having woken up, thev feed on pollen and nectar and then fly low over the ground looking for a suitable place to make a nest and start a new colony. An old mouse hole or a hole in a bank is chosen by most bees. The queen then collects fine grass and moss to make a ball-shaped underground nest, in which she makes a special wax cell and lays her first eggs.

## Amphibians in Spring

In spring, British amphibians come out of their winter hibernation and, triggered by the warmer temperatures and increased rainfall, they start breeding. In just a few months they go through an amazing metamorphosis from birth to adulthood.

There are three types of amphibians native to Britain: frogs, toads and newts.

#### The Common Frog

The common frog is found in a wide range of habitats across the UK. They can grow up to 8cms long and have moist, smooth skin and are yellowish-brown in colour. Frogs hop and toads crawl.

Apart from really dry habitats, adult frogs can be found in most areas outside of the breeding season. Between January and March though they will be returning to a pond or other water source to mate and lay their eggs. You may hear males croaking to catch a female's attention and to keep other males out of their territory.

In early spring, the female will lay up to 2000 eggs in a pond – usually the one she was born in. One pond could contain as much as 25,000 eggs as all the frogs in the area mate in the same place. Each egg contains a little black embryo and each egg is clumped together in a jelly-like lump - which is called frogspawn. The frogspawn floats to the surface where it is kept warm by the sun. After two to four weeks - depending on the temperature - tiny tadpoles will emerge from the frogspawn.

The tadpoles eat the frogspawn jelly and then move on to the plant matter in the pond. They breathe oxygen through gills and grow quickly. Within seven weeks they will have rear legs near their long tails and by nine weeks will have grown lungs and need to surface to breathe air. After three months the front legs break through the skin and soon afterwards their tails will start to recede as they prepare for a land-based life. When it takes its first steps on land it will have lost its gills and tail, can breathe air and is a tiny frog only a centimetre long.

Although they are called the common frog they are not so common. They are at risk

due to loss of habitat, increased use of insecticides in farming and in our gardens, and many get run-over on their way to the pond during the mating season. In some places you might spot road signs that warn drivers that frogs are crossing. In recent years the common frog has been struck down by a virus called Red Leg (Ranavirus). If you see any dead adult frogs with red limbs report them to Froglife (See end for website address).

#### The Common Toad

There are two types of toad in the UK, the common toad and the natterjack toad. The common toad is Britain's largest and heaviest amphibian. It lives in fields, hedgerows, gardens

and woods. Toads spend most of their time on dry land and are

nocturnal - that is they hunt for slugs, worms and insects at night - and they rest motionless in the same hiding place during the day so you may find one hiding under a rock or log.

In the spring, toads wake up from their winter hibernation and like the frog, return to the pond where they were born to mate. Several hundred toads can migrate to the same pond in the spring making it a very noisy affair. Common toads breed a few weeks later than common frogs in most parts of the UK. Toads lay their eggs in double rows, in long strands about 3

metres (10 feet) long between March and early April. The strands are woven around the stems and leaves of water plants, Within three weeks the tadpoles hatch out and can be seen swimming in 'schools' of thousands from May to June. They develop in the same way as frog tadpoles but are a little smaller.

Out of the 1,000 to 4,000 eggs that were laid by one female only 5% will survive most of them are eaten by insects, fish and

birds. Even so, on damp nights in June and July pond banks can be teeming with tiny toads as they crawl off into the countryside. Newts

There are three species of newt resident in the UK: the great crested newt, the palmate newt and the common, or smooth, newt.

Newts wake up from hibernation (sometimes sharing the same hiding place as frogs and toads and other newt species) and head to a pond or other water source during February and March, although the main breeding period is not until April or May.

Male newts use elaborate courtship displays to attract the females, they dance in front of the female, swell the crest along the back and show off their brightly coloured stripes and spots. After mating the females lay single eggs which they wrap in underwater leaves for protection.

Within a couple of weeks the eggs will hatch into miniature adults called efts which have feathery external gills so that they can breathe underwater.

Newt tadpoles are carnivorous and immediately start eating small aquatic insects, frog and toad tadpoles and even each other. They are not ready to leave the pond until mid-summer and if food is particularly scarce they can delay

the metamorphosis process and stay in the pond as tadpoles for a whole year.

All native British amphibians are protected under the Wildlife and Countryside Act of 1981, and the sale of any British newt, their eggs, or tadpoles, is prohibited. Great crested newts are an endangered species and have extra protection - it is illegal to even disturb or damage their habitat.

## Birds in Spring

Spring is an active time for birds as they start up their spring mating songs, compete for territories and look for nesting sites.

Song Thrush

Some birds in the UK are resident – that is they live here all year round, such as robins, blackbirds, and wrens – and some, like the swallow and cuckoo migrate during the winter and return to the UK in the spring. The RSPB (Royal Society for the Protection of Birds) are doing a Big Garden Bird Watch Survey for 2003. This is a great way to get involved in a national programme and watch birds at the same time. (See end for website address).

#### Swallow

The swallow returns to the UK in March and April from warmer African countries. Occasionally you might spot a swallow as early as February! Over 60% of swallows die each year during the spring migrations.

The return of the swallows to the UK is perfectly timed to coincide with the first major hatch of flying insects on which they are almost entirely dependent for food.

The male swallow is the first to arrive and he immediately sets about finding a suitable nesting site, which will often be used for several years. The nest is made out of mud, often under eaves, tree branches, or in barns. Then he will start to collect materials such as straw and feathers for furnishing the nest in the hope of attracting a female. When the females arrive she chooses a mate and finishes the nest building.

She will lay four or five eggs in May which take 15 days to incubate and then the chicks hatch. The father goes off to find food for the hatchlings and after a few days the mother also leaves the brood in search of food. Over a summer the swallow can produce three broods of chicks.

Swallows are easy to spot because of their unusual forked tail. They also fly with a characteristic swoop when hunting insects and are rarely seen on the ground. Swallows are often spotted swooping over water catching sticklebacks.

Did you know – some experienced swallows may be able to return from South Africa in just five weeks flying at a speed of about 300km a day!

#### Blackbird

The blackbird is a common bird throughout the UK all year round. The population actually decreases in spring as many of the birds have been overwintering in the UK and now return to the

continent. There are an estimated 4.4 million blackbird pairs in Britain and 1.8 million in Ireland. Over the winter there could be as many as 20 million blackbirds in the UK.

The male is all black with a bright yellow bill and the female is dark brown all over with faint streaking on the breast. They can be found in almost any habitat including woods, farmland, gardens, wasteground and hedges.

The blackbird is from the same family as the thrush, robin and redwing, all of which are great songbirds. They eat insects like earthworms, snails and slugs, and berries and can often be seen pecking at grass.

In March and April, blackbirds start looking for mates, establishing territories and building nests. The blackbirds dawn chorus is a sure sign that spring is here. The songs are varied and are used to help them recognize nearby territorial rivals and to confuse new-comers.

They also build a large nest made of stalks, grass and roots stuck together with mud, in a bush or tree. They lay four or five eggs which are bluish green and covered with brown splotches and they may have two or three broods each year. The first brood hatches out in May and the hatchlings hide in hedges and shrubs making odd chirps so the parent knows where they are.

#### Cuckoo

The cuckoo is a traditional herald of spring in the UK with its distinctive "cuckoo" song. They are large birds with grey-blue backs and white striped bellies, long wings and a long tail.

From April to May, the females arrive from wintering in Africa and set about reclaiming their old territories until the males return. The female does all the fighting to defend the territories and the males wander from one territory to the next mating as they go.

Each female has a favourite species of bird whose nest she will 'borrow', usually it's the nest of the species in whose nest she was brought up. Within her territory the female will lay up to 20 eggs in as many host nests as she can find. She

spies the bird as it picks up nesting materials and follows it back to its nest. Cuckoo seems to favour the hedge sparrow, reed warbler, meadow pipit, pied wagtail and robin as hosts.

From May to June the female cuckoo lays her eggs. She will first knock out one of the host bird's eggs and then lay her own in the brood. Cuckoos eggs are plain or spotted and a variety of colours – so the host bird is less likely to notice the change. Not all foster parents are fooled though and sometimes they abandon the nest and the egg.

Cuckoos' eggs usually hatch before the other eggs and the cuckoo chick will eject

the other eggs or young so that it gets all the food brought by its 'fosterparents'. After about 20 to 23 days the cuckoo hatchling could be several times larger than its foster parents and it will finally leave the nest.

In recent years the number of cuckoos in the UK has been declining and today's population is estimated at only 40% of its 1970s population. The decline is probably due to changing land use, increased use of insecticides, and climate change affecting the breeding times of the host birds.

Both the Woodland Trust and the British Trust for Ornithology (BTO) are urging people to report sightings (or hearings) of the cuckoo, and also report its absence. (See end for website address).

## Mammals in Spring

Mammals also get active as the winter ends and the spring weather arrives. Only three mammals hibernate over winter in the UK; hedgehogs, bats and dormice, others stock up on food like the squirrel, whilst others have to search for food all winter long like the brown hare.

#### Hedgehog

Hedgehogs spend the winter in hibernation in the UK because their food supply of insects, worms, slugs and other small creatures is scarce and, because they have spines instead of fur, they are prone to cold. In countries with warmer winters, like New Zealand, they do not need to hibernate (or only for a few weeks), whilst in Scandinavia where it is extremely cold, hedgehogs hibernate for months on end.

Hedgehogs are easily disturbed from their winter nests which are made of twigs, brambles and layers of leaves and grass up to 10 cm thick. By March, the hedgehog's fat reserves, which have kept it alive all winter, will be exhausted and the first mild nights of March will see the first hedgehogs emerge. They need to eat lots to replace their lost body weight and they spend the entire night

foraging for nocturnal invertebrates. If a snap of cold weather sets in they may return to their winter nests, but by mid-April all hedgehogs should be wide awake. During the day they sleep in light nests made up of grass and leaves and as the weather gets warmer they will just lie in long grass or hidden in leaves.

Hedgehogs start mating in May and June and it is an extremely noisy event. A male seems to meet a female by chance on his nightly wanderings and starts snuffling and snorting, whilst circling round and round, trying to get her attention. This can take hours because the female often shows no interest. The female may even wander off.

If they do mate it takes just a few minutes and the male plays no further part in bringing up the family. Babies are born about four and a half weeks later usually in June or July. A cold spring will cause the female to return to hibernation for a while and actually delay the pregnancy. The hedgehog does not stop growing once it reaches maturity, but continues to get bigger throughout its life.

#### British Bats

There are 16 species of bats in the UK, most of which are found in the south and a few in Scotland. This is because there are more insects in the south, a warmer climate and more roosting sites.

All bats are nocturnal, feeding on night-time insects, and they all hibernate in winter when their food becomes scarce. Although they mate in autumn they delay fertilisation until the warmer weather arrives in spring and they give birth in the late spring and early summer months.

> Bats become very active in the spring searching for food to restock the body fat they used up in hibernation. You might spot them after dusk around trees, over water or even under streetlamps attracted by the insects.

#### Brown Hare

The brown hare, or European hare, was probably introduced to Britain during the Roman times and was once common across the UK. It is less common in Northern Ireland and absent in the Scottish highlands where it is in competition with the indigenous mountain hare.

At its population peak in the early 1900s there may have been as many as 4 million brown hares but since then the population has fallen rapidly and is currently estimated at about 750,000 hares. This is mainly due to loss of grassland and changes in agricultural practices. It is now listed as a National Priority Species in the UK Biodiversity Action Plan (UKBAP). (See end for website address).

Hares are bigger and faster than rabbits. They have large, yellow eyes, tall blacktipped ears and in the spring their reddish



They prefer open grassland and arable land but can also be spotted in hedgerows and woodland during the day eating herbs

and grasses. They also eat cereals and root crops. During the day they rest in shallow dips in long grass called 'forms' so that only

their heads and backs are visible, and in the evenings they will venture out into the open to eat.

The best time to spot hares in the countryside is in the spring when the courtship starts. Females may be seen 'boxing' with males if they are not interested in mating in typical 'mad March hare' behaviour. Males may be seen racing about trying to protect their females from other suitors. Then, from early spring till late summer, the females will have up to three litters with about four babies, called leverets, in each litter.

Did you know that Brown hares are the fastest land animals in the UK – reaching speeds of up to 45mph?



## Is Spring getting earlier?

It is well-known that spring arrives in the south of our country at least a month earlier than it does in the north. However, over the last few years it has been noticed that all over the country the signs of spring are appearing earlier each year.

For example, frogspawn has been seen in ponds in Cornwall as early as the end of December! Butterflies have even been spotted flying on New Year's Day!

In 2002, the catkins on hazel trees flowered 23 days earlier than in 2001, snowdrops flowered 7 davs earlier and the cuckoo arrived almost a week earlier! As there are now fewer frosts, some species of insect are now breeding further north in Britain. Some migratory birds are now staying with us as they can find enough insects to feed them throughout the winter. Hedgehogs, bats and dormice are coming out of hibernation earlier.

Who makes a note of all these signs of Nature? The people responsible are several thousand volunteers called phenologists. The study of the timing of natural or seasonal events – such as the first frogspawn, first swallow, first butterfly – is called phenology. The earlier signs of spring that the phenologists are carefully recording seem to be coinciding with a 30 general rise in temperature 20 that Britain has been experiencing over recent years. Regular recordings of temperature are taken all over Britain. and these have shown that the 1990s were the warmest decade (10 years) since 1659, when records began. Spring was, on average, 1.3°C warmer in the 1990s than the 1980s. This increase may not sound very much but even small temperature rises can, over a period of time, cause changes in our climate and the behaviour of animals and plants.

You have probably noticed that our

British winters do seem to have been mild and short these last few years, especially in the southern parts, with very few frosty or snowy days.

The springs have been mild and wet. Some scientists tell us that these temperature increases are probably due to global warming - a rise in temperature all over the world as a result of human activities such as the burning of fossil fuels. Throughout its history, our planet has experienced many periods of natural

climate change as it has warmed up or cooled down, but it seems that the global warming we are experiencing at the moment is happening faster than ever before - and this may be leading to severe changes in the climate, such as more violent storms and higher rainfall. Also, it is feared that animals and

plants may find it hard to cope with a faster-than-normal changing climate.

Perhaps the signs of our changing seasons are not due to global warming caused by us humans, but just a natural 'blip' in the world's climate. Whatever the reason, our British climate does seem to be

changing and our wildlife is being affected. Changes in the behaviour of wild animals and plants from year to year should be taken seriously because they show us that changes are also happening to the climate.

Wherever we live, we could all be observant and make a note of the behaviour of the plants and animals around us - in our gardens as well as in the countryside. The records that we make today may be important for the future of our planet.

# Things to do

There are plenty of natural signs when spring is on the way. Here are some of the ways that you can be a nature detective on the trail of spring:

- 1. Find out which birds prefer which nesting materials: hang wool, straw and feathers from a low branch of a tree or from a bird table. Which bird species are attracted to the nesting materials? Do they prefer one type of nesting material to the others? Where are they taking the nest materials? You may be able to work out the sites of some nearby nests, but be very careful not to approach them while the birds are building them. Birds are easily scared, and if you pay a nest too much attention it may be abandoned.
- 2. How do you fancy being a phenologist? Don't worry, it doesn't mean you've got a disease, and you don't need lots of qualifications! Phenology is the study of when signs of spring happen for the first time in a place each year. You could record the date when you see the first snowdrop or the first bluebell, or perhaps when you hear the first cuckoo. Phenology has been going on for several hundred years across the UK, and as a result, we now have an interesting set of records that help to provide evidence for climate change. You can find out more, and get involved in an on-line phenology survey by visiting the Woodland Trust's website (see list of websites below).

### Helpful Websites

www.bbc.co.uk/reallywild general information on wildlife, surveys etc. www.bto.org/migwatch opportunity to become involved with a bird migration survey.

www.cloudsrus.com weather site for children.

www.4seasons.org.uk school projects related to the weather.

www.froglife.org information on amphibians

www.rspb.org/features/default.asp RSPB website for Big Garden Bird Watch Survey.

www.woodland-trust.org.uk/getinvolved Woodland Trust's site for reporting seasonal events.

#### www.ukbap.org.uk for information about the UK Biodiversity Action Plan

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