



Flag Fen: A natural history



working today
for nature tomorrow



Nature and wildlife is all around us. Wherever you go, from the remotest islands to the busiest cities, you will find plants and animals in some of the most unlikely places.

A world without wildlife would be quite impossible for us to live on. As all forms of life on Earth follow natural cycles, so we humans depend on our plants and animals for food, clothing, medicines and even building materials. All our fruit, vegetables and meat come originally from a natural source, but in this country we are used to buying these products from supermarkets, carefully prepared and packaged. It's sometimes hard to imagine that the perfectly-formed apples and carrots we see actually grew in an orchard or field!

Imagine how much harder it would be if we had to find food for ourselves. Would you be able to find your next meal, or sufficient food to feed your family? Three thousand years ago, long before supermarkets, the people who lived around Flag Fen had to solve these problems every day.

Flag Fen is an internationally important archaeological site, which has provided valuable information about Bronze Age people and their environment. Although they were farmers, wild plants and animals played an important part in the day-to-day survival of those early fen folk.



Scabious flowers at Flag Fen: this former home to ancient Britons is right next to modern houses and modern life – and wildlife thrives here.

Paul Lacey/English Nature

We live at a time where many things are provided for us. We don't have to catch or gather our breakfast from the countryside or weave our own clothes to keep warm and dry. We don't even have to worry about clean water, but we still need wildlife.

Contact with wildlife-rich environments has a very positive effect on both our health and mental wellbeing. Unfortunately the plants and animals we once shared such an intimate relationship with are threatened by our need to build more homes, roads and factories. Even our climate is being affected by pollution and increases in greenhouse gas emissions. At English Nature we are working to protect wildlife to ensure that everyone, now and into the future, can enjoy and experience the benefits of nature.

As you walk around Flag Fen, you might wonder how the people of the Bronze Age relied on their skills and knowledge of the world around them. They lived in harmony with their environment and respected it. Perhaps we too can learn some lessons from the Bronze Age.

WILD PLANTS

Many wild plants have been used as food, and some as medicines (one of the best-known examples is aspirin derived from the bark of willow trees). But not all plants are good to eat, and some are extremely poisonous, so knowing your plants is an important key to survival. Even before the Bronze Age, people have looked to the green world around them for food and cures, and many plants are still in use today.

Did you know ?

Many of the local names for mallow – ‘bread and cheese’, ‘cheese flower’ and ‘lady’s cheese’ for example – are evidence of centuries of the use of mallow as a food plant. ‘Bread and cheese’ was a basic meal available to most people, especially the poor.

Other plants were used for tools or building. Reed, for instance, is still widely used for thatching roofs, but it has also been used for boat building and papermaking.

The plants in this booklet are all common and familiar to most people. The English names given here are the most commonly used. Please remember that it is against the law to uproot or pick wild plants without permission.

Warning! While most of the food plants mentioned in this leaflet will *not* harm you, please remember it is important to identify plants correctly. Some that are safe to eat closely resemble dangerous ones, and we recommend using a good field guide.

Food plants

Around 10,000 or so plants have been used as food. Today, humans rely on just two dozen or so, of which the main ones are wheat, potatoes, rice and maize. The green leaves of dozens of other species have been added to other dishes, even just to provide some ‘salad’. The plants here have provided a more substantial contribution to our diet, and some have other uses as well.

Common mallow *Malva sylvestris*

Wayside or blue mallow is a common plant that grows on waste ground, by roadsides and even in your garden. It is a relative of the popular tree mallow or garden *Lavatera*, often grown as a decorative shrub.

Common mallow contains a very mucous sap and a related species, marsh mallow, was the original source of the well-



Chris Gibson/English Nature

known sweet. The roots of marsh mallow were once used as ‘teethers’ for babies as they are an ideal shape and hard enough to chew on. As well as being sweet and chewy, they can also calm tummy disorders.

Common mallow has been used as both food and medicine. The Romans certainly believed it was a beneficial plant and may even have cultivated it. The Roman writer Pliny claimed a daily dose would make you immune to all diseases, although it may not be a good idea to rely on this advice! The leaves are still made into a soup in the Middle East.

Dandelion *Taraxacum officinale*



Paul Lacey/English Nature

Dandelions are one of our most familiar wild flowers. It is a plant with centuries of association with humans. In Japanese ‘nituke’ cooking, the leaves are still eaten as a salad vegetable; the stems and roots are sautéed in oil and dressed with soy sauce. The roots were dried and roasted as a coffee substitute. It also provided the ingredients for wine and beer.

Some of dandelion’s local English names indicate its use as a herbal diuretic (a drug to purge the kidneys and encourage urination). There is a history of the gentry growing it in the Fens especially for this purpose as it counteracted the side-effects of drinking too much port! It has also been popular as a children’s toy, the seed heads being made into ‘clocks’ and the hollow stems into ‘raspberry blowers’.

Fat-hen *Chenopodium album*

Many of us will have come across this well-established ‘weed’, as it nearly always appears on ground that has been dug or disturbed. Its old name was ‘melde’ and it gave its name to Melbourn in Cambridgeshire, and Milden in Suffolk where it is celebrated in that village’s sign.

Did you know ?

The English name comes from the French words ‘dent de lion’ or ‘lion’s tooth’.

Did you know ?

Fat-hen has also been used as a dye plant, producing red or golden colours.



Chris Gibson/English Nature

Above: Fat-hen is the fore-runner of many of our green vegetables such as spinach and beets, and was a staple food plant for early humans. Its seeds have been found in Bronze Age excavations in Sussex and from even earlier sites in Switzerland.

Until the introduction of spinach from Asia, fat-hen was eaten and there are references to its use right up to the 18th century.

However, more recently, fat-hen has been treated as a problem weed and is not as common as it once was. But while humans no longer rely on it for food, our farmland birds do. The decline of fat-hen in our fields has contributed to the reduction in numbers of many of them.

Bistort* *Persicaria bistorta

Bistort is believed to have got its southern English name from an Anglicised version of the Latin for ‘twice-twisted’, describing the spiral appearance of the roots. In the north of England, the plant is simply known as ‘dock’, and for years has been eaten in a spring pudding. The leaves have a bitter taste and the fact that the puddings were eaten two weeks before Easter (during the traditional fasting period of Lent) suggests a religious origin for the dish.

Bistort is still eaten in the north with the basic recipe adapted with local variations. Many also include dandelion leaves and stinging nettles, to which eggs and oatmeal are added before being pressed in a pudding basin.

Medicinal plants

Our knowledge of the way the human body works has improved considerably since these plants first began to be used

Did you know ?

The twisted roots of bistort have been used as a treatment for snake bite.

for curing disorders. Please consult a trained expert rather than attempt to try these remedies yourself.

It's worth remembering that some plants were used as medicines purely and simply because their shape resembled human body parts! This is known as the 'doctrine of signatures'.

Hoary plantain *Plantago media*



Chris Gibson/English Nature

Hoary plantain can be found on country paths and in gardens. The 'flowers' are carried at the top of the stem which emerges from a rosette of tough dusty-green leaves. They are whitish pink and this flowerhead turns brown as the seeds form within becoming the familiar club-shaped tip.

Like other members of the plantain family, it is often found on paths as it can

stand up to constant trampling. This led to the belief that the plant could cure bruising. In this case, the old beliefs have been found to have some truth. The plant contains tannins, which can help to sooth pain and, like dock leaves, plantain has been used against nettle stings as its leaves can cool and relieve a sting or a burn.

Selfheal *Prunella vulgaris*

Selfheal is often found on grassy paths, its violet-coloured petals often showing up against the green of the grass. As the name suggests, it has been used as a healing herb, both internally and externally. It was used to treat 'green wounds' such as festering sores, and was thought especially good for mouth ulcers because the shape of the flower resembles a mouth.



Chris Gibson/English Nature

Did you know ?

Hoary plantain is also a great 'play' plant. The leaves have strong ribs, inside which are long, stringy fibres. Children pull these out to make 'angel harps'. The seed/flower head can also be made into a 'gun', using the stem wrapped round on itself as the trigger.

Did you know ?

Selfheal belongs to the dead-nettle family, many species of which have been used as medicinal plants over the centuries.

Did you know ?

Hemlock's local names include 'devil's flower', 'devil's oatmeal' and 'break your mother's heart'. You've been warned!

Hemlock *Conium maculatum*



Chris Gibson/English Nature

Warning! This plant is deadly poisonous and should not, under any circumstance, be eaten, tasted or even touched!!

Not only is hemlock a rather frightening-looking plant during the summer months; it has an unpleasant smell, too. Even animals avoid eating it as hemlock is VERY POISONOUS and all parts of it are dangerous. It grows alongside ditches

and roadside, often where the ground is damp, and can be over two metres tall. Its green stems have purple spots on them.

In Greek history, it was poison from this plant that the philosopher Socrates was forced to take for despising the democratic government of his day. The symptoms are the onset of paralysis of the body. Death is caused by asphyxia as the lungs stop working.

As a medicine, it has been prescribed as an antidote to strychnine poisoning, as a means of halting epilepsy and fits in children, and to prevent coughs and asthma. No doubt one way the plant cured respiratory illnesses was to stop the victim breathing altogether!

Guelder rose *Viburnum opulus*

The autumn berries of this shrub look waxy and very appetising, but you should not eat them, as they can make you sick. However, Geoffrey Chaucer recommended them as food in the 14th century, and the berries are eaten in North America, cooked as a substitute for cranberries. Dried, they turn black and have been used to make ink. The bark is still used in herbal medicine for problems associated with the digestive system, as a sedative or to stop muscle spasms (such as hiccups or twitching) in asthma and hysteria.

Did you know ?

Guelder rose flowers at the same time as elder and was called 'dog elder' in some parts of England.



Purple loosestrife *Lythrum salicaria*

Purple loosestrife can be found around lakes and along ditches, and looks good around the garden pond. It attracts insects by the thousand and its tall purple flower spikes look very exotic. It has been used as a herbal remedy for diarrhoea and dysentery, as

well as preserving the sight and relieving sore eyes.

Yellow loosestrife *Lysimachia vulgaris*

Despite sharing part of a name, yellow loosestrife is not related to purple loosestrife but can be found growing in similar places. Its flowers do not form tall spikes but occur in smaller loose clusters of half a dozen or so.

Yellow loosestrife was used to staunch nosebleeds and to help soothe coughs, as well as a cure for sore eyes and to stop chronic diarrhoea.

Purple loosestrife (above) and yellow loosestrife (left) share a name but are not related.

Paul Lacey/English Nature

Did you know ?

Loosestrife comes from 'loose strife' or 'to calm' as the plant was once believed to have the power to quell restless horses and oxen by deterring biting flies and midges.



Chris Gibson/English Nature

Did you know ?

The leaves of tutsan have also been used as sweet-smelling bookmarks, and the local West Country name for the plant is 'book leaf'.

Did you know ?

The dried sprigs of a close relative, the rare pennyroyal, will keep moths out of your wardrobe.

Tutsan *Hypericum androsaemum*

From the French 'toute-saine' (all healthy), tutsan was used as a dressing for cuts and grazes. It was also thought to protect women from the attentions of men, if the leaves were placed under the bed.

Water mint *Mentha aquatica*

Water mint is another plant that you can put in your garden pond. You will have to keep it under control, however, as it can quickly take over and smother all the other plants. One way to do this is to eat it! You can use water mint for exactly the same recipes as garden mint, such as mint sauce and with boiled potatoes.

Now used to cure stomach disorders and flatulence, water mint was once used for many inflammatory illnesses. This is the commonest of our wild mints, although spearmint *Mentha viridis* is the variety from which our garden mint derives.

Field scabious *Knautia arvensis*

Field scabious and small scabious were used against the skin disease scabies (from which the plant gets its common name) as well as being drunk as an infusion to alleviate pleurisy. Its relative, devil's-bit scabious, was used to treat intestinal worms as well as a wash for sores and dandruff.

Plants for tools and practical uses

It probably did not take long for early humans to discover that some plants and trees produced stems that could be used for jobs that demanded strength or flexibility. The round houses at Flag Fen are a good example of the different ways wood can be used in building.

As our craft and artistic skills developed, we began to find more imaginative ways to use raw materials.

Hedge bindweed *Calystegia sepium*

This plant, sometimes called ‘devil’s guts’, is an incredibly fast-growing plant. It has probably been used for tying and binding (maybe that’s how it got its common English



Paul Lacey/English Nature

name?), along with bramble or other fibrous plants such as flax or nettles. Another climber, honeysuckle, or woodbine, is a natural twining plant. It has been used by humans as rope for centuries because it is very strong and grows in long lengths.

Field maple *Acer campestre*

One of our native trees, whose wood has been much used over the millennia. A maple harp frame was found in the celebrated Sutton Hoo Anglo Saxon ship burial in Suffolk, but it has been a popular wood for musical instrument makers for centuries. It is lightweight, easy to shape



David Townsend/English Nature

Did you know ?

Some gardeners recommend bindweed as twine for plants. Seahenge, discovered on the Norfolk coast in 1998, had ropes made from honeysuckle creepers still attached to the central tree stump when it was found.

Did you know ?

Some towns and villages – Mappowder in Dorset and Maplestead in Essex for example – get their names from field maple.

Did you know ?

Items made from bulrush, such as boats, have a natural waterproofing as the plant grows in wet places and is frequently flooded.

Chris Gibson/English Nature



and carve, and often has an attractive pattern of growth rings, in which the subtle colours of the wood seem to undulate. Craftsmen call this the figure, flame or curl, and it is one of the features of fine, handmade musical instruments such as violins, and cellos. The maple is used for the back and ribs of the instrument.

Bulrush *Schoenoplectus lacustris*

A wonderful plant for weaving, basketwork, papermaking and even making boats. It was also used to cover earth floors in the days before mats and carpets, together with scented plants such as sweet-flag and meadowsweet. This was often part of elaborate religious ceremonies, such as the Christian ‘rush-bearing’. Some of these ceremonies still take place in some parts of the country, such as the Lake District.

‘Strewing herbs’ may also have inspired some of the elaborate floral designs for carpets, many of which were popular during the Victorian age and in the early years of the twentieth century.

Woad *Isatis tinctoria*

Most of us have heard the name ‘woad’ in connection with the Ancient Britons. Woad actually belongs to the cabbage family and is probably a native plant but, by the time of the Saxons, around 500AD, demand for its use led to it being imported.

Woad is traditionally associated with dyeing fabrics and as a war paint. The preparation was complex and extremely smelly. Because of the smell (likened to a million rotting cabbages), Queen Elizabeth the First banned woad production in any place she planned to visit and travel through.

The plant was also used as a poultice for pains to the spleen, and as an ointment for ulcers.

Did you know ?

The last commercial use in Britain was to dye police uniforms. The last two woad mills, in Lincolnshire, were closed in the 1930s.

Multi-purpose plants

Many plants have multiple uses. Something that tastes nice may also have useful effects as a medicine, too. As well as house construction or making a musical instrument, timber can also be burned for heating and cooking, and used for making implement handles. The following examples include some of the most-used plants found at Flag Fen.

Blackthorn *Prunus spinosa*

There is a long tradition of uses of this shrub during human history. The spines served as skewers and the wood for tools. It provided

Did you know ?

Sloes are still collected to make a potent liquor called sloe gin.

food from its plentiful (but sour) berries, called sloes, which also provide a dye. Eventually sloes, through generations of cultivation, produced fruit as sweet and succulent as the Victoria plum, although the wild sloe is still as sour as ever.



Paul Lacey/English Nature

Alder *Alnus glutinosa*

Alder is a common tree of wetlands. Its natural properties of water-resistance mean that it has been used as 'pile' timber – supporting building foundations on wet ground - as it does not rot under water. More famously, it has been used for shoe and clog making. Today, it is used for tool handles and brush backs.

It will also attract woodworm and pieces of alder were once placed in cupboards to lure the woodworm out of valuable furniture.

Did you know ?

Alder woods used to be planted near gunpowder works as alder charcoal is one of the ingredients of gunpowder.

Soft-rush *Juncus effusus*

This plant of fens and wet meadows has been used for many centuries for making rushlights, the forerunner of the candle. The rushes are cut when still green during September, and the green rind is peeled away, leaving just a narrow strip to support the inner white pith. This pith is extremely absorbent, and

Did you know ?

During World War Two, candles were in short supply and rushlights were rediscovered. They burn with a surprising bright light and, as a bonus, smell of a roast dinner!

Did you know ?

Not all plants with nettle-shaped leaves can sting you. Dead-nettles have evolved to copy the nettle leaf shape to avoid being eaten by animals.

soaks up fat readily. Almost any kind of fat can be used, but the most commonly used comes from the kitchen cooking pot.

When soaked and dried, the rushes are placed in a support and lit. Compared to the price of candles, rushlights are incredibly cheap, using waste kitchen products and freely available plants. In times past, the labour costs of making the rushlights was reduced by employing children or old folk on collecting, peeling and soaking the rushes. A few days work would supply a family with enough rushes to light their home throughout the winter months.

Common (stinging) nettle *Urtica dioica*

Nettles have been used as food, dyes, a source of cloth fibre and even as a medicine. A nettle patch can indicate abandoned human settlements, even Roman camps, as they will grow in the same place for years if they are not disturbed.

As food, the stinging nettle enjoyed a revival during World War Two and still features in some modern chef's menus. As a medicinal plant, it has been used to prevent arthritis and as a cure for inflammation.

Nettles have been used to make linen due to their long, tough fibres, and during World War One when supplies of cotton were short, Germany used vast quantities of nettles to make army shirts. In 1915, 1.3 million kilograms of nettles were collected, which increased to 2.7 million kilograms in 1916. That's a lot of nettles!



Chris Gibbon/English Nature



Allan Drewitt/English Nature

Did you know ?

Yellow iris is thought to have inspired the 'Fleur-de-lis' of heraldry.

Yellow iris *Iris pseudacorus*

The yellow flag, is the plant that gave Flag Fen its name. The root produces a violet-scented oil prized for its sweet-smelling qualities. Not only was it once used to scent cloth, but may well have been used as an early form of body deodorant. It was also used occasionally in medicine as a cure for stomach disorders.

Common poppy *Papaver rhoeas*

Red poppies, with their red petals have long symbolised blood, death, and new life. In the fields of Flanders, six months after the battle of the Somme, the war artist William Orpen found the battleground covered with daisies, poppies and cornflowers. Colonel John McRae's poem *In Flanders Fields* prompted the idea of 'Poppy Day', marking the signing of the Armistice on 11 November 1918.

Did you know ?

Poppies have been turned into one-legged dolls, a stalk being used as a belt to turn the petals into a red dress and another stalk pushed through to make arms.

Did you know ?

Daisies flower for seven months of the year between spring and autumn. If you have daisies growing in your garden why not try to make a daisy chain?

Poppy petals have been used for making syrup, ink and the seeds are used in baking and as a source of cooking oil.

*Daisy **Bellis perennis***

The ‘day’s eye’, the flower that opens with the dawn. It has been used to treat bruises, and the leaves eaten as a vegetable. It has many local names, including ‘bairnwort’ and ‘baby’s pet’ which show that the daisy has been seen as a child’s game plant for many years.

ANIMALS AND HUMANS

Animals, especially birds and insects, are more mobile than plants. Many only spend their winters or summers with us, and our relationship with them is very different from plants.

Domestic animals

Lots of creatures provide us with food, and domesticated animals can all trace their ancestry back to our early agricultural history, perhaps as early as 8,000 years ago.



Paul Lacey/English Nature

Many of us also keep pets and the story of their domestication is equally fascinating. We all know that the ancestor of our pet dog was originally a wolf, but did we encourage them to come and live amongst us – or did some wolves decide it might be a good idea to become our ‘best friend’?

The Bronze Age people would also have had their own goats, sheep and cattle. However, these would have had to be protected from bears, which didn’t become extinct in Britain until after the Roman period, and wolves, which still roamed the countryside until the 18th century. It is possible that human beings were sometimes on these animals’ menus, too!

Pigs

The European wild boar is the ancestor of all domestic pigs around the world. Still quite common in continental Europe, the wild boar is a large and powerful animal, weighing up to 350 kilograms, and growing to two metres in length. Although they have been hunted for centuries, wild boars are now protected.

Flag Fen’s pigs belong to a breed called the Tamworth, believed to be the closest descendent of the original domesticated pigs. They still behave like and resemble their wild ancestors. Once widespread in Britain, Tamworths are now listed as a rare breed.

Cat

Cats didn’t appear in Britain until long after the Bronze Age and it is believed that most arrived with the Norman invasion of 1066AD. Cats were often regarded with distrust. They were thought to be witches’ familiars but were also valuable controllers of vermin, especially the rats that carried disease.

However, the wildcat was still common across the whole of Britain during the Bronze Age. Today, it is found only in Northern Scotland and is a rare and endangered animal.

Dog

By the time of the Bronze Age, domestic dogs were part of everyday life, and one of their duties might have included protecting the family and its precious farm animals from bears

Did you know ?

The Flag Fen pigs are believed to be two of fewer than 300 Tamworth pigs left in this country.

Did you know ?

All British domestic cats are descended from the African wildcat, not the Scottish wildcat.

Did you know ?

Dogs share a common ancestor with cats, bears, badgers and seals.

and wolves. There were far fewer different breeds then, maybe just 10, but they were all selected for different jobs. Some were better at chasing, others for herding.

Geese

Geese were probably the first fowl to be domesticated for food and eggs. The greylag (below) is the ancestor of all our domestic geese, but it probably wasn't part of the British homestead until the Iron Age. When moulting their feathers, geese are unable to fly, and could be easily caught and fattened for consumption at some later date.



Allan Drewitt/English Nature

Did you know ?

The goose most people are likely to be familiar with is the Canada goose, a recent introduction, known to be breeding in private collections by the 1700s.

Cattle

Although there are no cattle at Flag Fen today, the Bronze Age people would have had a form of domesticated cow. All modern farm cattle are descended from the enormous wild aurochs. These are one of the animals that feature in early cave art, and would have been really dangerous creatures to hunt as bulls stood two metres tall at the shoulder and weighed well over a tonne.

Wild aurochs probably became extinct in Britain over two thousand years ago, but they survived in Europe until the 18th century.

In the 1920s, the German Heck brothers began a project to 're-create' the aurochs by selective breeding, in a similar story to the 'Jurassic Park' experiment! Although the Heck cattle look like their ancient ancestors, it is doubtful whether they are as strong or as fearsome as the prehistoric aurochs.

Soay sheep

Sheep are believed to have been one of the first animals to be domesticated for food. The mouflon, is the ancestor of all domestic sheep, and provided our ancestors with wool, skins, milk and meat, so was a truly useful animal.

Until the late 19th century, Soay sheep, like the ones at Flag Fen, were found only on the remote island of Soay, some 60 kilometres off the north west coast of Scotland. Some believe they were abandoned on the island by the Vikings, perhaps as long as 3,000 years ago as a sort of living larder. If this is true, then the Soay sheep is a living relict of the Bronze Age.

Horses

Although Flag Fen used to be the home of some Exmoor ponies, there are currently no horses here. The Exmoor is the modern descendent of the ancient Celtic wild horse, itself believed to be related to the native European wild horse. The horse features regularly in cave art, and was certainly hunted for its meat long before it was domesticated, but the cave paintings suggest that early humans also admired the horse for its grace, strength and speed.

The horse enabled us to become more effective hunters and, ultimately, to wage war on others. In fact, the horse has probably contributed more than any other animal to the spread of human civilisation.

Wild animals

Human beings have been hunters for most of our evolutionary history. Before farming began, we had to gather our food from

Did you know ?

The St Kilda islanders visited Soay each year. They collected the wool, shed naturally by the animals, and wove it into a rough tweed cloth or other items of clothing. This was probably the same method used in the Bronze Age, a form of domestic economy that lasted over 3,000 years!

Did you know ?

Eohippus or 'dawn horse' appeared about 55 million years ago and was about the size of a spaniel. Eohippus's main enemy is believed to have been a large predatory bird called Gastornis.

the wild and our urge to hunt has never really disappeared. Naturally, the animals we preferred to catch were those that could be caught easily and that also provided the most meat.

Bronze Age people also raided wild bees nests for honey (probably one of the few sources of sweetness they had), and would even have eaten grasshoppers and beetle grubs (a rich source of protein). Red and roe deer would not have been common, so smaller creatures such as the hedgehog, badger, beaver and fox were probably eaten, too.

Did you know ?

The tail streamers of the male swallow are slightly longer than those of the female.

Birds

Swallow *Hirundo rustica*

People once believed the swallow was the bearer of fire from heaven to Earth, which explained its red throat, smoky-blue back and singed tail feathers. It was also believed that they spent the winter months hibernating in the mud at the bottom of ponds. This was before migration was understood, but in his 18th century book, *The Natural History of Selbourne* the Reverend Gilbert White was one of the first naturalists to suspect swallows flew to other countries to escape the British winter.



Did you know ?

Swifts feed, sleep and even mate on the wing and a young bird, on leaving the nest, may fly continuously for three years.

Swift *Apus apus*

The swifts' habit of screaming round buildings on warm summer evenings gave them the name 'devil bird'. They are perhaps the most aerial of British birds, seldom alighting on the ground, and are virtually the last of the summer migrants to appear, seldom being seen before the beginning of May. By the first week of September, most of them have left to return to Africa.

Cormorant *Phalacrocorax carbo*

The cormorant was once believed to be one of the feared ‘night ravens’; unseen birds that called at night, frightening the community. The night raven was associated with Odin, the Norse God who drove the Wild Hunt across the sky. The noise of wild geese calling to each other during migration is probably the real source of the legend. However, the sound was believed originally to be the Devil himself, seeking out the souls of evildoers.

Although mainly a sea bird, cormorants have spread inland in recent years and can now be seen on many lakes and reservoirs.



Allan Drewitt/English Nature

Robin *Erithacus rubecula*

The robin is one of Britain’s favourite birds. It was believed to be dangerous to kill or injure the birds in any way, as well as steal its eggs. Caging the robin also brought bad luck, and the 18th century poet William Blake’s poem *Auguries of innocence*, contains the lines “A Robin Redbreast in a Cage, puts all Heaven in a rage”.

Robins have also been called the ‘sexton of the woods’, one who prepared the bodies of people who died in lonely places. The nursery rhyme of the Babes in the Wood has the lines “And when they were dead, the robins so red, brought strawberry leaves, and over them spread”.

Did you know ?

The name ‘cormorant’ is derived from the Latin *Corvus marinus*, which means ‘sea crow’.

Did you know ?

The robin’s red breast resembles the red ochre painted on to the skin by our human ancestors, and is thought to be symbolic of life or fire.

Did you know ?

In Japan, some crows have learned to drop nuts on pedestrian crossings so the wheels of the traffic crack the shells. When the traffic stops to allow people to cross, the crows collect their shelled nuts.

Did you know ?

Foxes are omnivorous in their food habits and will eat practically anything edible, one reason why they are such successful animals.

Carrion crow *Corvus corone corone*

Crows of all species have long been associated with the powers of darkness and the supernatural. They were birds of portent, but also regarded as clever and thievish from their habit of picking up shiny objects. They were also believed to have the power to restore sight.

In recent years, it has been discovered that crows are amongst the most intelligent of birds. Crows will eat almost anything and have invented a number of different ways of getting food.

Mammals

The only sight that many people have of any British mammals, is usually fleeing. One you are most likely to see regularly is the grey squirrel, and that was only introduced into this country around the 1880s. The other is the hedgehog, perhaps sniffing round your garden at night. There are lots of other mammals but they are often very small, very secretive or only appear after dark.

Most large mammals have learned that it is safer to stay out of the way of humans. This is hardly surprising as, throughout our history, we have hunted them or treated them as pests and competitors for food. Some mammals have learned that, provided they remain out of sight, they can earn a good living from humans. The best example of these is the red fox, hunted for centuries, but still abundant and now thriving in our towns. Two smaller mammals that arrived in this country long after the Bronze Age, the brown rat and the house mouse, have also learned that human's untidy habits suit them nicely.

Red fox *Vulpes vulpes*

Cunning and wily, the fox has taken over the rôle of top wild predator since the disappearance of the wolf, and has learned to exploit our towns and cities. It is now thought that there are more foxes in London than in the same area of countryside.

The fox in folklore often represents the clever peasant, getting the better of his superiors by stealth and cunning. The 'Reynard' stories are thought to have originated during the 12th century in what is now Alsace-Lorraine, in eastern France



Paul Glendell/English Nature

and were passed on by minstrels and strolling players from country to country.

You are more likely to smell a fox than see one. Their characteristic musky scent marks their trails across the countryside, messages to other animals that say: “I was here recently.”

Badger *Meles meles*

Humans ate badgers until quite recently, and their skin was used for clothing, one example being the Scottish sporran. Badgers have also enjoyed a good reputation as characters in stories. Kenneth Grahame gave Mr Badger a respectable image as the sensible leader of the friends of Mr Toad in *The Wind in the Willows*.

Sadly, badger baiting is still practised in parts of the country, in spite of it being illegal. They have also been the subjects

Did you know ?

Badgers keep their burrows or ‘setts’ clean and tidy. They regularly change and even ‘air’ their bedding materials of grass, straw or bracken.

Did you know ?

Members of the House of Lords wear ermine-trimmed robes (although today, the fur is artificial), and the black dots are the tips of the tails of the stoats, which do not change colour with the seasons.

Did you know ?

Fairly recently, it has been noticed that some hedgehogs in parts of London have learned that it's safer to run rather than roll up into a ball when cars appear – an example of the evolution of behaviour, perhaps?

of official slaughter campaigns as they are thought to spread bovine tuberculosis, a disease in cattle.

Badgers are mainly nocturnal animals, so you are unlikely to see one during the day. However, they have been known to visit gardens, especially if food is provided. They will eat almost anything, but their main food is earthworms and carrion.

Stoat *Mustela erminea*

The stoat is possibly the most ferocious predator – for its size – in Britain. The animal is barely 30 cms long, yet it can kill a fully-grown rabbit that may weigh 25 times as much: roughly equivalent to an alsatian dog tackling a rhinoceros. The stoat's specific scientific name, *erminea* relates to the fact that its coat turns white in winter. It is in this form that the animal is called an 'ermine' and, traditionally, the fur was used for trimming or lining expensive gowns and robes.

Hedgehog *Erinaceus europaeus*

Although more familiar as a road casualty, many of us will have seen a live hedgehog at some time, probably in the garden at night. With many gardeners not using pesticides, the hedgehog is now a welcome visitor as it eats a lot of garden pests, especially slugs.

The name 'hedgehog' comes from the pig-like snout of the animal and dates from the middle of the 15th century. Hedgehogs have been eaten for centuries, but hedgehog oil also has a reputation for curing earache and deafness. A broth made from a hedgehog was also supposed to cure fits and lunacy.

Rabbit *Oryctolagus cuniculus*

Although rabbits are now common, there is no record of them in this country before the 12th century. So far, no archaeological remains have been found and there is no Anglo-Saxon name for them either. Most believe the Normans introduced rabbits to Britain for meat and fur. Rabbits live in warrens where they can seriously undermine the ground with their burrowing and this, along with their huge appetites, is a

problem for farmers. Many thousands are shot every year, but the rabbit is still very numerous in many parts of the country.

In recent years, they have begun to help the work of conservationists. Rabbits are used to graze sites to encourage the growth of small rare plants, which cannot normally compete with grass and taller vegetation. However, their numbers have to be kept in check to prevent them eating the plants the conservationists are trying to protect!

Reptiles and amphibians

Reptiles and amphibians are often described as ‘cold-blooded’, a term that has also come to mean unemotional and cruel. In fact, they cannot generate their own body heat so they have to get it from another source. That is usually the sun, one reason why you might come across a snake or a lizard basking in the sunshine. The animals need to be warmed before they can become active and hunt for their food.

Snakes

In Britain, we only have three snakes and one of them, the smooth snake *Coronella austriaca*, is very rare. If you come across a snake at Flag Fen, it will either be a grass snake *Natrix natrix* or an adder *Vipera berus*. Of the two, only the adder is mildly poisonous and it will almost certainly detect your approach and disappear before you see it.

Did you know ?

Rabbits also help archaeologists as they are often the first to put a trench through a site, and their digging has revealed the presence of unknown treasures.

Did you know ?

The grass snake, which is perfectly harmless, does hiss loudly and produce a pungent odour if handled.



Common frog *Rana temporaria*

The common frog (below) is the species most likely to adopt your garden pond if you are lucky enough to have one. Eating a frog used to be prescribed as a cure for whooping cough, perhaps because of the croaking noises produced by the patient!



Andy Sanson/Airco Ltd

Did you know ?

In some parts of the country American bullfrogs, sometimes sold as pets, have become a pest. The adults are very large and will eat almost anything they can catch.

Butterflies

We enjoy seeing butterflies, but some of their caterpillars would probably have been eaten by humans although they might have caused tummy ache. Some caterpillars absorb the poisons produced by their food plant and store them to protect the caterpillar itself from being eaten. They warn other creatures of their unpleasant taste by their colour; yellow and black being a common combination.

There are 58 species of butterfly recorded in Britain. Some are extremely rare, and others live only in certain parts of the country, but many are very common. Here are several you may see during your walk around Flag Fen if the weather is warm and sunny.



Did you know ?

In Victorian times large white butterflies were sometimes seen in such dense numbers, they resembled snowstorms.

Large white *Pieris brassicae*

Possibly the most widespread of the British butterflies, this is the dreaded ‘cabbage white’. Its Latin name *brassicae* refers to the family of its food plants, cabbage, which includes all our commercial greens.

The large white probably owes its position as a common butterfly to human cultivation and domestication of the wild cabbage, the large white’s native food plant.

Small tortoiseshell *Aglais urticae*

Another very common and widespread butterfly that lays its eggs mainly on stinging nettles *Urtica dioica*. This is one of the three most colourful butterflies that regularly visit gardens. If you have nectar-rich flowers, you will attract small tortoiseshells, as well as peacock and red admiral butterflies to your garden.

Peacock *Inachis io*

The ‘eyes’ on the wings of this, one of the most beautiful of British butterflies, are meant to deceive predators. Viewed upside down, the open wings and body of the insect resemble the staring eyes of an owl, a bird that lots of other birds and many small mammals, are wary of.

Did you know ?

The peacock butterfly produces an audible hissing noise, thus frightening any small bird or mammal that might think of eating the butterfly.

Did you know ?

Painted lady butterflies reaching Britain may have come from North Africa, the Middle East or even Central Asia.



Trevor Lawson/www.reflexmedia.com

Painted lady *Cynthia cardui*

Occasionally, this migratory butterfly arrives in Britain in huge numbers, such as in 1996 when they seemed to be everywhere. Their Latin name *cardui* refers to their liking for thistles, and their English name was acquired at the end of the 17th century. Although they can arrive as early as January, most painted ladies arrive in May or June. Then they can form large swarms along the south coast, before they disperse across the rest of the country.

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