

British Wildlife: Paired Pictures

Plants & Fungi



British Wildlife: Paired Pictures

Created by the Primary Science Teaching Trust (PSTT) and The Nature Collection

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[The Nature Collection](#) is an extraordinary collection of animal bones, skeletons, feathers, antlers, skins and photographs and was created by Susanna Ramsey.

Guidance for using British Wildlife: Paired Pictures

Plants & Fungi

This resource is designed to encourage children to observe closely and to stimulate talk about the features of plants, fungi and their habitats.

There are 12 pairs of plants and fungi in this slideshow. All are commonly seen in the UK.

For each pair of plants or fungi there are two slides. We suggest that you share only one or two pairs of images at any time. You can revisit the other plant and fungi pairs.

Choose one pair of images and show children the first slide. Ask - **What are these?**

Listen to children's suggestions. Ask - Why do you think this? Encourage children to notice special features of each plant or fungus which might help them to identify the type of plant or fungus.

Show the second slide to reveal the names of the two plants/fungi. Then ask – **What is the same and what is different?**

Encourage the children to look closely at the parts of the plant/fungus, the colours and the shapes.

Possible questions to prompt thinking & talking:

- What can you see?
- What colour/shape are the different parts?
- What part of the plant/fungus do you think this is? Why do you think this?
- Can you see any flowers/leaves/seeds/berries?

Note: This resource could be used with children in Early Years, KS1 or KS2. The third slide after each set of paired pictures provides detailed information about the characteristics of each of the birds shown. This is intended to support teachers' subject knowledge. We are not suggesting that all children should be taught all these facts. The discussions with the children should be appropriate to the age and ability of the children. For example:

- very young children (ages 3-5) may notice similarities and differences in the colour and shape of the plants or fungi,
- children (ages 5-7) may identify features such as flowers, leaves and seeds,
- older children (ages 7-11) using their knowledge of living things and their habitats, could give reasons for similarities or differences in appearance and comment on how the plant or fungus is suited to live in its habitat.

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What can you see?



What is the same and what is different?



fly agaric



parasol mushroom

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fly agaric & parasol mushroom

SIMILARITIES - that you can see from the pictures

- Both have a broad stem with a rounded cap, on top.
- Both grow out of the ground, not on a tree.

SIMILARITIES – that cannot be seen from the pictures

- Both are **fungi**.
- They feel soft and spongy.
- They both release **spores** from underneath the cap. These are equivalent to seeds in plants. The cap opens out like an umbrella, or parasol, and the tiny spores are dispersed by the wind.
- Both come out in late summer / autumn.

DIFFERENCES – that you can see from the pictures

- Fly agaric has a red cap with white spots and a white stem. The parasol mushroom is pale brown with brown spots on the cap.
- Fly agaric is growing on sandy soil. They often grow near birch trees. Parasol mushrooms grow in fields or woods, in the grass.
- Parasol mushrooms are taller than fly agaric.
- Fly agaric is growing in a group. Sometimes parasol mushrooms grow in groups.

DIFFERENCES – that cannot be seen from the pictures

- Fly agaric is very poisonous. Parasol mushrooms are not poisonous.

ADDITIONAL NOTES

- Fungi are not plants. There are separate kingdoms for animals, plants, fungi and many more!
- The stem of a mushroom is called the **stipe**.
- Fungi have a large network of threads, like roots, underground, which is called **mycelium**. This breaks down organic matter in the soil.
- The mushrooms which appear in autumn are the fruiting bodies of fungi. A fungus consists of these fruiting bodies called 'mushrooms' and a large network of threads, like roots, underground, called 'mycelium'. The mycelium breaks down organic matter in the soil or dead wood.

What can you see?



What is the same and what is different?



buttercup



foxglove

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buttercup & foxglove

SIMILARITIES- that you can see from the pictures

Both are flowers, with delicate petals.
Both are colourful, to attract insects.

SIMILARITIES – that cannot be seen from the pictures

- Both grow on a stalk.
- Both flowers bloom in summer.
- Both have stamens and pollen. You can see these on the buttercup. They are hidden inside the foxglove.

DIFFERENCES – that you can see from the pictures

- The buttercup has yellow petals. The foxglove is pale purple with purple and white dots inside. These are like runway lights at an airport, guiding insects to the pollen and nectar.
- The buttercup flower is open and easy for bees and butterflies to land on. The foxglove is like a bell. Insects have to go inside to collect the nectar. Butterflies could not fit in there! Different species of bee have different length tongues. They collect nectar and pollen from flowers which suit them best.
- The buttercup has 5 petals. The petals on the foxglove are fused together, into one.
- The foxglove plant grows a row of flowers on one side of the stem. The buttercup has one flower on each stem.
- The foxglove is outdoors. The buttercup has a black background, so we cannot tell where the flower is.

DIFFERENCES – that cannot be seen from the pictures

- The foxglove is very poisonous. The buttercup is not.
- The foxglove grows in woodland clearings. The buttercup grows in meadows, often near water.
- We cannot tell if, or how, they smell, from the pictures!

What can you see?



What is the same and what is different?



acorns from a Turkey oak tree



acorns on the English oak tree

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acorns (from Turkey oak & English oak)

SIMILARITIES- that you can see from the pictures

- Both types of acorn are oval-shaped and growing inside a cup, like a nest.
- Both acorns are full size. (Acorns start off tiny, in the spring. Have a look!)
- Acorns ripen and fall off in autumn. So both photos were taken in the autumn.
- Both types of acorn have a short stalk. (Some acorns have long stalks)

SIMILARITIES – that cannot be seen from the pictures

- Both grew on large, old oak trees in the woods.
- The acorns are a similar size.

DIFFERENCES – that you can see from the pictures

- The cup for the Turkey oak acorn looks woolly or hairy. The cup for the English oak acorns is smoother, made of overlapping scales.
- The cup for the Turkey oak acorn covers half the acorn. The English oak acorn cup is very shallow.
- The acorns are green in the first photo and brown in the second. The brown ones are riper.
- The first photo is taken indoors. The acorns in the second photo are still on the tree.

Notes:

1. There are 600 different species of oak tree in the world! Next time you are in the woods, see if you can find different types of acorns!
2. Which animals eat acorns? Deer, squirrels, mice, crows, jays and acorn weevils!

What can you see?



What is the same and what is different?



hawthorn berries



blackberries

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hawthorn berries & blackberries

SIMILARITIES- that you can see from the pictures

- Both are commonly known as berries. In fact blackberries are not true berries but 'aggregate fruits', made up several fruits packed together!

SIMILARITIES – that cannot be seen from the pictures

- Both contain seeds.
- Both berries ripen in the autumn. But hawthorn berries never soften or turn black.
- There are thorns on blackberry bushes and on hawthorn branches (but these are hard to see.)
- Birds, deer, foxes, beetles and mice eat berries of all types. **Seed dispersal.**

DIFFERENCES – that you can see from the pictures

- The hawthorn berries are all red. Some blackberries are black and some are red. (The black ones are ripe to eat.)
- Hawthorn berries have one berry on each stalk. Each hawthorn berry contains 3-5 seeds. Each blackberry is made up of a cluster of fleshy fruits around a pip.
- Hawthorn berries feel hard and blackberries are soft. Juice easily runs out of ripe blackberries if you squeeze them! This does not happen with hawthorn berries.
- The leaves are different shapes.

DIFFERENCES – that cannot be seen from the pictures

- Each hawthorn berry contains 3-5 seeds. Each blackberry has several pips.
- Blackberries grow on low bushes. Hawthorn berries grow on hawthorn trees. Many grow high up.
- Humans eat blackberries but not hawthorn berries.

What can you see?



What is the same and what is different?



horse chestnut (conkers)



sweet chestnut

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horse chestnut (conkers) & sweet chestnut

SIMILARITIES- that you can see from the pictures

- Both nuts ripen and fall off the tree in autumn.
- Both are brown and shiny, inside a prickly green 'husk' or case, which bursts open when ripe.
- Both nuts have a pale white patch where they joined onto the case, as they grew.
- Both cases are cream inside and soft and padded, to protect the seeds.

SIMILARITIES – that cannot be seen from the pictures

- Both grow on types of chestnut tree.
- Both are seeds which would grow into a tree, if planted and watered for many years.
- Many animals eat sweet chestnuts and conkers, such as squirrels, mice and deer.

DIFFERENCES – that you can see from the pictures

- The prickles on the sweet chestnut case are longer and there are more of them. They hurt to touch. (This protects the seeds from animals which want to eat them!)

DIFFERENCES – that cannot be seen from the pictures

- Children play with conkers but not sweet chestnuts. The cases are too prickly to open!
- Humans eat sweet chestnuts when they are roasted but they do not eat conkers.
- There may be 1 or 2 conkers inside a shell. There may be 2 or 3 sweet chestnuts inside a shell.
- Conkers can be mildly poisonous to some animals.

What can you see?



What is the same and what is different?



birch trees



horse chestnut trunk and leaves

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birch trees & horse chestnut trunk & leaves

SIMILARITIES- that you can see from the pictures

- Both pictures were taken in summer when the leaves are green and fully grown.

SIMILARITIES – that cannot be seen from the pictures

- Both trees are growing in a park.

DIFFERENCES – that you can see from the pictures

- There are several birch trees in a row and just one horse chestnut tree. You cannot even see the whole tree!
- Horse chestnut bark is brown. This bark is covered in green algae. (The green is not part of the tree.)
- The bark of the horse chestnut tree is peeling off. When horse chestnut trees are young, the bark is smooth. As the tree ages, the bark develops thick scaly plates. Birch tree bark does not peel off like this.
- The leaves of horse chestnut trees grow with 5 sections, or '**blades**' on one stalk. These are called '**compound**' leaves. Each section is called a 'leaflet'. Birch leaves grow with just one blade per stalk. They are described as '**simple**' leaves.

Note: Can you find these trees in your park or garden?

What can you see?



What is the same and what is different?



orange peel fungus



puffball fungus

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orange peel fungus & puffball fungus

SIMILARITIES- that you can see from the pictures

- Both are small mushrooms, which grow out of the ground, not on a tree.
- Both these mushrooms grow in autumn.

SIMILARITIES – that cannot be seen from the pictures

A fungus consists of an extensive network of thin threads underground, called 'mycelium' and fruiting bodies which appear in autumn, often called 'mushrooms'.

DIFFERENCES – that you can see from the pictures

- Orange peel fungus looks like bits of orange peel. The flesh is waxy and orange. The puffballs are white.
- Orange peel fungus is smooth. Puffball fungus is covered in spikes.
- Orange peel fungus is made up of several folds or cups. It is a type of cup fungus. Puffballs form as round balls on a thick stem. There are many different types of puffball fungus.
- Orange peel fungus looks just like pieces of orange peel. Puff ball fungus does not.

DIFFERENCES – that cannot be seen from the pictures

- Puffballs are common in woodland or grassland. Orange peel fungus grows on clay soil, especially when the soil has recently been dug up, perhaps to make a new path.
- When the puffball is knocked, or ripe, clouds of spores puff out of a hole at the top, like smoke. The orange peel fungus breaks if you knock it. It releases spores when it is ripe.

What can you see?



What is the same and what is different?



oak leaves



pine needles and cone

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oak leaves & pine needles and cone

SIMILARITIES- that you can see from the pictures

- Both pictures were taken in summer. The leaves are green and the pine cone is green and still growing.
- Both are green leaves growing on brown branches.
- Both are part of a tree.

SIMILARITIES – that cannot be seen from the pictures

- Both trees are growing in a park.

DIFFERENCES – that you can see from the pictures

- The oak leaf is a '**lobed**' shape, as if bits have been taken out, all the way round the edge. Each leaf has a central vein with smaller veins coming off it. The leaf has a rounded shape around the end of each vein. Pine '**needles**' are thin spikes. They grow in a rosette pattern on this tree. Cedar needles last 3-5 years.

DIFFERENCES – that cannot be seen from the pictures

- Oak leaves turn brown in autumn and fall off. Oak trees are '**deciduous**' Cedar trees are '**evergreen**'. The 'needles' stay on the tree all year round.
- A pine cone is growing on the branch. Oak trees grow acorns but there are none on this branch.

What can you see?



What is the same and what is different?



chicken of the woods fungus



beefsteak fungus

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fungus (chicken of the woods & beefsteak)

SIMILARITIES- that you can see from the pictures

- Both are large fungi.
- Both grow out of the bark of a tree, not out of the ground.
- They are different types of 'bracket fungi'. They have this name because they grow out of the tree like a bracket or shelf.
- Both have no stem.

SIMILARITIES – that cannot be seen from the pictures

- Both fungi appear in autumn.
- Both grow out of the bark of old, oak trees, usually within 1 metre of the ground.
- Both are named after food which we eat. They are edible. **Do not try to eat any mushrooms you find in the wild. They might be poisonous and kill you!**
- Some animals eat these fungi, for example, mice and parakeets.
- The spores fall down from underneath the layers, when the fungi are ripe. The spores are blown around on the wind. **Wind dispersal.**

DIFFERENCES – that you can see from the pictures

- Chicken of the woods is yellow and multi-layered. Beefsteak is red on top and pale underneath. It has just one layer.
- Chicken of the woods has several thin layers. (They look a bit like popadoms!) Beefsteak has just one, thicker, domed layer.
- Beefsteak is smooth and shiny on top. Chicken of the woods is not.

DIFFERENCES – that cannot be seen from the pictures

- Some mushroom experts cook chicken of the woods but beefsteak does not taste very good.

What can you see?



What is the same and what is different??



oak tree in spring



oak trees in autumn

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oak trees in spring & autumn

SIMILARITIES- that you can see from the pictures

- Both show big, ancient, oak trees.

SIMILARITIES – that cannot be seen from the pictures

- Both are in a park

DIFFERENCES – that you can see from the pictures

- Spring in one picture and autumn in the other.
- Leaves are green in spring and turning brown in autumn.
- You can see catkins on the tree in spring
- You can see a hole in the spring tree, where squirrels or birds might go inside.
- There is a bench in one picture and not in the other. What a view!
- You can see into the distance in the autumn picture. The photo was taken on top of a hill.
- You can see lots of trees in the autumn picture and just one in spring.

What can you see?



What is the same and what is different?



dandelion flower



dandelion seeds

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dandelion flower & dandelion seeds

SIMILARITIES- that you can see from the pictures

- Both are dandelions.
- Both are in summer.
- Both have a thin green stem.

SIMILARITIES – that cannot be seen from the pictures

- Both grow out of the ground.
- Both are about 5-15cm tall.

DIFFERENCES – that you can see from the pictures

- The flower has several yellow petals. The seed head has no petals.
- The flower is flat and circle-shaped. The seed head is like a ball, 3D.
- The seed head looks soft to touch. The flower is delicate but not fluffy.
- The flower is solid. You cannot see through it. The seed head is transparent.

DIFFERENCES – that cannot be seen from the pictures

- If you blow the flower, it will not fall apart. If you blow the seed head, the seeds will come off and float away. **Seed dispersal.**
- The seed head is called a dandelion clock!
- Insects such as bees, hoverflies, beetles and butterflies visit the flower to collect nectar and pollen. Rabbits and mice eat dandelions. Birds like goldfinches, sparrows, blackbirds and pheasants would eat the seeds.

What can you see?



What do you see?



blossom



daffodils

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blossom & daffodil flowers

SIMILARITIES- that you can see from the pictures

- Both are flowers.

SIMILARITIES – that cannot be seen from the pictures

- Both grow in spring.
- Both attract pollinators such as bees and butterflies. In both, the pollen is easy to reach.

DIFFERENCES – that you can see from the pictures

- The blossom is white. Daffodils are orange and yellow.
- Blossom is growing on a tough, brown branch. The daffodils are growing on flexible, dark green stems.
- Daffodils have one flower head per stem. Blossoms have several flowers together in a clump.
- You can see the stamens and pollen in the blossom but not on the daffodils, although we know they are there.
- Daffodils have long, thin leaves. The tree has smaller leaves.

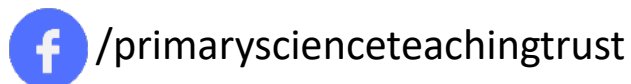
DIFFERENCES – that cannot be seen from the pictures

- Blossom grows on trees, high above the ground. Daffodils grow low, out of the ground.
- Trees grow from seeds. Daffodils could be grown from seeds but they are usually grown from bulbs, as this is much easier.

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