



Let's go

WILD

Cub Scout Naturalist Activity Badge activity pack



cubs



# Welcome to your activity pack

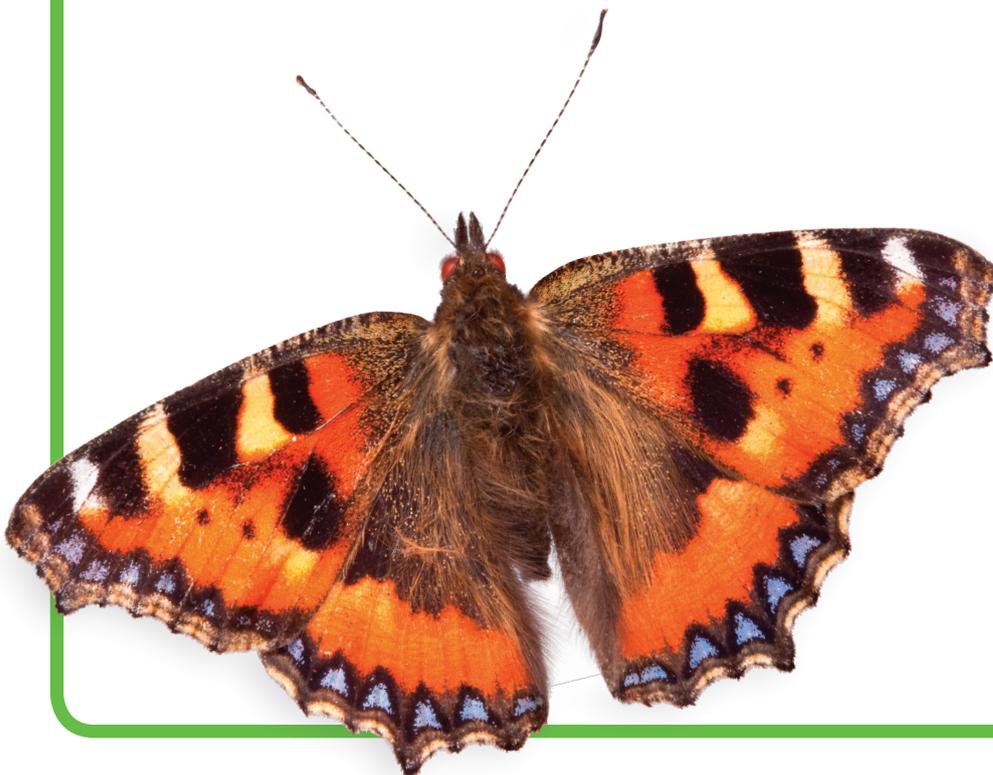


**Want to discover nature on your doorstep? Fancy discovering pond life, spotting bugs or tempting birds into your garden? Then you've come to the right place.**

This activity pack is stuffed full of activities to help you get close to nature. This could be in your back garden, local park, or further afield in wild spaces such as woods, nature reserves or the seaside. The activities will also help you work towards your Naturalist Activity Badge.

Supported by the National Trust, the Natural History Museum and The Wildlife Trusts, this pack is sure to help you make the most of the great outdoors.

**Ready? Then let's go wild.**



# Nature on your doorstep



Nature is everywhere. If you stop and really look all around you'll see many different plants and animals, whether you're playing in your back garden or local park, on a country walk, wandering through woodland, visiting a nature reserve or on a trip to the seaside.

If you're looking for a new wild place to explore nature, there are many local Wildlife Trust nature reserves or National Trust sites near you.

**You need to do at least three of these activities to get your Naturalist Activity Badge.**

## 1. Hedgerow hounds

Did you know hedges are an important source of food and shelter for our wildlife? Have a close look at hedges near you to record what's living in them. Learn to identify some common hedgerow plants and animals.

**When?** Any time of the year.

## 2. Bug hunters

Bugs (also called invertebrates) are everywhere and many do really useful jobs such as pollinating our crops, breaking down dead plants and providing food for birds. See how many different types of bug you can spot during three 15 minute challenges.

**When?** Any time of the year, but you are likely to find more in the spring and summer.

### 3. Garden bird detectives

Become a garden bird detective. Make a bird feeder to encourage birds to visit your garden. Then spend half an hour every day for a week recording the birds you spot.

**When?** Autumn and winter are the best times for this activity when birds are more likely to suffer food shortages, but you can feed and record birds at any time of the year.

### 4. Dipping dudes

Ponds and lakes are home to a fantastic range of plants and animals, but many ponds are polluted by chemicals and litter, or have been neglected. Survey a pond or lake and find out how healthy it is by recording what animals you find living in it.

**When?** Spring and summer.

### 5. Seaweed sleuths

Living in the UK, you are never more than about 70 miles from the coast, and our seashores vary from rugged cliffs to sandy beaches. Explore the seashore and learn to identify some common seaweeds.

**When?** Any time of the year.

### 6. Tree trackers

Take a close look at the trees growing in your garden, or local streets and parks. Learn to identify the most common ones and do a tree survey by identifying and recording the trees growing in your area.

**When?** Spring and summer (when the leaves are on the trees) are best because the trees are easier to identify.

# Activity 1.

## How to become a hedgerow hound



Hedges are found all over our towns and countryside, from our gardens and parks to field boundaries. Many are hundreds of years old and consist of old trees and shrubs which provide food and shelter for a wide range of animals and other plants. Take a close look at a hedge in your local area and record the wildlife you spot.

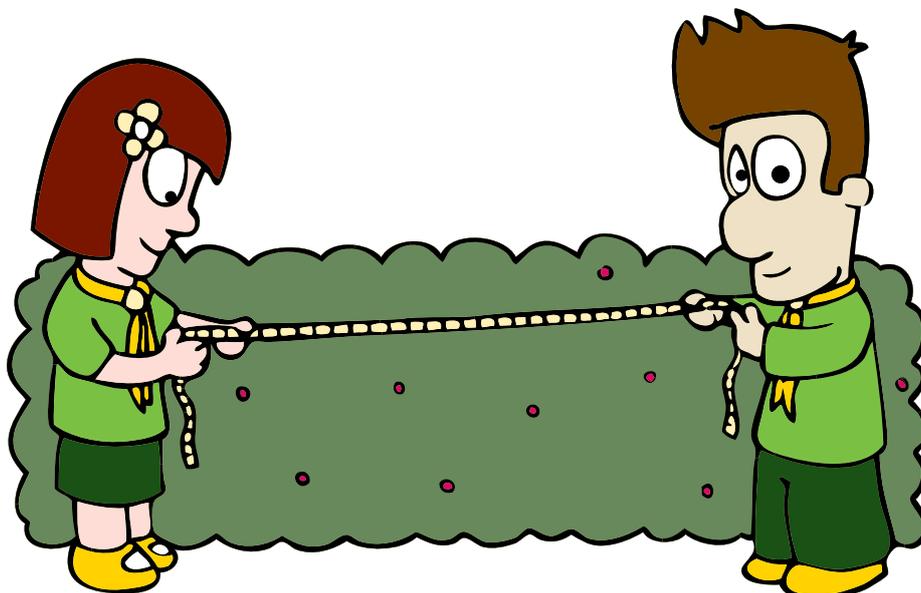
**When?** Any time of the year.

You don't need any special equipment to find out what's living in your local hedge but if you want to add your results to a nationwide survey you need to fill in an **OPAL Biodiversity Survey Workbook** (ask your leader to download it and print out the recording forms on pages 5 and 6).

### Hedge finds

#### 1. Choose a three-metre section of hedge to explore.

Make a note of where the hedge is, and whether it is made up of bushes, trees or both. Record how well looked after it is, whether there are any gaps in it and the approximate height and width of the hedge.



**2. Are there any nuts, berries or flowers that could be eaten by animals?**

Ask your leader to help you name the different plants growing in the hedge and tick them off on the chart.

**3. Find out what bugs are living in the hedge.**

Gently shake the branches, or sweep them with a brush while holding a tray or dustpan underneath to catch anything that falls. Make a note of the bugs you find, using the **OPAL Bugs Count Pocket ID Guide** to help identify them (ask your leader to download and print a copy). You could sketch or photograph them before carefully putting them back on the hedge.



## More activities



If you have completed the recording form in the **OPAL Biodiversity Survey Workbook**, you can add your results to a nationwide survey to find out which areas of the country have the most wildlife-friendly hedges. Ask your leader for the online data entry form and for more fun activities about hedges and their wildlife, including...

- **hedge jokes and puzzles**
- **how to make a woodpile to attract wildlife**
- **a wild fruit detective spotting sheet to identify fruits growing in hedges.**

# Activity 2.

## Bug hunters



Bugs (also called invertebrates) are everywhere and many do really useful jobs such as pollinating our crops, breaking down dead plants and providing food for birds. See how many different types of bug you can spot in different environments such as grass, plants, soil, paving or fences.

**When?** Any time of the year, but you are likely to find more in the spring and summer.

### Get hunting

Think of all the places where you might find bugs. You can look for bugs all over the place – in grass, on plants, under window sills, beneath pots, among dead leaves, or in soil.

Make sure your leader has downloaded and printed out the **OPAL Bugs Count Pocket ID Guide** to help you identify the bugs you find.

There are three 15 minute bug hunt challenges to search for bugs in different habitats. Your leader will divide the Pack into three groups. Your group will either do all three challenges or each group will complete a different challenge then compare what it finds out with the other two groups.

Nominate a time-keeper in each group. Your job will be to tell the group when to start hunting and keep an eye on your watch or stopwatch to make sure you hunt for bugs for exactly 15 minutes.

You may want to carefully put the bugs you find in a container while you identify them before returning them to where you found them.

Once you've identified which bugs you saw, record them on your bug recording form (ask your leader to download the forms in the **OPAL Bugs Count Field Notebook**).

## Challenge 1

Hunt for ground living invertebrates on soft ground surfaces such as soil, short grass and amongst fallen leaves and twigs. See how many you can spot in 15 minutes.

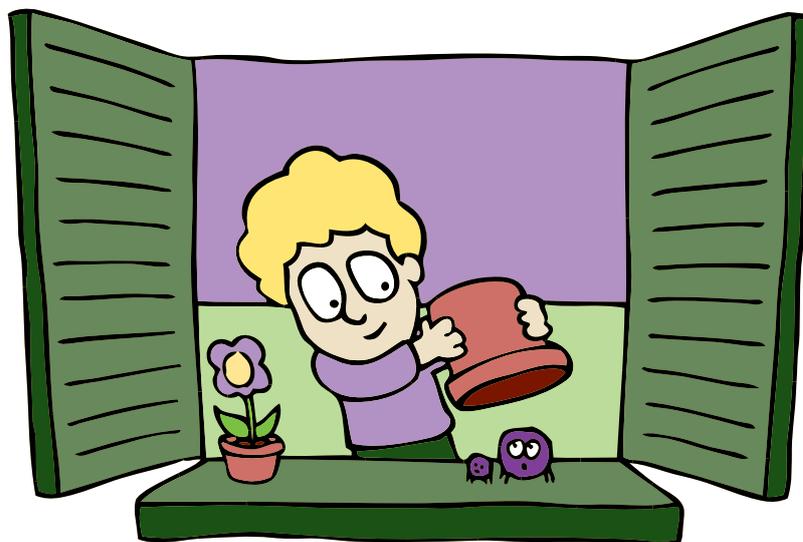
## Challenge 2

Search for invertebrates on human-made hard surfaces such as paving, fences and the outside of buildings. See how many you can spot in 15 minutes.

## Challenge 3

Look for invertebrates on plants, including long grass, flowers, shrubs and trees. See how many you can spot in 15 minutes.

Did you find different types of bug living in different places? Why do you think some bugs live in the soil while others are found on flowers?





## More activities



If you would like to send in your results to a nationwide survey run by OPAL (Open Air Laboratories Network), ask your leader.

If you've got the bug for bugs, ask your leader how to...

- **make your own insect hotel**
- **make a tumble trap for insects.**

# Activity 3.

## Garden bird detectives



Why not become a garden bird detective? Make a bird feeder or a bird cake to encourage birds to visit your garden. Then spend half an hour every day for a week recording the birds you spot. Learn to identify at least six garden birds.

**When?** Autumn and winter are the best times for this activity when birds are more likely to suffer food shortages, but you can feed and record birds at any time of the year. In the spring it can be harmful to put out fat, bread and whole peanuts in case the adults are feeding young.

### Make your own bird feeder

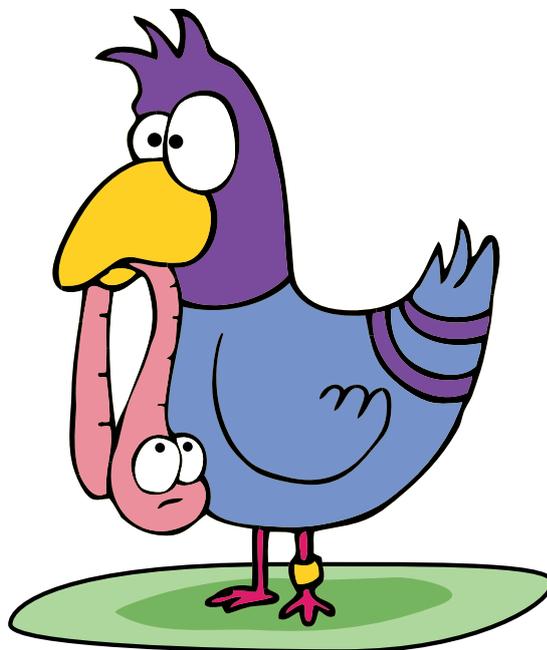
1. In a bowl, mix some bird seeds, breadcrumbs, dried fruit or chopped nuts with some warm lard or dripping to bind it together.
2. Press the fatty mixture into an empty yoghurt carton or smear it around a fir cone.
3. Turn out the yoghurt pot bird cake and place on a bird table or hang your fir cone feeder from a tree branch in your garden.

## Watch and wait

Find a comfortable place to sit inside where you can look out of the window and see your bird feeder.

Spend half an hour every day for a week recording the birds that you spot coming to eat from the feeder. How many different types of bird can you name?

You may need some help identifying birds, so ask your leader to download and print the **Garden Bird Detective Spotting Sheet** for you to take home. They'll find this in their leaders' notes.



## More activities



If you enjoyed being a bird detective and want to try some Wildlife Watch activity sheets, including how to make a nest box, ask your leader to provide these.

# Activity 4.

## Dipping dudes



Ponds and lakes are home to a fantastic range of plants and animals, but many ponds are polluted by chemicals and litter, or have been neglected. Survey a pond or lake to find out what animals live there. If you have more time you can work out how healthy the pond is.

**When?** Spring and summer.

### How to be a dipping dude

Survey your local pond or lake and look for commonly found animals, such as dragonfly larvae, water beetles and pond skaters. The presence of these animals can indicate the health of the habitat.

### You will need some basic equipment for this activity...

- a pond net (you could make one by taping a fine-meshed kitchen sieve to a pole), or you could use a jam jar or saucepan
- a shallow white tray.



## Pond dipping

Once you've found a suitable pond or lake to explore, dip your net into the pond and sweep it through the water to catch any bugs (also called invertebrates) living in the pond.

Empty everything you have scooped up with your net into your tray. Add some pond water so that the bugs can swim around.

Ask your leader to download and print out the **Pond Identification Sheet** to help you name the bugs. Count how many of each different type of bug you have found and write the numbers down on your sheet. Make sure you return the animals to the pond as soon as possible.

If you have more time, ask your leader to download and print out the **OPAL Water Survey Workbook**. This has a pond scoring system so you can work out how healthy your pond is.

## More activities



If you have filled in your results in an **OPAL Water Survey Workbook**, you can upload your results to a nationwide survey, using an online data entry form.

### Explore pond life without going outside!

Ask your leader for links to...

- a virtual pond dip with **Microscopy UK** or **Pond Explorer**
- a fun water quiz.

# Activity 5.

## Seaweed sleuths



Living in the UK, you are never more than about 70 miles from the coast. Our seashores vary from rugged cliffs to sandy beaches. Explore the seashore and learn to identify some common seaweeds.

**When?** Any time of the year.

### Big Seaweed Search

The Big Seaweed Search is a fun way to explore the seashore and learn to identify the common seaweeds that grow there. You may not know much about seaweeds but you probably use products that contain them as they are added to many foods, shampoos and medicines.

In the sea, seaweeds play the same role as plants on land – turning the sun's energy into food. Many animals rely on seaweeds for food and shelter.

The Big Seaweed Search involves looking for 12 common seaweeds, then taking part in a one minute limpet hunt.

Ask your leader to download and print, preferably in colour, the **Big Seaweed Search Identification Guide**. They'll find this in their leaders' notes.

Go for a walk along a rocky seashore looking out for seaweeds growing on the rocks and in rock pools. Use the identification guide to see how many different types of seaweed you can spot.

Make a note of the different seaweeds you find using the recording form.

## Limpet lookout

Now look for limpets. Limpets are animals with a cone-shaped shell and they eat seaweeds. Find a spot on the seashore where there are living seaweeds. Time yourself for one minute and record all the limpets you can see within three metres around you.



## More activities



If you would like to add your seaweed results to a nationwide survey run by the Natural History Museum and British Phycological Society, ask your leader to refer to their notes.

# Activity 6.

## Tree trackers



Take a close look at the trees growing in your garden, streets and parks, and learn to identify the most common ones. Do a tree survey in a local street or park by identifying and recording all the different trees growing in the area.

**When?** Spring and summer (when the leaves are on the trees) are best because the trees are easier to identify.

Trees play a very important role in helping to regulate our climate and prevent soil erosion. They also provide a home or food for bugs, birds and many other animals.

In the distant past almost the whole of the country was covered in woodland but now forests and woodland cover just 12 per cent of the land area of the UK.

How many trees can you name?

Ask your leader to download and print out, preferably in colour, the **Urban Tree Survey Leaf Chart**.

Explore the trees in your local area using the leaf chart to identify them. Make a note of them on your recording sheet and sketch a simple outline of at least two different leaf shapes you find. You could also take photos of the trees you survey to help identify them.



# More activities



## More tree activities

If you want to complete a tree survey in your local area and upload the results, ask your leader to look at their notes to find out how. It's the first ever national count of trees growing in parks, streets and gardens. The results will help scientists find out what trees grow where, and how new building developments or climate change may be affecting our trees.

If you enjoyed this activity, ask your leader for more tree activities such as...

- **grow your own oak tree following a Wildlife Trust activity sheet**
- **Wildlife Watch spotting sheets, including a Spring tree ID guide.**



# Resources for your activity pack



## Seaweed and limpet score sheet

Where are you?

Today's date

What is the seashore like? (Please tick)

Is it:

- almost all rock
- almost all sand or mud with just a few rocks
- somewhere in between

Is it:

- sloping
- almost flat

What seaweeds have you found? Tick the boxes below to record which seaweeds you have seen, where they were and how much of each species you saw. Remember, the options are:

Is it underwater in a rock pool or out of the water on a rock?  
Is there lots of it (covering most of the nearby rocks), not very much (just one or two pieces), or somewhere in between?

Seaweed type	Where is it?		How much of it is there?		
	Underwater	On a rock	Lots	Not much	In between
Egg wrack					
Bladder wrack					
Bifurcaria bifurcata					
Channelled wrack					
Spiral wrack					
Toothed wrack					
Dabberlocks					
Sugar kelp					
Thongweed					
Wireweed					
Red seaweeds					
Green seaweeds					

How many limpets did you find in 1 minute?

--

# Resources for your activity pack



## Tree tracking record

Tick the trees you see during your survey. Choose your favourite two leaves and draw their outlines in the blank space below.

Type of tree	Seen it
Alder	
Ash	
Beech	
Birch	
Cherry	
Elder	
Field maple	
Hawthorn	
Hazel	
Holly	
Horse chestnut	
Lime	
Oak	
Rowan	
Sycamore	
(Other)	
(Other)	
(Other)	