



Let's go

WILD

Cub Scout Naturalist Activity Badge leaders' notes



cubs



Welcome to your activity pack



Supported by the National Trust, the Natural History Museum and The Wildlife Trusts, the Naturalist Activity Badge activity pack includes fun and inspiring activities to help Cubs work towards their Naturalist Activity Badge.

Activities include sampling pond life, spotting bugs and tempting birds into your garden with some tasty treats. The aim is to let Cubs have fun and get close to nature whether in their back garden or local park, or further afield in wild spaces such as woods, nature reserves or the seaside.

If you're looking for a wild place to explore nature, find your local Wildlife Trust nature reserves, www.wildlifetrusts.org/wildlife/reserves, or National Trust sites near you, www.nationaltrust.org.uk.

The notes and online resources below will help you run the six activities. Please download and print out an **activity pack** for each Cub. For most of the identification guides you will only need to print out a few colour copies to share among the Pack. But for the **Garden Bird Detective Spotting Sheet**, please print out a colour copy for each Cub to take home so they can identify the birds they see in their garden. And for the **Pond Identification Sheet** please print out a colour copy for each Cub so they can each record which pond animals they have found.

All the downloads needed for these activities can be found at www.nhm.ac.uk/cubs. The main ones you need are listed under the activity pack and leaders' notes. They are...

OPAL Bugs Count Pocket ID Guide

(1–3 copies)

Garden Bird Detective Spotting Sheet

(a copy for each Cub)

Pond Identification Sheet

(a copy for each Cub)

Big Seaweed Search Identification Guide

(1–2 copies)

More resources and activities are listed at www.nhm.ac.uk/cubs

Activity 1.

How to become a hedgerow hound



This activity is based on the OPAL Biodiversity Survey. It is a survey of a short section of hedgerow to explore and identify the plants and animals living in this habitat.

The main instructions and equipment needed for the activity are outlined in the activity pack but it would be useful to download and print out a few copies of the **OPAL Bugs Count Pocket ID Guide** so you can identify the bugs you spot (this guide is also useful for the Bug hunters activity). If you want to record your findings, print out the forms on pages 5 and 6 of the **OPAL Biodiversity Survey Workbook**.

When?

Any time of the year.

Time to allow:

Allow at least an hour to carry out the survey, and to identify and record the plants and animals. If you run out of time, you could always photograph some of the plants and animals to identify at your next meeting. You could use the next meeting to add the results online.

Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **OPAL Bugs Count Pocket ID Guide** (1–3 copies)
- the **OPAL Biodiversity Survey Workbook** for more information about the hedge survey. Print out the recording forms on pages 5 and 6, which list 12 plants and 24 bugs that you may find in your hedge. If you fill in this form, you can add your results to a nationwide survey to find out which areas of the country have the most wildlife-friendly hedges using the online data entry form www.opalexplornature.org/biodiversity-survey.
- the **OPAL Biodiversity Survey Field Guide** to help name the plants growing in your hedge

If you need more help with identifying your hedge finds, go to the Natural History Museum's identification forum www.nhm.ac.uk/identification.

Activity 2.

Bug hunters



This activity is based on the OPAL Bugs Count survey, which explores the invertebrates found in our built environments. There are three 15 minute bug hunt challenges, looking for bugs in different habitats – soft ground, hard human-made surfaces and plants. It will be easiest to divide the Pack into three groups for this activity. Depending on how much time you have you can either get each group to carry out all three bug hunts in rotation, or each group can do a different bug hunt and report back to the other groups on their findings.

Please download and print out three colour copies of the **OPAL Bugs Count Pocket ID Guide** so each group has a copy (you may have already done this for the Hedgerow hounds activity) to help identify the bugs they find. If you want to record your findings, print out the tables on pages 11, 13, and 15 of the **OPAL Bugs Count Field Notebook**.

When?

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

Time to allow:

30 minutes to one hour exploring and identifying bugs outside. You could spend more time afterwards discussing what you have found and why different bugs favour different habitats.

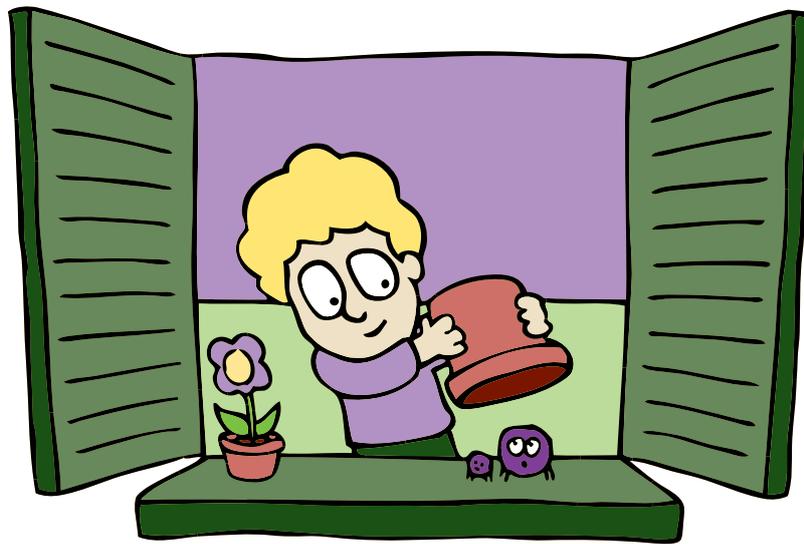
Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **OPAL Bugs Count Pocket ID Guide** (3 copies)
- the **OPAL Bugs Count Field Notebook** for more information about the bug hunt challenges and the recording forms on pages 11, 13 and 15
- the **OPAL Bugs Count group leaders support pack**, which has information relevant to groups
- the **OPAL Bugs Count poster** shows where bugs might be found, so you could use this to introduce the activity.

If you would like to send in your results to a nationwide survey run by OPAL (Open Air Laboratories Network), use this online form www.opalexplornature.org/bugs-count.

If you need more help identifying the bugs you've found, go to the Natural History Museum's identification forum www.nhm.ac.uk/identification.



Activity 3.

Garden bird detectives



This activity involves making a simple bird feeder during a Cub meeting, following the instructions in the activity pack. Cubs take their feeder home. Please download and print a colour copy of the **Garden Bird Detective Spotting Sheet** for each Cub to take home with the feeder they have made. Cubs put the feeder in their garden then spend half an hour every day for a week recording which birds they see, using the form in the activity pack.

At the next meeting you could ask Cubs to talk about which birds they have seen, or you could run a quiz or a bird bingo game as a fun way of learning to recognise the common garden birds.

When?

Autumn and winter is the best time 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.

Time to allow:

Making the bird feeder will take about 30 minutes. Cubs then spend time at home watching for birds and feedback their findings at the next meeting, which could take up to an hour.

Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **Garden Bird Detective Spotting Sheet** (a copy for each Cub)
- a guide to feeding birds

If you need more help, ask experts on the Natural History Museum's identification forum www.nhm.ac.uk/identification.

Activity 4.

Dipping dudes



This is a pond dipping activity where Cubs collect pond water samples and identify and record the invertebrates they find. Download and print a colour copy of the **Pond Identification Sheet** for each Cub so they can record which pond animals they find.

It would also be useful to download and print out at least one copy of the **OPAL Water Survey Workbook**. This has health and safety advice, an invertebrate factfile which shows the pond health score for different types of pond invertebrates, and a pond health recording form on page 7 to fill in your results. You can then upload your results to a nationwide survey run by OPAL (Open Air Laboratories Network) using an online data entry form www.opalexplornature.org/water-survey.

More pond dipping safety advice is available from the Royal Society for the Prevention of Accidents

www.rosipa.com/leisuresafety/adviceandinformation/watersafety/pond-dipping.aspx.

To find a pond or lake, go to www.opalexplornature.org/FindingLake.

When?

Spring and summer.

Time to allow:

At least an hour to carry out the pond dipping and to identify the invertebrates. You may want to use the next meeting to discuss the results, to calculate your pond score and to add your results online to the national survey.

Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **OPAL Pond Identification Sheet** (a copy for each Cub)
- the **OPAL Water Survey Workbook**
- an amphibian identification guide
- a dragonfly identification guide
- a duckweed identification guide
- a Wildlife Watch duck detective spotting sheet
- the **OPAL Water Survey group leader pack**

If you need more help with identifying your pond creatures, go to the Natural History Museum's identification forum

www.nhm.ac.uk/identification.



Activity 5.

Seaweed sleuths



This is a seashore activity asking Cubs to walk along the shore looking for and identifying different types of common seaweed. Please download at least one copy of the **Big Seaweed Search Identification Guide**. Cubs record the different seaweeds they have spotted on the seaweed score sheet in their activity pack. They then spend one minute counting all the limpets they can see in a 3 metre radius around them and record the number on the seaweed score sheet.

When?

Any time of the year.

Time to allow:

This activity can take as much time as you've got available. The limpet search takes one minute.

Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **Big Seaweed Search Identification Guide** (1–2 copies)
- a shoreline detective spotting sheet for other seashore finds.

If you would like to add your seaweed results to a nationwide survey run by the Natural History Museum and British Phycological Society, use this online form www.nhm.ac.uk/seaweeds.

If you need more help identifying seaweeds, go to the Natural History Museum's identification forum www.nhm.ac.uk/identification.

Activity 6.

Tree trackers



This activity is about looking at the trees all around your area – in parks, gardens and the surrounding countryside – to learn to identify the most common ones. Cubs are asked to look at the differences in leaf size and shape to help identify the trees.

Download and print out in colour a few copies of the **Urban Tree Survey Leaf Chart** so you can identify some of the common tree species you are likely to see.

You could collect different leaves during the tree tracker activity or ask Cubs to bring leaves in to the next meeting. During the next meeting you could ask Cubs to sort the leaves into the different shapes and talk about the different features, such as shape, surface and leaf edge that help us to identify tree species (see the **Urban Tree Survey learning resources** for more information about this).

When?

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

Time to allow:

Around an hour should be long enough for the outdoor part of this activity. You could also spend the next meeting on follow-up activities.

Useful resources:

Go to www.nhm.ac.uk/cubs if you want to download...

- the **Urban Tree Survey Leaf Chart**
- **Urban Tree Survey learning resources** for more information about how to group different types of leaves.

If you want to complete a tree survey in your local area and upload the results, go to www.nhm.ac.uk/urbantreesurvey. 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 tree population. If you need help identifying trees, go to the Natural History Museum's identification forum www.nhm.ac.uk/identification.



More activities



A wildlife haven in London

If you are staying at Baden-Powell House in London between April and September, the Natural History Museum's Wildlife Garden is just across the road and you can do a tree survey there or fill in a Tree Hunt activity sheet.