



Curriculum links

Science

Unit 2B Plants and animals in the local environment

Unit 2C Variation

Unit 4B Habitats

Unit 5B Life cycles

Geography

Unit 8 Improving the environment

Mathematics

Block C: Handling data and measures

Art and Design

Unit 2B Mother Nature, designer

Citizenship

Unit 1 Taking part – developing skills of communication and participation

Unit 3 Animals and us

Learning objective

To find out what types of animal live in ponds, and for KS2, what the creatures can tell you about the quality of the water.

Introduction

The pack is suitable for use with around 30 participants divided into up to 5 groups. In the pack there are:

Instructions showing how to use the activities.

Materials and equipment for 5 groups and their leaders.

A risk assessment for the site and the activities in the pack.

A checklist of contents.

Activities for Key Stage 1:

- Pond dip

Activities for Key Stage 2:

- How healthy is the pond?

Health and safety notes. Ensure that the trays are put at least 2 metres back from the water. Emphasise to the class that water can be dangerous, no matter how shallow it is.

Using the site

Please begin your visit with a talk about using the site.

Wildlife sites are home to many animals, plants and insects and you'll meet some of them on your visit, please treat them with respect. Human visitors who come to enjoy the wildlife too, so please keep the site looking good. When you have completed an activity, please try to put everything back as you found it, e.g. turn any dead wood you have looked underneath back over or scatter the leaves you picked discretely.

If there site has a pond and wet areas, make sure you know where these areas are and if you are using any of them, that participants are supervised.

Checklist

Please ensure that everything is there before you return the pack and report any losses.

Folder A - Who lives in ponds?

Pond nets

Trays

Folder B - OPAL water survey and ID guides

2 litre bottle

pH strips

Disposable gloves

Folder C - OPAL Water Survey Record
Sheet



KS1 Pond Dip



A pond.



Folder A - Who lives in ponds? record sheet, Folder B - Guides to Pond Invertebrates (on the reverse of the The OPAL Water Survey), Guide to Amphibians and Guide to Dragonflies and Damselflies



Pond nets, trays, gloves



Before you start pond dipping, half fill your tray with water and place it a few metres back from the water. The best way to pond dip is to put the net into the water, ideally near the edge or around plants, and make a figure-of-8 pattern with the net for 5 to 10 seconds. The movement of the water will disturb the creatures that live in the mud so they should enter the net. Try not to get mud itself in the net as this will make it very hard to see things. After this, tip your net upside down into the tray, and try to identify what has been found. Ideally the participants should spend more time looking at what they have found than doing the actual dipping! Encouraging them to look very closely at the organisms will help ensure this.

Dip to see which creatures you can find, use the ID guides to identify what you have found and record them on the record sheet. Did you find anything with 6 legs? Did you find anything with no legs? Did you find anything with legs too small to count? Did you find anything with more than 6 legs?

KS2+ Pond Dip



A pond



Folder B - Guides to Pond Invertebrates (on the reverse of the The OPAL Water Survey), Guide to Amphibians and Guide to Dragonflies and Damselflies, Folder C - Water Survey Record Sheet



Pond nets, Trays, OPAL water clarity disc, pH strips, water bottle, gloves



Before you start pond dipping, half fill your tray with water and place it a few metres back from the water. The best way to pond dip is to put the net into the water, ideally near the edge or near plants, and make a figure-of-8 pattern with the net for 5 to 10 seconds. The movement of the water will disturb the creatures that live in the mud so they should enter the net. Try not to get mud itself in the net as this will make it very hard to see things. After this, tip your net upside down into the tray, and try to identify what has been found. Ideally the participants should spend more time looking at what they have found than doing the actual dipping! Encouraging them to look very closely at the organisms will help ensure this.

Carry out the OPAL Water Survey according to the instructions contained in the OPAL pack. Depending on the amount of time you have, you can either just do the pond dipping (Activity 3) or also do activities 1 and 2. Make a tally of what you see on the enclosed OPAL Water Survey recording sheet. Some creatures need very clean water in which to live, these animals score 10. Other creatures need quite clean water, these score 5, and others are quite happy in polluted water and score 1. What do the things you have found tell you about how healthy the pond is?