Minibeast Pond Safari

Please use this information to help you and your students get the most from your visit.

Your workshop

Workshop name	Minibeast Pond Safari
Location	In the Museum's Wildlife Garden. Please be at the Darwin Centre Café (see map on page 2) **10 minutes before your start time**. You will be met by a science educator (in a purple T-shirt) who will take you to the garden.
Start time	10.30 11.30 13.30 14.30
Duration	45 minutes
Minimum ratio	1 adult : 10 pupils
Maximum group size	30 pupils

Please ensure you meet the required minimum adult : pupil ratio.

This workshop takes place outside so please ensure pupils are dressed appropriately for the weather. They need flat comfortable shoes and may need a coat.

Health and safety

The science educator will give a health and safety briefing at the start of the workshop.
Please be aware of the following safety points:

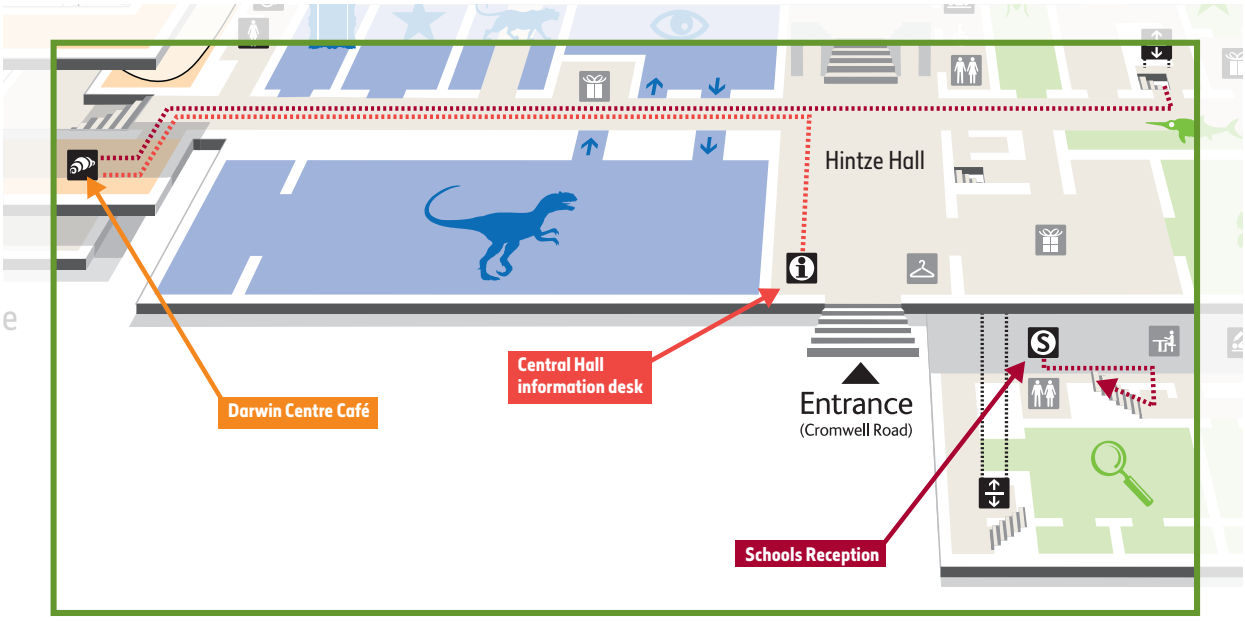
- keep away from pond edges unless pond dipping
- stay with the group
- wash hands after the workshop
- kneel down to pond dip (do not stand/lean over the pond)
- do not pond dip without adult supervision
- bear in mind that some insects and plants sting
- do not climb on the rocks

We have a demonstration beehive in the Wildlife Garden. It has a clear glass front, so visitors can watch what the bees are up to inside. The viewing area and the hive are divided by a small barrier, and the entrance/exit point for the bees is high enough to keep bees and people safely apart. Please advise pupils that if a bee flies towards them the best thing to do is stay still. Pupils known to have allergic reactions to bee stings should carry appropriate medication.

About the workshop

The science educator will introduce pupils to the variety of invertebrates in the pond and encourage them to consider how different organisms are suited to life there. Pupils will carry out pond dipping and use simple keys to explore the features of the invertebrates. Pupils record which invertebrates they identified and where they found them. The activity concludes with a discussion about the variety of invertebrates found in the pond, what features each invertebrate has that could help it survive in the pond habitat and how different features can be used to aid identification.

Meeting point map



After taking your group to leave their belongings at their designated space in *Schools Reception*, please be at the Darwin Centre information desk **10 minutes before your activity** start time. A science educator will meet your group for an introduction before taking them into the Wildlife Garden.

Before your visit

Work on adaptations, habitats and using keys would be of benefit.

A note about behaviour

Our experienced science educators will lead your workshop. We work to make it an inspiring and inclusive experience for all pupils and find we rarely have problems with behaviour. However, teachers have overall responsibility for the behaviour of their pupils and we expect you to support us with this where necessary. Pupils benefit significantly when teachers and accompanying adults also get involved in the workshops, so please do join in.

Learning objectives

- to become familiar with a range of invertebrates
- to understand that different animals are found in different habitats
- to know that animals are suited to the environment in which they live

Skills/practical techniques

- to make reliable observations of organisms
- to use a key to identify animals
- to record where different animals were found

National Curriculum links

Year 3

- identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other
- identify and name a variety of plants and animals in their habitats, including micro-habitats

Year 4

- recognise that living things can be grouped in a variety of ways
- explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment

Working scientifically

- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Expected outcomes

By the end of the session, pupils will be able to:

All	Know that different animals have different features and that these can be used to identify them.
Most	Use a key to identify different animals and record where they were found. Understand that their different features help them to survive in their habitat and be able to describe some of these.
Some	Predict accurately a range of features that will be found in animals living in a specific habitat and suggest habitats in which animals with certain features will be found. Explain why they think this.

After the workshop

You may like to complement Minibeast Pond Safari with a visit to our *Creepy Crawlies* gallery.
There is an *Explore and Discover* guide available linked to this gallery that may be suitable for your students:

Key stage 2

• Creepy Crawlies

Please see the full *Explore and Discover* primary series at **www.nhm.ac.uk/education/school-activities/self-led-activities/discovery-guides/explore-primary/index**. These guides cost 50p each payable before the day of your visit.

For more information please contact our Bookings team on 020 7942 5555.

After your visit

If you have a pond at school, you can repeat activities from the workshop. Do you find the same invertebrates or are they different? Alternatively, collect some water from a nearby pond to look at in the classroom. Remember to return the water to the pond when you have finished.

Science

Pupils could carry out a similar investigation looking at invertebrates found in a woodland environment (or similar). Pupils could look at grass or leaf litter, the trunks or leaves of shrubs and small plants, the trunks of much taller trees and identify flying invertebrates to compare three 'layers' or zones of a land habitat (in a method similar to how they looked at the three 'layers' of the pond in the *Minibeast Pond Safari* activity). A land animal survey resource sheet for this activity is available to download at: **www.nhm.ac.uk/education/school-activities/hands-on-activities/wildlife-garden/minibeast-pond-safari**

- What features can you identify on the invertebrate?
- Can you describe the shape, colour, size, number of each feature you identify?
- Do you think any of the features help the invertebrate survive in its environment? How? (These are adaptations.)
- Are any of the adaptations you see in the land invertebrates similar to those you saw in the pond invertebrates? (For example, the flat body of a woodlouse is suited to living under a log. Were there any flat-bodied invertebrates in the pond that may have lived under something?)

Art or DT

Ask pupils to invent and then make a creature adapted to a given habitat. Experiment with different media such as play-doh, clay, papier mache or paints. What features does the creature have to help it be successful in its habitat? This activity can be extended by asking pupils to also invent the habitat, which can be as fantastical as they like – as long as the creature living there is adapted to survive.

Literacy

Ask pupils to create an estate agent style advertisement for a home in a pond habitat. This could link into literacy work on persuasive writing and advertisements.

Numeracy

This could link into work on measuring (eg volumes of water, length of invertebrates) or ratio and proportion. For example, in my pond there are three water lice to every two phantom midge larvae. If I have nine water lice, how many phantom midge larvae are there?