

Carrying out a BioBlitz - tracking biodiversity

Summary:

A BioBlitz is a biodiversity survey that works as a fun activity for engaging learners with their local environment to see what plants and wildlife are present. It is a great way of combining scientific methods with art and the activity can be used as a basis for many different conversations around biodiversity and landscapes, wildlife conservation, life cycles, seasons, and anatomy/botany. You can use this activity to encourage learners to think about the different species of plants, animals, and insects that live in different environments by conducting the BioBlitz in various locations.

The BioBlitz is a tool to also show children how the wildlife they find varies over time based on seasons and changes in the environment - both natural and man-made. This is a fun activity to do as a class, or with a group of children as part of Eco-team activities (or similar). This is also the perfect activity to do as part of Outdoor Classroom Day on the 7th November.

This activity sheet is aimed at educators, to provide you with information and guidance so that you can lead this activity with your learners.

Key Stage / Age group: It can be easily tailored to any age group - the links below are from the <u>National Curriculum for England</u>.

National Curriculum links (Primary):

KS1 & KS2 - Science

Working Scientifically - please see National Curriculum Guidance for working scientifically objectives

Year 1:

- Plants: identify and name a variety of common wild and garden plants.
- Animals including humans: identify and name a variety of common animals.
- Seasonal Changes: observe changes across the four seasons.

Year 2:

- Living things and their habitats: 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 mirror
 habitats.
- Plants: observe and describe how seeds and bulbs grow into mature plants; find out and describe how plants need water light and a suitable temperature to grow and stay healthy.

Year 3:

• Plants: explore the requirements of plants for life and growth (air, light, water, nutrients from soil and room to grow) and how they vary from plant to plant.

Year 4:

• Living things and their habitats: 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; recognise that environments can change and that this can sometimes pose dangers to living things.

Year 5:

 Living things and their habitats: describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird; describe the life process of reproduction in some plants and animals.

Year 6:

• Living things and their habitats: describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences including microorganisms, plants and animals; give reasons for classifying plants and animals based on specific characteristics.

Time needed: 30 mins +

Location: You can do this activity in any location. We recommend choosing a green space such as a park, playground, or garden, as there will be more species to record. We recommend doing a BioBlitz in multiple locations to show how different environments affect biodiversity.

For example: Choose 3 locations: a non-greenspace (e.g. paved area), a greenspace with lots of different plants (e.g. wildflower patch or grass bordering hedging) and a greenspace without many different types of plants (e.g. lawn).

Activity links:

We recommend using this activity in conjunction with our other activities that work to support wildlife, in order for learners to track how their actions affect biodiversity. There is nothing more motivating and empowering than seeing that everyone can have a positive impact!

This activity works well in combination with:

Create a wildflower patch
Create a water feature for wildlife
Build a bug hotel

How to plan & complete a BioBlitz

What you'll need:

- ClipboardsPens or pencils
- BioBlitz observation sheets (printed) attached
- Wildlife identification sources (books/guides etc)
- Camera
- Magnifying lenses (optional)



How to:

Go outside and observe the wildlife in the location you have chosen! We recommend putting learners into groups to observe in different parts of your chosen location, so that you cover all ground and don't note down the same organism multiple times.

Make sure you:

LOOK EVERYWHERE: Under rocks, in water, up trees, under leaves. Explore grass and soil, check every area and leave no stone unturned. When you do find wildlife, observe, but do not disturb.

ENJOY YOURSELF: Slow down and truly enjoy being in nature. Notice all of your senses: what can you see, hear, smell and feel?

RECORD: Document everything in detail. Take photos, draw pictures and make sure you give the exact location of the creature found - you might want to be specific - you could use graph paper to help with this. Perhaps give the learners a very small area of the chosen location and have a photo of it that they could mark up. Why not have a competition for the best photo or most accurate drawing?

IDENTIFY: Use guidebooks, the internet, apps, and local experts to identify every species you have found throughout the day. It's always best to use a few different identification methods to be sure!

Observation sheet 1

Observer(s):	Location:
Date + time: Sketch and label your observed organism here:	Weather:
Common Name:	Scientific Name:
Notes: (size, colour, markings, exact location, organisms near)	, behaviour, amount of them, any other

Observation sheet 2

Observer(s):	Location:	
Data I timo	Worthow	
Date + time:	Weather:	

Species name (common and/or scientific name)	Notes (e.g. location, certainty, life stage)	Number Observed (tally & final number)

Learn More:

Here are some of our favourite identification sources for young wildlife explorers:

Books:

- * RSPB First Book of Minibeasts
- ❖ RSPB First Book of Flowers
- ❖ RSPB First Book of Butterflies and Moths
- * RSPB Children's Guide to Nature Watching
- ♦ Know Your Nature: British Wildlife by Caz Buckingham & Andrea Pinnington
- ♦ What's that Garden Bird? by Caz Buckingham & Andrea Pinnington
- Spring Books for topics