



Topic based resource

Biodiversity

Lower Key Stage 2

Background information

Biodiversity is the vast variety of living things on earth. The existence of all life forms including plants, animals, insects, birds, fungi and micro-organisms is interwoven in the ecosystem we call home. All living organisms are part of the biodiversity of our natural and man-made surroundings. Humans cannot survive without a healthy ecosystem, we depend on it for our health, food, water, air to breathe and quality of life.

In the Welsh language 'cynefin' means a place or habitat, but more than that, a sense of place and connection with nature. Recognising the importance of our natural surroundings is vital in understanding how to protect and improve biodiversity.

The World Wildlife Fund's Living Planet Report 2020 shows that human behaviour, from the way we live to the food we eat, is causing the destruction of natural resources and habitats which is having a devastating impact on wildlife populations and also on our own health and wellbeing.



Climate perspective

It is well documented that rapid changes in climate can drastically affect eco systems. Although there have been changes in climate throughout history when it happens at speed there is no opportunity for species to adapt which results in a loss of biodiversity. Each species lost influences other areas of the eco system. If it is a prey species lost

it causes food shortages for predators or if a predator for a particular species is lost, then that causes over population of the prey species and no predator to control it. As the climate warms there is evidence of species succeeding in areas they have not previously been found and pushing out the native species.

Nest Building

Lower Key Stage 2

Build your own nest

Why do birds build nests? What do the nests need to do? Protect the bird and its eggs and the chicks when they hatch. Nests need to be strong, protect the eggs/chicks from the weather and keep them safe from predators. The nest needs to be made in a safe place, have a way to get in and out, be soft on the inside and strong on the outside.

How are nests made? What materials do they use and why? Natural materials, readily available in the local area, easy to carry and suitable for the requirements of the bird.



Materials required:

- A range of natural materials available in your school grounds or local area e.g. large and small sticks, twigs, dry leaves, cut grass, straw/hay, mud, feathers, moss, wool.
- A toy bird if possible.

Step 1

Think about the location and design of your nest. You could make a large nest for your group to get in together or smaller nests in pairs or groups. Find a safe place to build your nest such as in some bushes, tucked away in a log pile or in the branches of a tree.



Step 2

Gather your materials – think carefully about what you want to use each of the materials for and only take as much as you need so you don't waste energy.



Challenge

Remember birds can only use their beak and claws! How will you carry your building materials? Can you make your nest using only one hand as a bird's beak?

Step 3



Think about the size and shape of your nest and start to build. Don't forget that it needs to be strong enough to protect the eggs from predators and the weather. Some birds use wet mud to stick their nests together or weave the materials together using their beaks.



Step 4

What will you line the inside of the nest to keep the eggs safe? Birds use feathers, moss, animal fur or wool and sometimes even plastic or packaging from litter.

Step 5



Try your bird out in its new nest! Do you think the nest would be a safe place for a real bird to lay its eggs? Think about the reasons why you chose the location and materials and prepare a short advert with your group to sell your nest to a bird! Think Location! Location! Location! and be sure to include all the unique selling points of your nest. You could make a video of your advert or make a poster in the style of those you might find in an estate agents window.

Curriculum Links

Area of Learning and Experience - Science and Technology

What Matters Statement:

The world around us is full of living things which depend on each other for survival

Matter and the way it behaves defines our universe and shapes our lives

Area of Learning and Experience - Humanities

What Matters Statement:

Our natural world is diverse and dynamic, influenced by processes and human actions.

Next steps and other ideas

- Read 'Bird Builds a Nest' by Martin Jenkins to find out more about the forces involved in nest building.
- Group the nesting materials by texture or natural and man-made.
- Find out more about how birds can end up using man-made materials in their nests – link to litter and waste minimisation.
- Find out what types of birds you have in your school grounds and what sort of nest they would build.
- Provide a range of natural materials for nesting birds in your school grounds.



- Make bird boxes for your school grounds to encourage nesting birds.
- Take part in the RSPB Big School Bird Watch
- Look at how you could increase biodiversity in your school grounds – e.g. introduce plants for pollinators, plant a wildflower area, make mini-ponds, create a minibeast area/garden, plant fruit trees, leave an area of the school field to grow longer, ask your grounds maintenance team to stop using weedkiller or pesticides



33-35 Heol yr Eglwys Gadeiriol, Caerdydd, CF11 9HB | 33-35 Cathedral Rd, Cardiff, CF11 9HB
029 2025 6767 keepwalestidy.cymru info@keepwalestidy.cymru

Cadwch Gymru'n Daclus yn gwmni wedi ei gyfyngu trwy warant. Rhif Cwmni: 4011164 Rhif Elusen: 1082058 Rhif TAW: 850 3958 13
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