



The
countryside
charity



Hedgerow Detectives

Key Stage 2

A simple line drawing of rolling hills at the bottom of the page, consisting of several curved lines that create a sense of depth and movement.



This is a lesson plan developed by CPRE, the countryside charity. CPRE campaigns to promote, enhance and protect the countryside for everyone's benefit, wherever they live. With a local CPRE in every county, we work with communities, businesses and government to find positive and lasting ways to help the countryside thrive - today and for generations to come. CPRE's Hedgerow Heroes project is planting and restoring hedgerows across the country. We are also campaigning for the government to commit to a target to increase the hedgerow network by 40% by 2050 - to help achieve net zero. This has been recommended by the Climate Change Committee.

Why hedgerows matter



A hedgerow is a strip of woodland, usually made up of many different trees, shrubs (these are like trees but don't grow so big), brambles and flowers. As well as providing a valuable place for wildlife to live, hedgerows also help people.

Use CPRE's 'Little rough guide around the hedges' leaflet to name and show the students what the common trees, shrubs, brambles and flowers found in hedgerows look like.



Hedgerows are under threat and need our protection. Over 16,000 miles of managed hedgerow were lost between 1998 and 2007 alone. This is disastrous for many species of wildlife – for example, 80% of our woodland birds, 50% of mammals and 30% of butterflies rely on hedges for protection and food.

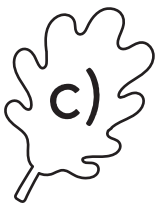
Important environmental benefits (these are also known as ‘environmental services’) provided by hedgerows, include:



Preventing soil erosion: Hedgerows act as wind-barriers, therefore reducing surface wind speeds. Their extensive root network can strengthen the soil by holding it all together while the hedge itself covers the top soil. Hedgerows can also act as a barrier to surface water that runs off and takes the soil with it.



Tackling climate change: Hedgerows can contribute to reducing climate change by storing carbon. They do this by taking carbon, also known as CO₂, out of the atmosphere. The UK’s Climate Change Committee has recommended extending the hedgerow network by 40% by the year 2050 to help reduce climate change.




Attracting insects: Hedgerows can enhance the numbers of insects, which are essential for pollinating plants and flowers in the environment. For example, holes at the bottom of hedges which have been created by mice and voles make excellent nesting places for bumblebees. Hedgerows also provide food for butterfly and moth caterpillars. These pollinators then benefit crops such as vegetables, oilseed rape, and fruit. Abundant pollinators can result in increased harvests.

The use of hedgerows systems in England dates back thousands of years to the Bronze Age, when fields were first starting to be carved into the landscape. Two-thirds of England has had hedgerows as a continuous part of the landscape for more than a thousand years. By the Anglo-Saxon period (AD 410 – 1066), hedgerows were a well-established part of the countryside.

Some hedgerows that we see today are hundreds, and perhaps even thousands, of years old. The oldest hedgerow in England is called:

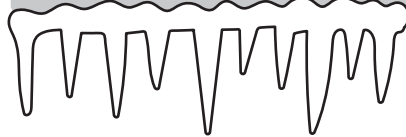


These ancient hedgerows are a link to the past, to how people managed the land hundreds of years ago – hedges are living history! Hedgerows also provide irreplaceable services such as storing important seeds to be used in the future, these are known as ‘seed banks’. Many of these special hedgerows are viewed as very valuable and are protected by law.



Guidance for teaching resources:

Cold task



Firstly, use the hot and cold task questionnaire to find out what the children already know about hedgerows, before you teach them anything. You can compare what they have learnt at the end by using the hot task questionnaire to measure progress.

Spot the difference



Use the Spot the Difference worksheet to ask children to consider how the landscape has changed in the last 100 years. Ideal answers should notice the larger fields, removal of hedgerows and general loss of trees and vegetation. Ask the children if they know why hedgerows have been removed over time. Ideal answers will appreciate how farm machinery such as tractors and combine harvester have increased in size and therefore work best on large fields with fewer hedgerows and also that more building such as new houses and roads can mean hedgerows are removed.



Benefits and disadvantages of hedgerows



Print off and cut out the cards, give a set to each student and ask them to read and put them into two piles, benefits and disadvantages. Once you have checked through the answers as a class, children can then stick the cards into their exercise books under the two headings. Challenge – can they think of any other benefits or disadvantages? These can be discussed and added to the appropriate sides.



Hedgerow challenge



Display the Hedgerow Challenge PowerPoint and show the picture of farmer Mary, explain that the children are going to decide which type of fencing to use in a new field that Mary is going to keep her goats in. Talk through the slides of the PowerPoint by slowly revealing the costs, benefits to wildlife, aesthetics, environmental benefits and how sustainable each method is. Then, ask the children to work in groups of two or three to complete the Hedgerow Challenge worksheet (use a different coloured pen for each method on the same sheet). You could do 'cost' as a worked example, as a whole class, to make sure everyone understands as each aspect must be given a score out of 5, 1 = very poor, 5 = excellent. Children then add up all their scores to get a final score for each method. Ask children to share their answers and explain why they gave their scores for each section and confirm which strategy they think is best.

Hot task



Children to now go back to the questionnaire and complete the questions again to see how much they have learnt.



Extension activities



Arrange an excursion to a local hedgerow to find out what species of plants are growing in it, use CPRE's 'Little rough guide around the hedges' leaflet to help your students find out what species there are:



Alternatively, contact your LEAF Education Regional Education Consultant to arrange a farm visit to hear first hand from farmers how they look after hedges and plans to reintroduce hedges on their land:



leaf.eco/education/contact-us



Further resources



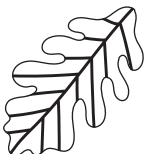
Hedgelinek

hedgelinek.org.uk



Exploring hedgerows printable board game

wildoxfordshire.org.uk



People's Trust for Endangered Species has great resources about hedgerow history

ptes.org/

