

Biodiversity in Arrow Valley Country Park

What is biodiversity and why does it matter?

Biodiversity is a measure of variety amongst all living things, including the plants, fungi and animals that we can see, as well as things like microscopic bacteria and single-celled organisms.

Together, living organisms and their environment form interconnected eco-systems or habitats. They interact with each other in a carefully balanced way and do some really important jobs to help keep life going on earth. These are sometimes referred to as 'eco-system services' - see one example in the diagram below.

The diagram shows a cross-section of a wetland area. Water flows from the left into a pond-like area with reeds and plants. Arrows indicate the flow of water through the vegetation, which filters out impurities. The text 'Water Purification' is written above the diagram.

Through study, we have discovered that these systems work better and are more resilient to changes if they are more biodiverse. The loss of even one or two species from a habitat can put it out of balance.

Biodiversity in the UK has been in decline in the past 60 years as habitats have been lost or broken-up through a combination of built development, industry and changes to farming. However, growing recognition of the importance of biodiversity to our environment and the benefits of nature mean that many of us are increasingly valuing our outdoor spaces and are working to restore and create new habitats.



Biodiversity success story

Arrow Valley Country Park is host to a fantastic display of wildflowers in its meadows over the summer months. The best places to see these are here at Bordesley Abbey Meadows and further south at Proctors Barn Meadow.

These meadows have been helped over a number of years through the annual cut and removal of vegetation, which reduces the amount of nutrients in the soil. This is good for wildflowers as it lessens the growth of grasses and other plants that tend to take over, leaving space for the wildflowers to thrive.

One of the wildflowers grown in Arrow Valley Country Park is yellow rattle, which has yellow tube-like flowers in summer, followed by brown pods in which the seeds form and 'rattle' as they ripen. It is hemi-parasitic, which means it gets some of the nutrients it needs to survive from other plants. Because of this, it reduces the strength of grasses, again leaving space for other more delicate wildflowers.



Supporting biodiversity at Arrow Valley Country Park

Large green spaces like Arrow Valley Country Park offer a valuable range of habitats bringing many ecological benefits. This park is part of the new town development that now provides an important wildlife corridor running through the town and great access to nature for lots of Redditch residents.

The map above shows the range of habitats found in this part of the park. Here is some further information on each:

Linear woodland

Linear woodlands create wildlife corridors which link different habitats, like larger woodland areas together, allowing animals to move between them. They also provide homes, food and shelter for many birds, mammals and insects which helps to boost local diversity.

Hedges

Hedge laying involves partially cutting young trees and bending them to create hedges. The hedge laying, which can be seen in this part of Arrow Valley Country Park, helps to maintain thick and healthy hedgerows that provide food and shelter for wildlife. They support plant diversity, help prevent soil erosion and create safe pathways for animals to move between habitats.

Ponds and lakes

These features, like Forge Mill Pools, offer calm water habitats. They support a variety of wildlife including fish, insects and birds, which thrive in the rich, stable environment. They also help to manage water flow and improve the surrounding landscape by providing important breeding grounds for amphibians and water birds.

Linear wetland habitats

Linear wetland habitats, like the streams and the River Arrow that run through Arrow Valley Country Park, support a wide range of wildlife. They connect different areas of the park for species movement and help to control flooding by slowing flows. The plants in these habitats also prevent soil erosion by stabilising riverbanks with their roots, and help to clean the water running through them by filtering it through their roots.

Wildflower meadows

Wildflower meadows are an important habitat for many pollinating insects, including butterflies, bees and wasps. Recently we have seen a decline in pollinator numbers in the UK, partly because around 98% of the UK's wildflower meadows have been lost since the 1930s. To help support these important insects, areas of Arrow Country Valley Park, like Bordesley Abbey Meadows, have been actively managed to encourage the growth of wildflowers (find out more in our 'Biodiversity Success Story' above). As well as boosting local biodiversity, wildflower meadows also have other benefits, such as improving soil health and trapping and storing carbon.