

Biodiversity in Arrow Valley Country Park

What is biodiversity and why does it matter?

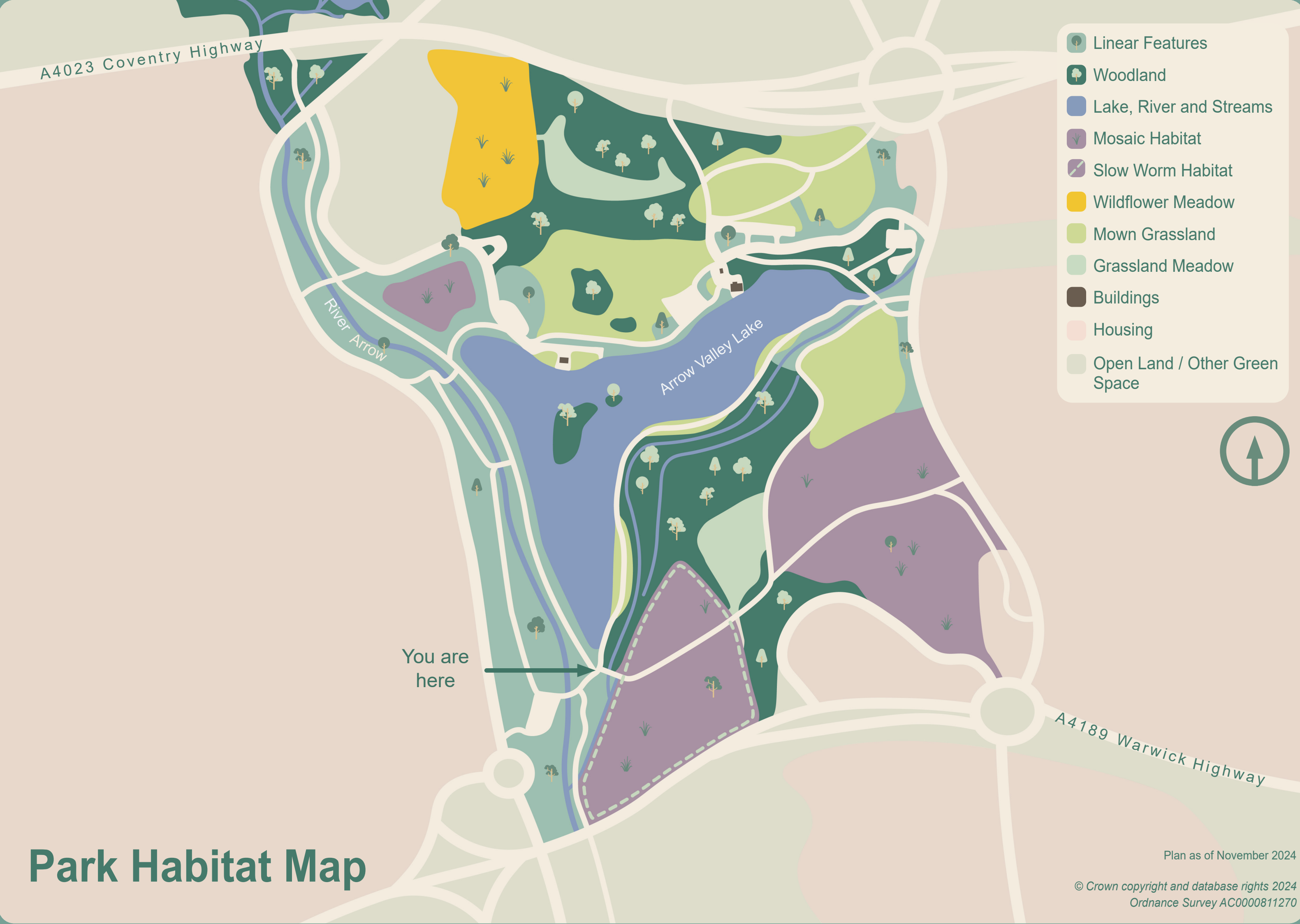
Biodiversity is a measure of variety amongst all living things, including the plants, fungi and animals that we can see, as well as things like microscopic bacteria and single-celled organisms.

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 illustrates the process of gas exchange in a plant. A sun is shown in the top left corner. A plant with green leaves is in the center. An arrow labeled 'CO2' points from the air into the plant's leaves. Another arrow labeled 'O2' points from the plant's leaves into the air. The text 'Gas Exchange' is written to the right of the plant.

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

Slow worms are legless lizards that are often mistaken for snakes! What defines them as a lizard is their ability to blink and shed their tails as a defence mechanism. Slow worms are small and harmless creatures, they do not have venom and are not aggressive, in fact, they are shy and easily frightened!

Slow worms inhabit a variety of environments including heathlands, grasslands, and woodland edges. They thrive in mosaic habitats, like those found in this part of Arrow Valley Country Park.

The illustration shows a slow worm, a small, brown, legless lizard, crawling through a grassy field. There are several white daisies and other small flowers in the field. The background is a soft, hazy landscape.

Here they can sometimes be seen basking in the sun, seeking refuge under stones and logs and hunting invertebrates, which helps control pest populations. They are quite rare and are protected under the Wildlife and Countryside Act 1981.

Recognising their ecological importance and the need to protect these reptiles, a section of Arrow Valley Country Park has been fenced off, with limited access (see slow worm habitat area shown on the map). This area is being carefully managed to conserve and enhance the slow worm habitat.

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:

Arrow Valley Lake

Arrow Valley Lake was formed in the 1970s following the gravel extraction that took place in the building of the new town. At nearly 12 hectares, it is the largest water body in Redditch and contains an excellent stock of fish as well as attracting a range of native and migratory water birds, like herons and little egrets which use the island for refuge.

Linear features

Linear habitats, like hedgerows, riverbanks, and rows of trees, are very important for wildlife. They create corridors that connect different habitat areas in the park, allowing animals to safely travel. This helps species find food, shelter, and mates, especially in areas where habitats are divided by man-made features. They also support biodiversity by linking larger habitats, making the environment more connected and resilient to changes.

Wildflower meadow

The wildflower meadows in Arrow Valley Country Park are incredibly beneficial for the environment. They provide a rich habitat for a wide variety of insects, including bees, butterflies, and other pollinators, which help to make up a healthy ecosystem. The meadows also support birds and small mammals by providing food and shelter. As well as this, wildflower meadows help improve soil health, reduce flooding in the local area and store carbon, which helps fight climate change.

Woodland

Millennium Wood, which can be found on the northern edge of Arrow Valley Country Park, was planted in 2000 to celebrate the new millennium. It features a variety of native tree species, contributing to the park's biodiversity. Also in the park is the much older Bluebell Wood which is an area of woodland that pre-dates the park. A sign of this woodland's age is the presence of large swathes of native bluebells in spring, growing under the dappled light of the trees.

Mosaic habitat

Mosaic habitats are areas where different habitats, like woodland, scrub, grasslands, and wetlands, mix closely. They support a wide range of plants and animals which helps biodiversity thrive. Each habitat offers different resources, providing food, shelter, and breeding grounds for different species. This diversity makes the landscape more resilient to changes like climate shifts and helps to sustain a healthy ecosystem. An example of a mosaic habitat in the park includes the area around the Spider's Web.