

# What is biodiversity and why is it important ?

## What is biodiversity?

Biodiversity is a term that we use to give a name to ALL of the life on this planet, and comprises all of the plants and animals, bacteria and fungi, humans and every other organism.

In Leicestershire we can see it in the red kites that float and glide low over the hedges and woodlands, the bumblebees in the verges and gardens, and the profusion of flowers in our grasslands.

The term is also used to encompass all of the genetic diversity of those organisms and to encourage us to think about the habitats and ecosystems within which those organisms live and the ecological processes that they are a part of. It is anything and everything that is alive in the world around us, and even within us!

## Why is it important?

Everyone has a different view on what might be important to themselves but put simply we would not exist without biodiversity! For instance, it provides the oxygen we breathe, the food we eat, many of the medicines that keep us healthy, and the energy that helps us to grow; historic and current biodiversity (in the form of fossil and biofuels) even provides us with energy to keep us warm, to power much of our transport and our economies. Many of these we call 'ecosystem goods' and contribute to our natural wealth ([IPBES, 2019](#)).

Biodiversity also provides us with an enormous number of other benefits, other ecosystem goods and 'ecosystem services'. These include benefits such as the provision of water quality and climate regulation, flood and pollution reduction, the creation of soil, and fibre for our clothes and homesteads. It also provides us with the beautiful landscapes, wildlife experiences and inspiration for creativity that enhance our quality of life.

In recent years a lot of effort has been put into trying to help us gain a greater awareness of the value of biodiversity and one way has been to put monetary values on those good and services – leading to a natural capital assessment, or a set of natural capital accounts (much like a personal financial account).

A global assessment of pollination determined that whilst the value of global agricultural crop production is estimated as \$2.6 trillion, between £235 billion and \$577 billion of that (5-8%) is at risk through loss of animal pollinators ([IPBES, 2016](#)). In the UK, the most recent (partial) assessment of the UK's natural capital estimated the total value to be nearing £1 trillion (£950 billion) with, for instance, living within 500 metres of green and blue space estimated to be worth £78 billion to UK homes ([UK Gov, 2019](#)).

**These are likely to be the most valuable habitats for wildlife in your local area:**

- Unimproved pasture (unfertilised grassland used for grazing)
- Rough grassland and scrub
- Meadows
- Wetlands e.g. fens, marshes and reed-beds
- Woodlands (deciduous and ancient woodland)
- Hedgerows and scrub
- Native trees (especially old trees)
- Rivers, streams and ditches
- Lakes and ponds
- Older buildings
- Allotments
- Churchyards
- Disused quarries and derelict land
- Railway embankments and disused railway lines
- Old roads and green lanes, and wide roadside verges
- Old orchards

**These are usually less valuable:**

- Arable fields (growing crops)
- Short mown grass (on verges or town/village greens, and amenity areas)
- Plantation woodland (especially conifers)
- Newer buildings and the areas around them