

# Biodiversity

Your questions answered

English Nature is the Government agency that champions the conservation of wildlife and geology throughout England.

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# Biodiversity

Your questions answered

The word 'biodiversity' is increasingly used, particularly by conservationists and politicians. But what does it mean? This booklet will help you understand more about biodiversity by answering some of the most frequently asked questions.

## What does 'biodiversity' mean?

Biological diversity, or 'biodiversity', is defined as the richness of the natural world - the variety of plants and animals, together with the soils, rocks and water on which they depend. The variety of life on Earth is astonishing. So far about 1.5 million species of plant, animal, fungus, alga and bacteria (the five kingdoms of the natural world) have been described. However, it is thought that there may be as many as 100 million species still to be found and identified.



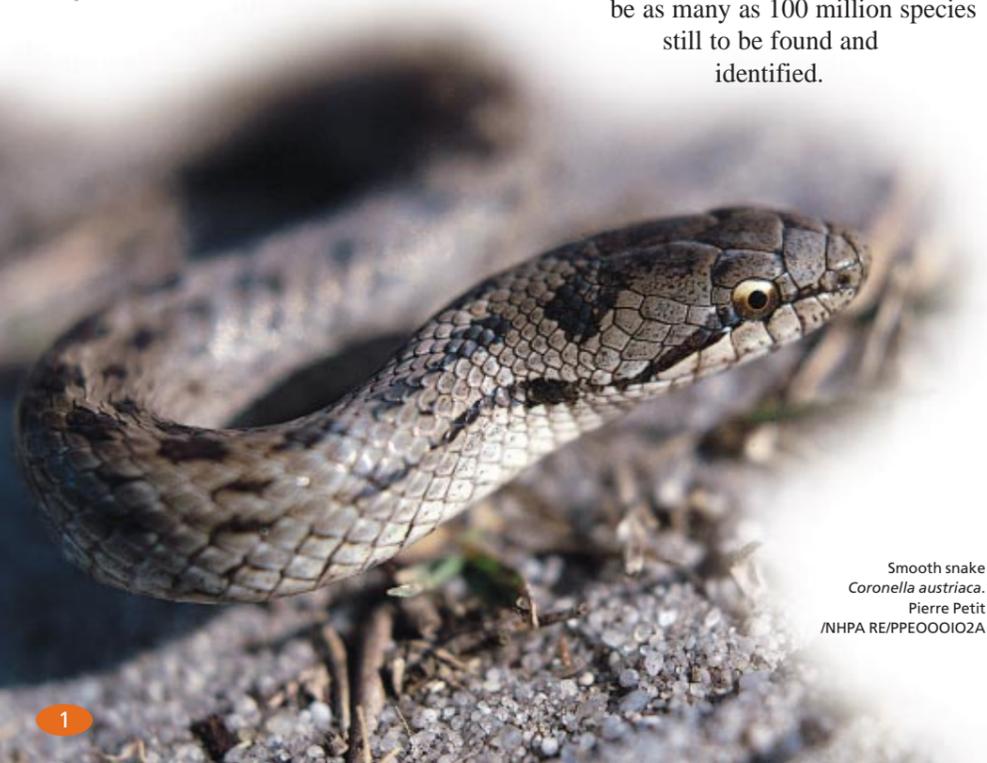
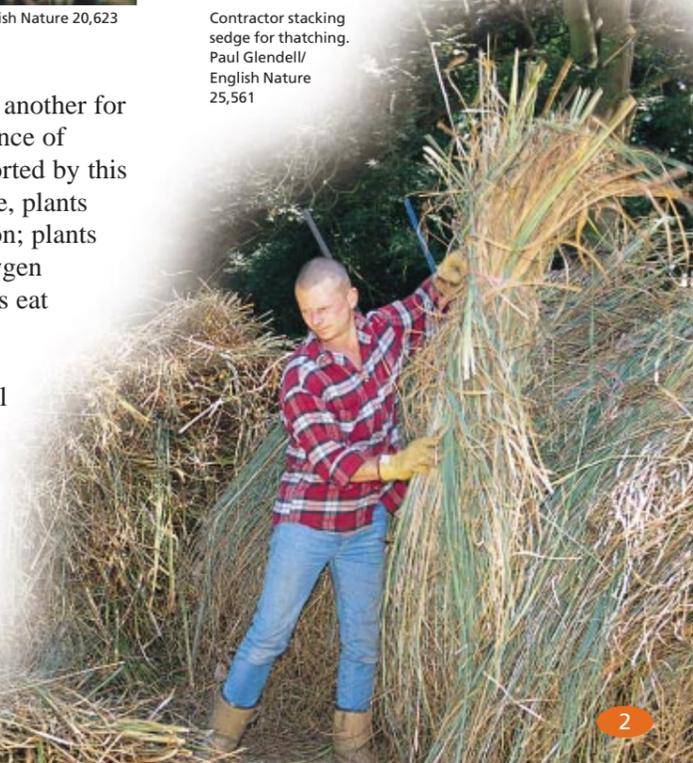
Adonis blue butterfly. Peter Wakely/English Nature 20,623

wetlands help alleviate the effects of storms and floods and act as natural filters for pollutants, improving water quality. Biodiversity also provides and enhances the places where we live, relax and exercise, in both the countryside and the city.

Species depend upon one another for survival. The very existence of humans on Earth is supported by this 'web of life'. For example, plants need insects for pollination; plants and algae provide the oxygen animals need; and animals eat plants and other animals.

Biodiversity influences all aspects of the quality of our lives, especially the economy. From it we obtain our food, fuel, medicines, cosmetics and construction materials. Shorelines, floodplains and

Contractor stacking sedge for thatching. Paul Glendell/English Nature 25,561



Smooth snake  
*Coronella austriaca*.  
Pierre Petit  
/NHPA RE/PPE000102A



Knole Park SSSI, Kent. 'Tree hugging' old oak. Peter Wakley/English Nature 20,204

### How is biodiversity under threat?

The principle threat to biodiversity is the tremendous growth in the human population. This has led to increasing consumption of the Earth's natural resources, supporting demands for even higher standards of living, with the consequences that:-

- Many of the habitats where plants and animals live have been seriously damaged, reduced in size, fragmented or even lost completely.
- In many parts of the world we have introduced species, such as rats, domestic animals and invasive plants. These invaders have frequently devastated populations of the native species, some to the point of extinction.
- The climate has been changed by the production of billions of tonnes of greenhouse gases every year through burning fossil fuels. The resultant global climate change is already having a noticeable effect on wildlife.
- The whole environment - the land, the oceans, freshwater and the air we breathe - is increasingly polluted.

These changes in Earth's life-support system are causing the extinction of species at such an alarming rate that, unless halted and reversed, could lead to the ultimate failure of the web of life.

Linnet. Bob Glover/RSPB 1999/0422/546



### What action is being taken?

At the first 'Earth Summit' held in Rio de Janeiro in 1992, governments acknowledged that the planet's biodiversity was being severely depleted. Over 150 world leaders signed the Convention on Biological Diversity. In doing so, they agreed to play a part in restoring the richness of the Earth's biodiversity.

The UK Government published its Biodiversity Action Plan (UKBAP) in January 1994, acknowledging its responsibility to reverse the loss of animals, plants and habitats. The Government also pledged to incorporate environmental concerns into its policies, in particular climate change and sustainable development. However, everyone needs to become actively involved if we are to conserve our natural heritage.

By 1999, 391 individual Species Action Plans (SAPs) and 45 Habitat Action Plans (HAPs) had been published to initiate action to restore the UK's biodiversity. These can be viewed on the UK Biodiversity website at [www.ukbap.org.uk](http://www.ukbap.org.uk).

### How do Action Plans work?

The Species Action Plans set out the activities necessary to stabilise and increase populations of threatened plants and animals, based on knowledge of individual species' requirements. They are complemented by the Habitat Action Plans, which deal with the maintenance, enhancement and re-creation of threatened habitats.

These Action Plans are implemented by many organisations, in both the public and voluntary sectors, as well as by private individuals.

English Nature plays a major role in restoring biodiversity in England. Often working in partnership with other organisations, it delivers action through the Species Recovery Programme, its management of important sites, and by influencing ways wildlife is managed elsewhere in the countryside.

### Is the UK Biodiversity Action Plan working?

*Sustaining the variety of life*, a report published in March 2001, showed an encouraging start over the first five years of the UK Biodiversity Action Plan. Of the Habitat Action Plans and Species Action Plans, for which information was available, 54% were progressing towards their targets. Signs of recovery were recorded for 33 species and five habitats, and 58 species and one habitat were close to full recovery.

### How can I help?

Everyone has a duty to help to conserve Earth's biodiversity, not just for our present well being, but also for our children's. We should help them to understand their natural inheritance and teach them to cherish it. English Nature believes wildlife is a key part of our quality of life.

There are many ways to help enhance biodiversity. For example, gardening for wildlife by using fewer pesticides, planting nectar-rich flowers, composting garden waste and digging a pond. Careful use of energy sources in your home, such as oil and gas, and recycling household waste also has important benefits for wildlife.

You can help in other ways, too. Why not join a nature conservation body? Many organisations run volunteer weekends on nature reserves where you can help by getting involved in habitat restoration. These activities help to implement Local Biodiversity Action Plans that focus on the characteristic wildlife of the area as well as tackling UKBAP priorities at a local level.

### Where can I find out more?

English Nature has published a wide range of booklets to help you learn about England's biodiversity. These include information about the Species Recovery Programme, wildlife-friendly gardening, wildflower meadows and many others on managing different habitats for wildlife.



Dahlia anemone. F.Dipper/English Nature 6164A

English Nature's website provides information on obtaining these publications, as well as much more about biodiversity and wildlife in your area. Log on at [www.english-nature.org.uk](http://www.english-nature.org.uk).

Alternatively, contact English Nature's Enquiry Service on **Tel: 01733 455100.**

**E-mail:** [enquiries@english-nature.org.uk](mailto:enquiries@english-nature.org.uk).



Courtyard Farm, Ringstead, Near Hunstanton. Peter Lambley/English Nature.

Walking on Cat Bells SSSI, Cumbria. Near Buttermere Fells. Peter Wakley/English Nature 19,472

