Wildlife and habitats
Food, fresh air, clean water, medicines, a stable climate – life on Earth provides the essentials of daily living for everyone. Wildlife inspires and fascinates us, and our open spaces are there to enjoy. Not only are species and habitats valuable in their own right, it’s in our own interests to take care of them. That’s because our future is bound up with a healthy, thriving natural world in all its diversity.

But we are in danger of losing the range and variety of life on Earth. One in four mammal species, one in eight species of birds and potentially millions of smaller species could face extinction. Wildlife habitats are disappearing at an alarming rate. This loss is already a problem for millions of people around the world, particularly if they depend on the land for a living. But a damaged environment will hurt us all.

So what’s behind the destruction? Friends of the Earth believes the answers lie in the way economies work and who controls them. Richer countries and powerful companies are using more than their fair share of resources, and they’re not doing enough to protect our world.

But we can make a difference. Individuals and communities in the UK and across the world have shown again and again that there are practical solutions to the threats facing the web of life.

This booklet is about biodiversity and why it is so important. It explains Friends of the Earth’s unique approach to tackling the problems now facing our global wildlife and habitats and what you can do to help. Please also visit www.foe.co.uk/campaigns/biodiversity

**Global biodiversity is the richness of life on Earth. It is the web of all living things and ecosystems – everything from whales to warblers and forests to coral reefs.**

Scientists estimate that there are about 14 million species on Earth. To date fewer than 2 million of them have even been named.

Living nature works for us for free: cleaning the air and water; recycling nutrients and making soils; stabilising the climate, slowing floods and calming storms; pollinating crops, supplying genetic resources of agriculture and chemicals for medicines; and inspiring us with its beauty and richness. In 1997, the value of these services was estimated to be £18 trillion per year.
The web of life: what nature does for us

Controlling water flow
Forests are home for wildlife but also regulate the flow of rain into rivers, calming flooding and maintaining soil structure. Evergreens, conifers, and trees in full leaf can intercept more than a third of the rainfall that hits them.

Genetic resources
Wild flowers like foxgloves provide chemicals used in medicines. In Europe some 1,300 medicinal plants – 90 per cent of them collected from the wild – are used commercially. Some, like clover, take nitrogen out of the air and make it available to other plants as a nutrient.

Materials for life
Much of our clothing and shelter comes from the living world – like cotton and timber. Wood is an important fuel for millions of people.

De-tox plants
Boggy areas like fens provide up to a quarter of the world’s carbon dioxide storage capacity – taking the main greenhouse gas out of the air. Reedbeds filter poisons from water supplies. UK wetlands are home to more than 660 species of plants and 7,500 creepy crawlies, and provide winter stop-overs for thousands of birds.

Varied diet
The wider our variety of foods the less vulnerable we are to crop failure through disease or bad weather. The collapse of the Irish potato market in the 1840s was partly due to reliance on a single variety.

The food chain
Three-quarters of the staple crop plants that feed humankind and 90 per cent of the world’s flowering plants rely on insects and other creatures to pollinate them. Bees and other insects control pests and are food for other animals.
Biodiversity is all around us – in our gardens, parks, rivers, hedgerows, fields – playing a big part in our quality of life. But we are burying more and more of it under new houses, roads, ports and airports. We’re quarrying the land and dredging the sea-bed for rock, sand and gravel. And we’re digging up peat bogs to use as a soil conditioner in gardens, while for decades industrial-scale farms have ripped out wildlife-rich hedgerows to make bigger fields.

This record of destruction is why we need stronger protection for our countryside. And following years of campaigning by Friends of the Earth and other groups we have new laws – the Countryside Rights of Way Act 2000 – providing additional protection to our most precious wildlife sites that are home to birds, mammals and invertebrates like insects, snails and worms. The Act also means the UK must honour its international pledge to wildlife protection, the Rio biodiversity convention.

Yet despite the law, wildlife and habitats often still lose out, especially if they are not in a protected area. We need tighter planning controls to safeguard our local biodiversity, and fundamental changes to transport policies to reduce the amount of traffic on our roads and in the air.

Did you know?

Dibden Bay, near Southampton, was set to become a massive new port until local and national groups told a public inquiry how damaging it would be for migrating birds and mud-loving invertebrates. The Government rejected the port proposal in 2004.

A beauty spot on the Devon-Somerset border was saved in 2004 after groups including Friends of the Earth urged the Government to reject the widening of the A303 road through the Blackdown Hills.

Oxleas Wood, an ancient woodland in South East London, was saved from destruction by a new road after a campaign by Friends of the Earth and other groups.

Britain’s wildlife is still under threat, yet there are practical measures that the Government, companies and ordinary citizens can take to stop its decline.
We need houses and transport infrastructure – but not at the expense of a thriving natural environment today and for the future.
Hidden threats

It’s easy to see how we lose biodiversity when habitats are bulldozed. But there are many other, far less obvious threats to wildlife.

**Intensive agriculture:** Industrialised farming is a major cause of biodiversity loss around the world. Mechanisation and the use of chemicals have enabled large agribusinesses to focus on a narrow range of crops, squeezing out small, mixed farms at the expense of farmers and wildlife. Routine use of synthetic pesticides and fertilisers reduces biodiversity and pollutes rivers and lakes.

**Genetically-modified crops:** Some companies are pushing intensive agriculture a step further by promoting genetically-modified (GM) crops. Some GM crops are designed to resist herbicides that kill all the other plants in a field – yet these plants also provide food and shelter for insects and birds. Cross-contamination of GM with non-GM plants could produce herbicide-resistant weeds that can only be controlled with more and different herbicides – adding to the cost to wildlife.

More organic farming, no GM crops, and less use of chemicals would encourage biodiversity in the countryside and a greater choice of healthy food for shoppers.

**Introduced species:** When new species are introduced to an area (like the grey squirrel to the UK, for example) native ones can be badly affected. Introduced diseases, too – like Dutch elm disease and sudden oak death syndrome – can devastate native species.

**Industrial pollution:** Many industrial processes produce toxic chemicals and release poisonous heavy metals that harm animals and plants. Burning coal and oil for industry, transport and power produces gases that lead to acid rain, which damages wildlife, particularly forests. Tighter controls on industrial pollution, cleaner vehicles and a reduction in road traffic are needed to address these threats.
Core values: Industrial farming and supermarkets’ demands for perfect-looking fruit have narrowed the varieties available in shops and led to more pesticides in our food. Reducing chemicals in farming is better not just for wildlife but for our health too.
Biodiversity is under threat worldwide for complex reasons. Big businesses are allowed to plunder natural resources like forests and minerals for short-term profit, often at the expense of wildlife and local people. Under global trade rules small farmers find it difficult to compete with powerful multinational companies – and that means more industrial-style farming. Public bodies like the International Monetary Fund force indebted countries to export more raw materials and farm produce – often at a high cost to local habitats and wildlife. The World Bank, too, finances mining, oil extraction and logging by multinationals.

Forests are being cut down for wood and paper, and to make way for cattle ranching and planting of monoculture crops such as soya and oil palm.

Mining of minerals like bauxite (for aluminium) and iron ore often leaves landscapes, wildlife and communities irreparably damaged.

Oil spills, sewage, industrial chemicals and heavy metals pollute the oceans. We are exhausting fish stocks and killing millions of marine animals caught by mistake in fishing nets.

The world’s poorest people often have no option but to use the most readily available resources to survive: they may have been displaced by war or famine, dispossessed by big business or impoverished by unfair trade rules.

**Multinational companies:** Some companies are so powerful that they can get governments to ignore wildlife protection laws and social standards. New rules are needed governing multinational companies and rebalancing global trade in favour of local communities, small farmers and the environment.

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**Did you know?**

- **Fifty-one of the top 100 economies in the world are now companies and only 49 are countries.**
- **It is estimated that for every kilogram of shrimp harvested from the ocean, five kilograms of marine life are killed.**
- **More than 2 million hectares of Indonesian rainforest – home to the Sumatran tiger (below) – vanish each year, much of it linked to the spread of plantations producing palm oil, a cheap vegetable oil, for Western markets.**

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**Right: Africa’s Green Belt Movement – which gets communities involved in conservation – have planted more than 20 million trees. Founder and Nobel peace prize winner Wangari Maathai is also a patron of the world’s largest grassroots environmental network, Friends of the Earth International.**
Our greatest challenge – climate change

Of all the threats to the world’s plants and animals, climate change is potentially the biggest. Scientists now agree that by burning oil, gas and coal to provide energy we are releasing alarming concentrations of carbon dioxide into the atmosphere, causing the planet to warm up and weather patterns to change.

Through sudden changes to habitats and eco-systems, climate change could lead to the extinction of almost a quarter of land animals by 2050. The oceans too are warming up, disrupting marine life. The seas are a vital source of food and provide a livelihood for millions of people through fishing and tourism.

Biodiversity and the poorest people are already feeling the impacts of climate change. Drastic action to reduce emissions of carbon dioxide and other so-called greenhouse gases, such as methane and nitrous oxide, could avert huge loss of human life and mass extinction of species. Yet some rich countries, backed by powerful companies with a vested interest in increasing energy consumption, don’t want to take action.

By taking urgent action Governments can take steps to control global emissions of carbon dioxide. The UK Government can lead by example by making year-on-year reductions in emissions. This can be achieved by switching to cleaner fuels, improving energy efficiency and reducing energy use.

United Nations scientists estimate that the global temperature could rise by as much as 6°C this century. Among the impacts, southern Africa is expected to see droughts undermining people’s food supplies as well as the region’s biodiversity.

Birds like the ptarmigan and snow bunting and many wildflowers that only live on the highest Scottish mountains could disappear from the UK because of climate change.

Warmer seas are bleaching and killing coral reefs, seriously affecting the populations of some fish species.
Increasing global support for renewable energy sources like sun, wind and wave power, needs to be matched with real cuts in carbon dioxide emission to reduce the threat that climate change poses to life on Earth.
What you can do
Small actions really do add up and will make a difference to preserving biodiversity

Reduce your paper use – paper production is linked to rainforest destruction. Re-use old envelopes, use both sides of a piece of paper and choose recycled whenever you can. This booklet is printed on paper made from 100 per cent post-consumer waste.

Avoid buying peat-based compost for your garden and houseplants. Ask your favourite garden centre not to stock peat-based products.

Garden for wildlife by planting native species and digging a pond. As countryside habitats are lost wildlife is increasingly relying on gardens for food and shelter. Visit www.wildaboutgardens.org for more information.

Use reclaimed timber for DIY projects. If you need to buy new timber try to find some that has been produced locally and is marked with the Forest Stewardship Council (FSC) symbol. This means the wood is more likely to have come from a well-managed forest. Avoid buying furniture made from tropical hardwoods or old-growth forests. See www.goodwoodguide.com for practical advice.

Buy organic food or grow your own to cut down on pesticides. Ask your supermarket to make sure pesticide residue safety levels are not exceeded in the produce they sell – for more information visit www.foe.co.uk/campaigns/real_food/
Shop locally for UK-grown, seasonal produce. This reduces the distance food is transported and thus cuts climate changing emissions. Find out what’s in season at www.bigbarn.co.uk/food/inseason.

Avoid GM foods. Tests show that growing GM crops threatens wildflowers and birds. Contact your local supermarket to demand zero tolerance on GM food – for help visit www.foe.co.uk/campaigns/real_food/

Invest ethically. This puts pressure on companies that harm the environment or people. It can also promote firms that make an effort to enhance communities and the environment. For more information call the Ethical Investment Research Information Service on 020 7840 5700.

Demand tough new laws for big business to prevent them plundering and polluting the natural environment, by writing to your MP. For help visit www.corporate-responsibility.org.

Action with Friends of the Earth
Join Friends of the Earth and support our national and international campaigns on Climate Change, Corporate Accountability and Real Food. For online actions and ways you can get involved, visit www.foe.co.uk/campaigns.

Sign up to Campaign Express and receive three packs a year by post containing easy-to-do actions that will put pressure on the right people at the right time.

Join a Friends of the Earth group in your area and help stop plans for developments that will destroy precious wildlife habitats near you. Call 020 7490 1555.
Friends of the Earth
Here’s how we are working to conserve wildlife and habitats

Biodiversity conservation has long been a core part of Friends of the Earth’s work. We know why biodiversity is threatened and are tackling the root economic and social causes of these threats.

**Corporate accountability:** We want governments to pass strong and binding laws making big companies responsible for their actions worldwide. Only such international accountability will ensure high environmental and social standards. And we want an end to public loans for developments such as mining and oil extraction that damage and pollute wildlife sites.

**Climate change:** We want governments to agree to save human lives and hundreds of thousands of animal species by making year-on-year cuts in carbon dioxide emissions to levels that don’t jeopardise the world’s climate. This can be achieved by switching from fossil fuel-dependent economies towards renewable energy, cutting demand for energy and greater energy efficiency.

**Real food:** We want tough laws to protect our wildlife from GM crops. And we want a drastic reduction in the pesticides and fertilisers used in food production as these pollute rivers and lakes and are harmful to our health.

**Reduce resource use:** We want the UK to use less resources in order to reduce the huge impact of our consumption on communities and wildlife in some of the poorest countries in the world.

**Local campaigns:** Friends of the Earth local campaigns have a great track record of preventing road and other damaging developments and proposing alternatives that are wins for people and the environment.
Government and its agencies:

**Department for Environment, Food and Rural Affairs**
The Government department responsible for working towards sustainable development.
www.defra.gov.uk
Tel: 08459 33 55 77

**The Environment Agency**
The public body for protecting and improving the environment in England and Wales.
www.environment-agency.gov.uk
Tel: 0845 9333111

**English Nature**
Championing the conservation of wildlife, geology and wild places in England.
www.english-nature.org.uk
Tel: 01733 455100/101/102

**The Countryside Council for Wales**
Statutory adviser on sustaining natural beauty, wildlife and the opportunity for outdoor enjoyment in Wales and its inshore waters.
www.ccw.gov.uk
Tel: 0845 1306229

**The Environment and Heritage Service**
Advising on and implementing the Government’s environmental policy and strategy in Northern Ireland.
www.ehsni.gov.uk

**Scottish Natural Heritage**
Responsible for the conservation and enhancement of Scotland’s natural heritage.
www.snh.org.uk

**Biodiversity Action Plans**
Details of action to protect the UK’s biodiversity.
www.ukbap.org.uk

**Biodiversity conservation:**

**WWF-UK**
UK branch of the worldwide conservation organisation.
www.wwf.org.uk
Tel: 01483 426444

**The Wildlife Trusts**
Partnership of charities dedicated to UK wildlife conservation.
www.wildlifetrusts.org
Tel: 0870 0367711

**The Woodland Trust**
Working to protect the UK’s native woodland heritage.
www.woodland-trust.org.uk
Tel: 01476 581135

**Rainforest Foundation UK**
Helps local people protect rainforests and their livelihoods.
www.rainforestfoundationuk.org

**Corporate Watch**
Research and publishing group concerned with the social and environmental impacts of corporations.
www.corporatewatch.org.uk
Tel: 01865 791 391

**Royal Society for the Protection of Birds (RSPB)**
Campaigns for wild birds and conservation.
Tel: 01767 680551
www.rspb.org.uk/

**Sustainable living:**

**Centre for Alternative Technology**
Offers practical solutions to environmental problems.
www.cat.org.uk
Tel: 01654 705950

**Energy Savings Trust**
Promotes domestic energy efficiency.
www.saveenergy.co.uk
Tel: 0845 727 7200

**Sustrans**
The sustainable transport charity.
www.sustrans.org.uk
Tel: 0845 113 0065

**HDRA – the organic association**
Dedicated to researching and promoting organic gardening, farming and food.
www.hdra.org.uk
Tel: 024 7630 3517

**Ethical shopping:**

**Fairtrade Foundation**
Information on fair trade, suppliers and products.
www.fairtrade.org.uk
Tel: 020 7405 5942

**National Association of Farmers’ Markets**
Find one near you.
www.farmersmarkets.net
Tel: 0845 230 2150

**The Natural Collection**
Online and catalogue shop for products promoting a sustainable future.
www.naturalcollection.com
Tel: 0870 331 33 33
Friends of the Earth inspires solutions to environmental problems, which make life better for people

Friends of the Earth is:

- the UK’s most influential national environmental campaigning organisation
- the most extensive environmental network in the world, with almost one million supporters across five continents and more than 70 national organisations worldwide
- a unique network of campaigning local groups, working in over 200 communities throughout England, Wales and Northern Ireland
- dependent on individuals for over 90 per cent of its income.

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