

# Nature Positive 2030

## Summary Report

Investing for healthy nature, people and economy



**Cyfoeth Naturiol Cymru**  
**Natural Resources Wales**



**Northern Ireland**  
**Environment**  
Agency



**Nature Positive 2030 – Summary Report** is a publication by the Joint Nature Conservation Committee, Natural England, Natural Resources Wales, NatureScot and the Northern Ireland Environment Agency.

This Summary Report describes the key findings and conclusions of ‘Nature Positive 2030 – Evidence Report’ which is available at: [jncc.gov.uk/nature-positive-2030](https://jncc.gov.uk/nature-positive-2030)

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Loch Maree Islands, Scotland



# Foreword

We are the generation who has been handed the climate and ecological crisis and we are the generation who will have to live with the decisions you make today. You have nine years to make the changes needed. You have to fix it. We have to live with it.

It's the year 2050. Imagine this.

A coast where the sight of a surge of redshank, knot, and oystercatcher flocking in, to breed, make their home and thrive. A coastline where the cry of tern and flute of curlew competes with wind and wave. A



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place where the salty air is fresh and untainted by the stench of human waste and the shoreline is free from plastic. The feel of rocks encrusted with barnacles, periwinkles, and bladderwrack. An intact marine ecosystem with mammal, bird and fish in abundance. Harmonious and majestic; a place to get lost in. One that can persist for generations into the future for all to love and enjoy.

The rivers of the UK run clear and rich of life - tufted banks, luscious wet meadows and long reed beds stretch from the meanders up the valley sides. The electric blue flash of a kingfisher disappears into an overhanging veteran willow. Beavers gnaw loudly in the woodland, engineering the diverse ancient landscape where otters and water voles now thrive. The woodlands are now vast and sprawling, a mosaic of coppice and old growth, providing protection from memorable flash flooding in the town below. Fungi and bird nests burst from the gnarled standing dry timber as hazel dormice and nightingales recover their ancestral lands. The farmlands are now stitched together with a patchwork of dense and continuous hedging, which tumbles into crop fields with a broad and colourful meadow verge. These rich green corridors connect to the horizon, creeping through the urban gardens, linking commuting routes for wildlife and people to connect as one.

The sprawling UK uplands, once over-grazed and burned, are clothed in a myriad of habitats and species. Young saplings, springy and tough, rise from the feet of towering giants draped in moss, providing a home to nests of great spotted woodpeckers and dreys full of sleepily squirming squirrels. The woodland, humming and buzzing with life, trails up the steep mountain slope to the weathered peak far above, buffeted by winds where ptarmigan cower and golden eagles soar, free from persecution. This is a land where people and nature walk as one. A sanctuary, healing and free.

As animals, we respect our place in nature. Somewhere that keeps us well and allows us to flourish within a clean, nurturing and healthy environment. Swimming safely in rivers and seas free from sewage, breathing lightly and feeling the clean fresh air of our cities and countryside on our smooth skin. Badgers, hedgehogs, sparrows and starlings once again a regular sight in our gardens, wild verges and wildflower meadows heavy with bees, butterflies and ladybirds. Everyone with equal access to natural spaces and with the freedom to enjoy our environment.

This is a world worth living in for generations to come, one which can be achieved. But only through concerted action and a will for change and only if we begin this journey now. A first, critical step is becoming Nature Positive by 2030. We can do this, as demonstrated in this report. Curbing climate change, hand in hand with nature to benefit both humans and wildlife in an inter-connected cooperation.

**Holly, Dara, Mya-Rose and Emily**





# Headline messages

## **Nature loss harms human health and well-being and undermines our economy**

Ecosystems are being degraded and biodiversity is being lost at alarming rates around the world, and declines are continuing in the UK. These losses matter: we no longer have a sustainable natural system that can provide reliable supplies of clean water, purify our air, regulate our climate, or secure our food supplies. More than half global GDP is put at risk by losses to nature.

## **Recovering nature is everyone's business**

World leaders have promised change. In the past year Heads of State from the UK and many countries around the world have made hugely important commitments to recover nature. Achieving these commitments will require transformative change across society and in the way we protect, value, use and engage with nature. Consequently, the commitments made by world leaders are commitments for everyone – all government ministries, all organisations, all businesses, all people.

This report describes how we can succeed in achieving these commitments in the UK, drawing upon wide experience of what works from across the UK.

## **We need to go high nature and low carbon, tackling the twin crises of biodiversity loss and climate change together**

The crises of biodiversity loss and climate change share many of the same causes and solutions. We need to tackle both crises or we will tackle neither. Restoring wildlife habitats on land and sea can lock up carbon and help us adapt to climate change, such as by reducing flood risk. Embracing natural solutions has never been more important because climate change is already impacting upon us, creating profound and new challenges for humanity. Nature can help us survive this uncertain future, but its ability to do so depends upon biodiverse ecosystems that are resilient to the changes ahead.

## **It is not too late to become Nature Positive by 2030 in the UK, provided we act now**

Becoming Nature Positive means reversing the current declines in biodiversity, so that species and ecosystems begin to recover. This is an essential first step on the path to full nature recovery. The UK has committed to become Nature Positive by 2030 and this can be achieved, as described in this report. However, what happens in the next few years is critical: if species populations are to begin recovering by 2030, wildlife habitats need to be restored and created now.

**Nature recovery is within our grasp: we know what to do and how to do it.  
The time to act is now!**



**Blanket Bog, Fleetwith, Cumbria, England**

# 1 Introduction

Over recent decades the understanding of our relationship with nature has changed. We once saw nature as a never-ending source of food, materials and space. We were wrong. We now know that our levels of consumption are exceeding nature's capacity to regenerate and that nature is being lost, sometimes irreversibly. These losses matter. Globally, many essential services for human life provided by nature have declined, including water and air quality, regulation of our climate, soil formation and the benefits to people's physical and mental health. In countries like the UK, this means that we no longer have a sustainable natural system that can provide reliable supplies of clean water, purify our air, regulate our climate, or secure our food supplies. Urgent and transformational action to reverse biodiversity loss is now essential.

People around the world, often led by younger people, are calling for change. Here in the UK, the public demand for environmental action is the highest ever, and public support for nature has grown during the coronavirus pandemic as the importance of connecting with nature has become even more apparent in our everyday lives.

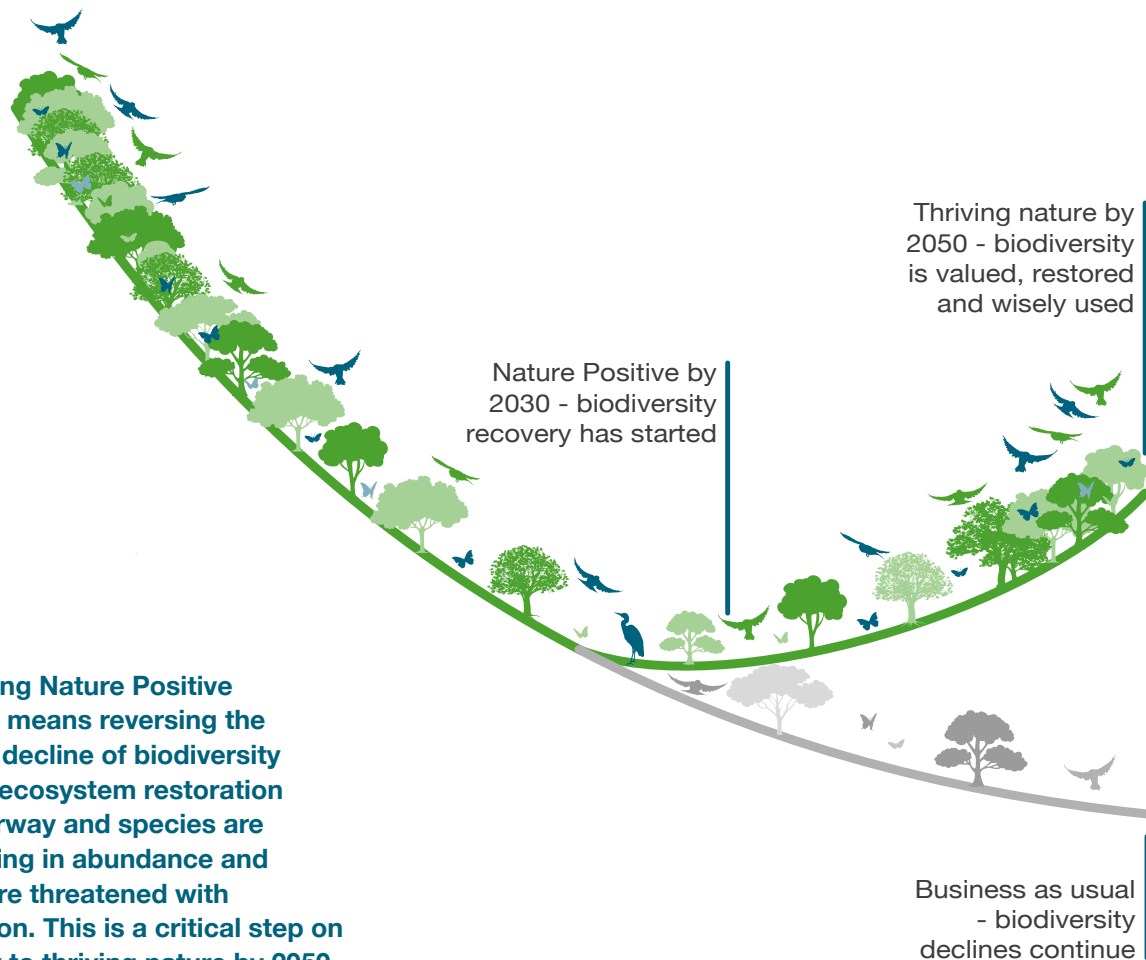
World leaders are responding to this call for action to address the crisis of biodiversity loss. Many Heads of State have recently made hugely significant commitments for nature, notably through the Leaders' Pledge for Nature launched at the United Nations General Assembly in 2020, and the 30by30 commitment to protect 30% of our land and seas for nature by 2030. These commitments are far reaching, requiring transformational change across sectors in the way we protect, value, use and engage with nature.

In this report, the five statutory nature agencies of the UK have come together to identify how the UK can succeed in achieving these commitments, along with ensuring that nature recovery is able to play its critical role in our path to net zero and to establishing a vibrant and 'green' economy. This Summary Report describes the key findings and conclusions set out in our extensive Nature Positive 2030 – Evidence Report.

We draw upon the wealth of experience and innovation that exists across the UK to present solutions that can be scaled up to achieve real change. First, we make the case for urgent action: describing the scale of biodiversity loss in the UK and around the world, why it is happening, and why this matters profoundly to all of us. We then consider the commitments in the Leaders' Pledge for Nature and 30by30. For each, we set out why the commitment matters and how we can succeed in delivering it. Finally, we identify the most promising pathways to rapidly recover nature that can enable us to become Nature Positive by 2030, as a critical step on the path to achieving the recovery of nature and the health of our planet.



**Becoming Nature Positive by 2030 means reversing the current decline of biodiversity so that ecosystem restoration is underway and species are increasing in abundance and fewer are threatened with extinction. This is a critical step on the way to thriving nature by 2050.**





Common dolphins in the Irish Sea

## 2 The Case for Action

Humans are harming the health of our planet. Nature is being damaged by the pressures we are placing on it and is not regenerating fast enough to recover. Globally, over 1 million species are threatened with extinction and the populations of many animals have declined by at least two-thirds since 1970. Here in the UK, 40% of species are in decline, more than 40 million birds have been lost from our skies over the past 50 years, and a quarter of mammals are threatened with extinction including many once common species, such as the hedgehog. These ongoing declines, on top of earlier losses since the industrial revolution has led to the UK becoming one of the most nature-depleted nations on Earth. We still have many important habitats and species, and beautiful patches of nature to enjoy, but these are a shadow of what we would have if we recovered nature.

**The UK's rich seas support globally important populations of seabirds including over half the world's gannets**



## Our Nature

Our nature is the wealth and variety of living things (our biodiversity); it is our beautiful and varied seas and landscapes, shaped by their diverse geology and historic uses; it is healthy ecosystems providing us with clean water, fresh air, healthy soils, recreation and much more.

The UK's nature is special and unique, forming part of our common heritage and giving us all a sense of where we belong. Our nature includes 15% of the world's blanket bogs and most of its chalk rivers. We have Atlantic temperate rainforests, ancient woodlands, flower-rich grasslands and fens, each supporting unique species communities. Our rich seas contain coral reefs and huge kelp forests, and support globally important numbers of seabirds including over half the world's gannets. Some species occur nowhere else in the world, such as the Scottish primrose and the schelly, a relative to the salmon.

Most of all, the UK's nature is special because it is ours! It has shaped our culture, inspired our poets and artists, it fascinates us and delights our children. This nature is our life, and this life is being lost.

## Why is biodiversity being lost?

Globally, the main cause of declines in biodiversity on land is the loss of habitats to grow food and produce materials such as wood, or for space to build homes. In global marine ecosystems, over-fishing has had the largest impact. Other factors are also harming nature, including pollution, the illegal wildlife trade and invasive species, while climate change adds to these impacts and is causing further declines. The scale of change is staggering. For example, the rate of global deforestation between 2015-20 was about 10 million hectares (ha) per year, the equivalent of losing a football pitch of forest every three seconds. Humans have now taken so much of the world's resources that the combined weight, or biomass, of all people alive today is nearly 10 times the total biomass of all wild mammals, from mice to whales.

The UK was one of the first countries to industrialise so the loss of nature began sooner than in many countries. Declines in the UK accelerated through the second half of the 20th Century in the wake of significant agricultural intensification. For example, a total of 97% of wildflower meadows had been lost by 1984, and some 10,000 km<sup>2</sup> of wetlands were drained in the 1970s. The scale of these relatively recent losses means that the nature we see and experience today, and the resilience of our ecosystems, is significantly impoverished even compared to just a few decades ago. These past habitat losses represent a future extinction risk to species that have increasingly been confined to small, vulnerable patches of habitats. **Put simply, this means that just stopping any further habitat loss is not enough to halt biodiversity decline: we now need to make more space for nature.**

## The twin crises of biodiversity loss and climate change

Globally the crises of climate change and biodiversity loss are inextricably linked, with many shared causes and shared solutions. The degradation of natural systems (especially deforestation) is one of the main causes of climate change, while climate change is causing species declines and undermining the resilience of ecosystems. Together these create a downward spiral of environmental harm. Conversely, creating and restoring biodiverse habitats on land and in our seas locks up carbon and ‘Nature-based Solutions’ can also help us to adapt to climate change, such as by reducing flood risk.

Climate change is upon us, creating profound and new challenges for humanity. Nature can help us survive this uncertain future, but its ability to do so depends upon ecosystems being resilient to the changes ahead. This needs them to be biodiverse – so we need thriving species-rich nature more than ever. Achieving the commitments for nature, as described in this report, can consequently make a critical contribution to responding to climate change too - **a win-win for nature and for the climate.**

### Nature-based Solutions

Defined by the International Union for the Conservation of Nature (IUCN) as “actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits.”



## The economics of biodiversity

Many people would argue that losing nature is an ethical issue, and that driving species to extinction is simply wrong. Whether you subscribe to this view or not, recovering nature is very much in our self-interest: our economic prosperity and well-being depends upon doing so. The World Environment Forum estimates that US\$44 trillion of economic value generation – over half of global GDP – is moderately or highly dependent on nature. So, **a healthy environment and a vibrant economy must go hand in hand, otherwise we will have neither.**

The recent seminal review of The Economics of Biodiversity by Professor Sir Partha Dasgupta stressed the importance of recognising nature as a precious and declining asset. We need to change both our demand on nature (by reducing our impact) and its ability to provide what we need (by restoring nature). This means factoring in the value of nature into decisions, which makes recovering nature everyone's business: all government ministries, all organisations, all people.

**The commitments being made for nature by the leaders from many countries are commitments for everyone.**



**Mourne Mountains, Northern Ireland**

# 3 Our Nature Commitments

Within the last year, the UK governments have made hugely significant commitments for nature. Each of the four countries of the UK have distinct and evolving policies and powers to recover nature and to respond to climate change, and all have recognised the need for ambitious change. Perhaps most notably the UK has committed to the Leaders' Pledge for Nature, which has so far been signed by leaders from over 85 countries, and the '30by30' commitment to protect 30% of our land and seas for nature by 2030, agreed by more than 60 countries. At the G7 summit in June 2021, the UK also committed to 'halt and reverse biodiversity loss' by 2030, in other words to become Nature Positive by 2030. These commitments are far-reaching and build on previous pledges: they span multilateral agreements and cooperation, international finance, trade and knowledge management. They require transformative change across sectors and in the way we protect, value, use and engage with nature. They are also consistent with many goals and targets of the emerging post-2020 Global Biodiversity Framework of the Convention on Biological Diversity. Importantly, these nature commitments complement legally binding commitments for carbon reductions, not least to reduce emissions in the UK by 78% of 1990 levels by 2035 and achieving net zero emissions by 2050.

Together these commitments add up to a huge agenda of change, here in the UK and around the world. Some of these international commitments require multilateral action such as changing the way global trade operates, however, the majority will need to be delivered through country-level action.

This report focusses on the implementation of those commitments made in the Leaders' Pledge for Nature and 30by30 that require action within the UK.

Achieving these commitments will require delivery to be scaled up, building on what we know to work from experience from across the UK and identifying approaches that hold greatest potential. First, we consider the need to mainstream nature's recovery, so that it becomes a core part of decision-making, including for the finance sector. We then describe how we can effectively protect and enhance nature, underpinned by science-based targets. Finally, we set out how we can transition to sustainable use of our land and seas by tackling the main drivers of biodiversity loss.

**The commitments being made in the Leaders' Pledge for Nature are commitments for everyone**







# 4 Mainstream Nature Recovery

The way we live our lives, especially in richer nations of the world, is harming the health of our planet. This is already undermining human health and well-being, and is increasingly creating risks to our economy, including by undermining supply chains upon which our long-term prosperity depends. We need a fundamental change that embraces nature as our global life support system. This needs all parts of society to be working together to avoid causing harm to nature and to contribute to its recovery, while also tackling the related challenge of climate change. The need to ‘mainstream’ nature protection and recovery is emphasised in the Leaders’ Pledge for Nature which makes commitments across four key areas:

**Children passing an urban  
wildflower meadow in Perth,  
Scotland on their way to school.  
Regular contact with nature brings  
a host of well-being and health  
benefits, including improved child  
cognitive development**





## 4.1 Plan for a Healthy Planet and Healthy People

Space is scarce and too often the price for built development on land and at sea is the degradation of nature. These losses are bad for people, notably by harming our health and well-being. The Leaders' Pledge commits us to embedding a 'One-Health' approach in decision-making, reinforcing the links between the health of our planet and our own. In the UK, we can succeed by:

- Integrating green and blue infrastructure into developments on land. This means using natural solutions in place of built 'grey' infrastructure and the use of greenspace standards can help to ensure people can easily access nature, even in urban settings. Using nature in this way can provide critical health benefits as well as supporting adaptation to climate change, alongside other benefits.
- Planning for integrated environmental and socio-economic outcomes in our seas, seeking win-wins for nature and people.
- Securing environmental gains alongside built development through the planning system, and ensuring gains are maintained in the long-term. In some parts of the UK, net gain for biodiversity is required from new developments.
- Enabling contact with nature, so that it becomes part of everybody's daily experience. There are growing numbers of health partnerships across the UK using our 'natural health service' because they are finding it is better to use nature to keep people well, rather than having to treat them after they become ill.

## 4.2 Align Action for Nature and Climate Change

The twin crises of climate change and biodiversity loss are inextricably linked and we need to tackle both or we will solve neither. Nature can provide important solutions to climate change, both by helping to lock up carbon and by helping us cope with inevitable change. Important opportunities for succeeding in aligning our work to recover nature and tackle climate change are:

- Deploying Nature-based Solutions for climate change mitigation, notably by restoring peatlands and planting native trees.
- Deploying Nature-based Solutions for climate change adaptation, thereby reducing the risk of flooding and overheating, amongst other benefits.
- Ensuring that actions to respond to climate change do not damage nature, such as by ensuring trees are planted and wind-turbines are constructed in the right places.
- Taking account of climate change in the way we protect and enhance nature because adaptation cannot be taken for granted – we need to actively ensure biodiversity can thrive under a changing climate.



**Peatland restoration work in Northern Ireland. Peatlands are the UK's largest natural carbon store, but many have been drained and damaged causing them to become emitters of greenhouse gases. Work is underway across the UK to restore peatlands, such as by blocking ditches to re-wet dry peat, so that they can once again accumulate carbon as well as providing habitats for many species and delivering a range of benefits including improved water quality and flood reduction**

## 4.3 Financing Nature's Recovery

At global and country scales we need to dramatically increase investment in nature from public and private sources, while also reducing or re-directing spending that is harmful to nature. We can succeed in our Leaders' Pledge commitments by:

- Increasing financial flows to nature. Particular opportunities to do this include: more direct investment by private companies who are realising the business benefits of nature recovery; spending more of our climate-related investment on Nature-based Solutions; and increasing opportunities for private investment in nature, such as by developing packages of projects that collectively are of sufficient scale to attract significant investment.
- Eliminating and repurposing harmful subsidies so that, instead of harming nature, public money supports its recovery and delivers a range of public benefits.
- Increasing transparency and disclosure within the finance system and across businesses, so that investors and customers can make informed choices about the impact on nature of the companies that they invest in and the goods they buy. People increasingly want to use the 'power in their wallets' to help nature instead of harming it, and we need the right reporting and labelling to make this possible.



**Increasingly, businesses are choosing to invest in Nature-based Solutions such as creating woodland nature reserves to offset carbon emissions and support nature recovery**

## 4.4 Embed the Value of Nature in Decision-Making

Nature's worth to society – the true value of the various goods and services it provides – is not reflected in market prices or most of the decisions we make. This failure leads to poor decision-making and poor choices across sectors, that harm nature and ultimately undermines human health and well-being. The Leaders' Pledge commits us to better account for the value of nature in decisions; opportunities to succeed include:

- Taking account of the value of nature in relevant strategies and decisions across public and private sectors, thereby making better decisions in the long-term. Some businesses are already seeing benefits of this approach, including helping to manage the risks to their supply chains.
- Providing regularly updated evidence on the extent and condition of natural capital, enabling impacts to be assessed at the right scale to support decisions by different stakeholders.



**In Wales, the Well-being of Future Generations Act is helping to embed the value of nature in the culture of decision-making, by requiring Welsh public bodies to take a long-term view**



Beavers have been successfully reintroduced into parts of the UK

# 5 Protect and Restore Nature, including through Ambitious Targets

One of the main causes for biodiversity loss is that species are being starved of space. Humans are also threatening some species with extinction by over-exploiting them or damaging their habitats. The actions outlined in this section aim to address these challenges, by protecting more space for nature on land and at sea, and by protecting and recovering threatened species. Setting and achieving targets, underpinned by a strong evidence base, guides the type and scale of action required and encourages action by others. By protecting and restoring nature, we enhance its ability to provide the essential services upon which we depend.



## 5.1 Protect 30% of Land and Sea

Protecting sufficient space for nature on land and at sea is essential for effective biodiversity conservation, restoring the ecosystems upon which we depend, and to help nature and people cope with climate change. Many countries have now committed to protecting 30% of land and

**The UK has established an extensive network of Marine Protected Areas, covering about 36% of our seas. The priority now is to ensure these sites, and the pressures upon them, are well-managed to ensure our rich marine life can thrive**



sea for nature. In the UK, we have recently completed an extensive network of Marine Protected Areas which exceeds 30% of our sea and our priority now is to achieve effective management of these areas. On land, less than 30% of the UK terrestrial area comprises wildlife habitat, so our approach needs to include increasing the area of wildlife habitat as well as protecting and better managing what we have. To succeed in achieving our commitments, this means:

- Ensuring protected areas on our land and sea are well-managed to enable biodiversity to thrive within them, taking account of climate change.
- Increasing the area of wildlife habitat on land, targeting areas where they will deliver most benefits to biodiversity and people. Many protected areas are very small and action to create wildlife habitat adjacent to, or close to, these places can be very beneficial to biodiversity. We also need more large, wilder places where ecosystem function is restored and species can thrive.
- Creating large scale ‘nature networks’ that improve the resilience and protection of ‘core’ wildlife areas, while also enhancing the connections between them to enable species to move across the network.



**We need to make more space for nature. At the Great Fen in Cambridgeshire, work is underway across 3700 ha to reconnect two remnant ancient fen habitats. Wildlife is already thriving in recently created habitat and the project is delivering a range of other benefits including enhanced access for people, carbon storage and flood-risk reduction**

## 5.2 Protect and Recover Species

Above and beyond the habitat enhancements that will be realised by meeting the 30by30 target, some species require specific support to be able to recover, particularly those that have undergone severe declines or are at risk from illegal activities. We can succeed in meeting our species protection and recovery commitments by:

- Protecting threatened species using regulation and enforcement.
- Preventing further human-induced extinctions or reductions in range through targeted species recovery action.
- Reintroducing species that have been lost, especially where there are wider benefits to nature and to people.
- Implementing wildlife habitat management approaches that support a greater resilience and diversity of ecosystems, thereby promoting species persistence and colonisation.



**Re-introducing top predators like white-tailed eagles, and ecosystem engineers such as beavers, can help re-build food webs and restore ecosystem function**

## 5.3 Evidence and Targets

Targets define the scale of change needed to successfully achieve our nature goals, thereby informing allocation of resources while also encouraging innovation and buy-in across stakeholders. To be able to deliver national and global targets effectively we need to measure and understand change in biodiversity and ecosystems. We can achieve our commitments by:

- Surveying and monitoring nature. In the UK, we are fortunate in having an extensive network of citizen scientists who monitor different aspects of our biodiversity. Increasingly, we are also employing new techniques such as genetics and earth observation to improve our understanding of nature and the benefits it provides us.
- Developing targets that are measurable and have achievable but ambitious deadlines in support of our biodiversity goals. In some parts of the UK our nature targets are being made legally-binding.
- Evaluating and adapting. Our journey to becoming Nature Positive will require us to try new things and tackle new problems. We need to measure, monitor and learn as we go.



**The extent of the Leasowes SSSI in the West Midlands was determined using DNA sampling of the soil to establish the distribution of rare waxcap fungi. This was the first time DNA was used to establish a protected area boundary anywhere in the world**

## Nature Transformations

It is widely recognised that tackling the twin problems of biodiversity loss and climate change will require transformative change. The UK has undertaken a number of inspiring nature transformation projects, some of which are described below. These projects demonstrate that, when we give space to nature, biodiversity can rapidly recover and people benefit too.

**The Great Fen** is an ambitious 50 year restoration project working across 3700 ha of Cambridgeshire to reconnect the two remnant ancient fen habitats of Woodwalton Fen and Holme Fen National Nature Reserves. Wildlife is thriving in recently created and restored habitats and the project is delivering a range of benefits from new footpaths and cycleways for access, to carbon storage and flood-risk reduction.

**Cairngorms Connect**, the UK's biggest habitat restoration project, is a partnership of neighbouring land managers (public, private and NGO) working collaboratively to enhance habitats, species and ecological processes across an area of over 600 km<sup>2</sup>. It works with committed people, from scientists to deer-stalkers and from farmers to foresters, to deliver a healthier, natural landscape that supports strong, economically vibrant local communities. Partners are working together to create a wilder landscape including by controlling deer numbers to allow forests to expand, naturalising rivers and restoring huge tracts of peatland.

Established in 2007, **the Pumlumon Project** is a radical rethink of how the landscapes of upland Britain could work. Across 40,000 ha of the Cambrian Mountains in Wales, the Montgomeryshire Wildlife Trust is pioneering an upland economy built around wildlife, ecology and long-term sustainability. The project has demonstrated how large-scale ecological restoration can bring economic, social and environmental benefits.

**Peatlands Park** in Northern Ireland is a remnant of an extensive lowland raised bog complex. The 265 ha site was acquired in 1978 from the Irish Peat Development Company and brought under the management of the Northern Ireland Environment Agency. Designated as an ASSI and SAC, Peatlands Park is today managed to promote and facilitate safe public access to the extensive habitats alongside effective conservation and restoration, with approximately 10 miles of paths, leading visitors through open bog and enclosed woodland. Restoration continues and in recent years has been supported through the INTERREG CANN project to safeguard and enhance this valuable resource for future generations.

**Wallasea Island** is an inspiring RSPB wildlife reserve located in Essex close to the Thames Gateway. More than 3 million metric tonnes of earth was brought by boats from the tunnels of a large rail infrastructure project to help create 115 ha of intertidal habitats. The reserve now provides 740 ha of rich wildlife habitat, helps to reduce tidal flooding in the Thames estuary and is an important visitor attraction.

In the 1950s, only 1% of Caledonian Forest survived but **Trees for Life** has been working to bring back Caledonian Forests to Scotland. With the help of 10,000 volunteers, 1.7 million trees have been planted rewilding 4,000 ha in total, with 2,750 ha of that at Glen Affric. The charity bought Dundreggan, an old hunting and estate with plantation woods in 2008. Since then it has become a model conservation estate to demonstrate native forest restoration.

**Lyme Bay**, in southwest England, was designated as a Marine Protected Area in 2008 because of its fantastic assemblages of reefs including pink sea fans and king scallops. Despite the importance of the area commercially for fishing, scallop dredging was damaging the reefs and destroying the marine communities. The area was closed to demersal fishing (including dredging) across the reefs. Biodiversity in the bay has rapidly recovered, along with associated crustaceans enabling profitable sustainable fishing to flourish. Produce marketed as from a “Marine Reserve” is attracting a premium price.





Before and after photos of Frongoch Mine in Ceredigion. Former mine waste dumps that were contaminating local rivers have been restored, improving water quality and enhancing biodiversity

# 6 Transition to Sustainable Land and Sea Use

We are depleting nature's resources faster than they can regenerate, leading to negative impacts on people around the world, and undermining opportunities for future generations. We need a rapid transition so that nature's resources are used sustainably and sources of harm are reduced. The Leaders' Pledge for Nature includes specific commitments for change across the sectors and drivers that are having the largest impact on biodiversity.

## 6.1 Agriculture

About 71% of the UK is under agricultural use and changing the way we use our land will be critical to recovering nature. Around the world and in the UK, agriculture is heavily dependent on public subsidies, which incentivise farming systems that often cause declines in nature. This is bad for biodiversity, and also harmful to our long-term food security due to declining health of our soils. Some important



**Durie Farm, Fife, Scotland. Here, agroecological approaches enable sustainable and profitable farming by improving soil fertility, while also enhancing biodiversity and soil carbon storage**

opportunities exist to meet the Leaders' Pledge commitments for agriculture, in particular by:

- Reforming agricultural subsidies. The UK governments are in the process of re-directing subsidies so that they pay farmers for delivering public benefits, such as by recovering nature or supporting climate change adaptation and mitigation.
- Delivering large-scale creation of habitats, by providing incentives to landowners to spare land for nature and secure other benefits for people.
- Incentivising high nature value farming which helps support biodiversity, enriches our soils and enhances the beauty of our landscapes, while also providing a viable farm business.
- Improving the efficiency of our farming systems and food supply-chain to avoid increasing our food demands on the rest of the world. There is good evidence that we can produce enough food while still making more space for nature, provided we tackle food waste and other inefficiencies that exist in our food supply systems.

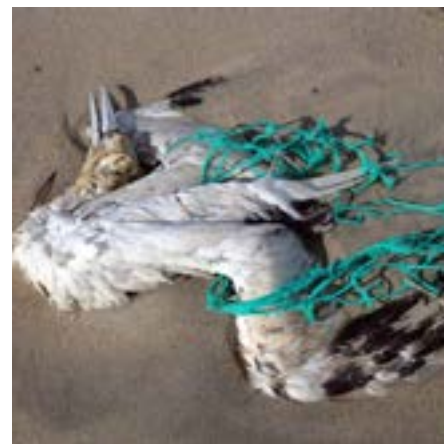


**Species-rich hay meadows  
depend upon appropriate  
agricultural management**

## 6.2 Fisheries

Fishing is overexploiting many stocks of fish in the UK and around the world, as well as harming wider marine biodiversity and contributing to climate change. The UK has a new world-class Fisheries Act, which enshrines principles of sustainability that provides us with an important opportunity to change course and meet the UK's Leaders' Pledge commitments by:

- Maintaining fish stocks at levels capable of producing maximum sustainable yield, in other words achieving the highest possible annual catch that can be sustained over time, through maintaining high fish populations.
- Reducing wildlife by-catch and entanglement, including of marine mammals and seabirds.
- Ensuring impacts from fisheries are effectively managed throughout UK waters including in Marine Protected Areas to achieve biodiversity and climate outcomes. Our aims include achieving Good Environmental Status of our seas, and minimising the contribution of fishing to climate change, including reducing the release of 'blue carbon' from seabed sediments.



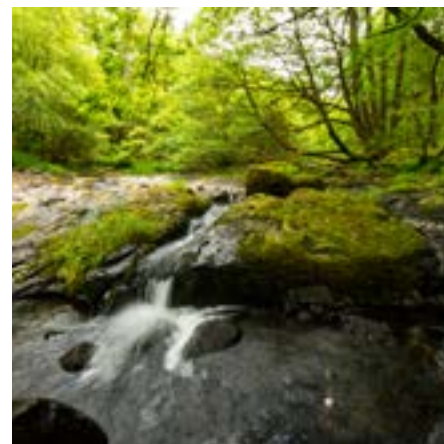
**Clean Catch UK and the Scottish Entanglement Alliance are examples of initiatives that bring together scientists and fishers to monitor and help reduce the entanglement and unintended capture of wildlife**



## 6.3 Forestry

Woodlands have a critical role to play in the UK's transition to a high nature, low carbon and healthy society, while also providing timber for construction. Currently, however, the UK is one of the least-wooded countries in Europe and much of our woodland biodiversity is in decline. We can succeed in achieving the Leaders' Pledge commitments for forestry and woodlands in the UK by:

- Increasing the rate of woodland establishment, including through allowing woods to regenerate naturally as well as tree planting.
- Ensuring government policies and incentives to establish woodlands prioritise nature recovery and other public benefits alongside carbon storage and sequestration. We need to ensure 'the right tree is planted in the right place' so that much-needed work to increase the extent of woodlands does not have unintended negative consequences for nature.
- Managing and protecting woodlands for nature and making them part of wider nature networks. Despite recent increases in woodland cover, woodland biodiversity is still in decline; we need to better look after our woods so that species thrive.
- Ensuring more woodland carbon remains locked up, such as by promoting the use of UK wood as construction material.



**Ceunant Llenyrch, one of Wales' Celtic Rainforests benefiting from management that mimics the dynamism of the prehistoric landscape**

## 6.4 Pollution and Harmful Chemicals

Environmental pollution is a major cause of biodiversity loss around the world and in the UK, and also has significant impacts on human health. A particular area of concern is the inputs of nutrients as a result of agriculture and other sectors including transport. Nutrients, such as nitrogen and phosphorous, effectively fertilise our natural ecosystems, leading to changes in species communities because less vigorously growing species, such as wild orchids, lose out. The main opportunities for achieving our Leaders' Pledge commitments are:

- Tackling atmospheric ammonia and nitrogen deposition through coordinated national and local action, backed by legal limits.
- Reducing diffuse water pollution from agriculture, in particular through catchment-level action and coordination across sectors. One particularly promising approach is to set a legal limit on the amount of nutrients that can be emitted, and allow landowners and others to trade their allowances within this overall limit.
- Reducing pesticide impacts and risks, taking account of the full range of impacts: direct, indirect and sub-lethal effects.
- Better managing the risk from chemicals, including the legacy from past industrial operations and stocks of old chemicals that are harmful to our environment.
- Reducing marine plastic through stronger regulation and promoting clean-up of our marine environment, including through community-led action. The charge on single-use plastic bags has already led to significant reductions in plastic around our coasts, but we still have much to do.



## 6.5 Invasive Non-Native Species (Alien Species)

Many species are moved around the world outside their normal (native) ranges, for example as a result of travel and trade. A minority of animals and plants have escaped from captivity or from gardens, and in the past some were deliberately released by people. Some of these species cause harm, for example by transmitting new diseases or out-competing native species; these are called invasive non-native species (INNS). INNS are increasing in number and spreading around the world. Within the UK, over 2100 non-native species are established in the wild. Some of these are problematic, causing significant harm to native biodiversity and costing the UK economy an estimated £1.8bn per year. We can reduce this impact by:

- Preventing the introduction of new INNS; this is our top priority because it is far cheaper and better for biodiversity and our economy to prevent problem species from arriving than tackling them afterwards.
- Maintaining early detection and surveillance mechanisms for new INNS and responding rapidly to new incursions. The UK has been successful in involving the public to detect new invasions.
- Targeted control of established INNS, focussing on those with greatest impact on biodiversity and on our economy. In the UK several islands are now rat free, helping to protect our globally important seabird populations.



**Puffins on Skomer Island. The eradication of rats from islands can be critical to sea birds breeding successfully**



# 7 The Time is Now

The Leaders' Pledge for Nature is about change. It's about transforming our relationship with nature from unsustainable exploitation and mutual harm to one of Nature Positive inter-dependence and restoration. We must change from seeing nature as a block on growth, to recognising that investing in nature is essential for sustaining both our society and economy. Our actions for nature and climate change need to work hand-in-hand, in line with the scientific consensus that if we don't tackle the biodiversity loss and the climate change crises together, we will solve neither.

Commitments need to lead to action. As described in our report, the UK already has or is actively developing many of the approaches and policies needed, notably:

- Incorporating green and blue infrastructure – in other words using natural solutions – within developments to deliver integrated outcomes for health, well-being, nature and our economy.
- Increasing deployment of Nature-based Solutions, notably tree planting, peat restoration and effective coastal and water management, to deliver for climate change and biodiversity.



**When we make space for nature, its recovery can be dramatic. In less than 20 years of adopting a naturalised grazing regime, Knepp Wildlands in Sussex, England, has seen many nationally threatened species flourish and now supports the UK's largest population of purple emperor butterflies**

- Growing financial innovation, including blended approaches where public and private funding can work together to recover nature, and achieving better traceability to enable consumers and investors to make choices that support nature instead of harming it.
- Improving and expanding our protected areas to underpin nature recovery, improve resilience to climate change, and secure benefits for people.
- Establishing high quality, well-planned nature networks to help achieve our 30by30 commitment on land and sea.
- Introducing ambitious targets, including legally binding targets in parts of the UK, to improve our environment and recover nature.
- Changing the way we support agriculture, so that public money is directed away from subsidy to payment for nature recovery and the delivery of other public benefits.
- Fully implementing the new world-class UK Fisheries Act to achieve sustainable, productive fisheries, healthy ecosystems and thriving wildlife.
- Taking a more strategic approach to nature recovery so that,



**The River Wensum chalk river, Norfolk. The UK contains most of the world's chalk rivers, home to many threatened plants and animals**

for example, wider pressures arising from sources of air and water pollution can be managed alongside protected areas.

These approaches and delivery commitments are cause for optimism. Implemented well, they have real potential to achieve sustained nature recovery in the UK and more widely in the longer term. However, we are running out of time. Many of the promising approaches we have identified are still under development or being progressively introduced, and so cannot yet be relied upon to deliver a significant contribution towards reversing biodiversity loss by 2030. This is worrying because what happens in the next few years is critical: wildlife habitats are not restored overnight and, for species to be increasing by 2030, as much action for habitats as possible needs to be underway in the next 2-3 years. We cannot leave most of the habitat improvements until the end of the decade if we are to succeed in becoming Nature Positive.

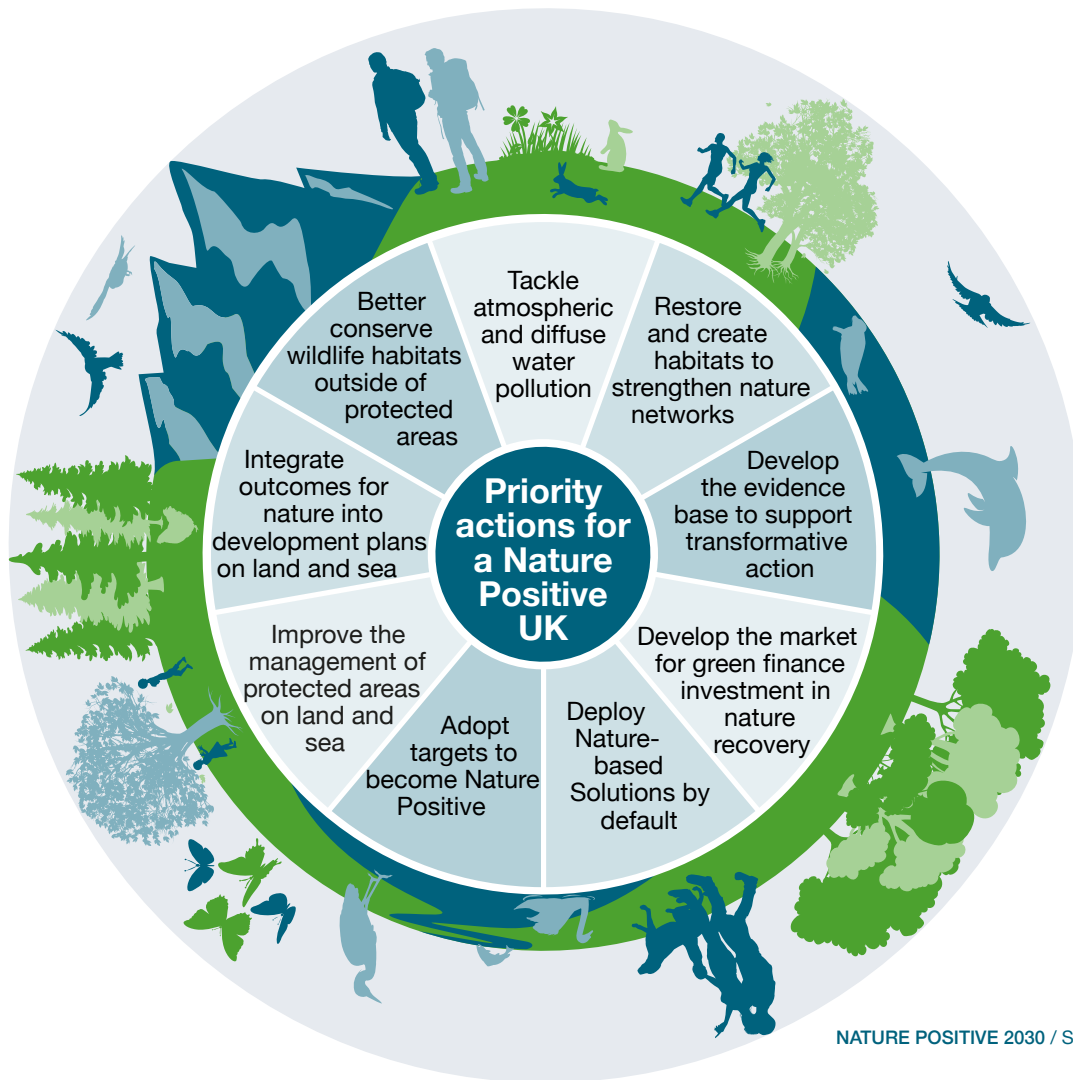
Does this mean we should just wait and reverse even greater biodiversity loss later than 2030? Absolutely not. Delaying action would mean it will eventually cost us much more to succeed and over that period much of what we lose will never return, further impoverishing our ecosystems. Delay also postpones our ability to benefit: the sooner we invest in restoring our natural capital, the sooner it will pay dividends.

While the transformative changes described in this report are essential in the medium-longer term to achieve sustained nature recovery, becoming Nature Positive by 2030 requires significantly greater action and investment in nature now. Nine changes can be delivered rapidly, by national and local governments, land owners, businesses and others, that will have particularly high impacts on reversing biodiversity loss this decade:



1. Ensure wildlife thrives within protected areas on land and at sea through improving their management and tackling sources of harm. Protected areas need to be the beating hearts of nature networks, supporting thriving species populations that spill out across the network.
2. Better conserve wildlife habitats outside protected areas, in particular those places identified as parts of nature networks or as important blue/green infrastructure.
3. Invest in habitat restoration and creation to strengthen nature networks. In particular, we need to create large areas of wildlife habitat with restored ecosystem functions.
4. Integrate outcomes for nature into developments on land and at sea, ensuring access to nature is improved, and delivering a wide range of health and other benefits.
5. Tackle atmospheric and diffuse water pollution, especially from nitrogen and ammonia.
6. Develop the market for green finance, putting in place the frameworks necessary to facilitate private investment in nature recovery.
7. Deploy Nature-based Solutions by default. Decision makers need to start by asking themselves ‘can nature provide a solution?’
8. Develop the UK’s evidence base so that it is ready to support the larger, transformative changes underway.
9. Adopt targets to become Nature Positive, so that nature goals are put on an equal footing with climate change ambitions.





There are four further key points:

- Firstly, the UK's approach to nature conservation outside protected sites for the past thirty years has, in many areas, been characterised by 'renting' (actually and metaphorically) patches for nature within our farmed landscapes, often for quite short periods of time. This has not worked well for most species, and we now need to invest in establishing large spaces for nature and nature networks where more species thrive.
- Secondly, the nature 'conservation' that we are pursuing is not about going back to a nostalgic point in the past. It is about building a nature-rich future, with restored ecosystems that are more resilient to climate change and provide more benefits to more people.
- Thirdly, becoming Nature Positive by 2030 is not an end-point but an essential milestone on the path to nature recovery.
- Finally, making space for nature in the UK must not mean taking space from nature in other countries. The UK needs to reduce its impact on global biodiversity too.



**Species like the fly orchid can recover quickly when appropriate habitat management is put in place**

Changing course quickly to become Nature Positive by 2030 is possible but will require significant investment. Many countries, including the UK, have committed to building back better as we recover from the Covid pandemic. Yet, of the \$15 trillion being mobilised globally to recover from Covid, only 3% is benefitting nature. Re-focussing more of this recovery investment provides a fantastic opportunity to rapidly recover nature and build a fairer and better future, while also increasing opportunities for 'green' employment.

In the Foreword of this paper, we heard voices of young people calling for bold and urgent action to recover nature. They have appealed for the world to change course to secure their futures and that of life on our planet. It has never been more important for governments, businesses and others to respond and become Nature Positive: **we know what to do and how to do it. The time to act is now!**



**The time to act for nature is now!**



Gwydir Forest Park, Wales

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 [jncc.gov.uk/nature-positive-2030](https://jncc.gov.uk/nature-positive-2030)



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