



## The time is now

he world is starting to take note of the threat of climate catastrophe. As global governments come together at COP26, the need to tackle the climate crisis has never been clearer.

Yet we cannot tackle the climate emergency without similar ambition to meet the nature crisis head on. Climate change is driving nature's decline, whilst the loss of wildlife and habitats leaves us ill-equipped to reduce emissions and adapt to change.

Net Zero needs nature. Nature needs Net Zero. Both need to be resilient to the climate of the future. "Net Zero needs
nature. Nature needs
Net Zero. COP26 is
our chance to tackle
the climate and
nature crises
together"

Nature's incredible ability to trap carbon safely and provide other important benefits is proven peatlands, woodlands, saltmarsh and other habitats are vital carbon stores. But these natural carbon stores are in decline and at high risk of degradation from the extreme climatic conditions that are already inevitable over the next 30 years.

If global Net Zero fails, nature alone cannot prevent the climate crisis worsening. We must protect at least 30% of land and sea for nature by 2030, but also cut emissions at source to keep these carbon stores intact.

The Wildlife Trusts are already stepping up to the challenge, but we need decision makers, communities, businesses and everyone else to join us. To deal with the climate crisis, we must bring back nature at an ambitious scale. At COP26 we can make this happen.

The Intergovernmental Panel on Climate Change (IPCC) says decisions we take in the next ten years are crucial for avoiding total climate catastrophe. We must use COP26 to kickstart nature's recovery and make Nature-based Solutions a priority — whilst also ensuring we reach Net Zero as soon as possible.

Craig Bennett
Chief Executive,
The Wildlife Trusts

## **Contents**

- Time to take the lead
- The UK's chance to lead on global climate action
- Nature-based Solutions
- The natural systems that lock carbon away safely
- 4 A Net Zero strategy for nature
- Natural carbon stores are at risk from emissions
- 10 Case study 1
- Beaver reintroduction, Argyll
- 11 Case study 2
- The Great Fen Project, Cambridgeshire
- 2 Case study 3
- Abbotts Hall Farm, Essex
- 13 Case study 4
- The Yorkshire Peat Partnership
- 14 The way forward on land
- The policies that will help nature work for us
- 16 Wildbelt
- A designation that would restore
- ecosystems to benefit us all
- 18 The way forward at sea
- How to revolutionise the way we manage the sea



# Time to take the lead The UK Government must to ambitious action to restore nature if it is serious about tackling the climate crisis.

The UK Government must take

e can't solve the climate crisis without restoring nature. As individuals we have a part to play in this, but the Government must lead the way by embedding climate action and nature's recovery across all national policies. This is the only way to achieve a Net Zero, climate resilient UK where nature is thriving, by 2050.

Governments need to afford greater protection to the natural environment we already have, whilst also expanding the network of nature protections to give wildlife the space it needs for the future. By doing this, they can help nature thrive in the UK and enable nature to do its job as a carbon sink.

Here's how the UK Government can take the lead:

## 30BY30

By 2030 we need to have protected 30% of our land and seas for nature. We welcome the UK Government's commitment to doing this and its work galvanising other global leaders

to do the same through the Leaders' Pledge for Nature.

The problem is, the UK Government claims 26% of land is already protected for nature unfortunately the reality is closer to 3%. Many of the sites included in the Government's figure are in poor condition and are not specifically protected for nature. By underestimating the work that needs to be done, the UK risks missing this crucial 30by30 target.

## PLANNING FOR NATURE

The planning system can't just be about building new homes, it must also help to address the nature crisis. As it considers reforming planning legislation, we want the UK Government to introduce a new designation specifically for nature's recovery a Wildbelt. This would go beyond protecting the nature we have, to protecting the space that nature needs for the future.

Nature Recovery Networks must also be put at the heart of the planning system, with clear duty

to use Local Nature Recovery Strategies when making land use planning decisions.

## LEGAL TARGETS

The UK Government has just amended its Environment Bill to include a landmark legally-binding target for nature's recovery. This is excellent progress which commits the Government to halting the decline of nature by 2030.

But we still have to ensure this target is translated into meaningful action on the ground. It must be supported by an additional £1 billion per annum investment in nature's recovery.

## **ADAPTATION PLANS**

The UK's next set of plans for how the country will adapt to deal with the climate crisis are due in 2023. At COP26 we want to see the Government signalling that these will include the necessary actions that have to be in place if we are to begin to lower the risk climate change poses to the country's environment on land and at sea.

## **Net Zero now!**

The UK Government is currently not on track to achieve Net Zero emissions — yet the UK has to play its fair share in reaching global Net Zero.

Adaptation needs to be integrated into the strategy. embedding plans for scaling up Nature-based Solutions — like tree planting and peatland restoration — that are resilient.

There needs to be adequate Government incentives and financing for those who must make the changes necessary. High quality Nature-based Solutions should be developed within communities, there must be better incentives for homeowners, and sustainable transport options must become more accessible.

Governments also need to provide the regulation to enable market mechanisms to operate. These mechanisms in turn need

to be well-regulated and robustly verified to ensure market players can act with confidence.

## **Carbon offsetting**

The absence of regulation or a rulebook on carbon offsetting or removals has led to carbon offsets commonly failing to deliver genuinely additional benefits for climate, even on the compulsory

As a rule, offsets should be used as a last resort in achieving corporate Net Zero targets as recommended by the Sciencebased Targets Initiative and Climate Change Committee. Where carbon offsets are used, stringent regulatory mechanisms need to demonstrably uphold this, and be transparent and verifiable to it.





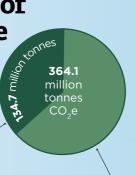
## Nature-based Solutions

The UK has a target of Net Zero greenhouse gas emissions by 2050. Nature can make a massive contribution to achieving this, or an even more ambitious target — but only if we restore our damaged ecosystems. Here are the main areas that need attention.

The size of the prize

Restoring our natural systems could provide 37% of the CO mitigation needed by 2030 to meet the Paris Agreement

Possible contribution of UK natural systems to reducing CO. emissions



## BIOMASS CARBON

All animals and plants are carbon stores. When marine animals die, they generally sink and become incorporated into sediment, where their carbon might stay for thousands of years. Human activities release this carbon and impact populations of marine animals.

### PEATLAND

The UK's peatland soils store around 3.2 billion tonnes of carbon, but are heavily degraded and release the equivalent of 23 million tonnes of CO2 every year. Restoring them to prevent this emission is one of the most cost-effective Nature-based Solutions.



## GRASSLAND

The crucial tool:

On land, 66% of carbon in nature-rich areas is outside protected sites. We need

to identify, map and protect these ecosystems, and restore them locally as part of a national Nature Recovery Network. We also need to incentivise farmers and other land managers to improve their land for nature and

At sea, we need effective marine planning, and an ecologically coherent

a Nature Recovery Network

UK grasslands store 2 billion tonnes of carbon, but this is vulnerable to disturbance. Between 1990-2006, arable conversion of grasslands released 14 million tonnes of CO<sub>a</sub>. We can restore species-rich grasslands to lock up carbon and support abundant wildlife.

## WOODLAND

About 1 billion tonnes of carbon are locked up in UK woodlands, mostly in the soils. Planting more woods could lock up more carbon, but this must be carefully planned to maximise benefits and avoid harming other habitats.



## FOOD WEB CARBON

Total UK emissions 2018

Phytoplankton are the basis of ocean food webs and absorb CO<sub>a</sub>. Globally, 10 billion tonnes of carbon are transferred to seabed sediments when phytoplankton die or are eaten then excreted.



A hectare of seagrass may store two tonnes of CO<sub>2</sub> a year and hold it for centuries, while providing nursery habitat for young fish. But we have lost half our seagrass meadows since 1985. Reducing water pollution and replanting would bring them back to health



## SALTMARSH

A hectare of saltmarsh can capture two tonnes of carbon a year and lock it into sediments for centuries. but we are losing nearly 100 hectares of saltmarsh a year. Coastal realignment could restore much of it, and reduce flooding and erosion.



## WETLAND

Wetlands can accumulate carbon for centuries, but in some areas of the UK we have lost over 90% of our wetland habitat. Restored wetlands provide rich habitat. clean water naturally and reduce flood



risk downstream.



contribute to this network.

network of Marine Protected Areas.

Globally, plants have atmosphere combined.



Oceans absorb 20-35% of human-made CO<sub>2</sub> emissions every year. Carbon is incorporated into the tissues of plants and animals, and later into mud and sediments.



removed 25% of humanmade CO<sub>2</sub> emissions. Soils contain more carbon than is stored in plants and the

# Nature and Net Zero

Restoring nature locks up carbon, but these carbon stores will be at high risk if we fail to meet

ealthy ecosystems on land and at sea can absorb vast quantities of CO<sub>2</sub> from the atmosphere and lock it away as carbon. Achieving Net Zero requires making the most of this process.

But if we fail to meet Net Zero, these natural carbon stores face an increasing threat of irreversible loss. Even with ambitious global emissions reductions, they are under threat from the extreme weather events which are inevitable over the next 30 years.

We need a Net Zero strategy for nature that recognises this threat and is ready to adapt for the future.

## PROTECTING PEAT

Peatlands are by far the UK's largest natural carbon sink, storing 3.2 billion tonnes of carbon. But due to intensive agriculture, drainage and burning our peatlands are in such a poor condition that they are currently emitting carbon.

We need to see:

- A target of 100% upland peat restoration before 2050
- An immediate ban on rotational burning
- An end to arable and horticultural farming on deep peat
- A ban on the use of peat in horticultural and compost products, including imports

## SAVING OUR SEAS

Due to climate change the seas are losing oxygen and becoming more acidic. The IPCC's most recent report shows further change is locked in for millenia from sea level rise. The seabed, saltmarsh and seagrass all have important roles to play in sequestering carbon, but will be unable to do this if they are damaged and polluted by fishing and recreation.

We need to see:

A reduction in fishing methods

which disturb the sea bed - this will allow the sea bed to recover and start capturing carbon again

- All seagrass habitats to be given highly protected status
- Governments renew pledges to protect coastal habitats
- More investment in large managed realignment projects

## AGRICULTURE

Current voluntary policies to reduce agricultural emissions have failed. Yet the Climate Change Committee says we need to see around a 40% drop in emissions from farming by 2050. With around 70% of land farmed in the UK, shifts in how this land is managed can achieve transformational change for nature, climate and people.

We need to see:

 More details on how the Environmental Land Management scheme (ELMs) will incentivise farmers to manage Net Zero.

their land for nature

Promoting diet change away from meat to help to free up land to focus on carbon sequestration and biodiversity

## TREE COVER

By 2050 we need woodland cover in the UK to increase from 13% to 18% as a sensible contribution to Net Zero. Planting rates still remain low at present and land managers need more details on what "right tree, right place" means.

We need to see:

- Natural regeneration encouraged instead of planting wherever possible
- Guidance for land managers to require that a diversity of species are planted in every location in order to ensure the best chance of survival in unpredictable and changing conditions

## Adapt, adapt, adapt

The UK Government treats climate mitigation and climate adaptation separately. But adaptation is absolutely fundamental to achieving Net Zero. The latest independent UK Climate Change Risk Assessment spelt out over 20 different risks to achieving Net Zero from climate change.

Risks to natural carbon stores from changing climatic conditions, including extreme heat, fire, and drought, were a top area for immediate action in the report.

Adaptation cannot wait until the next set of strategies are due from 2023. It must be integrated across Government policies now, particularly on how the resilience of natural carbon stores will be improved.

This includes reducing the risk of wildfire, guidance on managing land during drought and hot weather, and ensuring that targets for boosting natural carbon stores take into account some inevitable loss driven by climate change itself.

Government departments should be required to demonstrate progress on adaptation at the same time as progress on mitigation.



Our ground-up

are the local

experts

## We can deliver

For more than a century, The Wildlife Trusts have been saving, protecting, and restoring wild places and bringing people closer to

We are involved in projects to restore and connect habitats across the country as part of a Nature Recovery Network, from re-wetting peatland to creating saltmarsh and planting seagrass.

The Wildlife Trusts are already restoring more than 45,000 hectares of peatland in England — more than the UK Government has pledged to restore by 2025.

We also advise thousands of farmers and landowners on how best to care for their land so that it sustains wildlife.

We have the knowhow and expertise to work in partnership. With investment and support from governments, businesses and local communities, we can

create real change for nature's recovery, so that Nature-based Solutions can play a massive role in achieving Net Zero emissions.

Our work on more than 100 Living
Landscape projects across the
U.K. shows that restoring nature is
sustainable and feasible

## Four flagship projects

The Wildlife Trusts are taking action to bring nature back across the UK. Here's a flavour.

## Scottish Beavers, Argyll



**Sarah Robinson** Director of Conservation, Scottish Wildlife Trust

Climate change will lead to increases in both periods of flooding and drought. Beavers help to hold water back in a catchment and store it, improving landscape resilience to fluctuations in rainfall.

"Beavers are industrious ecosystem engineers. Their dams create wetland habitats that support a wide range of other species, and they slow the flow of water,

reducing flood risk downstream and keeping streams and rivers running during droughts.

"The Scottish Wildlife Trust has long championed their reintroduction and protection. In May 2009, they were one of the lead partners of the Scottish Beaver Trial, a pioneering five-year project that

> "Beaver dams boost wildlife, slow the flow of water, reduce flood risk and keep streams and rivers running during droughts"

saw the licensed release of 16 beavers into Knapdale Forest, Aravll.

"This was one of the largest field trials of its kind in Europe. Extensive independent scientific monitoring of their impact on the natural environment paved the way for the Scottish Government to recognise beavers as a native, protected species in Scotland in 2019. Further reinforcement of the Knapdale beavers has been carried out to boost their numbers and increase genetic diversity.

"Other Wildlife Trusts around the UK are involved in beaver reintroductions, all providing insight into the benefits beavers can bring to people and wildlife."





### he Great Fen Project Cambridgeshire



**Lorna Parker** Restoration Manager, BCN Wildlife Trust

Intensively farmed fen could lose all of its remaining peat soil in 30 years due to climate change, so restoration is critical to maintain and expand carbon stores.

"Bedfordshire, Cambridgeshire and Northamptonshire Wildlife Trust is leading the Great Fen project to create landscape-scale change and deliver one of the largest restoration projects of its kind in Europe.

"99% of wild fen in Eastern England has been historically drained to create farmland, leading to the ongoing release of carbon as drying peaty soils oxidise or simply

blow away. At the Great Fen near Peterborough, we at the Wildlife Trust are working in partnership with the Environment Agency, Natural England, local authorities and land managers to rewet farmland and restore 3700 hectares of fen.

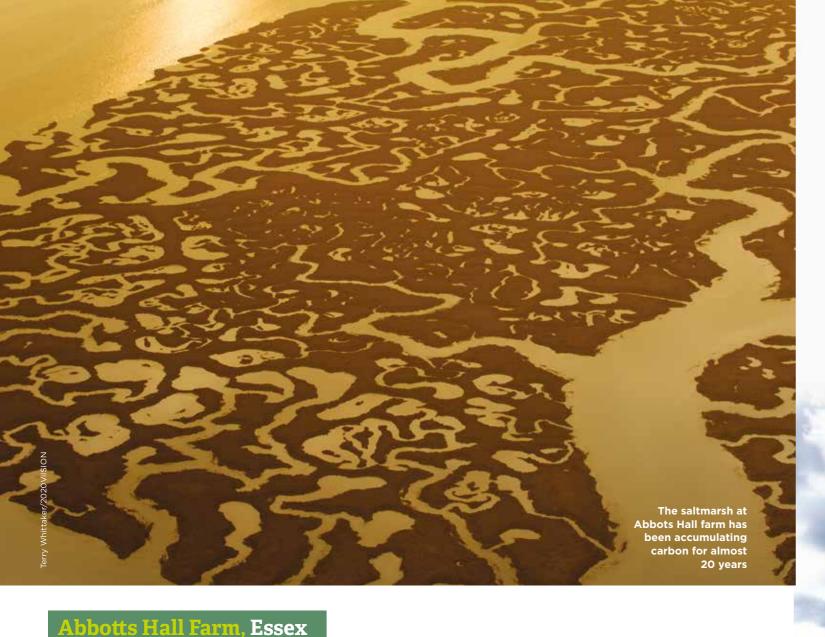
"This will reconnect Holme Fen and Woodwalton Fen National Nature Reserves, create a huge

"This huge wetland mosaic will save around 325,000 tonnes of CO<sub>2</sub> from being released each year through peat loss"

mosaic of wetland habitats for the benefit of people and wildlife, reduce the risk of flooding on near by farmland, and save an estimated 325,000 tonnes of CO<sub>2</sub> from being released each year through peat

"Our Water Works project, part of the Great Fen Project, also aims to improve farming practises in the Cambridgeshire fens. We are working with partners and local farmers to trial innovative wetland farming techniques at the Great Fen that can help rewet the fen and halt and reverse the release of carbon.

"Water Works could be truly transformative for future generations farming in the fens, creating new sources of income for farmers, protecting food supplies and the natural environment, and combating climate change."





Andrew Impey
Chief Executive,
Essex Wildlife Trust

Sea levels could rise by up to a metre by 2100; natural buffers like saltmarsh can defend against increased coastal flooding.

"Rising sea levels and increasingly frequent storms threaten both manmade defences and important habitats on our coastlines. In Essex, up to 60% of coastal marshes have been eroded in the last 20 years.

"At Abbotts Hall Farm, Essex Wildlife Trust has worked with the Environment Agency to realign the coast and create thriving saltmarsh habitat.

"When the Wildlife Trust purchased Abbotts Hall Farm in 1999, part of the sea wall was in need of repair. Instead of undertaking the costly work to maintain it, the Wildlife Trust and the Environment Agency explored coastal defence methods which took account of rising sea levels.

"After two years of studies,

"After two years of studies, the old seawall was breached in 2002 to allow tides to wash onto disused farmland"

monitoring, and consulting the local community, new defences were installed further inland and in 2002 the old seawall was breached to allow tides to wash onto disused farmland. The managed retreat is transforming 50 hectares of previously arable land into saltmarsh abundant with wildlife, particularly migrating birds. The new habitat is also teeming with young bass, herring and 14 other types of fish feeding in the creeks within the marshes.

"This ground-breaking project shows what can be achieved when coastal realignment is carried out in suitable places and static seawalls are replaced with dynamic, carbon-absorbing tidal habitat, helping our wildlife and coastal communities stay resilient in the face of change."

## he Yorkshire Peat Partnership



**Tim Thom**Peat Programme
Manager, Yorkshire
Wildlife Trust

It is essential that all upland peat is restored to a re-wetted condition to enable it to store carbon.

Without it, hotter, drier conditions could lead two-thirds of upland peat being lost by 2050, putting Net Zero out of reach in turn.

"Yorkshire has 23% of all the UK's blanket bog, a type of peatland, and Yorkshire's peatland holds an estimated 38 million tonnes of carbon in total. However much of it is in decline — channels were historically cut to drain the peatland, and ongoing activities such as grazing and burning can

continue to cause damage.

"Since 2009, Yorkshire Wildlife Trust has been leading the Yorkshire Peat Partnership to restore the blanket bog on a massive scale by surveying the habitat and working to block drainage ditches, replant bare areas with mosses and other plants, and reduce erosion.

"So far, we have completed restoration works on over 30,000

"So far the partnership has completed restoration of over 30,000 hectares of blanket bog, out of a total 86,000"

hectares of a total 86,000 hectares of Yorkshire's blanket bog.

"This vital work can reverse the loss of peat and helps keep carbon locked up. It also helps regulate water flow and reduces the risk of flooding, increasing the resilience of communities downstream.

"Many other Wildlife Trusts have similar projects to revive UK peatlands, preserving this vital resource into the future.

"As well as natural flood management and carbon storage, healthy peatlands are amazing habitats for extraordinary wildlife, including reptiles and carnivorous plants. They're beautiful places to visit too. But despite the progress we're making, restoring peatlands takes time and needs a long-term outlook with corresponding long-term policies and funding."

Blocking ditches and eroded gullies helps rewet and protect peatland







he Government has committed to protecting 30% of land for nature by 2030. This will require creation of significant new areas of habitat, through public and private investment, such as Biodiversity Net Gain and Environmental Land Management grants.

Protecting these areas from damaging development in the future is an essential requirement for achieving the Government's ambition.

These areas have little protection under existing designations. Though they are on a journey towards high biodiversity value, they do not yet meet any current criteria for protection from damage

16 | wildlifetrusts.org

"To give these sites a chance of contributing to nature's recovery they must be protected now, rather than later."

or loss. To give these sites a chance of contributing to nature's recovery they must be protected now, rather than waiting until results have already been achieved.

To secure the future of the land where we are making more space for nature, we need a new

designation. Wildbelt should be a robust and permanent designation that will protect land in the process of being managed to bring nature back, and speed up the creation of the Nature Recovery Network in England.

Wildbelt proposals should be included in the forthcoming Green Paper on nature. Sites should be identified as part of the Local Nature Recovery Strategy process, with recommendations made to Defra for designation.

The Planning Bill should require the recognition of Wildbelt sites in Local Plans, and the provision of policies in the National Planning Policy Framework that would set a presumption against development.

## Wildbelt: What is it and how does it work?



The proposed Severn Vale Wildbelt spans Wales and England

With habitat

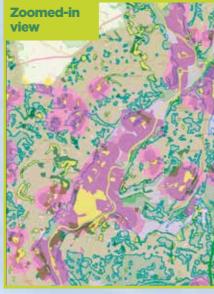
detail



**English contributors Worcestershire** (top) and Gloucestershire



Gloucestershire has already completed its Nature Recovery Map



Here is a detail from the map, close to the town of Tewksbury

For nature to start to recover, it needs a large land area which is allowed to function in a seminatural way for the benefit of people and wildlife. Such wilder areas would provide us with ecosystem services: for example absorbing carbon, reducing flooding, providing cleaner water, boosting biodiversity and improving climate resilience.

In a country as densely populated as England, nature's recovery cannot be confined to remote uplands, but also where

"Allowing natural processes will provide social and economic benefits far into the future."

people live. For example in the Severn Vale, this transformation (left) is centred on the river's floodplain - an area where enormous transfers of energy and biomass take place. Allowing more natural processes there will provide ecological, social and economic benefits far into the future. Within such areas, the sites where nature is recovering should be protected from future destruction by being designated as Wildbelt.

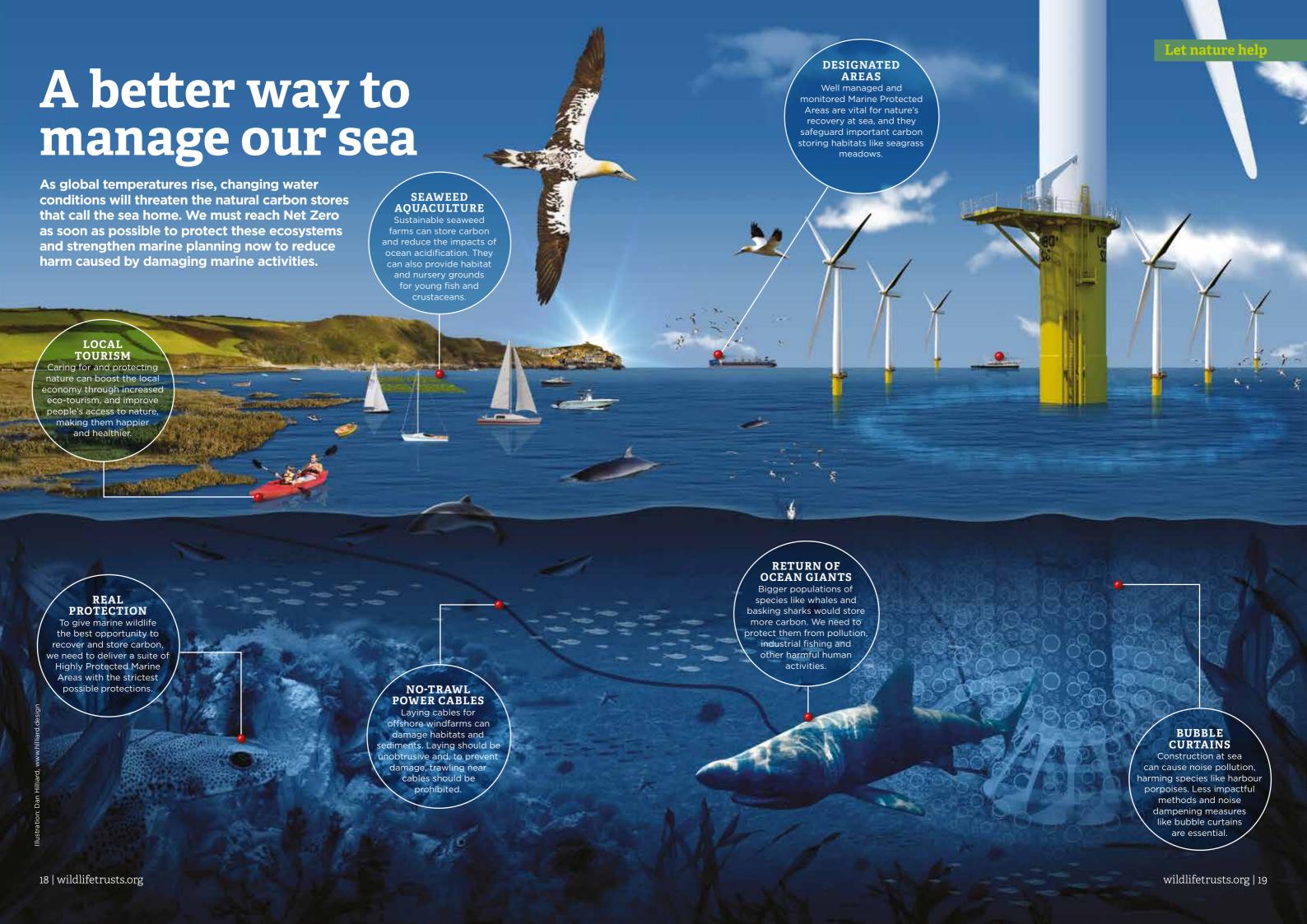


wildlifetrusts.org | 17

Wildbelt means more

landscape, like this pond

natural features in a





## At COP26, we can make it happen

The world is coming together in Glasgow to find solutions to the climate crisis. With temperatures rising, extreme weather events becoming increasingly common, and wildlife in decline, we know we have to act now if we want to avoid climate catastophe.

The UK Presidency needs to lead the way. The UK must ensure that all parties reach agreement on scaling up ambitions to keep 1.5C within reach. We have to push for nature to be integrated into more ambitious

national pledges to reduce emissions and adapt to climate change, to ensure we meet the aims of the Paris Agreement. It's crucial that we show leadership at home too, by taking action to protect nature and reach Net Zero, even when it is challenging.

## At COP26, we ask the UK Presidency to:

- [] Keep 1.5C within reach to protect the natural environment from irreversible changes
- Show leadership by demonstrating the right approach at home and using COP26 to encourage greater innovation and ambition
- Aim for investment in high-quality Nature-based Solutions, developed with and for local communities

The climate and ecological emergency affects us all. You can help The Wildlife Trusts make a real and lasting difference by supporting us to lock up more carbon and make nature's recovery a reality.

## Find out more about Nature-based Solutions

naturesolutions@wildlifetrusts.org











