

# ***Resilient Nature***

---

Adaptation progress across  
The Wildlife Trusts in 2024/25



# Contents

Executive summary.....3

Progress summary against our adaptation actions .....4

Extreme weather impacts in 2024/25 .....5

Action updates.....6-22

Increasing our adaptive capacity .....23

Policy and advocacy on adaptation.....24

Research and data – progress and priorities .....25

Authored by Eleanor Johnston and Kathryn Brown (Royal Society of Wildlife Trusts)

A number of colleagues across The Wildlife Trusts have kindly provided case studies of impacts and adaptation underway which are featured in this report. Thanks to Sue Barnard, Natalie Barnett, Eve Bend, Janice Bradley, Nick Bruce-White, Liz Colyer, Chris Corrigan, Imogen Davenport, Nigel Doar, Josh Hellon, Leo Henley-Lock, Gwen Hitchcock, Ian Jelley, Lizzie Laybourne, Steve Mewes, Jade Neville, Jack Reeves, Hannah Stewart, Ruth Swetnam and Debbie Tann.

# Executive Summary

Climate change is accelerating. This year and last, climate scientists have warned that the world is about to breach the 1.5°C warming threshold, which has stood as the target global warming limit for the past 10 years under the Paris Agreement. The British public continue to show high levels of concern about climate change<sup>1</sup>. As impacts worsen, every bit of avoided warming matters, but the need to adapt to climate change alongside efforts to reduce emissions is becoming ever more urgent. Our UK wildlife is bearing the brunt of more chaotic extreme weather and seasonal shifts. Spring 2025 was the warmest since records began and the sunniest since 1910 across the UK. Drought conditions hit many parts of the country through summer 2025, following extensive periods of flooding over winter 2024. Multiple heatwaves occurred in 2025 with yellow and amber warnings for public health. The habitats we care for across the UK are becoming increasingly exposed to flooding, drought, extreme heat and fire.

The Wildlife Trusts are taking action. We now treat extreme weather as normal weather; extremely wet followed by dry periods, extreme heat, greater wildfire risk, increasing sea temperatures, sea level rise and disruptive storms. Our work has always been based on the core principles of the Lawton Review: natural habitats that are more numerous, bigger, in better condition and joined up. Now we are bringing in additional principles to underpin our conservation work: more flexibility, more diversity and the ability to bounce back. We are basing our adaptation actions on the Resist-Accept-Direct framework, to determine when we must let go of how nature has looked in the past and consider how we can sustain it in the future.

This report summarises some of the many adaptation actions undertaken by Wildlife Trusts over the past year. We are better supporting species under threat from climate change, such as white-faced darter dragonflies, scrambled egg lichen, scarce tufted-sedge and chalkhill blue butterflies. We have spent £8.8 million on 200 natural flood management schemes, more than double the previous year's total. Beavers continue to be re-introduced to parts of England, with the hope of wild releases in the near future. New butterfly banks have been created to provide shade and food for these beautiful insects during heatwaves and hundreds of hectares of coastal habitat are being created to reduce the threats from coastal flooding. We developed a new

adaptation toolkit and worked with the Met Office and RSA Insurance to publish new adaptation research and public engagement resources.

In our previous adaptation report for 2023/24, Embracing Nature, we recommended the new Labour Government take five bold actions to boost adaptation across the UK in its first few months in office. We have seen some progress; the UK Government has opened the door to granting wild beaver releases and maintained the sand eel fishing ban in the North Sea. It is also extending the burning ban on deep peat soils. These are all policies that will make our natural environment more resilient. However, we have not seen an increase in total investment in adaptation for nature towards the £3 billion/ year that is needed, with Defra's departmental budget cut in real terms in the 2025 spending review<sup>2</sup>. There has been no further action to provide better adaptation support services to charities or to review governance for adaptation across government departments. The Climate Change Committee's latest assessment of progress on adaptation in England described preparations as piecemeal and disjointed<sup>3</sup>. Successive National Adaptation Programmes have not been specific or ambitious enough.

Given the scale of risk, the UK Government should rethink its whole approach to adaptation. In particular, we urge them to create new emergency response plans for extreme wildfire, flood, drought and heat, looking at scenarios that consider the impacts already happening in southern Europe. These plans need to include consultation and partnership working with major landholders, including The Wildlife Trusts. We need joined up governance and urgent delivery on adaptation.

1 <https://www.gov.uk/government/statistics/desnz-public-attitudes-tracker-spring-2024/desnz-public-attitudes-tracker-net-zero-and-climate-change-spring-2024-uk>

2 <https://www.gov.uk/government/publications/spending-review-2025-document>

3 <https://www.theccc.org.uk/publication/progress-in-adapting-to-climate-change-2025/>

# Progress summary against our adaptation actions

Adaptation action	Indicative progress
1. Take forward conversations with key partners (National Trust, RSPB, UK Government and devolved administrations, local authorities, National Parks, National Landscapes) on a framework for future conservation in a changing climate, building on the Lawton principles	
2. Assess how far our current nature reserves management practices and land advice go towards protecting and facilitating the movement of terrestrial and freshwater species and habitats up to 2050 in a changing climate, including a review of dispersal ability of key species and habitat connectivity for The Wildlife Trusts	
3. Review, across our nature reserves network, plans for managing climate hazards. Share information across Wildlife Trusts and create lists of actions that can be taken to reduce each hazard	
4. Sustain planned actions to record and manage pests, pathogens and invasive non-native species and consider future risks, including emerging trends across the rest of Europe	
5. Consider climate change impacts to future conservation grazing regimes	
6. Assess overheating, flood and extreme weather risk for our offices in corporate policies and provide guidance for home-based working on managing extreme heat and flooding. Assess what additional passive cooling, water efficiency, property-level flood management or other measures to manage risks from extreme weather are needed for our buildings	
7. Collect information through our impact measures on money spent/area covered by natural flood management measures	
8. Continue to scope out new funding opportunities for nature-based solutions based on their adaptation benefits	
9. Assess how we can plan for cascading and compound risks arising from climate change	
10. Develop new or different approaches to nature reserves management and land advice to facilitate adaptation for terrestrial and freshwater species and habitats	
11. Review approaches to new nature reserve creation to maximise resilience in the future through e.g. fire breaks, choice of tree and other species, hydrology modelling	
12. Review how we can monitor new species that are arriving on our nature reserves and in Marine Protected Areas around the UK	
13. Review how climate change will affect plans for nature recovery networks	
14. Bring together Wildlife Trust evidence and research on soil condition and changes for our land holdings	
15. Gather more evidence on the risk of saline intrusion for Wildlife Trust landholdings and review possible adaptation options	
16. Working in partnership with relevant stakeholders, assess what additional adaptation actions can be taken to help marine wildlife to adapt to climate change	
17. Scope out available evidence and undertake research to inform us of priority coastal realignment sites and risks to our coastal assets from sea level rise	
18. Scope out available evidence and undertake research to inform us of possible future options for managing lowland and upland farming, to inform our land management advice	
19. Assess how far our urban land holdings are contributing to reducing overheating and flood risk and how these benefits can be enhanced	
20. Review climate risks to our supply chains, investments and insurance coverage for flooding and other extreme weather	
21. Devise a framework for considering climate risk in land acquisition strategies	

# Extreme weather impacts in 2024/25

2024 was the warmest year on record globally. In June 2024, the world reached 12 consecutive months of global temperatures reaching 1.5°C above pre-industrial levels. In 2025, drought status has been declared for the north-west of England, Yorkshire and the West and East Midlands, with impacts experienced across many other areas. Spring 2025 was the warmest since records began and the sunniest since 1910 across the UK as a whole<sup>4</sup>. Temperature records continued to be broken with heatwaves in June, July and August 2025 leading to a series of amber heat health warnings being issued by the UK Health Security Agency and Met Office. The dry and hot weather has brought with it significant concerns for nature, agriculture and public water supplies.

Extremely wet weather was frequent in 2024. During the autumn, exceptionally high rainfall led to flooding in some areas. **The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** reported flooding across multiple nature reserves after two months' worth of rain fell in a few days. **Nottinghamshire Wildlife Trust** had to close the Attenborough Nature Reserve eight times due to weather conditions in 2024, with severe flooding also closing the site in January 2025.

A 'Butterfly Emergency' was declared in September 2024 after the summer count led by Butterfly Conservation recorded the lowest numbers on record for some species. The wet spring and relatively cool summer would have contributed, alongside human driven impacts from pesticide use and habitat loss. A count across **Yorkshire Wildlife Trust's** nature reserves revealed abundance was down to less than half of 2023 numbers. **Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust** also reported a disappointing butterfly season.

In contrast, spring 2025 swung in the opposite direction; it was one of the driest on record in the UK as well as the warmest and sunniest. **Northumberland Wildlife Trust's** Whitelee Moor nature reserve experienced extreme drying, threatening the precious peat bog and heathland habitat. **Worcestershire Wildlife Trust** observed pools that support dragonflies drying up in the hot weather, a dramatic shift from the flooded pools during the heavy rain earlier in the year. **Hertfordshire and Middlesex Wildlife Trust** reported ponds drying up earlier than usual and lower numbers of swallows and swifts at Wilstone Reservoir, thought to be due to lack of small insects that they feed on. In other areas, both insects and birds appear to have fared much better.

Spring and summer 2025 also saw serious impacts from wildfires. Fires are most often started due to human activity, with prolonged high temperatures, low rain and humidity, and high winds increasing the risk of wildfires taking hold and spreading.

**Dorset Wildlife Trust** experienced a major wildfire on Upton Heath, which seriously damaged the vulnerable heathland habitat. **Yorkshire Wildlife Trust** reported moorland fires during the spring, including a mile-long blaze near Rippendon. A wildfire at **Staffordshire Wildlife Trust's** Gentleshaw Common Nature Reserve also threatened solitary bees, ground-nesting birds, small mammals and reptiles.

The UK has experienced marine heatwaves in both 2024 and 2025, with waters to the south of the UK being particularly affected. Frequent heatwaves are damaging for marine life, particularly through changes to plankton distributions and impacts on the food web.



SPHAGNUM MOSS © BEN PORTER

<sup>4</sup> <https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2025/double-record-breaker-spring-2025-is-warmest-and-sunniest-on-uk-record>

# Actions

## Action 1: Take forward conversations with key partners (National Trust, RSPB, UK Government and devolved administrations, local authorities, National Parks, National Landscapes) on a framework for future conservation in a changing climate, building on the Lawton principles

The Lawton Principles, summarised as ‘more, bigger, better and joined’ habitats, form the basis of our work at The Wildlife Trusts. We are also in the process of creating a broader framework for adaptation focused on diversity, flexibility and the ability to bounce back, considering the changes our nature reserves are experiencing and will likely experience in the future due to climate change.

As part of our collective Strategy 2030, The Wildlife Trusts are striving to ensure our nature reserves and land assets are the foundation for nature's recovery in the UK. Through the theme of resilient reserves, we are considering a range of topics including:

- Defining resilience and understanding what resilience brings.
- How best we can apply the Lawton Principles.
- Regulation, site designation and protection.
- Monitoring, measuring resilience and adaptive management.
- External perceptions of our work to manage for resilience.

We have inputted into Natural England's development of Adaptive Delivery Plans for protected sites. This recognises that a long-term conservation planning approach taking future climate change into account may result in more positive outcomes. This work is particularly welcomed as we currently face challenges around the rigidity of regulatory requirements for protected sites, such as Sites of Special Scientific Interest (SSSIs).

Wildlife Trusts are continuing to explore the Resist-Accept-Direct (RAD) approach to adaptation. **Somerset Wildlife Trust** has developed a Land Management Plan for the ‘Adapting the Levels’ Landscape Recovery Project. Several workshops were held to consider the current climate issues facing surveyed and proposed habitats within the wider project area. A series of RAD flowcharts were then created to guide future management decision making. The flowcharts summarise land management, consequences and triggers for change for each habitat under resist, accept and direct scenarios.

Our Climate Change Director chaired an independent oversight group for an adaptation public dialogue led by the Climate Change Committee, which aims to gather insights from the public on their perceptions of climate risk and different adaptation actions, including those related to nature.

Our focus for the coming year will be better understanding and providing evidence for the role of nature in climate action in a 1.5°C+ world, including how to maximise the resilience of our habitats and species to increasingly chaotic conditions.



SOMERSET LEVELS © ROSS HODDINOTT/2020VISION

## Action 2: Assess how far our current reserves management practices and land advice go towards protecting and facilitating the movement of terrestrial and freshwater species and habitats up to 2050 in a changing climate, including a review of dispersal ability of key species and habitat connectivity for The Wildlife Trusts

Improving habitat connectivity is essential for healthy ecosystems and an important component of our nature recovery work. In addition, for species that are extinct in certain areas or threatened with extinction, reintroducing them from other sites or introducing them to new sites can be an option to support their conservation.

**Derbyshire Wildlife Trust's** Derwent Living Forest project is creating wooded habitats and wetlands to establish a connection between the new woodlands of the National Forest in the south and the soon-to-be established woodlands of the Northern Forest in the north. This north-south connectivity should allow better movement of woodland species in response to climate change.

**Cumbria Wildlife Trust** celebrated a rise in numbers of white-faced darters, a rare dragonfly that has declined due to loss of peatbog habitat through climate change and human activities. This comes following extensive restoration of peatbogs at Drumburgh Moss. **Cumbria Wildlife Trust** aims for the white-faced darter to sustain itself at the reserve and hopes it will spread further across the Solway Mosses.

**Norfolk Wildlife Trust** and **Cornwall Wildlife Trust** have worked with Plantlife to reintroduce rare scrambled egg lichen to the Breckland reserves across East Anglia from North Cornwall. This lichen was once common but became extinct due to habitat loss and is also threatened by climate change and air pollution.

**Hertfordshire and Middlesex Wildlife Trust** has helped the critically endangered scarce tufted-sedge colonise at four new sites. This plant has been lost in many areas along with the wetlands it thrives in, which has also reduced vital resilience through drought and flood protection.

A key consideration in species introductions to former or new sites is climate suitability. In 2024, we worked with the Met Office to assess the suitability of the current and future climate across the UK for survival of meadow clary, a plant species threatened with extinction. A set of climate suitability maps were produced to support Wildlife Trusts in prioritising areas for reintroducing or introducing meadow clary.

**Yorkshire Wildlife Trust** has been transforming Parson's Carr, an area of former farmland just off the M18 motorway next to a rail terminal development near Doncaster. They have been restoring the land to a mixture of wetland, grassland and woodland mosaic. This site extends the nearby Potteric Carr nature reserve, allowing wetland bird species to move easily between areas. The creation of new dew ponds will also hopefully attract wildlife like great crested newts and dragonflies, and grassland areas create cover for farmland birds such as yellowhammer to nest and breed.



YELLOWHAMMER © MARK HAMBLIN/2020VISION | LITTLE EGRET AT POTTERIC CARR © KATHRYN BROWN



### Action 3: Review, across our nature reserves network, plans for managing climate hazards. Share information across Wildlife Trusts and create lists of actions that can be taken to reduce each hazard

Our resilient reserves work, which forms part of our 2030 Strategy delivery, is providing a platform for knowledge sharing between Wildlife Trusts on hazard management. Those working on reserve management have come together to discuss possible steps to strengthen the resilience of nature reserves and hear about case studies from across different Wildlife Trusts.

In 2024/25 we worked with Land Use Consultants (LUC) to develop The Wildlife Trusts' Climate Change Adaptation Toolkit. The toolkit helps Wildlife Trusts produce an Adaptation Action Pathway for a particular nature reserve or site, with the option to include actions related to buildings and staff. This process assesses the risk of different climate change hazards under two warming scenarios, identifies and prioritises adaptation actions and considers relevant case studies, drawing from an adaptation actions database. The toolkit draws upon existing adaptation planning resources, condensing these into an easily accessible and concise format that is bespoke to our circumstances.

Multiple Wildlife Trusts have continued with major projects to build resilience to climate hazards. In 2024, **Sussex Wildlife Trust** completed major earthworks on the Pevensey Levels nature reserve, creating extensive new wetland habitat. After an extremely dry spring in 2025, the benefits are now showing, with the landscape holding more water. Wetland birds are enjoying the new scrapes and ditches, and lapwings have successfully raised young.



LAPWING CHICK © MARGARET HOLLAND

**Yorkshire Wildlife Trust** carried out a range of river restoration projects in 2024 helping with flood resilience. This included re-naturalising around one kilometre of Otterburn Beck to create 3.7 hectares of enhanced wetland, as well as restoring ponds and creating new wetland along the Swale.

**Warwickshire Wildlife Trust** teamed up with local partners and the Nature Conservancy to develop an economic business case for water resilience on the River Avon. This demonstrates the costs of nature-based solutions alongside the stackable benefits of improving water quality, water availability and reducing flood risk as well as additional benefits for Biodiversity Net Gain, carbon sequestration and health.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** continued work to future-proof their woodlands to extreme wet conditions. Work is underway in Waresley and Gransden Wood to widen and reprofile tracks known as 'rides', so they don't stay waterlogged. A study on similar work completed previously has shown the recovery of grasses and wildflowers as a result.

**Staffordshire Wildlife Trust** continued to work with the Moors for the Future Partnership to restore peatland at The Roaches after the devastating wildfire in 2018. To date they have planted an impressive 687 m<sup>2</sup> of sphagnum, a type of moss that is essential for peat formation.

**Sheffield and Rotherham Wildlife Trust** completed the Greno Woods Resilience project. The works will help with flood protection and fire prevention in this ancient woodland. Actions taken include installing leaky dams to hold back water, as well as improving access and water storage for wildfire resilience.

### Action 4: Sustain planned actions to record and manage pests, pathogens and invasive non-native species and consider future risks, including emerging trends across the rest of Europe

Ash dieback continues to have an impact across our woodland nature reserves, with many Wildlife Trusts removing trees affected by the fungal disease to prevent any danger to the public from falling branches or trees. This has carried a significant financial burden; for example, **Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust** has had to spend well over £1 million since 2020 on management. They, along with **the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire**, are fundraising to support their work to tackle the effects of ash dieback. To cope with restocking, **Devon Wildlife Trust** is setting up tree nurseries, undertaking extensive tree planting, setting up free community hubs to distribute trees and providing free advisory visits to landowners.

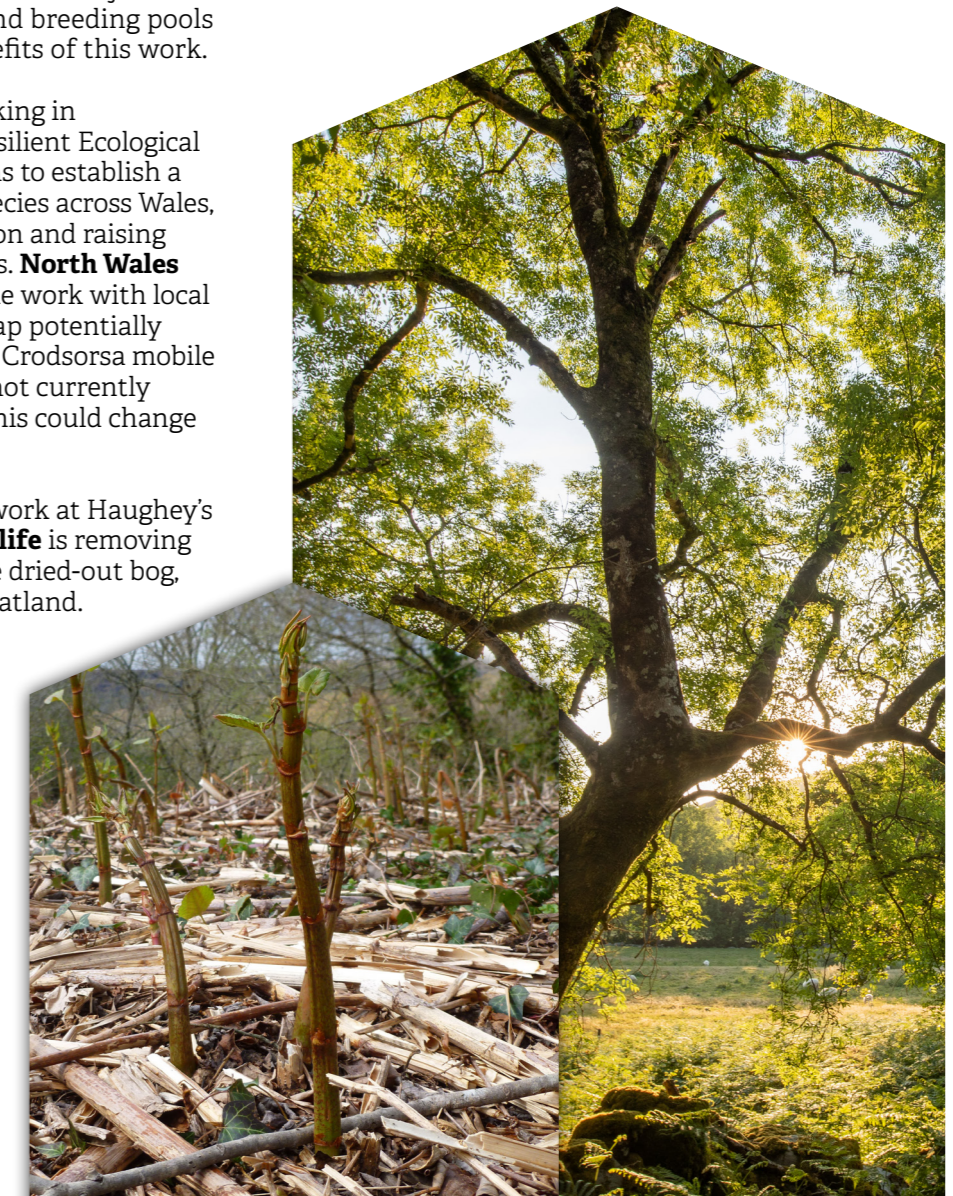
**Cheshire Wildlife Trust** has carried out removal of invasive vegetation across the sand dunes, ponds and reedbeds at Red Rocks Nature Reserve on the Wirral to support species such as natterjack toads and grayling butterflies. Hundreds of natterjack toadlets emerged from reedbeds and breeding pools in June last year, showing the benefits of this work.

**North Wales Wildlife Trust** is working in partnership to deliver the Wales Resilient Ecological Network (WaREN) project. This aims to establish a framework for tackling invasive species across Wales, linking up stakeholders taking action and raising public awareness of invasive species. **North Wales Wildlife Trust** also carried out some work with local residents in north-west Wales to map potentially invasive garden plants through the Crodsorsa mobile game. Whilst the target plants are not currently known to cause impacts in Wales, this could change in future.

As part of its peatland restoration work at Haughey's Bog in County Tyrone, **Ulster Wildlife** is removing invasive sitka spruce trees from the dried-out bog, which is vital for recovery of the peatland.

In collaboration with **Kent Wildlife Trust** and **Ulster Wildlife**, the Met Office carried out a study to understand how climate change may impact invasive Pacific oyster numbers in the UK by analysing future changes in sea surface temperatures at Thanet, Kent and Strangford Lough. Analysis suggested that by 2050, warmer waters will lead to greater survival of juvenile Pacific oysters at both sites and increased breeding success, giving valuable insights for the Wildlife Trusts to use in future planning to control this species.

In 2024, **Yorkshire Wildlife Trust** treated around 30 kilometres of river course for Japanese knotweed, American skunk cabbage and giant hogweed. Volunteers also surveyed 70 kilometres of canal for non-native invasive species.



JAPANESE KNOTWEED © LIZZIE WILBERFORCE | ASH TREE © BEN PORTER

### Action 5: Consider climate change impacts to future conservation grazing regimes

Conservation grazing is a type of sustainable environmental land management that Wildlife Trusts use on many of our nature reserves. It is the most natural form of vegetation management currently available for some habitats, maintaining the vegetation structure and promoting biodiversity. Extreme weather is already impacting our conservation grazing regimes and we are working to understand what we might expect in the future.

**Nottinghamshire Wildlife Trust** has found that the warmer and wetter weather over successive winters is impacting management of scrub on open habitats such as heathlands and grasslands due to an extended growing season. Conservation grazing is used here for sward management to provide optimal conditions for wading birds on wet grassland sites. For example, at Idle Valley nature reserve, this practice benefits lapwing and redshank. Historically, grazing would end in October and vegetation would be suitable for wader breeding in March, but the extended growing season now means there is too much vegetation for waders prospecting for nest sites. This has led to increased grazing requirements or the need for mechanical cutting to keep on top of the sward growth.

Similarly, **Dorset Wildlife Trust** has reported the need to change stocking patterns and face a risk of under-grazing due to the almost year-round growing season for vegetation, caused by higher temperatures. Removing livestock from wet sites for the winter (which is needed to avoid churning up the ground, known as poaching) leads to an excess of vegetation in drier spring and summer seasons, which is hard for the grazing livestock to keep at bay.

**Nottinghamshire Wildlife Trust** has also noted the impacts of hot summers following warmer and wetter winters. Reduced grass and herb growth due to the hot weather reduces sward growth but is poorer quality for grazing, and water needs for the animals are much higher. This has a particular impact on nature reserves with no water supply, requiring frequent trips to fill water troughs.



GRAZING CATTLE © JON HAWKINS

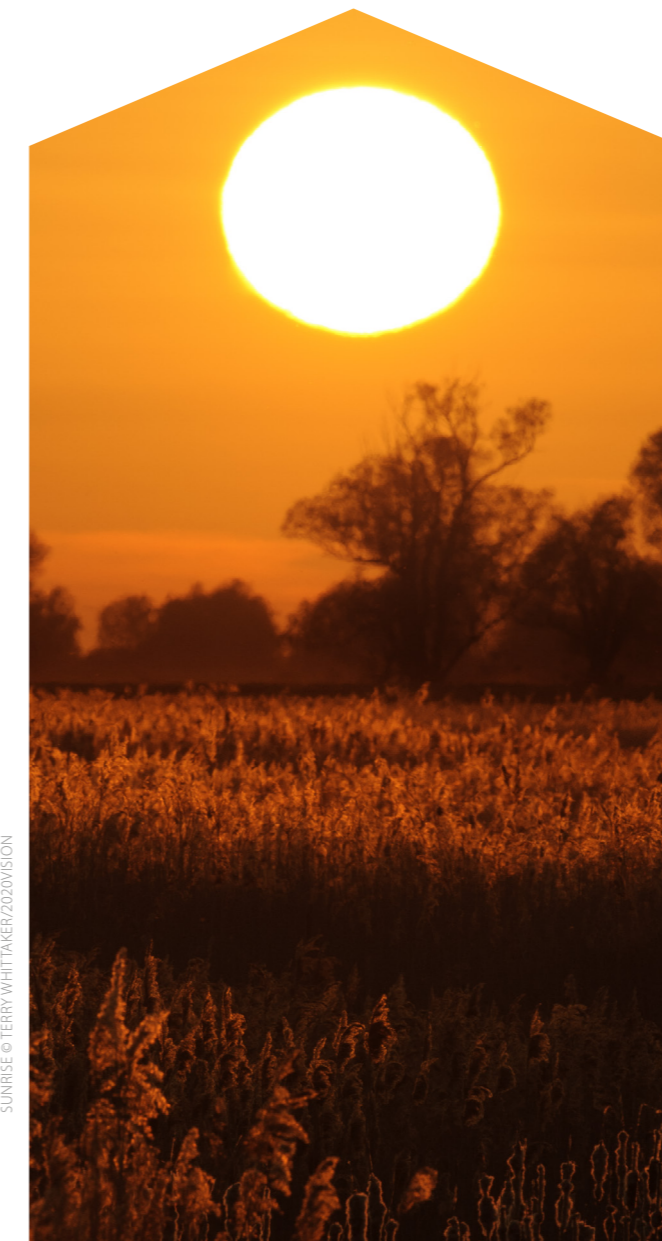
### Action 6: Assess overheating, flood and extreme weather risk for our offices in corporate policies and provide guidance for home-based working on managing extreme heat and flooding. Assess what additional passive cooling, water efficiency, property-level flood management or other measures to manage risks from extreme weather are needed for our buildings

Over the past year, both flooding and extreme heat have posed risks to our offices and staff across The Wildlife Trusts. **Sussex Wildlife Trust's** headquarters at Woods Mill were flooded in November 2024 and concerns about the risk of machinery fires were raised by **Lincolnshire Wildlife Trust**, exacerbated by hot temperatures and surrounding dry grass.

Our recently developed Wildlife Trusts' Climate Change Adaptation Toolkit includes the option to identify adaptation actions for staff and buildings to reduce the risk of flooding and extreme heat. Actions include developing protocols to facilitate office closures, passive cooling methods for buildings and increasing staff engagement and awareness. We also continue to promote our working from home sustainability tips, which include guidance on coping with hot weather.



FLOODING © SUSSEX WILDLIFE TRUST



SUNRISE © TERRY WHITTAKER/2020VISION

### Action 7: Collect information through our impact measures on money spent/area covered by natural flood management measures

We have been recording total activity on natural flood management through our collective Strategy Impact measures since 2022. Wildlife Trusts spent an estimated £8.8 million on natural flood management in the 24/25 financial year, across more than 200 projects around the UK.

In March 2025, we published a research project undertaken by Stantec for The Wildlife Trusts and funded by RSA Insurance, quantifying the benefits of natural flood management schemes. Ten Wildlife Trust natural flood management schemes were reviewed to assess cost-benefit ratios. This research showed that every £1 invested in natural flood management is expected to deliver £10 of benefits over 30 years. Amongst other measures, the project demonstrated the benefits of reintroducing beavers as a natural flood management technique. Beavers are a native species that help to store water in the landscape through building dams, digging channels and other activities. **Devon Wildlife Trust** previously led the River Otter Beaver Trial, which ran from 2015 to 2020, allowing a complex floodplain to develop as a result of the beavers constructing a series of dams.

The biodiversity value of this site is estimated to be nearly £1.5 million per year, on top of reduced flood flows and benefits for water quality. **Devon Wildlife Trust** is working to support the future of the beaver population in this area and support landowners and local communities to make space for the wetland to develop.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** introduced a family of beavers to the Nene Wetlands earlier this year. The project aims to help transform the site into more diverse habitat allowing other species to thrive.

**Cornwall Wildlife Trust** has been working towards submitting a wild release application for beavers in mid-Cornwall with the key aim of increasing the flood and drought resilience of the Par and Fowey river catchments.



BEAVER © RUSSELL SAVORY

### Action 8: Continue to scope out new funding opportunities for nature-based solutions based on their adaptation benefits

We continue to work in partnership with Aviva on our temperate rainforest restoration programme. This 100-year programme is looking to restore approximately 1,755 hectares of temperate rainforest across the British Isles. Current project locations include Bowden Pillars in Devon, Bryn Ifan in North Wales, Creg y Cowin and Glion Darragh on the Isle of Man, West Muchlarnick in Cornwall, Trellwyn Fach in Pembrokeshire and Skiddaw in Cumbria.

Our project assessing the multiple benefits of natural flood management has demonstrated the need for government and businesses to invest in natural solutions. As recommended by the report, we would like to see improved data and standardisation, government support and private sector opportunities, which will increase investment in these valuable nature-based solutions.

Two Wildlife Trusts have led local partnership projects funded by the Nature Returns programme, which is led by Natural England. **Derbyshire Wildlife Trust's** Derwent Living Forest project is creating wooded habitats and wetlands to increase habitat connectivity and provide a range of ecosystem services such as natural flood management and increased carbon sequestration. **Gloucestershire Wildlife Trust** has worked in partnership on the Severn Solutions for Nature's Recovery, which is demonstrating the benefits of restoring semi-natural habitats through creation of wood pasture, species rich grassland and traditional orchards within a farmed landscape.

**Nottinghamshire Wildlife Trust** and **Cheshire Wildlife Trust** have active projects under the Environment Agency's latest £25 million natural flood management programme, which is funding new schemes with a focus on monitoring, standards and improving business cases.

**Essex Wildlife Trust** is working with RSPB and Harwich Haven Authority to deliver the Blackwater Estuary Beneficial Use of Dredged Sediment Project. Sediment will be recycled to create sand and gravel banks in the estuary, which will act as coastal buffers for flooding and mitigate coastal erosion. The works will create around 640 hectares of new habitat for key wildlife species such as beach-nesting little tern, oystercatchers and ringed plovers. It will help to protect properties in Tollesbury, Salcott and West Mersea from coastal flooding.



COB MARSH ISLAND © JIM PULLEN | ASH COOT © VAUGHN MATTHEWS



**Action 10: Develop new or different approaches to reserves management and land advice to facilitate adaptation for terrestrial and freshwater species and habitats**

**Action 11: Review approaches to new nature reserve creation to maximise resilience in the future through e.g. fire breaks, choice of tree and other species, hydrology modelling**

Action 10 and 11 are considered together due to their similarities. Climate change is a key consideration in management of our existing nature reserves and creation of new reserves across The Wildlife Trusts. Decisions around how they may need to be adapted or what changes may need to be accepted are being considered and implemented.

In 2024, **The Wildlife Trusts** purchased part of the Rothbury Estate in Northumberland. The acquisition of this significant estate will create a new national flagship nature reserve for the nation, while also developing new models for nature economy and sustainable food production. Early work includes consideration of how we can minimise fire risk and prioritise peatland restoration on the site.

**Hertfordshire and Middlesex Wildlife Trust** carried out major works to reduce the risk of the River Lea flooding into the spring-fed lagoons and watercress beds, which support wintering green sandpipers. They also restored the river's backwater, which will allow juvenile fish species to take refuge when the river is in full flood flow. These changes will also support wading birds, dragonflies and damselflies.

**Wiltshire Wildlife Trust** added four new butterfly banks at Coombe Bissett Down in a project with Cambridge University. The banks, which are designed and funded by The Cambridge Conservation Initiative, have been modified from traditional 'S' shaped designs to an 'E' shape. The 'E' shape allows each bank to be oriented to a different compass point to test which aspects of slope, elevation and temperature are most beneficial for butterflies and other invertebrates to bask or cool

down. There are plans to plug plant these banks with food plants for several caterpillar species including Adonis and chalkhill blue butterflies, kickstarting their usefulness to the nature reserve's invertebrate population. The aim is to test the effectiveness of butterfly banks in helping butterflies adapt to climate change; and whether this is affected by different landscapes, local climates and insect communities. This work will also explore how visitors engage with butterfly banks.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** has started social surveys at Pegsdon and Totternhoe, to assess how locals view their existing butterfly banks. Their Banking on Butterflies project continues with plans confirmed to build four butterfly banks at Trumpington Meadows in Cambridge, through funding from Cambridge Conservation Initiative. Preliminary site surveys and planning started in March 2025. The project is also looking at how letting a patch of scrub grow may create similar important microclimates within a grassland habitat. Students are collecting data on vegetation, invertebrates and temperature. These studies continue to provide data on the importance of microclimates for adapting to climate change, as well as resulting in functional habitats that benefit a range of species. **The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** is also working with other landowners to establish experimental banks in a range of habitats and geographical locations.

As part of the Ebdon Farm project, **Avon Wildlife Trust** is making plans to create a new climate resilient nature reserve on a former dairy farm in the North Somerset Levels and Moors.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** has started work to create a new area of wetland habitat at the Great Fen, which will hold water, boost biodiversity, help store carbon and reduce flood risk for nearby areas. This year also marks 25 years since the Great Fen project began.

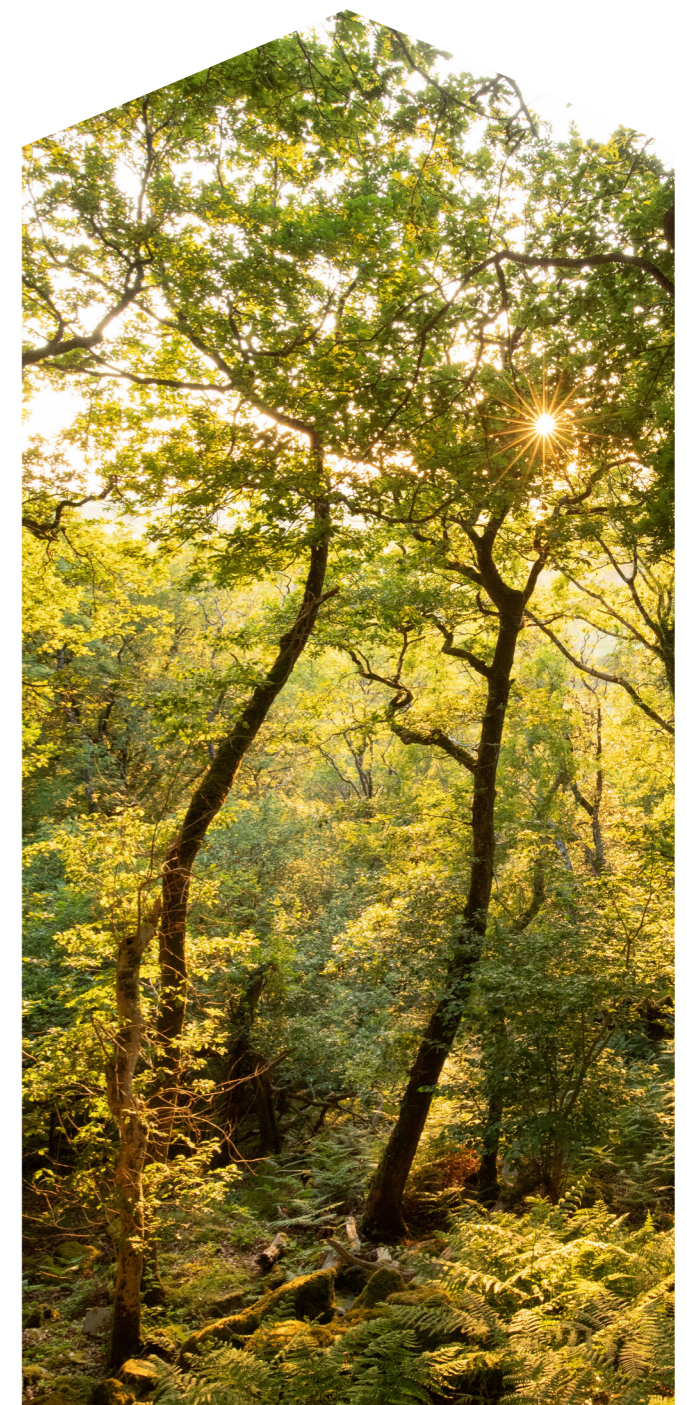
In 2024, the Met Office developed a bespoke set of climate indicators to help identify how climate influences natural events at Wildlife Trust sites, for example the first-flowering dates of hay meadow plants and movements of chalk grassland butterflies. This included indicators such as accumulated rainfall and number of days with temperature above a threshold. This study will help inform management practices across relevant nature reserves.

Temperate rainforests are being created by **Cornwall Wildlife Trust, Cumbria Wildlife Trust, Devon Wildlife Trust, Manx Wildlife Trust, Montgomeryshire Wildlife Trust, North Wales Wildlife Trust, Ulster Wildlife, The Wildlife Trust of South & West Wales and Yorkshire Wildlife Trust**. We are using Met Office climate models to help design planting mixes with resilience to climate change. In addition, we are using data such as elevation and aspect to target site purchases to those areas with more capacity for cooler microclimates.

Professor Nigel Arnell (University of Reading) was commissioned by our rainforest research programme to model the impacts of climate warming on the extent of the temperate rainforest zone to 2080. Results showed a contraction of suitable climate space in England but also highlighted knowledge gaps concerning the microclimates of these forests. In response, we have funded Professor Dominic Spracklen (University of Leeds) to measure and model the microclimate of existing temperate rainforest across the UK. Both projects will inform our approach to future site purchases and highlight existing rainforest nature reserves threatened by warming over the next 50 years.



CHALKHILL BLUE © MEGAN SHERSBY | BUTTERFLY BANKS AT COOMBE BISSETT DOWN © WILTSHIRE WILDLIFE TRUST



TEMPERATE RAINFOREST © BEN PORTER

## Action 12: Review how we can monitor new species that are arriving on our nature reserves and in Marine Protected Areas around the UK

**Wildlife Trusts across the UK, Alderney and the Isle of Man** lead and support hundreds of monitoring initiatives to survey marine wildlife, identify threats and document changes over time.

In 2024, volunteers clocked 46,000 hours surveying shorelines and recording wildlife. Our national intertidal survey programme, Shoresearch, and volunteering days have identified a variety of new and some invasive species. Findings in Devon included a non-native kelp seaweed called wakame recorded for the first time, pom-pom weed which is native to Asia, a very dense aggregation of invasive Pacific oysters at Hope Cove and a rainbow sea slug. Devil's tongue weed and wakame were recorded in Kent, and a red-rust bryozoan was recorded along the south coast. Asian shore crab were also found on the Naze in Essex over summer.

**Cornwall Wildlife Trust** has highlighted sightings which may be linked to the marine heatwave experienced in 2024. Observations include large shoals of juvenile red sea bream along the entire south coast of Cornwall, not seen since the 1980's. There have also been large aggregations of moulting and mating spider crabs, a species which seems to be benefitting from warming seas, increased sightings of salps and huge numbers of the usually rarely seen mauve stinger jellyfish. Seasearch (like Shoresearch, but using observations from volunteer divers) has been a valuable tool in capturing these changes.

Species monitoring through citizen science is commonplace across The Wildlife Trusts. For example, **Essex Wildlife Trust** has supported the Essex BioBlitz led by the University of Reading for the last three years. Submissions are helping to map the effects of climate change on wildflowers across the county.



JUVENILE RED BREAM SHOAL © MATT SLATER | MAUVE STINGER JELLYFISH © REI EGAWA

## Action 13: Review how climate change will affect plans for nature recovery networks

Climate change poses challenges for establishing nature recovery networks, from increasing the frequency and intensity of extreme weather events, to altering species distributions. The Wildlife Trusts are working on a range of nature recovery network programmes which are handling these challenges, with climate change adaptation being a key area to consider. Fragmented conservation efforts often limit the ability to restore nature and adapt to climate change, but through collaboration with others and focusing on the bigger picture, Wildlife Trusts are working hard to take on this challenge.

**Surrey Wildlife Trust** is working with groups of local landowners in the west of the county to connect and safeguard lowland heathland sites. This work should halt the fragmentation and erosion of heathland habitats, improving their resilience and suitability for wildlife.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** alongside Cambridge Past Present and Future has led the Cambridge Nature Network. This has involved 24 habitat creation projects, which are nearly all completed, creating 18 hectares of habitat such as woodlands, wildflower-rich chalk grasslands and wetlands.

The five-year Wilder Horsham District project led by a partnership between **Sussex Wildlife Trust** and Horsham District Council has now been extended another three years. The project is supporting landowners to create and improve habitats, forming networks of land that are protected and enhanced for wildlife. **Sussex Wildlife Trust** has embedded climate resilience in this project, and across others such as the Wilder Ouse, another nature recovery network the Trust leads.

**Cornwall Wildlife Trust's** new Tor to Shore project aims to create a Local Nature Recovery Network across the land and sea. The project will span from Helman Tor in central Cornwall, through the Par River and surrounding farmland, to St Austell Bay, working with natural processes and the community to enable nature recovery and build resilience to climate change impacts.



Tor to Shore

TOR TO SHORE © CORNWALL WILDLIFE TRUST

### Action 14: Bring together Wildlife Trust evidence and research on soil condition and changes for our land holdings

Climate change is affecting soils, as its structure and inhabitants are highly influenced by rising temperatures. Monitoring soil condition and improving its resilience is therefore important across our nature reserves. Whilst we do not have comprehensive soil monitoring for Wildlife Trust nature reserves specifically focussed on climate change adaptation, some Trusts are carrying out soil monitoring as part of habitat management.

**Suffolk Wildlife Trust** has been conducting soil health research using eco-acoustic techniques at Martlesham Wilds. Vibration-sensitive recording equipment has been used to monitor the health of biological communities. **Suffolk Wildlife Trust** has also hosted events exploring soil sampling techniques and the importance of soil health with local farmers and growers.

**The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire** has a programme of soil chemistry monitoring, helping to identify possible improvements for particular plant communities.

**Worcestershire Wildlife Trust** has sampled soil across some of their meadows and grasslands to assess carbon storage and organic matter content, which can also help with water retention.



WORCESTERSHIRE WILDLIFE TRUST RESERVE AT MONKWOOD © ANDY BARTLETT

### Action 15: Gather more evidence on the risk of saline intrusion for Wildlife Trust landholdings and review possible adaptation options

Saline intrusion threatens certain freshwater habitats and groundwater supplies, particularly in coastal areas where sea level rise is an increasing risk. Some Wildlife Trusts are considering the impacts of sea level rise and saline intrusion in the management of nature reserves.

In collaboration with the Environment Agency, **Hampshire and Isle of Wight Wildlife Trust** restored 90 hectares of floodplain habitat at Manor House Farm in the Lower Test Valley. Over time, as saline levels increase, the floodplain will transition naturally into a coastal grazing marsh. This restored floodplain will increase resilience to the impacts of sea level rise, and at the same time provide habitat for overwintering waders, migratory wildfowl, southern damselflies and local fish species.

Also with the Environment Agency, **Norfolk Wildlife Trust** completed major work at Cley and Salhouse Marshes to realign and restore the most vulnerable section of the New Cut, a huge drain located on the north side of the nature reserve that removes saltwater from the site. This, along with restoration of reedbeds, is helping protect freshwater habitats on the site from rising sea levels and storm events. The work will benefit a range of winter waterfowl and wading birds, which use the site as feeding grounds and reedbed species such as bittern, by providing secluded hunting habitat in the reedbed channels.



SOUTHERN DAMSELFLY © BRIAN EVERS HAM

### Action 16: Working in partnership with relevant stakeholders, assess what additional adaptation actions can be taken to help marine wildlife to adapt to climate change

#### Action 17: Scope out available evidence and undertake research to inform us of priority coastal realignment sites and risks to our coastal assets from sea level rise

Many Wildlife Trusts are working in partnership on restoration of marine and coastal habitats to maximise their resilience to changing marine conditions and sea level rise.

Through a partnership between **Yorkshire Wildlife Trust, Lincolnshire Wildlife Trust** and Ørsted, the Wilder Humber project is carrying out sand dune, saltmarsh, seagrass and native oyster restoration. In 2024 the project planted its first seagrass on the Lincolnshire side and constructed a new seedbank and plant nursery for coastal species. In 2024, Wilder Humber also trialled a new remote setting method to restore native oysters. If successful, this method has great potential for creating native oyster reefs in the Humber and elsewhere.

**Cumbria Wildlife Trust** began seagrass restoration trials last year and is hoping to restore some of the lost meadows in the Walney Channel.

**Hampshire and Isle of Wight Wildlife Trust** is a partner in the Solent Seascape Project, which was recognised last year as an official United Nations Decade Action due to its contributions to international goals for protection and restoration of marine biodiversity. Restoration is taking place across saltmarsh, seagrass, oyster reefs and seabird sites, and will help create a more resilient coastline with benefits to both people and wildlife.

**Essex Wildlife Trust** is collaborating with Project Seagrass on seagrass transplant restoration trials in the Blackwater Estuary. These trials consider environmental conditions, sediment type, gradient, density of transplants and other factors to help define the best methods required for seagrass restoration.

We continue to work on coastal realignment and habitat compensation schemes in areas where sea level rise and extreme weather puts our coastal nature reserves at risk.

**Essex Wildlife Trust** and the RSPB commissioned a report from ABPmer to investigate the viability of different saltmarsh restoration options, including smaller scale options and managed realignments on multiple landholdings in the Blackwater and Colne estuaries. This is informing potential future works.

**Norfolk Wildlife Trust** is creating inland freshwater reedbed habitat to compensate for anticipated loss of this habitat on the Norfolk coast. Work at sites such as Wissey Wetland and Potter Heigham will provide habitat for rare wildlife, such as bittern.



OYSTER REEFS ON THE HUMBER © KATHRYN BROWN

### Action 18: Scope out available evidence and undertake research to inform us of possible future options for managing lowland and upland farming, to inform our land management advice

Projects across The Wildlife Trusts are demonstrating how farming can boost nature recovery and resilience to climate change.

**Wiltshire Wildlife Trust** and the National Trust formed a partnership last year to transform the farm at Great Chalfield Manor. The aim is to develop a learning hub where farmers and landholders can learn how to develop nature-based solutions such as the creation of species-rich grassland and hedgerows, wood pasture and ponds. They aim to demonstrate how farmers can access green finance through integrating nature-based projects, whilst also prioritising soil health, improving climate resilience and supporting nature's recovery.

**Ulster Wildlife** has welcomed farmers and landowners from Ulster Farmers' Union to Cuilcagh Mountain to showcase the peatland restoration techniques carried out and explore the benefits through improved biodiversity, enhanced water quality and carbon storage.

**Staffordshire Wildlife Trust** is supporting the Morridge Hill Country project aiming to strengthen the connection between farming and nature in the uplands. Twenty-one local farmers and land managers are part of the development phase.

**Lancashire Wildlife Trust** is part of the Palus Demo project, which is bringing together partners from across Europe to demonstrate wet farming (also known as paludiculture) as a viable and sustainable way to manage lowland agricultural peatlands. This practice both better protects peatlands and reduces greenhouse gas emissions, which are released when they are drained.

In its first year, **Herefordshire Wildlife Trust's** Wye Adapt to Climate Change project provided advice on over 8,000 hectares of land, helping land managers, farmers and landowners consider how their land holdings can be made more resilient to climate change. The project has shared case studies of how farms can help manage the movement of water through the catchment, for example, through agroforestry, herbal leys and habitat improvements.

**Herefordshire Wildlife Trust** is also involved in Wyescapes, a farmer-owned landscape recovery project for the River Wye. The project aims to restore the Wye catchment to a healthy condition so it can support wildlife, mitigate flood risk and provide clean water as well as natural spaces for people to enjoy – all whilst supporting sustainable food production.



FARM HEDGEROW © MATTHEW ROBERTS/2020VISION

### Action 19: Assess how far our urban land holdings are contributing to reducing overheating and flood risk and how these benefits can be enhanced

In addition to providing important havens for wildlife, our nature reserves, including those in urban areas can help reduce flood risk and impacts of extreme heat for surrounding areas.

**Warwickshire Wildlife Trust's** installation of leaky dams and retention pools on the Upper Sherbourne will help to reduce flood damages for the local community in Coventry.

**Gloucestershire Wildlife Trust** has worked on Gloucester and Cheltenham Waterscapes. Fifty homes will benefit due to creation of rain gardens, de-paving driveways, green verges, attenuation ponds and scrapes, which were delivered through RSA Insurance funding. Phase 2 of Waterscapes is now underway, extending the work into Stroud and Tewkesbury.

**Wiltshire Wildlife Trust** is re-wiggling the River Were at Smallbrook Meadows Nature Reserve in Warminster, which will help the area cope with flooding events.

We're also supporting adaptation across wider communities. **Lancashire Wildlife Trust** is working with partners to develop the Wigan Greenheart Landscape Recovery Scheme. The scheme aims to join up disconnected greenspaces to support health and well-being and boost climate resilience.

**London Wildlife Trust** is supporting the third round of the Rewild London Fund, including convening the London Rewilding Action Group, which is exploring the development of large-scale projects across London. It is supporting 21 projects to restore nature, help residents access and benefit from nature, and make the capital more resilient to climate change.

Working with Action for Conservation and the Youth Leadership Group, **Avon Wildlife Trust** has started a new project to transform a brownfield site just outside Bristol city centre. This is part of the wider Intergenerational Action for Climate and Nature programme.



RED DEER STAG IN FRONT OF WEMBLEY FOOTBALL STADIUM © BERTIE GREGORY

## Increasing our adaptive capacity

In our first adaptation assessment in 2022, *Changing Nature*, we scored The Wildlife Trusts on our adaptive capacity based on the 'NI188' indicator shown in Table 1. Across the federation, we scored ourselves as operating at level 1 (with some Wildlife Trusts at level 3 and some at level 0).

In 2024, we updated our climate hazard mapping and priority adaptation actions. This can be found in our 2023/24 adaptation progress report, *Embracing Nature*, and further updates were completed as part of the Climate Change Adaptation Toolkit, which all Wildlife Trusts are now starting to use. This has improved our capacity score up to level 2 (comprehensive risk assessment and action prioritisation) with the hope to increase it further to level 3 after we review our adaptation programme in 2026.

We have also continued to promote the delivery of climate literacy training across the federation. Thanks to voluntary support from a trustee at **Sheffield and Rotherham Wildlife Trust**, we have run train-the-trainer sessions to support those delivering the training and now have recorded, narrated sessions of our materials. Many Wildlife Trusts have carried out in-person training sessions with staff covering both climate change mitigation and adaptation, with some also delivering training to local landowners and farmers.

**Table 1** - Definitions of adaptive capacity levels taken from the NI188 indicator

Adaptive Capacity Level	Description
0 - Getting Started	The organisation has begun the process of assessing the potential threats and opportunities across its estate and services and has identified and agreed the next steps to build on that assessment in a systematic and coordinated way.
1 - Public commitment and impacts assessment: Assembling an evidence base	The organisation has made a public commitment to identify and manage climate related risk. It has undertaken a local risk based assessment of significant vulnerabilities and opportunities to weather and climate, both now and in the future. It can demonstrate a sound understanding of those not yet addressed in existing strategies and actions. It has communicated these potential vulnerabilities and opportunities to internal staff and other local partners and has set out the next steps in addressing them.
2 - Comprehensive risk assessment (with prioritised action in some areas)	The organisation has undertaken a comprehensive risk based assessment of vulnerabilities to weather and climate, both now and in the future, and has identified priority risks for its services. It has identified the most effective adaptive responses and has started incorporating these in its strategies, plans, partnerships and operations. It has begun implementing appropriate adaptive responses in some priority areas.
3 - Comprehensive action plan (and prioritised action in priority areas)	The organisation has embedded climate impacts and risks across its decision making. It has developed a comprehensive adaptation action plan to deliver the necessary steps to achieve the existing objectives set out in its strategies, plans, investment decisions and partnership arrangements in light of projected climate change and is implemented appropriate adaptive responses in all priority areas.

# Policy and advocacy on adaptation

Advocating for greater ambition on adaptation in national and local policy, as well as public awareness raising, is a core part of our work.

In 2024 we called on the new Labour Government to undertake a major overhaul of adaptation policy, with increased funding, coordination and follow through with delayed or blocked policy decisions from the previous administration. The UK Government's response in its first year in office has been disappointing. There have been some areas of progress, such as the retention of the ban on sand eel fishing in the North Sea (critical for increasing resilience for marine habitats and seabirds), and maintenance of flood funding in the latest Spending Review. But overall, UK Government progress on adaptation has been weak, as stated by the Climate Change Committee in its most recent progress report for England. Climate change is accelerating, and the Government must urgently develop new emergency plans for emerging extreme hazards from fire, flood, drought and extreme heat. It should draw on the impacts seen in southern Europe such as the catastrophic floods in Valencia in 2024 and wildfires in Spain and Portugal in 2025 – and think through what is needed to cope with similar events should they hit the UK. The Wildlife Trusts are not part of any national conversations on emergency planning currently – this also needs to change given our role as major landholders.

On public engagement, we worked with the Met Office to produce a suite of public-facing infographics to communicate the major challenges posed by climate change at Wildlife Trust sites.

The infographics focus on peatlands, woodlands, coastal/saltmarsh sites and a general overview of climate-related challenges for wildlife and nature. These are available for Wildlife Trusts to use at their nature reserves and any wider public-facing activities. We continue to share tips on how people can reduce their flood and heat risk, and support wildlife through times of extreme weather.

In 2024, **Cumbria Wildlife Trust** and the Cumbria Innovative Flood Resilience project shared a series of Creature Comforts-style animations, raising awareness of how natural flood management can protect communities and businesses from flooding, enhance biodiversity and combat climate change.

**Somerset Wildlife Trust** has continued to support adaptation in communities across the county through their Act to Adapt programme. Through collaborative events they have worked with communities to create and implement climate adaptation plans. Plans have been produced for seven communities so far, with two more in progress.

In 2024, we published *A vision for the return of beavers to England and Wales*, making the case for bringing back this keystone species and highlighting their role in flood prevention, water quality and providing habitat for wildlife. This follows a long history of campaigning by The Wildlife Trusts for the return of beavers to the wild, as well as vital research such as the River Otter Beaver Trial led by **Devon Wildlife Trust**. Earlier this year we celebrated the UK Government's decision to allow applications to return beavers into river catchments in England.

We submitted our 2023/24 adaptation progress report, *Embracing Nature*, to the Fourth Round of the UK Government's Adaptation Reporting Power. This should feed into the upcoming fourth UK Climate Change Risk Assessment.

Findings from an internal survey we ran last year highlighted drought as a leading threat to our nature reserves according to Wildlife Trust staff. This year, we've received thought-provoking results from public surveys exploring concerns about nature and climate change, as well as adaptation awareness. Changes to land use, pollution and flooding were seen as top future threats to nature in a snapshot survey. Out of around 2,000 people surveyed, 41% felt the UK Government is not currently doing enough to protect homes and communities from the effects of climate change, with a further 36% unsure or neutral.

# Research and data – progress and priorities

**The Wildlife Trusts** adopted a Data, Research and Evidence Framework in 2024, which set out our priorities for developing and sharing evidence alongside further building our evidence-based culture across the federation. In addition, we published our first evidence synthesis report, *Wild Science*. This included a showcase of research led by Wildlife Trusts with direct relevance to adaptation, including studies on Marine Protected Areas, beaver reintroductions, butterfly banks and peatland restoration.

In 2025, we published research funded through RSA Insurance to value the multiple benefits of natural flood management and consider the case for greater investment. We also completed five research projects undertaken jointly with the Met Office on a pro bono basis, looking at communicating climate change, developing weather and climate indicators, climate suitability for re-introducing rare plants, changing suitability for invasive Pacific oysters and how barn owl breeding success is linked to seasonal rainfall.

Since our last review of research needs for adaptation in 2023, we have also made progress in better understanding the evidence for some of our priority actions where knowledge is lacking:

**Action 9:** Assess how we can plan for cascading and compound risks – we took part in research looking at the threat from non-linear climate change, led by the Strategic Climate Risk Initiative, which included recommendations for change to government structures and decision making. The resulting report, *The Security Blind Spot*, strongly recommended that climate change needs to be a core part of national security planning.

**Action 20:** Review climate risks to our supply chains, investments and insurance coverage – we are investigating climate-specific insurance for specific hazards like flooding and wildfire.

**Action 21:** Reviewing climate risk in land acquisition strategies – we are developing monitoring frameworks for our new nature reserves at the Rothbury Estate and for our temperate rainforest programme, which include climate risk metrics.

Our key adaptation research priorities for the coming period are:

- Understanding immediate short-term risks (worst-case scenarios) to our habitats, species and assets from extreme weather.
- Understanding emerging threats and any opportunities, from new species arriving in the UK. This includes threats from invasive non-native species, pests and diseases.
- How soil condition is changing with climate change.
- Spatial risks to our coastal assets from sea level rise, but also priority areas for coastal realignment work.
- Potential risks to our conservation grazing practices and livestock.



FERNS © MATTHEW ROBERTS



SIMONDS HILLS, ROTHBURY ESTATE © JOHN MILLARD

The Wildlife Trusts are a federation of 47 charities, 46 individual Wildlife Trusts and a central charity, the Royal Society of Wildlife Trusts. Together we have more than 940,000 members, 39,000 volunteers and 3,600 staff across the UK. We share a vision of nature in recovery, with abundant, diverse wildlife and natural processes creating wilder landscapes where people and nature thrive.



Wildlife Trusts care for – and have restored – some of the most special places for wildlife in the UK. Collectively we manage more than 2,300 nature reserves, and operate 123 visitor and education centres. We undertake research, we stand up for wildlife and wild places under threat, and we help people access nature.

We work with businesses who are committed to being nature positive and take action to help restore 30% of land and seas for nature by 2030.

#### **The Wildlife Trusts**

✉ [enquiry@wildlifetrusts.org](mailto:enquiry@wildlifetrusts.org)

🖱 [wildlifetrusts.org](http://wildlifetrusts.org)

✂ @WildlifeTrusts

f @wildlifetrusts

📷 @thewildlifetrusts