



Forestry England

# Biodiversity Plan 2022-26





Over fifty years ago our predecessors recognised:  
“As the owner of the largest single estate in Britain, the Forestry Commission realises its exceptional responsibility for the conservation of wild life.”

This is just as true for Forestry England as the largest land manager in the country today.



Biodiversity conservation is a core part of our purpose at Forestry England. We are the largest land manager in England, delivering more habitats for wildlife than any other public, private, or charitable body. We have 68,000 hectares (ha) of Sites of Special Scientific Interest (SSSIs), 98% of which are in favourable or recovering condition, and 38% are in favourable condition (up from 9% in 2011). In certain areas we are sector leaders. For instance, 89% of our 9,000 ha of lowland heathland SSSIs are in favourable condition, ahead of the national average of 43%. Also, 77% of our 8,000 ha of upland bog SSSIs are in favourable condition, ahead of the national average of 12%.

Since our predecessors started work in 1919, we have been on a journey through changing government policies and national priorities, and improving scientific understanding. We know we must continue to restore habitats that today we would not consider planting. We have 43,000 ha of plantations on ancient woodland sites (PAWS) and have a long-standing commitment to restore these. We also have 45,000 ha of biodiversity-rich open habitats, which have increased by over 5,000 ha since we launched our open habitat strategy in 2013.

We have a range of pioneering conservation projects at the forefront of nature recovery. For instance, the award-winning restoration of 29 kilometres of New Forest streams, the prestigious white-tailed eagle reintroduction on the Isle of Wight, and the cutting-edge conservation success at Wild Ennerdale. These can only happen with strong and fruitful

relationships with local and national conservation partners. The challenge is that the UK has lost more biodiversity than many other countries in the world, being ranked 189th of 218 countries assessed on a Biodiversity Intactness Index. The recent State of Nature report showed that 13% of species in England are at risk of extinction from Britain.

This plan sets out Forestry England's approach to protect and restore resilient biodiversity in the nation's forests. Launched in 2022, we will review the plan in 2026 to assess our progress and ensure it remains fit for purpose. The ambition here is driven by the wider government goal set out in the 25 year Environment Plan, as well as the England Tree Action Plan, England Peat Action Plan, Keepers of Time and the future Species Reintroduction Task Force. All the while we'll be delivering the step change for nature set out in our five year plan Growing the Future and continuing to provide vital, sustainable timber for the nation.

**We are in the midst of a biodiversity crisis, which needs bold steps to reverse. We must learn from what has gone before us, and be better, bolder, and more adventurous. We can't do this without you.**



**Mike Seddon**  
Forestry England Chief Executive



# We have a vision that:

## The nation's forests provide the most valuable places for wildlife to thrive and expand in England

Forests are a mosaic of different habitats including woodlands, wetlands, scrub and open habitats. The fundamental principle for restoring biodiversity in the nation's forests is restoring fully functioning ecosystems. This means prioritising conservation action beyond managing for single species or very specific habitats, and restoring the natural processes which create a forest ecosystem. To achieve a fully-functioning ecosystem we must pursue three core improvements<sup>1</sup>.



White-tailed eagle



## Bigger habitats

There is currently a gap between the amount of habitat that our nation provides, and the amount of habitat biodiversity needs to thrive. We will work to prioritise our effort where we can achieve a habitat landscape that extends to more than 12,000 ha<sup>2</sup>. In areas where this scale is not possible, sites are part of a wider habitat network that can be joined through the Nature Recovery Network.

## Better habitats

We will increase the diversity of species, diversity of habitats, and increase trophic complexity<sup>3</sup>. Trophic complexity is when a diverse range of species from all trophic levels are present within an ecosystem, from large herbivores, to dung beetles, through to predators. We will balance disturbance<sup>4</sup>. Disturbance creates dynamism and provides opportunities for wildlife to flourish. Too little disturbance creates climax habitats that barely change with low levels of dynamism, while too much does not allow time for species to recolonise and prevents natural succession.

## More-connected habitats

Landscape connectivity is connecting habitats across large areas to allow individuals to move and populations to link. This encourages meta-populations to thrive<sup>5</sup>. Our aim is to improve connectivity on land we manage with well-planned forests. We will collaborate with partners and neighbours to connect land we manage across landscapes. We will also connect through management, such as translocations between disparate populations (either species or whole communities), or by reintroducing grazing cattle to disperse seeds across landscapes.



Working with partners, we have reintroduced native pine martens to the Forest of Dean.





# We have five focus areas

A pair of Eurasian beavers were introduced into Greathough Brook, Forest of Dean in July 2018.

## 1. Protecting wildlife

### Protecting species

We will protect what we already have. 56% of priority species have been found in the nation's forests. Since 2000, 82% of priority birds, 78% of priority butterflies, and 94% of priority mammals have been recorded. We will continue to protect these valuable populations as we know many are in national decline.

### Protecting sites

We care for 68,000 ha of Sites of Special Scientific Interest (SSSIs). 97.8% are in favourable or recovering condition, of which 38.3% are in favourable condition. Of our SSSIs, approximately 38% are predominantly open habitats, 29% native woodland, and 32% non-native woodland. We have made steady progress towards improving the percentage of sites in favourable condition. However, at the current rate of improvement we would only expect to reach 75% favourable condition by 2115. We will accelerate our improvement rate to reach the government's 25 Year Environment Plan targets.

We also care for over 9,000 hectares of National Nature Reserves (NNRs). NNRs are viewed as the 'Jewels in the Crown' for nature conservation in the UK and are often underpinned by a SSSI designation. They are also deemed to be of increasing relevance and importance, being seen as a core component of the Nature Recovery Network.



We will maintain and improve the condition of our SSSIs, in line with the 25 Year Environment Plan commitment to improve to 75% favourable condition by 2042. We will aim for 100% of our NNRs to be in favourable condition by 2042.



The New Forest is our largest SSSI.

## 2. Creating networks of open and dynamic habitats

As part of our 2013 open habitats strategy we committed to increase the amount of open habitats on land we manage from 16.8% in 2013, to 21.1% by 2060. In 2022 we stand at 18.9% open habitat, with over 5,000 ha created since 2013. We will also ensure we are building not only bigger, but more-connected open habitats.

On top of our previous commitments, we will create networks of open and dynamic habitats, to include permanent and transient open space, linked through rides, watercourses, and dedicated corridors. We will use the UKFS decision framework for peat and trees to help guide our long term decisions, and develop ambitious new open and dynamic habitat creation proposals.

53% of the nation's forests are Sites of Special Scientific Interest, open habitats, ancient woodland, or plantations on ancient woodland sites. These sites are the core of the first three focus areas.



Chequered skipper butterflies have been reintroduced to Fineshade Wood, previously extinct in England.



### 3. Ancient woodlands and trees of special interest

Ancient Semi-Natural Woodland (ASNW) is a biodiversity rich habitat which has been cultivated and managed by people for centuries. In line with the England Tree Action Plan and the Keepers of Time update, here we reinforce our 2007 commitment to restore all 42,814 ha of our Plantations on Ancient Woodland Sites (PAWS).

We commit to manage ancient woodland sites across the nation's forests to improve their ecological value and ultimately restore all plantations on ancient woodland sites to resilient native woodland.

We have already restored the easiest sites with 9,979ha (23%) now more than 80% native tree species. We are evolving our guidance to restore more challenging sites and plan for the likely challenges presented by our heating climate.

We also hold approximately 31,000 ha of wood pasture and parkland, of which 91.5% is found within existing ancient woodland or an SSSI. In addition to our previous commitments, we will now actively investigate whether this resource can be restored, alongside the viability of creating new habitats to support the feature species of wood pasture (see forest wilding).

### 4. Restoring species

We are a sector leader in species reintroductions, with all six of our districts currently reintroducing at least one species. These range from pine martens and white-tailed eagles, through to water voles, pool frogs, chequered skipper butterflies, and white-faced darter dragonflies. All are partnership projects with environmental Non-Governmental Organisations (NGOs). We will continue to reintroduce species across all districts, and will actively engage and align future projects with the Species Reintroduction Task Force. Our focus will be on those ecosystem engineers and keystone species that help to restore fully functioning ecosystems.

Over the entire biodiversity plan period (2022-26) each of our districts will be actively working on at least one species reintroduction project in either feasibility, release, or monitoring stages.



Pool frog - one of the several species we are reintroducing to the nation's forests.



## 5. Forest wilding

We have the rare ability in the UK to deliver landscape-scale nature recovery projects over the long term. We already pioneer in delivering wilder forests at Wild Ennerdale, one of the longest running wild land restoration projects in the country. To deliver a step-change for nature, we propose to build on our success.

**We will establish 6,000 more hectares of wild core areas within our forest landscapes. These areas will be places of innovation to rebuild biodiversity by restoring natural processes.**

Ennerdale Valley, Lake District

## Measuring change

Monitoring should be the bedrock of our plan, but whole-community, direct species monitoring has historically been too expensive. Emerging environmental DNA technologies mean we can now rapidly assess levels of biodiversity and measure trends. A recent collaboration with Forest Research detected more than 2,000 species of fungi and more than 200 species of invertebrate, from just 86 soil samples collected within our forests in Yorkshire. We will continue to explore and use this innovative technology to robustly monitor the biodiversity within the nation's forests.

**Strong partnerships are critical to restoring biodiversity at scale. Join us and help ensure wildlife grows and thrives for the future:**

- Help support our work
- Discover corporate partnership opportunities

Let's work together to reintroduce species, and where we're neighbours let's partner across landscapes. We'll be releasing all our environmental DNA data online, let's collaborate on its analysis, and explore further opportunities for research.

For more information, please contact:  
[info@forestryengland.uk](mailto:info@forestryengland.uk)



## References

1. Lawton, J. H. Making Space for Nature: a review of England's wildlife sites and ecological network. (2010).
2. Natural England. Nature Networks Evidence Handbook. (2020).
3. Perino, A. et al. Rewilding complex ecosystems. Science (2019) doi:10.1126/science.aav5570.
4. Connell, J. H. Intermediate-disturbance hypothesis. Science (1979) doi:10.1126/science.204.4399.1345.
5. Crouzeilles, R. et al. A global meta-Analysis on the ecological drivers of forest restoration success. Nat. Commun. (2016) doi:10.1038/ncomms11666.

Front cover: Ennerdale Valley, Lake District

Back cover: Mendip Hills, Somerset

**forestryengland.uk**

© Crown copyright 2022

