

Written evidence submitted by the RSPB to the Environmental Audit Select Committee's inquiry on  
'Biodiversity and Ecosystems'

The RSPB is the largest conservation organisation in Europe, with more than 1.2 million members, over 2000 employees and more than 200 nature reserves across the UK. We have a large policy team of around 60 staff, covering all of the policy areas covered in the remit of this inquiry – from the Overseas Territories and the Aichi targets, to biodiversity net gain in new developments and nature-based solutions. The wide scope of both the inquiry and the RSPB's work is reflected in the length of our submission.

The state of biodiversity

**How effectively is the Government monitoring the impact of UK activities on biodiversity, at home and abroad?**

As noted in answer to other questions below, Government spending on biodiversity has been drastically cut over recent years. This has led to monitoring work being scaled back, meaning that we now have alarming lack of knowledge about the current status of our finest sites and most vulnerable species and the impact of our activities on the UK's biodiversity. Key areas of concern include:

- Huge gaps in knowledge on the status of species. Trends in either abundance or occupancy are available for little over 10% of the UK's terrestrial and freshwater species.
- The near cessation of national surveys established in 1998 under the Statutory Conservation Agencies/RSPB Annual Breeding Bird Survey Partnership (SCARABBS). This means we have no knowledge of trends in species of the highest conservation concern.
- Efforts to monitor the UK's protected areas have diminished, with more than half of sites not monitored in the last 6 years<sup>1</sup> contrary to Governments' official scientific advice<sup>2</sup>.
- A lack of data on the state of nature in National Parks, Areas of Outstanding Natural Beauty (AONBs) and National Scenic Areas (NSAs). The Glover Review in England expressed concern and recommended that regular and robust state of nature assessments are urgently needed<sup>3</sup>.

UK Government monitoring of the overseas biodiversity impacts of its activities is extremely limited. There is strong evidence that UK import of and trade in key agricultural commodities drives significant environmental harm and threatens already endangered species in tropical landscapes overseas. A [recent study](#) by RSPB and WWF estimated that an area equivalent to 88% of the total UK land area was required to produce just seven agricultural and forest commodities annually between 2016-2018 – beef & leather, cocoa, palm oil, pulp & paper, rubber, soy and timber – often in countries with very high deforestation risk. Defra carries out estimates of the UK's GHG consumption footprint ("carbon footprint"), but there is no equivalent to assess the UK's biodiversity impacts related to consumption.

**How has the Government performed against the Aichi Biodiversity Targets and what further progress is needed?**

By its own admission, the UK has failed in its contribution towards global progress for biodiversity over the last decade – the UK 6<sup>th</sup> National Report (2018) shows the UK will miss nearly all of its commitments. The targets where the most progress has been made are mainly procedural. Target 11 on protected areas is the only outcome-focussed target for biodiversity which the JNCC report that the UK is ‘on track to achieve’. However, this assessment is not supported by the evidence. The UK reports a 28% coverage on land, but this includes landscape designations (National Parks, AONBs and NSAs) which are consistently failing to deliver for biodiversity across the UK<sup>4</sup>. We estimate that only around 5% of the UK’s land is both protected and effectively managed for nature<sup>5[OB]</sup>. The picture in the marine environment is the same – with many MPAs poorly managed (if at all) for biodiversity<sup>6[OB]</sup>.

And this is not the only rose-tinted assessment. For example, against both the species and financing targets (Targets 12 and 20 respectively) the UK has reported ‘Progress towards target but at an insufficient rate’. However, most assessments of UK biodiversity point towards ongoing loss, or no recovery from depletion<sup>7</sup>, and public sector spending on biodiversity in the UK fell 29%, from £641 million to £456 million, between 2012/13 and 2017/18<sup>8</sup>.

### **Where should the four nations prioritise resources to tackle biodiversity loss?**

The four nations need to both increase resources and improve the way they are prioritised.

#### Increasing resources

As noted in answer to question 2, there has been a substantial decline in public sector spending on biodiversity between 2012/13 and 2017/18<sup>9</sup>. The budgets of the UK’s statutory nature conservation agencies have also been severely cut, for example Natural England’s budget has been reduced by 63% between 2008/09 and 2020/21. The UK’s current spend on biodiversity corresponds to a tiny proportion, 0.02%, of UK GDP.

At the same time, the UK has failed to achieve its international biodiversity targets. Species declines are continuing<sup>10</sup> and the ecological condition of protected areas for nature have deteriorated in every nation of the UK<sup>11</sup>. **If Governments are serious about their ambitions to recover nature, we need to see an increase of spending to beyond the levels in 2008.**

#### Prioritising resources

The four nations should prioritise their resources in four key areas:

- A. **Put in place robust, legally binding, long-term targets to achieve nature’s recovery.**
- B. **Commit to 30% of land and sea being effectively protected and managed for nature.** This must include completing the designation of and restoring existing protected areas<sup>12</sup> and transforming the state of nature and ecosystems in protected landscapes<sup>13</sup>.
- C. **Strong UK fisheries bill and implementation,** including legally binding targets to end overfishing, alongside regulation and funding that accelerates a shift to lower impact fishing and supports methods that minimise damage to habitats and bycatch.
- D. **Fundamental reform of agriculture and food policy** so that farm payments systems reward farmers by paying them for the work they do for nature, not the amount of land they own.

Over the last decade the Statutory Conservation Agencies have shifted their focus away from their core responsibilities to tackle biodiversity loss - this needs to change. For example, the monitoring of protected area condition has been significantly scaled back<sup>14</sup>.

**How should the Environmental Land Management scheme maintain and improve biodiversity? What role might alternative land use play in delivering improvements to biodiversity under the ELM scheme?**

Over the last three years, Defra has worked toward reforming agriculture policy and payments in England toward the principle of ‘public money for public goods’, using public investment to secure environmental and other benefits not rewarded by the market. Alongside wider reforms to farm policy, such as improving transparency in the supply chain to improve market returns to farmers, moving toward a better implementation of the polluter pays principle and meeting commitments to a trade policy that safeguards UK standards, this has the genuine potential to be a world leading set of reforms, capable of making a significant contribution to the delivery of the 25 Year Environment Plan goals and the 2050 net zero carbon target.

Farming is uniquely placed as both one of the primary sources of our environmental problems – the sector responsible for the most water pollution, for a significant proportion of historic and current biodiversity declines and 10% of UK greenhouse gas emissions – whilst also being one of the primary solutions. As the dominant land use in England and the UK, changes to the way we farm and manage our land can restore nature, absorb carbon, reduce flood risk and reconnect people to nature through improving the countryside that surrounds us every day.

Biodiversity is a vital public good, that underpins both ecosystem and economic health. Protecting and recovering biodiversity should be a core focus of ELM funding. The Farmland Wildlife Partnership is comprised of nine environmental NGOs and the Nature Friendly Farming Network (NFFN), that work together to provide a single source of best practice management advice for wildlife on farmland. The partnership has identified six key actions that can drive the recovery of farmland wildlife including birds, insects, and mammals, particularly in lowland farming systems.

1. Protect existing semi-natural habitats (e.g. species rich grasslands, woodlands and scrub)
2. Maximise the value of boundaries and margins (e.g. hedges, beetle banks, uncropped margins)
3. Enhance and create wet features, including ponds, streams and ditches.
4. Create flower-rich habitats, on at least 2% of the farm (e.g. species rich margin and meadows)
5. Create seed-rich habitats, on at least 2% of the farm (e.g. sown bird seed mixes, fodder crops and unharvested headlands)
6. In-field management, including progressive soil management and integrated pest management (e.g. fallow plots, green composts, cover and inter cropping, herbal leys, in field flower and grass margins, pesticide reductions)

At the farm scale, there is unmistakable evidence to suggest that devoting 5-10%<sup>i</sup> of lowland farmland to the Farmland Wildlife actions has significant positive impacts on wildlife abundance within that farm. Taking land out of production need not impact yields. In fact, wildlife friendly farming increases crop yield. One study published in 2015, showed that farmers could manage up to 8% of land for wildlife with no net loss in yield as the wildlife management such as flower rich margins can boost yield/ha due to improved pollination and pest predation.

In addition to these simple measures, ELM should reward farmers for more complex interventions, including:

- Undertaking targeted management to support rare and/or declining species such as lapwing, turtle dove and many species of pollinating insects.
- Managing, enhancing, and creating areas of wildlife rich habitats and protected areas (e.g. Sites of species scientific interest). Conserving, enhancing and creating wildlife habitats, can also help store carbon, reduce flooding, enhance landscape and improve wellbeing, for example.
- High nature value farming systems, which are low intensity farming operations that are valuable for wildlife as they often help maintain species rich habitats, such as hay meadows, a coastal and wet grasslands. These farms can support significant populations of waders, flowers and insects, for example.

The Westminster Government should not restrict ELM funding to farmland. A range of other land holdings, and land managers can deliver for the natural environment. For example, local communities, non-governmental organisations, and private individuals (non-farmers) can help deliver wildlife rich habitats for a full suite of species, whilst helping to store carbon, ensure clean water and enhance wellbeing. Many have begun to show an interest in rewilding projects, done in the right way and in the right places, rewilding could deliver benefits for biodiversity and help recover the natural environment.

**How effective are the new measures to enhance biodiversity within the Environment Bill, particularly biodiversity net gain and Nature Recovery Networks? Do these measures complement existing regulatory frameworks and address issues surrounding how to value nature?**

The Environment Bill's target setting framework has the potential to direct ambitious, forward looking environmental policies that could reverse environmental declines and drive genuine recovery. However, we are concerned about several weaknesses in the target provisions:

- The lack of an overarching objective in the Bill means the level of ambition need not be high and, combined with the lack of a non-regression clause, permits the setting of targets that are less stringent than those currently existing. There is also no guarantee that a comprehensive set of targets will be maintained as existing targets expire.
- The significant improvement test is intended to ensure targets are fit for purpose but needs clearer definition – a “significant” improvement to an already depleted environment may not drive the sort of transformative change that is required.
- Environmental improvement plans should contain specific time-bound actions that are linked to achieving the outcomes required by the targets, to ensure progress towards targets is maintained.
- The Bill should require the setting of legally binding interim targets, following the model of the Climate Change Act's 5 yearly carbon budgets, to ensure that actions to deliver on the long-term targets are not delayed until the end of the period.
- The process for agreeing targets gives broad discretion to the Minister, lacks transparency and does not guarantee independent, expert, science-led consultation.
- Target provisions should be linked to delivery mechanisms in the second half of Bill, such as Local Nature Recovery Strategies and biodiversity net gain, to ensure these form part of a coherent set of actions to achieve long-term targets.
- Because of the urgency of the ecological crisis and the need for parties to the Convention on Biodiversity to agree ambitious goals for nature, we would like to see the Bill amended to place a duty on the Secretary of State to set out his intentions for setting a target to reverse the decline of nature in time to influence international negotiations in 2021, and then to set that target as soon as possible following the conclusion of the negotiations.

Nature Recovery Networks are a potentially important and effective measure for biodiversity, they are not mentioned on the face of the Environment Bill. The explanatory notes make clear that Local Nature Recovery Strategies are intended to provide a basis on which to build an NRN but the bill creates no duty to do so. The LNRSs themselves require strengthening to ensure an adequate obligation to act upon them, for example in planning processes. The Bill establishes the 25 Year Environment Plan as the first Environmental Improvement Plan—and thus some commitment to developing an NRN—but is a relatively weak provision to ensure the creation and maintenance of an effective national network.

The biodiversity/net gain system would be a helpful addition to nature protection and would fit comfortably with the existing regulatory framework. It is narrowly framed, addressing only a sub-set of development impacts and with little/no strategic direction of investment toward wider public benefits or government priorities. This is unfortunate as it misses the chance to link with other policy mechanisms, to deliver transformative green infrastructure and changes in the public value of nature, and major carbon benefits. Under current plans we expect <5% of a potential >0.5MtCO<sub>2</sub>e/yr carbon benefit to be realised – a major lost opportunity equivalent to the projected 2050 footprint of the minerals or petrochemical industries<sup>[1]</sup>. Going by the Defra Impact Assessment, biodiversity/net gain could deliver approx. 8% of the Government's 25-year nature recovery target – a reasonable contribution but not a game-changing one. The proposed metric for biodiversity/net gain is similarly tightly designed around the needs of the system with little/no scope for wider use. The system also has broad exemptions for development orders (eg new towns) and infrastructure projects, and would not protect new habitat beyond 30 years, undermining its benefits and legacy.

### **How should Nature Recovery Networks be planned, funded and delivered?**

A national NRN requires clear statutory underpinning both to establish the network and enable its management and improvement. Detailed planning and delivery should be undertaken at as local a level as possible, in partnership with local stakeholders, and accounting for local contexts and priorities and existing networks. Ultimate responsibility for the NRN should be held at a national level, where quality assurance of local networks and reporting against targets and objectives should be undertaken. Prioritisation and decision-making should be transparent, based on science, and democratically accountable. Network design and delivery should account for and include additional potential environmental benefits (such as carbon storage, water management or community access) but should, at heart, be concerned with the recovery of nature and biodiversity. Undertaking mapping and developing partnerships will be key elements of a functioning and well-governed network but these should be oriented towards delivering the network on the ground through the improvement, restoration and creation of wildlife-rich natural habitat. Success of an NRN will depend on multiple factors but should include measures of species recovery and habitat connectivity, and not only habitat extent.

At the heart of NRNs will be the existing network of protected and designated sites for nature. Monitoring and management of these sites are already variously held statutory obligations, albeit not always fulfilled. Funding to establish and maintain a national NRN should be additional to funds required to fulfil statutory obligations on the part of government. Dedicated funding for scientific expertise and mapping may be required where an NRN creates additional burdens for local authorities or record centres. Delivery of networks should be able to draw on varied sources of funding—public and private—and, where possible, pool budgets from multiple sources to maximise

benefits for nature. NRNs will be important both for spatially prioritising the delivery of funds from national mechanisms (ELMS, Net Gain, Climate for Nature Fund) but also for identifying opportunities for investment locally.

### **How effective are other policies for conservation and enhancement of existing natural habitats, such as the Woodland Grant Schemes?**

Nature is fairing worse in the UK than most other countries<sup>[1]</sup>, with more than half the species monitored between 1970 and 2013 in decline, and one in 10 at risk of extinction<sup>[2]</sup>.

Conservation and enhancement of ecosystems is essential to deliver biodiversity recovery, climate change mitigation and adaptation, plus many other services to society. It is vital that policies are put in place that can reverse declines and deliver recovery. This requires clear targets, responsibilities and timelines for delivery, along with available funding and support necessary to generate action. Sufficient funding must be made available support protected areas and provide enhanced networks for nature recovery throughout the UK. Public funding must be focussed on delivery of public goods, especially environmental benefits.

In the case of woodlands, woodland specialist species include some of the UK's fastest declining species<sup>[3]</sup>. An enhanced network of ecosystems should include native woodland habitats whilst also delivering other nature rich habitats, such as heathland, blanket and raised bog, fen and swamps, and coastal habitats such as saltmarsh and mudflats.

#### Co-ordination of UK environmental policy

### **How can biodiversity and ecosystems help achieve the air, soil and water quality objectives in the 25 Year Environment Plan?**

We can look to achieve water quality objectives set out in the 25-year environment plan through enhancing, protecting, and restoring our natural environment, especially where freshwater is present. In agricultural settings, more green space, whether it be buffer strips, field corners, cover crops, or creation of suitable habitat could help to reduce the effects of pollution. This needs to be targeted, with strips/areas of uncropped land located adjacent to watercourses. Restoration of targeted habitat and watercourses, such as restoring dried reedbed, and natural meanders in river sections, can help to bring more flow and oxygen to the water; improving water quality and reducing flood risk downstream. Natural flood management schemes, which can range from large scale habitat creation (e.g. woodland, saltmarsh, peatland), to reconnecting rivers to floodplains, to small woody dams, can also contribute to managing diffuse pollution by slowing the flow and accumulating silt load on fields as opposed to riverbeds. Recent evidence also suggests that beavers could play a role in improving water quality, reducing nitrate, phosphate and suspended sediment, and increasing dissolved organic carbon downstream of their dams (<https://www.devonwildlifetrust.org/what-we-do/our-projects/river-otter-beaver-trial>). Direct

---

<sup>[1]</sup> "on the Biodiversity Intactness Index (an assessment of how damaged nature is across the world), the UK was ranked 189 out of 218 countries." *State of Nature* report, 2016.

<sup>[2]</sup> [rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf](https://rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf)

<sup>[3]</sup> UK woodland bird index figures 1970-2016

action can also be taken by water companies, and sites such as the Ingoldisthorpe integrated constructed wetland provides an example of how natural habitat can be used to sustainably treat water whilst avoiding the installation of costly carbon intensive nutrient stripping techniques (<https://norfolkrivertrust.org/ingoldisthorpe-wetland-creation-natures-own-water-treatment/>).

## **How well is the UK addressing biodiversity loss in its Overseas Territories and in international development partnerships with other countries?**

### UK Overseas Territories - Marine

The UK and our Overseas Territories are custodian of the fifth-largest marine estate in the world, which represents a significant responsibility and opportunity in every major ocean basin on the planet. The UK Government's flagship Blue Belt Programme, initiated in 2016, has overseen a transformation in marine protection and is on track to provide long-term protection of 4 million km<sup>2</sup> of rich oceanic waters- almost 60% of the UK's total 6.8 million km<sup>2</sup> marine area. This has in turn enabled the UK to take an international leadership role in pushing for a new global '30 by 30' ocean target (to protect 30% of the world's oceans by 2030) under the Convention on Biological Diversity (CBD). Specifically, the UK created the Global Ocean Alliance in 2019 in support of achieving its goal of 30% protection, and under its successful leadership the membership has expanded to 22 countries, including Canada and Germany.

The major risk to the Blue Belt is now ensuring the long-term protection of its large-scale marine reserves. All UK Government funding currently ceases in March 2021, which has the potential to leave a high-profile network of 'paper parks' undermining our position in the middle of crucial biodiversity negotiations on future targets. It is therefore vital that the UK Government maintains its commitment of £7m per annum to fund the management and enforcement of these flagship 4 millions square kilometres of protected ocean.

### UK Overseas Territories – Terrestrial

The terrestrial environments of the UK Overseas Territories have been less well supported than the marine environment for the past 5 years, and an equally ambitious partnership approach is required to help safeguard their important terrestrial biodiversity. Funding is one of the key impediments to progress, as the Territories are ineligible for most domestic and international environment funding due to their unique constitutional status. One of the only funding mechanisms is the vital Darwin Plus programme. In March 2020, the Chancellor made a very welcome announcement that this annual funding stream would be increased to £10m per annum. It is vital that this is now well-programmed into three tiers to ensure that it can deliver effectively for OT conservation. Those tiers are:

- Small-scale OT grassroots conservation projects up to £100k in size. These projects should only be available to in-Territory organisations, and would replace and improve upon EU 'BEST' project funding.
- Medium-scale OT conservation projects up to £300k in size, as currently funded via Darwin Plus
- Large-scale restoration projects (£1m-3m). This would provide much needed funding for transformational projects, such as eradications of introduced species, wetland restoration for flood control, peatland restoration for climate mitigation etc.

### International development partnerships

2019 IIED analysis commissioned by CAFOD, RSPB, Oxfam, Christian Aid, WWF-UK and Greenpeace on the current fitness of UK ODA to deliver a joined-up, sustainable development approach that tackles poverty, protects nature and addresses climate change, concluded that while some funds, such as the DEFRA and DFID-managed Darwin Initiative and Illegal Wildlife Trade Challenge Fund, explicitly aim to integrate poverty and environment objectives, the bulk of cross-governmental ODA goes to funds that are dedicated to stimulating non-targeted economic growth or to addressing security concerns. Indeed, while one of the key findings of the recent IPCC (2019) and IPBES (2018) reports was the need for solutions that integrate livelihood, land management, and environmental protection approaches to tackling poverty and climate change – often called nature-based solutions, UK ODA spending trends over the past ten years have been moving in the opposite direction.

We note, however, that in 2019 there have been commitments to new funds for nature and the climate, and these have the potential to pioneer the joined-up approach that is needed within UK ODA to ensure they tackle the triple challenges of poverty, climate change and nature loss. The government has shown leadership by announcing a doubling of International Climate Finance to £11.6 billion over 5 years from 2021 to 2026 while the Biodiverse Landscapes Fund, and other funds announced in September 2019, are a positive recognition of the need for greater protection of nature and its role in tackling climate change and supporting people's livelihoods.

The UK should:

- Review UK ODA spending to ensure that all future spending is climate and nature-positive;
- Ensure new climate and nature funds are transformative, with an increased focus on nature-based solutions for climate change and poverty reduction and based on the priorities of national governments and local communities;
- Immediately halt negative investments in large-scale commercial agriculture and fossil fuels
- Commit to finding new and additional sources of climate and nature finance;
- Develop a coherent whole-of-government approach so that all development, diplomatic, security and trade policies tackle poverty, climate change and nature loss as a core objective.

### **What outcomes and protections should the UK Government be pushing for at the forthcoming UN negotiations on the post-2020 global biodiversity framework at the Convention on Biological Diversity COP 15?**

The UK must work with other governments to ensure that several key elements of the CBD post-2020 biodiversity framework are strengthened as part of a coordinated recovery and to build the connections between the two agenda. These include commitments by 2030:

- To bend the curve of biodiversity loss,
- By 2030 **species populations** are recovering. To maintaining and improving **habitat** quality and extent, especially no loss of intact ecosystems. Supported by a stronger ask on restoration and underpinned by commitment to a **30% protected area** target for land, seas, and water.
- To tackle the **key drivers of biodiversity loss**. There will need to be a renewed ambition on supply chain impacts, drivers of deforestation, and wildlife trade/sustainable use. The UK should consider supporting a footprint target and commitments to tackle environmental crime within the CBD framework.
- For a significantly enhanced framework or mechanism on **implementation and accountability**
- Sufficient **finance** to support the ambition in the framework, building strong connections to delivering and investing in benefits for local livelihoods.



## Economics and biodiversity

### **What are the possible approaches to balancing economic growth and conservation of nature and its contributions? Is there evidence these approaches work and can be implemented?**

This question is based on the premise that economic growth and the conservation of nature must always be in conflict, and that one can only be furthered at the expense of the other. RSPB fundamentally disagrees with this premise on several grounds.

Firstly, actions taken to conserve nature now represents in the UK a significant economic sector in its own right, and one that has grown considerably. Recent studies have shown that the natural environment supports almost 750,000 Full Time Equivalent (FTE) jobs and over £27.5 billion of economic output across the UK.<sup>1</sup>

Secondly, the conservation of nature supports many economic activities, including those that depend on access to high quality natural environments, e.g. ecotourism, and those that exploit natural resources, e.g. fishing. For example RSPB reserves across the UK attracted £66 million into the surrounding communities in 2009, supporting 1,872 FTE local jobs.

Thirdly, all economic activity, to a greater or lesser extent, depends on natural ecosystems and the services they provide. For example, the Bank of England has highlighted the risks posed to economic stability by climate change.<sup>2</sup> Natural stability underpins economic and societal stability.

Lastly, it is important that the Committee take full account of the value of the contributions of nature to the economy. The UK natural capital accounts: 2019, published by the Office for National Statistics, noted that in 2016, with the addition of new services, the partial asset value of UK natural capital was estimated to be nearing £1 trillion (£958 billion)<sup>3</sup>.

As recognised by the Natural Capital Committee; “There is a huge economic prize to improving the environment for the next generation. If government fails, the environment will become a drag on the economy.”<sup>4</sup>

### **What does the UK Government need to do to maximise human prosperity – in terms of health, economic, and social wellbeing—within the ecological and resource constraints of a finite planet? What alternative models and measures of economic welfare can feasibly help achieve this?**

The UK Government must recognise that GDP alone is an inadequate measure of human prosperity, as acknowledged in the Istanbul declaration on measuring and fostering social progress.<sup>5</sup> Maximising

<sup>1</sup> <https://www.rspb.org.uk/globalassets/downloads/documents/positions/economics/natural-foundations---conservation-and-local-employment-in-the-uk.pdf>

<sup>2</sup> <https://www.bankofengland.co.uk/knowledgebank/climate-change-what-are-the-risks-to-financial-stability>

<sup>3</sup> <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapitalaccounts/2019>

<sup>4</sup>

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/858739/ncc-annual-report-2020.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/858739/ncc-annual-report-2020.pdf)

<sup>5</sup> <http://www.oecd.org/site/worldforum06/istanbulworldforum-measuringandfosteringtheprogressofsocieties.htm#:~:text=The%20Istanbul%20Declaration%20The%20OECD%2C%20the%20European%20Commission%2C,of%20improving%20policy%20making%2C%20democracy%20an>

human prosperity in terms of health, economic and social wellbeing implies being able to measure and monitor all of these aspects of human prosperity in a meaningful way, making policy decisions on the basis of this information, and, through those policy decisions, seeking to maximise all three of these aspects.

The UK Government is fortunate in having several examples of such an approach in Scotland, Wales and Northern Ireland. A

For example, the Well-Being of Future Generations (Wales) Act 2015 seeks to improve social, economic, environmental and cultural well-being in Wales. The Act places a statutory requirement on public bodies to prioritize and adhere to its sustainable development principles by seeking “to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs” through “five ways of working”.

The COVID-19 crisis offers a clear opportunity to deliver such an approach across all of the UK. A recovery based on fiscal austerity driven by spending cuts and weak links to sustainability and resilience failed post 2008 and further locked in the unproductive fossil fuel economy. A targeted ‘green stimulus’ can be more resilient in supporting recovery in the long-run than ‘brown’ alternatives and will also improve quality of life.

#### Pairing nature-based solutions to climate change with biodiversity:

#### **Which nature-based solutions are most effective in achieving both climate and biodiversity goals?**

The protection, restoration and creation of a range of carbon and nature rich habitats are the most effective NBS. Our [research](#) showed that these habitats, in particular ancient woodland, peatland and coastal wetlands contain 2 gigatons of carbon (equivalent to four years of the UK’s annual emissions) yet two thirds of are outside protected areas and many are in poor condition. It highlighted that the UK’s **peatlands** have a huge role to play, especially in Scotland, in locking up carbon (an estimated 3 billion tonnes) as well as being internationally important for nature. However, much of our blanket bog is now severely degraded by drainage, grazing and burning. The private benefits these bring e.g. to grouse moor shooting are greatly exceeded by the destruction of public goods resulting. Whilst England’s blanket bogs should be a net carbon sink, they are instead releasing 350,000 tonnes of CO<sub>2</sub> annually, with 75% of these emissions a direct result of burning. Burning is also substantially changing the vegetation, with significant impacts on wildlife, as well as increasing wildfire and flooding risk. To enable this NBS to fulfil its potential burning peat and extraction must be banned and rewetting and restoration prioritised. The UK’s **woodlands and forests** also clearly have an important key role to play but it should be noted that single-species plantation forestry does not constitute an NBS as reflected in these internationally recognized<sup>1</sup> [NBS guidelines](#). A recent RSPB commissioned [evidence review](#) highlights that not only do coniferous plantations have very limited biodiversity value, they also deliver reduced climate benefits with more rapid short term sequestration being outstripped by reduced long-term carbon storage, which is much higher in native broadleaved woodlands. Additional RSPB research in progress reinforces this (see below). The UK’s **coastal, seagrass and kelp bed habitats** have a smaller role to play in land area terms but are internationally important wildlife habitats and can be very efficient at carbon uptake (saltmarsh sequesters carbon 2-4 times faster than tropical rainforest) and therefore still have an important role to play for

---

[d%20citizens%E2%80%99%20wellbeing.](#)

climate mitigation. The protection and re-creation of these habitats e.g. saltmarsh by coastal realignment should be prioritized; the co-benefits of this also yield many benefits e.g. the RSPB's Medmerry coastal site provides flood protection, saves £300,000 per year in flood preventing costs, and includes 138 hectares of intertidal habitat. Some of the saltmarsh is now also grazed by cattle. It protects 348 properties that were at risk of flooding, and main roads serving 5000.

**What would constitute clear indicators of progress and cost-effectiveness of nature-based solutions and how should trade-offs and co-benefits associated with nature-based solutions, biodiversity and socioeconomic outcomes be considered?**

Clear indicators of progress and cost effectiveness are when **multiple outcomes** can be delivered. Decisions regarding nature must prioritise multiple, diverse biodiversity outcomes. They should also seek to **maximise** co-benefits via a whole range of ecosystem services to humans including carbon storage, water quality, flood management, air quality, tourism and recreation value, soil health, human physical and mental health. For example, the decrease in the minority recreational value of grouse moors (currently leading to severe degradation of England's upland peatlands, see above) would be considered a minor trade-off compared to the host of other benefits delivered by peatland restoration, namely carbon sequestration, internationally important biodiversity (e.g. curlew) water quality, flood amelioration, and wildlife tourism.

The need for **long-term decision making** is also essential in considering tradeoffs and co-benefits: short-term solutions will not solve the biodiversity and climate crises, sufficiently long timescales are vital (e.g. 50-100 years) Long-term carbon sequestration and storage should be prioritised over short term gains that may have negative biodiversity outcomes. Recent RSPB restoration mapping research (to be launched later this year) has found that compared with standard plantation forestry using Sitka spruce, mixed broadleaf woodlands are better for long-term carbon sequestration, even accounting for carbon storage in timber products. Tree planting on deep peat however is highly detrimental – short-term carbon gains are significantly outweighed by loss from the soil and biodiversity decline (Crane, 2020). Maximising benefits over longer timescales will also substantially increase socioeconomic benefits – the risks of dangerous climate change and ecosystem collapse over the next century will make-or-break our resilience and prosperity as a society. Short-termism in the face of such a challenge would be disastrous.

**How can funding be mobilised to support effective nature-based solutions to climate change? How can the private sector be encouraged to contribute to funding?**

The RSPB welcomes the commitment to invest £640 million in a Nature for Climate Fund. This means investing in restoration and creation of multiple habitats including upland and lowland peatland restoration. This will maximise the value for money by providing the greatest range and level of benefits and the greatest degree of permanence of those benefits.

In our briefing, "The Nature for Climate Fund – how to Spend £640 million?" (this briefing is available on request), we outline spending recommendations to meet existing Government targets and increase ambition for peat (table 1).

Habitat	Target (in hectares)	Number of Facilitators	Cost (£)/hectare	Total Cost (£)	Annual emissions savings/sequestration (tCO2e)
Tree planting / woodland creation (without land	30,000	30	5525	165,750,000	321,300

purchase)					
Blanket bog restoration	70,000	70	865	60,620,000	312,900
Swamp and fen creation on lowland peatland (with land purchase)	10,000	10	30,045	300,450,000	352,300
Swamp and fen creation on lowland peatland (without land purchase)	5,400	5	3,045	16,443,000	190,242
<b>Total</b>	<b>115,400</b>	<b>115</b>	<b>n/a</b>	<b>543,263,000</b>	<b>1,176,742</b>

The RSPB has also identified opportunities for the Government to underwrite the risk of investing in natural assets. By de-risking investment in nature Government can catalyse market opportunities and leverage in private investment in nature with the potential to create a large number of jobs across a range of skill sets. The more mature US natural investment markets employ 220,000 people directly in the 'restorative economy'. Specific policy opportunities identified are for:

1. Capacity and floor price auctions for biodiversity net gain (>£1bn)
2. UK domestic carbon market guarantees (>£500M)
3. Agricultural sector investment through ELMS (>£5bn)
4. Risk guarantees for Nature-Based Solutions in the water industry (>£1bn)
5. A dedicated innovation fund for the Insurance industry (>£2bn)

<sup>i</sup> Winspear, R.; Grice, P.; Peach, W.; Phillips, J.; Aebischer, N.; Thompson, P.; Egan, J.; Nowakowski, M. (2010) The development of Farmland Bird Packages for arable farmers in England. *Aspects of Applied Biology*, 100 pp.347-352

<sup>ii</sup> Bright, J.A. et al. (2015). Higher-tier agri-environment scheme enhances breeding densities of some priority farmland birds in England, *Agriculture, Ecosystems and Environment*, 203, pp69–79

**September 2020**