



Written evidence to the Net Zero, Energy and Transport
Committee, Scottish Parliament

Scottish Biodiversity Strategy

Scottish Wildlife Trust

25 August 2022

The Scottish Biodiversity Strategy has the potential to deliver transformative change. However, we are disappointed that delivery mechanisms, pathways, timescales, and resources to achieve flagship policies to combat the nature crisis are absent.

The Scottish Wildlife Trust welcomes this opportunity to present evidence to the Net Zero, Energy and Transport Committee of the Scottish Parliament on the Scottish Biodiversity Strategy.

Overall views on what is needed to address the biodiversity crisis

In 2010 the international Convention on Biological Diversity set out a 10-year plan, with 20 targets – known as the Aichi targets – for protecting and conserving natureⁱ. In Scotland we have failed to meet 11 of these targetsⁱⁱ. The previous Scottish Biodiversity Strategy failed to galvanise efforts for the protection and restoration of biodiversity. Scotland continues to rate near the bottom of the Global Biodiversity Intactness Indexⁱⁱⁱ and the State of Nature report showed that 1 in 9 species are under threat of extinction in Scotland^{iv}.

In the UN Decade of Ecosystem Restoration^v we need greater drive towards transformative change to conserve and restore nature to the level necessary to support a sustainable society in Scotland. Current societal and economic normalities are preventing sustainable use of natural resources and ecosystem services, resulting in further decline in biodiversity and our quality of life^{vi}.

The **five drivers of biodiversity loss** described by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)^{vii} should be a core focus of the Scottish Biodiversity Strategy. These drivers are:

1. Land and sea use change
2. Direct exploitation of animals and plants for food and materials
3. Climate change
4. Pollution
5. Invasive non-native species

In addition to these direct drivers of biodiversity loss, there are also indirect drivers such as peoples' disconnect with nature and consequent lack of recognition for the value and importance of nature. All these drivers must be tackled by the new strategy.

Scotland should learn from the experience of other countries and draw on the many National Biodiversity Strategies and Action Plans^{viii} that have been developed elsewhere. A good example is that in New Zealand - Scotland's partner in the Wellbeing Economy Governments partnership^{ix} - where the Biodiversity Strategy 2020^x includes:

- Analysis of the problems nature faces including the **5 drivers of biodiversity loss** and the key gaps and **issues with the current system** and management approach.
- Emphasis on the **connection between nature and people** and **Nature-based Solutions** to health, economy and wellbeing.
- Input from the public and experts and a 160-page **companion report**^{xi} on biodiversity including an overview of the state, trends and pressures and **what was learned from the previous strategy**.
- Consideration of opportunities to **improve the way we work** and that the challenges we face with the current biodiversity system, recognition that **nature is at the heart of the economy** and the need to work in partnership, commit to action, create connections and be flexible.
- An implementation framework with 13 objectives, each with **measurable and time-bound goals** for 2025, 2030 and 2050. The approach is built on collaboration, being **flexible and adaptive over time** and transparent monitoring.

We can achieve considerable positive changes through rapid and improved deployment of policy instruments and collective action. Biodiversity needs to be embedded across government, ensuring policy coherence and considering the synergies and trade-offs between societal goals and alternative pathways. The public sector must play a strong leadership role in tackling the biodiversity crisis, intertwined with the approach to mitigating and adapting to climate change. Sufficient funding and resources are needed for necessary changes and reporting to ensure this is progressed with the necessary urgency.

The National Strategy for Economic Transformation^{xii} needs to recognise that our economy is embedded in nature. This strategy as it stands clearly identifies the need to transform our economy through investment in nature-based solutions, shift to more sustainable patterns of production and consumption and live within the sustainable limits of our planet. The conclusion is that this transformation is not only a necessity, but it will also create new opportunities for Scotland to prosper. We must ensure that the National Strategy for Economic Transformation and Scottish Biodiversity Strategy align.

Meaningful, **legally binding biodiversity targets** with associated indicators are needed to assess the progress made to achieving the vision. It is essential that these targets are decided upon and published as soon as possible to ensure progress is made at pace. This should align with those put forward in the proposed EU Nature Restoration Law^{xiii} if Scotland is to ensure they maintain or exceed environmental standards as stated in the EU Continuity Bill^{xiv}.

Around 75% of Scotland's land is used for agriculture^{xv}. The ongoing land use change and intensification of farming is responsible for a high proportion of biodiversity loss^{xvi}. The Scottish government spends more than half a billion pounds on farm funding every year. Yet, broadly, it is failing to help farmers and crofters to protect and restore Scotland's nature or tackle climate change. If we are to halt and reverse this decline, we need to fully support farmers to deliver public goods through climate and biodiversity benefits^{xvii}. To do so we need to replace the decades-old farm funding system with one that works for nature, climate and people, ensure at least three quarters of public spending on farming supports methods that restore nature and tackle climate change and support all farmers and crofters in the transition to sustainable farming. The changes made need to be connected across the environment at a landscape scale through progressing the Rural Land Use Partnerships^{xviii} and developing nature networks which link different habitats and nature-based solutions allowing species to move through a landscape, increasing their resilience.

Nature networks^{xix} need to be progressed urgently and decisively in Scotland as they are a critical factor in our response to the climate and nature emergency. The Scottish Wildlife Trust believes there are six priority areas for action if Nature Networks are to be taken forward in an effective and timely manner in Scotland:

- i. Leadership – There is an important role and opportunity for Nature Scot to lead on strategic thinking, championing, coordination and successful role out of Nature Networks.
- ii. National coordination – Biodiversity does not respect local boundaries. National level coordination, dovetailed with local bottom-up approaches will ensure all opportunities are realised.
- iii. Guidance for local authorities - The current draft National Planning Framework 4 requires the creation of Nature Networks. However, there is a clear gap between this expectation and the guidance made available to planning authorities

iv. Opportunity mapping should be used to create local Nature Networks and identify areas that should be prioritised for biodiversity. The Edinburgh Nature Network^{xx} used a tried and tested blueprint that can be rolled out nationwide and embeds community engagement at the heart of the process.

v. Set a reporting requirement - The draft National Planning Framework 4 omits any mention of reporting duties in relation to Nature Networks. It is important to make sure planning authorities are clear about where and when different elements of the Nature Network are to be completed and where they are to be submitted for review.

vi. Establish new funding streams - Creating local Nature Networks would require additional investment. Our estimates based on the experience with the Edinburgh Nature Network indicate that c. £1.6m p.a. for two years would provide enough funding to allow the other 31 authorities to get their Nature Network to the same position as that in Edinburgh. This funding is needed urgently and should be provided from central funds by Scottish Government. Additional funding mechanisms are available – such as the Infrastructure Levy – to ensure the next phase of development can be funded and that private sector investment can be unlocked.

Restoration of our rivers and riparian habitats represents a huge opportunity to meet climate and nature targets and provide a myriad of other benefits range from health and well-being improvements nature-based water management. The Riverwoods^{xxi} initiative provides a platform to catalyse a joined-up network of nature restoration projects along a river network. Rivers can act as back bones for nature networks, connecting habitats over a large area, allowing species to move and adapt, increasing their resilience. Protecting riverbanks and supporting regeneration of native river woodlands provides a defined focus that could galvanise the local communities and landowners into actions to improve biodiversity. The changes can be seen in examples such as those on the Tweed Valley^{xxii} and offer transparent investment opportunities.

Nature-based solutions^{xxiii} offer a means to make positive changes for biodiversity while also helping deal with local and wider societal challenges, but we must ensure that the interventions meet the International Union for the Conservation of Nature Global Standard for Nature-based Solutions^{xxiv} to avoid misuse of the term. There are varied options of nature-based solutions across different environments from urban to marine, which can offer value for money and reduce the inequality in access to the benefits of nature^{xxv}. Optimising these interventions for biodiversity will have ongoing benefits for nature, and for people, that will only improve as they mature. Nature -based solutions should form a significant part of nature networks and be prioritised when taking action to mitigate and adapt to climate change impacts across Scotland.

Financing nature restoration will need a mixture of public and private investment through initiatives such as those proposed in the £1 Billion Challenge^{xxvi}. The Trust welcomes the Nature Restoration Fund; however, the scale of the biodiversity crisis requires more than just public funding and a greater effort is needed to encourage private investment in nature restoration. The Green Finance Institute^{xxvii} estimates of £15 - £20 billion to restore Scotland's biodiversity indicates the scale of this challenge.

Invasive non-native species (INNS) prevention and eradication needs greater investment. INNS are a significant threat to biodiversity, with over 900 non-native species in Scotland to date^{xxviii}. While many of these are not invasive, those that are cost the Scottish economy £246 million a year. To ensure further spread and prevent new arrivals more investment is needed in monitoring, biosecurity and eradication.

Effective **marine planning**^{xxx} is needed to manage increasing demand for space and resources in the marine environment, and halt declining health of marine ecosystems. If applied correctly, the introduction of a plan-led system of marine planning will help avoid conflict, identify areas for appropriate development, manage resources sustainably and, most crucially, protect and enhance biodiversity.

Reflections on the outcomes specified in the consultation

It is critical that our response to biodiversity loss and climate change converge and align so that they may be dealt with holistically. The two crises are intertwined and so our response must be too. There are many opportunities for common and integrated approaches using nature-based solutions that tackle the crises as one. The Intergovernmental Panel on Climate Change's (IPCC) latest climate report^{xxx} highlights that safeguarding and strengthening nature is key to a liveable future and the Dasgupta Review^{xxxi} concludes that "our economies, livelihoods and well-being all depend on our most precious asset: Nature", highlighting that there is great urgency needed to increase protection and restoration of biodiversity for a sustainable future.

The Trust are reassured to see that there has been reflection on why previous strategies have not been successful and in particular that "What we have come to understand is that key shortcomings relating to governance and accountability structures and mechanisms for mainstreaming biodiversity into all areas of policy, including economic policy making, have undermined our ambitions".

We welcome the commitments detailed in the Strategy to "Spatially identified Nature Networks which are widespread and embedded in land use planning and management" by 2030 and that "On land, Nature Networks at landscape scale demonstrate widespread increasing resilience and health of species and habitats and increases in carbon sequestered across ecosystems" by 2045.

We very much welcome reference to "An independent body (to be determined) to monitor and report on progress". Coupled with the recognition of "An improved monitoring framework and suite of indicators is in place on biodiversity and ecosystem health" and that "Effective monitoring supports the delivery of the statutory targets". The Trust views this as a vital new development on previous approaches that could forward marked change for the benefit of biodiversity if well resourced.

While there are many commendable aspirations the current outcomes presented in the strategy are lacking considerable detail and clarity. To put it bluntly, this is currently a vision document, and we need to see delivery mechanisms in order to assess its merits as a strategy.

If we are to make meaningful positive changes to biodiversity in Scotland, we need more information on what an increase in biodiversity should look like. More detail on overall biodiversity goals and goals for each "environment" - linked closely with the promised delivery plans - would ensure sufficient meaningful improvements in biodiversity are realised across Scotland.

We would recommend the following amendments to the outcomes:

- "substantially" is qualified i.e., from 1950s baseline
- "regenerated" is defined in a glossary of terms
- The leaders pledge for nature is explicitly referenced i.e., reverse biodiversity loss by 2030. This would provide context and a logical steppingstone to the 2050 goal
- There should be more explicit reference to the IPBES drivers of biodiversity loss^{xxxii} and how these will be addressed

- There should be explicit mention of the importance of targets
- There should be detailed description of delivery strategies
- There should be mention of the importance of leadership

These outcomes need to be underpinned by legally binding targets and that can be supported by robust data. Much of the data needed to understand the state of biodiversity is available but we need to continue to fully support and resource data collection and monitoring.

We have made suggestions to the original based on this below:

By 2045 we will have substantially restored and regenerated biodiversity, so that at the very least it is equivalent to 1950s baselines, across our land freshwater and seas. Our natural environment of plants, animals, insects, aquatic life and other species will be richly diverse, thriving, resilient and adapting to climate change.

To realise this vision, we will implement legally binding targets aimed at addressing the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services five drivers of biodiversity loss coupled with detailed delivery strategies. A key stage in realising this vision will be reversing biodiversity loss by 2030.

Everyone across Government, business and society needs to play their part and this will require leadership, particularly from government, to mainstream biodiversity thorough all of our activities. Starting from now there will be a concerted effort to make sure people understand the benefits from and importance of biodiversity and are active in their role in the stewardship of nature in Scotland for future generations.

Legislative requirements to deliver the outcomes which might be needed

Biodiversity, like climate change, needs to be a central thread across government if we are to effectively halt and reverse its decline. Biodiversity needs to be considered throughout all policy areas, with integration of a biodiversity duty across all government sectors. Monitoring and reporting of progress made by each policy department, scrutinised by Environmental Standards Scotland.

In order to monitor and report on the progress made we need legally binding nature (biodiversity) restoration targets that are closely linked to those laid out by the EU in the proposed Nature Restoration Law^{xxxiii}. The **Natural Environment Bill**, promised in the Programme for Government^{xxxiv} needs to be progressed with urgency, embedding the key legislative changes and statutory targets needed to restore and protect nature.

National Planning Framework 4 draft requires creation of nature networks – this needs to be fully supported with resources and skills. The language in the National Planning Framework 4 needs greater strength around the environment, nature and climate. In short there are too many “shoulds” around environmental obligations and no “musts”. We are in a declared emergency and the tone and expectations from Government must reflect this. If this needs secondary legislation to be brought forward then this must be done.

Introduction of a new **Agriculture Bill** needs to ensure changes to current farming practices that will halt and reverse the decline in biodiversity. The changes need to fully support farmers to deliver public goods through climate and biodiversity benefits^{xxxv}. To do so we need to replace the decades-old farm funding system with one that works for nature, climate and people, ensure at least three

quarters of public spending on farming supports methods that restore nature, and tackle climate change and support all farmers and crofters in the transition to sustainable farming.

Licensing of grouse moors and implementing the recommendations of the Deer Working Group to ensure sustainable use of Scotland's uplands, providing ecosystems service for the local community and wider society.

We need to transform our marine environment. The inclusion of Highly Protected Marine Areas in the Programme for Government and confirmation of the intention to protect 10% of Scotland's seas from damaging activities is welcome. However, current legislation only allows for the designation of protected areas for specific features (habitats or species), rather than protecting everything within a specified area. The intention is that the Natural Environment Bill will address this legislative gap, which is another reason why this Bill should be brought forward without delay.

Urgent reform of aquaculture regulation^{xxxvi} is needed to address the environmental impact of existing salmon farms. We also need to see more progress on new policies and, where necessary, legislation to support a fair transition to a modern, climate and nature positive fishing industry^{xxxvii}.

Views on what else needs to happen to deliver the outcomes set out in the consultation document

Improving data availability continues to be an area in need of investment. There are a number of data sources currently available^{xxxviii}, but support of their ongoing management and continued collection of data is essential to ensure we fully understand biodiversity conditions. Support and development of the Scottish Biodiversity Information Forum^{xxxix}, as previously promised by Scottish Government in the 2020 Challenge for Scotland's Biodiversity^{xl}, would greatly improve the availability of good quality biodiversity data.

Investment in skills and knowledge across sectors to ensure effective implementation of nature restoration, from on the ground delivery to green financing initiatives.

The Trust looks forward to discussion around how to achieve "Regular and high-quality outdoor learning in – and about – nature from 3-18 years has a key role to play in increasing climate-nature literacy, positive behaviours and an update in the career pathways that will be needed to deliver a nature rich Scotland". More also needs to be done to demonstrate the benefits of biodiversity to older generations who currently have the power and influence to make changes that will benefit **future generations**.

Clearer guidance and regulation for the business community. The business community is relatively aware of its responsibilities, risks and dependencies in relation to climate change but the same can't be said for biodiversity. More should be done to support organisations such as the Scottish Forum on Natural Capital. The Scottish Government needs to articulate more clearly what the forthcoming Natural Environment Bill will mean for business.

ⁱ <https://www.cbd.int/sp/targets/>

ⁱⁱ <https://www.nature.scot/doc/scotlands-biodiversity-progress-2020-aichi-targets-final-report#Summary>

ⁱⁱⁱ <https://spice-spotlight.scot/2021/06/04/how-does-scotlands-biodiversity-measure-up/>

^{iv} <https://www.nature.scot/doc/state-nature-scotland-report-2019>

^v <https://www.decadeonrestoration.org/>

- ^{vi} <https://ipbes.net/global-assessment>
- ^{vii} <https://www.nature.scot/scotlands-biodiversity/key-pressures-biodiversity#:~:text=The%20IPBES%20identified%20the%20five,on%20the%20importance%20of%20nature.>
- ^{viii} <https://www.cbd.int/nbsap/>
- ^{ix} <https://weall.org/wego>
- ^x <https://www.doc.govt.nz/globalassets/documents/conservation/biodiversity/anzbs-2020.pdf>
- ^{xi} <https://www.doc.govt.nz/globalassets/documents/conservation/biodiversity/anzbs-2020-biodiversity-report.pdf>
- ^{xii} <https://www.gov.scot/publications/scotlands-national-strategy-economic-transformation/>
- ^{xiii} https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en
- ^{xiv} <https://scottishwildlifetrust.org.uk/news/trust-welcomes-publication-of-continuity-bill/>
- ^{xv} <https://www.gov.scot/publications/final-results-june-2019-agricultural-census/pages/2/>
- ^{xvi} <https://www.gov.scot/publications/resas-climate-change-evidence-arable-farmer-led-group/pages/3/>
- ^{xvii} <https://farmforscotlandsfuture.scot/>
- ^{xviii} <https://scottishwildlifetrust.org.uk/wp-content/uploads/2020/05/Land-Commission-RLUP-response.pdf>
- ^{xix} <https://scottishwildlifetrust.org.uk/wp-content/uploads/2022/08/Nature-Networks-Briefing-Document-1.pdf>
- ^{xx} <https://storymaps.arcgis.com/collections/9e57bb4b3d4c443889392b725ad2ae46>
- ^{xxi} <https://www.riverwoods.org.uk/>
- ^{xxii} <https://tweedforum.org/>
- ^{xxiii} <https://scottishwildlifetrust.org.uk/2021/05/what-is-a-nature-based-solution/>
- ^{xxiv} <https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf>
- ^{xxv} <https://scottishwildlifetrust.org.uk/our-work/our-advocacy/naturebasedsolutions/>
- ^{xxvi} <https://scottishwildlifetrust.org.uk/news/route-map-to-1-billion-for-nature-conservation-published/>
- ^{xxvii} <https://www.greenfinanceinstitute.co.uk/news-and-insights/finance-gap-for-uk-nature-report/>
- ^{xxviii} <https://www.environment.gov.scot/get-involved/submit-your-data/invasive-non-native-species/>
- ^{xxix} https://scottishwildlifetrust.org.uk/wp-content/uploads/2016/09/002_293__marineplanningpolicy_1373450621.pdf
- ^{xxx} <https://www.ipcc.ch/report/ar6/wg3/>
- ^{xxxi} <https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review>
- ^{xxxii} <https://ipbes.net/models-drivers-biodiversity-ecosystem-change>
- ^{xxxiii} https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en
- ^{xxxiv} <https://www.gov.scot/binaries/content/documents/govscot/publications/strategy-plan/2021/09/fairer-greener-scotland-programme-government-2021-22/documents/fairer-greener-scotland-programme-government-2021-22/fairer-greener-scotland-programme-government-2021-22/govscot%3Adocument/fairer-greener-scotland-programme-government-2021-22.pdf>
- ^{xxxv} <https://farmforscotlandsfuture.scot/>
- ^{xxxvi} <https://scottishwildlifetrust.org.uk/wp-content/uploads/2016/09/Finfish-aquaculture-policy.pdf>
- ^{xxxvii} https://scottishwildlifetrust.org.uk/wp-content/uploads/2021/03/Fisheries-Management-Policy_Final.pdf
- ^{xxxviii} <https://www.nature.scot/scotlands-biodiversity/biodiversity-where-find-data>
- ^{xxxix} <https://nbn.org.uk/about-us/where-we-are/in-scotland/the-sbif-review/>
- ^{xl} <https://www.gov.scot/publications/2020-challenge-scotlands-biodiversity-strategy-conservation-enhancement-biodiversity-scotland/pages/10/>