

Scottish Government Biodiversity Strategy

John Muir Trust response

Questions

Using your own knowledge and the evidence presented, to what extent do you agree that there is a nature crisis in Scotland? Why do you think that?

We strongly agree that there is a nature crisis. Please see Scottish Environment LINK's response in answer to this question.

What do you see as the key challenges and opportunities of tackling both the climate and biodiversity crises at the same time?

We see the challenges and opportunities for tackling both at the same time as those outlined in the Scottish Environment LINK response.

In addition, we see some of the opportunities as:

- To support rural economies as part of a just transition towards managing land for nature and for natural carbon storage. Agroecology and crofting both offer ways of managing land in a low carbon, low impact sustainable way with resulting benefits for wild places. The Food and Farming Commission's report, 'Farming for Change' models how agroecology could effectively feed a growing UK population whilst delivering for climate and improving species abundance. With more than 750,000 hectares of land in Scotland under crofting tenure, the crofting community could be at the fore of leading change amongst smaller landowners to manage land for natural carbon savings and improved biodiversity.
- To direct private investment towards managing land for carbon and biodiversity outcomes. Projects such as Wilder Carbon already exist to direct carbon investment into land-based projects that lock up carbon and enhance biodiversity. These projects demonstrate that financial responses to both crises exist and provide models for others to apply.
- To improve public health and wellbeing. Tackling both nature and climate crises together will improve the quality of the natural environment. Wilder places support peoples' wellbeing through nature connection. See the John Muir Trust's Wild and Well online repository for evidence that wild places support human health and wellbeing:
<https://www.johnmuirtrust.org/resources/category/13-wild-and-well?filter=Wild+and+Well%3A+Academic+research&sort=>
- Long term cost savings to the nation as biodiversity and nature solutions save manmade resources on future climate change mitigation.

We see some of the challenges as follows:

- Market-led development and finance is driving land use change in Scotland at a fast rate, faster than Scottish Government policy is being formed to prevent the loss of nature. Examples include the carbon market and resulting land use changes from commercial forestry plantation in Scotland, another example is the renewable energy market and onshore wind construction driving land use change near Scotland's wildest places. We would like to see the Scottish Government use its fiscal powers to direct responsible land management to achieve climate and biodiversity outcomes whilst raising funds for natural carbon solutions. The John Muir Trust's proposal for a Carbon Emissions Land Tax is an

example of a policy idea that could incentivise land management for natural carbon capture and generate funds for natural carbon solutions at the Local Authority level.

- Carbon offsetting, which is closely associated with a carbon market, is too narrowly focused on quick returns which is playing out in the expansion of commercial forestry in Scotland at an opportunity cost to biodiversity and uncertain outcomes for overall carbon emission reduction. Carbon codes and standards that include biodiversity recovery in baseline assessments and future measures of the land's ability to store carbon are needed to direct carbon finance in a responsible way that includes benefits for biodiversity.
- Knowledge gaps when it comes to being able to measure carbon savings and biodiversity gains from land use changes. We need land managers to be assessing holistic baselines for carbon and biodiversity. With a reasonably accurate, holistic assessment, it becomes possible to measure future changes in amounts of carbon being removed from the atmosphere by restored ecosystems and the improvements in biodiversity. For more detail on this please see discussion paper 'Natural Capital, Offsetting and land use' by Professor Dieter Helm.
- Integrating biodiversity outcomes into requirements for the planned design and expansion of renewables. As electrification offers a pathway to decarbonise heating and transport we need a strategy for energy that places a responsibility on energy developers and the transmission companies to consider biodiversity implications in design and to incorporate biodiversity net gain into every proposal through consultation with ecologists and land owners. SSEN Transmission has taken a lead on biodiversity for the transmission industry with a policy to achieve net biodiversity gain from all new grid transmission projects from 2025 onwards. For all current projects their policy is no net biodiversity loss.

Is the draft vision clear enough?

We support Scottish Environment LINK's response to this question.

Is the draft vision ambitious enough?

We support Scottish Environment LINK's response to this question.

Arguably the most important aspect of this strategy is its implementation and understanding what 'substantially restored and regenerated biodiversity across our land, freshwater and seas' means. To ensure the success of the strategy targeted engagement for its implementation will be key.

Do you have any suggestions for a short strategic vision which would form the title for the strategy?

Scotland's Nature Emergency Strategy (as suggested by Scottish Environment LINK).

Rural Environment Proposed Outcomes (Farmland, Woodlands and Forestry, Soils and Uplands)

Do the 2045 outcome statements adequately capture the change we need to see?

We support Scottish Environment LINK's response to this question.

In addition, we would like to see:

- An outcome on habitat connectivity and the extent and quality of native habitats. Habitat connectivity is mentioned in relation to woodlands in the 2030 milestones, but habitat connectivity can be encouraged for a range of habitat types – sometimes referred to as a mosaic of habitats – for example riparian, wetlands, ponds, montane and open moorland.

- The outcome statements explicitly acknowledge that some types of land use and land management activities (notably the unsustainable management of high densities of deer and some of the unsustainable practices associated with driven grouse shooting) will have to discontinue because they are incompatible with restored and regenerated biodiversity.

Are the 2030 milestones ambitious enough? Are we missing any key elements?

We support the comments made by Scottish Environment LINK in their response to this question.

We would like to see the 2030 milestones mention Scottish Government policy that will reinforce and underscore the responsibility of landowners and land managers to deliver for biodiversity by 2030. This can include milestones that set a clear end date to land management practices that are incompatible with biodiversity outcomes. It can also include responsibilities for managing deer at sustainable numbers to enable natural regeneration and a licencing scheme for grouse moors. We would welcome specific reference to montane woodland, Caledonian pinewood, arctic alpine plants and rainforest in the 2030 milestones.

What are the key drivers of biodiversity loss in this outcome area?

We support the comments made by Scottish Environment LINK in their response to this question.

To the Scottish Environment LINK response we would add:

- Unsustainably high deer numbers and the damage of centuries of over grazing which continue to prevent native woodland regeneration. Please see Scottish Environment LINK's deer publication 'Managing deer for nature, climate and communities' published 2019 for a summary of the problem. The scale of these impacts is evident when considering 18,000 square kilometres, or 23 per cent of our total land area – is devoted primarily to recreational deer stalking, according to a 2016 report commissioned by the Association of Deer Management Groups (please see the John Muir Trust's 'Just Transition and Wild Places' publication for more detail).
- Intensive grouse moor management, muirburn and the illegal persecution of wildlife. According to a 2013 report by the Scottish Moorland Group, 12.5 per cent of Scotland's total land area (10,000 square kilometres) is managed to ensure an unnatural ultra-density of red grouse during the autumn shooting season. Intensive driven grouse moor management focuses on maintaining an open, treeless landscape composed almost entirely of heather that provides food, shelter and nutrition for red grouse (please see the John Muir Trust's Just Transition Publication for more detail).
- Loss of healthy functioning peatlands to renewable energy development. As the UK grid continues to decarbonise, the carbon costs of developing on peatland will increasingly make this type of development untenable. We do not see any justification for development on peatland and, in the absence of any accurate estimate of the true extent of carbon emissions from the peatlands that are damaged and destroyed by development we recommend this strategy signals that peatlands will be protected for their carbon and biodiversity importance. For a paper on the carbon costs of developing on peatlands, please see 'Quantifying the land-based opportunity carbon costs of onshore wind farms', Fabrizio Albanito, Sam Roberts, Anita Shepherd, Astley Hastings, Journal of Cleaner Production, 2022.
- Commercial forestry plantations that fail to plan for native woodland planting and biodiversity.

- The absence of environmental safeguards to protect wild salmon from sea lice and chemical pollution, both by-products of Scotland's aquaculture industry, has been having a serious detrimental impact on wild salmon and sea trout populations. These migratory fish bring important nutrients upstream into upland areas; a steep decline in their numbers over the past 50 or so years has changed river ecologies and reduced the biodiversity of life upstream. At the same time, the absence of riparian woodland habitats in the uplands means these species do not have the environment they need in which to thrive. The Biodiversity Strategy needs to acknowledge that some species are integral to different types of environments, such as marine, coastal, river, uplands and their health is interwound with the health of these different environments.
- For rare native plant life, such as the lesser butterfly orchid, roadside verge cutting whilst the plants are still flowering reduces the reproductivity chances of the orchids and is a threat to the future population. We are aware a separate Plant Strategy has been published, but whilst the example here is of plant life, the wider point is that how we choose to manage public spaces can be a driver of biodiversity loss or encourage biodiversity bounce back.

What are the key opportunities for this outcome area? What are the key challenges for this outcome area?

We support Scottish Environment LINK's response to this question.

In addition, we see key opportunities as:

- Huge potential for removing carbon emissions naturally given the land mass in Scotland available to deploy natural carbon approaches to land management. Please see John Muir Trust's 'Just Transitions and wild places' publication for Government policy ideas that will incentivise land management for biodiversity and natural carbon storage.
- There is a public interest case for new fiscal measures, such as a new Carbon Emissions Land Tax, which could raise revenue for Local Authorities to fund future nature restoration projects in their area whilst incentivising land management changes in the public interest.
- New employment, learning and training opportunities in Scotland's rural economy with jobs for ecologists, site contractors, deer management contractors, rangers, wildlife tourism and hospitality businesses, woodland managers and foresters.

We see key challenges as:

- Aside from the reformed agricultural subsidy, there is a policy gap in how recovering biodiversity will become the economic and financial choice for landowners as well as the environmental choice. For example, at present it remains profitable for a landowner to lease peatland for the construction of a wind farm, which comes at huge cost to biodiversity and undermines a national programme for peatland restoration. With clear policy that states some land use changes will incur high costs for the pollution and harm they cause, the Government could make biodiversity recovery the more economical choice for landowners.
- Onshore wind development taking place on peatlands. Of particular concern is development that is proposed on areas mapped by NatureScot as Class 1 or Class 2 peatland.
- Rising global temperatures are changing species behaviour and putting some specialised native plant and animal life at risk as they are unable to adapt to the changes.

2. Marine Environment

Do the 2045 outcome statements adequately capture the change we need to see?

We support Scottish Environment LINK’s response to this question.

Are the 2030 milestones ambitious enough?

We support Scottish Environment LINK’s response to this question.

What are the key drivers of biodiversity loss in this outcome area?

We support Scottish Environment LINK’s response to this question.

What are the key opportunities for this outcome area?

We support Scottish Environment LINK’s response to this question.

What are the key challenges for this outcome area?

We support Scottish Environment LINK’s response to this question.

3. Freshwater Environment: Rivers Lochs and Wetlands

Do the 2045 outcome statements adequately capture the change we need to see?

We support Scottish Environment LINK’s response to this question.

In addition, we would like to see the 2045 outcomes revised to include substantial restoration of riparian habitats in the uplands with land owners aware of their responsibility to restore these habitats. References to riparian woodland in this section would reinforce references to riparian habitats in the rural environment section of this strategy and the fact freshwater environments are interconnected with upland environments.

Are the 2030 milestones ambitious enough? Are we missing any key elements?

We support Scottish Environment LINK’s response to this question.

What are the key drivers of biodiversity loss in this outcome area?

We support Scottish Environment LINK’s response to this question.

In addition, one notable driver of biodiversity loss is the aquaculture industry due to the detrimental impacts this industry is having on wild salmon and sea trout populations – two species which are an integral part of the wild ecology of many of Scotland’s rivers. The negative environmental impacts of salmon farming have come under increased scrutiny for their role in the deterioration of the health of Scotland’s coastal waters, creating conditions that are making it harder for wild salmonids to thrive. In 2018, the Environment Climate Change and Land Reform (ECCLR) Committee completed an inquiry into the impacts, making many strong recommendations and concluding that “the status quo in terms of regulation and enforcement is not acceptable”.

What are the key opportunities for this outcome area?

We support Scottish Environment LINK’s response to this question.

What are the key challenges for this outcome area?

We support Scottish Environment LINK’s response to this question.

4. Coastal Environments

Do the 2045 outcome statements adequately capture the change we need to see?

We support Scottish Environment LINK’s response to this question.

Scotland’s coastal environments offer people an opportunity to experience some of Scotland’s wildest places. We support outcome statements guaranteed to protect existing wild coastlines and make coastal environments wilder.

Are the 2030 milestones ambitious enough? Are we missing any key elements?

We support Scottish Environment LINK’s response to this question.

What are the key drivers of biodiversity loss in this outcome area?

We support Scottish Environment LINK’s response to this question.

What are the key opportunities for this outcome area?

We support Scottish Environment LINK’s response to this question.

What are the key challenges for this outcome area?

We support Scottish Environment LINK’s response to this question.

5. Urban Environments – Towns and Cities

Do the 2045 outcome statements adequately capture the change we need to see?

We would like to see specific reference in the 2045 outcome statements to realising many more local wild places in our towns and cities.

Are the 2030 milestones ambitious enough? Are we missing any key elements?

We support comments made by Scottish Environment LINK in response to this question.

In addition to those comments, we would like to see a 2030 milestone for urban environments to have an abundance of local wild places. This could include all urban greenspace working for biodiversity. Some suggested missing elements are:

- Protecting and enhancing wild corridors for species to move freely through urban environments.
- The opportunity to enhance connectivity of between wild places in urban environments and those in the surrounding landscape – for example, coastal, freshwater and rural environments.

What are the key drivers of biodiversity loss in this outcome area?

We support comments made by Scottish Environment LINK in response to this question.

Space for nature to adapt and thrive in urban environments is reduced as the availability and connectivity between green space or local wild places is reduced.

What are the key opportunities for this outcome area?

We support comments made by Scottish Environment LINK in response to this question.

In addition, we see key opportunities as:

- Improving human health and wellbeing for people living in towns and cities by giving more people access to nature through increasing and improving the quality of wild places in towns and cities.
- Enabling cities to better withstand rising global temperatures as green spaces help to provide shade and absorb heat.

What are the key challenges for this outcome area?

We support comments made by Scottish Environment LINK in response to this question.

Challenges are similar to the key driver of biodiversity loss in the demand for land for urban development in towns and cities as well as on green belt land surrounding them. This demand for land and subsequent land use change squeezes out the space and freedom that nature has to recover, let alone, thrive.

Across our Land and at Sea – Proposed Outcomes

Do the 2045 outcome statements adequately capture the change we need to see?

Please see Scottish Environment LINK's response to this question.

Are the 2030 milestones ambitious enough? Are we missing any key elements?

By 2030 we need to have:

- All land managers, farmers, land owners, businesses and communities making biodiversity recovery a priority consideration in their everyday activities.
- All developers to be making biodiversity a consideration at design stage through to construction with the objective that biodiversity on any development site improves as a result of a land use change.
- Holistic baseline assessments completed by land owners and managers for carbon storage and biodiversity in use to measure impacts of future land use change and nature restoration projects.
- Every Scottish Government strategy and high-level policy taking into consideration whether it is compatible with the aims of the Biodiversity Strategy.

We see some missing elements as:

- The important role of communities in achieving biodiversity outcomes. Models of community land ownership around Scotland (for example, in Assynt and Coigach, Knoydart, the Western Isles and Langholm) in addition to community partnerships (for example the Heart of Scotland Forest Partnership in Highland Perthshire) demonstrate what communities can achieve for nature restoration and local biodiversity.
- Recognition that achieving the outcomes will require knowledge transfer between people who understand ecology, land management, species and habitats and people who have the resources (money, land, technology) with which to realise the outcomes.

What are the key drivers of biodiversity loss in this outcome area?

Same comments would apply as those included in responses to earlier questions about drivers of biodiversity loss.

What are the key opportunities for this outcome area?

There are opportunities for rural economies and communities to benefit from landscape scale nature restoration. According to ‘A Nature Recovery Plan’, a report published by RSPB Scotland, Scottish Wildlife Trust and WWF in 2020, large scale investment in nature restoration in Scotland would have a cost-benefit ratio of 1:7 over 25 years and nature-based tourism currently generates £1.4 billion a year and 39,000 full-time equivalent jobs for the Scottish economy.

What are the key challenges for this outcome area?

We support comments made by Scottish Environment LINK in response to this question.

To what extent will these outcomes deliver the Vision? What might be missing?

These outcomes will only deliver a vision if everybody who needs to be engaged in their delivery is engaged. A stakeholder engagement plan that is resourced, continually reviewed and impact monitored will be key.

A step towards delivering the outcomes is ensuring they are targeted more specifically at different stakeholders through an engagement plan (which could include, for example, landowners, farmers, industries, companies, public bodies and communities).

What evidence and information should we use to assess whether we have delivered the Vision?

We suggest evidence should be gathered from:

- Land managers and owners on the overall biodiversity improvements on their land (captured in regular habitat surveys, bird and species surveys, regular monitoring of trends and reporting on outcomes).
- Companies that extract natural resources from the natural environment and developers responsible for land use change to report on how they are reducing the harm to biodiversity from the extraction process or land use change and also evidence implementing company policies for biodiversity gain.
- Planning authorities who have approved planning proposals subject to conditions for improving or protecting biodiversity to evidence that the conditions of planning have been upheld.

Have we captured the key enabling factors which are essential in order for our strategy to be successful?

We support Scottish Environment LINK’s response to this question.

Are there good examples of enabling conditions in other strategies we could learn from?

We support Scottish Environment LINK’s response to this question.

Can you set out how you think any of the proposals set out in the consultation might help to eliminate discrimination, advance equality of opportunity and foster good relations?

No comment

Can you provide any evidence which informed your conclusions?

No comment

