

## **The 2020 Challenge for Scotland's Biodiversity**

A response to the Scottish Government consultation

26 September 2012

### **Introduction and general comments**

1. The Society of Biology welcomes the opportunity to respond to the Scottish Government's consultation on the 2020 Challenge for Scotland's Biodiversity. The Society of Biology is well-placed to offer informed, independent comment on the biodiversity strategy by drawing upon the wide-range and depth of expertise within its membership. The Society of Biology is also a founder partner of the Natural Capital Initiative (NCI), a leading UK forum bringing together scientists, policy-makers, business, industry and others, to discuss how the ecosystem approach might be implemented in practice.
2. This strategy document outlines many sound, practice-based measures to build on, and extend current policy and operational management of biodiversity in Scotland. However, the policy drive towards biodiversity offsetting and natural capital valuation is well ahead of the current scientific evidence and available evaluation methodologies. It is imperative that the strategy demonstrates a commitment to funding a robust agenda for further research.
3. The value of this document would be significantly enhanced by clearer timescales for individual pieces of work, and a tightening of the messages and their justifications into a strong clear statement of intent and reasoning. A consistent style, and a glossary of terminology would also be helpful in making the strategy accessible to a wide-range of stakeholders.
4. A strategy should naturally result in a series of recommendations to be translated into time-bound actions to deliver the high-level outcomes. This is a significant omission from the document. The Government must ensure that biodiversity outcomes are considered by all its directorates and agencies. Assigning responsibilities more broadly would help to mainstream the Strategy across Ministerial portfolios.
5. While we do not wish to respond to all the consultation questions, our comments are organised by the chapter structure in the document. We would be pleased to discuss further any of the issues raised in this response with the Scottish Government's Biodiversity Strategy Team.

### **Chapter 1 – Healthy Ecosystems and Ecosystem Services**

6. The move towards an ecosystems approach to the management of Scotland's land and marine environment is to be welcomed. However, while the document recognises, and emphasises, the intrinsic dynamism of ecosystems, it subsequently outlines plans for the 'restoration' of ecosystems to a notional concept of 'health'. During this period of considerable climate change we can expect a wide variety of ecosystems to emerge during the next century, making the concept of restoration redundant. Management of ecosystems must recognise this dynamism. Much more research is

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needed to define what is meant by 'ecosystem health' together with robust methods of assessment before catchment-scale evaluations can be made.

7. We recognise the importance of local decision-making in delivering the strategy, however ecological processes operate at scales beyond 'localities'. A robust strategy must recognise that local decision-making does not always operate in the national interest - and can even be a major barrier to progress in some key areas - and provide a framework for decision-making where there are conflicting priorities.

## Chapter 2 – Natural Capital and Resource Use Efficiency

8. This chapter develops the outcomes of the UK National Ecosystem Assessment into a series of principles for public policy and decision-making. However, the methodologies do not currently exist to turn the valuations of the NEA into operational and tactical decisions. In 2.3.1 an assessment approach is suggested "where the value of nature's benefits cannot be measured". Any future assessment methods should only use valuation information as one of many lines of evidence to inform public policy, and the weighting given to it should be informed by the level of uncertainty around the valuation process.
9. Biodiversity offsetting can only work effectively in a system where there is a reliable valuation process for biodiversity at an appropriate scale, across different biodiversity assets. We do not currently have a sufficiently robust process for this purpose and the strategy should make a clear commitment to the funding of further research.
10. The Natural Capital Initiative (NCI), a partnership of the Society of Biology, the Centre for Ecology and Hydrology and the British Ecological Society, organised a series of three workshops<sup>1</sup> in 2010 to consider issues relevant to biodiversity offsetting in England. A number of issues and conclusions agreed at these meetings are relevant for Scottish consideration:
  - Although current methodologies, tools and evidence are sufficient to begin increased use of biodiversity offsetting, it is still necessary to evaluate current scientific knowledge needs to increase the use of offsets.
  - Good quality data are needed to underpin the development and operation of biodiversity offsetting in the UK. The data which exist in the UK are not sufficient to allow offsetting for ecosystem services. Data collection must be augmented to encompass ecosystem services, and existing data brought together.
  - The location of biodiversity offsets should be planned strategically in order to improve ecological networks and enhance the connectivity of landscapes.
  - The capacity of stakeholders, including local authorities, to deliver ecosystem service offsetting must be improved, by developing guidance.
11. We welcome the development of a Natural Capital Asset Index for Scotland. It is essential that there is coordination with similar efforts in England. The Natural Capital Initiative could play a role here in facilitating dialogue between different stakeholders regarding the development of natural capital accounting across the countries of the UK.
12. In developing new methods of valuing natural capital assets there must be a keen appreciation of the difference between standing stocks of 'natural capital' and the turnover of this capital. The strategy

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<sup>1</sup> Natural Capital Initiative, 2010. *Towards no net loss, and beyond*. Available at: <http://www.naturalcapitalinitiative.org.uk/towards-no-net-loss-and-beyond> [Accessed 16 September 2012].

must recognise this difference and the underlying complexity of the proposals.

### **Chapter 3 – Biodiversity, health and quality of life**

13. We particularly welcome the inclusion of this chapter in the biodiversity strategy. It is important that this is translated in to targeted action with appropriate funding by the relevant Directorates, including Health and Education, to support and maintain Scotland's biodiversity.

### **Chapter 4 – Wildlife, habitats and protected places**

14. The recognition that there are 'compelling reasons for maintaining and restoring the diversity of wildlife in its own right' in section 4.4.1 is very welcome. We are disappointed, therefore, that the reasons given for selecting habitats for inclusion on the key list of priorities for action in section 4.3.8 are economic ones.
15. Many figures are quoted in this chapter with minimal justifications. For example, paragraph 4.3.4 quotes a figure of 18% of Scotland's land area that is currently conserved. However, paragraph 4.3.9 prioritises only 17% of land for future conservation. Given the richness of Scotland's environment, arguably the aim should be to increase, rather than decrease, conserved areas.
16. In paragraph 4.4.7 there is an *a priori* aim to shorten the Scottish Biodiversity List. Any changes in the list should reflect: 1) successful management of these special habitats and species; and 2) advances in knowledge about the changing state of these habitats and species.

### **Chapter 5 – Land and freshwater use and management**

17. Our previous comment that the strategy must be explicit in its recognition of conflicting priorities is particularly relevant here. We would welcome a clearer vision of the way of achieving a balance between the demand for land for productive purposes (and may have a relatively low biodiversity value) and land that is prioritised for biodiversity (and may have low productive value in the traditional economic sense). How is the balance determined and how would changes be agreed, either nationally or locally?

### **Chapter 6 – Marine and Coastal**

18. Scotland has a very extensive marine environment, with both inshore and offshore waters and it is to be regretted that it is always separated from the terrestrial environment. With the possible exception of soil biodiversity, for marine biodiversity it is too often the case of 'out of sight, out of mind'. Many aspects of the marine environment could have been included in chapters 1 to 5 of this consultation document.
19. We welcome and support the aim to establish a coherent network of Marine Protected Areas as set out in the Marine Nature Conservation Strategy 2010. However, we are concerned about the ambition to bring Common Fisheries Policy fish stocks to levels consistent with Maximum Sustainable Yield (MSY) wherever possible. Modelling has demonstrated that MSY is an unstable equilibrium and year-to-year changes in climate, reproductive success of a fish or its prey species etc., can lead to catastrophic declines in the stock. We are strongly of the view that MSY should be an absolute upper limit to exploitation, not a target.

## Chapter 7 – Measuring Progress

20. We welcome the commitment to developing indicators to track progress and wish to reiterate our comment that, similarly, the strategy must demonstrate a commitment to funding a robust agenda for further research.
21. The Scottish Biodiversity Information Forum is to be formed from “predominantly volunteers but also government and private sector”. We urge that the omission of researchers is rectified.

The **Society of Biology** is a single unified voice for biology: advising Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society of Biology is a charity, and seeks to champion the study and development of biology, and provide expert guidance and opinion. The Society represents a diverse membership of over 80,000 - including practising scientists, students and interested non professionals - as individuals, or through the learned societies and other organisations listed below. We are committed to ensuring that we provide governments and other policy makers - including funders of biological education and research – with a distinct point of access to authoritative, independent, and evidence-based opinion, representative of the widest range of bioscience disciplines.

We are pleased for this response to be publicly available and will shortly place a version on [www.societyofbiology.org](http://www.societyofbiology.org). For any queries, please contact Dr Caroline Wallace, Society of Biology - Scotland, 22-26 George Street, Edinburgh EH2 2PQ; [carolinewallace@societyofbiology.org](mailto:carolinewallace@societyofbiology.org)

## Member Organisations represented by the Society of Biology

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