NatureScot
Scotland's Nature Agency

**NatureScot**

**SCIENTIFIC ADVISORY COMMITTEE**

**DISCUSSION PAPER**

# Report on the Board/SAC meeting, February 2022

## Purpose

1. This paper reports back on the Board/SAC meeting held on 3 February 2022. It summarises the discussions held and proposes a future programme of work for the SAC.

## Action

1. **The Committee is asked to comment on the emerging forward programme of work**.

## Preparation

1. The paper was written by Sarah Hutcheon. It is sponsored by Eileen Stuart.

## Background

1. The Board and SAC met to discuss how the SAC could support the Board and NatureScot staff in delivering the new corporate plan. Professor Pete Higgins, Chair of the SAC, introduced the session and the work of the SAC.
2. A number of questions were asked after the introductory presentation on the visibility of the work of the SAC and of NatureScot’s scientific work more generally. Noting the impressive detail of work by the SAC in conjunction with staff, it was agreed that more needed to be done to improve visibility through sharing of papers, promotion of work, and making stronger connections internally and with the wider academic community.
3. A series of presentations were then given on key priorities from the emerging corporate plan:

* **Protecting Nature** through protected areas, licencing, and planning advice on land and at sea.
* **Restoring Nature** through a new biodiversity strategy, restoring peatlands, aiding nature’s recovery and transforming farming.
* **Valuing nature** so that it is valued for itself and the many benefits it provides to society, in turn attracting public, private and third sector financing for both protection and restoration.
* **Cross cutting issues** round prioritising species action, connecting people and nature, and technological advances.

1. The presentations were developed by staff in collaboration with SAC members. Each presentation considered what NatureScot currently does well, where there are gaps in our evidence, key areas of work coming up, and suggestions as to where the SAC could contribute.
2. Board members, SAC and staff then discussed the areas of work and suggested priorities. These priorities and the key points from the discussions are summarised in this paper, and then developed into a proposed programme of work for the SAC.
3. A list of attendees and of the staff and SAC members involved in developing the presentations is given in **Annex A.**

## Priorities identified

1. Presentation 1 on **Protecting Nature** was given by Nick Everett. Key priorities identified in this presentation were:

* Scientific basis required to ensure protection enhances nature in the face of (climate) change.
* Climate change and other pressures and impacts: what evidence do we need, to decide if we are using the best interventions?
* Further understanding and influencing positive behaviours and connection with nature.

1. Key points from discussion were around: whether we are able to quantify how effective our interventions are, both on the environment and in changing behaviours; how we can utilise new technologies for monitoring and analysis of data; and the extent to which we should lead on developing technologies or rely on others for that.
2. Presentation 2 on **Restoring Nature** was given by Martin Price. Key priorities identified in this, which were divided into 4 themes, were:

*Biodiversity Strategy*

* how business engages with biodiversity: evidence needed, and how to enthuse
* how social science can improve how we engage
* developing evidence base for CBD targets – especially those framed around wider society

*Peatland restoration*

* reviewing existing Peatland Action monitoring
* developing new long-term Monitoring Programme (draft March/April 2022)

*Aiding restoration in urban areas*

* mainstreaming Blue-green infrastructure-first/urban Nature based Solutions approaches and collaborative, inter-disciplinary ways of working
* greater cross-sectoral understanding of impacts (social, economic, environmental) and vulnerabilities, and the key roles of cities
* improving assessment of projects in terms of cost and valuing benefits

*Transforming farming*

* appropriate/farmer-friendly metrics
* analysis of carbon tools -> recommendations for improving inclusion of biodiversity outcomes in these

1. Key points from the discussion included: importance of working with others on carbon metrics and codes; developing work on impacts of climate change on all our work and the interventions we are promoting; dynamic conservation needs; evidence needs for proposed targets in the Natural Environment Bill; what a nature restoration code could look like.
2. Presentation 3 on **Valuing Nature** was given by Aileen Mill. Key priorities identified in this presentation were:

* Defining nature and climate literacy and identifying metrics to track it at population level
* Biodiversity metrics and natural capital assessment
* Standards for the ‘selling’ of ecosystem services such as carbon – developing Woodland Carbon Code, Peatland Code, and new codes
* Understanding demand for nature-based jobs and skills (numbers, types, timescales, locations) as we ramp up NbS, and natural capital approaches

1. Key points from the discussion focused on: the need for clear nature targets to galvanise action, and indicators of success; the importance of agricultural measures being flexible and adaptive to change; findings from the [Dasgupta Review](https://www.gov.uk/government/publications/final-report-the-economics-of-biodiversity-the-dasgupta-review) that we should continue to build on in Scotland; ensuring marine and terrestrial environments are equally covered.
2. Presentation 4 on **cross cutting issues** – prioritising habitat and species action, connecting people and nature/behavioural change and technological advances – was given by Paul Sizeland. Key priorities identified in the presentation were:

* Completion of the National Strategy for beavers
* Prioritisation of conservation translocations
* Review of implications of synthetic biology advances on future conservation translocations
* Understanding nature connectedness across Scotland’s population and eco-anxiety in young people
* Help with methods to capture and analyse qualitative social benefits that interactions with nature provides
* Ideas and indicators for wellbeing to inform proposals for a Wellbeing Act
* Data – understanding what data we need to support action and measure improvement
* Improve core to crowd – looking outside our area of expertise for new solutions e.g. CivTech approach
* Developing solutions and platforms that support actions e.g. nature Planner- Govtech funded.

1. Key points from the discussion were around: the need to be able to share and gather data from the private sector; use of apps to gather data from a wide range of people, and risk of duplication; greater connectivity leading to greater eco-anxiety; developing shared concerns into solving problems.
2. Following the presentations and discussions Eileen Stuart described the next steps in developing the SAC work programme. Board members expressed an interest in hearing more from the SAC on science at Board meetings or separate sessions (Annual Reports from the SAC are presented to the Board each year).

## Common themes

1. Building on the presentations and discussions, we are drawing up priorities for further work for the SAC. Common themes emerging from the discussion included:

* measuring the effectiveness of our work and the development of metrics;
* targets and indicators of success;
* the use of social science to improve how we engage with people;
* the identification and use of emerging technologies to develop new monitoring approaches.

1. We will develop a framework of topics arising out of this discussion to guide our future meeting agendas, and identify further ways in which SAC members can support the Corporate Plan’s science and evidence needs (for instance through Sub-groups; support to staff teams; and helping make connections with work elsewhere). These will be grouped into short, medium and long term horizons.
2. Some early topics where we anticipate SAC input include:
   * Mentoring of staff
   * Evidence evaluation to underpin key policy positions to support the Scottish Biodiversity Strategy (though we have support of an Advisory Group for this)
   * Reviewing & assessing carbon tools (noting paper on Carbon-biodiversity synergies)
   * Forecasting environmental change and implications for biodiversity action
   * Scot wind renewable proposals – assessment of likely impact on Natura interests
   * Implications and opportunities from synthetic biology, especially in relation to species control
   * Behaviour change approaches and methodologies to measure impact.
   * Refresh of the NatureScot [Strategic Evidence Needs](https://www.nature.scot/doc/naturescots-strategic-evidence-needs) overview.
3. We intend to work this up into a more detailed framework so that we co-produce a forward work plan for the next two years. This will include looking at how we can raise awareness of the science output of the organisation and develop stronger links between the SAC, Board and staff. **We would welcome comments from the SAC on:**
   * **Further main areas of work where SAC could contribute to the Corporate Plan delivery;**
   * **Additional topics which may need early engagement from the SAC;**
   * **Any members willing to contribute to further development of a work plan.**

Contact: Sarah Hutcheon

Annex A

Attendees

Board – Mike Cantlay, Cath Denholm, Kate Broughton, Ian Gambles, Pete Higgins, Jackie Hyland, David Johnstone, Colin MacPhail, Aoife Martin, Heather Reid, Nikki Yoxall, Wayne Powell

SAC – Dan Haydon, Aileen Mill, Ruth Mitchell, Neil Metcalfe, Martin Price, Jane Reid

Staff – Robbie Kernahan, Nick Halfhide, Eileen Stuart, Jason Ormiston, Graham Boyle, Sarah Hutcheon, Des Thompson, David Donnan, Nick Everett, Kath Leys, Paul Sizeland, Philippa Vigano

Apologies – Marian Scott, Mary Christie

Presentations developed by:

**Protecting Nature**. Developed by Jackie Hyland, Laura Campbell, David Donnan, Nick Everett, Ben Ross, Cathy Tilbrook, Liz McLachlan and Mike Shepherd.

**Restoring Nature.** Developed by Prof Martin Price, Kath Leys, Kay Prichard, David O’Brien, Joe Bullard, Elana Bader, Stuart Shaw and Rebekka Artz.

**Valuing nature.** Developed by Aileen Mill, Mary Christie, Brendan Turvey, Ivan Clark, Pete Rawcliffe and Elana Bader.

**Cross cutting issues.** Developed by Pete Higgins, Paul Sizeland, Philippa Vigano, Iain MacDonald, Martin Gaywood, Abi Gardner and Dougie Pollok.