

A summary report from 'A Super Year for Nature' event jointly hosted by BES SPG and CIEEM on 28 September 2021

INTRODUCTION

This event was the first of two linked events. In the first event of this series covered by this report, we explored the biodiversity and climate COPs (COP15 and COP26), how they tie together and the plans for them. The second part of this series (planned to take place in 2022) will explore the outcomes of the COPs and how they will be implemented in practice across different sectors in Scotland.

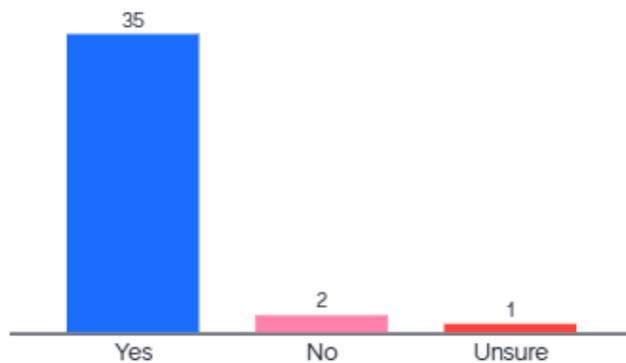
The event was open to all but was specifically targeted at students and those in the early stages of their career. 75 people attended the event which was held on Zoom.

We were delighted to be joined by the following speakers:

- Debbie Bassett, Climate Change and CoP Coordinator, NatureScot
- James Curran, MBE, Fellow of the Royal Society of Edinburgh
- Tamsin Morris, CEcol CEnv MCIEEM, Freelance ecologist
- Clive Mitchell, Outcome Manager Nature and Climate Change, NatureScot
- Professor Des Thompson, FCIEEM, Principal Adviser on Science and Biodiversity, NatureScot

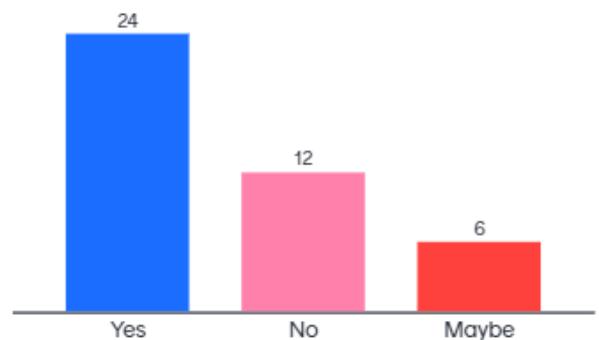
At the start of the event, attendees were asked the following questions on Mentimeter:

Do you know what COP26 is?



Do you know what COP15 is?

Do you know what



SPEAKER PRESENTATIONS

A Road to the Two CoPs - Debbie Bassett, Climate Change and CoP Coordinator, NatureScot

Headline: 'Nature is Climate, Climate is Nature'

Key points:

- The twin Climate and Nature Crises are coupled and must be tackled together: we tackle both or we tackle neither.
- Nature can contribute to more than 30% of our net zero targets.

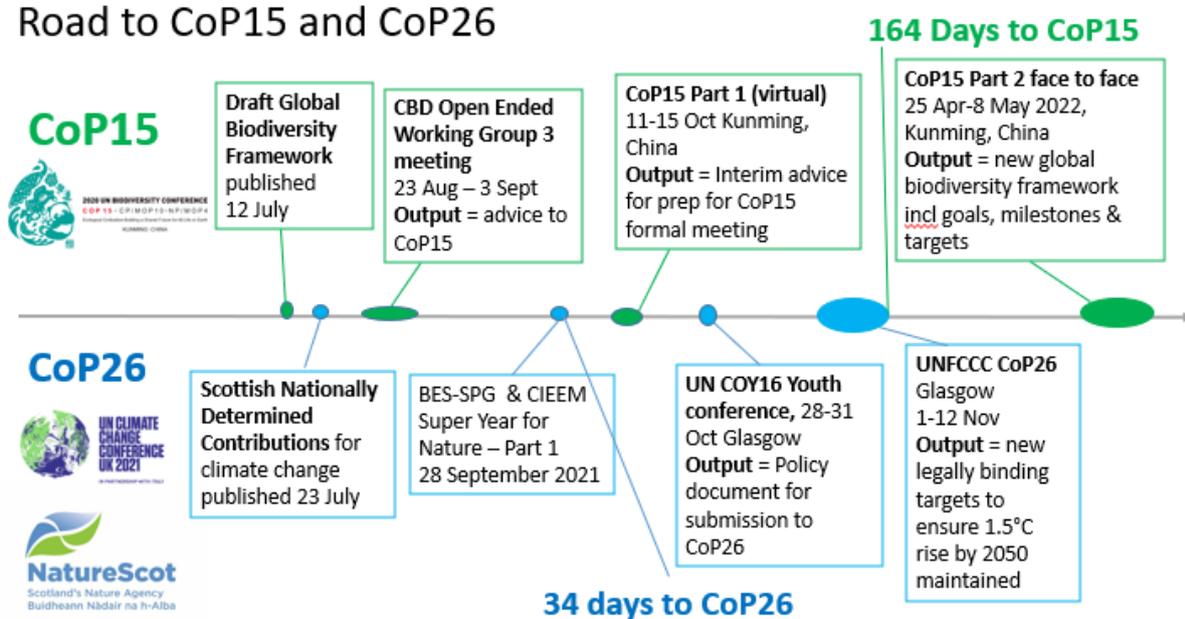
- Involvement of people from across all society in developing and delivering nature-based solutions, and support through changes in society, will lead to a just transition.

COP15 will now take place in two parts, part 1 is virtual (11th-15th October, 2021) and part 2 will be a face to face event in Kunming, China with the overarching aim to agree targets to 2030, milestones, and goals to 2050. After COP15, a new Scottish Biodiversity Strategy will be published in October 2022. Further information about the Edinburgh process, COP15 and related events can be found here:

<https://www.nature.scot/scotlands-biodiversity/scottish-biodiversity-strategy-and-cop15/countdown-cop15>

COP26 in Glasgow (1-12th November 2021) will focus on limiting global temperature rise to 1.5°C above pre-industrial levels by 2050. Nationally Determined Contributions (NDCs) are required to be published by all nations. Even though Scotland is not a signatory to the convention, Scottish Government has published a NDC. In Glasgow, there will be a **Blue zone** controlled by The UNFCCC – attended by c.25,000+ ministers, official delegates, observers and media, with the main business of international negotiations to agree (legally binding) new targets to ensure temperature rises are limited to 1.5°C (Paris Agreement) - and a **Green Zone**, controlled by UK Government, and attended by 150,000 + general public, youth groups, civil society, academia, artists, business, NGOs, media and others to have their voices heard through events, exhibitions, workshops and talks that promote dialogue, awareness, education and commitments. NatureScot has secured space in the Blue and Green Zone at COP26 and will be showcasing how nature can help deliver climate targets and address the biodiversity crisis.

Road to CoP15 and CoP26



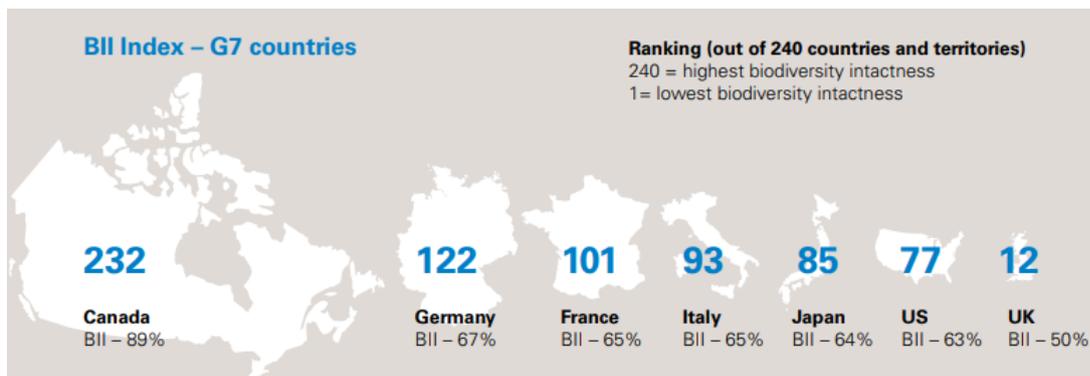
Scottish Perspectives on Climate Change and Biodiversity - Tamsin Morris & James Curran

Tamsin highlighted key findings from Scotland's Nature on Red Alert Report – Climate Change Impacts on Biodiversity prepared for Scottish Environment LINK and WWF in 2018. This report reviewed over 140 scientific papers and looked at impacts on Scottish habitats and species. <https://www.scotlink.org/publication/scotlands-nature-on-red-alert-climate-change-impacts-on-biodiversity/>

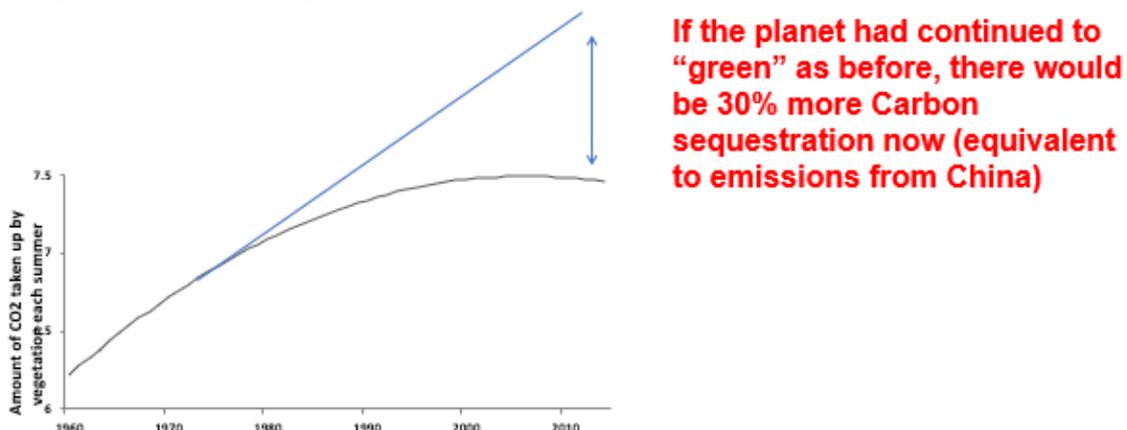
Impacts are already observed on many iconic species such as Freshwater Pearl Mussel, Capercaillie and Dwarf Willow. At a river in Aberdeenshire, average temperatures in April have risen by 1.46°C between 1970 and 2000 with associated impacts on many fish species. In moorland areas a reduction in craneflies after hotter, drier summers has led to subsequent reduced survival of chicks of Golden Plovers. A 2°C rise by end of 21st century is predicted will lead to a 44% decline in Golden Plover populations.

A report by NHM and RSPB on the Biodiversity Intactness Index (which shows how much 'nature' is left) shows that Scotland is at 56% and the UK at 50%. The UK is in the bottom 12% of countries and lowest of the G7.

<https://www.rspb.org.uk/globalassets/downloads/about-us/48398rspb-biodiversity-intactness-index-summary-report-v4.pdf>



James Curran, delved into the importance of maintaining land and ocean ecosystems which lock up around half of global carbon emissions. About half of the carbon dioxide (CO₂) that human activities have emitted to the atmosphere has been taken up by natural carbon sinks in vegetation, soils and oceans. These natural sinks of CO₂ have roughly halved the rate at which atmospheric CO₂ concentrations have increased, and therefore slowed down global warming. However, nature's capacity to uptake CO₂ is severely weakened. Thus, both the total amount of CO₂ emitted to the atmosphere and the responses of the natural CO₂ sinks will determine what efforts are



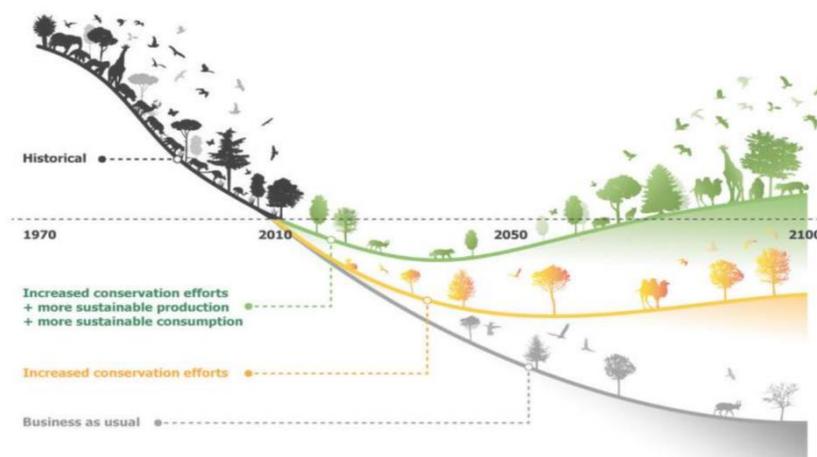
required to limit global warming to a certain level, underscoring how important it is to understand the evolution of these natural CO₂ sinks.

Challenges and Opportunities for COP26 & COP15 - Clive Mitchell and Des Thompson, NatureScot

Des and Clive highlighted that we face a triple challenge (or opportunity) through green recovery to:

- Transition to a net zero economy, which will require major changes in the use of the land and sea with consequences for the state of nature;
- Adapt to climate change that is already happening, which will also require major changes in the use of the land and sea; and

Northern Hemisphere ecosystems are losing ability to absorb CO₂ from atmosphere.



- Improve the state of nature by tackling the main drivers of biodiversity loss, including climate change.

Five key areas were then addressed:

1. Securing public engagement with nature, equivalent

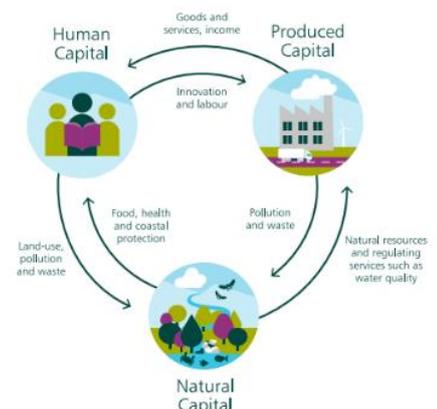
to that for tackling the climate emergency. How do we get the same degree of traction with the nature crisis that we have with the climate emergency? Net Zero targets by 2045 for Scotland has been a massive help. Do we have the same for nature? Have we big hitter support to offer solutions to the nature crisis, and are we making connections between the two? After all: “Nature is climate. Climate is Nature”

2. Reversing the loss of biodiversity through mainstreaming policy and practice.

The traditional approach to nature conservation has not worked! Protected areas, emphasis on species and habitat conservation and management measures have been marginally successful. We need to break new ground in terms of engaging land and water managers, investment, business, policy and people.

3. Implementing Nature-based solutions.

Roughly a third of the carbon emissions’ targets can be met through Nature-based solutions (NbS) e.g. peatland and wetland restoration and woodland regeneration. Has every SAC, SPA, NNR, SSSI, National Park got targets for NbS? No,

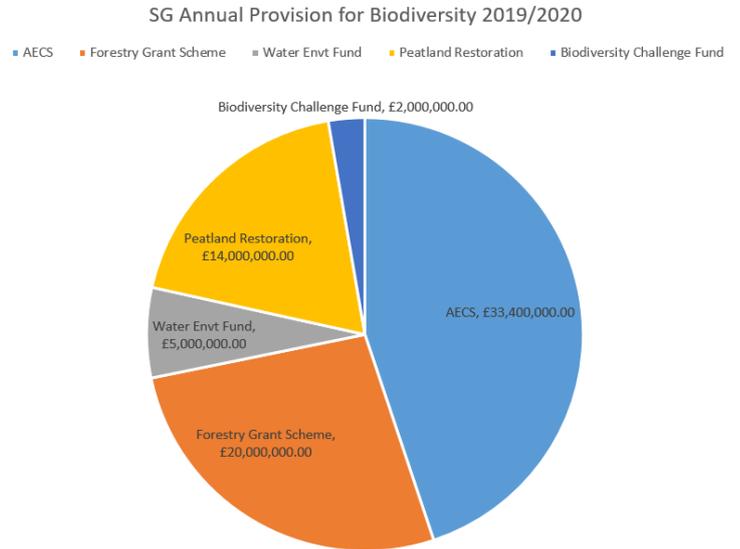


because legislation does not ask for it! Integrated land use – aligning climate-nature policy and practice – and nature networks are needed.

4. Adopting an evidence based approach as routine practice

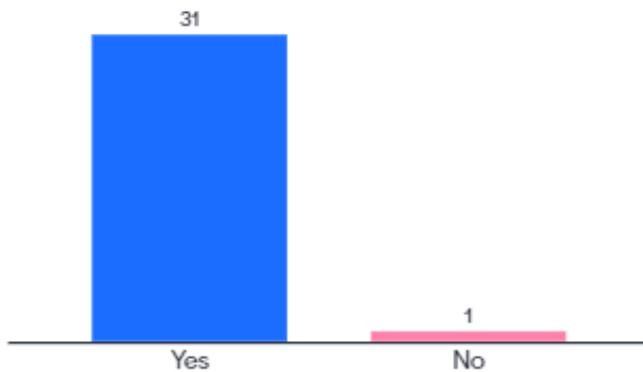
5. Transforming funding to bend the curve on biodiversity loss

How do we transform support for nature to shift towards public (and nature) good? Look at the **pale blue slice** – agri-environment support! Look at the **dark blue slice** – a tiny fund supporting biodiversity. How do we invest far more in nature? How do we ensure investment in large-scale, networked programmes of work to bend the curve to halt the loss and then regenerate nature – and us? We need an economy embedded in nature.



Following the speaker presentations and Q & A session, attendees were asked the following questions:

Do you know feel like you have a better understanding of what COP is and the difference between COP15 and COP26?



What was the most interesting thing you learned today:

I liked the new tagline 'nature is climate and climate is nature'

30% of climate change goals are nature based

The rate at which the land's ability to absorb carbon is falling

That Scotland's Biodiversity intactness is at 56% and that the UK is so low compared to other countries!

That you UK is in the top 10 emitters of CO2 if you take historic emissions into account

cop 15 is now much more in my mind and we must have hope and do our best to make these policies successful

Scientists need to be better at creating an accessible evidence base

A deeper understanding and appreciation of the various initiatives underway in Scotland to address biodiversity and climate change

After 2050 it is predicted that carbon sequestration rates will decrease massively due to the impact of climate change on ecosystems and those carbon sequestration mechanisms.

I liked the phrase that James used about the circular economy effectively mimicking nature - don't throw anything away - I'm going to use that and try to do that!

The wide range of opportunities we have to actually fix these problems - there is still hope!

Social / economic aspects of biodiversity protection

climate and nature: tackle both together, or tackle neither!

What we do in Scotland matters

BREAKOUT SESSIONS

This section provides a summary of some of the key points that were noted down during the discussions in the breakout groups, grouped into themes.

What does Scotland need to do to meet the targets?

- More cross-organisational working and mainstreaming of nature in all of our thinking.
- Collective, coordinated and local community involvement and action.
- Focus on circular economy.
- Agriculture (more sustainable production, circular economy, less waste). Working with farmers more to provide resources to make changes for benefit of nature. There is a global narrative of farmers as the bad guys and they are not getting recognition they deserve - need to find better ways to mobilise their existing knowledge and sharing best practice.
- Land management is key. Landowners have an immense amount of power - how can we change this? We need to ensure the public have a greater say in how land is managed - there is a lot of their money supporting farmers through subsidy. This would lead also to a more just transition.
- Forestry (amount of C emissions from planting, dependent on what you plant and where). Focus on woodland creation rather than tree planting.
- NPF4 - need to have in legislation that things like Biodiversity Net Gain are written in, and nature is more protected – coming from developers, not councils.
- Biodiversity monitoring– do we really know where we are with targets? Agreement on what features we are monitoring?
- Eating less meat and changing what meat we eat. Meat production integrated into a more integrated agricultural system. Public disconnected from where food comes from. Eat venison as a sustainable meat product.
- Green renewable policies.
- Recovery post covid needs to be genuinely green, including green jobs, nature-based solutions, insulation of houses, polluter pays principles, not promoting economic growth.
- How do you connect people with nature - how do you get that ground swell shift – outdoor education is key here.
- Make connection between policy and action on ground.

What change would you like to see in your field/area of interest?

- Want to see private business sector invest in biodiversity. Big business getting behind ecology like it has in other research areas.
- Biodiversity budget is trivial compared to other areas. More funding – funds are massively oversubscribed, and the money needs to be accountable so people can see where the money is going and how much it achieved.
- Circular economy embedded across all government policy.
- Need a clear definition of what 'positive effects for biodiversity' means.
- Transformation of land use management and agri systems. Linking climate and nature including water, soil quality.

- Better integration of whole carbon, nitrogen cycle etc. across all ecological work.
- Integrating forest ecotones within agriculture.
- Look more at our grassland environments.
- Make sure we implement the fact that trees can't be planted on peat depths >10cm.
- Proper value on the sector for students and early career researchers so they don't have to do voluntary work and short term contracts to get into the sector.
- Need evidence based research of restoration.
- Better control of deer populations and more focus on woodland creation and natural regeneration
- More awareness and participation – most people just do not care. We need to get people on board, changing the way the average person sees nature.
- Willingness to be imaginative! Not just doom and gloom.
- Developing the evidence base is key.
- Planning laws not fit for purpose - these need changing, need to stop fragmentation and increase urban conservation – urban habitats and brownfield sites can be very important for some species - CIEEM conference covers some of these issues.
- Interconnect science and policy.
- Rewilding agenda should be more prevalent and being part of this by investing time and money, to show positive action. Conditions on land ownership.

The BES/SPG and CIEEM would like to thank all the speakers and participants for contributing to the success of this event and providing such a great event with lots of interesting discussions.