RESAS Science, Evidence and Policy Conference
18 May 2023 Our Dynamic Earth

Rural and Environmental Science and Analytical Services (RESAS), Scottish Government (SG) is pleased to welcome you to the first science, evidence and policy conference that will bring together stakeholders from across the rural and environmental research and policy landscape in Scotland. The day will showcase excellence in SG funded research and build networks and collaborations.

Objectives of the event:

- The event will provide an opportunity for researchers, including early career researchers, across the Environment, Natural Resources and Agriculture Research Portfolio to showcase their research and highlight recent research outputs and impact.

- This networking event will provide a forum for both researchers and policy makers from across the public sector to discuss key cross cutting strategic issues affecting Scotland's environment, communities and rural economy.

- The event will enable policy colleagues to discuss with the research community policy priorities and potential future evidence needs.

#RESASConf23

Scottish Government
Riaghaltas na h-Alba

SEFARI Gateway

RESAS
Rural & Environmental Science and Analytical Services

PROGRAMME

Wi-Fi:
Network: DELEGATES
Password: D3L3GATE

1.	**09:30**	**Arrival and registration and refreshments**
2.	**10:00 – 10:15**	**Welcome – Professor Mathew Williams, CSA ENRA**
3.	**10:15 – 11:00**	**Keynote addresses: *Bridging the gap between science and policy to achieve our climate and nature goals*** **Simon Fuller, Deputy Director, RESAS** **Professor Lorna Dawson, SEFARI Gateway and James Hutton Institute**
4.	**11:00 – 11:30**	**BREAK: Refreshment, Networking, Posters**
5.	**11:30 – 12:20**	**SEFARI Gateway: Impact Case Studies** *Chaired by Dr Sallie Bailey Deputy CSA ENRA*

- **Scotland's eradication programme for Bovine viral diarrhoea** - George Russell, Moredun Research Institute and Andrew Barnes, SRUC.
- **Evidence to the Agriculture and Rural Development Stakeholder Group**
  David Miller**,** James Hutton Institute
- **Livestock and greenhouse gas emissions reduction**
  Eileen Wall/Jamie Newbold, SRUC

6.	**12:20 – 13:00**	**Round table interactive activity: Working with researchers and policymakers.** *Chaired by Dr Sallie Bailey Deputy CSA ENRA*
7.	**13:00 – 14:00**	**Lunch and Networking**

8. **14:00 – 15:00** **Breakout sessions: Exploring how Scottish Government funded research across all the Strategic Research Programme themes can help address the nature and climate crises and support thriving rural communities. Two parallel sessions:**

- **Thriving Biodiversity**
- **Climate Change Adaptation**

9. **15:00 – 15:45** **Poster session: Networking and refreshments**

10. **15:45 – 16:30** **Panel Discussion and Q&A: Science and evidence to support future and emerging policy challenges.**

Chaired by Sallie Bailey Deputy CSA ENRA

Panel members:

- *Professor Chris Quine, Chief Scientist, Forest Research, Plant Health Centre*
- *Dr Peter Singleton, Research, Innovation & Evidence Manager, SEPA*
- *Emma Harding, Deputy Director Environmental Quality and Resilience, Scottish Government*
- *Dr John Kerr, Head of Agriculture Policy, Scottish Government*
- *Professor Lorna Dawson, Professor of Soil Forensics, James Hutton Institute*
- *Professor Lisa Boden, Chair of Population Medicine and Veterinary Public Health Policy University of Edinburgh, EPIC Director of Policy and Impact*

11. **16:30 – 16:45** **Poster prize awards presented by Professor Mathew Williams**

SEFARI ***Sponsored by SEFARI Gateway***

12. **16:45 – 17:00** **Event Summary and Concluding remarks, Professor Mathew Williams, CSA ENRA**

Event close 17:00

Breakout sessions

Panel Session 1: THRIVING BIODIVERSITY:

The evidence is unequivocal that biodiversity is in decline both globally[1] and in Scotland[2] due to a range of direct and indirect pressures. We are now close to a precipice, where if direct action is not taken there will be serious threats to our wellbeing and survival as a species. At the global level, the Kunming-Montreal Global Biodiversity Framework sets out the goals and targets for addressing these threats. In Scotland, the Scottish Government has set out its vision in the new Scottish Biodiversity Strategy which states that:

"By 2045, Scotland will have restored and regenerated biodiversity across our land, freshwater and seas.

Our natural environment, our habitats, ecosystems and species, will be diverse, thriving, resilient and adapting to climate change.

Regenerated biodiversity will drive a sustainable economy and support thriving communities, and people will play their part in the stewardship of nature for future generations."

Making this vision a reality will require action across the full breadth of society and the economy, meaning that biodiversity will have to be considered in a much wider range of Scottish Government policy. This is by no means a small task and will require new evidence to inform wider policy in areas such as addressing the direct and indirect drivers of biodiversity decline, measures and actions to improve biodiversity, new ways of assessing biodiversity etc.

This panel session will bring together biodiversity experts, experts [in related areas vital to underpin positive change for biodiversity] and policy leads to discuss how we can mobilise our evidence across the whole of the strategic research programme to meet the 2045 vision of thriving biodiversity in Scotland. Panel Members include Prof Robin Pakeman (The James Hutton Institute), Dr Alexandra Davey (Royal Botanic Gardens Edinburgh), Cate Turton (co-Deputy Director of the Nature Division, Scottish Government), Baukje de Roos (Professor of Human Nutrition, The Rowett Institute) and Professor Emeritus of European Agricultural Policy Alan Matthews (Trinity College Dublin).

Panel Session 2: CLIMATE CHANGE ADAPTATION:

Scotland is already experiencing the effects of climate change, such as warmer summers and wetter winters. Climate projections for the next century indicate that these trends will not only continue, but intensify. A solid understanding of the impacts of climate change across the full range of natural and built environments is fundamental to Scotland's ability to adapt and build

[1] **Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat**
[2] **State of Nature Scotland Report 2019 | NatureScot**

resilience to climatic changes that are already “locked in” as a result of the historic and ongoing emissions at the global scale.

Building climate change adaption and resilience into Scotland’s economy and society will require joint action across public agencies, local authorities, business and communities across the country. Getting the appropriate science and evidence to the right people, and at the right time, is vital to developing policy that will support and incentive those actions, and in doing so, create a smooth transition to a just and resilient Scotland.

This panel session will bring together experts to discuss how their research areas are addressing climate change adaptation, and how funders, researchers and decision-makers can work together, using the evidence provided by this strategic research programme to build a more resilient Scotland.

The panel will explore how we ensure government funded research supports policy that promotes adaptation and builds resilience to the impacts of climate change?

SPEAKERS

Professor Mathew Williams, Chief Scientific Adviser for Environment, Natural Resources and Agriculture

Professor Williams provides independent science advice on issues such as the environment, agriculture and the wider rural economy and champions the use of evidence to inform policy development and delivery. This is a part time position (three days a week) and Professor Williams retains an academic position at the University of Edinburgh.

Professor Williams leads the Global Change Ecology Lab in the School of GeoSciences at the University of Edinburgh. Over the past 25 years, his research has focused on studying the carbon cycle of terrestrial ecosystems, including Arctic tundra, the Amazon rainforest, African savannas and Scottish landscapes, including agriculture and forestry. This research has informed society both on how ecosystems will respond to climate change, and how ecosystem responses will change the global carbon cycle. His lab currently focuses on combining environmental simulation models with field data and satellite observations to understand the flows of carbon, energy, and water across natural and managed landscapes. His research explores the climate sensitivity of forests and tundra, the effect of fires and harvests on forest biomass, effective monitoring of UK and global greenhouse gas balances from space and tall towers, and how to optimise farming in the UK to enhance soil C storage and climate resilience.

Professor Williams received the Royal Society Wolfson Merit Award in 2014. He is a member of the UK National Centre for Earth Observation and is an advisor to the European Space Agency for two of its satellite missions. He has also served on the Science Board for the UK Natural Environment Research Council.

Professor Lorna Dawson

Professor Lorna Dawson is Head of the Soil Forensics Group within the Environmental and Biochemical Sciences group at the James Hutton Institute, and has over 30 years' experience in managing and conducting research in soil and plant interactions, in particular its application in the criminal justice system. She was awarded a CBE in the Queen's Birthday Honours list in June 2018.

Lorna is also honorary professor in Forensic Science at Robert Gordon University, and is SEFARI Advisor on the Scottish Government's (RESAS) strategic research programme and SEFARI Gateway Knowledge Exchange Lead for Environment. She is affiliated to Robert Gordon University in Aberdeen, contributing to Forensic Science lecture courses and also lectures at the universities of Aberdeen, Strathclyde and Edinburgh. She has supervised over 20 PhD projects and has published over 100 refereed journal papers, books and book

chapters, and regularly presents at national and international conferences. Professor Dawson was awarded a Special Recognition award at the Pride of Britain 2017 awards ceremony.

Simon Fuller, Deputy Director RESAS

Simon Fuller is the Deputy Director for Rural And Environment Science And Analytical Services (RESAS) which provides scientific and analytical input across a range of environmental, rural and agricultural subjects. Prior to this Simon was the Scottish Government's Deputy Director for Economic Analysis and has held a range of economic and finance related roles across government.

Event Information:

Location**:** **Our Dynamic Earth,**

Our Dynamic Earth is located at the bottom of **Holyrood Road, Edinburgh [EH8 8AS],** neighboring the Scottish Parliament and the Palace of Holyrood House.

Dynamic Earth is an approximately 15-minute walk from the city centre (Princes Street) and there are several bus routes a short walking distance away.

Dynamic Earth is close to the National Cycle Network. You can find details about the nearest cycling and walking routes here: **www.sustrans.co.uk**

There are a number of bus routes a short walking distance away. You can find details of all local bus services at **www.lothianbuses.com**

If travelling by car Our Dynamic Earth has a 24 hour car park located underneath the building (approx. 120 spaces) allocated on a first come basis, for which charges do apply. Dynamic Earth has 3 electric car charging points for public use. Electricity is free. Standard car park charges apply. The charging points only accept Charge Place Scotland cards (not the app) as it is a low signal area.

Access:

Dynamic Earth is fully wheelchair accessible, with ramp access up to the entrance of the building and lifts throughout to navigate through the exhibition space, and to gain access to and from the car park. Wheelchair access to the car park is via the internal lifts only. Additionally, Dynamic Earth have disabled toilet facilities on both sides of the building, which include handle rails and wide door access. Dynamic Earth have 6 disable parking bays in our car park; to view their location, please download our access statement **HERE**.

Social Media:

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