

The Spark

SEFARI Gateway's Newsletter

May 2024



Scottish Government
Riaghaltas na h-Alba
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Welcome to the May 2024 edition of The Spark, SEFARI Gateway's (Centre of Expertise for Knowledge Exchange & Innovation) newsletter, a monthly update on the latest research developments from the [Scottish Government's Environment, Natural Resources and Agriculture \(ENRA\)](#) strategic research programme. The ENRA Research Portfolio provides evidence for policy and practice across environment, climate change, biodiversity, land use, agriculture, food, and rural community agendas.

Scotland is playing a central role in developing environmental solutions to the global climate and nature crises, and the Scottish Government response is based on the strongest possible scientific evidence. The Environment, Natural Resources and Agriculture research programme is key to achieving this.



We'd love to hear from you and receive your feedback on how we can improve our newsletter. Please contact us at info@sefari.scot with your suggestions.

Louping Ill Virus: New Vaccine Developed to Control Neurological Disease in Sheep and Red Grouse



Louping ill, a tick-borne viral neurological disease, primarily affects sheep and red grouse but can also harm other animals and humans. It poses significant economic and animal welfare concerns in upland and moorland areas where ticks thrive, yet there's no vaccine commercially available. ENRA-funded researchers have developed a new vaccine for louping ill with initial support from the Strategic Research Programme and additional funding from Scottish Estate Owners via the Game and Wildlife Trust. Expected to enter commercial development soon, this vaccine promises to mitigate the impact of louping ill, benefiting farmers, estate owners, and the public.

Link: <https://moredun.org.uk/news/research/promising-results-vaccine-louping-ill>
For more information contact Dr David Griffiths: david.griffiths@moredun.ac.uk.

Risks and rewards of AI being examined by new specialist advisory group

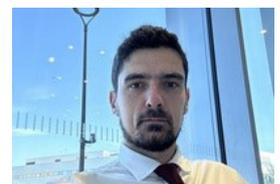
How can artificial intelligence be harnessed to support environment, natural resource and agriculture (ENRA) policy in Scotland – and how do we avoid its potential dangers? These are the important questions being addressed by a new SEFARI Gateway Specialist Advisory Group.

Known as AI-SAG and co-chaired by Professors Georgios Leontidis (University of Aberdeen) and Mark Brewer (Biomathematics and Statistics Scotland), it has been formed to advise the Scottish Government on the use, future opportunities, risks and regulatory aspects of the fast-evolving technology as it applies to the sector.

Its first event was a workshop held in Edinburgh on May 9, which brought together a small grouping of AI experts from across the UK, Scottish Government policy advisers and colleagues from SEFARI engaged in AI and data science.

The workshop considered key issues such as what is meant and understood by AI in an ENRA context, data availability and completeness, and the specific ethical issues of data and AI in the fields of environmental science and agriculture.

The SAG will ultimately produce a report, or series of reports on specific subjects, to inform future policy development and evaluation.



Pictured above top to bottom:
Georgios Leontidis and
Mark Brewer, co-chairs of AI
Specialist Advisory Group

Summit with high-level speakers attracts 160-plus delegates to discuss Scotland's food future

Best-selling writer and campaigner Henry Dimbleby inspired healthy debate when he spoke at the Rowett Institute and Food Standards Scotland's recent joint summit.

The event, titled Shaping the Science of Scotland's Food Future, drew a highly-engaged audience to Edinburgh's Dynamic Earth in April. Leon co-founder and Ravenous author Dimbleby - and Mat Williams, Chief Scientific Adviser for ENRA - outlined the importance of a food systems approach. Big picture science is essential in meeting this challenge and can already be seen in the SEFARI Institutes' interdisciplinary collaborations - such as the joint effort to tackle Anti-Microbial Resistance. The institutes are combining their expertise to identify intervention points in the animal, human and environmental food systems, taking a ONEHealth approach.

Another of the speakers was Professor Julie Fitzpatrick, Chief Scientific Adviser for Scotland, who focused on the importance of efficiency across the food chain to reduce its carbon footprint, whether through strategic breeding programmes or improving Scotland's food processing capabilities. She stressed the imperative for a triple helix approach of collaboration between government, science and industry.

The urgency for collaboration was clear when Public Health Scotland's Director of Place and Wellbeing Ruth Glassborow revealed the day's most shocking statistic: men from the most deprived areas of Scotland have a healthy-life expectancy of just 45 years, compared to the 71 years of good-health predicted for those in the least deprived regions. You can read more about the [conference at this blog here](#).



Pictured left to right:

Lucinda Bruce Gardyne, Chair of Scotland Food & Drink;

Henry Dimbleby, Author of Ravenous and Independent National Food Strategy;

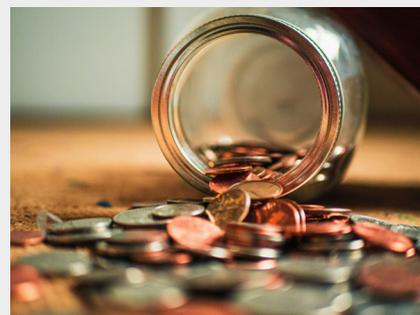
Heather Kelman, Chair of Food Standards Scotland;

Jim Fairlie, MSP Minister for Agriculture & Connectivity;

Jules Griffin, Director of the Rowett Institute, University of Aberdeen.

Older people and food-borne disease in Scotland

A [SEFARI Fellowship](#) with Food Standards Scotland explores the lifestyle of the older population and the potential associations with food-borne disease in Scotland. Older adults make up 20% of the Scottish population but 75% of listeriosis cases, 31% of campylobacteriosis cases and 63% of norovirus cases are in the over 65s. Food Standards Scotland will use the findings to design a targeted information campaign.



'Arable farming in a new era' – be part of the conversation at this year's Arable Scotland event

What does climate change mean for the arable sector – how is it adapting? And what will increase farm resilience to these conditions? These are the questions that will be tackled in this year's Arable Scotland event, on Tuesday 2nd July at the James Hutton Institute's Balruddery Farm, near Dundee. Now in its sixth year, this free event brings together key stakeholders in arable production to delve into crucial industry topics and highlight innovative practices for sustainable and resilient farming.

The ever popular 'Arable Conversations' are at the heart of this year's programme and will be a lively discussion about current issues in the arable industry. The morning conversation is chaired by Elizabeth Massie, a farmer in East Lothian, who will steer a panel of farmers and Panel representation from FarmStrong Scotland will ensure the discussion goes beyond agricultural practice to consider what else is needed for greater social resilience and wellbeing.

In the afternoon, a second arable conversation will explore emerging markets in Natural Capital, guided by Clive Mitchell from Nature Scot as the chair.

Supported and championed by The James Hutton Institute in partnership with the Agriculture and Horticulture Development Board (AHDB), Arable Scotland's mission is to facilitate the adoption of practices that enhance sustainability and resilience in farming.

Long-term sponsors include SEFARI Gateway, the Scottish Society for Crop Research and Scotland's Rural College, www.arablescotland.org.uk



The banner features a brown background on the left and a green background on the right. On the left, the text 'Arable Scotland' is written in a stylized font with vertical lines, followed by '2nd July 2024' and 'Balruddery Farm, Dundee, DD2 5LJ'. A wheat stalk icon is positioned to the right of the text. On the right, a white rounded rectangle contains the website 'arablescotland.org.uk'. Below this, the 'Sponsors' section lists SEFARI, KWS, SRUC, and SSCR. The 'Partners' section lists The James Hutton Institute and AHDB.

Arable Scotland 2nd July 2024
Balruddery Farm, Dundee, DD2 5LJ

arablescotland.org.uk

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