

Approved by the community

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Scottish Consortium
for Rural Research

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PHOTOGRAPH: UNIVERSITY OF EDINBURGH



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It's time for an early career researcher network within SCRR

Talk is turning to action with the establishment of a way to enable input from newer researchers into SCRR’s activities. Katie Dubarry of Roslin explains...

A WARM WELCOME to the first SCRR newsletter of 2024. I hope the start of the year has been fruitful for you, and that you have had chance to reflect on the year just past.

In case we haven't met before, I'm a final year PhD student at the Roslin Institute, where I research immune gene expression in sheep, after studying for my undergraduate degree in Agriculture at SRUC.

Last year, a small group of us came together to discuss an Early Career Researcher network within SCRR. When we were asked whether this is something that is needed, the answer was a resounding YES!

There is an increasing awareness of the challenges faced by ECRs in all areas of research. The combination of

a challenging funding landscape and the relentless pace of academia are placing unprecedented pressure on the work/life balance of all researchers. ECRs, however, do not necessarily have the 'academic currency' of their more established peers to fall back on: a track record of publications, support networks, and wider contacts and mentors.

Add into the mix the isolation, loneliness, and insecure contract terms that sometimes seem part and parcel of PhD or postdoc life, and it's easy to see why mental health and wellbeing has become such a predominant topic among ECRs.

Working in rural research can bring additional challenges. For some in the SCRR community this includes

Researchers in the lab at Roslin

physical distance from wider groups of colleagues that make it difficult to form connections. And of course, we cannot forget the concerns of our international ECR community, trying to forge their

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About SCRR

THE SCOTTISH CONSORTIUM FOR RURAL RESEARCH exists to promote sharing of ideas and techniques among a group of organisations active in research into land, freshwater, coastal and marine resources, and their uses.

Our member organisations have bases throughout Scotland and are at work all over the world: further details can be found on the back page.

Members' reports

Roslin Institute

From page 1

research careers in an increasingly hostile political climate.

These issues are complex and systemic, and it would be unreasonable to rely on ECRs to solve them alone. But there is still work that can be done to move forward.

I have had a varied career path through a number of different sectors, and a common thread through all of

'A common thread in my career is how a sense of community binds us together. Communities help us feel connected and motivated, and drive change through common goals and ambition'

them is how a sense of community binds us together. Communities help us feel connected and motivated, and drive change through common goals and ambition.

Building community is not an easy task, however. In our sector, everyone is always busy. The challenge, then, is to find a model that allows ECR members to participate on their own terms: in a light-touch way when needed or giving more when they can, mirroring the ebb and flow of their other commitments. One model that could work well is a smaller 'core' group of organisers and a wider group of volunteers that dip in and out of organising activities when they can.

Katie Dubarry graduated from SRUC in Agriculture



Communication is key when community-building. I've recently been inspired by the successful launch of the Young Aquaculture Society of which one of our network's founders, Rob Stewart, is vice president. They have done an excellent job in leveraging social media to connect with ECRs, and we're looking forward to hearing from Rob on how they did it at one of our future meetings.

In future months we may get in touch with you, the wider SCRR

membership, to help broaden our reach to more ECRs as we seek to map their needs and expand the network's reach. So please do look out for that.

From the next newsletter we will also be featuring short bios of our ECR members, so you can get to know them and their work, and perhaps give them a friendly hello at the next members' meeting or when the annual SCRR / RSE Peter Wilson event rolls around.

Take care until then!

Katie Dubarry

New annual symposium to take place at Roslin on 'Supporting Food Systems Transformation with Data'

The first annual symposium of the The Global Academy of Agriculture and Food Systems will be at the Roslin Institute in March 2024

THE GLOBAL ACADEMY OF AGRICULTURE and Food Systems 1st Annual Symposium is scheduled for Friday, March 15, 2024, 10am-4pm at the Roslin Institute. This year's theme is 'Supporting Food Systems Transformation with Data.'

Jessica Fanzo, Professor of Climate and Director of the Food for Humanity Initiative at Columbia University, will present the Food Systems Countdown Initiative and Dr



Mike Clark, senior researcher at Oxford, will present data on the environmental impact of foods.

PhD students and postdocs are invited to submit a 250-word abstract for a poster session.

For further information and to register, see edin.ac/gaafs-symposium-2024

Jessica Fanzo of Columbia will present the Food Systems Countdown Initiative





‘Social licence’ and its importance to seaweed farming

Community trust and backing for a project is vital to its success, according to research from the Scottish Association for Marine Science (SAMS)

ATTITUDES TOWARDS THE UK’s emerging seaweed farming sector and lessons to learn from other aquaculture industries have been documented and analysed in a new report.

The Social Licence for Seaweed Farming project, led by the Scottish Association for Marine Science (SAMS) in Oban and funded by WWF, has used the findings to produce resources for would-be seaweed farmers to improve ‘social licence’, a term given to an activity that has gained public trust and backing.

Lead author Dr Suzi Billing from SAMS launched the report at last year’s Scottish Seaweed Industry Association annual meeting in Oban (November 14–16, 2023). It offers a range of resources and data derived from a two-year study of attitudes towards seaweed farming from a range of communities and stakeholders throughout the UK.

Dr Billing said: ‘Seaweed farming is at an early stage of development

in the UK and Europe, but there is increasing interest from investors. It is seen as a great example of nature-based solutions and is appealing for its potential socio-economic effect, particularly in rural areas.

‘At this stage of development, it is important that seaweed farming

‘Seaweed farming is seen as a great example of nature-based solutions and is appealing for its potential socio-economic effect in rural areas’

learns lessons from more established forms of aquaculture. There must be a relationship between the operator and the community before a seaweed farm goes to the planning stage, so that people know what they’re getting. It is difficult to do that retrospectively, as the operator is seen as less trustworthy.

‘Considering social licence to operate (SLO) in the early planning makes the planning application stages easier for all stakeholders.’

Seaweed of many varieties has the potential to be a valuable crop

The report stresses the importance of understanding local social context when thinking about site selection. The study found that people were more likely to accept and support seaweed farming when positive relationships were already established and – critically – when the industry as a whole is perceived as environmentally sustainable.

While a relatively new concept in the UK, seaweed farming has been operating at scale for decades in Asia, which accounts for more than 95 percent of global production, powering an \$18 billion industry.

Mollie Gupta, WWF-UK Seaweed Solutions Project Manager, said: ‘As we move forward in this exciting journey, social licence is going to be pivotal in fostering trust and acceptance, and ensuring that any benefits of seaweed aquaculture are genuinely felt and understood by local people.

‘It is only with social licence that we will be able to responsibly and sustainably scale up seaweed aquaculture, and in doing so achieve the potential benefits for nature, people and climate.’

To view the project findings and resources, visit the project’s own web pages at readymag.website/u1892175579/4217590/

Members' reports

Royal Botanic Garden Edinburgh (RBGE)

PHOTOGRAPH: YIN LUN



Senior author Dr Antje Ahrends noted: 'While deforestation linked to rubber is widespread, some countries are of particular concern. In Cambodia, for example, over 40 per cent of rubber plantations are associated with deforestation. Our maps show that rubber plantations have encroached into areas of global importance for the protection of biodiversity, with over one million hectares planted in these areas.'

'With 70 per cent of the world's natural rubber yields destined for tyre manufacture, demand is not likely to diminish and the threat this poses to biodiversity should not be underestimated. In addition, while predominantly grown by smallholders with the potential to support livelihoods, rubber is also associated with land grabbing and human rights infringement in some countries.'

A separate systematic review of case studies and analysis of recent trends in rubber area and yield, led by Bangor University, also indicated that rubber is regularly linked to deforestation.

Warning that, as demand grows and yields stagnate, continued deforestation for rubber is to be expected, lead author Dr Eleanor Warren-Thomas commented: 'Our analysis shows substantial expansion of rubber plantations has occurred in many producer countries since 2010, with particularly rapid increases in new locations such as Cote d'Ivoire. Some 2.7 million to 5.3 million hectares of additional harvested area could be needed to meet industry estimates of demand by 2030. It is critical that existing rubber producers are supported to improve their yields and

Revealing the true extent of tropical forest loss from rubber plantations

New research led by Royal Botanic Garden Edinburgh (RBGE) demonstrates the need to measure the impact of cash crops, as well as for policy that supports smallholders

Rubber-driven deforestation (above and below) is larger than previous estimates showed

TWO GROUND-BREAKING STUDIES by an international team demonstrate that the impact of the global rubber trade on forests has been serially and substantially underestimated.

Using the latest satellite technology and cloud computing, and a review of more than 100 case studies, the fresh evidence reveals that rubber-driven forest loss is significantly larger than previously reported estimates, which have been widely used to inform policy. Now, scientists behind the research say equitable and sustainable solutions are needed without delay.

Led by the Royal Botanic Garden Edinburgh (RBGE), in collaboration with Kunming Institute of Botany (KIB), Chinese Academy of Sciences and CIFOR-ICRAF China Country Program, the study, based on satellite imagery, shows that rubber-related deforestation could be three times greater than previously believed, and since the 1990s has impacted an area as large as Switzerland.

Dr Yunxia Wang, first author of the study, explained: 'Rubber was already known to lead to forest loss, but quantifying the damage has been challenging. Because it is difficult to distinguish from natural forest on satellite imagery, it has received reduced attention when looking at the losses caused by commercial plantations.'

'However, thanks to expanding earth observation and computing technology, there are increasing opportunities to map 'difficult' commodities. The results have been sobering.'

Underscoring the significance of this pioneering research, Professor Peter Hollingsworth, Deputy Keeper and Director of Science at RBGE commented: 'The study highlights the importance of rigorous quantifications of the effects of cash crops on the environment. This is now increasingly possible thanks to advancements in earth observation technology.'



PHOTOGRAPH: JIANCHU XU

maintain production, to avoid ongoing expansion of plantation area.'

Both studies emphasise that while it is critical to halt deforestation associated with rubber, it is vital that smallholders, who account for 85 per cent of natural rubber production, are not marginalised by regulations.

Dr Maria Wang, from the Grantham Centre for Sustainable Futures at the University of Sheffield and co-author of the study said: 'Rubber smallholders and industry understandably fear extra burdens placed on them by regulations. However, these studies show that the biodiversity impacts and deforestation from rubber cannot be ignored and that there is a need for solutions that work for smallholders, without putting any more pressure on the planet.'

Dr Ahrends concluded: 'While it is encouraging to see an increasing

'The study highlights the importance of rigorous quantifications of the effects of cash crops on the environment. This is now increasingly possible thanks to advancements in earth observation technology'
 – Prof Peter Hollingsworth, Deputy Keeper and Director of Science at RBGE

number of initiatives and policy changes that aim to halt commodity-driven forest loss, there is a risk of inflexible regulation marginalising the poor as only wealthy rubber producers and traders can afford to pay remote-sensing companies to verify that goods are deforestation-free.

'We are, therefore, working with smallholder initiatives and other key players in the sector to ensure that our rubber and deforestation maps are widely and easily accessible to all stakeholders, in particular to smaller economic players.'

Professor Jianchu Xu, Head of Centre for Mountain Futures at KIB and Principal Scientist from CIFOR-ICRAF China Program said: 'As one of the largest rubber consumers, China is very concerned about displaced deforestation from international trade.'

'With support from the China-UK Collaboration on International Forest Investment and Trade Program, we have developed the world's Guidance for Sustainable Natural Rubber to support the implementation of the Kunming-Montreal Global Biodiversity Framework.'

Royal honour recognises SRUC's Veterinary Services

Queen's Anniversary Prize for Scotland's Rural College (SRUC)

SCOTLAND'S RURAL COLLEGE (SRUC) has been awarded a Queen's Anniversary Prize for its contribution to animal welfare, veterinary science, education, research and the economy through its world-class Veterinary Services network.

With around 7,300 farmers and livestock keeper members, SRUC Veterinary Services is the largest provider of livestock health schemes in the UK, transforming animal health and welfare and contributing hundreds of millions of pounds to the economy through improved productivity.

SRUC's flagship initiative is the Premium Cattle Health Scheme which has had a national and international impact in helping to eradicate Bovine Viral Diarrhoea (BVD), a major cattle disease that causes slower growth rates, increased susceptibility to other diseases and raised mortality rates. The modelling and analytical work carried out by SRUC researchers is regularly cited as an example of best practice in its field.

As well as contributing to animal health and welfare and providing vital support to industry, the Veterinary Services team has also demonstrated political impact by providing the underpinning technical frameworks for sheep and goat exports to Northern Ireland post-Brexit.

The team is supported by a state-of-the-art laboratory at Pentlands

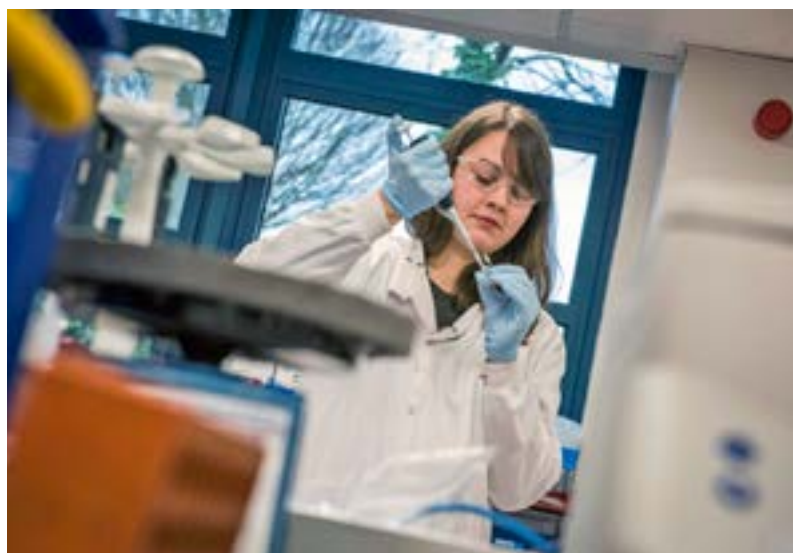
Science Park in Midlothian and a network of regional facilities from Thurso to Dumfries, which can process up to one million samples a year. These came into their own during the Covid-19 pandemic when the molecular biology facility was re-purposed for testing human samples of coronavirus.

Professor Wayne Powell, Principal and Chief Executive of SRUC, said: 'Being awarded a Queen's Anniversary Prize is a huge honour for everyone at Scotland's Rural College and reflects both the quality of our research and the commitment of our staff.'

'SRUC is one of the UK's leading institutions specialising in the land-based sector at the heart of the natural economy. We have delivered national and international impact for more than 50 years through our unique network of Veterinary Services across the UK for the benefit of animal health and welfare and the rural community, as well as for veterinary science consultancy, education and research.'

'This award further cements SRUC's reputation as a centre for innovative educational excellence as we continue on our journey towards achieving degree awarding powers and opening our new vet school in Aberdeen to grow the country's first tertiary model of veterinary teaching and learning and address the critical shortage of vets in this sector.'

The award recognises many contributions to animal health and welfare by SRUC researchers



Members' reports

Scotland's Rural College (SRUC)

Tackling food security and climate change

A new UK centre will lead to new international partnerships involving Scotland's Rural College (SRUC)

SCIENTISTS FROM SCOTLAND'S RURAL COLLEGE (SRUC) will carry out research into plant breeding and animal nutrition to increase productivity and reduce greenhouse gas emissions as part of a new centre announced by UK Prime Minister Rishi Sunak.

The UK-CGIAR Centre was launched at a global food security summit hosted by the Bill & Melinda Gates Foundation, the Children's Investment Fund Foundation and the Foreign, Commonwealth & Development Office (FCDO) in London on November 20 2023.

With funding from the FCDO, the UK-CGIAR Centre aims to

'There is a need to develop solutions that increase the productivity of livestock systems in sub-Saharan Africa while also reducing their environmental impact'

harness the UK's strengths in science and technology to help tackle the interconnected challenges of global food security and climate change.

It will do so by strengthening existing partnerships and forging new collaborations between CGIAR – a global partnership that unites international organisations engaged in food security research – and science centres throughout the UK and in the Global South.

Scientists at SRUC will work with the International Livestock Research Institute (ILRI), part of CGIAR and co-hosted by Kenya and Ethiopia, to drive a step change in the breeding and manipulation of forages and crop residues for use in ruminant production systems.

The project will combine ILRI's expertise in plant breeding and SRUC's track record on ruminant nutrition, to develop tools to accelerate the development of new forages and plant residues for Sub-Saharan Africa that boost animal production while decreasing greenhouse gas emissions.

Lead researcher Professor Jamie Newbold, Provost and Deputy Principal at SRUC, said: 'Livestock is a fast-growing, high-value agricultural sub-sector accounting for 15–80 percent of GDP in low- and middle-income countries. In Africa and Asia, demand for livestock products is expected to grow 200 per cent by 2030.

'Ruminants can make use of feed substrates such as crop residues and forages not otherwise nutritionally available to humans. However, such systems are associated with higher levels of greenhouse gas emissions and low productivity, particularly in the Global South.

'There is a need to develop solutions that increase the productivity of livestock systems in Sub-Saharan Africa while also reducing their environmental impact.'



Joint projects in Kenya and Ethiopia will work to boost production while reducing emissions



Rural sites top list of most amazing archaeological discoveries in 2023

Each year, the Society of Antiquaries publishes its list of the most exciting discoveries of the year – and this year's list is no exception.

DIG IT!, A HUB for Scottish archaeology coordinated by the Society of Antiquaries of Scotland, has compiled its annual list of some of the biggest discoveries from the year to raise awareness of the archaeological work that takes place across the country. It features several rural sites including:

Possible Neolithic timber 'hall' in Moray

Found in late 2022 in Portgordon during an evaluation, the site was excavated by AOC Archaeology between January and March 2023 in advance of proposed development works (known as developer-led archaeology).

Archaeologists believe it is a timber hall dating to the Early Neolithic period (4,100 BC to 3,500 BC) – the first ever to be excavated in Moray. More than



PICTURES: UNST SPACEPORT: STUART MUNRO; PORTLETHEN COVE: SCAPE; BRONZE AGE FINDS: AOC

Top 23 of Scotland's archaeological sites

of Scotland picks out the most interesting and many are in rural Scotland

240 pieces of prehistoric pottery have also been recovered from the site, including fragments of carinated and Unstan bowl – among the earliest type of pots found in Britain.

Bronze Age discovery at Shetland spaceport site

In June, the remains of what may have been an Early Bronze Age ritual cremation cemetery were found at a rocket launch site in Unst. The discovery was also made by AOC Archaeology, who were carrying out a watching brief during groundworks at the SaxaVord spaceport site.

Several features, including pits, boulders and cremations (surviving as deposits of burnt bone) were uncovered along with quartz pebbles. These are often associated in prehistory with burial tombs and, in this

case, had been used to create a bright white platform. Archaeologists believe the remains may date from around 2,200 to 1,800 BC.

Rare cliffside cableways in Aberdeenshire

In April and May, the SCAPE Trust worked with the local community to survey and record rare – possibly unique – iron and steel cableways which were used to lift nets, gear, and fish from coves to the top of steep cliffs at Burnbanks Haven and Portlethen.

Introduced into quarries in the late 19th century, the technology was borrowed for the fishing industry in Aberdeenshire when natural coves were developed into small salmon-fishing harbours.

According to a local resident, they were known as 'Blondins', after the

Archaeological wonders of rural Scotland, clockwise from main: the spaceport site in Unst, Shetland; natural cove developed for fishing at Portlethen in Aberdeenshire; neolithic timber hall in Moray; recording Bronze Age finds in Unst

19th-century French tightrope walker Charles Blondin who famously crossed the Niagara Gorge on a high wire.

Surveying and recording are important parts of the archaeological process which, in this context, involve visiting vulnerable coastlines, updating records, and prioritising sites for monitoring or future action.

The fishing stations are now largely disused, but remaining elements such as these cliffside cableways make the sites important for preserving modern fishing heritage.

Dig It! advertises archaeology events throughout the year, including fieldwork opportunities which are free and open to everyone with no previous experience required. Read the full list of top archaeological sites in 2023 and find out how to get involved in Scottish archaeology at DigItScotland.com

Members' reports

Moredun



‘As treatment options become limited, it is important to reduce the risk of importing drug-resistant roundworms onto farms. One effective control strategy is quarantine wormer treatment and appropriate biosecurity.

‘Ensuring measures are taken to limit the spread of disease between farms and prevent wormer-resistant roundworms from being introduced is essential for increasing the lifespan of the available wormers.’

Biosecurity and roundworm advice for cattle enterprises

A joint project led by Moredun Research Institute is looking at ways to reduce the harm done by roundworm while working collaboratively with farmers

ROUNDWORMS ARE KNOWN to impact on the productivity and welfare of livestock and roundworm infections in the national herd are causing significant production losses.

Uncontrolled roundworm infections are estimated to cause a reduction in weight gain during the first and second grazing seasons and a reduction in milk yield of up to 2.2kg per cow, per day. Biosecurity and Roundworm Advice for Cattle Enterprises (BRACE) aims to understand the current roundworm situation in UK herds, farmers' attitudes and practices, and the spread of anthelmintic resistance.

BRACE is led by Moredun Research Institute and involves partners from the James Hutton Institute, Scotland's Rural College (SRUC) and the University of Liverpool. The project is funded by Biotechnology and Biological Sciences Research Council.

The effective control of roundworm typically relies on wormer (anthelmintic) treatments; in the UK there are only three wormer (anthelmintic) classes licensed for use in cattle (white, yellow

and clear) and resistance to all these products has been identified.

Clear wormer resistance has been commonly reported in the UK, particularly against the cattle worm Cooperia. Resistance to the white and yellow wormers has also been recorded, but it is still unclear how common these are in the UK.

Continued use of potentially ineffective drugs could leave herds vulnerable to infection with resistant roundworms and a lack of options for future control.

As treatment options become limited, it is important to reduce the risk of importing drug-resistant roundworms onto farms. One effective control strategy is quarantine wormer treatment and appropriate biosecurity. Ensuring measures are taken to limit the spread of disease between farms and prevent wormer-resistant roundworms from being introduced is essential for increasing the lifespan of the available wormers.

However, the results of a previous questionnaire highlighted that only half

Herds will be increasingly vulnerable to infection if the available treatments become ineffective

of cattle farmers administered any wormer treatments to newly purchased stock.

BRACE intends to co-develop a set of clear and practical recommendations for cattle farmers to help them minimise the risk of introducing wormer resistance into their herds and control roundworms effectively.

To inform these recommendations, the project is exploring the risk posed by traded cattle; clarifying how big a problem roundworms are in commercial cattle and understanding the associated risk of transporting wormer-resistant roundworms onto farms. Moredun and the other project partners would like your input.

Farmers who can spare 10 minutes are being asked to complete Moredun's brief questionnaire on cattle management and roundworm control by scanning the QR code or following the link on the website.

All information will be treated confidentially and stored securely. Gathering information on current management practices will help BRACE tailor the recommendations and ensure they will be easy to achieve on-farm.

For further details and to fill in the questionnaire, please see moredun.org.uk/news/research/roundworm-questionnaire

Arran's Lamlash Bay is focus of new boat traffic study

A collaboration involving Heriot-Watt University will monitor movements of smaller vessels

HERIOT-WATT SCIENTIST Lauren McWhinnie and placement student Rebecca Olaley are working with volunteers from Community of Arran Seabed Trust (COAST) to calculate the true volume of boat traffic in Lamlash Bay by installing an Automatic Identification System (AIS) receiver.

In the UK, vessels over 15m long must broadcast their ID, activity, speed and position with an AIS. It is therefore easy to track how many larger vessels are coming in and out of the bay.

Smaller boats, which can account for up to 70 percent of all vessels in some areas, are under no obligation to use AIS. That makes it difficult to estimate the true volume of marine vessel activity along Scotland's coastlines, including Lamlash Bay.

Vessel traffic has potentially wide-ranging impacts on marine life. Boats

Volunteers will help with land-based vessel counts to accurately track smaller vessels



can damage the seabed by anchoring on sensitive habitats such as reefs or impact protected species – for example, seagrass beds – in the bay.

Species such as seals and dolphins are sensitive to disturbance from boats, which can cause changes to their behaviour, and the noise the boats emit can affect the ability of sea mammals to communicate with each other.

Heriot-Watt's Scottish Vessel Project received funding from the

Natural Environment Research Council (NERC) and the charity Sea Changers for a research placement undergraduate student to work on the project. Vessel data company Fleetmon is providing the AIS equipment and hosting the project's data.

Combining AIS data with land-based vessel counts will give a more accurate picture of the number and types of vessels coming in and out of this environmentally-important area.

BarlBQ: biostimulants for improved barley quality

Trials of an alternative to traditional fertiliser are under way in Ireland, involving a team from Heriot-Watt University



BARLEY MAKES UP 63 percent of Scotland's cereal crop and is used for malting and distilling (beer and whisky) as well as for animal feed. Currently, barley production is very heavily

dependent on the use of nitrogen fertiliser. A Heriot-Watt team consisting of Ross Alexander, Calum Holmes and Angela Feechan is working with scientists from University College

The algal, bacterial and yeast-based biostimulants under trial may be a sustainable alternative to nitrogen fertilisers

Dublin to investigate the impact of biostimulants on barley grain quality for malting. The work is part of an international project funded by the Royal Society of Edinburgh (RSE) and the Irish Department of Agriculture, Food and the Marine (DAFM).

The biostimulants, or biofertilisers, under Irish field trials are algal, bacterial and yeast-based and may be possible sustainable alternatives to fossil based nitrogen fertilisers.

The grain from three different barley varieties (Cassia, Valeria and RGT Planet) will be tested for quality at Heriot-Watt's International Centre for Brewing and Distilling with the tests including: germination, β -glucan content, enzyme activity and soluble protein content.

Micro malting analysis will determine the impact that the biostimulants have on barley for malting and whisky production.

Members' reports

Scottish Alliance for Food, Forest Research

New food alliance is cultivating collaboration for a sustainable future

One of a series of new alliances aimed at addressing research challenges, the Scottish Alliance for Food aims to connect and support researchers

AT A TIME WHEN building a healthful, equitable, and sustainable food landscape is paramount, the Scottish Alliance for Food (SCAF) emerges as a catalyst for change. Funded by the Scottish Funding Council, SCAF is part of the new 'Alliances for Research Challenges' initiative – aiming to coordinate the research community across disciplines and sectors, leverage additional funding, and connect Scotland's research excellence with its national challenges.

Under the leadership of Professor Emilie Combet at the University of Glasgow, SCAF, with its diverse leadership team spanning 10 Scottish institutions, endeavours to unite the



Themes for the new Scottish Alliance for Food

many facets of food research. SCAF connects practitioners, scientists, and the people of Scotland to navigate the complex challenges within our food systems.

The alliance is trans-disciplinary, since SCAF recognises that achieving a sustainable food future is going to demand insights from all disciplines and sectors. It operates across four core themes:

1. Mapping the food system
2. Innovation-led food systems research
3. Culture, heritage & behaviour
4. Food security, environment, community

SCAF carries significance for rural research, stakeholders, and communities, as it emphasises recognising and incorporating rural perspectives into its research initiatives. Through the cross-cutting Academy of Citizens workstream, SCAF extends an invitation to the

Launch of Forest Lab to support woodland resilience and stewardship science

A new project developed by Forest Research is engaging woodland managers as 'stewardship scientists'

AN INNOVATIVE PROJECT to enable UK woodland managers to become volunteer 'stewardship scientists' has been launched by Forest Research and Sylva Foundation, an environmental and forestry charity.

Funded by the Defra Future Proofing Plant Health Programme, Forest Lab enables woodland managers to get involved in science by collecting and sharing data within myForest, the woodland creation and



PICTURE: STEPHEN TALAS VIA UNSPLASH

'The aim is to provide woodland managers with tools to help them interpret official guidance at site level, so more informed management actions can be taken to improve woodland resilience'

Strips and pockets of woodland on estate land in Tweeddale, not far from Peebles

management platform run by Sylva Foundation. The aim is to provide woodland managers with tools to help them interpret official guidance at site level, so more informed management actions can be taken to improve woodland resilience.

myForest is used by over 10,000 woodland owners and managers to help care for almost 200,000ha across Britain. Embedding Forest Lab within myForest means that anyone using the

public, encouraging co-production and engaging with food research. This inclusive approach ensures that the unique challenges and aspirations of rural areas and communities are acknowledged and integral to the research agenda.

SCAF is not just a research alliance - it is a call to action for researchers, practitioners, and consumers, urging them to unite in the collective pursuit of a healthier, more sustainable, and equitable food future for all. Membership is free and open to anyone interested in food and food research in Scotland. SCAF members have access to a broad network of research stakeholders, innovative events (e.g., webinars, sandpits, workshops, writing retreats), research funding for pilot projects, and training and mentoring opportunities.

To become a SCAF member, please visit www.gla.ac.uk/research/az/scaf/takepart/ and to learn more about SCAF, visit www.scaf-arc.co.uk or email scaf@glasgow.ac.uk

platform can get involved simply, and they are able to share data from their existing maps and plans.

Forest Lab is now live and freely accessible within the myForest platform. To take part, people will need to create a free account in myForest and to have mapped at least one area (sub-compartment) of woodland. Signing up to myForest and completing some basic mapping has been designed to be as simple as possible for all users.

There are currently three live Forest Lab projects covering resilience (via the Ecological Site Classification), wildfire and tree growth, with plans to offer more in the future.

'Forest Lab started as a simple idea: wouldn't it be good if myForest users could help researchers? This soon prompted a follow-up question: how can researchers help myForest users with issues impacting their forests? This two-way exchange is the foundation of what has become Forest Lab,' explained Gabriel Hemery, chief executive of the Sylva Foundation.

For further details, including a case study featuring a small woodland owner from Aberdeenshire who is taking part in the tree growth project, see www.forestresearch.gov.uk/climate-change/resources/news/launch-of-forest-lab-a-new-stewardship-science-initiative/



Harvesting in association with landslide prevention on steep ground

Woodland adaptation and climate change case studies

Just published by Forest Research, three new case studies highlight measures that can be taken on a range of sites

FOREST RESEARCH RECENTLY PUBLISHED three new case studies demonstrating how forest adaptation measures can be used to reduce climate change risks.

The case studies feature:

- Steep ground harvesting and landslide prevention: the A82 project.
- Managing for dynamic coastal change at Tentsmuir Forest.
- Woodland management planning at Queensberry Estate, Buccleuch.

The case studies highlight the main climate change risks for each site, how climate change adaptation measures

'The case studies highlight the main climate change risks for each site, how adaptation measures can be selected and implemented, and the lessons learnt so far'

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A case study video on the steep ground harvesting and landslide prevention A82 project is also available.

Find out more at www.forestresearch.gov.uk/climate-change/resources/news/new-case-studies-demonstrate-climate-change-adaptation-measures-at-three-scottish-sites/

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