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1 Enhancing our agricultural landscape: Sustainable intensification in practice

SIP invites you to discuss findings from the Sustainable Intensification Research Platform. Funded by Defra and the Welsh Government, the Platform is promoting new methods in farmland and landscape scale management, which could, for society's welfare, provide both enhanced farm productivity and environmental benefits such as clean air and water. There are five events at the following locations where you can learn more about various land management decision support tools, meet and talk to the researchers involved on the research farms, and learn about the range of findings across the seven national Platform study sites.

Friday 20 Oct North Wyke, Okehampton, Devon, EX20 2SB

Monday 23 Oct Nafferton Farm, Stocksfield, Northumberland, NE43 7XD

Tuesday 24 Oct GWCT Visitor Centre, Loddington, LE7 9XE

Wednesday 25 Oct Morley Farm, Botolph, Wymondham, Norfolk, NR18 9DF Friday 27 Oct Neuadd Reichel, Bangor University, Bangor, LL57 2TW The workshops run from 10.00 -15.00 hrs and are free to attend. Register online.

2 CECAN provides critical friend perspective to Government policy

Bovine TB and approaches to managing the disease are controversial and arguments about their effectiveness persist. DEFRA is developing a framework to guide their evaluation of the overall Bovine TB Strategy. CECAN – the Centre for Evaluation of Complexity Across the Nexus - has been operating as a "critical friend" in this process, with a CECAN representative sitting on the Defra steering group guiding evaluation of "The Strategy for achieving Officially Bovine Tuberculosis Free status for England". CECAN team members have also been providing input into the development of approaches to evaluation at BEIS in relation to their Contracts for Difference policy, to Defra on rural

development programme evaluation, as well as <u>providing expert advice to members of the Environment Agency's "Evidence, Assessment and Evaluation" team as they seek to understand the effectiveness of their waste crime enforcement activity and develop their evaluation in this area.</u>

3 Scottish Government sets up task force on women in farming

The Scottish Government has announced the formation of a Women in Agriculture <u>task force</u> cochaired by Fergus Ewing, Cabinet Secretary for the Rural Economy and Connectivity and Joyce Campbell, a working farmer and entrepreneur based in North Sutherland. The task force is a response to the <u>"Women in Farming and Agriculture Research Report"</u> commissioned by the Scottish Government and produced by researchers at Newcastle University and the James Hutton Institute. Duke of Northumberland Professor of Rural Economy Sally Shortall from Newcastle's Centre for Rural Economy, who led the research, is a member of the task force and Dr Lee-Ann Sutherland Senior Researcher, The James Hutton Institute is acting as Technical Adviser. Other members include a range of representatives from the agricultural industry in Scotland. The overall purpose of this research was to "establish a baseline position on women in farming and the agriculture sector, which then will influence future policies to enhance the role of women in these sectors going forward".

4 Global Food Security projects tackle serious challenges world-wide

Leading experts from the UK and in developing countries across the world are joining forces to tackle some of the most serious global challenges in a new multidisciplinary research programme. In one of the most ambitious international research programmes ever created, £225 million from the Global Challenges Research Fund has been invested across 37 interdisciplinary projects to address challenges in fields such as health, humanitarian crises, conflict, the environment, the economy, domestic violence, society, and technology. Projects consist of UK and developing-country researchers, working together as equal partners. Professor Tim Benton, former Global Food Security Champion is leading a major initiative focussed on creating evidence-based policy to develop sustainable, productive, agricultural systems. His team's research, drawing on expertise at the University of Leeds, aims to support smallholding farmers in Africa, to meet food security and economic development needs.

5 Local fish on the menu

Fish can make a quick, tasty and healthy meal and we are often advised to eat more of it, but since 2007 consumption of seafood has been falling, approaching the second lowest level since records began. The seafood we do eat is generally imported, while we export what we catch. At an event in North Shields "Locally Landed Seafood on the Menu" organised by Food Nation, Newcastle University and the EU funded Strength2Food research project, representatives from the industry and consumers came together to discuss the issues. Barriers mentioned ranged from knowledge and lack of confidence among the public, to the preference of fishermen for a quick sale, which often means to the larger export retailers. The project team is interested in finding ways of bridging the gap and there were also examples of innovative approaches such as a fish box scheme and specialist fish tasting events, as well as some suggestions to explore for the future, including small taster plates in restaurants for customers to try unfamiliar types of fish.

6 CHAP creates a unique platform for testing novel plant protection products

As new plant protection products are developed, we need to ensure that they are safe for the aquatic environment. The CHAP (Crop Health and Protection) has started work on a £3.6m E-Flows mesocosm – a unique platform for higher tier risk assessment of novel plant protection products. They have created 60 realistic streams, each up to two metres wide and ten metres long, each having a continuous matched supply of aged fresh water, and all being independent of each other. This provides a facility that is a realistic, but closely controlled, facsimile of edge-of-field surface waters that can be exposed to novel products in a real-world scenario to ensure the safety of our aquatic habitats. From spring 2018 the E-Flows mesocosm will be available for risk assessment projects or other research projects involving impacts or effects on lowland aquatic habitats. Please contact Rachel Benstead for more information Rachel.Benstead@fera.co.uk.

7 Asian hornet could colonise UK within two decades without action

The yellow legged or Asian hornet – a voracious predator of honey bees and other beneficial insects – could rapidly colonise the UK unless its spread is combatted, <u>according to new research by the Universities of Warwick and Newcastle</u>, working with the National Bee Unit. Professor Matt Keeling, from Warwick's Zeeman Institute for Systems Biology & Infectious Disease Epidemiology Research

predicts that if Asian hornet nests are left to thrive in the UK, there could be hundreds of thousands of them in just over two decades – putting a critical strain on British populations of honey bees and other beneficial insects. With funding under the Insect Pollinators Initiative, the researchers began simulating the likely spread of Asian hornet across the UK over a twenty-five year period, starting from a single active nest in a location near Tetbury, Gloucestershire – where the first verified nest in the UK was discovered and destroyed in 2016. Bee keepers and the public are advised to be vigilant and an app is available to help people identify the invaders and report sightings.

- Researchers call for more stakeholder involvement in the global drylands

 More than 2.5 billion of the poorest, hungriest, least healthy and most marginalized people in the world live in "dryland" environments that are characterized by a lack of water. Their inhabitants face combined challenges of poverty and unemployment related to high population growth rates, low crop yields and land degradation, climate change, conflict and civil unrest. Newcastle's Professor of Socio-Technical Innovation Mark Reed and Lindsay Stringer, Professor in Environment and Development at the University of Leeds have been carrying out research in the drylands of the world over several years. In a blog for the Centre for Rural Economy they explain how involving smallholder farmers themselves in developments could be the key to improving lives in these challenging environments. Their new paper from the research is now published in Land Degradation and Development.
- **9 Call for proposals investigating sustainable intensification in sub-Saharan Africa**The Global Challenges Fund has announced <u>a £10 million call</u> for collaborative proposals to address research challenges relating to the sustainable intensification of agricultural systems in sub-Saharan Africa (SSA). Proposals must be led by a Principal Investigator in the UK, but may include Co-Investigators in Africa and this is strongly encouraged. The call aims to enhance food security by improving the productivity and health of crops important to African farmers. Its focus is on farming systems in which crops are grown primarily for human consumption, and their interactions with the environment. Projects may also include crops grown for animal feed or non-food uses in rotations or mixtures with food crops, and the contributions of farmed animals to food crop productivity. Deadline for applications is 8 November 2017.
- Could the UK follow New Zealand's lead and thrive without subsidies?

 Farm support has been a big talking point for the agricultural industry following the EU referendum, with many citing New Zealand as an example of how the industry can thrive without subsidies. However, a briefing note produced by the Agriculture and Horticulture Development Board highlights many fundamental differences between the New Zealand economy and agriculture industry in 1984 and how the UK economy and agricultural industry performs in 2017. The note may be downloaded from the AHDB website.
- 11 An Introduction to the Landscape Typology Tool free webinar from SIP
 In an era of growing population and climate change managing farmland to increase farm output and competitiveness, whilst protecting the countryside and enhancing environment and social benefits is a key challenge. The Sustainable Intensification Research Platform research initiative, funded by Defra and the Welsh Government, has produced a tool to assist in planning and decision making for Sustainable Intensification at landscape-scale. At a free webinar at 1 pm on Thursday 2 November the Centre for Ecology and Hydrology provides an introduction to the tool and its varied capabilities and applications. The webinar will be presented by Professor Jack Cosby (CEH) and Chaired by Siobhan Sherry (Defra), co-hosted by the Ecosystems Knowledge Network and the Sustainable Intensification Research Network. Registration is required to join this event.
- 12 Royal Institution of Chartered Surveyors events in November and December
 - RICS Rural Mid-Session conference takes place in Battleby on 23 November 2017. Join the RICS team to discuss what role the rural profession can play to support Scotland's forests and to increase their value and contribution to the environment and the economy. Further sessions such as business rates and renewables will look at renewable energy schemes and what the rate reliefs and liability are likely to be for hydro, wind and solar projects. Download the agenda and book now via the RICS website.
 - The RICS Rural Conference is scheduled for 30 November 2017 at Brockholes Nature Reserve, Preston, offering a timely opportunity to consider what a favourable outcome from

Brexit could look like and how to achieve this. The <u>agenda</u> is available and you can <u>book via</u> the RICS website.

 The <u>RICS Rural Conference</u>, <u>Wales</u> returns to Llandrindod Wells on 5 December 2017 with a packed programme designed to help everyone learn about and discuss the latest developments that will affect the rural sector in Wales. Download the full agenda from the RICS website and <u>register</u> today.

13 Coastal Futures conference booking available now

The 25th Coastal Futures conference will take place at the Royal Geographical Society on 17-18 January 2018. An outline programme is available on the website, highlighting the main topics to be covered. The conference has reached its 25th year and there will be emphasis on looking ahead to the opportunities and practical measures that will be needed to meet the challenges the future will pose. Online booking is now open.

14 Science into impact within UK planning system

Northumbria University's Professor of Environmental Geography and Planning Alister Scott who led Relu's *Managing Environmental Change at the Rural Urban Fringe* project has been awarded a NERC 3 year knowledge exchange fellowship on mainstreaming urban infrastructure into the UK planning system. The project seeks to translate NERC science from past and existing programmes of research into pathways to impact to help shape the future direction of planning policy, delivery and funding for green infrastructure. Information and outputs from the fellowship are <u>available as on line resources</u>.

15 KTN study groups with industry: agri-food companies and maths experts

The Knowledge Transfer Network is inviting agri-food companies to take part in a three-day study group with maths experts 21-23 February 2018 to stimulate innovation in this exciting field. At this stage they are inviting agri-food industry organisations of all sizes to get in touch if they would like to find out how they can participate. They are looking for companies with an industry challenge that could potentially be solved by the mathematical sciences. Contact Matt Butchers and David Telford for more information.

16 Harnessing the power of big data in agri-food supply chains

Big data has the potential to transform the way we produce, process and manufacture the food of the future. With recent advances in the technologies used to collect data across the food supply chain, there is an urgent need to harness the power of this information in order to benefit from the new insights, practices and products. SCI's Agri-sciences Group and the Knowledge Transfer Network are organising an event on 22 November in London to focus on key needs of the Agri-Food sector in using data, discuss the existing barriers, and present a number of potential solutions and joint initiatives. Bookings can be made on line.

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Centre for Rural Economy School of Natural and Environmental Sciences Newcastle University Newcastle upon Tyne NE1 7RU

Tel: 0191 208 6623

Email: relu@ncl.ac.uk to subscribe/unsubscribe