

Relu Newsletter

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1 Making the most of the ecosystems approach

Key innovations in economics, cultural ecosystem services and scenarios were presented to a range of stakeholders at the UK National Ecosystem Assessment Follow-on launch in London at the end of June. Parliamentary Under Secretary of State Lord de Mauley gave the ministerial address, expressing the support of the UK government for the research emerging from the UKNEA. Practical case studies from ecosystem pioneers were also on offer and the audience heard about success stories that ranged from green living in Birmingham to working with farmers in the North Devon Nature Improvement Area and natural flood management in the Scottish borders. [Reports are available on the UKNEA website.](#)

2 Sustainable Intensification Platform aims to develop community of practice

Defra's new [Sustainable Intensification Platform](#) was launched in May, creating a platform for research, innovation and knowledge exchange on sustainable intensification. Led by the [National Institute of Agricultural Botany](#) (SIP Project 1) the [University of Exeter](#) (SIP Project 2) and [ADAS](#) (SIP Project 3) and drawing in a range of universities,



research bodies and stakeholder organisations, it aims to create a community of practice, improving knowledge and guidance for farmers and other stakeholders and enabling sustained collaboration at landscape scale. [Landbridge](#) will be involved in knowledge exchange for the project, which is also aiming to develop a web-enabled map-based typology for England and Wales identifying opportunities and risks for production and the environment, which will support targeting of agricultural advice and incentive schemes.

3 Nexus Network to foster new connections on food, water, energy and environment

With £1.8 million funding over the next three years from ESRC, the Nexus Network brings together researchers, policy makers, business leaders and civil society to develop collaborative projects and improve decision making on food, energy, water and the environment. The Nexus is a way of thinking about the interdependencies, tensions and trade-offs between food, water and energy security, in the broader context of environmental change. These systems are inextricably linked and integrated approaches are required which move beyond sectoral, policy and disciplinary silos. Led by the University of Sussex, in partnership with the University of East Anglia and the Cambridge Institute for Sustainable Leadership, the Nexus Network will foster debate, innovative research and practical collaborations. For more information contact Rose Cairns, Network Coordinator, info@thenexusnetwork.org

4 What is causing the decline in pollinating insects?

Insect pollinator numbers are affected by many different environmental and socio-economic factors. LWEC's policy and practice note no 9 "[What is causing the decline in pollinating insects?](#)" explains some of the pressures and pinpoints implications for decision makers. The whole policy and practice note series may be found on the [LWEC website](#).

5 Bee friendly pesticides from spiders and snowdrops

[New research led by Newcastle University](#) has tested the insect-specific Hv1a/GNA fusion protein bio-pesticide – a combination of a natural toxin from the venom of an Australian funnel web spider and snowdrop lectin. Feeding acute and chronic doses to honeybees – beyond the levels they would ever experience in the field – the team found it had only a very slight effect on the bees' survival and no measurable effect at all on their learning and memory. The researchers say that their findings suggest the insect-specific compound has huge potential as an environmentally-benign, "bee-safe" bio-pesticide and an alternative to the chemical neonicotinoid pesticides which have been linked to declines in pollinator populations. The project is part of the [Insect Pollinators Initiative](#), under the auspices of the [LWEC partnership](#).

6 Film shows how farmers bid to improve water quality

The [Bid for Clean Water](#) - a new film from South West Water, the Westcountry Rivers Trust and the University of East Anglia, shows

how farmers, water company customers and the environment benefit from on-farm improvements to cut pollution. The River Fowey supplies around 70% of Cornwall's water. But run off of sediment, nutrients, pesticides and animal manure from the land can cause problems. The [Upstream Thinking](#) programme has invested £360,000 to be paid to farmers for improvements such as fencing, covering feeding sheds and improving slurry stores. A competitive auction aimed to ensure best value for money in terms of environmental improvement per pound of investment.

7 Ecosystem services knowledge: who uses it, when and for what?

The concept of ecosystem services is increasingly being promoted as a means for better protection of ecological systems through more informed decision-making, but in practice much less is known about how far this shift in thinking is actually affecting the way in which ecosystem knowledge is used, especially by decision makers. [A new collection of research papers](#) published in Environment and Planning C explores, for the first time, how far ecosystem knowledge has been taken up in land use planning, policy appraisal and cost benefit analysis. The research was carried out by the [Valuing Nature Network](#).

8 Tree health research to tackle threats to biosecurity

The societal benefits of the UK's trees are estimated at around £1.8 billion per year but in the last few years, several new pests and diseases have emerged as significant risks to tree health and plant biosecurity. Changes in trade in plants and plant products may also contribute to the risk of new pests and diseases entering the UK and climate change may be increasing the risk of them spreading. In June projects under the new [Tree Health and Plant Biosecurity Initiative](#) met at a workshop in London and also heard from LWEC Land Use Fellow Jeremy Phillipson on "Knowledge Exchange: how can it grow and blossom?" Seven new research projects have received a share of £7 million to help address threats to UK forests, woods and trees. The joint, multidisciplinary initiative is funded by BBSRC, Defra, ESRC, the Forestry Commission, NERC and the Scottish Government as part of the LWEC partnership.

9 Could putting a value on coastal assets help to defuse conflict?

Coastal management can be a highly contested topic - a scheme to control erosion in one place may result in loss of beach frontage further down the coast. People value natural assets in different ways - one group of stakeholders may want to see changes that will benefit livelihoods but change the natural habitat and threaten species that other stakeholders hold dear. The [latest Policy and Practice Note from LWEC](#), drawing on evidence from the Valuing Nature Network and UK National Ecosystem Assessment, tackles this issue head on, looking at how coastal assets may be valued and proposing a "balance sheet" approach that could help.

10 Are we neglecting the rural contribution to national economic growth?

Against the backdrop of the flooding that ravaged many rural communities over the winter, a debate was hosted in April by Newcastle's Centre for Rural Economy highlighting the contribution the rural economy makes to national growth. "Reimagining the rural: Are we neglecting the rural contribution to national economic growth?" was held at the Royal Institution of Chartered Surveyors in London with a panel consisting of Janice Banks – Chief Executive of Action with Communities in Rural England, Sara Eppel – Deputy Director of Rural Communities Policy in Defra, Elinor Goodman (chair) - Former Chair of the Affordable Rural Housing Commission and presenter on Radio 4's The Week in Westminster, Jeremy Phillipson – Reader in Rural Enterprise at Newcastle University, and Professor Mark Shucksmith – Director of the Newcastle Institute for Social Renewal. [Read a summary of the debate.](#)

11 Manual helps nature conservationists prepare for climate change

A hands-on manual giving up-to-date, detailed, habitat-specific information for conservation managers to use, to prepare and respond to a changing climate has been published by Natural England and the RSPB, in partnership with the Environment Agency's Climate Ready Support Service and the Forestry Commission. There is strong evidence that climate change is already affecting wildlife and habitat. Species such as the Dartford warbler and the bee orchid are moving further north and recent storms have highlighted the vulnerability of coastal and wetland habitats. [Climate change adaptation manual: evidence to support nature conservation in a changing climate](#) helps land managers and conservationists to plan and take action.

12 Mind the gap between research and practice

Is there really a problem about getting the latest land use research into practice? The consensus at [Landbridge's](#) latest event "[Taking stock of the links between research and the land professions](#)" was that there is still a serious gap that both the academic and land-based professions need to be addressing. But the participants also identified some other key players, including the supermarkets and the agri-supply industry and the discussion has been taken up in a [series of blogs](#), all available on line.

13 BESS reports now available on line

Presentations from the second [Biodiversity and Ecosystem Service Sustainability \(BESS\)](#) research meeting held in June 2014 are now available on line. Early career researchers took the podium on the first day, while research projects from 2013 reported on day 2. The presentations showed the tremendous amount of work that has already been conducted across the BESS Programme and gave the research community a chance to discuss the emerging results.

14 Nature offers a great return on investment according to new report

A new report demonstrating that investment in the environment offers excellent value for money has been published by Natural England. [Microeconomic Evidence for the Benefits of Investment in the Environment](#), assesses the evidence across a wide range of themes, including economic growth, health, social cohesion and resilience to climate change. The report will be of particular interest to anyone involved in land use planning or management.

15 Call for research proposals to strengthen agri-food supply chain

The Technology Strategy Board, along with the [Department for Environment, Food and Rural Affairs \(Defra\)](#), [Invest Northern Ireland](#), the [Scottish Funding Council](#) and the [Welsh Government](#), are to make a joint investment of up to £2.3 million to establish [Knowledge Transfer Partnerships \(KTPs\)](#) to improve the competitiveness, resilience and responsiveness of the agri-food supply chain. The aim of this initiative is to give businesses access to the UK knowledge base so that they can develop innovative solutions to global challenges facing the agri-food sector and it will support up to 25 KTPs. The competition is open on a rolling basis for applications until 11 February 2015 and details are available on the [Technology Strategy Board website](#).

16 Are agricultural policies making us fat and unhealthy?

Politics and economics are getting in the way of better food writes the Global Food Security programme's Sarah Nicholson. [In the GFS blog](#) she notes that cardiovascular diseases are the number one cause of death globally and are predicted to increase by 15% between 2010 and 2020 and the increasing prevalence of these kinds of non-communicable diseases are to a large extent determined by dietary factors. In Europe, our diets have changed to include higher levels of saturated fats, sugars and salt and lower levels of fibre, fruits and vegetables. One hypothesis is that agricultural policies influence food availability and consumption and are causing us to change our diets. If Europe is going to tackle the obesity epidemic there needs to be increased collaboration and communication between agricultural policy makers and health policy makers, she says.