



## **Relu Newsletter**

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# 1. Bridging ecosystems research and the built and natural environment professions

Professionals working across the built and natural environments met up with ecosystem services researchers at an event organised by the LWEC/ESRC Landbridge initiative. A great deal of work has now been done in this area and the workshop assessed the value of an ecosystems services framework for decision making, advisory processes and professional working. The event, held in June at Aston Conference Centre in Birmingham and led by Alister Scott of the National Ecosystem Assessment Follow On, brought together a range of researchers and professions (surveying, planning, forestry, agricultural valuation, agronomy, ecology and environmental management etc). The outcomes will feed into two forthcoming policy and practice notes. One will be aimed at the land based professionals, the other at third sector organisations specifically concerned with riparian and water management. Details will be available on the Landbridge website www.landbridge.org.uk.

#### 2 New mapping portal for ecosystem services

The 'Ecosystem Service Mapping Gateway', developed by the NERC Biodiversity and Ecosystem Services (BESS) Programme, with funding from Natural England, brings together information on the growing number of projects concerned with mapping ecosystem service delivery at the landscape level. It provides an interactive, searchable, map-based facility to explore the wealth of projects that are currently being conducted in this field. The resource may be accessed via the <u>BESS website</u>.

#### 3 Valuing Nature Network funding extended

NERC has committed a further £5 million to further Valuing Nature research. The new five year programme will fund interdisciplinary research to tackle priority research questions. NERC is also committed to maintaining the networking part of the programme, with continued support for the <a href="Valuing Nature Network">Valuing Nature Network</a>. There are discussions going on with other key funders and a call for research proposals is expected later this year.

#### 4 Auction scheme to improve water quality

In the first scheme of this kind in the UK, an auction was used successfully to distribute funds from a water company to farmers, investing in capital items to improve water quality. The work was supported by the NERC Business Internship scheme, managed by the Environmental Sustainability Knowledge Transfer Network. The scheme offered South West Water the opportunity to work with researchers from the University of East Anglia to devise an innovative mechanism for paying for the delivery of ecosystem services. A new briefing note by Ruth Welters outlines the process

#### 5 Measure your own nitrogen footprint

Scientists at Oxford, Lancaster and Virginia Universities, working with the LWEC Macronutrient Cycles programme, have produced a web based tool, to enable anyone living in the UK to see their own nitrogen footprint. The tool helps users to calculate the likely effect of food consumption, transport, housing, and goods and services on the environment. It also makes recommendations for how to lessen your footprint, such as by cutting back on road and air travel, choosing renewable energy and most importantly, altering the balance of food contained in your diet. It could help people to assess their choices and opt for more sustainable ways of living.

#### 6 New professional resources for land advisers

The professionals who advise land managers have increasingly to work with colleagues from a range of different disciplines. That can be problematic for some, but if approached in the right way, this kind of interprofessional working can be both helpful to the client and bring added value for the advisers. A <a href="new resource from Landbridge">new resource from Landbridge</a> guides advisers on best practice and pitfalls.

#### 7 What works for wildlife conservation on farms?

Large sums of money are spent on schemes to conserve wildlife across Europe but not enough is known about which interventions work best. A synopsis of evidence for the effects of such interventions on northern European farmland is now available on the Conservation Evidence website from the Relu project Linking Evidence and Policy for Managing Biodiversity in the Agricultural Landscape. The evidence comes largely from a systematic map compiled by Harper Adams University, which used a peer-reviewed search protocol to find studies of the effectiveness of farm-scale interventions for conserving biodiversity in temperate Europe.

The project has also provided evidence to inform policy decisions on CAP reform and looked at where evidence is lacking and which interventions should be promoted. For more information contact Lynn Dicks lvd22@cam.ac.uk

### 8 River video shows role of biodiversity

Hugh Feeley from Cardiff University, talks about the <u>Diversity in Upland</u> <u>Rivers for Ecosystem Service Sustainability</u> (DURESS) project and the decomposition experiment carried out last winter that will help us understand biodiversity's role in ecosystem service sustainability <u>in a new video</u>.

**9 BBSRC Innovator of the Year Award for Blue Tongue research** BBSRC Innovator of the Year 2013 winners reveal a how disastrous outbreak of the livestock disease Blue Tongue was averted, in an interview on the Global Food Security website.

http://www.foodsecurity.ac.uk/research/impact/innovators-mertens.html

### 10 Landbridge blogs

Landbridge, the knowledge exchange initiative launched by Relu and LWEC to bring researchers and land based advisers together, features regular blogs from professionals in practice and researchers on topics of current concern. Read them all on the Landbridge website.

11 Best practice in Payment for Ecosystem Services promoted

Defra's Payment for Ecosystem Services Best Practice Guide is now published. Relu researchers helped to write the Guide and the case studies draw on research from the programme. The PES Action Plan is also now available and features work carried out by Relu's Sustainable Uplands: Learning to Manage Future Change project. For an overview of PES see Relu Policy and Practice Note no 39.

#### 12 Sustainable aquaculture could boost global food supplies

The <u>Sustaining Ethical Aquaculture Trade</u> project is aiming for major gains in sustainable fish and shellfish farming that could help to feed more people says Dave Little, who led Relu's <u>Warmwater Fish Production as a Diversification Strategy for Arable Farmers</u> project in the <u>Global Food Security blog</u>.

# 13 Cocktail of multiple pressures combine to threaten pollinating insects

A new review of insect pollinators of crops and wild plants has concluded they are under threat globally from a cocktail of multiple pressures, and their decline or loss could have profound environmental, human health and economic consequences. Globally, insects provide pollination services to about 75% of crop species and enable reproduction in up to 94% of wild flowering plants. Pollination services provided by insects each year worldwide are valued at over US\$200 billion. The review, published in Frontiers in Ecology and the Environment, was carried out by an international team of 40 scientists from 27 institutions involved in the UK's Insect Pollinators Initiative, LWEC's £10M research programme investigating the causes and consequences of pollinator decline.

# 14 The latest evidence-based biodiversity information for UK policy and decision-making

The Terrestrial Biodiversity Climate Change Impacts Report Card is the first in a series of click-through expert reports to advise government policy makers, land managers, environmental consultants and researchers who need to know what the current evidence indicates and make decisions relating to climate change adaptation and mitigation. The LWEC Partnership has gathered together the latest evidence and observations to give a comprehensive overview of what is happening now in the UK's countryside, the extent to which climate change is contributing to those changes, and what we might expect to happen in the future as the magnitude of climate change increases.

### 15 Relu academic awarded Wellcome Trust fellowship

Angela Cassidy, who was a <u>Relu Interdisciplinary Fellow</u>, has been awarded a Wellcome Trust Medical Humanities research fellowship to look at the recent history of badgers and bovine TB. The period she will be investigating covers the contemporary resurgance of bTB in cattle, as well as the initial connection of wild badgers with the disease.

#### 16 Masters cuts across rural urban divide

A new "mountains to city" theme being offered as part of an MSc in Environmental Sustainability will cut across the rural urban divide. The course is a unique collaboration between Birmingham City University and the University of the Highlands and Islands and is being co-led by Mark Reed, drawing on research findings from Relu's <u>Sustainable Uplands:</u> <u>learning to manage future change</u> project which he headed.