

## July 2018

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#### 1 What role will there be for advisers in post-Brexit land management?

Farm advisers could play a key role in helping farmers navigate the changing agricultural and environmental policy landscape following Brexit. By applying their field-generated knowledge and targeting technical expertise they can help land managers to improve existing practices and adopt new ones. Relu Policy and Practice [Note No 4 - What role will there be for advisers in post-Brexit land management?](#) provides pointers for the advisory professions on how they could influence developments after the UK leaves the European Union.

#### 2 CECAN outputs on the web

The Centre for the Evaluation of Complexity Across the Nexus (CECAN), a £3m research centre hosted by the University of Surrey is pioneering, testing and promoting innovative policy evaluation approaches and methods across Nexus domains such as food, energy, water and the environment, through a series of 'real-life' case study projects with co-funders ([ESRC](#), [NERC](#), [DEFRA](#), [BEIS](#), [FSA](#) and [EA](#)). A suite of outputs including [case studies](#) and the CECAN series of [Evaluation Policy and Practice Notes](#) can be found on the [CECAN website](#).

#### 3 Centre for Rural Economy highlights post-Brexit challenges for rural England

Challenges facing rural communities after Brexit will vary across the UK. Perceptions of the English countryside have sometimes been over-romanticised as a "rural idyll" but it is also a place that contributes over £250 billion a year directly to the UK economy and that we rely on to produce food, public goods and also remains a resource for relaxation and pleasure. Deprivation may be found in many places and there are constant challenges around affordable housing, connectivity and access to services. Newcastle University's Centre for Rural Economy explores the issues in its latest publication "[After Brexit: 10 key questions for rural policy in England](#)" and raises the questions that will need to be addressed.

#### 4 £2 million awarded to support sustainable agriculture in the UK

[Four new interdisciplinary projects](#) have received £1.8 million to improve the sustainability of UK farming. Funded in the third round of the Sustainable Agriculture Research & Innovation Club (SARIC), the grants have been awarded by BBSRC and alongside 12 other industry partners. SARIC supports interdisciplinary projects to provide solutions to key challenges affecting the efficiency, productivity and sustainability of the UK crop and livestock sectors. The projects include exploring biological management strategies to control insect populations and investigation of the use of sheep in arable rotations. The funded translational projects include a novel soil health monitoring approach for livestock farming and development of a farmer decision support tool to assist with systemic grassland management.

## **5 Ensuring rural businesses are not left behind**

The 4th Industrial Revolution is gathering pace and set to alter many aspects of the way we live and work. A workshop for delegates from traditional and high tech businesses, along with national and local government representatives, was hosted by Newcastle University's Centre for Rural Economy (CRE) as part of the [Northern Powerhouse Business Summit](#). Four provocations highlighted different developing technologies: a trial of autonomous vehicles by the Lake District National Park and the future of mobility as a service in rural areas; augmented and virtual reality that Northumberland National Park is employing to enrich the visitor experience and reach a new audience; work on the future of food production by the Government Office for Science; and a presentation from CRE on the opportunity for distributed power stations using rural community buildings. Delegates then generated their own ideas of how new technology could be integrated with rural development - a fantastic range of possibilities, from a pop-up mobile theatre with augmented and virtual reality facility, to an open platform Internet of Things network which is available to all everywhere as a foundation of future innovation. If you want to keep in touch with CRE and find out more about the research that is being carried out [you can sign up to the contacts list](#).

## **6 Beneficial fungi and could help protect cereal crops**

A team of young researchers has pinpointed a way of easing cereals' risks from 'Take-all', a devastating root disease of cereal crops worldwide. 'Take-all' is caused by the fungal pathogen, *Gaeumannomyces tritici*. Farmers struggle to control the disease because few chemical seed treatments are available, and current biological strategies are hindered by the variety of soil types. [But now scientists from Rothamsted Research](#), funded by BBSRC, has come up with some answers. Related species, notably *G. hyphopodioides*, are capable of immunising plant roots against the pathogen. The complete findings are published in the [Journal of Experimental Botany](#).

## **7 Production diseases and animal welfare**

With intensive animal production on the rise, farmers have to be increasingly alert to problems created by so-called "production diseases". These have implications for both profits and animal welfare. But how aware are consumers of these diseases and what interventions would they like to see in the food chain? Relu policy and practice note no 5 "[Production diseases and farm animal welfare: what does the public think?](#)" outlines the issues and looks at actions stakeholders could take.

## **8 UK and Brazilian research teams in partnership to tackle resistance challenges**

[Ten pump-priming awards](#) bring together researchers across the UK and São-Paulo to tackle core challenges for anti-microbial resistance and resistance of insect pests in the Brazilian agriculture and livestock sectors. The projects are to be funded by BBSRC and FAPESP through the Newton Fund's Joint Pump-Priming Awards for AMR and Insect Pest Resistance in Livestock and Agriculture. All bring together leading UK and São-Paulo-based bioscience research teams and will focus on resistance challenges impacting the livelihoods of Brazilian farmers, addressing a range of important issues, from bovine mastitis and poultry productivity to pests of sugarcane and citrus trees.

## **9 Latest publications from the Farm Business Survey now available to buy**

Three new publications are now available from the [Farm Business Survey](#) team based in the School of Natural and Environmental Sciences at Newcastle University. [A benchmarking guide to farming in Northern England](#) analyses the profitability of farms in the local area. The guide looks at the economic health of all farm types across Northumberland, Cumbria, Durham and Tyne and Wear over the period 2016/2017. Two national publications give an independent analysis of specific farm types in England during 2016/17. [Hill Farming in England](#) by David Harvey and Charles Scott provides an insight into how these iconic but economically vulnerable areas are faring and highlights their current

dependence on agricultural subsidies. [Organic Farming in England](#) looks at a niche sector which is down from a peak of 391,76 ha in 2010 to 281,769 ha in 2016.

#### **10 Policy Internships opportunities for PhD students**

[The Policy Internships Scheme](#) provides the opportunity for PhD students funded by the research councils of UK Research & Innovation to work for three months in one of a selected group of highly influential policy organisations. The next funding opportunity is now open for applications until 13 August 2018. The successful applicants are funded to work at host partner organisations on one or more policy topics relevant to both the student and the host. The student will be expected to produce at least one briefing paper, participate in a policy inquiry and/or organise a policy event, or equivalent piece of work. Internships are available with a number of parliamentary departments, government departments and non-governmental bodies, learned societies and other organisations.

#### **11 Innovation Projects open call from NERC**

NERC is inviting proposals to its [Innovation Projects open](#) call between 4 July and 26 September 2016. This call picks up where research grants leave off, supporting translational and knowledge exchange activity and enabling research outputs from research council funded research to be taken further and developed into practical (non-commercial) application, so their potential outcomes can be realised. Proposals to this funding call must involve non-academic end users as project partners. Private, public or third-sector organisations or institutions with an interest that falls within NERC's remit are eligible to be considered as end users in the context of this call.

#### **12 If you are a potato grower CHAP and Fera need your help**

A new pest and disease risk forecasting service for potatoes was launched in May by CHAP (Crop Health and Protection Centre) and Fera and they are looking for volunteers to be part of a network of surveillance to report appearance of first symptoms in crops. Data will be collected from registered users via a mobile phone during the decision period for potato blight disease on a map which is being extended and updated to form the core platform for a new national capability in decision support. The new service will deliver risk forecasts for pests and diseases of potato, wheat, barley, oilseed rape using a bespoke weather monitoring network, national pest and disease surveillance data and advanced risk models. To join the participatory network and for more information please contact [cropmonitor@fera.co.uk](mailto:cropmonitor@fera.co.uk). To keep up to date on developments with CropMonitor please visit the [website](#) and register for text or email updates.

#### **13 Don't be a sluggard – sign up for FERA's Metaldehyde Conference right away**

It is estimated that losses of £45m – £100m per annum could occur in agriculture if molluscicides were not used. But pellets as currently used can cause pollution, and improvements to their design are urgently required. This event at FERA Science in York on Wednesday 13 September 2018 aims to improve understanding of the problem and multi-faceted challenges to industry, farmers, regulators and the water industry, and to discuss the science required to give better and safer slug control.

[Register on line](#)

#### **14 Want us to keep in touch?**

If you are reading this but didn't get a copy directly emailed to you please [sign up to our mailing list](#). It only takes a couple of seconds and will ensure you never miss any future updates. Or you can email us at [relu@ncl.ac.uk](mailto:relu@ncl.ac.uk).

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**Edited by Anne Liddon and Jeremy Phillipson**

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](mailto:relu@ncl.ac.uk) to subscribe/unsubscribe