PlantSci Newsletter – a monthly round-up of plant science policy headlines and stories

March 2017

You are receiving this newsletter as a previous PlantSci news digest subscriber. We are delighted to be relaunching this monthly publication and we hope you will find it useful! You can change your subscription preferences on the RSB mySociety webpage.

News

UKPSF news

Plant Health Undergraduate Studentships
Undergraduates - would you like to experience the exciting world of plant science research, tackle a key science challenge, and be paid for it? We’ve worked with plant scientists to create four excellent projects that address major plant health challenges identified by the Department for Environment, Food and Rural Affairs (Defra). Students can now apply to work on these projects for 8-10 weeks this summer, with selected students receiving £300 per week. Closes 30 April 2017

UKPSF blog

‘Power Plants’: renewable energy from photosynthesis
A blog post by Barney Slater AMRSB, BBSRC PhD student at University of Cambridge and policy intern at the Royal Society of Biology, in which he discusses renewable energy from photosynthesis.
Plant health and biosecurity

Commons Library analysis: Bees and neonicotinoids
This briefing concentrates on the interaction between bees and a group of insecticides - known as neonicotinoids - which have been in the spotlight after a number of studies yielded evidence (although much of that evidence is contested) of sub-lethal, harmful effects on bees.

1 in 3 Scottish farmers blame neonicotinoid ban for rapeseed crop damage
The neonicotinoid ban has resulted in far greater damage to oilseed rape crops, according to a third of Scottish arable farmers.

Glyphosate weedkiller, previously linked to cancer, judged safe by EU watchdog
Chemical used in the best-selling Roundup herbicide is cleared for public use following an EU licensing battle due to potential health risks.

UN experts denounce 'myth' pesticides are necessary to feed the world
Report warns of catastrophic consequences and blames manufacturers for ‘systematic denial of harms’ and ‘aggressive, unethical marketing tactics’.

CRISPR, microbes and more are joining the war against crop killers
Agricultural scientists look beyond synthetic chemistry to battle pesticide resistance.

Plant Health across Defra
The Government is committed to protecting our trees and other plants from pests and diseases and building their resilience to threats. Our woodlands and parks are an essential economic, environmental and social resource so it’s vital that we keep them vibrant and healthy offering homes for wildlife and places for people to enjoy.

‘Negative data is good!’, Jane Barbrook, APHA

Keep it Clean – don’t give pests and disease an easy ride

Agriculture

How to deliver an improved UK agriscience sector outside of the EU
Rothamsted Research and the NFU convened a workshop identifying the key areas of focus in order to have a world leading agriscience sector in the UK after Brexit.

£1.5M investment supports postgraduate training in agri-food sector
To continue meeting the advanced skills needs of the agri-tech food industry, the Biotechnology and Biological Sciences Research Council (BBSRC) recently delivered additional funding of £1.5M to support the union of three Advanced Training Partnerships to form a single enhanced Advanced Food Training Partnership (AFTP).
Researchers propose using CRISPR to accelerate new crop plant domestication
Out of the more than 300,000 plant species in existence, only three species -- rice, wheat, and maize -- account for most of the plant matter that humans consume, partly because in the history of agriculture, mutations arose that made these crops the easiest to harvest. But with CRISPR technology, we don't have to wait for nature to help us domesticate plants, argue researchers at the University of Copenhagen.

Building a commercial seaweed industry
First policy guidelines for sustainable seaweed cultivation.

The rise of biodynamic farming: a return to 'the way farmers farmed for millennia'
Biodynamic foods are more nutritious than conventionally farmed crops – but critics are questioning biodynamic farming’s ability to feed the masses.

Biodiversity

Decline of bees threatens evolution of plants, study suggests
Field mustard plants pollinated by bumblebees were taller and more scented than those pollinated by hoverflies.

Flower-rich habitats increase survival of bumblebee families
New research led by the UK’s Centre for Ecology & Hydrology has revealed for the first time that flower-rich habitats are key to enhancing the survival of bumblebee families between years.

We need to talk about Nitrogen
Plantlife’s report on nitrogen deposition highlights scale of challenge.

Conservation

Monitoring helps conservation project protect New Forest
Monitoring of a conservation scheme in the New Forest has been increased to extend its benefits for rare species and habitats.

Improving the evidence base for tackling the threat of invasive non-native species
Invasive Species week 2017 takes place from March 27 until April 2.
Forestry

**Forestry and woodland grant schemes not fit for purpose**
On International Day of Forests, MPs from the Environment, Food and Rural Affairs Committee have published a report "Forestry in England: Seeing the wood for the trees", calling for the Government to take action to increase woodland creation in England.

**The satellites that safeguard our forests**

Sustainability

**The future of environmental policy after Brexit – Summary report now available**
To uphold the proud tradition of evidence based policy in the UK is a challenge. And we will be stronger if we provide policy options, not only evidence; if we cooperate and if we speak out. This was the conclusion at the latest NCI meeting, held jointly with the UK Network of Environmental Economists, on the future of evidence-based environmental policy post-Brexit. A short report of the event is now available.

**Green campaigners call for land ministry to halt the ‘erosion of the countryside’**
Peers, academics and architects urge unified approach to planning to improve quality of life.

**A makeover for the world’s most hated crop**
Oil palm has a reputation as an environmental menace. Can the latest genetic research change that?

Other news

**What every scientist should know about influencing policy**
Science provides evidence and evidence informs policy. But how exactly does the relationship work? One of Forest Research’s own scientists decided to find out and discovered three key lessons for scientists that can help improve their impact on policy.

**Are digital solutions good for farmers?**

**In praise of quinoa**
The spread of exotic grains is evidence that globalisation works.
Opportunities

**Royal Society of Biology, Regional Grant Scheme for Biology Week events in 2017**
The Regional Grant Scheme for Biology Week events is now open and offers grants of £50 to £500 for individual members of the Royal Society of Biology to run an event or activity in their region. Full details including guidance notes, event ideas and an application form are available online. For enquiries please contact our regional coordinators via email regions@rsb.org.uk
Closes 21 April 2017

**Sense about Science Plant Science Panel**
Public access to reliable, comprehensible information about innovation in plant science is limited. People are concerned about scare stories they see and hear as well as being interested in the developments they read about. But if you have a question, who do you ask? By submitting a question – any question – to the Sense about Science plant science panel, a member of the public can get a direct answer from someone working in that field.

Consultations

**Forestry and Woodland inquiry consultation**
The National Assembly’s Climate Change, Environment and Rural Affairs Committee is launching an inquiry into forestry and woodland policy in Wales.
Closes 7 April 2017

**Building our Industrial Strategy**
This green paper sets out our vision for a modern industrial strategy and some early actions we have committed to take. It aims to start a genuinely open and collaborative conversation about the skills, research, infrastructure and the other things we need to get right to drive long term growth in productivity.
Closes 17 April 2017

Events

**Forest insects and their allies**
25 April 2017, York
Royal Entomological Society Special Interest Group meeting.
State of the World’s Plants Symposium 2017
25 – 26 May 2017, Royal Botanic Gardens, Kew
In conjunction with the publication of a cutting-edge annual report, scientists and policymakers will gather at Kew for the 2nd international State of the World's Plants Symposium. An annual review of the major issues affecting plant diversity and abundance, Kew's State of the World’s Plants report provides data on important indicator metrics to show us how plants are faring and how this is changing over time.

Fascination of Plants Day 2017
18 March 2017
Fascination of Plants Day (FoPD), which takes place on 18th May every other year, is a worldwide initiative of the European Plant Science Organisation (EPSO) and Global Plant Council (GPC), where plant scientists engage with schools and the public to enthuse them about the wonders of plants.

Fascination of Plants Day 2017: Guided tour of Green Island Gardens
21 May 2017
Our Fascination of Plants Day 2017 celebration will be a guided tour of Green Island Gardens with an opportunity to stay afterwards and explore the gardens further and access the café for lunch.

Utilising genetic resources in R&D
13 July 2017, York
This half day training event is an opportunity to gain an overview of the Nagoya Protocol and associated EU Regulations which have significant implications for the way R&D using certain plant and microbial materials is conducted. This event will include a variety of interactive learning approaches developed from our recent workshop "Sharing nature’s genetic resources – implementing the Nagoya Protocol on Access and Benefit Sharing".

For the full events list, please see the UKPSF website.

And finally...

Amazon rainforest was shaped by an ancient hunger for fruits and nuts
People living in the area thousands of years ago may have changed the forest around them in ways that are still visible today.