





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

January 2019

News

Top story

Plant scientists and MPs come together for Growing the Future report launch

The Royal Society of Biology today [29 January] released a new report about opportunities arising in plant sciences.

Download a PDF copy of *Growing the future*. To request a printed copy, please contact Jonathan Carruthers.

Plant health and biosecurity

Movement restrictions introduced to protect UK against tree pest

New measures brought in after larger eight-toothed spruce bark beetle (*Ips typographus*) was found in Kent.

Thousands turn out to support science in Italy's stricken olive region

Anti-science sentiment has hampered efforts to contain the spread of a devastating olive-tree disease.

Beech trees are dying, and nobody's sure why

A confounding new disease is killing beech trees in Ohio and elsewhere, and plant scientists are sounding an alarm while looking for an explanation.

'We are clearly losing the fight': scientists sound alarm over invasive species Invaders are a greater threat to native species than climate change, land clearing and energy production, experts say.

Agriculture

Oxford Farming Conference 2019 address by the Environment Secretary

Michael Gove: British farmers can take advantage of the opportunities provided by Brexit and continue to export great British produce.

<u>Application for Field Trial of Genetically Modified Organisms: High Iron Wheat</u> and CRISPR Brassica

Researchers at the John Innes Centre have applied to the Department for Environment, Food and Rural Affairs (Defra) for consent to conduct field trials of genetically modified (GM) wheat and gene-edited Brassica (CRISPR).

Genetically modified 'shortcut' boosts plant growth by 40%

French court bans sale of controversial weedkiller

Ruling prohibits sale of a glyphosate product to professionals, citing arguments that chemical is potentially carcinogenic.

Food security

New plant-focused diet would 'transform' planet's future, say scientists

'Planetary health diet' would prevent millions of deaths a year and avoid climate change

How African scientists are improving cassava to help feed the world

Researchers in Nigeria are combining genomics and conventional breeding to improve the starchy staple crop.

Biodiversity and conservation

Agency protecting English environment reaches 'crisis point'

Natural England struggling to protect important sites after suffering budget cuts

'Land sparing' on farms could revitalise UK bird populations, study says

Claim that more intensive farming would allow rewilding of greater areas of countryside.

World's coffee under threat, say experts

City bees: allotments and gardens can help arrest decline – study

Research also identifies pollinators' favourite flowers, including brambles, buttercups, dandelions, lavender and borage.

Insect collapse: 'We are destroying our life support systems'

Scientist Brad Lister returned to Puerto Rican rainforest after 35 years to find 98% of ground insects had vanished.

<u>Protecting monarch butterflies' winter home could mean moving hundreds of trees</u>

Researchers are trying to shift Mexico's oyamel firs to higher elevations to help them weather warming temperatures.

The secret life of plants: Ten new species found this year

Biodiversity thrives in Ethiopia's church forests

Ecologists are working with the nation's Tewahedo churches to preserve these pockets of lush, wild habitat.

Forestry

Communities to have greater say in protecting local trees

Michael Gove launches consultation on plans to create greater protections for trees in urban areas.

Transgenic trees face rocky path from farm to forest

Report from the US National Academies of Sciences, Engineering, and Medicine highlights thorny issues with releasing engineered trees into the wild.

How much can forests fight climate change?

Trees are supposed to slow global warming, but growing evidence suggests they might not always be climate saviours.

Sustainability

Plant hedges to combat near-road pollution exposure

Urban planners should plant hedges, or a combination of trees with hedges -- rather than just relying on roadside trees -- if they are to most effectively reduce pollution exposure from cars in near-road environments, finds a new study.

Guardian switches to potato starch wrapping

For more on the subject of compostable wrapping...

<u>The Biologist</u> said goodbye to plastic wrapping back in June 2018, read our <u>blog</u> post, published at the time, to find out more.

Other news

Strongest opponents of GM foods know the least but think they know the most

Analysis of surveys from US, France and Germany could also have implications for science communication in other fields.

<u>Indian court's decision to uphold GM cotton patent could boost industry</u> research

But the ruling is not the end of the legal challenge.

People

EU's FAO candidate champions producing 'more and better'

There is no universal solution to producing more and better produce, according to the former head of the European Food Safety Authority (EFSA), who is now running to become director general of the UN's food and agriculture agency (FAO).

Natural England's longest-serving Chair retires

Andrew Sells retires today as Chair of Natural England after five years.

Opinion

What has UK Plant Science ever done for us?

Like that famous sketch about the Romans from Monty Python's Life of Brian, the contributions of the UK plant science community are often overlooked in favour of (equally worthy) research in cancer or neurobiology. However it is clear from numerous outstanding discoveries and from international citations-rankings that UK plant science is world-leading.

Three cheers for Michael Gove: if he can make Agriculture a STEM subject?

During his session at the annual Oxford Farming Conference (OFC) on January 2nd 2019, Michael Gove mentioned that Agriculture should be considered as a STEM subject.

EAT-Lancet report's recommendations are at odds with sustainable food production

The Sustainable Food Trust welcomes the analysis in the EAT-Lancet report, published today, which illustrates why diets and global food systems need to change. However, due to a fundamental lack of agricultural understanding, some of the main dietary recommendations are incompatible with the food production outcomes of truly sustainable farming systems.

Spotlight on urban, vertical and indoor agriculture

Should food be grown in cities? If so, how? These questions have a long history, with the last few hundred years taking in the Garden City movement where towns were designed to include homes, industry and agriculture, the 'Victory Gardens' of the First and Second World Wars and, more recently, the food miles debate.

Opportunities

Local RSB volunteers wanted to help at RSB outreach and engagement events throughout 2019

The first events will take place in <u>Birmingham</u>, <u>Nottingham</u>, <u>Kent and on the Isle of Wight</u>. Please contact <u>Amanda Hardy</u> if you are interested in volunteering.

Regional Food Programme opens for applications

The Department of Agriculture, Environment and Rural Affairs (DAERA) has today announced the opening of the 2019/20 Northern Ireland Regional Food Programme (NIRFP), a DAERA-funded programme to help raise the profile of quality regional food.

Closes: 6 February 2019

Highlight topics - Fifth round

NERC invites proposals for the fifth round of highlight topics, a route for funding strategic research. Highlight topics focus strategic research on defined subject areas, and will be delivered through independent projects.

Closes: 21 February 2019

Applications open: Speak Up for Food Security

The Global Food Security programme has launched a new science communication competition 'Speak Up for Food Security' to equip early-stage researchers with the knowledge and communication skills to propose and facilitate the necessary changes to transform our food system for health and sustainability. Applications are now open to UKRI council-funded PhD students and post-docs who recognise the food security implications of their research.

Closes: 24 February 2019

Biology Challenge 2019

The Biology Challenge 2019 (6th – 26th March) for students aged 13-15 is now open for registrations. The competition stimulates students' curiosity about the natural world and encourages them to take an interest in biology outside of school. High scoring students will receive certificates and be invited to an awards ceremony in London. Please contact Raghav Selvam with any enquiries.

Closes: 27 February 2019

£500 Royal Society of Biology Travel Grants - apply now!

Student and early career members of the Royal Society of Biology can now apply for a £500 Travel Grant to be used towards overseas travel in connection with biological study, teaching or research. Find out more and apply on our website (you can also become a member to apply!).

Closes: 1 March 2019

GCRF Equitable resilience: ensuring resilience enhances the Sustainable Development Goals

Closes: 7 March 2019

The BBSRC Impact Writing Competition 2019

Are you aware of inspiring research, supported by BBSRC, making a real, tangible difference to people's lives? BBSRC invites PhD students and early-career researchers to submit an impact case study clearly describing the economic or societal impact of BBSRC's activities and investments.

Closes 18 March 2019

David Miller Award Applications Now Open

Calling all young horticulturists and plant scientists! The SCI Horticulture Group has now opened applications for the 2019 David Miller award. Two travel bursaries with the value of £500 each along with other benefits that are available this year.

Closes: 15 April 2019

New online RSB training course on Unconscious Bias

The online Unconscious Bias course is a half day awareness building course, which aims to educate staff and managers so that they can lead by example in the quest to change mind-sets and create a more diverse and inclusive workplace.

This course will introduce you to the idea of unconscious or 'hidden' bias and how it can impact on the workplace. It will give you the opportunity to think about situations where your own unconscious bias might affect your ability to make objective decisions or judgements.

To register for this course, please visit our online learning platform - myLearning.

RSB training course: Leadership in a Laboratory Environment

A successful career in a scientific lab environment needs leadership and management skills.

To register for this course, please visit our online learning platform - myLearning.

Consultations

Biodiversity net gain: updating planning requirements

The government is seeking views how to improve the planning system in England to protect the environment (biodiversity net gain) and build places to live and work.

Closes: 10 February 2019

Deforestation and forest degradation – stepping up EU action

Closes: 25 February 2019

Tree and woodlands: introducing measures for felling street trees

Closes: 28 February 2019

Knowledge exchange framework (KEF)

In November 2017, the Government asked the former HEFCE to lead on developing the knowledge exchange framework, to support the Government's Industrial Strategy 'Building a Britain fit for the future'. We [Research England] now invite responses to the KEF proposals. We [Research England] are also calling for volunteer institutions to participate in a pilot of the KEF for the remainder of the 2018/19 academic year. Closes: 14 March 2019

Events

Molecular Plant Biology Symposium

This symposium is a full day program of talks showcasing cutting edge research and the facilities available at each of the N8 institutions. There is an exciting line up and lots of time for discussion and networking.

Durham University, 1 April 2019

11th Tri-National Arabidopsis Meeting (TNAM 2019)

For the last 20 years, TNAM has established itself as a premier plant science meeting in Europe that attracts many participants and also much international attention. In addition to two keynote lectures presented by Tetsuya Higashiyama and Wolf Frommer, TNAM 2019 features an exciting scientific program highlighting frontier plant research from Arabidopsis to crops, including technology development. With more than 26 invited speakers and 250 expected participants, combined with the strong plant research community in Europe and in Switzerland, TNAM 2019 again presents an exciting opportunity to engage in discussions on frontier research. Zurich, 10-12 April 2019

Heads of University BioSciences (HUBS) Annual Meeting 2019

We are delighted to invite all members to attend the inaugural HUBS Annual Meeting. Early-bird registration is now open for this two-day conference, which will feature sessions on research, higher education policy, and teaching and learning in the biosciences.

Cambridge, 30 April - 1 May 2019

Valuing our Life Support Systems 2019 – Book your place now!

21-22 May 2019, The Crystal, London

Our call for sessions, speed talks and posters has been extended until Friday 30 November. Please send your proposals to secretariat@naturalcapitalinitiative.org.uk using our short submission form.

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

And finally...

Plant sprouts on the Moon for first time ever

China's Chang'e-4 lander has sent back pictures of a cotton seed sprouting in a miniature biosphere experiment on the craft.

Plants Can Hear Animals Using Their Flowers

And they react to the buzzing of pollinators by sweetening their nectar.

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