





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

October 2019

News

Top story

Valuing our Life Support Systems 2019 – report

The Natural Capital Initiative is a partnership of the Royal Society of Biology, British Ecological Society, Centre for Ecology & Hydrology, and the James Hutton Institute. The Natural Capital Initiative summit report is out now. The Natural Capital Initiative's 10th anniversary summit brought together over 180 delegates from across science, policy, NGOs, businesses and local communities to discuss innovative solutions that enhance the environment and strengthen society.

Plant health and biosecurity

'Citizen army' needed to tackle invasive species, MPs suggest
Environmental committee says government funding 'fails to match scale of threat'

A coordinated response to the oak processionary moth outbreak

<u>Citizen scientists have helped shed light on a "humungous fungus" that can kill off common plants.</u>

Plant health: EU prioritises 20 pests

The European Commission has published a list of 20 "priority pests" that present the most serious economic, environmental and social threat to EU countries.

Plant breeding

Researchers call for responsible development of synthetic biology
Potentially transformative technology

Agriculture

New report shows pilot scheme farmers boost environment outcomes

Farmers and land managers in a "Payment by Results" pilot are more motivated to succeed, delivering "exceptional results" for the environment

Brexit may expose Britons to more pesticides - report

Fear that fall in food standards after UK leaves EU regulatory system could allow farmers to use more chemicals

MEPs block move to weaken EU rules on bee-harming pesticides

Sixteen states and European commission had lobbied against planned guidance

EU will not renew authorisation of 'bee killer' substance thiacloprid

ased on a conclusion by the EU's food safety authority EFSA, the European Commission announced on Tuesday (22 October) that it will not renew the authorisation of the "bee killer" substance thiacloprid. This means that the substance can still be used until April 2020.

<u>Eight in 10 farmers benefit from working with government pollution advice</u> service

A network of 20,000 farms are taking action to drive down water pollution and protect the environment

Climate: 100% organic farming would boost emissions

Farming could be absorber of carbon by 2050, says report

Veganism and trees could help stop agriculture contributing to global heating, study says

Food security

UK aid partners with Gates Foundation to tackle global food insecurity

New funding to allow scientists to research cutting-edge technology to protect crops and produce "super crops" that will be more efficient and withstand the impacts of climate change.

Stop the waste: UN food agencies call for action to reduce global hunger

Higher temperatures driving 'alarming' levels of hunger – report

Global hunger index finds countries affected by drought and conflict have seen biggest increases in undernourished people

Healthy diet means a healthy planet, study shows

Healthier food choices almost always benefit environment as well, according to analysis

Biodiversity and conservation

Populations of UK's most important wildlife have plummeted since 1970

Quarter of mammals and nearly half of birds assessed are at risk of extinction, says State of Nature report

Landmark Environment Bill moves forwards

Environment Bill passes second reading by MPs unopposed and will now progress to Committee stage.

'Green gold' tree offers Brazil deforestation hope

Climate change: Widespread drying of European peatlands

'Once they're gone, they're gone': the fight to save the giant sequoia

A conservation group plans to buy the largest privately owned sequoia grove as the climate crisis threatens the species' future

Amazon rainforest 'close to irreversible tipping point'

Forecast suggests rainforest could stop producing enough rain to sustain itself by 2021

Natural 'bumblebee medicine' found in heather

HS2 Ltd's approach to ancient woodlands during the Oakervee Review

As highlighted by the Secretary of State, during the Oakervee Review we must strike a sensible balance between keeping the programme on track, and recognising that some works cannot be undone.

'It's an enormous act of ecological vandalism': the ancient forests under threat from HS2

The high-speed rail network is under review – and may even be cancelled. But that hasn't stopped irreplaceable woodland in its path from being targeted for destruction. However, people are fighting back

Sustainability

Rice growing produces tonnes of excess straw – can we turn it into 'bioenergy'?

For every tonne of rice produced, about a tonne of straw is grown. Given 770m tonnes of rice are produced each year, that's a lot of straw.

Other news

New Academy of Nutrition Sciences launched

The Association for Nutrition (AfN), British Dietetic Association (BDA), British Nutrition Foundation (BNF) and Nutrition Society (NS) have launched the Academy of Nutrition Sciences (ANS), a new charitable organisation which aims to provide a powerful and unified voice to promote evidence-based nutrition science. Other organisations from the UK and further afield, who share the Academy's ambition, principles and values, will be welcome to join in future. Academy membership is open to organisations, not individuals.

NIAB EMR opens bespoke research winery

The UK now has a bespoke state-of-the-art research winery and vineyard to underpin the rapidly expanding viticulture sector, thanks to new investment in vine-to-wine R&D facilities.

People

New appointment to help find fresh ideas to transform food systems

Guy Poppy, Professor at the University of Southampton and Chief Scientific Adviser to the Food Standards Agency, has been appointed to the Biotechnology and Biological Sciences Research Council (BBSRC) – part of UK Research and Innovation – on a part-time basis as Programme Director for the recently announced Strategic Priorities Fund (SPF) Food Systems programme.

Opinion

Block on GM rice 'has cost millions of lives and led to child blindness'

Eco groups and global treaty blamed for delay in supply of vitamin-A enriched Golden Rice

To save Brazil's rainforest, boost its science

My country's government is squeezing research and pushing the rainforest to the brink.

Andriukaitis: 100-year old production models cannot achieve food sustainability

Opportunities

Natural England Board Members

Ministers wish to appoint four new Members to the Board of Natural England. Board Members play an important role in supporting and encouraging the executive team in improving Natural England's delivery for the natural environment by driving forward substantial change to deliver value for money, excellent customer service and better collaboration with key partners while maintaining a clear overview, and ensuring business continuity, across the range of its functions.

Closes: 14 November 2019

Help to promote the IYPH 2020 with your plant health story!

The Food and Agriculture Organisation (FAO) is collecting stories that demonstrate the importance of plant health to share during the International Year of Plant Health 2020.

Closes: 15 November

<u>Transforming the UK food system for healthy people and a healthy environment</u> call

Proposals are invited for interdisciplinary research consortia to take a systems approach, linking healthy and accessible diets with sustainable food production and supply to help drive food system transformation. This programme aims to address health, environmental and social challenges simultaneously, bringing together researchers, policymakers, business and civil society to develop evidence for multipronged and simultaneous action across the food system.

Closes: 26 November 2019

Consultations

Dasgupta Review on the Economics of Biodiversity

HM Treasury launches a call for evidence for an independent global review, led by Professor Sir Partha Dasgupta, to assess the economic value of biodiversity and identify actions that will simultaneously enhance biodiversity and deliver economic prosperity. The RSB response to this consultation is currently in draft. Please contact consultation@rsb.org.uk for more information and if you would like to contribute. Closes: 6 November 2019

Events

Plant Quantitative Genetics: from Theory into Practice

This one off meeting will bring together plant quantitative geneticists and breeders for a lively discussion of the most up to date advancements in quantitative genetics as applied to plants, and particularly crops, and to identify on-going opportunities for discussion and collaboration between the academic community and the plant breeding industry.

7 November 2019, Birmingham

<u>Shaping the Development of the Centre for Ecology and Hydrology UK-SCAPE</u> Data Science Framework

CEH is developing a Data Science Framework (DSF) to enable easy access to CEH environmental datasets and models. The outputs of this event will contribute to the UK-SCAPE programme, part of CEH's national capability portfolio funded by UKRI. 12 November 2019, Manchester

El Innovate: genomics data to advance bioscience

Developing solutions to global issues with El's advanced capabilities and expertise in genomics and bioinformatics - improving global food security, environmental management, conservation, health and wellbeing 13 November 2019, Earlham Institute, Norwich

Quantitative Methods in Gene Regulation V

9–10 December 2019 Institute of Physics, London

45th New Phytologist Symposium: Ecological and evolutionary consequences of plant–fungal invasions

The 45th New Phytologist Symposium will explore how human activities increasingly alter plant and soil fungal communities and the consequences of these changes. Eighteen leading scientists will share insights into the biogeographic patters, ecological/evolutionary dynamics, and ecosystem/biogeochemical consequences of plant¬–fungal co-invasions¬.

20-23 June 2020, Campinas, Brazil

Arboricultural Association Amenity Conference 2020

Conference 2020 is to be on the main theme of Trees & Society. This is a wide subject area which incorporates many questions of interest and relevance to everyone who works in arboriculture and urban forestry, as well as other professions. 6–9th September 2020, University of Exeter

46th New Phytologist Symposium: Stomata 2020

There have been dramatic developments in our understanding of stomata in recent years. This symposium will provide a forum for stomatal scientists to hear the latest developments in stomatal research and to discuss and decide on a road map for the future. It will also place stomatal research in the overarching context of global environmental change.

11-14 September 2020, Kaifeng, China

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

And finally...

Plant 'takes' botanical world's first selfie in London Zoo experiment

Growing the future – a report from the UK Plant Sciences Federation (UKPSF)

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