





Nominate a member

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

#### August 2020

This newsletter provides links to published news articles from a range of sources. Views or opinions presented are those of the original author(s) and do not necessarily represent the views of the Royal Society of Biology.

## **News and debate**

#### RSB news

## GCSE results awarded and revised A level results shared with schools after exam results U-turns

Students in England, Northern Ireland and Wales received their GCSE qualification results, after education ministers in England, Northern Ireland and Wales confirmed that students would be awarded whichever was the higher of their moderated grade or centre assessed grade (CAG). Roger Taylor, Chair of Ofqual, released a statement on 17th August 2020 <a href="confirming">confirming</a> the changes to awarding plans.

#### **Education during COVID-19**

An RSB webpage listing advice, resources and announcements for schools, students and parents during the COVID-19 pandemic.

#### **COVID-19 Bulletin**

For further detail on COVID-19 research, news and updates, RSB has developed a monthly bulletin collating some of the bioscience behind the outbreak and response. The latest edition, published on the 24th of August 2020 covers updates on: education; surveillance; vaccine trials; populations at risk and impacted; investment to research into links between COVID-19 and ethnicity; mental health; viral transmission routes; trust; COVID-19 'long haulers'; calls for innovation, volunteers, evidence; biodiversity loss and disease spillover; and international public health responses. See <a href="our webpages">our webpages</a> to read previous editions and subscribe to the next.

### Plant health and biosecurity

#### Plant health leaders warn gardeners not to plant mystery seeds

BBC News reports people are being warned not to plant unsolicited packets of seeds which hundreds have received through the post.

The Animal and Plant Health Agency <u>is investigating</u> the packages of unsoliicted seeds sent to UK residents.

#### Ash dieback: Northern Ireland's native ash trees face fatal disease

The Woodland Trust says it expects virtually all native ash trees to succumb to ash dieback disease.

#### Crop damaging invasive pest trapped for first time in the UK

A shield bug responsible for damaging crops of apples, pears and soft fruit around the world, has been trapped for the first time in the UK, NIAB EMR reports.

## Plant breeding

#### Gene manipulation using algae could grow more crops with less water

Enhanced photosynthesis holds promise of higher yields in a drought-afflicted future, The Guardian reports.

### **Agriculture**

#### UK facing worst wheat harvest since 1980s, says farmers' union

NFU predicts yields could be down by a third as extreme weather hits crops.

#### UK potato farmers fear another washout for this year's crop

Growers hope to avoid a third bad year but have already been hit by lockdown and a heatwave, The Guardian reports.

#### Alarm as pesticides spur rapid decline of US bird species

Popular pesticides are causing bird species to decline at an alarming rate in the US, adding fuel to a 50-year downward trend in bird biodiversity, a new report has found.

#### Space to grow, or grow in space - how vertical farms could be ready to take-off

There is a growing environmental and economic case for vertical farms, according to new research, reported by BBSRC.

## **Biodiversity and conservation**

#### Label showing plants safe for bees and butterflies

The BBC reports on a label scheme launched to protect bees and butterflies from plants containing insecticides.

#### Rare plant discovered on Somerset Levels after 100-year absence

A nationally rare plant not recorded in Somerset since 1914 has been spotted on the Somerset Levels by botanists.

#### Amazon region: Brazil records big increase in fires

Official figures from Brazil have shown a big increase in the number of fires in the Amazon region in July compared with the same month last year.

#### New Guinea has greatest plant diversity of any island in the world, study reveals

The tropical island edges out Madagascar as botanists estimate that 4,000 new species could be discovered in the next 50 years.

### **Forestry**

#### England's biggest landowners not growing enough trees – claims Friends of the Earth

Church of England and Duchy of Cornwall come last in ranking of major landowners by forest cover, the Guardian reports.

#### Why deforestation and extinctions make pandemics more likely

Researchers are redoubling efforts to understand links between biodiversity and emerging diseases — and use that information to predict and stop future outbreaks.

#### Proposed new UK law to curb deforestation in supply chains

UK businesses will have to show that their products and supply lines are free from illegal deforestation, under government plans.

## <u>Predicting net changes in carbon from afforestation over time for different woodland planting options</u>

Researchers at the James Hutton Institute, Forest Research and the University of Aberdeen have developed a new way to quantify the potential carbon storage for eleven different forestry management alternatives in Scottish locations using a novel spatial analysis method.

## **Sustainability**

#### Legally binding targets to help "build back greener"

The Government sets out how it will underpin key environmental commitments with legally binding targets, including for air quality, water, waste and biodiversity.

#### **UK** peat emissions could cancel forest benefits

Emissions from UK peatland could cancel out all carbon reduction achieved through new and existing forests, warns the countryside charity CPRE.

#### Warming world will be 'devastating' for frozen peatlands

The world's peatlands will become a large source of greenhouse gases as temperatures rise this century, say scientists.

#### Other news

#### Edinburgh's Royal Botanic Garden celebrates 350th anniversary

As RBGE celebrates its 350th anniversary, it is holding various events to look back at its origins, and forward to 21st Century challenges.

#### The future is fungal: why the 'megascience' of mycology is on the rise

The Observer investigates the study of fungi, and describes the work of biologist Merlin Sheldrake to raise its profile.

#### 'Mummified' plants give glimpse of Earth's future

Fossil leaves from the remains of a 23 million-year-old forest suggest some plants may adapt to grow more quickly as CO2 levels rise, a study says.

## **People**

#### **Royal Society award for Professor Dame Caroline Dean**

The Royal Society recognises the research of Professor Dame Caroline Dean (FRS) with award of the Royal Medal.

## **Opportunities**

#### **RSB Policy Internships**

The RSB has one internship position available for current PhD students who are funded by <u>AHRC</u>, <u>BBSRC</u>, <u>EPSRC</u>, <u>ESRC</u>, <u>MRC</u>, and <u>NERC</u>. The successful applicant will spend three months working at the RSB in 2021. Start and end dates can be negotiated as appropriate.

Closes: 10 September 2020

#### <u>Pre-announcement: Future of UK Treescapes programme – call for proposals</u>

UKRI (AHRC, NERC and ESRC) will shortly be inviting proposals for grants as part of the Future of UK Treescapes programme. Proposals must take an interdisciplinary approach bringing together arts and humanities researchers, environmental scientists, social scientists and, economists to form substantial research collaborations.

Closes: 8 December 2020

## **Consultations**

#### **England Tree Strategy**

This Defra consultation will inform a new England Tree Strategy. It will focus on expanding, protecting and improving our woodlands, and how trees and woodlands can connect people to nature, support the economy, combat climate change and recover biodiversity.

Closes: 11 September 2020

#### **Comprehensive Spending Review 2020**

The UK has a well-established budgeting framework, through which a spending review is carried out approximately every 3 years to allocate funding to departments. The Comprehensive Spending Review 2020 will allow the government to consider its priorities across all spending over multiple years. HM Treasury welcomes representations as part of the policy-making process. A Comprehensive Spending Review representation is a written representation that comments on government policy or suggests new policy ideas for the Comprehensive Spending Review. It can be submitted by an interest group, individual or representative body to HM Treasury.

Closes: 24 September 2020

#### Due diligence on forest risk commodities

Defra is seeking views on whether the UK Government should introduce a new law designed to prevent forests and other important natural areas from being converted illegally in to agricultural land. The proposed law would require a relatively small number of larger businesses to ensure that the 'forest risk' commodities they use – commodities that can cause wide-scale deforestation – have been produced legally.

Closes: 5 October 2020

#### **RSB Policy Resource Library now online**

The RSB has created a searchable, digital library of more than 800 statements, responses, briefings and other policy resources produced by the RSB and our Member Organisations across the biosciences. This collection is freely and openly accessible to everyone, including members and non-members, through the <a href="mySociety portal">mySociety portal</a> (no registration necessary).

### **Events**

## <u>The Foundation for Science and Technology: The R&D Roadmap - Levelling Up Across</u> the UK

In July, the Government published the R&D Roadmap, setting out ambitious plans for investing in research and securing the benefits for the economy. A key element of this is the promise of an R&D Place Strategy, designed to unlock local growth and societal benefit across the UK. This webinar will discuss the role that R&D can contribute to the "levelling up" agenda, the inequalities in R&D funding across the different nations and regions of the UK, and how the focus on place fits within the overall R&D Roadmap.

7 October 2020

#### Plant Genomes in a Changing Environment (Virtual Conference)

The meeting will bring together plant scientists working on the model plant Arabidopsis thaliana, on populations in their natural environment as well as crop species. This year's meeting will focus on approaches on how to improve plants for tolerance of abiotic stresses and biotic interaction. It will also discuss strategies for sustaining yield and mechanisms of domestication and adaptation in a changing environment.

12-14 October 2020

#### The 1st International Electronic Conference on Plant Science

This electronic conference will be held online at sciforum.net, a platform developed and maintained by MDPI for hosting conferences. It allows scientists from all over the world to present their latest research, receive direct feedback, and engage in discussions with the wider scientific community. Deadline for Abstract Submission: 10 September 2020 1-15 December 2020

Due to the COVID-19 pandemic, all in person RSB events due to take place in 2020 have been cancelled, postponed or moved to an online format. Updated information will be made available on the RSB events pages. Postponed events will hopefully run in 2021.

We are aware that a number of events previously advertised in the Plant Science Newsletter have been cancelled owing to the novel coronavirus Covid-19. We recommend also checking other external event webpages for updates and continuing to monitor and follow official advice.

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

## And finally...

#### Furry engineers: sea otters in California's estuaries surprise scientists

Sea otters play surprising role in maintaining seagrass beds and improving ecosystem health.

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

UK Plant Sciences Federation Royal Society of Biology Science Policy Team 1 Naoroji Street London WC1X 0GB policy@rsb.org.uk Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Royal Society of Biology.

Click here to unsubscribe from this publication

Or, manage your subscription to this and to other RSB publications by logging into mySociety and choosing 'My Subscriptions' under 'Me and the RSB'.

> © Royal Society of Biology 2020. Registered Charity Number: 277981 1 Naoroji Street, London WC1X 0GB