

# Historic Kew Gardens collection to go digital in major boost for climate change research

News story

A £15 million investment to digitise the world's largest collection of plant and fungal specimens will "revolutionise" climate change research and help protect biodiversity for generations to come, the Chief Secretary to the Treasury announced today (4 November).



- Government to fund £15 million digitisation of the Herbarium at Kew Gardens in major boost to "revolutionise" climate change research during opening week of COP26.
- The Chief Secretary to the Treasury, Simon Clarke, confirmed the funding on a visit to the world's largest collection of plant and fungal specimens.
- The historic archive spans 170 years and includes specimens collected by Charles Darwin.

Simon Clarke said the significant injection of government funding would allow researchers from across the globe to access the historic collection free of charge.

The Herbarium houses over 8 million plant and fungal specimens with some dating back 170 years – including specimens collected by Charles Darwin.

Digitising this treasure trove of information will also ensure that it is protected from gradual deterioration with age or catastrophic loss from fire.

**Simon Clarke MP, Chief Secretary to the Treasury said:**

This vital investment will revolutionise research to combat climate change and biodiversity loss. By digitising this unique collection, the largest of plant and fungal specimens in the world, we are opening up a vast stockpile of data which will seed a forest of vital research projects across the planet.

**The Director of Kew Gardens, Richard Deverell, said:**

I am absolutely delighted that the British Government has committed £15m towards the digitisation of Kew's plant collections and to secure them for future generations through the construction of a new collections laboratory. These collections represent knowledge of plant and fungal diversity that will help scientists around the world conserve nature and find solutions to some of the most critical challenges facing humanity.

**Dr Aaron Davis, Senior research leader in the Crops and Global Change team at Kew Gardens said:**

The collections at Kew are a global resource that help us to understand what is happening to our biodiversity, how climate change is affecting nature and what we are losing. It was assembled by partners across the world so it is therefore only right that we speed up the process of digitising this data for everyone to use now in tackling species loss and ensuring we are making good choices that are sustainable for people and planet.

The government-funded project, which is estimated to take four years to complete, will also support ongoing projects at Kew, including mapping endangered tropical plants in East Africa and Madagascar, protecting vital biodiversity.

The Chief Secretary's visit comes as world leaders have this week gathered for COP26 Glasgow and Governments have made unprecedented commitments to protect forests, reduce methane emissions and finance green technology.

Published 4 November 2021

---

# Human rights in Belarus: 35 OSCE states invoke Vienna Mechanism

Madam Chair

I am delivering this statement on behalf of the following thirty five participating States: Albania, Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Montenegro, The Netherlands, North Macedonia, Norway, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, the United Kingdom, Ukraine, and the United States.

During the Seventh OSCE Summit of Heads of State held in Astana in December 2010, all OSCE participating States emphasised that we are accountable to our citizens and each other for the full implementation of our OSCE commitments, and that we consider our commitments to be matters of immediate and legitimate concern amongst all participating States.

In that spirit, we stress that our countries continue to be deeply concerned about serious human rights violations and abuses taking place in Belarus. On 17 September 2020, [17 participating States invoked the OSCE's "Moscow Mechanism"](#) to establish a mission of experts to look into and report on credible accounts of human rights violations and abuses occurring before, during and after the Presidential election of 9 August 2020. Those concerns were identified as particularly serious threats to the fulfilment of the provision of the OSCE human dimension in Belarus. In addition to establishing the facts and reporting them, the mission was also encouraged to provide recommendations and advice.

The subsequent [independent report](#), authored by the Rapporteur, Professor Wolfgang Benedek, was formally presented to the Permanent Council on 5 November 2020. The report's conclusions were clear. The 9 August 2020 presidential election results were neither free nor fair, and "massive and systematic" violations and abuses of human rights and fundamental freedoms had been committed by the security forces. In addition, the report also made a number of recommendations to the Belarusian authorities, to all participating States and to the wider international community.

Since the publication of the Moscow Mechanism report, almost a year ago, the situation in Belarus has deteriorated. Our delegations have repeatedly called on the Belarusian authorities to implement the report's recommendations. We have also called on the Belarusian authorities to take up the offers of the current Chairpersonship, together with the previous and subsequent Chairs, to facilitate a true national dialogue between the Belarusian authorities and representatives of the opposition and civil society. Regrettably, the Belarusian authorities have not implemented the Moscow Mechanism report's recommendations, nor have they made use of the OSCE's institutions, bodies and mechanisms to help resolve the ongoing crisis.

Instead of seeing a move towards a resolution of the crisis in Belarus, the situation has worsened and the Belarusian authorities' response has continued to be inadequate.

Therefore, in response to the Belarusian authorities' failure to respond satisfactorily to the 5 November 2020 Moscow Mechanism report, and considering our additional concerns over ongoing developments in the last 12 months, our countries are today invoking the [Vienna \(Human Dimension\) Mechanism](#) and Belarus' commitments under that Mechanism.

Our concerns include, but are not limited, to the following:

(i) freedom of peaceful assembly: the Belarusian authorities have unduly restricted the right to freedom of assembly, by prohibiting peaceful protests, and arresting and using excessive force against peaceful protestors. The recent amendments to the Law on Mass Events is only one example of actions that are of concern.

(ii) media freedom: before and after the 2020 Presidential election, large numbers of independent media, journalists and media actors have been subject to repression, with the ordered closure of the Belarusian Association of Journalists only one example of independent voices being silenced by the authorities' actions.

(iii) continued arbitrary or unjust arrests or detention: credible reports allege there are currently over 800 political prisoners in Belarus. Many individuals have been detained for participating peacefully in the political opposition around last year's Presidential elections and the subsequent peaceful demonstrations, and for reporting and documenting human rights violations and abuses by the Belarusian authorities. The forced diversion and landing of Ryanair Flight FR4978 on 23 May 2021 for the apparent purpose of arresting journalist Roman Protasevich and his partner Sofia Sapega, is the highest profile example of politically motivated arrests over the last 12 months.

(iv) targeting of opposition figures: human rights groups report the targeting of opposition figures by the Belarusian authorities, as exemplified by the cases of Maria Kolesnikova and Maksim Znak who, following closed trials, were sentenced to 11 and 10 years imprisonment, respectively. In addition to the detention and imprisonment of opposition figures, there are growing credible allegations of state controlled media, and social media channels, being used to spread threats of violence against opposition figures, civil society and media actors.

(v) torture: credible reports allege that more than 1,500 cases of torture and other cruel, inhuman or degrading treatment or punishment have occurred since the Presidential election. The International Accountability Platform for Belarus (IAPB) has so far documented more than 300 reported cases. The decision by the Investigative Committee of Belarus, announced on 26 August 2021, not to open criminal investigations into 680 complaints is indicative of a culture of impunity.

(vi) migration: the sharp increase in irregular migration across the Belarusian border, caused by the Belarusian authorities' political instrumentalisation of migrants and refugees, puts vulnerable people at risk, adversely impacts their human rights, and has a destabilising effect on regional security.

For these reasons, and in accordance with Belarus' OSCE commitments under the Vienna (Human Dimension) Mechanism, we request concrete and substantial responses to the following:

1. Have steps been taken by the Belarusian authorities to investigate allegations that the right to freedom of peaceful assembly is being unduly restricted, that individuals are being arbitrarily detained or arrested, and that numbers of political prisoners are increasing? Please detail the actions taken.
2. Have steps been taken to investigate all allegations of torture and cruel, inhuman and degrading treatment or punishment? Please detail the actions taken, including steps taken to ensure the independence and integrity of investigations.
3. Have steps been taken to investigate allegations of hate crimes, including the use of state controlled media or social media accounts to incite violence? Please detail the actions taken.
4. Have steps been taken to ensure the ability of civil society and media actors to freely document and report, without reprisal, on human rights concerns in Belarus? Please detail the actions taken.
5. What steps are being taken by the Belarusian authorities to ensure it is not facilitating irregular migration (to other OSCE participating States) which puts vulnerable people at risk, impacts on their human rights, and has a destabilising effect on regional security?
6. What engagement has there been with the OSCE's institutions, including ODIHR and RFoM, to respond to concerns raised by those institutions, and to help realise full compliance with OSCE commitments?
7. Have meaningful steps been taken, including through the OSCE Chairperson-in-Office, to engage with the opposition, independent civil society and human rights defenders? Please detail such steps.
8. Please respond in detail to the recommendations contained in the 5 November 2020 report under the Moscow Mechanism.

We expect to receive information in response to these serious concerns in writing within 10 days, in accordance with the Vienna (Human Dimension) Mechanism.

We request that this statement be attached to the Journal of the Day.

---

# Gloucester man ordered to pay almost £11,000 for fishing for eels illegally

Phillip Croker, of The Oval, Gloucester, was caught fishing for elvers – baby eels – at Oldbury tidal sluice, on the tidal River Severn, on 14 March 2019.

The case was heard at Cheltenham Magistrates' Court on 28 October 2021, when the 60-year-old was ordered to pay the Environment Agency costs of £10,425.40, a £300 fine and a £30 victim surcharge. Croker's fishing net was also seized and destroyed.

During the evening of 14 March 2019 Environment Agency Fisheries Enforcement Officers caught Croker fishing illegally for elvers, including fishing with a net in water within 10 metres below the tidal sluice, and using a light to attract elvers into his net.

Elvers migrating from the Sargasso Sea are attracted to freshwater and gather in large numbers below the tidal gate, which controls freshwater entering the saltwater estuary at Oldbury.

When Croker was discovered, officers found around 700 grams of elvers in Croker's net. At the time of the offence elver prices were approximately £150 per kilogram. The elvers were released back into the Severn.

The fishing of eels on the River Severn is regulated by the Salmon and Freshwater Fisheries Act 1975 as amended by the Marine and Coastal Act 2009 by way of authorisation.

Anglers fishing for eels on the Severn need Environment Agency authorisation and receive a tag that must be attached to their net to show they are fishing legally.

While Croker pleaded guilty to fishing without an Environment Agency tag for his net, he denied setting up his net within 10m below a tidal sluice, fishing unaided by tying his net to the sluice gates and using a light. Magistrates found him guilty on all counts.

Richard Dearnley, Fisheries Enforcement Officer for the Environment Agency, said:

Elver authorisations come with strict conditions aimed at preventing their over-exploitation and to encourage a fair and sustainable fishery.

There has been a huge decline in eel stocks in recent years and their illegal exploitation undermines the Environment Agency and Sustainable Eel Group efforts to conserve and improve eel stocks.

This offence was financially motivated to increase the likelihood

of higher catches of eelers due to an unfair advantage.

This case shows we pursue offenders through the courts and will not hesitate to take enforcement action where people flout the rules.

Anyone with information about illegal fishing activities should call the Environment Agency's 24-hour incident hotline on 0800 807060 or contact Crimestoppers anonymously on 0800 555 111.

## **Notes to editor**

### **Offences charged:**

- Fishing for eels in contravention of condition 8 of the authorisation, in that he did fish with a net in waters within 10 metres below an inlet or outlet of the Oldbury Tidal Sluice.  
Contrary to Section 27B(1)(b) of the Salmon and Freshwater Fisheries Act 1975 as amended by the Marine and Coastal Access Act 2009.
- Fishing for eels in contravention of condition 5 of the authorisation, in that he did fish with a net which should not be capable of fishing unaided when both hands are removed, in that the net was tied to railings.  
Contrary to Section 27B(1)(b) of the Salmon and Freshwater Fisheries Act 1975 as amended by the Marine and Coastal Access Act 2009.
- Fishing for eels in contravention of condition 9 of the authorisation, in that he did fish without his authorisation tag attached to his instrument at all times.  
Contrary to Section 27B(1)(b) of the Salmon and Freshwater Fisheries Act 1975 as amended by the Marine and Coastal Access Act 2009.
- Using a prohibited instrument, namely a light for the purpose of taking or killing eels.  
Contrary to Section 1(1)(a)(v) and Schedule 4 of the Salmon and Freshwater Fisheries Act 1975 as amended by the Marine and Coastal Access Act 2009.

## **About the eel**

The European eel, *Anguilla Anguilla* has a complex life history. It is assumed to spawn in the Sargasso Sea, which is off the Caribbean coast, but this has never been observed. Larvae hatch and drift in the Gulf Stream and the North Atlantic currents towards our shores. By the time they reach the UK shores they are known as glass eels or eelers.

After the young eel has pigmented and been in the freshwater environment for a period of time it becomes what is known as a yellow eel. They remain in this state for the majority of their adult lives in fresh water (up to 35 years). Just before they begin their return journey to the Sargasso Sea their skin colour again changes, this time to a silver colour, which enables them to combat the changes from fresh to saltwater.

Eels have been exploited by man for thousands of years, initially through

subsistence fisheries, and now by commercial fisheries supplying a worldwide market. They are used at all stages, from glass eels (elvers) to yellow and silver eel. The fisheries are seasonal, in the case of the elvers in the River Severn they are fished for between 1 February and 25 May.

---

## [US-UK Strategic Energy Dialogue](#) [Launch: partnering to accelerate](#) [global clean energy transition at](#) [COP26](#)

UK Business and Energy Secretary Kwasi Kwarteng met with US Secretary of Energy Jennifer M. Granholm today (4 November 2021) at the UN COP26 summit in Glasgow, where they discussed strengthening cooperation to accelerate the global transition to clean energy and build back better ambitions.

The meeting marked the launch of the US-UK Strategic Energy Dialogue, a commitment made by Prime Minister Johnson and President Biden in June 2021, to deepen collaboration in areas such as clean energy technologies, industrial decarbonisation, nuclear energy, and energy security, as well as science and innovation.

Secretary Granholm and Secretary of State Kwarteng set out their visions for how the Strategic Energy Dialogue will steer collaboration and global leadership in the coming years – recognising the critical role energy will play for both nations' shared climate objectives, national and economic security, and the foundation for a robust clean energy economy.

The co-chairs announced that the next Strategic Energy Dialogue ministerial meeting will be held in Spring 2022, and that future meetings would continue to prioritise the global transition to net zero emissions, while facilitating public-private sector engagement.

Both ministers emphasised that sustaining the momentum achieved at COP26, and implementing its objectives is a bilateral priority.

The co-chairs agreed to leverage the strong bilateral relationship between the US and UK, to help drive more ambitious action at fora like the G7, G20, International Energy Agency, Clean Energy Ministerial, and Mission Innovation. The co-chairs recommitted to the success of the G7 Industrial Decarbonisation Agenda which they led in creating this year. The ministers highlighted the vital role that international organisations fulfil through their convening power, analytical expertise, and capacity to drive public attention towards these critical issues.



The co-chairs reiterated that all of these arenas must advance global clean energy objectives while working towards a swift and inclusive transition that creates sustained, lasting prosperity for generations to come in a new energy economy that leaves no community behind.

UK Business and Energy Secretary Kwasi Kwarteng said:

The United Kingdom and United States are showing how the world can reap the benefits of this global green industrial revolution – from unlocking well paid jobs to creating thriving new green industries that will help secure a cleaner and more prosperous future for the global economy.

Drawing on this unique partnership with our closest ally will enable both nations to chart the course to net zero emissions by 2050 while supporting countries across the world in this global clean energy transition as we build back better.

US Secretary of Energy Jennifer M. Granholm said:

The United States and the United Kingdom are committed to working towards a net-zero economy by 2050. This is the opportunity out of the crisis: to create more sustainable, more resilient economies, while creating millions of good paying jobs. We will leave no community behind as we build a better future.

---

## **Shipston-on-Stour residents harness power of nature to increase the town's flood resilience**

- Since forming, the group has installed more than 800 natural interventions to slow and store water from the River Stour and its tributaries
- Group is the result of one of 60 Government Natural Flood Management pilot schemes

Volunteers in Shipston-on-Stour in Warwickshire, who are harnessing the power of nature to increase flood resilience in their community, have been praised

by the Environment Agency for their innovation.

Members of the community formed the Shipston Area Flood Action Group (SAFAG) in 2014. They have since become part of a government pilot to use Natural Flood Management (NFM) techniques, such as tree planting and pond creation, to slow flows and store water from the River Stour before it reaches the town whilst also creating habitats.

There are around 85 homes and businesses at risk of flooding in Shipston and around 30 additional properties at risk in surrounding villages across the catchment. Many properties flooded in July 2007 when the Stour reached its highest ever level.

The group now has members from Brailes, Long Compton, Tredington, Newbold and Alderminster as well as Shipston. Since 2017, it has installed more than 800 interventions, including leaky barriers and ponds, to hold back and slow the flow from upstream tributaries into the Stour during periods of heavy rainfall, benefiting some 17 villages and towns as well as numerous smaller settlements.

Today the group is highlighted in a new [Government report on The Natural Flood Management Programme](#) which received £15 million of government funding which completed this year.

SAFAG Volunteer Geoff Smith, who joined the group in 2016, said:

Although my house isn't one of those at risk of flooding I was inspired and motivated to help the group to reduce flooding in Shipston. We've installed lots of ponds and barriers that can hold back water, and planted trees and plants which slow the run-off from rainwater into the river. Lots of small changes can help to make a difference.

While it's hard to scientifically prove that the interventions have decreased flooding, anecdotally people in the community have said it has made a difference and after last winter's heavy rain we saw much less flooding than expected. The interventions won't stop a major flood but they can help to reduce the frequency of flooding.

The core volunteer group was formed by Phil Wragg, a former CEO, Mike McCarthy, who has a background in the forces and fire service, and Geoff who worked in finance. Their combined experience helped them to raise funds, engage more than 50 landowners, undertake scheme design, obtain statutory consents and then procure the materials and contractors to carry out the work.

They used some 'seed' funding to recruit a PhD student from the Coventry University Centre for Agroecology, Water and Resilience as the group's project officer in 2017-8, and then took over all aspects of the schemes from 2019.

Geoff added:

If you're willing to get stuck in and find some help to get started you can make a big difference to your community. It helps the community to take ownership of protecting their homes from flooding.

The wider group of volunteers monitors the NFM sites during heavy rainfall to review every asset in flood conditions and they have an annual schedule of works to maintain all the different interventions. The group was awarded the Environment Agency Flood and Coast Excellence 2021 Award for Community Partnership.

David Hudson, Environment Manager for the Environment Agency's West Midlands Area, said:

It's fantastic to see the amazing work that volunteers have undertaken in and around Shipston to make these step-changes to their immediate environment to ease the impact of rainfall in the River Stour catchment.

Reducing flood risk through nature-based solutions is not new to flood management, but what is changing is our understanding of how to work with others to implement the most effective blend of measures in the right locations.

James Bevan, Chief Executive of the Environment Agency, said:

Natural flood management has a crucial role to play as we help the country adapt to climate change, and this programme demonstrates the huge benefits it can offer to reducing the impacts of flooding as well as capturing carbon and creating habitats for wildlife.

Into the future, we're going to be doing even more to use the power of nature alongside conventional defences to help create a nation more resilient to climate change.

Read more in this blog on [Using the power of nature to increase flood resilience](#) by James Bevan.

## **Notes to editors**

Natural flood management (NFM) helps manage flood and coastal erosion risk. It does this by protecting, restoring and emulating the natural processes of catchments, rivers, floodplains and coasts. NFM can include:

- planting trees and hedges to absorb more water, catch rainfall and slow the flow of water on the ground surface when there is excess rainwater

- covering the ground with plants to reduce water pollution and surface water run-off
- diverting high water flows and creating areas to store water
- creating leaky barriers to slow water flow in streams and ditches
- restoring salt marshes, mudflats, and peat bogs
- Report published today into the £15 million funded Defra Natural Flood Management (NFM) programme shows the benefit of using the power of nature to increase flood resilience.
- 60 pilot projects have implemented 4,500 natural flood management (NFM) measures, slowing and storing water upstream of 15,000 homes.
- The measures have included planting trees, creating leaky barriers, restoring peatland and restoring salt marshes.
- The report also shows the benefits that NFM can have to improve habitats, capture carbon and increase biodiversity with 4,000 hectares of habitat improved and 100 hectares of woodland planted.
- The programme has highlighted the power of partnership and the role it plays in going hand in hand with the Environment Agency's Capital Investment Programme which focuses on flood scheme construction to better protect properties from flooding. With NFM, local people have a role and leadership in their own area and managing their flood risk.
- NFM incorporates a huge variety of measures which need to be looked at across a catchment, often working in combination with more conventional, engineered flood and sea defences.
- Find out more about the successes of the programme and how people can use nature-based solutions to reduce flooding in their area in the [Government report on The Natural Flood Management Programme](#).
- Concentrating on NFM and the benefits it can bring is fundamental in helping to deliver the ambitions of the [FCERM Strategy for England](#), which highlights how the climate emergency will impact on communities and nature and how we must adapt to live in a changing climate.
- Whilst the NFM programme has concluded, NFM measures continue to be considered within all future flood risk management projects as part of the Environment Agency's Capital Programme, in which £5.2 billion will be invested over the next 6 years to better protect 336,000 properties.
- A full evaluation report for the NFM programme will follow in 2022 which will form part of an NFM evidence base.