

EMBARGOED UNTIL 15 July, 9AM (UK): Central England DiSSCo co-hub news release

Oxford and Cambridge join forces to unlock over a million biological records for climate research

The University of Oxford and the University of Cambridge have announced a major new partnership to digitise over 1.1 million natural history specimens, creating a step-change in how researchers and conservationists access vital biodiversity data.

The project is part of DiSSCo UK [<https://discco-uk.org/>] (Distributed System of Scientific Collections UK) – a £155 million national programme to digitise and connect the UK's natural science collections.

Together, the universities steward over 12 million specimens – the largest natural science collection in the UK outside London and Edinburgh. Over the next two years, they will establish the Central England DiSSCo UK co-hub, a strategic network supporting 23 museums and herbaria to prepare their collections for a digital future. The project aims to contribute 1,195,419 specimen records to the national dataset using cutting-edge technologies, including high-throughput imaging and AI.

Professor Sam Brockington [<https://www.plantsci.cam.ac.uk/people/samuel-brockington>], Professor of Evolution at the University of Cambridge and project lead, said: “The project will combine the strengths of two world-leading universities to deliver digitised UK biodiversity data at scale and transform digitisation capacity across England’s central belt. We will embed digitisation within regional communities tackling biodiversity loss and climate resilience.”

Dr Gavin Svenson [<https://oumnh.ox.ac.uk/people/gavin-svenson>], Director of the Museum of Natural History, University of Oxford, said: “After centuries of documenting and preserving the natural world in museum collections, we are now unlocking the full potential of this extraordinary body of knowledge through digitisation, enabling it to help address some of the world's most pressing environmental challenges.”

Zoë Simmons [<https://www.oumnh.ox.ac.uk/people/zoe-m-simmons>], project co-lead and Head of Life Collections, Museum of Natural History, University of Oxford said: “Through this partnership we will be able to realise our aspirations for data sharing at a global scale. The information released will inform and support research from a diverse portfolio of subjects and researchers, opening the collections to a new era of investigation.”

Dr Sarah Joomun [<https://oumnh.ox.ac.uk/people/dr-sarah-joomun>], project digital lead and Digital Collections Manager at the Museum of Natural History, University of Oxford said: “Digitisation at this scale unlocks the research potential of biodiversity data from collections across central England. Our network will have the opportunity to develop and share new skills in digitisation, the use of cutting-edge technologies and making information accessible for a global audience.”

Jack Ashby [<https://www.museum.zoo.cam.ac.uk/staff/jack-ashby-assistant-director>], project co-lead and Assistant Director of the University Museum of Zoology, Cambridge [<https://www.museum.zoo.cam.ac.uk/>], said: “Our collections are already being used heavily in research and active conservation projects by major NGOs. Working directly with county collections,

we will further integrate digitisation into regional strategies for biodiversity monitoring and recovery.”

A historical baseline for environmental change

The project focuses specifically on British plants and insects collected over the last two centuries, with a particular emphasis on East and Southeast England. This region has witnessed some of the most dramatic environmental shifts in the country over this time, such as the drainage of wetlands, agricultural intensification, and rapid urbanisation.

By digitising these records – including nearly 771,000 newly digitised specimens – the hub will provide a high-resolution historical baseline. This data is essential for understanding species turnover and shifts in flowering times (phenology) caused by climate change. These records will directly support flagship regional restoration efforts, such as the Wildlife Trust’s Great Fen project [<https://www.greatfen.org.uk/>], allowing conservationists to set recovery targets based on historical evidence.

Building a national network

The co-hub unites four of the UK’s largest university collections: the Museum of Natural History, University of Oxford [<https://oumnh.ox.ac.uk/>], the Oxford University Herbaria [<https://herbaria.plants.ox.ac.uk/bol/oxford/herbaria>], Cambridge University Herbarium [<https://www.herbarium.plantsci.cam.ac.uk/>], and the University Museum of Zoology, Cambridge [<https://www.museum.zoo.cam.ac.uk/>].

It also supports a node-network spanning from Gloucestershire to Suffolk, including:

- Digitising nodes: Norwich Castle Museum [<https://www.norwichcastle.norfolk.gov.uk/>] and the University of Leicester Herbarium [<https://le.ac.uk/botanic-garden/collections-and-research>].
- Preparatory nodes: Eight sites receiving help to develop collections for digitisation.
- Wider network: Nine further nodes benefiting from online training and support, forming a shared community of practice across the sector.

Dr Stuart Desjardins from the University of Leicester Herbarium said: “The three university herbaria included in the project (Oxford, Cambridge and Leicester) represent a remarkable continuity in British botanical science, bringing together the authors and reference material that underpin virtually every major flora of the British Isles over the past century: from George Claridge Druce’s *List of British Plants* at Oxford, through Tom Tutin’s *Flora of the British Isles* and Clive Stace’s *New Flora of the British Isles* at Leicester, to Peter Sell and Gina Murrell’s *Flora of Great Britain and Ireland* at Cambridge.”

The resulting data will also be freely available through the Global Biodiversity Information Facility [<https://www.gbif.org/>] (GBIF), allowing researchers worldwide to access the collections.

About DiSSCo UK

This project is a key component of [DiSSCo UK](https://dissco-uk.org/) [<https://dissco-uk.org/>], a 10-year national programme funded through the UK Research and Innovation (UKRI) Infrastructure Fund and

delivered through the UKRI Arts and Humanities Research Council (AHRC) in partnership with the Natural History Museum and over 100 partners across the UK.

UK natural science collections hold more than 140 million items spanning an incredible 4.6-billion-year history. Over the next decade, DiSSCo UK aims to make around half of these digitally accessible. This includes creating millions of new digital specimen records, mobilising existing data, and bringing unpublished collections information into wider use.

Through digitisation, coordination, innovation and community building, DiSSCo aims to create a unique infrastructure that builds UK digital capacity and maximises the impact of natural science data to help find solutions for global problems like food security and biodiversity loss.

AHRC Executive Chair Professor Christopher Smith said:

“For hundreds of years the UK has gathered and grown one of the world’s most comprehensive and diverse collections of scientific material in museums across the UK. It has been a long-held ambition to bring this collection together – and now this dream can come true.

“Over ten years, DiSSCo UK will deliver progress that would otherwise have taken over a century, including the creation of millions of newly digitised records and a network of around 100 collections from national museums and gardens, and universities to local collections that would never have had such access without it. And the outcomes of this £155 million investment will offer exciting new opportunities for science as well as society.

“AHRC is proud to have led UKRI’s largest ever investment in the Galleries, Libraries, Archives, and Museums sector, yet another contribution to our leadership of the creative and cultural economy.”

Co-hub partners

In addition to the Cambridge and Oxford leads, the partnership includes: University of Leicester Herbarium; Norwich Castle Museum; Colchester Museum; Discover Bucks Museum; History of Science Museum (Oxford); Ipswich Museum; Peterborough Museum; Pitt Rivers Museum (Oxford); Royal Agricultural University (Cirencester); Sedgwick Museum of Earth Sciences (Cambridge); Abingdon County Hall Museum; British Antarctic Survey; British Entomological & Natural History Society; North Hertfordshire Museum; Northampton Museum & Art Gallery; Royal Holloway University of London; Saffron Walden Museum; Southend Museums; and Wisbech & Fenland Museum.

Images: There is a selection of images available on Google Drive:

https://drive.google.com/drive/folders/1bD3ao9mlpH2nSKflbmWuQkzYT3HljEbD?usp=drive_link

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