



Angela Marmont
Centre for UK Nature

Looking back, looking forward: 25 years of partnering with the NBN Trust

Dr John Twedde

Head of Centre for UK Nature, Natural History Museum

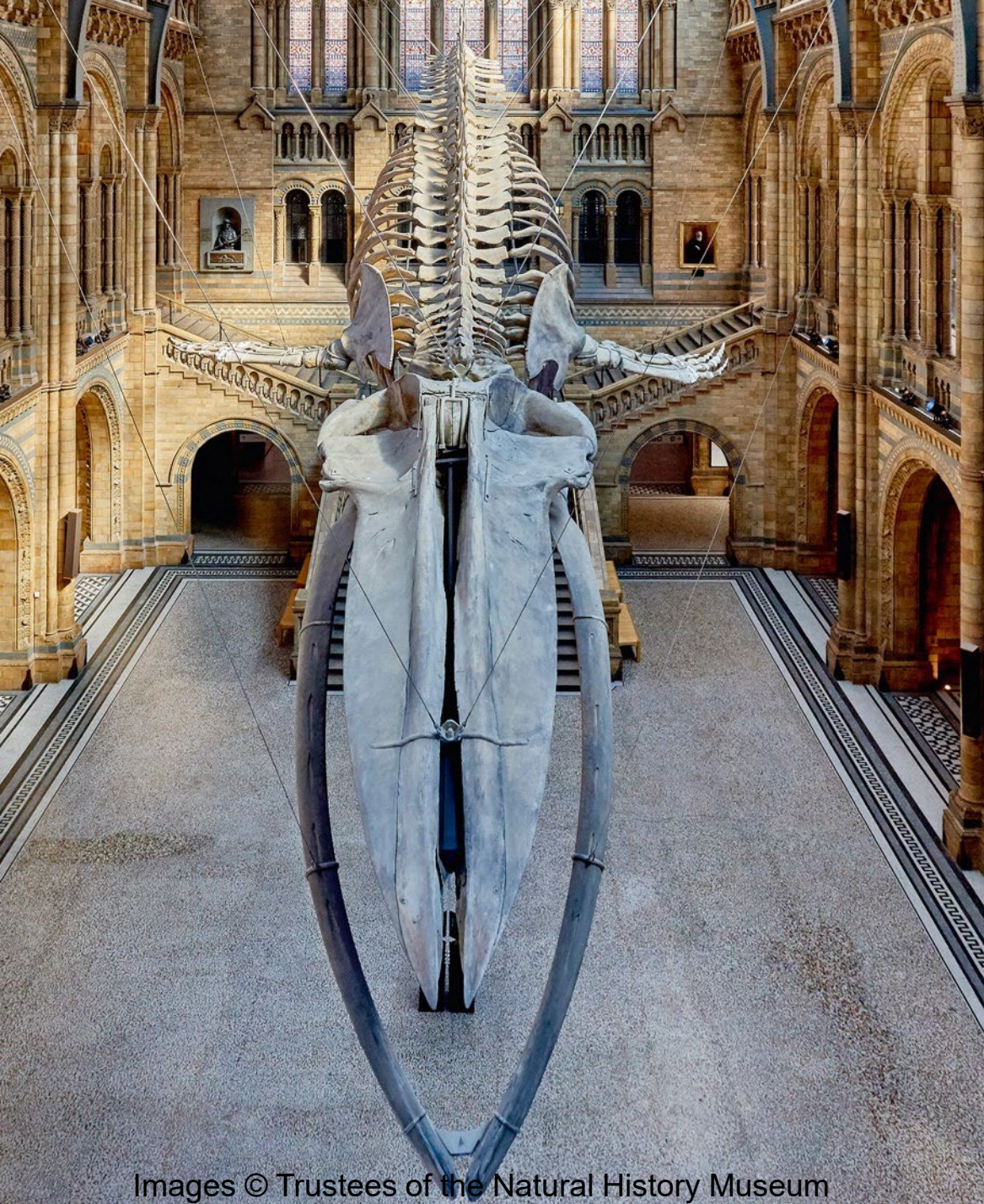
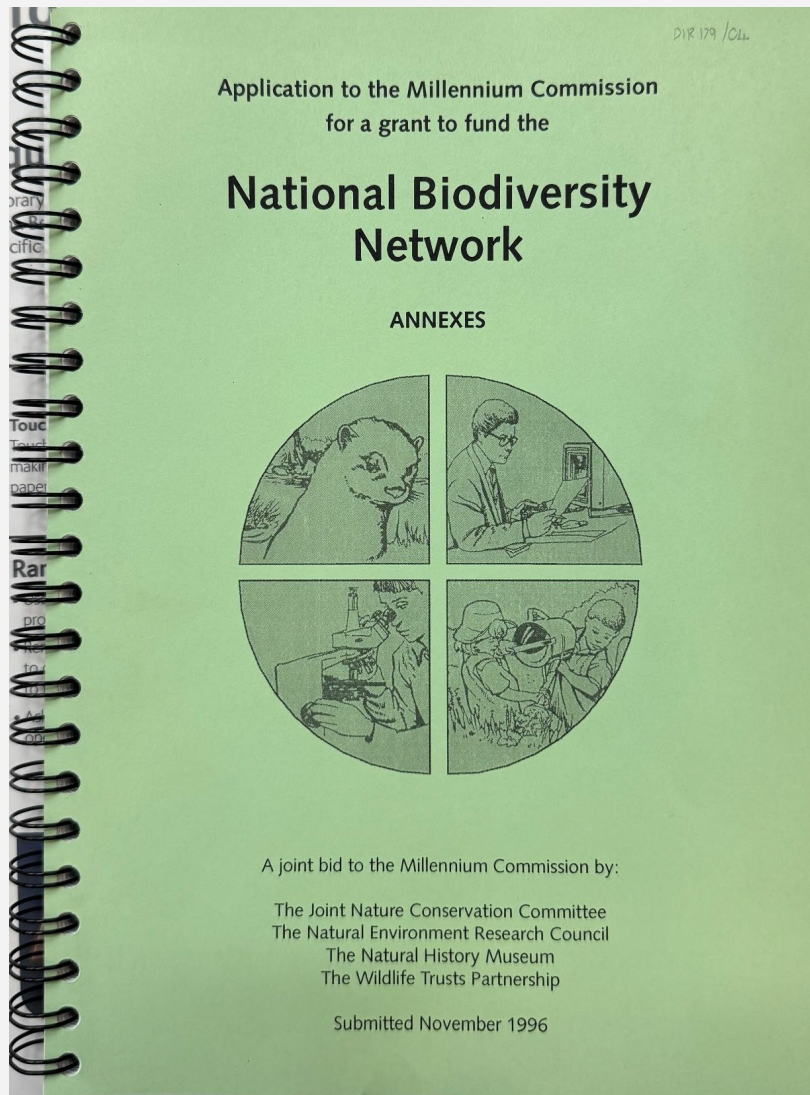




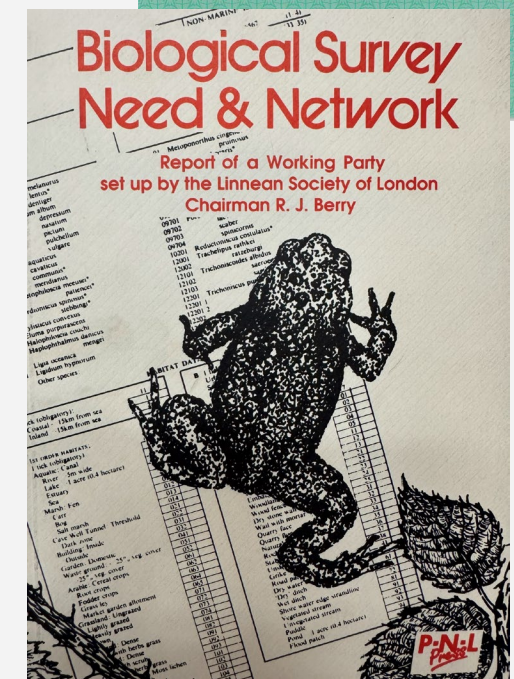
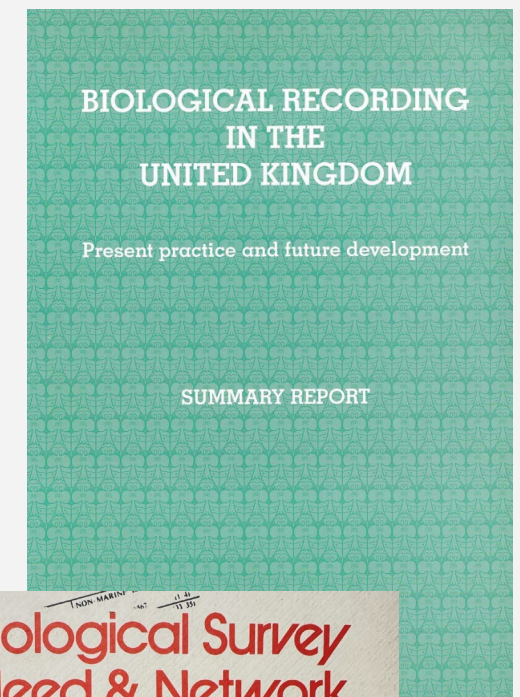
Image © Florin Feneru, NHM



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Five core objectives:

1. Giving local access to [biodiversity] information across the UK (incl. coordinated network of LRCs)
2. Making national [biodiversity] information available to the network
3. Making wildlife information available to wide audiences
4. Filling important gaps in knowledge
5. Creating nationally agreed standards



Arctia caja (Linnaeus, 1758) – Garden Tiger
Species, Insect - moth, Terrestrial
Teigr yr Ardd, Teigrod yr Ardd
Occurrences: 79,034

· DATA: enabling
data aggregation
and sharing

Identification Trainers for the Future

· PEOPLE: building
sector skills and
capacity



National
Education
Nature Park

· ACTION: evidence-
informed action for
nature and people



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The UK Species Inventory

- Response to the need for a consistent nomenclature and master-list of UK species, their synonyms, common names and recording aggregates
- Led by the NHM since 2000, Species Dictionary launched 2003. UKSI led by Chris Raper since 2012
- Taxonomic and nomenclatural foundation for most major UK biological recording and reporting systems
- Partners include NBN Atlas, iRecord, Recorder6 and dozens of agencies, records centres, schemes...



Image © Chris Raper, NHM



- Will never be finished!
- Relies on a wide range of contributing experts who advise on changes and additions
- 52,569 changes made since 2020 (20,267 in 2025)
- Incl. BSBI flowering plant update to Stace 4+ with Tom Humphrey (17.5k changes)



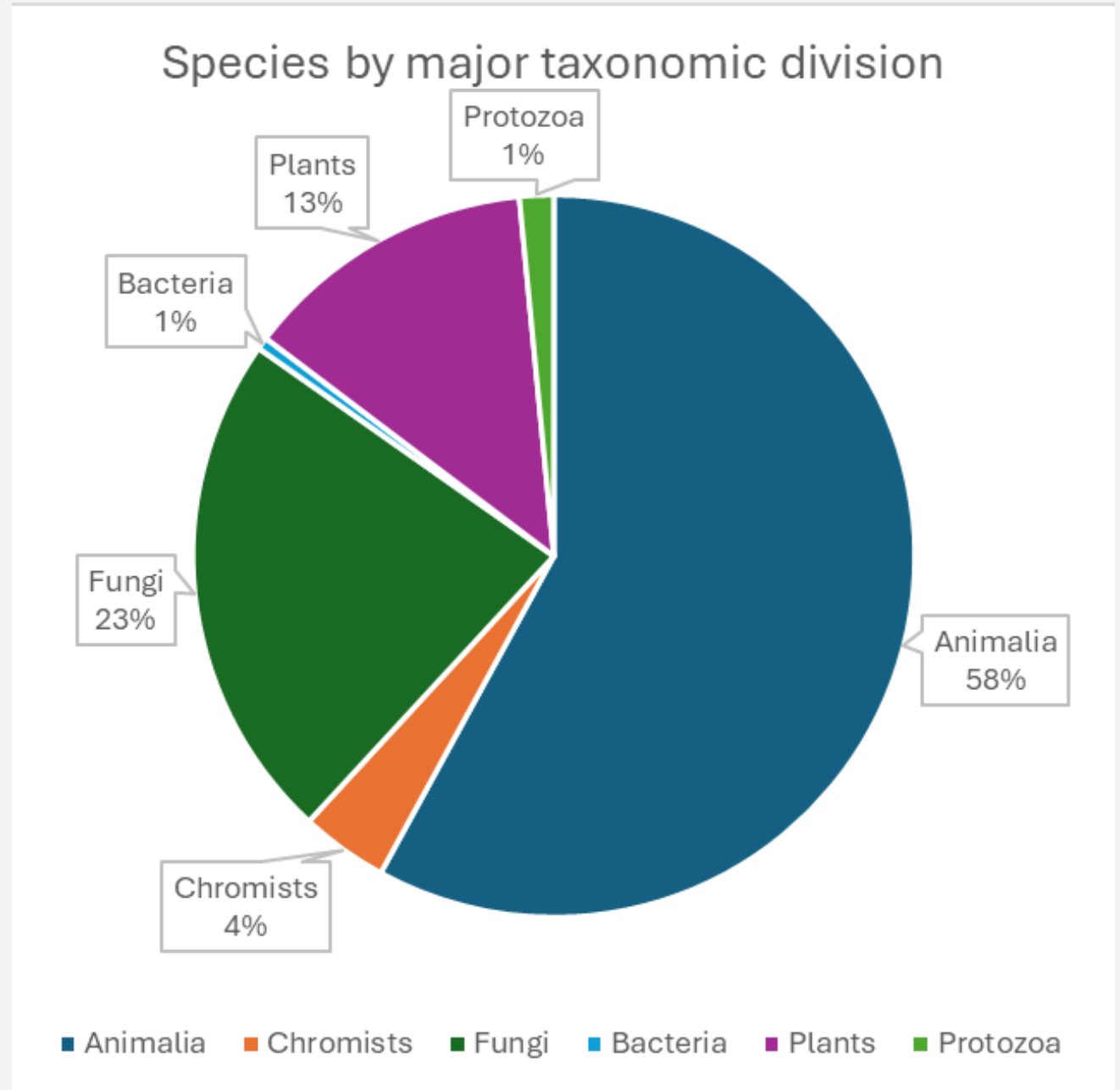
[Author: Marie-Noelle de Casamajor; Source: File:Limace à bigoudis (*Spurilla neapolitana*) sur l'estran de la côte basque (Ifremer 00623-73533 - 29225).jpg - Wikimedia Commons; Licence: CC BY 4.0]



Content (as 05/11/25)

- 70,860 species*
- 124,394 taxa of all ranks
- 336,805 names (scientific, English, Welsh & Gaelic)

*known from UK, plus horizon scanning



Identification Trainers for the Future (2014-18)



- Response to the growing taxonomic skills gap and a critical shortage of wildlife identification and recording skills in UK*
- Funded by HLF Skills for the Future and led by NHM in partnership with NBNT and FSC
- 15x paid year-long traineeships @ NHM, along with training resources and courses attended by further 172 people
 - Species identification and biological recording
 - Collections care and museum skills
 - Public engagement and Train the trainer
 - Work placements at NHM and FSC

*incl. House of Lords, 2008; Boxshall & Self, 2011; IEEM, 2011





Data workshops with NBNT



NBN Annual Conference



NBN Nature in Parliament



FSC ID courses



FSC work placements



FSC Teacher Training





Department
for Education

<https://www.gov.uk/government/publications/sustainability-and-climate-change-strategy/sustainability-and-climate-change-a-strategy-for-the-education-and-childrens-services-systems>

Policy paper

Sustainability and climate change: a strategy for the education and children's services systems

Updated 20 December 2023



National
Education
Nature Park

Led by



Natural
History
Museum

With



RHS

Working with



esri UK
THE SCIENCE OF WHERE™

Commissioned by



Department
for Education

Partners



Learning
through
Landscapes



Manchester
Metropolitan
University

NBN Trust

Making data work for nature



Royal
Geographical
Society
with IGB
Advancing geography
and geographical learning



UK Centre for
Ecology & Hydrology

THE
ROYAL
SOCIETY



Biodiversity gain



Green skills



Pro-environmental
behaviours



Improved wellbeing



OUR GREEN PLAYGROUND VISION!

By St Mary's Eco Committee

We care about our planet and our school. Right now our playground is grey and hard...
...but we have a BIG GREEN dream!

We want a green and happy playground with:

- 🌳 **Trees** for shade and climbing fun
- 🌸 **Flowers** to help bees and butterflies
- 🌿 **Grass and plants** we can look after
- 🪴 **Gardens** where we can grow things
- 🌱 **Places for wildlife** to live safely
- 😊 **Nature corners** to relax and smile

We want a playground that is colourful, alive, and fun for everyone! By planting and caring for our space, we can help the Earth and make our school a better place — one leaf at a time!



Evidencing biodiversity change

On the ground data gathering

- Baseline habitat maps
- Species records (iNaturalist)
- Biodiversity surveys of selected taxa (PoMS)
- Extent of habitat enhancements / changes

Literature meta-analysis

- Examining published research to explore likely gains / changes to biodiversity resulting from given enhancements
- Using these data in predictive models, to forecast likely gains as a result of the interventions made on education sites

- Into the 3rd academic year of programme
- >8,000 educational settings registered
- 15.3 million m² of habitat mapped (incl. 70 km of hedgerow, 13,900m² wildlife ponds...)
- >1,200 habitat improvements so far
- £12 million grants awarded to 1,250 settings

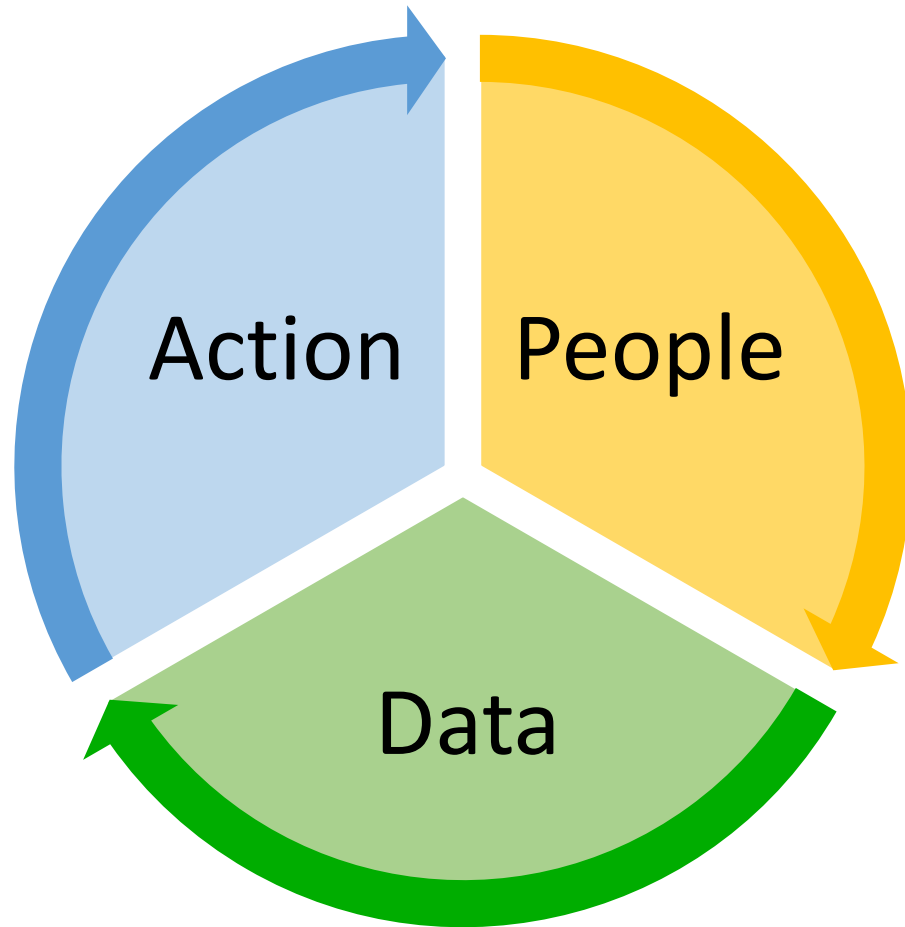


“The impact on our young people has been transformational, and self-sustaining. It has supported staff and student wellbeing and is a project that will last for years and years”

Mumin Humayun, Principal at Stockwood Park Academy, Luton

“I feel happy when I’m outside. Since the start of the year, log seating has been added, grass has grown, we’ve added dogwood and holly trees, built a walkway and added fruit trees.”

SEND pupil, Dixon Kings Academy, Bradford



- NBNT: standards, authority, authenticity
- Being part of something bigger
- Willingness to share time, skills, enthusiasm, differing perspectives



Image © Natural History Museum

25 years ago we built a network to mobilise the UK's biological record data.
Since then there have been huge changes across the landscape that we operate in

DIGITAL TECH

Advanced internet

Smartphones

Mobile apps

Social media

Data coverage & Wi-Fi

Cloud computing

AI & ML

'Real time' sharing &
communication

BIODIVERSITY MONITORING

Digitally-enabled structured
surveys & *ad hoc* recording

Remote sensing & robotics

Molecular methods

Sensor networks & IoT

Bioacoustics & ecoacoustics

Data science & AI

Centralised databases

NATURE CONSERVATION

More holistic approaches that
factor in people & value of
nature (e.g. NCEA)

Transition from protecting
individual sites & species to
landscape-scale recovery

Rise of rewilding/less-directed
management

Reality of the planetary
emergency

Increasingly evidence-led, at
local & landscape levels

Three key challenges

1. Integrating new data sources and knowledge
2. Translating data into action
3. Working together ever more effectively



Challenge 1

From genes to ecosystems: integrating new data sources and knowledge

- Accessible to end users
- Quality assured / verifiable
 - Sustainable



UKSI



[Images: insect specimens collected for full genome sequencing during DTOL Ainsdale Bioblitz, courtesy of NHM/DTOL; sensor hub from NHM gardens courtesy of NHM/Ed Baker]



Natural History Museum



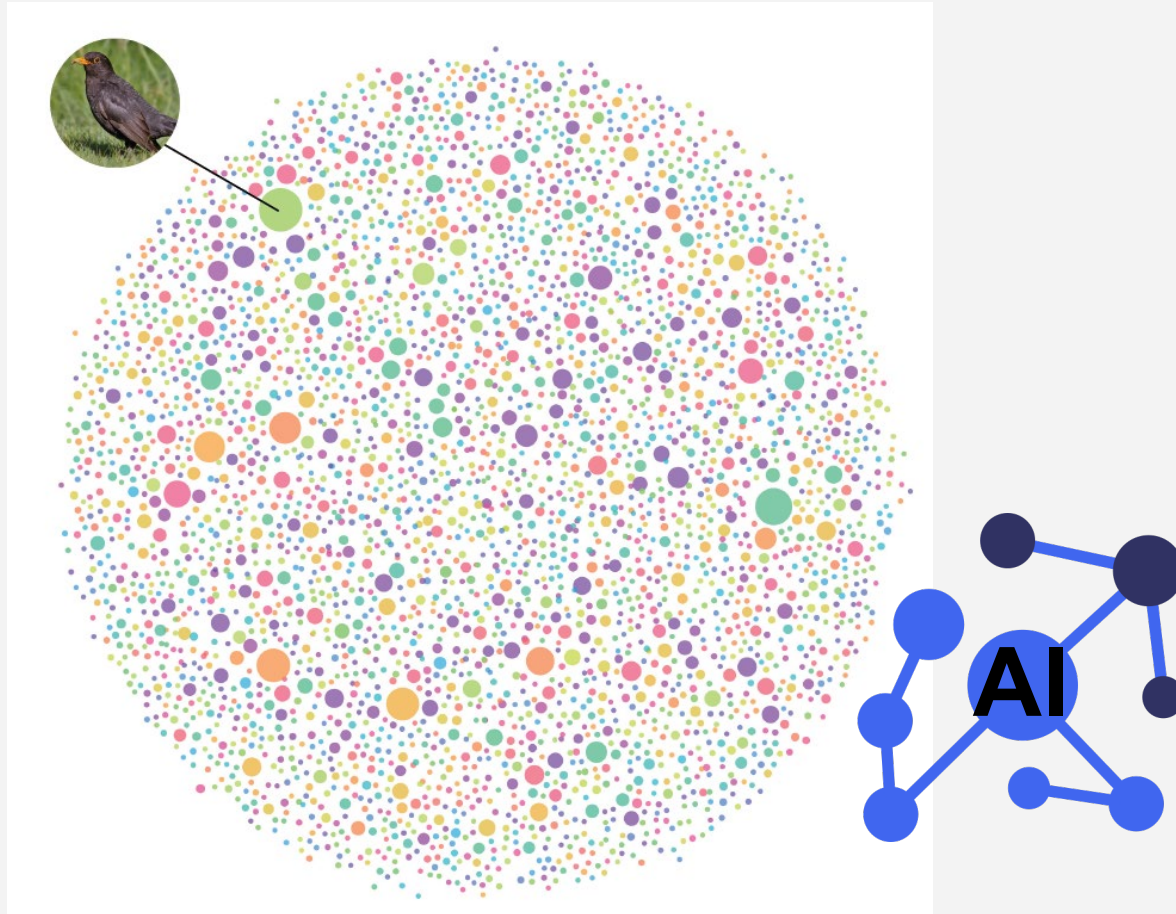
Arts and
Humanities
Research Council

DISSCO UK

2026-2036: Digitising the UK's Natural Science Collections

Challenge 2

Translating data into nature positive action:
data insight and data intelligence



Country overall

Biodiversity intactness in 2000: 30.55%

Biodiversity intactness in 2020: 30.98%

Biodiversity intactness change: +0.43%



Overall biodiversity intactness in the UK in 2020.

[Above: <https://www.nhm.ac.uk/our-science/services/data/biodiversity-intactness-index/policy/30by30.html>]

[Left: still from on-site interpretation screen within NHM Nature Discovery Garden; icon image: Flaticon.com]

Challenge 2

Translating data into nature positive action:
using data to inspire and drive change

← ↻ 🔍 <https://uk.naturalist.org>

iNaturalistUK 🔍 Explore Community More ▾



8,417,528
Observations to Date

SIGN UP ➞ EXPLORE ➞

Stephen McWilliam ~ European Goldfinch from Woolton, Liverpool, England

How It Works



- 1 Record your observations
- 2 Share with fellow naturalists
- 3 Discuss your findings



Challenge 3

Working together ever more boldly and effectively in ways that respect our differing roles, motivations, interests and resourcing

ALERC, Bat Conservation Trust, BES, Botanical Society of Britain and Ireland, British Trust for Ornithology, Butterfly Conservation, Cyfoeth Naturiol Cymru, Defra, Forestry England, JNCC, National Landscapes, National Trails, National Trust, National Trust Scotland, Natural England, NatureScot, **NBNT**, NHM, North York Moors NP, Peak District NP, Plantlife, Protected Landscapes Partnership, RSPB, Somerset Wildlife Trust, UKCEH, The Wildlife Trusts, The Woodland Trust

(signatories as 12/11/2025)

Introducing a new initiative: building a common evidence base for nature's recovery

Recognises the collaborative contribution we can make to build a common evidence base in support of nature's recovery. First step is an Accord that seeks to maintain consistency between individual and partnership efforts.

Working together to build:

- more comprehensive evidence to inform conservation actions and track progress towards biodiversity targets
- efficiencies in survey effort, tools, processes, support, analysis and investment
- engagement of wider organisations, sectors and communities in the study and appreciation of nature and action for its recovery



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*“The future of the natural world, on
which we all depend, is in our hands”*
Sir David Attenborough

Angela Marmont
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