NFBR

NATIONAL FORUM FOR BIOLOGICAL RECORDING

Newsletter 65: December 2023

Contents

Cover picture:
Grey-headed Albatross (© Dr Mike Pienkowski)

NFBR news and updates

Greetings from soggy Shropshire, where we are standing in for the wonderful Elaine Wright, who is having a one issue break from editing and designing this newsletter. I'm immensely grateful to Jodey Peyton who has acted as commissioning editor, and to Gordon Leel (who, when not laying out biological recording newsletters, is my other half).

Our amazing trustees and advisory council have been hard at work this year on subject specific working groups, more of which in our Spring newsletter. Basically, if you want to get involved, we need you and your skills!

The 2024 conference is called Next Level Recording with subthemes on extreme recording, new species, new tech and taking individual recording to the next level. It is scheduled to take place on 9th and 10th May, and will be hosted at the YMa cultural and arts centre in Pontypridd.

A huge thank you to all of our contributors, and I hope you all enjoy this issue.

Sarah Whild
Acting/Standing/Chair (I can't escape…)

December 2023

The British Bryological Society celebrates its centenary year

The British Bryological Society (BBS) is celebrating its centenary year in 2023, having been formed in 1923 from the pre-existing (since 1886) Moss Exchange Club, and welcomes anyone interested in the study and conservation of mosses and liverworts. Whether you are a beginner, keen to improve or have been studying bryophytes for many years, the society aims to support you, with lots of local meetings and events, a referee service for members, a lively membership magazine and an extremely popular Field Guide to Mosses and Liverworts.

Over this past 100 years the member ship has grown from 87 members to over 750 today. During this time the society has collected over 3 million records of mosses,

Members of Shropshire Botanical Society searching for a historical record of Grimmia montana

Orthotrichum pulchellum (Claire Halpin)

liverworts and hornworts, and produced multiple publications including most recently the two-volume Atlas of British and Irish Bryophytes in 2014. The BBS produces two regular publications available to members. These are the Journal of Bryology, which is a prestigious scientific journal primarily aimed at scientists and researchers around the world, and the bulletin Field Bryology, aimed at amateur and field bryologists. In 2010, the BBS published its Field Guide which has been hugely successful and instrumental in encouraging many beginners into bryology, and work has started on a second edition.

The centenary has been marked by the launch of the first National Moss Day in Britain and Ireland on October 21st which saw a range of beginner events, exhibitions and moss trails across the country, and a photographic competition culminating in the production of a 2024 calendar, which is now available on the BBS website.

The BBS website is packed with information to help you get started, including a species finder with lots of ID hints, beautiful images for each species and a helpful section on similar species, a vice-county explorer

Daniel Angell Jones exhibition at Harlech library to launch the opening of their moss trail on National Moss Day

Mnium stellare (Claire Halpin)

Members of the Wessex regional bryophyte group recording on Janesmoor plain in the New Forest

to find local information and your regional recorder (RR), and tips and techniques for microscope use for when you really get the bug! There is also a wonderful new section on bryophytes in art, and the society is calling all artists for any contributions to be displayed on the website.

The traditional bryophyte 'season' runs from autumn through to spring, so this is the perfect time to look at this fascinating group, and you can contribute records by contacting your RR, or via the iRecord app or website.

John Newbould – former NFBR Council member awarded BEM in the Birthday Honours List

John in his working life was a Pharmacist qualifying at the Heriot Watt University, Edinburgh in 1966. In his spare time, he started studying wild flowers with a keen interest in their distribution. By 1978, he joined the Yorkshire Naturalists' Union and what is now the Botanical Society of Britain and Ireland. Subsequently, he acquired a second hand copy of the first *Atlas of the British Flora* (1964) and was dismayed to find his home 10km square SK49 had only 208 species recorded.

He started volunteering with the Rotherham Biological Records Centre, under Bill Ely (also a former NFBR Council member) at around the time Recorder 3 became available. Needless to say, they devised a recording scheme that took full advantage of its capabilities using a field-by-field methodology. That is how he has surveyed since. SK49 has now over 1000 plant species on the NBN Atlas. Bill also encouraged John to show an interest in NFBR, taking him to a number of annual conferences.

In 1998, John retired from full time Pharmacy and the following year, he and his family moved to Weymouth. However, just before the move, John was once again at a NFBR Conference in Peterborough and found himself on the NFBR Council – a volunteer amongst many professionals. At the first Council meeting he attended, he was appointed secretary and thereafter did various administrative duties to keep NFBR running ranging from membership, treasurer and conference administrator. The hardest job of all was changing the status of the Federation to a registered charity now the National Forum for Biological Recording. He retired from NFBR duties in 2012.

Until the COVID pandemic, John, Paul Harding and the late Trevor James had an annual lunch in a restaurant in the South Bank Centre, London. Paul had received an MBE as he retired from The CEH Biological Records Centre at Monk Wood. Subsequently, Hertfordshire Natural History Society recommended Trevor for a National award. At various times, they have all been awarded Honorary membership of the NBN Trust.

In so called retirement, John has been appointed a National Specialist (Nature Evidence) for the National Trust in 2016, specialising in putting together Nature Conservation Assessments both in Yorkshire and Dorset. He is currently still active as a volunteer team leader for the West and North Dorset National Trust Ecology Group attempting to survey 26 properties, with the Golden Cap Estate having the largest area of neutral unimproved grassland in the England and Wales land

holding. There is also eight miles of the internationally important soft rock cliff coast with many nationally rare and scarce invertebrates and a World Heritage Coast.

John says “I still pay my NFBR subscriptions and occasionally look in on-line conferences. Increasing deafness limits activity but still working away.”

The medal was present by the Lord Lieutenant of Dorset Angus Campbell at the National Trust’s Portland House, with many family, colleagues from the professional staff, fellow volunteers and friends on 23rd October 2023.

All of the current NFBR Executive send John their warmest congratulations on this well-deserved award.

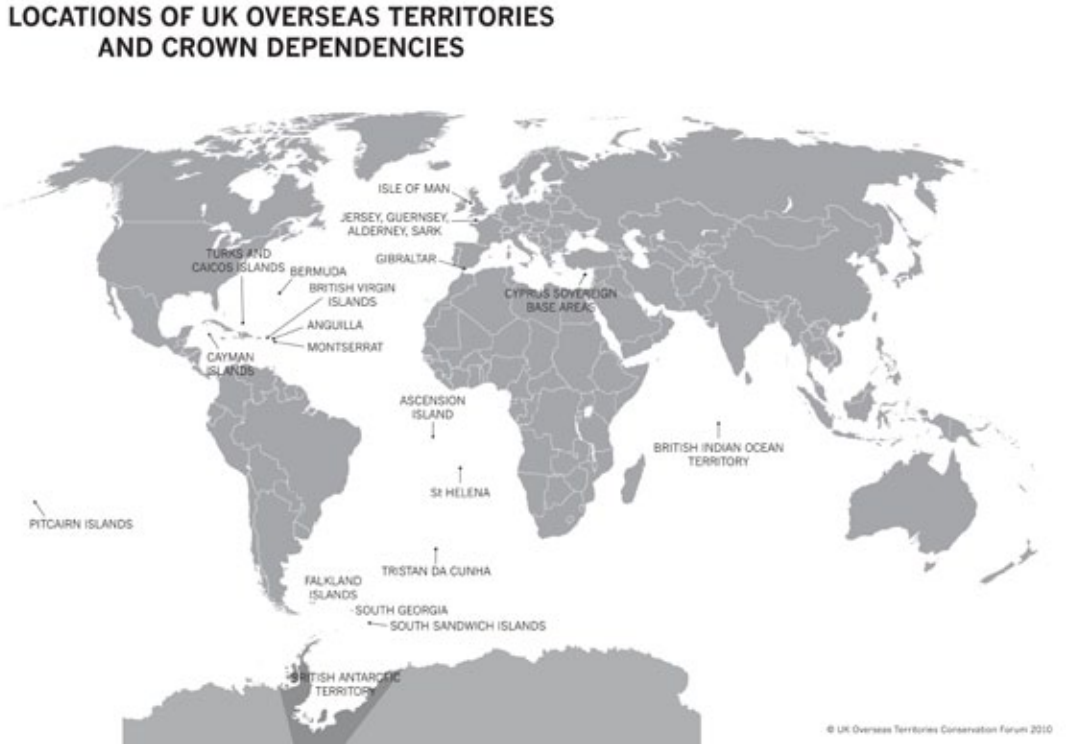
John surveying at National Trust Ringstead Bay

John receiving his BEM from Angus Campbell, Lord Lieutenant of Dorset

UK Overseas Territories and Crown Dependencies

Mike Pienkowski, Chairman, UK Overseas Territories Conservation Forum

Despite serious declines of wildlife in UK, it remains very important for many taxa, and potentially for others with well-planned and executed recovery programmes. This is evident from the work of generations of mainly amateur naturalists and the continuing efforts of biological recorders. UK is accountable internationally for even more important areas. These are the 16 UK Overseas Territories (UKOTs) and five Crown Dependencies (CDs) - those parts of the former Empire which opted to remain linked to UK. Apart from four UKOTs which are deemed to have no permanent human populations, all have locally elected administrations, with different extents of powers. All but two of the 21 are islands or archipelagos (or, in one case, parts of an island); the other two are peninsulas, relatively cut off, for different reasons. Their ecosystems range from deserts to cloud-forest (in one notable UKOT, St Helena – which holds at least 119 endemic invertebrate species



– with these ecosystems in sight of each other); and on to tropical wetlands, temperate peatlands, glaciers and assorted marine areas. By including the territories, UK's exclusive economic zone (EEZ) is the world's fifth largest, at 6,805,586 km^2. The total reef-area inside the UKOTs is 4,712 km^2, making UK the world's twelfth largest reef-nation.

An estimated 94% of the global biodiversity for which UK is responsible depends on the UKOTs, rather than UK itself. This is probably underestimated because of only a relatively short history of study. The human populations and economies of UKOTs tend to be small, with few resources either local or from UK available for study and conservation. For over 30 years, the UK Overseas Territories Conservation Forum (UKOTCF) has helped local people to organise NGO and official conservation bodies and facilitated increasing their capacity through a range of projects and assistance in finding funding for these, as well as specialist outside assistance, often unpaid. In doing this, UKOTCF itself has evolved, so that its constituents are now some 30 organisations in the UKOTs, the CDs and a few supporting

Grey-headed Albatross in front of breeding slopes, South Georgia, which hold 40% of the world population (© Dr Mike Pienkowski)

Flamingo, Great Egret, White-cheeked Pintail and Black-necked Stilts, among other wetland birds, feed in Red Salina beside the road in town at Grand Turk, Turks & Caicos Islands (© Dr Mike Pienkowski)

Great Shearwaters (most of the smaller birds shown; 99.99% of the world population breed in the Tristan da Cunha territory), Giant Petrels and Atlantic Yellow-nosed Albatrosses (which breed only in the Tristan da Cunha territory) forage in front of Inaccessible Island, Tristan da Cunha (© Dr Mike Pienkowski)

King Penguin colony with glacier in background, South Georgia (© Dr Mike Pienkowski)

UK-based bodies, together with a wide network of other specialist individuals and organisations.

However, a great deal of research, survey and conservation needs to be done. For example, work by one of our US partners in a recent UKOTCF project in Montserrat resulted in the description of 11 species (and one new genus) of long-legged flies (Dolichopodidae) new to science, five of them endemic to Montserrat. Many other taxa there and in other UKOTs are likely to have comparable results, once studied.

It is perhaps most sensible to demonstrate the relative richness of UKOTs and CDs by reviewing briefly those taxa which have been relatively well studied in the territories as well as in UK. Therefore, I look briefly at birds, reptiles and amphibians, before returning to some more general aspects.

The birds of the UKOTs include 26 living endemic species and at least 30 (probably many more) extinct endemic species, together with at least 40 further endemic subspecies. This compares with 0-1 endemic species in Great Britain (depending on the current specific or subspecific status of the Scottish Crossbill

Loxia scotia) – despite the UKOTs' much smaller land area. Obviously, larger areas tend to hold more endemic species and UKOTs are generally very small. If one takes an archipelago area somewhat smaller than the area of UK, there are also about 36 further species endemic to UKOTs and immediately adjacent islands. UKOTs hold globally important populations of six of the world's albatross species, nine penguin species representing over 25 percent of all penguins, parrots, and the world's smallest flightless bird – the Inaccessible Rail *Atlantisia rogersi*.

This importance of UKOTs results from several reasons. As for other taxa, the relative isolation of many territories from other land-masses gives rise to endemic species or subspecies. Amongst other reasons, many territories are small areas of land surrounded by large areas of often highly productive ocean. Seabirds and some marine mammals require land on which to breed, making such locations extremely important to them.

The territories are generally small and the populations on them have evolved with no or few land predators. This has made them particularly vulnerable to intentional or accidental human impacts. These include habitat destruction or fragmentation, accidental or deliberate introduction of non-native invasive species, direct killing of species, over-exploitation of their food supplies, and climate-change intensifying storms, raising sea-level and other factors – all exacerbated in Island situations in that the species cannot gradually move location as the climate changes.

Having got there, some bird species have evolved flightless-ness, such as Henderson Crake *Zapornia atra* and Inaccessible Rail, with Gough Moorhen *Gallinula comeri* and St Helena Plover *Charadrius sanctaehelenae* also having evolved shorter wings than the continental species from which they probably evolved. There are several possible reasons for this. Flight is extremely energetically expensive compared with walking, and food resources may be limited on small islands. Also, there is a risk of being blown off the island by storms. In 2001, winds on Tristan da Cunha were sufficiently strong that some domestic livestock were blown off the island. There may also be behavioural adaptations discouraging flying in open areas. Montserrat Orioles *Icterus oberi* are not seen outside their forest habitat (or adjacent gardens resembling forest). Montserrat is only 18 km long and only 39-64 km from its nearest neighbouring islands (well within sight), some with similar forest habitat, but these Orioles are found only on Montserrat.

Amongst reptiles and amphibians, there are at least 51 species and at least 19 further subspecies endemic to UKOTs (in a few cases including also immediately adjacent areas). Most are in the Caribbean. The archipelago nature of the Caribbean, tectonic movements and more recently sea-level fluctuations in the glacial and interglacial periods probably gave rise to great taxonomic diversity.

Some of these apply to the Mediterranean, although this has been subject to human activities, generally negative to conservation, for far longer periods of time.

These adverse human activities tend to involve direct over-hunting (as for turtles), habitat-loss and particularly the accidental or deliberate introduction of invasive animals which predate or compete with the native fauna. A striking example of this was the fact that the Cayman Islands were named after the Cuban Crocodile *Crocodylus rhombifer* which abounded when the islands were first sighted by humans. This species is now extinct in Cayman and critically endangered in the rest of its range. A similar problem of human moving of animals and plants has caused near extinction of, for example, the Turks and Caicos national tree, Caicos Pine *Pinus caribaea* var. *bahamensis*, and the Mountain Chicken frog *Leptodactylus fallax* in Montserrat, although rescue research and conservation of both are being attempted.

Destruction by humans continues. A study of skinks described 24 new species and reclassified others, giving 61

King Penguins returning from fishing trip to nest-sites march past Elephant Seals, South Georgia (© Dr Mike Pienkowski)

In the dawn light, the last of the female Green Turtles pull themselves back to the sea after laying and burying their clutches, Ascension Island (© Dr Mike Pienkowski)

species of mabuyine skinks, of which 39 occur on Caribbean islands with 38 endemic to these, mostly to single islands. Under IUCN Red-list criteria, all 38 endemic Caribbean island species are threatened with extinction, 27 species (71%) Critically Endangered, six species (16%) Endangered and five species (13%) Vulnerable. Sixteen of the Critically Endangered species are Extinct or possibly extinct because of human activities during the last two centuries. Several other surviving species are near extinction and needing immediate protection.

Across all taxa, compared with some 90 endemic species in mainland Britain, about 3300 are known so far in the UKOTs – but there are still huge unknowns resulting from understudied taxa. About 75% of those formally reviewed are globally threatened, and most of those not yet reviewed are likely to be similarly threatened. So there are lots to do. It is important, however, to do so in close collaboration with local naturalists and conservationists; UKOTCF can help put potential researchers in touch with these.

Find out more: www.ukotcf.org.uk

BSBI Plant Atlas 2020: a new resource for biological recorders

Louise Marsh

BSBI Communications Officer

The Botanical Society of Britain and Ireland (BSBI) published the results of its Plant Atlas 2020 project in March 2023. The project, based on over 30 million records, collected by thousands of BSBI's volunteer recorders between 2000 and 2019, and building on data collected for two previous Atlas surveys in the twentieth century, is the most comprehensive survey of vascular plants ever undertaken in Britain and Ireland.

Plant Atlas 2020 key findings include the following: 53% of our native plants are estimated to have declined in Britain due to human impacts such as agricultural intensification and habitat loss; the number of non-native plant taxa recorded in Britain now outnumber native plant taxa for the first time; some montane plants have declined due to climate change whereas some southern species such as Bee Orchid have benefited and spread further north; and, while many non-native species are benign, some, such as New Zealand Pigmyweed and Sitka Spruce, have become invasive, disrupting ecosystem function and outcompeting native species.

Outputs from the project, which will be of interest to biological recorders, comprise a 2-volume book, published by Princeton University Press, an interactive website created and hosted by the Biological Records Centre/ UK Centre for Ecology & Hydrology with funding from the Joint Nature Conservation Committee/

Natural Environment Research Council, and a set of reports summarising the main findings from the project and looking at the trends impacting the current state of our flora, assessing the changes since the 1950s and analysing the drivers of change, such as habitat loss, pollution and climate change. There are reports for Britain and for the whole island of Ireland; a Welsh language version of *Britain's Changing Flora*, the report for Britain is also available. The reports can be downloaded freely from both the BSBI website and from the Plant Atlas 2020 website.

The main finding from *Britain's Changing Flora* is that many of the habitats our wild plants depend on have been impacted by changes in agriculture since the 1950s. Nitrogen enrichment, habitat degradation and changes in grazing pressure have led to the decline of native species such as Heather and Harebell; damp meadows have been drained, leading to substantial declines in plants such as Devil's-bit Scabious; traditional grasslands have been reseeded or over-fertilised, and consequently 62% of our ancient arable wildflowers such as Corn Marigold have declined.

Pete Stroh and Daniel Zeichner MP cut the Plant Atlas 2020 cake (Julia Hanmer)

Climate change is also an important factor; it is likely to be the primary cause of the declines of some mountain plants such as Alpine Lady-fern, Alpine Speedwell and Snow Pearlwort which depend on areas where the snow lies late in the spring and summer. Peatland habitats, which will be essential as we strive to combat climate change, are being impacted by species such as Sitka Spruce, which is able to regenerate into moorlands and peatlands, reducing their ability to sequester carbon. Sitka Spruce has shown the most significant increase in range of any species recorded for Plant Atlas 2020.

The Plant Atlas 2020 website is freely accessible to everyone and will be a valuable resource for conservationists, policy-makers and practitioners going forwards. The website features information about 3,495 native and alien taxa recorded in Britain and Ireland, with interactive distribution maps allowing the viewer to explore data at tetrad and hectad level, alongside photo galleries and information on flower and leaf phenology, altitudinal range, time-series trends and conservation status. All plant distribution and phenology plots can be downloaded as .png or .svg files and the Trend tab features a handy hover-over "tool-tip" so viewers can see at a glance to what extent a plant's distribution is declining or increasing over the decades. All taxa can be searched for under either the common or the scientific name.

At the March 2023 launch of Plant Atlas 2020, BSBI Chief Executive Julia Hanmer paid tribute to the dedication and expertise of thousands of botanical recorders whose data fed into Plant Atlas 2020, and thanked them for their unique contribution to the evidence base needed to underpin nature recovery. She also pointed out the urgent need for action to ensure that, going forwards, our wild plants thrive and are valued. BSBI Head of Science Dr Kevin Walker stressed the importance of more research, recording and monitoring of our wild plants if we are to reverse the declines in wild plant populations and the habitats which support them. The Botanical Society of Britain and Ireland is confident that in the decades to come, biological recorders will find the Plant Atlas 2020 website and the summary reports helpful as we all seek to conserve our wild plants, their vitally important habitats and the many species of wildlife which rely on them for food and shelter.

October 2023

NBN Trust update for NFBR – November 2023

Improving the NBN Awards for Wildlife Recording

The NBN Trust has been running the annual NBN Awards for Wildlife Recording for eight years. During that time we have celebrated the work and achievements of over 65 biological recorders! Before we launched the 2023 Awards' scheme with the same format as previously, we thought it was time for a thorough review to see how we might be able to make them even better. As a result, we will not be having any Awards in 2023, but will launch the next scheme in January 2024. You can read more about the review and the key findings on the NBN Trust website.

https://nbn.org.uk/news/improving-the-nbn-awards-for-wildlife-recording/

Farewell to Sophia Ratcliffe – for now!

We are pleased to say that it won't be a final goodbye but, in October, we said farewell to Sophia Ratcliffe, the NBN Atlas Data Manager. Sophia worked for the NBN Trust from 2017 and brought a passion for biodiversity data, an incredible work ethic, and outstanding customer service skills.

Whilst recognising the incredible work Sophia did, we hope you will bear with us while we recruit for this new role and are able to return to providing the same level of service you have been used to. We currently only have limited capacity to respond to enquiries. Whilst someone will get back to you as soon as they can, depending on your query we may not be able to resolve matters immediately. We appreciate your patience in this interim period, while we are recruiting new data staff.

We'd be grateful if you could direct any data specific queries to data@nbnatlas.org and any general NBN Atlas queries to support@nbnatlas.org. Thank you.

https://nbn.org.uk/news/farewell-to-sophia-ratcliffe-for-now/

46 million Butterfly Conservation records on NBN Atlas

The NBN Trust is delighted that Butterfly Conservation has recently made over 46 million records of UK butterflies and moths publicly available on the NBN Atlas. It's brilliant news in our mission to make data work for nature.

The two datasets that have been shared are derived from verified UK scheme databases. They are based on the original records that Butterfly Conservation looks after, from the earliest records in the seventeenth century up to 2019.

https://nbn.org.uk/news/46-million-butterfly-conservation-records-on-nbn-atlas/

UK returns as GBIF Voting Participant

The UK, as one of the 23 founding national members of GBIF (Global Biodiversity Information Facility), has returned to Voting Participant status. This means it has rejoined the 42 other national governments that contribute financially to GBIF's core global budget. The NBN Trust will continue its crucial role in coordinating national activities as the UK's GBIF node.

https://nbn.org.uk/news/uk-returns-as-gbif-voting-participant/

INNS Mapper/Mapiwr INNS has launched!

INNS Mapper, a new app and website for reporting sightings, surveys and management of invasive non-native species (INNS) in England, Wales and Scotland has launched. INNS Mapper, which will also be known as Mapiwr INNS in Wales with Welsh language options, is free to use and aims to provide an effective resource to support INNS programmes and coordinate efforts.

There are 62 INNS that can be reported via INNS Mapper, including freshwater and terrestrial plants, freshwater invertebrates and mammals. The species included have all previously been reported in GB and are either widespread and under management, widespread where management efforts are less widespread or species present in GB with high impact, but difficult to manage. Data reported to INNS Mapper is open access and publicly available for anyone to use.

INNS Mapper was developed and funded by multiple organisations. Please visit the app or the website for more information.

Better Biodiversity Data project update

In March 2023 the Better Biodiversity Data project (BBD) welcomed its first staff; Mike Tetley – Scotland Programme Manager, and Christine Tansey – Partnership Officer.

The BBD project is addressing some of the key recommendations set out in the 2018 Scottish Biodiversity Information Forum (SBIF) Review. The BBD team will continue to work alongside the SBIF advisory group and other key partners to address three key objectives:

1. The establishment of a National Hub that supports Local Environmental Records Centres (LERCs) and Recording Groups in Scotland.
2. The creation of a shared online data management and digital services system that can be used by LERCs, Recording Groups and other partners to streamline biodiversity data flows and help deliver data services in Scotland.
3. The development of a more connected and better supported biological recording community in Scotland.

The first six months of the BBD project have seen Mike and Christine meet with LERCs, Recording Groups and other key partners both online and in-person around Scotland. These discussions have highlighted the differing circumstances faced by LERCs and Recording Groups, and demonstrated the need for central support and tools to facilitate the work they undertake. The next phase of the project will continue to scope out what is needed to enhance biodiversity data flows for the biological recording community in Scotland.

The team has recently been joined by Emily Baker as Data and Digital Services Manager, Philip Bysh as Lead Business Analyst and Bethany Fairbairn will join as Business Analyst, later in November.

More information on the BBD project is available here: https://nbn.org.uk/news/better-biodiversity-data-project/

iNaturalist is now an independent nonprofit organisation

After beginning life as a master's project at the University of California, Berkeley, and launching in 2008, iNaturalist became a LLC, then joined the California Academy of Sciences in 2014. In 2017, it became a joint initiative with the California Academy of Sciences and the National Geographic Society. Now, it is an independent, US-based nonprofit organisation.

This change won't affect the user experience and the platform and all of the features the contributors love about it will remain the same, and all the data can still be accessed free of charge.

You can read the official announcement on the iNaturalist blog and a set of FAQ's.

The WILdlife Disease and COntaminant Monitoring and Surveillance network (WILDCOMS)

WILDCOMS is a collaborative network formed in 2011 between 12 UK surveillance schemes that monitor disease and contaminants in vertebrate wildlife. WILDCOMS aims to:

- provide a focal point for disease and contaminant monitoring in wild vertebrates,
- provide an integrated overview of the health status of UK wild vertebrates,
- facilitate collaboration between WILDCOMS network partners,
- facilitate identification of disease and contaminants of emerging concern.

WILDCOMS publishes newsletters at https://www.ceh.ac.uk/our-science/projects/wildcoms-newsletters that highlight issues to wildlife health and news from the schemes as well as lists of recent publications to more than 600 interested parties. Information about the individual surveillance schemes in the WILDCOMS network can be found in Schemes. The following dead birds and mammals are of interest:

- If you find a dead bird of prey contact the Predatory Bird Monitoring Scheme
- For suspected poisoned wildlife contact the Wildlife Incident Investigation Scheme England and Wildlife Incident Investigation Scheme Scotland
- Found a dead otter? See Cardiff University Otter Project
- For a stranded marine mammal contact the UK Cetacean Strandings Investigation Programme
- And report sick or dead wildlife in your garden to Garden Wildlife Health

For further information see our website www.wildcoms.org.uk, and to get involved or to subscribe to our newsletters please email wildcoms@ceh.ac.uk

New to Nature

Clare Langrick and Seebra Young

The New to Nature programme, funded by The National Lottery Heritage Fund and led by community charity Groundwork, targets young people from ethnically diverse backgrounds, at an economic disadvantage, and/or suffering from disabilities to undertake a one-year paid work placements across the natural environment and landscape sector.

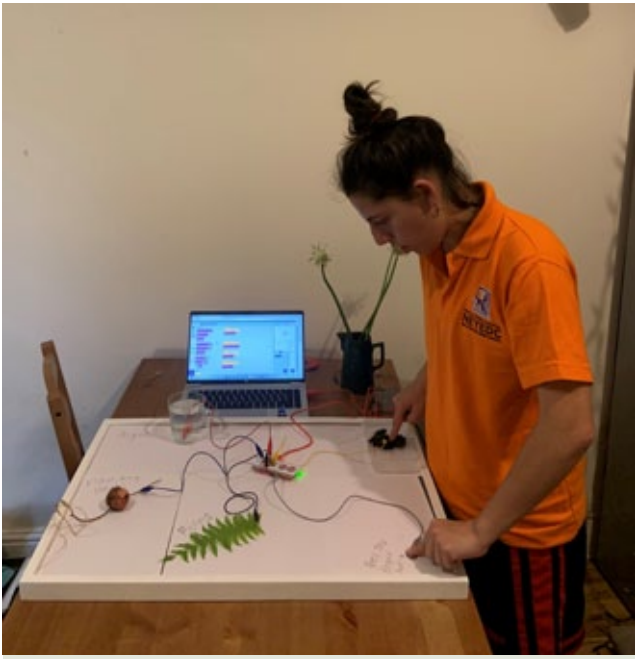
Here one such trainee, Seebra Young, talks about her first six months working for the North and East Yorkshire Ecological Data Centre and her perceptions of the biological recording landscape at the local level.

Starting out in the world of conservation can be incredibly daunting. With so many people wishing for a career in the environmental sector, securing a job is a worry that many aspiring young ecologists and conservationists can relate to. The New to Nature scheme, through which I have landed my first job as an Assistant Ecological Data Officer at NEYEDC, sets out to tackle some of the barriers to get started in the first place.

NEYEDC is a Local Environmental Records Centre (LERC) based in York, you may remember us popping up in the NFBR newsletter in the past. My position here has introduced me to many aspects of biological recording, as these records lie at the heart of what we do. Having recently graduated from university, my knowledge of ecological data had been limited to data used in an academic context which is generally collected in a highly standardised way and must withstand rigorous statistical analysis before any conclusions can be extrapolated. I had little knowledge of where data comes from in the 'real world' and how it connects to decision making.

I have been amazed to uncover the network of individuals and organisations involved in the world of biological recording, and the wider landscape in which their data is used. Although, I must admit, as a naïve newcomer I was surprised to

learn that there is no nationally funded systematic process in place to obtain biological records; this is something that frequently shocks the public too. Due to our involvement in the planning process, we often receive phone calls from members of the public exclaiming their shock that wildlife in a development site has not been acknowledged. We must explain to them, that if neither they nor other groups in in the community, have ever submitted records for this site then it is quite possible no data exists for local decision-making at this site!



Seebra developing Makey Makey outreach

Whilst this highlights how important the work of biological recorders is, it also brings about some issues. A lack of the aforementioned systematic recording means data must be collated by LERCs from many different sources; species recording groups, consultants, government bodies, natural history groups and the public. Although many recorders are experts, the heterogenous nature of data collected in different contexts and for different purposes means that spatial and taxonomic coverage is patchy and inconsistent. For example, 'uncharismatic' species are often under-recorded and engagement in citizen science recording is reduced in areas with a lower socio-economic status. Thus, counting the absence of data as an absence of wildlife is a shortcoming we regularly highlight.

Whilst working at NEYEDC I've been involved in all kinds of work related to biological recording: surveying Local Wildlife Sites, creating countless maps in GIS, working with programming software such as R, producing written content to raise awareness of the work we do, moth trapping with children, plenty of data 'cleaning' and exploring how we can use technology and data already available to map habitats. The

varied work of an LERC has taught me a lot about the reality of working in ecology and conservation, where we are often limited by resources, but also supported by a passionate and expert community of often 'unseen' recorders.

However, it is an exciting time to work in biological recording as conservation technology explodes, concepts like machine learning could provide new routes for both LERCs and recorders. Although new technologies like Artificial Intelligence have previously only been accessible to academics and large-scale commercial groups, they are now filtering down to those working on-the-ground. You may be using these technologies without realising, for example the BirdNET app, uses machine learning to identify bird species from audio recordings and Seek by iNaturalist uses image recognition to identify species in real time. I would like to look at how similar principles could be used to answer questions at NEYEDC, such as defining habitats on a large scale and identifying the most critical areas for survey and increased recording efforts. My traineeship with New to Nature has given me the freedom to explore some of these ideas, and I am excited to see where it takes me next.

Simon, Clare and Seebra in the field

National Forum for Biological Recording

The National Forum for Biological Recording is the premier UK organisation for practitioners engaged with biological recording across the UK. Membership includes individual naturalists, national organisations and recording societies, local records centres and their staff. This gives it a unique perspective and an important role.

Whether you are an experienced naturalist or taking your first steps in biological recording, we want to hear from you.

To offer an article for a newsletter, please contact our Newsletter Editor:

Elaine Wright on editor@nfbr.org.uk

To join the NFBR, please contact our Membership Officer and Treasurer:

Clare Langrick on membership@nfbr.org.uk

For all other enquiries about NFBR please contact our Chair:

(currently vacant) on chairman@nfbr.org.uk

Join the discussion on Facebook and Twitter.