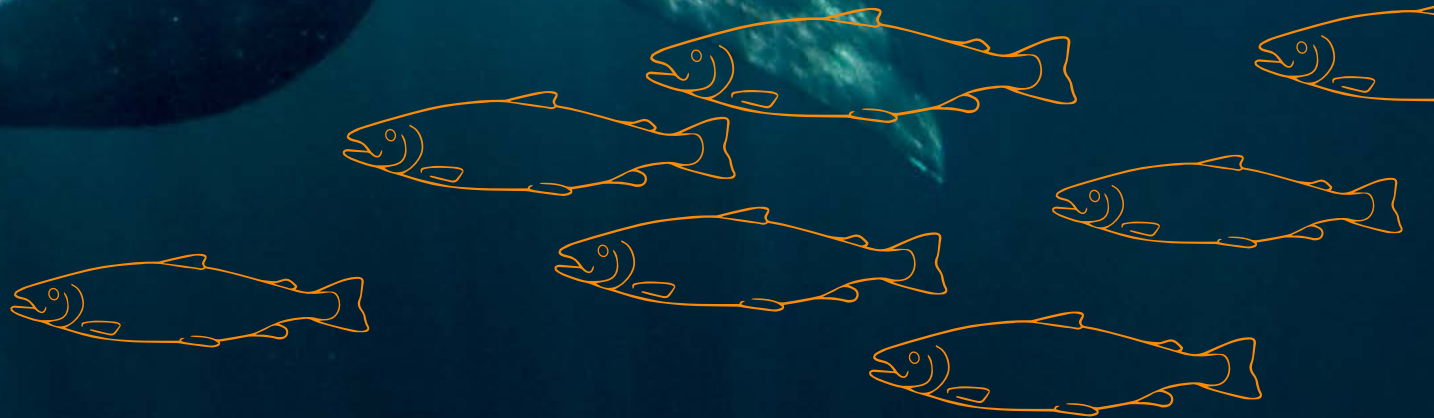




# Annual Impact Report 2022/23



# ABOUT US

The National Biodiversity Network Trust (NBN Trust) is a small charity with a big plan – to make data work for nature. For more than twenty years we've been making biodiversity data accessible, to support better decisions about the natural world and to connect people with nature. This Impact Report showcases the difference we have made in the past year, from April 2022 to March 2023.

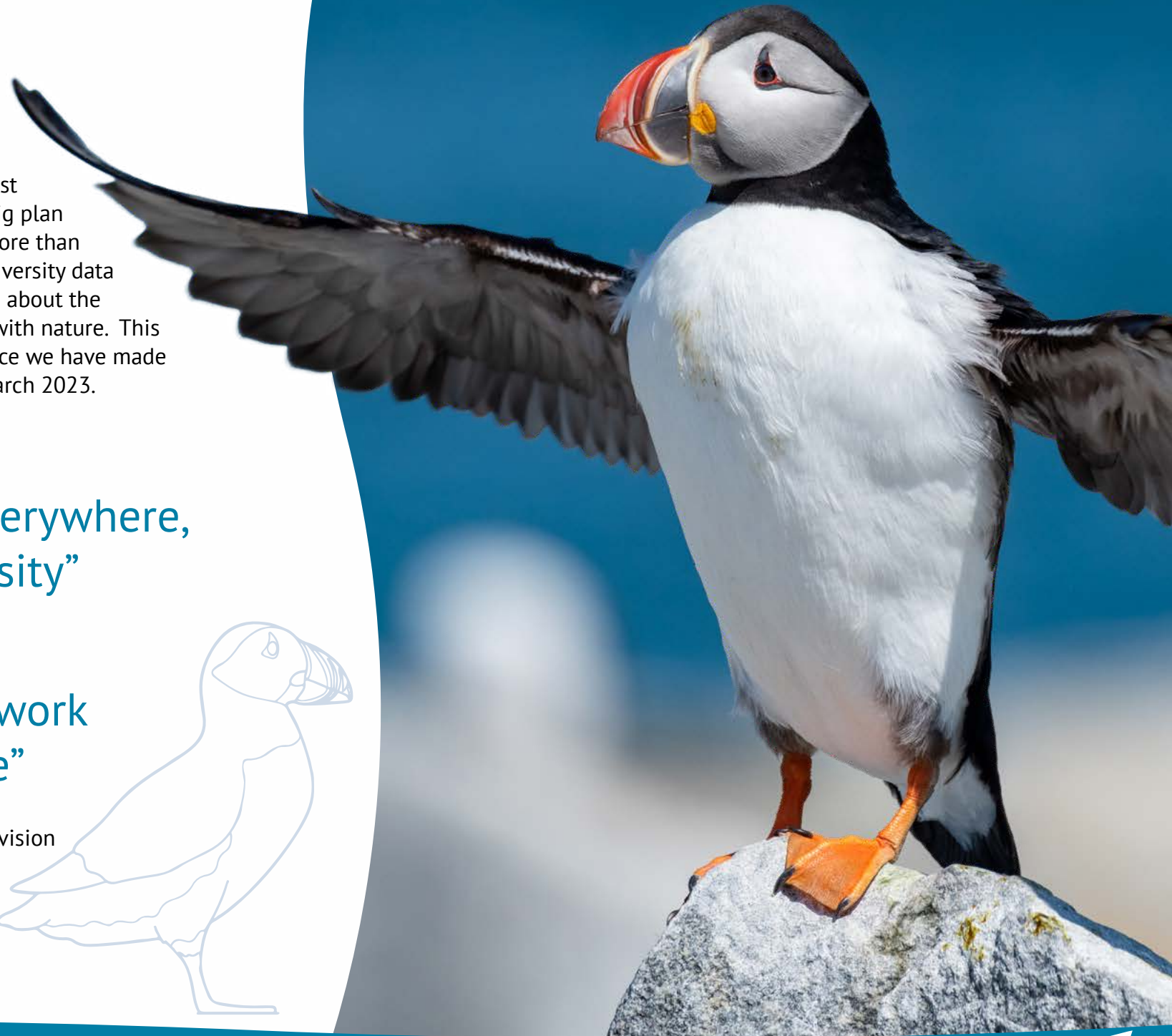
## **Our vision is:**

“Nature thriving everywhere,  
in all its diversity”

## **Our mission is:**

“Making data work  
for nature”

The key to achieving our mission and vision is our National Biodiversity Network (NBN): a dedicated community of over 200 organisations who are passionate about the positive impact of wildlife data.





# CHAIR AND CEO REPORTS

## Chairman's Report

Welcome to the NBN Trust's Annual Impact Report for 2022/23. I hope you enjoy reading about the many initiatives which the Trust has been involved in over the year and the impact it is having in relation to the important world of biodiversity data collection and use.

The challenges remain significant for the natural world. The UK's statutory nature conservation bodies reported in November 2022 that "the UK is one of the most nature depleted nations on earth. Over 40% of UK species are in decline, more than 40 million birds have been lost from our skies over the last 50 years and a quarter of UK mammals are threatened with extinction".<sup>1</sup> The Trust's mission is to make data work for nature and, as these facts show, its vision is as relevant as ever: "Nature thriving everywhere, in all its diversity."

Our exciting 2022-2027 strategy to achieve our vision is well and truly up and running thanks to the tireless efforts of staff at the Trust and partnerships with many organisations and individuals across the National Biodiversity Network who share our vision. Whether that is with biodiversity **data providers** and users, or receipt of support from funders (see page 29), the Trust team has achieved great things and is having a meaningful impact.

Putting biodiversity data at the heart of decision making requires leadership, something we aspire to show at the Trust and that we recognise through so many of these partnerships. Examples in 2022/23 include working with Royal Botanic Gardens Kew and Natural History Museum, London to successfully advocate the UK rejoining the **Global Biodiversity Information Facility** (GBIF) as a full voting member. The NBN Trust will continue its crucial role as the UK Node Manager for GBIF, helping mobilise wildlife data globally; acting as the lead for **iNaturalistUK**, the citizen science wildlife recording platform; and taking on responsibility for delivering the Better Biodiversity Data project, a Scottish Government and NatureScot funded partnership to develop a strategic approach to the collection, collation and sharing of biological data across Scotland. Such initiatives are central to achieving our strategic goals, but we are fully aware that they bring with them the responsibilities of leadership.

There has continued to be significant work on our biodiversity data platform, the **NBN Atlas** and we made excellent progress in our project to upgrade the software that underpins it in the past year. We also began to develop new functionality that will remove some of the key barriers to data sharing to help us fulfil our ambition for it to be the "go-to" place for sharing UK biodiversity data. We must not take our eyes off that prize, but we must simultaneously

keep abreast of technological advances and the opportunities those may throw up. Big data, AI, environmental DNA (eDNA) data. How these affect what we are seeking to achieve must be monitored and we will look to work with partners wherever possible to keep pushing the boundaries of what the NBN Atlas can achieve. For example, in 2022/23 we worked with NatureMetrics to examine how to share eDNA data as a rapidly growing source of species records.<sup>2</sup>

A personal low point of the year was being struck down with a bug that stopped me attending the Trust's annual conference. Nonetheless I had the honour to judge the applications for the **NBN Awards for Wildlife Recording** that were presented at the conference. The nominations covered volunteers giving their time to organise events, bring people together, record the natural world, and teach, support and inspire. Whilst they are of course a snapshot of the huge, dedicated volunteer network that is a key source of biodiversity data gathering, I find them personally inspiring and they embody our ambition to ensure citizen science is valued and supported.

As with many small charities, our finances (see page 30) remained an area of focus during the year. We will continue to search for opportunities to strengthen the Trust's financial position in order that we can remain financially secure and grow in line with our ambitions.

I would like to thank our CEO, Lisa Chilton and her small team for their leadership and also my fellow trustees for their support and bringing their expertise and experience to bear on a variety of topics and challenges.



1 *Nature Positive* 2030 p.12.

2 Read more in our 2021 article from Nature Metrics: <https://nbn.org.uk/news/turning-nature-into-data-with-naturemetrics/>



## Message from the Chief Executive Officer

Welcome to our 2022/23 Impact Report – and thank you for taking the time to read about our recent achievements. None of our work would be possible without the exceptional support of our members, data partners, recorders and funders, so this report is a celebration of our collective impact: *your* impact. Thank you for standing with us to make data work for nature.

This was a year of new beginnings for the Trust: a new strategy, new partnerships and projects, new staff and new directions. While our core business of bringing together people, organisations and data is unchanged, the political and environmental context is always evolving, and we must evolve too.

In May 2022 we launched our new five-year strategy, complete with the compelling new vision of 'Nature thriving everywhere, in all its diversity.' Our work safeguards and creates access to a vital part of the evidence base for nature's recovery, and we're proud to provide this service to the UK conservation community.

As a charity that serves other organisations, enabling them to fulfil their own mission, we've tended to stay out of the limelight. Our new strategy marks a turning point though, with a deliberate decision to develop a higher public profile, shout about our impact, and be recognised for our leadership. For the Trust to thrive, it's essential that our mission is understood, valued and supported, not just by the NBN but by the wider community of funders, policy-makers and businesses. It was rewarding to see this begin to take off in the past year, with many new relationships and partnerships forged, from the Alan Turing Institute to the University of Exeter's RENEW project.

As well as the much-anticipated Better Biodiversity Data project, we also launched two projects in partnership with Groundwork. As a participant in the New to Nature programme, which aims to address the lack of diversity in nature conservation, we're proud to host one of 70 placements for young people from a background that's underrepresented in the nature sector. In addition, we benefited greatly from Groundwork's Enterprise Development



Programme, through which we're exploring the potential for developing commercial income streams to support our charitable mission and financial sustainability.

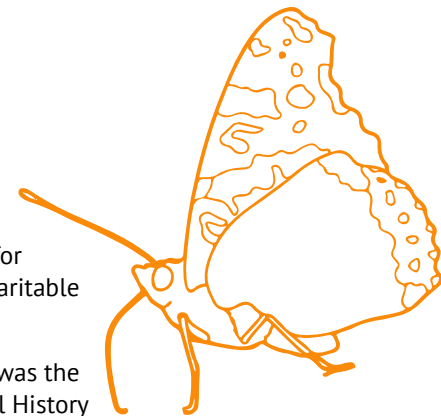
Another exciting collaboration that commenced this year was the National Education Nature Park project. Led by the Natural History Museum and the Royal Horticultural Society, and funded by the Department for Education, we're a partner in this initiative which will inspire and equip schools across England to enhance and record biodiversity in their grounds.

Since the NBN Trust was founded in 2000, the demand for biodiversity data has come principally from the conservation and research communities. But this is changing, and in the past year we began to build relationships with stakeholders from the financial services sector and wider business community to explore the role of biodiversity data in relation to Biodiversity Net Gain, biodiversity credits and corporate Environmental, Social and Governance targets. We are interested in engaging more in this area, and in 2022/23 joined the [Data Catalyst for the Taskforce on Nature-related Financial Disclosures](#). Global climate and nature commitments are driving greater transparency and accountability such that, in future, businesses will report on their biodiversity impact just as they do for carbon. This will need data, of course, hence our desire to understand and influence the emerging approaches and tools mentioned in the Chairman's Report.

For all these new directions though, our core focus remains on providing excellent support for the NBN Atlas, the Network itself and iNaturalistUK.

2022/23 saw the Trust forging ahead with our mission of making data work for nature. There are many more highlights in the following pages, and I hope you enjoy browsing.

Thank you again for all your support, and for everything you do for nature.

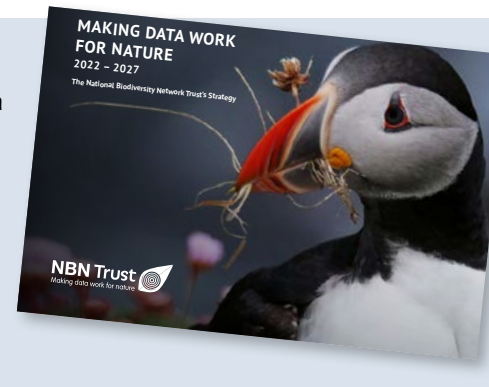


# HIGHLIGHTS OF THE YEAR

## MAY

We published the NBN Trust Strategy 2022-2027 – “**Making Data Work for Nature**”. We have only a few years to bring about the changes that are needed to address the biodiversity crisis in the UK and our new strategy sets out our ambitions and our commitment to helping make this happen.

We launched our Fit for the Future project, which will upgrade the NBN Atlas and re-align it with the Atlas of Living Australia (the platform on which it is based, but from which it had deviated). As a result, the NBN Atlas will be easier to maintain and able to adapt to the NBN's future needs, enabling the NBN Trust to manage increases in data volume and different types of data.



## JUNE

Our CEO, Lisa Chilton, was invited to speak at the ResetConnect sustainability conference and exhibition. On our stand, we showcased the NBN Atlas and iNaturalistUK, engaging with many green businesses and other stakeholders.



## OCTOBER

The Better Biodiversity Data project, led and managed by the NBN Trust, received formal approval.

This is a partnership project funded by Scottish Government and NatureScot to develop the first steps in a strategic approach to the collection, collation and sharing of biological data across Scotland.

## NOVEMBER

We were excited to hold our first face to face NBN Conference for three years. We welcomed over 130 delegates to the Flett Theatre at the Natural History Museum, London on 9 November.

We proudly announced our NBN Award winners at a ceremony also at the Natural History Museum.



## DECEMBER

In the run-up to COP15, we urged the UK Government to reinstate the UK as a full voting member of the Global Biodiversity Information Facility (GBIF). We were very pleased that these discussions were successful.



## JANUARY

We were thrilled to be selected to join Groundwork's New to Nature programme which aims to provide life-changing experiences for people who might not normally consider a career in the environmental sector. Through the programme, we were excited to recruit Rhianydd Stock as our NBN Atlas Support Officer.



## FEBRUARY

An exciting project to create a National Education Nature Park was formally announced. Working as a delivery partner for the Natural History Museum, London and the Royal Horticultural Society, the NBN Trust's role is to support biodiversity data capture and data flow from the project.

We were proud that the NBN Atlas system and our DevOps practices<sup>1</sup> were used as a **case study** by both Amazon Web Services and CirrusHQ.

We were invited to attend Rebalance Earth's Natural Capital Conference, which brought together 400 stakeholders from the financial services sector to consider their engagement in tackling the biodiversity crisis.

<sup>1</sup> The combination of development and operations to increase the efficiency, speed, and security of software development and delivery.

## MARCH

We were delighted to appoint two key roles in the Better Biodiversity Data project. Scotland Programme Manager, Michael Tetley and Partnership Officer, Christine Tansey, joined the team.



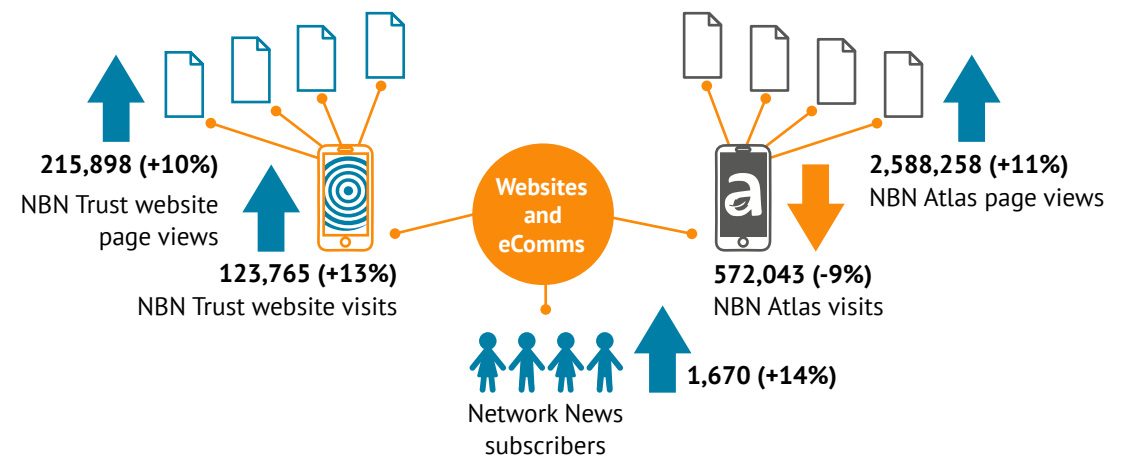
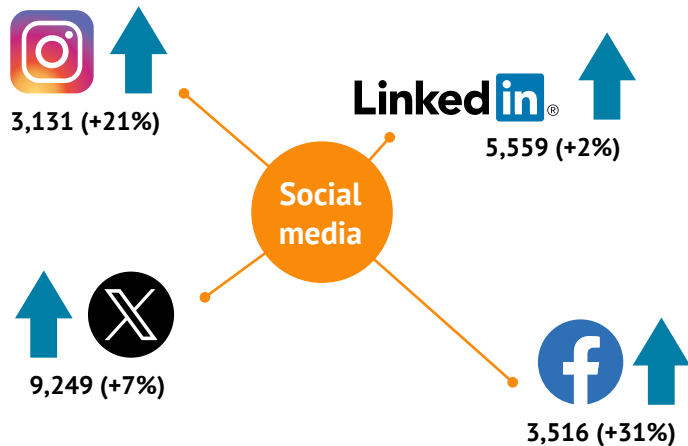
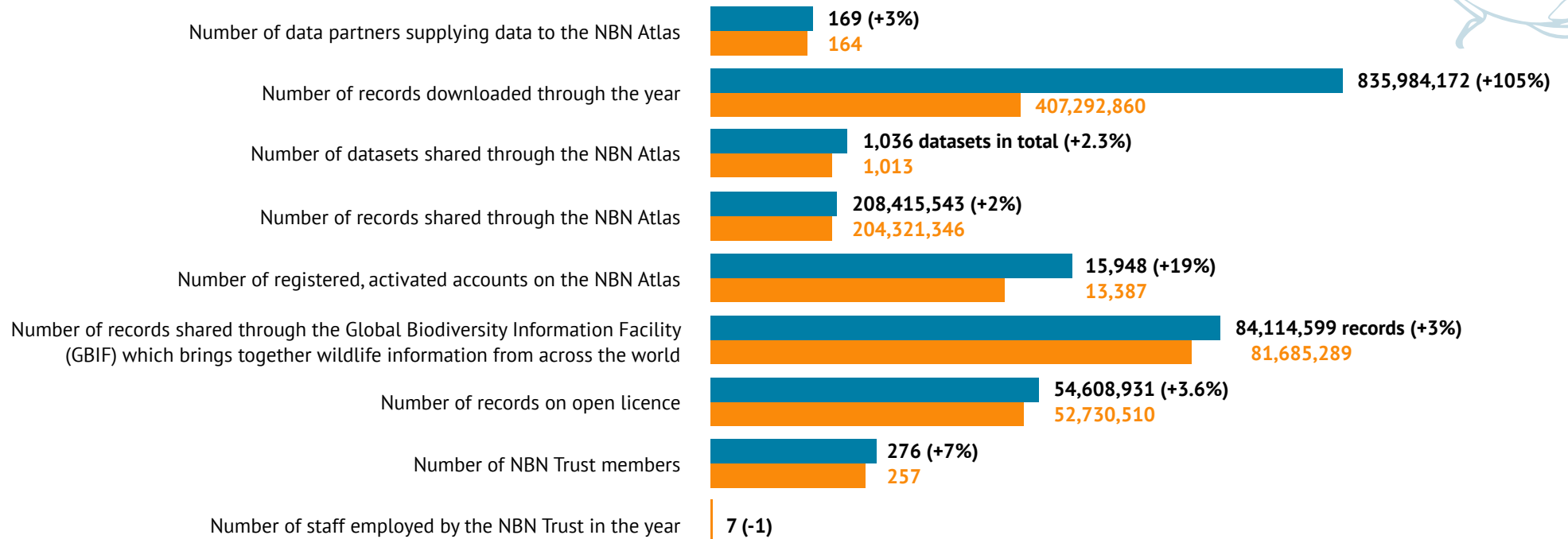
With the support of the Enterprise Development Programme and Groundwork we welcomed a Business Development Intern to the team. Sami Walter's role was to research how our stakeholders use biodiversity data, how they demonstrate their impact for biodiversity and what the potential might be for the Trust to develop commercial income streams.

Our CEO, Lisa Chilton, spoke about the opportunities and challenges for AI to help biodiversity, at the Alan Turing Institute's AI UK Conference.

# NETWORK NUMBERS

Figures are not to scale

2022/23 Data 2021/22 Data





# PROGRESS AND IMPACT

## Ambition 1:






The NBN Atlas is the  
'go to' place for sharing,  
finding and accessing  
UK biodiversity data





## Ambition 1: The NBN Atlas is the 'go to' place for sharing, finding and accessing UK biodiversity data

### Our impact during the year

-  **We welcomed five new data partners who now share their data with the NBN Atlas, making it an even better resource.**
-  **We uploaded over 200 new or updated datasets to the NBN Atlas.**
-  **We saw significant increases in data sharing from the Biological Records Centre and National Schemes and Societies.**
-  **The number of records on an open licence increased by 3.6%.**
-  **We made excellent progress on the NBN Atlas Fit for the Future project, delivering an improved service to our many users.**

NBN Atlas data partners and those recording what they see (often volunteers), are the lifeblood of the Network. Without them we would not be able to realise our vision and the Network would not function. Nature would lose out.

We made significant progress in 2022/23 working with data partners to mobilise their data and make it publicly accessible. We were delighted to bring onboard five new data partners, bringing the total to 169. That's 169 organisations sharing their data via the NBN Atlas, creating an unrivalled resource for conservation and research.

### Our five new data partners are:

**iSpot**

**Tweed Forum**

**Harrow Nature Conservation Forum**

**Bournemouth University**

**Scottish Raptor Monitoring Scheme**

## Welcome aboard!





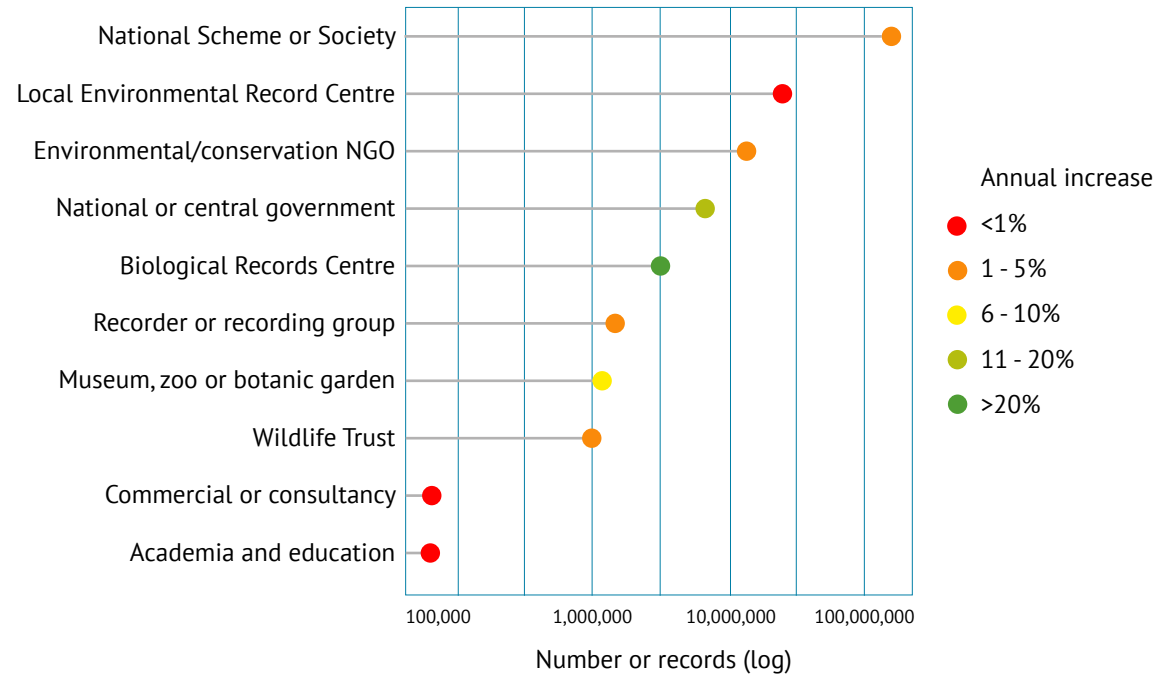
## Ambition 1: continued

### New and updated datasets

Thanks to the ongoing commitment of our data partners, we uploaded over 200 new or updated datasets over the last year. One particular highlight is that the digitisation of the Manx National Heritage dataset was completed: [Calf of Man \(Isle of Man\) Bird Observatory Daily Logs, 1959-2004](#)

We value the vital contributions of all our data partners enormously. A complete list of those contributing can be found on the [NBN Atlas](#).

### Percentage increase in record counts by data provider type



This highlights the tremendous impact of collaboration with our data partners to share new and updated records. The 20% increase in the number of records from the Biological Records Centre and an increase of more than two million records from National Schemes and Societies reflects the importance of the regular data flow from iRecord to the NBN Atlas. There is also an encouraging increase in data from national and central government.<sup>1</sup>

The figure also illustrates the need for greater engagement with potential data partners in the commercial and academic sectors, which is highlighted in our strategy.

<sup>1</sup> Natural England, NatureScot, Natural Resources Wales, Environment Agency, Joint Nature Conservation Committee, DEFRA, Scottish Environment Protection Agency and Welsh Government.



# Ambition 1: continued

## Licensing

The number of records on an open licence continues to increase, with 54,608,931 (+3.6%) records having an **OGL, CC0 or CC-BY licence** at the end of 2022/23. There are valid reasons why data partners choose to apply restrictions to how their data may be used, but we're delighted that many opt for open licences.

## NBN Atlas technical updates

The primary objective for the year was to concentrate on the Fit for the Future project. This major project, which commenced in 2021/22, is upgrading the NBN Atlas platform, modernising DevOps practices and improving the performance and stability of the NBN Atlas as well as providing an up-to-date and robust platform for its longer-term evolution and development. Therefore, during this financial year our attention focused on two main streams of work:

### 1. Upgrading the NBN Atlas code

Work within this strand included:

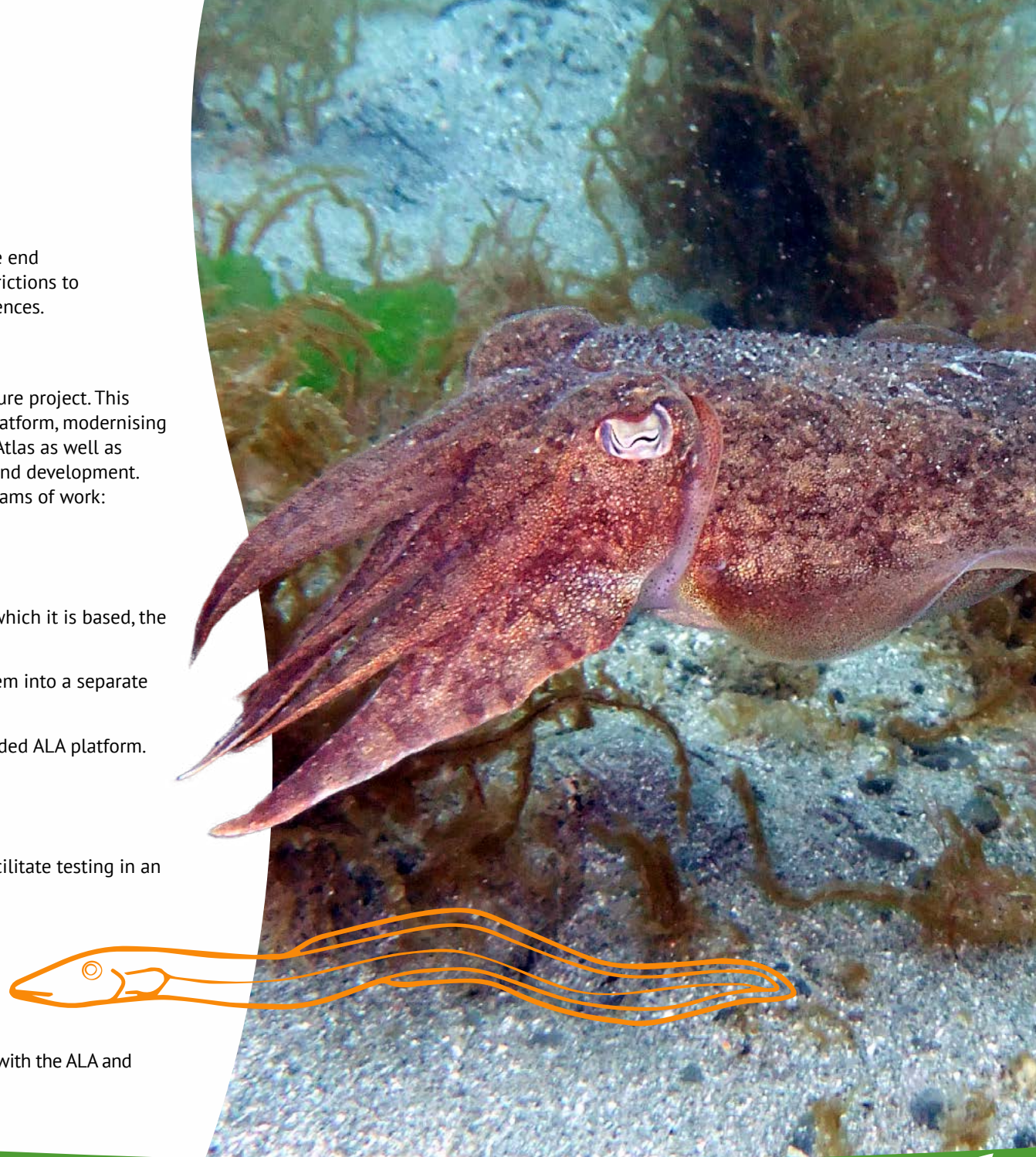
- Upgrading the platform code and aligning it with the system on which it is based, the Atlas of Living Australia (ALA)
- Extracting the NBN Atlas platform customisations and putting them into a separate code layer (NBN Atlas layer)
- Moving the customised NBN Atlas layer back to fit over the upgraded ALA platform.

### 2. DevOps and Infrastructure

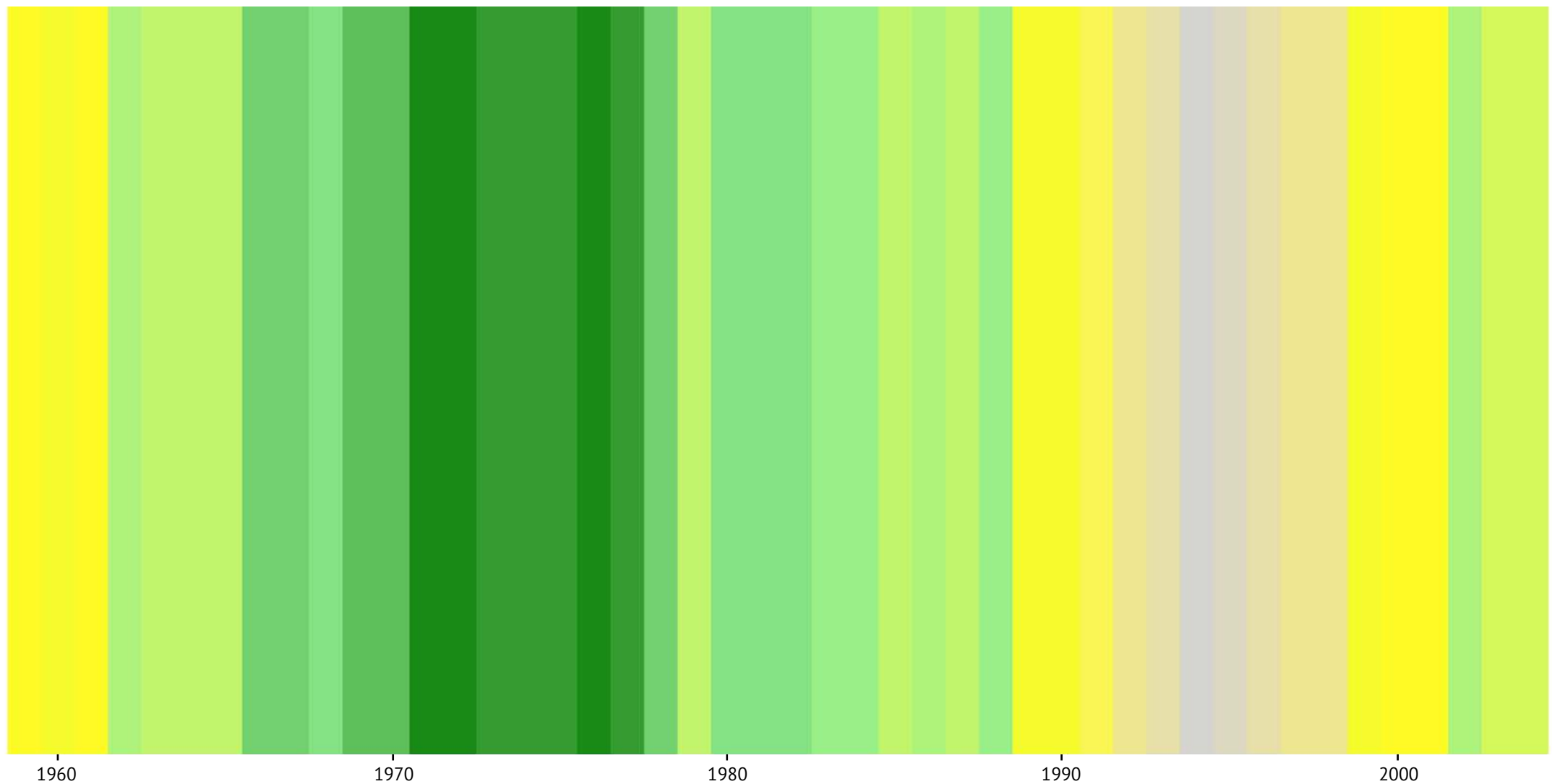
Work within this strand included:

- Developing a scaled-down replica of the NBN Atlas in order to facilitate testing in an environment isolated from production
- Setting up cloud infrastructure management, following industry best practice, which will enhance data security and provide more robust cloud infrastructure governance
- Rolling out the upgraded platform to users.

By March 2023, all platform code had been successfully extracted and aligned with the ALA and several upgraded components had been released to production.







Biodiversity data stripes were inspired by the University of Reading's climate stripes. The biodiversity stripes creator, Professor Miles Richardson, Professor of Human Factors and Nature Connectedness at the University of Derby, used the same graphic format to show how species have declined rapidly over the past five decades.

*"The biodiversity stripes provide a simple representation of the change in biodiversity over time, they show how our green world is becoming grey and this is something everyone needs to engage with."*

More information can be found at: <https://biodiversitystripes.info>

We used the same approach for these biodiversity stripes, which were created by Sophia Ratcliffe, NBN Atlas Data Manager, and show data from Calf of Man (Isle of Man) Bird Observatory Daily Logs, 1959-2004, [Manx National Heritage](#).

The stripes show periods of higher diversity, shown in green, in the late 1960s through to the 1980s, followed by decline in the 1990s (yellow and grey) and some improvement in the 2000s. The dataset used is derived from the original daily paper logs held in Manx National Heritage Library and Archives. Volunteers have finished digitising the logs and Manx National Heritage confirmed that survey effort will have been broadly similar over the dataset period.

## Ambition 1: continued

As part of the Fit for the Future project, we also generated comprehensive documentation including step by step instructions on how to perform tasks, system design diagrams and many quality assurance scripts to allow repeatable testing.

Other work carried out through the year included:

### 1. Putting the NBN Atlas behind a firewall

Over a three-month period, we placed the NBN Atlas components behind a Web Application Firewall. This crucial step formed a significant part of our security mitigation strategy in response to a penetration (pen) test, funded by NatureScot and carried out the previous year. A subsequent pen test, also funded by NatureScot, validated our improvements and confirmed that all issues of concern were satisfactorily resolved.

### 2. Migrating services from Microsoft's Azure cloud computing platform

A significant achievement was realised through the successful migration of the NBN Atlas services that were running on Azure to Amazon Web Services (AWS). This consolidation of the Atlas infrastructure not only simplified DevOps for the team, but also came with the added financial advantage of AWS providing credits towards the hosting costs for these services.

### 3. Case studies

The NBN Trust was proud that the NBN Atlas was featured in two industry case studies showcasing best practice. The first was in collaboration with CirrusHQ, with whom we worked to address the issues highlighted in the AWS Well-Architected Framework Review conducted to assess the relevant parts of the NBN Atlas, earlier in the year.<sup>1</sup>

We were delighted that the CirrusHQ Business Architect referred to us as their favourite customer as well as being inspired by the work the NBN Trust and the NBN Atlas does. The second was a much coveted [case study with AWS](#).

### 4. Access controls

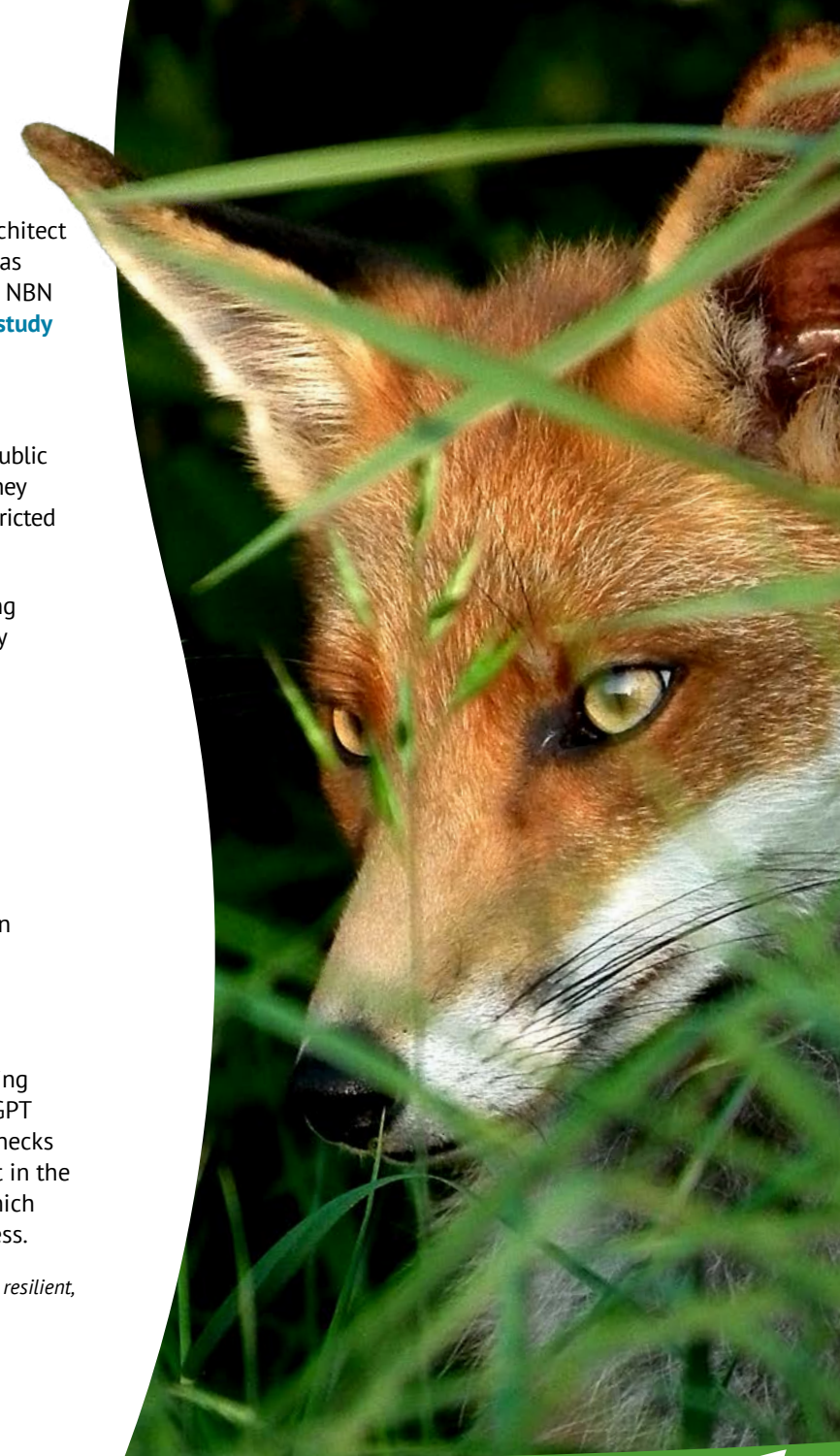
Access controls will allow data partners to set the public spatial resolution of their records and, on request, they will be able to grant access to data users to the restricted location in the download file.

In March 2023, we commenced work on confirming Phase I requirements and designing the necessary customised additions to the NBN Atlas.

### 5. ChatGPT (AI)

In the new year, ChatGPT (AI) came along and created a seismic shift that reverberated throughout the entire development community. The reason for this is that ChatGPT can write code! It's going to be a long while before AI completely replaces developers, but its integration into the development process has already led to newfound efficiencies. The development team regularly uses ChatGPT to write small snippets of logic-intensive code and scaffold initial coding solutions. They accomplish this by describing what needs coding using plain English, and ChatGPT generates the actual code which the team then checks and tests. ChatGPT also acts like having an expert in the room that you can talk to and get advice from, which adds an element of fun to the development process.

<sup>1</sup> This helps cloud architects build secure, high-performing, resilient, and efficient infrastructure for a variety of applications.





# PROGRESS AND IMPACT

**Ambition 2:**  
Biodiversity data  
is providing the  
evidence needed for  
nature's recovery



## Ambition 2: Biodiversity data is providing the evidence needed for nature's recovery

### Our impact during the year

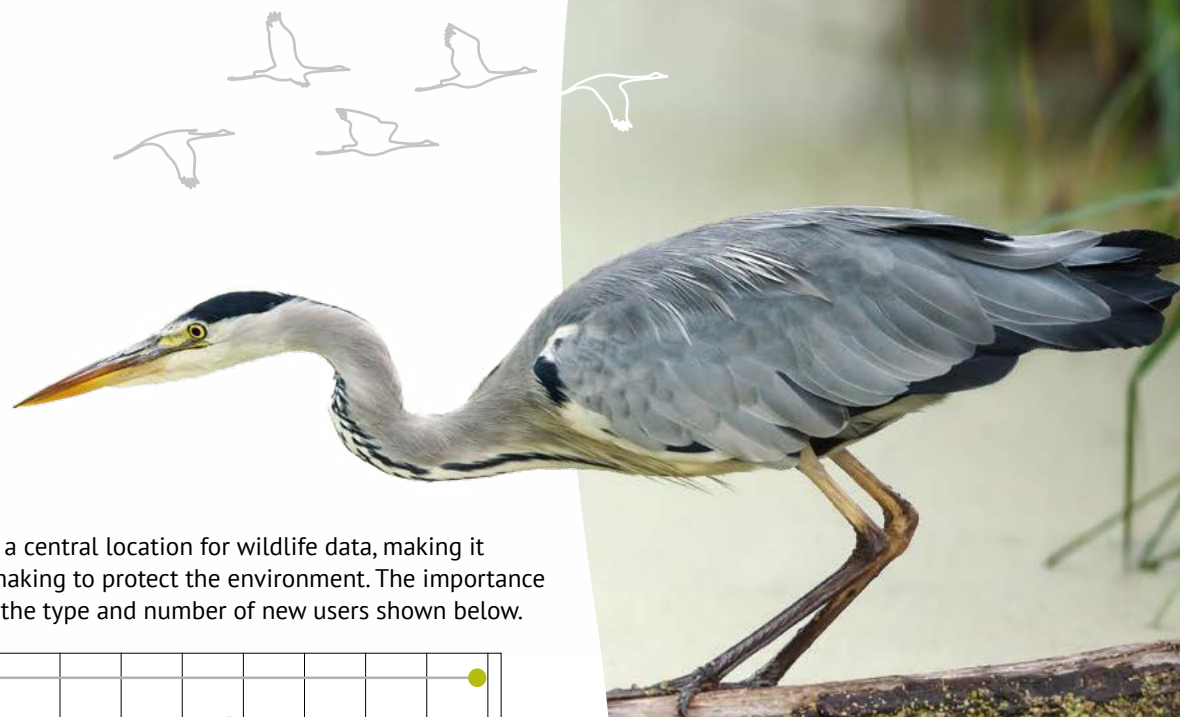
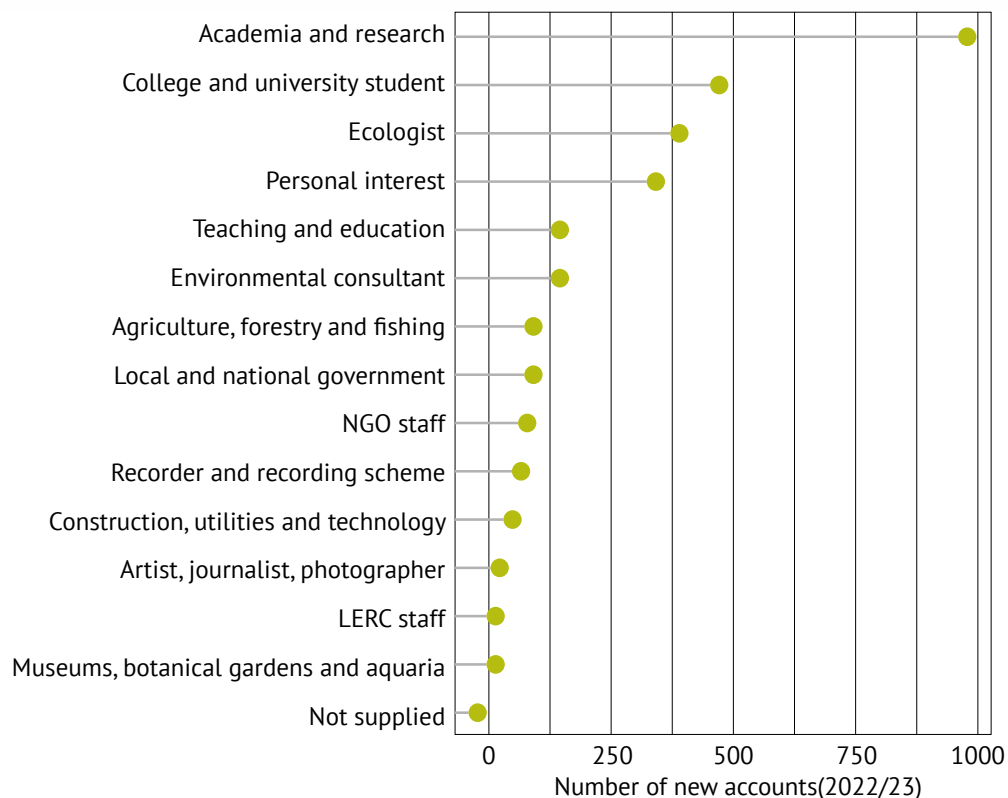
Through the NBN Atlas, we provided a platform that is being used by nearly 16,000 registered users to access high-quality biodiversity data to inform conservation, scientific research, urban and rural planning, journalism, art and much more besides.

The NBN Atlas enabled the downloading of more than 835 million species records!

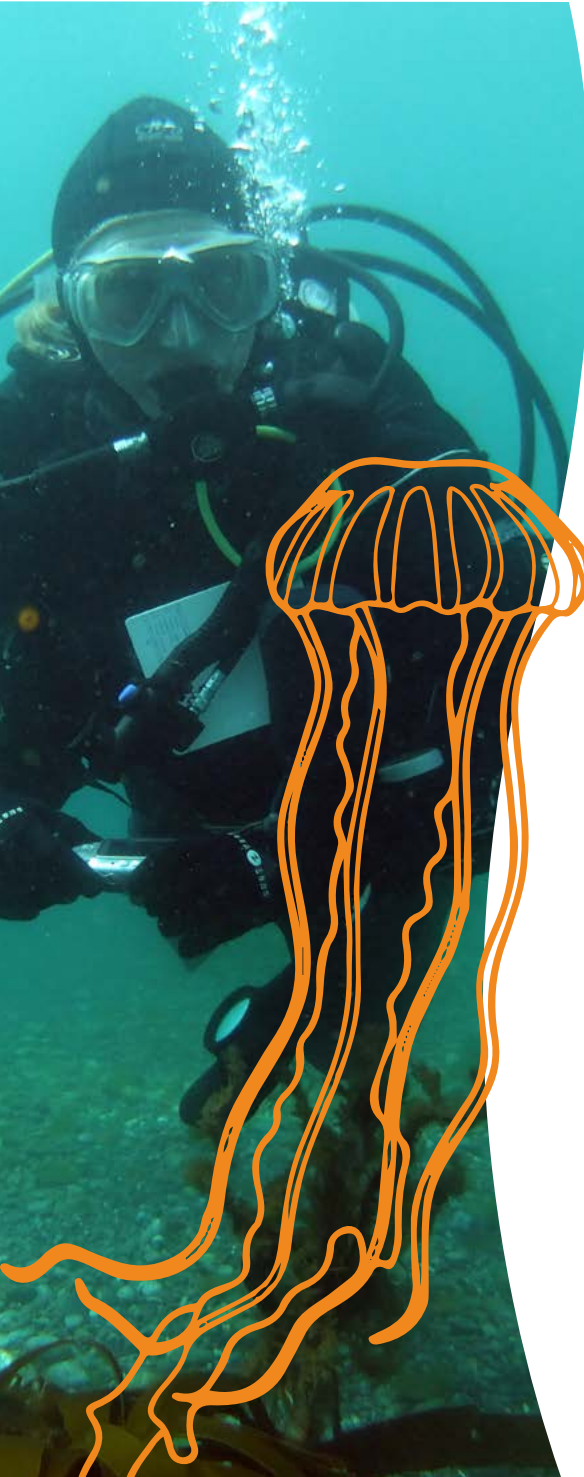
NBN Atlas datasets were utilised in studies that culminated in more than 270 peer-reviewed scientific publications this year, therefore advancing science and strengthening the evidence base that's essential for nature's recovery.

### Providing the evidence

The purpose of the NBN Atlas is to provide a central location for wildlife data, making it easier for the data to be used in decision-making to protect the environment. The importance of this resource becomes clear to see from the type and number of new users shown below.







## Ambition 2: continued

The number of registered users of the NBN Atlas continued to grow in 2022/23, with a 19% increase taking us just short of 16,000 by April 2023. There was continued growth across all categories of users, with the greatest increases in the academic and research communities. In addition to registered users needing to download data, the NBN Atlas is an important resource for people wishing to view biodiversity data and information online. It's more difficult to determine the number of these casual users, but we can use the number of page visits as an indicator (recognising that these will include visits by registered users). In 2022/23, the NBN Atlas home page was visited more than 572,000 times and the "Explore your area" page had over 111,000 page views. More than 835 million records were downloaded from the NBN Atlas, and 270 peer-reviewed publications cited their use of NBN Atlas datasets, which had been shared via the NBN Atlas with the Global Biodiversity Information Facility (GBIF). These include:

**Regional occupancy increases for widespread species but decreases for narrowly distributed species in metacommunity time series** - Xu, WB., Blowes, S.A., Brambilla, V. et al.

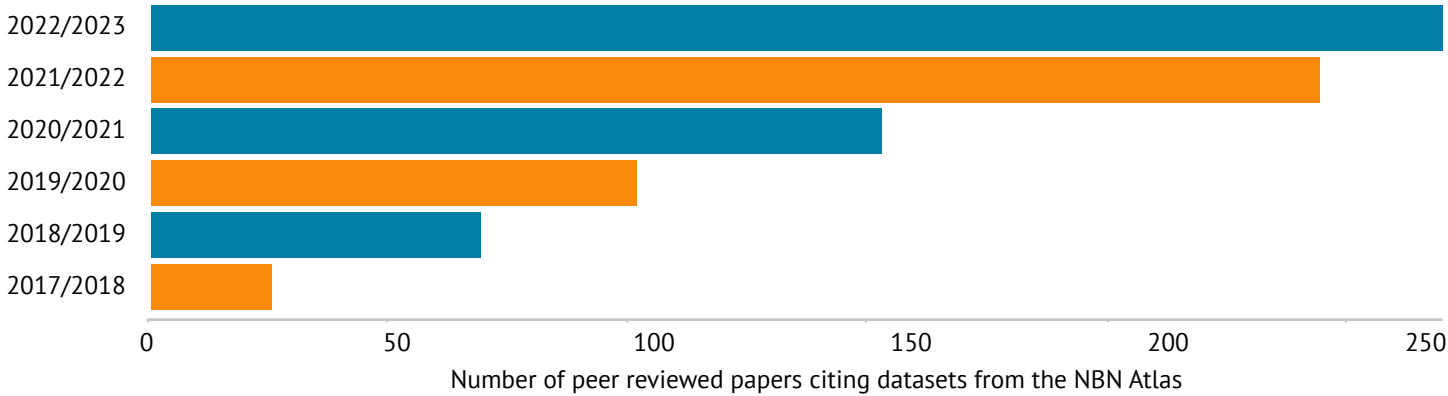
This study analysed multiple datasets from across the globe to compare changes in the distribution of widespread species with changes in more narrowly distributed species. Overall, widespread species have increased their occupancy (the proportion of sites where the species is present in a given year), while the occupancy of narrowly distributed species has decreased. This has important implications for conservation management.

**Three-quarters of insect species are insufficiently represented by protected areas** - Shawan Chowdhury, Myron P. Zalucki, Jeffrey O. Hanson, Sarin Tiatragul, David Green, James E.M. Watson, Richard A. Fuller

While protected areas could play a key role in safeguarding many insect species from extinction, coverage of insect distributions by protected areas remains undocumented. This study shows that about 76% of insect species are inadequately represented in protected areas globally and that nearly 2% of species do not overlap with protected areas at all.

**Histeridae, Sphaeritidae and Silphidae of Britain and Ireland (2021)** Lane, S A, Lucas, C B H, Whiffin, Ashleigh L. The Field Studies Council

As well as maps of recent and historical distributions in Great Britain and Ireland, this brand new identification guide has new ID keys for all recorded species. The two recording schemes that exist for the groups hold over 47,000 records between them, contributed by a vast number of individual naturalists. Data comes from multiple sources including the NBN Atlas.





## PROGRESS AND IMPACT


**Ambition 3:**  
Citizen science is  
valued, supported  
and expanded as  
a major source of  
biodiversity data



## Ambition 3: Citizen science is valued, supported and expanded as a major source of biodiversity data

### Our impact during the year

 We opened up wildlife recording to a wider audience as almost 20,000 new observers joined our iNaturalistUK community, bringing the total to more than 93,000. This community of observers shared more than a million new wildlife records in 2022/23.

 Through the NBN Awards for Wildlife Recording we recognised and rewarded the young people, adults and groups who are actively enhancing our understanding of the natural world.

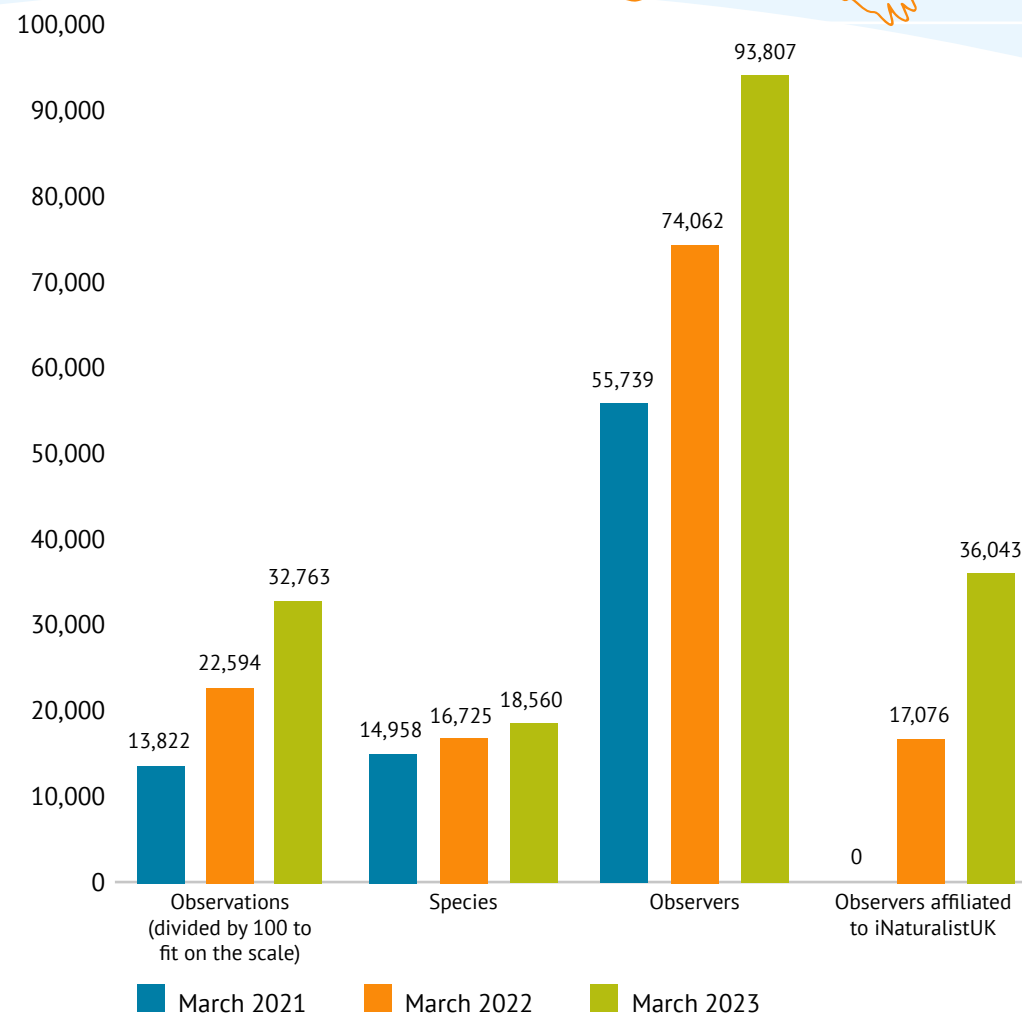


### Increasing number of iNaturalistUK users and records

iNaturalistUK continues to be an engaging and accessible way for people to record wildlife, whether they are complete beginners or seasoned experts. By the end of March 2023, 93,807 observers had shared 3,276,364 observations across 18,560 species on iNaturalistUK!

The figures clearly demonstrate the desire that people have to be out in nature, recording what they see, and we are delighted to be encouraging more people to do this through our role in iNaturalistUK.

We continue to work in collaboration with the Biological Records Centre (BRC) and the Marine Biological Association to help steer the project and implement appropriate data pathways. As shown in the “Percentage increase in record counts by data provider type” on page 9, the daily upload of records from iNaturalistUK to iRecord has proved to be really important in mobilising iNaturalistUK records within the UK recording community. All verified records are shared with the NBN Atlas, meaning that the records are more widely accessible. Our sincere thanks, as always, to the contribution of all verifiers across the UK for their painstaking work and commitment to ensuring high quality, accessible data.






Note: UK records that had previously been added via the global app became available via iNaturalistUK in March 2021. The above chart illustrates the growth of iNaturalistUK since the launch in April 2021.



## Ambition 3: continued

### iNaturalistUK Engagement

The iNaturalistUK User Group continued during the year. In **April** the focus was on projects and how they can be used. Examples of these in action include:

-  **Bristol Postcode Wildlife Projects** – set up to highlight urban wildlife in the Bristol area
-  **Dipterists Forum** – bringing together these species groups to aid with identifications
-  **BIAZA's Spotted on Site** – BIAZA (British and Irish Association of Zoos and Aquariums) staff are invited to record the wild native species found in their grounds. Christopher Leeson from Twycross Zoo spoke about this project at the 2022 NBN Conference. During 2023/24, visitors to the sites will be invited to record their sightings as well.

The focus in **September** was on the use of data and ensuring it is of the most benefit. The NBN Trust is continuing to work with

the BRC to explore ways to encourage users to amend their licences to allow as many observations as possible to be shared. This is in line with NBN Atlas, iRecord and GBIF requirements that all iNaturalist data shared to them has one of three licences: CC0; CC-BY or CC-BY-NC. More information on licences and the importance of iNaturalistUK users choosing the right one is covered in one of our **blogs**.

Messaging is included in iNaturalistUK blog posts, user advice and City Nature Challenge promotion materials. It is not something we can do alone, and we welcome and encourage the support of the iNaturalistUK community and wider recording network to assist us.

Following suggestions for more concentrated support we changed the format for February's meeting and held some in-depth, one-to-one support sessions. Through this opportunity we were able to assist and support an iNaturalistUK user group member with setting up the **West Somerset Wildways** project (see also page 27).

### City Nature Challenge

The City Nature Challenge is the largest mass participation event using iNaturalist in the UK. It has grown to be a global event with 445 areas in 47 countries participating. Although 14 urban areas in the UK officially took part using iNaturalist as the prime recording platform for wildlife sightings, observers across the UK were invited to go out and record over the early May bank holiday weekend in 2022.

Across the UK, 4,100 people recorded **3,800 species**. Globally, the most commonly recorded species was Common Dandelion. In the UK this was the fourth most recorded, with Garlic Mustard, Cow Parsley and Herb Robert topping our tally. However, it's not just the common species that people recorded, with Bank Voles, Stoat, Bleeding Heart Spider and Yellow-Tipped Darwin Wasp being other notable species.



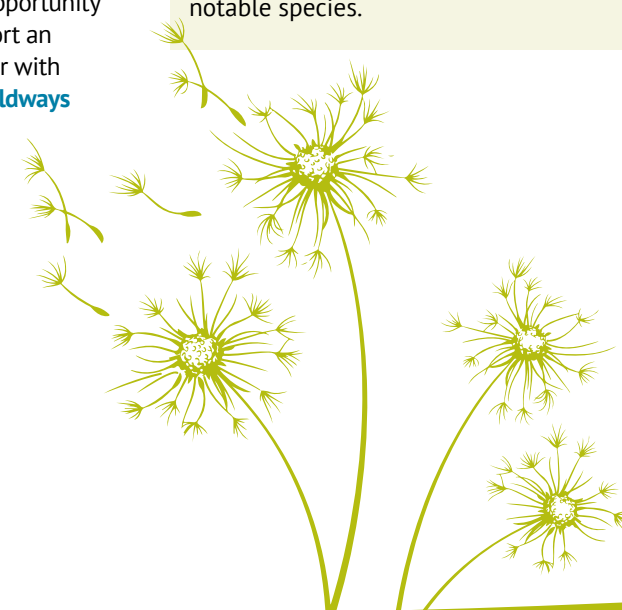
Bank Vole  
© ranger\_lee



Bleeding Heart Spider  
© wildhamandpetersham



Yellow-Tipped Darwin Wasp  
© Marie Lou Legrand





## NBN Awards for Wildlife Recording 2022


The NBN Awards for Wildlife Recording recognise and celebrate the outstanding contributions adults and young people are making to wildlife recording and data sharing, to help improve our understanding of the UK's biodiversity.

In addition to the publicly nominated awards, the 2022 John Sawyer NBN Open Data Award was presented to the UK Trichoptera (Caddisfly) Recording Scheme in recognition of its ongoing commitment to sharing wildlife data openly.


We were very grateful for the generosity of our prize sponsors – Opticron, Habitat Aid, Field Studies Council, Michael Hoppen Gallery, William Collins, W.W. Norton & Company, Bird Photographer of the Year, British Wildlife magazine and Natural History Book Service (NHBS).

More information on the NBN Awards and each of the winners can be found on the [NBN Trust website](https://www.nbn-trust.org.uk/).




 Young Person's Award Winner – *Amy Fleming*




 NBN Award – Marine Winner – *Matt Slater*



 NBN Award – Terrestrial Winner – *Steven Allain*




 NBN Newcomer Award Winner – *James Common*




 NBN Group Award Winner *Tice's Meadow Bird Group*




 Young Person's Award Runner-up – *Joe Fryer*




 NBN Award – Marine Runner-up – *Kate Williams*



 NBN Award – Terrestrial Joint Runners-up – *Imogen Cavadino and Steve McWilliam*



 NBN Group Award Winner Runner-up – *Harrow Nature Conservation Forum*



## Ambition 3: continued

### 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 engaged in an in-depth market research exercise at the beginning of 2023 with NBN Trust members, Network News subscribers and former NBN Award nominators as well as with Award recipients. We are very grateful for the participation and valuable feedback from all those who took part in this review.

The main findings and suggestions from the review were:

- to change the nomination period – to January to March – instead of May to July, in order to avoid ecologists' busy field-season
- to review the current NBN Award categories
- to simplify the nomination process further
- to publicise the NBN Awards more widely.

In order to make the suggested improvements we will not run the NBN Awards in 2023 and will instead launch the revamped Awards for nominations in January 2024.





# PROGRESS AND IMPACT

**Ambition 4:**  
**The National  
Biodiversity Network is  
a well-connected and  
highly collaborative  
community with a united  
voice on key issues**



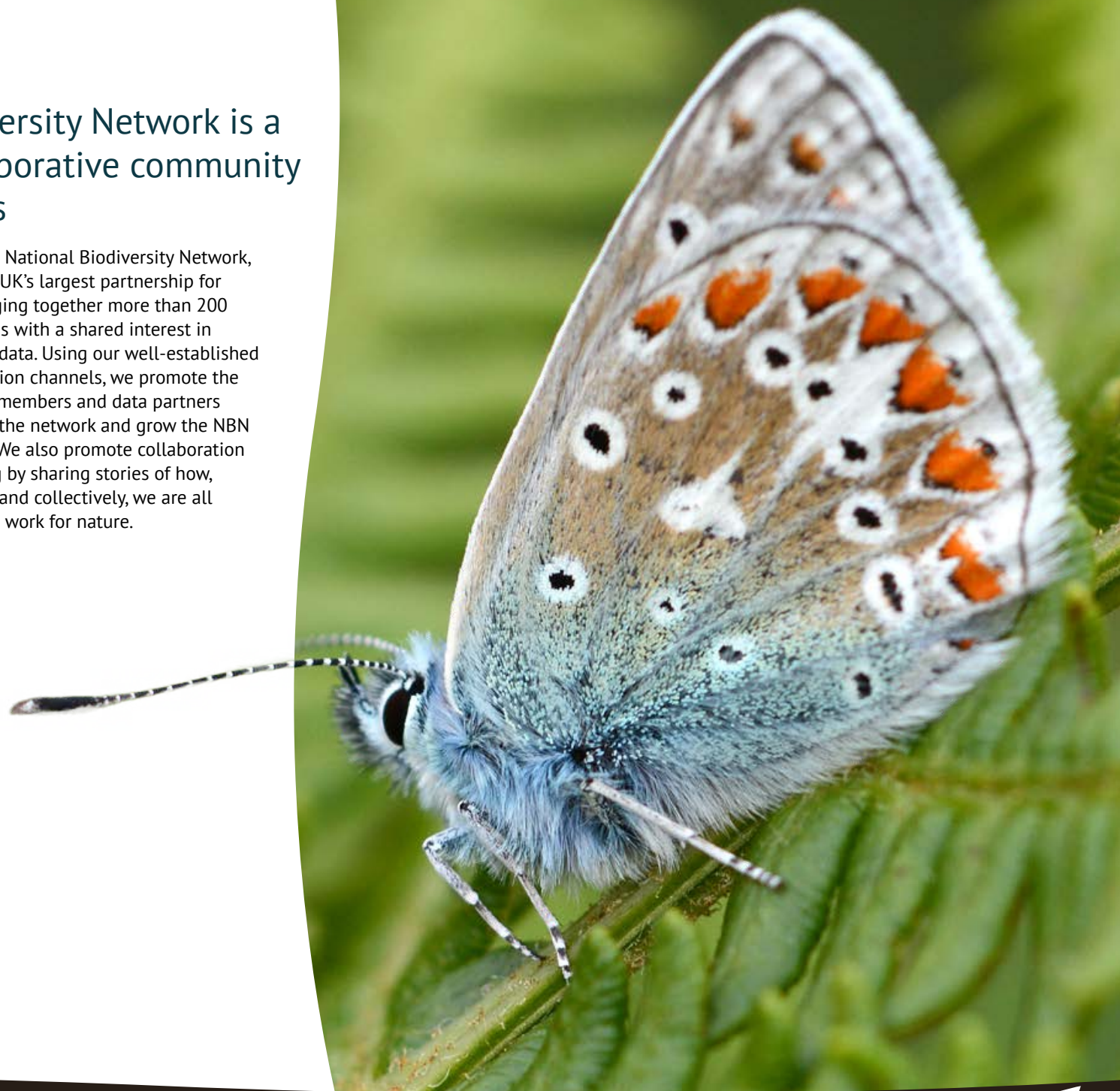


## Ambition 4: The National Biodiversity Network is a well-connected and highly collaborative community with a united voice on key issues

### Our impact during the year

- Through Network News, we provided a platform for our members and data partners to share their news and updates with almost 1,700 people every month.
- At the NBN Conference, we brought together 130 people to hear about and discuss how the network is making data work for nature.
- Through our team's external presentations, we shared information on the work of the NBN Trust and NBN, with academic and research institutions as well as businesses.

Through the National Biodiversity Network, we lead the UK's largest partnership for nature, bringing together more than 200 organisations with a shared interest in biodiversity data. Using our well-established communication channels, we promote the work of our members and data partners from across the network and grow the NBN community. We also promote collaboration and learning by sharing stories of how, individually and collectively, we are all making data work for nature.





# Ambition 4: continued

## Our communication channels:

### Network News

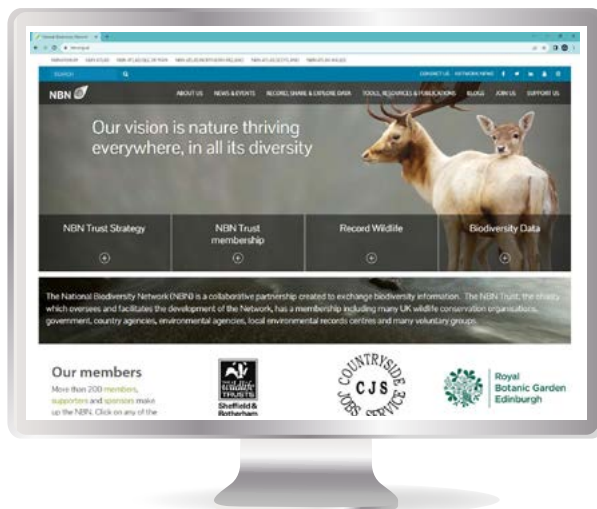
**Network News** continues to be one of the NBN Trust's main communication channels and is published electronically every month. Last year it was sent to almost 1,700 subscribers at the end of the financial year, which is +18% on the previous year. We continue to be delighted that our open rate and click through rate far exceed the averages for electronic communications. Our open rate is consistently around 48% compared to an average of 21.5% and the click through rate is around 12% compared to an average of 2.3%. If you don't already subscribe to **Network News**, we'd love you to do so!

### NBN Trust website

The **NBN Trust website** is the hub for all our communications and regular news updates. Traffic over the last year has steadily increased with visits +13% and page views +10%.

### Social media

We regularly post on the main platforms. See our year-on-year statistics on page 6.



### Presentations

Our staff and Trustees regularly promote our work and that of the network through presentations at external events. During 2022/23, panel participations and presentations we made included:

- “NBN Atlas” – A presentation to the Tree of Life Programme, Monthly Bioinformatics Committee
- “Insect records on the NBN Atlas” - Royal Entomological Society Monthly Talk Series
- “NBN Atlas: Making data work for nature” - TDWG 2022 (Biodiversity Information Standards): SYM03 National biodiversity data centers: challenges and opportunities.
- “Making data work for nature” - A presentation to Environmental Association for Universities and College (EAUC), Biodiversity Community of Practice meeting
- “Widening the Network - iNaturalistUK” - A presentation to the Royal Entomological Society, Special Interest Group Aquatic Insects.
- “Biodiversity and conservation – safeguarding against further loss and the journey to Nature Positive” - we joined a discussion panel with speakers from WWF-UK, Natural England, My Green Pod and the National Park City Foundation at the Reset Connect conference.
- “Where's the bee in ESG? Putting nature at the heart of business” - talk and panel discussion at the Reset Connect conference.
- “Biodiversity and AI: can AI solve the ecological crisis?” - we joined a discussion panel with speakers from the Natural History Museum, British Antarctic Survey and the Alan Turing Institute at the AI UK Conference.

### NBN Conference 2022

We were thrilled to be able to hold our first face to face Conference in three years. We were also delighted to hold the event in the prestigious setting of the Natural History Museum, London. Sixteen presentations were made and themed against the Trust's four strategic ambitions. Bryony Pound of Dialogue Matters gave the keynote address “How can data inform wise decisions for nature?” and Richard Benwell, CEO of Wildlife and Countryside Link gave the Sir John Burnett Memorial Lecture on “Targets trends and trajectories: can DEFRA halt the decline of nature?”




Other organisations that presented included GBIF, which helped to highlight the need for the UK to return as a full voting participant, and Forestry England who explained their aspirations for utilising eDNA and metabarcoding. The many other inspirational **presentations** came from senior representatives from the commercial, academic and voluntary sectors.



# OUR COMMITMENT TO SUSTAINABILITY

The following commitments underpin our strategy and are essential to its successful delivery.

## Key highlights during the year were:







-  We produced a medium-term financial strategy which sets out the key income streams that we will maintain and build over the course of the strategy.
-  Through our fundraising successes we were able to enhance the NBN Atlas, to improve the accessibility of biodiversity data; and launch the Better Biodiversity Data Project to improve data flow in Scotland.
-  As a team we developed a set of values that help make the NBN Trust a great and supportive place to work.



## Financial

We can only achieve the ambitions set out in our strategy if the NBN Trust is financially secure and able to grow.

We achieved multiple fundraising successes in the past year including the following grants. Most of these are for projects that started in 2022/23 and continue into 2023/24 or beyond.

-  **£580,000** from the Scottish Government and NatureScot to deliver the Better Biodiversity Data Project.
-  **£30,000** from Natural England and **£3,636** from the Environment Agency towards the first phase of work on key NBN Atlas enhancements.
-  **£33,600** from Natural England as a contribution to a collaboration with the Alan Turing Institute.
-  **£30,000**, together with training, mentoring and peer support, from the Enterprise Development Programme, for business development activities focused on the creation of bespoke data portals.
-  **£20,000** from Groundwork's New to Nature programme to support a 12-month NBN Atlas Support Officer post. The programme aims to attract candidates from backgrounds underrepresented in nature conservation.
-  **£22,000** from NatureScot to cover interim costs whilst preparing for the launch of the Better Biodiversity Data Project.

We are delighted with these extremely positive successes, which have had significant impact on our financial sustainability and project delivery. We are also aiming to build our core funding through the development of unrestricted grants and commercial revenues.





## Social

We take seriously our responsibilities to our staff and volunteers.

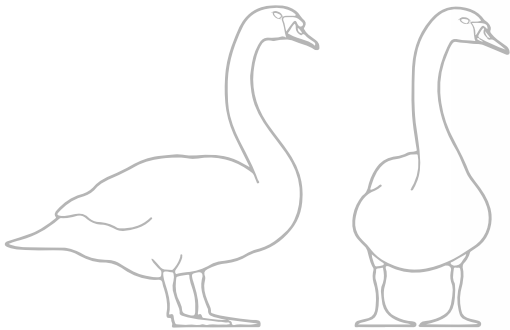
We want to recruit, develop and retain the most talented people, regardless of their background, and make best use of their talents. We recognise that being a diverse and inclusive employer helps us fulfil our responsibility to staff and meets our commitment to diversity within the NBN Trust strategy.

We have developed our [EDI statement](#) and have also signed up to Wildlife and Countryside Link's [Diversity and Anti-Racism Statement](#) and Route map towards greater ethnic diversity, and we have joined their [EDI Working Group](#).

## Environmental

We are passionate about the environment and know we can do more to reduce our impact on the planet.

Progress in 2022/23 has focused on research and gathering resources and contacts that will help us to audit our environmental footprint.





# OUR MEMBERS

The NBN Trust is a membership charity. Our members are diverse, with their own aims and objectives, but they each play their part in supporting our mission to “make data work for nature”. Our organisational members include statutory bodies, charities, Local Environmental Records Centres, wildlife groups and societies and many more.

We also have the ongoing support of many individual members who are dedicated to helping us achieve our aims.

We sincerely thank all of our members.

We would also like to acknowledge the long-standing support of our founding members:

**Environment Agency**

**Joint Nature Conservation Committee**

**Marine Biological Association**

**National Forum for Biological Recording**

**Natural England**

**Natural History Museum, London**

**Natural Resources Wales**

**NatureScot**

**Natural Environment Research Council** through the work of UKCEH and the Biological Records Centre

**RSPB**

**The Wildlife Trusts**

A list of NBN Trust members can be found on the [NBN website](#).

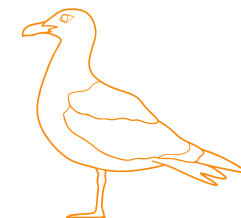


## Members by category at 31 March 2023

Organisational	117
Corporate	6
Individual	105
Honorary	17
Lifetime (Awards)	31
Total	276



# A WORD FROM OUR MEMBERS



## Natural England

*Written by Karen Kramer Wilson and Mike Prince, Principal Advisor and Senior Advisor - Data Engagement, Mobilisation, Management and Integration, Natural Capital and Ecosystems Assessment, Natural England*

Natural England is proud to have been a founding member of the NBN Trust. Over the years we have supported its core functionality as the central biodiversity data repository, and will continue to actively participate in the progression to make the NBN Atlas a one stop shop for species data.

Natural England is very much aligned with the four specific ambitions of the NBN Trust. Staff responsible for some of our core statutory responsibilities use the NBN Atlas as a first port of call for quality biodiversity data, integral to the strong evidence base we require to achieve our vision of “Thriving Nature for people and planet”. We will continue to work with the Trust on various community science support initiatives, seeing not just a valuable source of biodiversity data, but also the value of engaging with the wider biological recording community. Nature recovery is only going to be possible through building partnerships, and we are delighted to collaborate with the wide range of organisations and individuals that form the NBN community across the UK, at both national and local scales.

As our own Natural England-staffed monitoring programmes expand, teams have found new ways to streamline our submission of data, ensuring we continue to grow this essential resource. Recently, through additional funding from the Defra Natural Capital and Ecosystem Assessment Programme, we have been able to support the NBN Trust’s participation in a Data Study Group with the Alan Turing Institute.<sup>1</sup> It was incredibly rewarding to work with some brilliant young academics and researchers, applying the latest data science techniques to analyse threatened species data and highlight data gaps. In the near future, this will guide the entire NBN community to further improve the comprehensiveness, and associated value, of the NBN Atlas.

We are also exploring, together with the Trust and our partners in the wider biological recording community, how new and innovative monitoring approaches and technology, such as environmental DNA and remote acoustics, can help provide new data in a robust and transparent way which maintains the integrity and standards of NBN.

Through regular interaction, Natural England staff that have had the chance to work directly with the team at the Trust find it to be a rewarding and positive experience, and we look forward to more fruitful and fun collaboration in the coming years!

<sup>1</sup> We will provide more information on this project in the Impact Report for 2023/24.

## What two of our individual members say:

*“My route to supporting the NBN Trust came via my use of iNaturalist as a citizen science recording tool. Once I learnt that verified iNat observations become part of the NBN Trust’s database (the NBN Atlas), informing national and international research, I was hooked! My little butterfly and beetle observations suddenly became vitally important as part of a global project for biodiversity!”*

*I felt this was so important that I’ve now set up my own iNaturalist project, ‘West Somerset Wildways,’ as part of Somerset Wildlife Trust’s Wilder Coast initiative, funded by the HPC Community Fund and the National Lottery Climate Action Fund.*

*We now have a team of about 15 volunteers, running local wildlife events and supporting local community and youth groups in observing and recording the nature around them - ‘Making data work for nature’ I LOVE that phrase - and I use it all the time in my Wildways project work. This really is citizen science in action: since the project launch in April, it has gained an average of around 1 new observer per day, resulting in over 100 new participants so far in this tiny local piece of the global project - and it’s growing all the time. And observation has led to action - this weekend, for example, 14 local gardens in our two villages are opening their gates to share their approaches to creating wildlife-friendly habitats.*

*If I hadn’t known that the NBN Trust is using the data we collect, my iNaturalist observations would have remained a private pleasure. But with the knowledge that by recording what we see around us we are contributing to a national and international initiative for nature, it has become a passion I share with anyone who will listen!”*

Elizabeth Atkinson, West Somerset Wildways

*“In some ways I would love to support NBN Trust and NBN much more than I do. I work with geospatial data in geosciences and I recognise the importance of simply mapping what is going on. Also, as a geologist it is always obvious just what a fundamental influence life has had on the planet around us. To be a supporter then, is less than I would like to be in many ways, but it at least gives the comfort that I am helping those tackling one of the most significant causes and threats which faces us today. There are better ways to do things, and mapping, understanding what they are, is at the core of our battle with environmental threat. It is often the smallest creatures that are the most vulnerable, and yet it is they on which all else depends. Helping NBN Trust to monitor and publicise the threats and the mitigations is to me not just a nice hobby, it is to recognise the front line of assault and to engage”.*

Dave Waters



# PLANNING FOR THE FUTURE

Our focus for the coming year 2023/24.

**Ambition 1: The NBN Atlas is the 'go to' place for sharing, finding and accessing UK biodiversity data**

- Complete the rollout of the upgraded NBN Atlas to all users
- Upgrade the special software behind searching for records (Solr index)
- Add the ability to create, configure and start up servers to meet demand at the press of a button on the operational dashboard
- Implement a performance analysis test suite, for example for load and stress testing. This will enable us to determine optimal configurations for maintaining performance and stability
- Once the NBN Atlas upgrade is complete, we will move to the new data processing system that the Atlas of Living Australia has developed in collaboration with GBIF. This modernisation of the data processing system will enable us to carry out data processing more frequently so that we can share new data much more quickly.

**Ambition 2: Biodiversity data is providing the evidence needed for nature's recovery**

- We will deliver the Better Biodiversity Data project
- Partner with more than 60 organisations to produce the State of Nature Report 2023
- Help with the development of a microsite to host the State of Nature Report 2023.

**Ambition 3: Citizen science is valued, supported and expanded as a major source of biodiversity data**

- Work with verifiers and the iRecord community to help enhance the iNaturalistUK records flowing through to iRecord
- Undertake analysis of iNaturalistUK data to better understand and support the community
- Work with the Natural History Museum, Royal Horticultural Society and others to promote the use of iNaturalistUK in schools, through the [National Education Nature Park](#)
- Relaunch the NBN Awards for Wildlife Recording to recognise significant achievement and celebrate success in wildlife recording and information sharing in the UK.

**Ambition 4: The National Biodiversity Network is a well-connected and highly collaborative community with a united voice on key issues**

- Implement a stakeholder engagement plan to strengthen communication and engagement with and between members of the NBN community and as an important part of our governance framework
- Update the NBN Trust membership scheme to provide value to our members and income for the Trust.

## Our commitment to sustainability:

- Secure grant funding for core costs and new projects and begin to develop a commercial income stream
- By undertaking research to understand our users, we will seek to identify ways in which we can develop iNaturalistUK to engage under-represented groups in wildlife recording
- Audit our environmental footprint and implement plans for how to minimise it.



# THANK YOU!

As a Network-focused charity, we're nothing without you – our members, partners and supporters. We're grateful to each and every one of you that contributes in your myriad ways to our mission of making data work for nature. We'd like to highlight some of those who have helped make the greatest difference in the past year.

## Funders, members and supporters

We are deeply grateful for the support of all those who have made a financial contribution to the work of the Trust this year via membership subscriptions, donations, sponsorship and grants. The following organisations have each contributed £1,000 or more in 2022/23:

### £1,000-£19,999

Caring for God's Acre  
Enterprise Development Programme  
Habitat Aid  
Isle of Man Government  
Natural History Museum, London  
Northern Ireland Environment Agency  
RSPB  
Zulu Ecosystems

### £20,000 and over

Environment Agency  
Esmée Fairbairn Foundation  
Natural England  
Natural Resources Wales  
NatureScot  
Scottish Government

We'd love you to consider joining the Trust (if you haven't already) and making a donation towards our important work. If you'd like to discuss a gift of any size, please contact us at [support@nbn.org.uk](mailto:support@nbn.org.uk). Thank you!

## Data partners

Your data makes our world go round – and we help set your data free, to live its best life! Together we're a force for good, providing the evidence base for nature's recovery. Thank you.

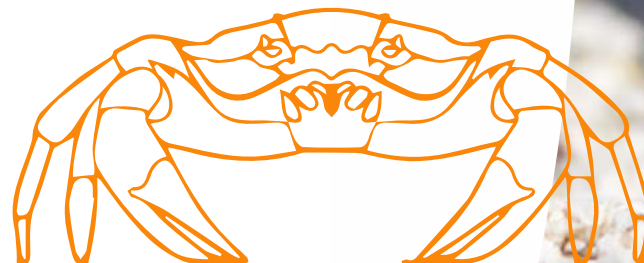
## Volunteers

Our Board of Trustees are volunteers, each of whom makes an invaluable contribution to the sound and sustainable governance of the Trust. Thank you all.

## Staff

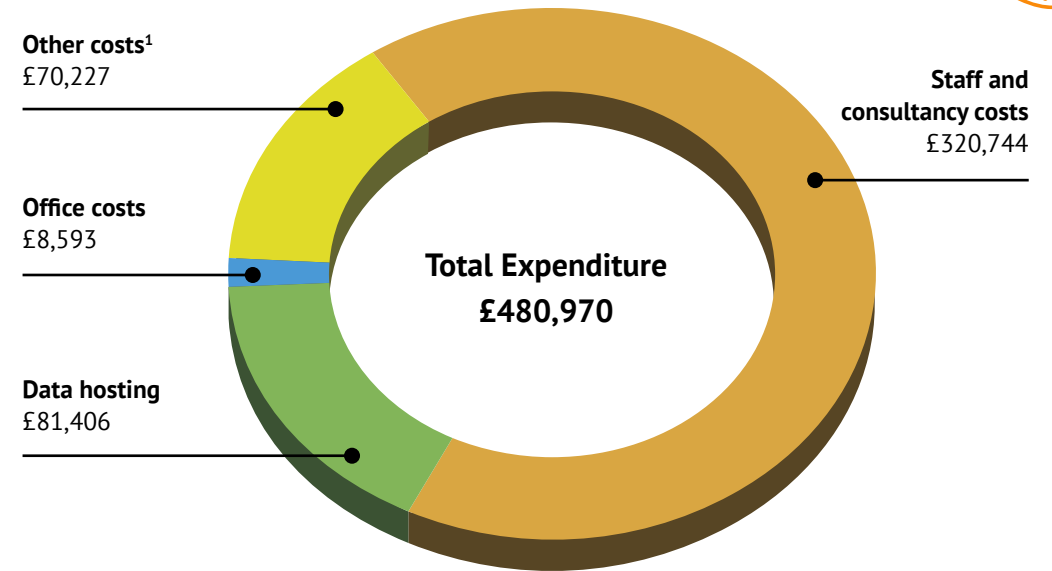
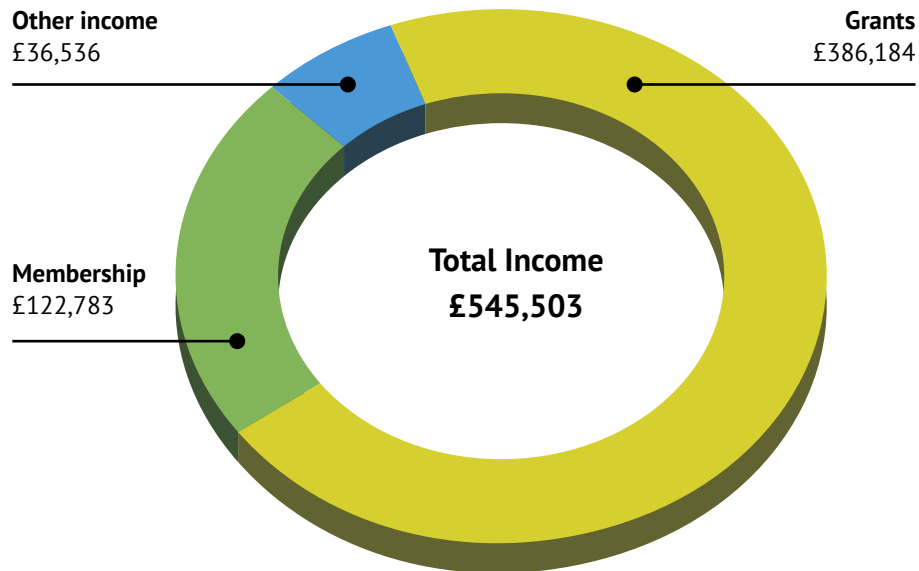
The NBN Trust is a small, tight-knit and industrious team that delivers an extraordinary amount with minimal resources. We'd like to acknowledge and thank all of the team for their skill and dedication. We welcomed three new staff to the team: Mike Tetley, Better Biodiversity Data Project - Scotland Programme Manager; Christine Tansey, Better Biodiversity Data Project – Partnership Officer, and Rhiannydd Stock, NBN Atlas Support Officer, as well as Sami Walter, our four month intern. Thank you all.

And finally... Thank you again for your wonderful support, and for taking the time to read this Impact Report. There's so much more we can achieve together for nature, and we're looking forward to working with you in 2023/24 and beyond. Our vision is of nature thriving everywhere, in all its diversity. Let's make it a reality!



# FINANCIALS

Financial summary for the year ended 31 March 2023



The figures shown are from the unaudited financial accounts. The full, audited financial statements will be available on the [NBN Trust website](https://nbn.org.uk) when approved. You can also contact the NBN Trust's Finance and Business Manager ([s.hyslop@nbn.org.uk](mailto:s.hyslop@nbn.org.uk)) if you would like a copy.

<sup>1</sup> Support, governance and charitable activities costs





# ADMINISTRATIVE INFORMATION

The National Biodiversity Network Trust is a charitable company limited by guarantee, incorporated on 3 April 2000 and registered as a charity on 25 August 2000. The company was set up under a Memorandum of Association, which established the objectives and powers of the charitable company and is governed under its Articles of Association.

## **Directors / Trustees for the year ended 31 March 2023**

The Trustees, who are also the Directors for the purpose of company law, and who served during the year and up to the date of signature of the financial statements were:

Mr N Hodges (Chair)  
Dr R Fairley (Treasurer)  
Mrs W Harper  
Dr B Howell  
Mr T Jagger

Mr M Postles  
Ms M Rudd  
Dr D Slawson  
Ms C Taylor  
Mr P Tomlin

Charity number: 1082163

Company number: 03963387

Registered office: Unit F, 14-18 St Mary's Gate, Lace Market, Nottingham NG1 1PF

Independent examiner: Rogers Spencer, Newstead House, Pelham Rd, Nottingham NG5 1AP

Bankers: TSB, PO Box 373, Leeds LS14 9GQ

## **Acknowledgements**

The NBN Trust would like to thank the following people and organisations for their contributions to this report:

Karen Kramer Wilson and Mike Prince – Natural England

Elizabeth Atkinson, West Somerset Wildways

Dave Waters

## **Image credits**

Page 3 – Dave Fenwick, Aphotomarine

Page 4 – Dave Kilbey

Page 7 – apout/iNaturalistUK

Page 9 – Derek Crawley

Page 10 – Paula Lightfoot

Page 12 – Derek Crawley

Page 13 – Matt Doggett/www.mattdoggett.com

Page 15 – Paula Lightfoot

Page 16 – The Natural History Consortium

Page 18 – West Somerset Wildways – Elizabeth Atkinson

Page 20 – Paula Lightfoot

Page 21 – Peter Wakely/Natural England

Page 22 – John Sawyer

Page 23 – Aimee McArdle ©The Trustees of the Natural History Museum, London

Page 29 – John Sawyer

Page 31 – Derek Crawley

Page 32 – Kerry Netherway, Natural England



## JOIN US

We'd love you to join us in our mission to make data work for nature. You can join us by:

-  **Becoming a member of the NBN Trust**
-  **Sharing and accessing data on the NBN Atlas**
-  **Recording wildlife and sharing your data**

Find out more at [nbn.org.uk](https://nbn.org.uk)

### Contact us

You can get in touch by  
email – [support@nbn.org.uk](mailto:support@nbn.org.uk)  
or phone – 0115 850 0177.

### Follow us

