

End of year report 2023 - 2024



Introduction

This past year has seen many changes in the conservation landscape that DBRC works within, both locally and nationally. For example, the launch of the DEFRA Local Nature Recovery Strategy (LNRS) initiative was welcomed by many, as it aims to bring together critical thinking around the country's nature conservation priorities and create closer links between planning, environmental schemes, conservation projects and community action. However, it has again showed that DEFRA and government bodies have little understanding of the role Local Environmental Records Centres play, and this has presented a number of ongoing challenges for DBRC this year.

In their LNRS data standards guidance, DEFRA called for local data held by Local Environmental Records Centres to be included within openly published data layers. By including Local Wildlife Sites and irreplaceable habitats within their methodology, without any prior discussion. Publishing data under an Open Government Licence (OGL) means that it is accessible to commercial companies to use, modify, and make profit from, which is something we cannot agree to currently.

DBRC's Not for Profit 'Shared Data' business model, as with any of our LERC colleagues around the country, works because the data is licensed to users, built into our fixed products, or blurred when outputted. But is never sold, or used for commercial gain. As a LERC, we recover the costs of generating, collating, managing and improving those data sets by ensuring the costs are split across the many hundreds of organisations and individuals that value and use our services, and in that way the data is disseminated securely into the right forums, and is accessible as possible.

Whilst government focuses much of its efforts on granular satellite derived information, AI and 'Big Data', we continue to work with local groups, communities and individual experts, to ensure the lens our planners and conservation partners look through, is as clear and as high a resolution as possible. To do so, we secure funding from multiple areas, but always ensuring that those that need our services can do so cost effectively. In the absence of any government funding, that approach has worked for over 30 years here in Devon, and unless DEFRA step forward and decide to invest on a long-term basis, then our partnership remains committed to our task, and current business model.



End of year report 2023 - 2024

We currently await a meeting with DEFRA leads to try to tackle this issue, and alongside colleagues within our national association, ALERC, we will be seeking a practical way forward. Who knows, by the time I write next year's end of year report, the LNRS will be in place, BNG will be a roaring success, and government will be a long term and committed funding partner, investing in DBRC and local biodiversity data infrastructure – let's wait and see!

In the meantime, I've tried to summarise the last 12 months below, as usual not everything can get covered, and not everyone that's helped us can get a mention. But, as always, our thanks go to the many volunteer recorders and specialist groups in the county, to the volunteers that have surveyed numerous sites as part of our CWS monitoring program, and to our partners and clients who continue to invest in, and support DBRC in its mission.

Ian Egerton – DBRC Manager

Headline figures from 2023 – 2024

- **DBRC databases now hold in excess of 8.3 million species records**
- **86 Wildlife Sites (CWS & UWS) were surveyed within the Biodiversity Monitoring Framework project**
- **With 27 new CWS being designated at the January CWS panel meeting**
- **DBRC delivered or worked within 28 partnership projects of varying scope and scale**

Some interesting species records highlights from within the county:

From the Devon Moth Group;

Great Oak Beauty (*Hypomecis roboraria*) – 1st confirmed record for Devon, 11th June, Phil Barden, South Hooe, near Bere Alston

Agonopterix pallorella, (a micromoth) 1st Devon record, February, Chris Vincent, Brixton

Meanwhile DBRC survey work for EA at Dawlish Warren Golf Course/DWT reserve recorded *Hypochaeris x intermedia* ('Hybrid Cat's-ear'), the first known Devon observation of a naturally occurring hybrid between the red listed, 'Smooth Cat's-ear' and 'Common Cat's-ear'. Populations of the site's signature plant, Warren Crocus, were found to be in good health.

Meanwhile again (no story just from walking dog), Phil Sansum found the nationally scarce beetle, *Platycis minutus*, at Stover Country Park. *Silvanus unidentatus* (a beetle from a family known as the 'silvan flat bark beetles') was also recorded there. In Devon, there was only a single pre-1900 record from Exeter before. Not far away in Newton Abbot the rather smart looking ant-mimicking

End of year report 2023 - 2024

beetle, *Anthicus antherinus*, was found in August, apparently the 1st record for the county. We thank Dr Martin Luff of the Devonshire Association Entomology Section for verification of these and many other records.



Silvanus unidentatus (left), *Anthicus antherinus* (right). © P.Sansum

Our thanks also to Lionel Pike, for the following interesting records and images from his botanical recording around east Dartmoor this season;



Glyphomitrium daviesii (left), *Taraxacum aesculosum* (right). © Lionel Pike

Glyphomitrium daviesii (Black-tufted Moss) is an oceanic moss of rock substrates, found in April at Heathercombe and then at a second site in December on Hayne Down (also in Manaton), over a century after the species was last seen in southern England.



End of year report 2023 - 2024

And three rare dandelion species;

- 1) *Taraxacum amicum*, found both in Newton Abbot and on a mossy shaded roadside in Manaton in East Dartmoor - the first records for this endemic species outside of Somerset - few Dandelions are so restricted in distribution.
- 2) *Taraxacum inclinorum*, an 'Irish' species, found on an open mossy forestry ride in Manaton – the second site in Great Britain. It was previously found once on Exmoor.
- 3) *Taraxacum aesculosum*, another 'Irish' species, several plants were found in grassland in Manaton - there are some previous Welsh records, but this may be the first record for England! Apart from being rare, this species is also perhaps the single most distinctive Dandelion in the British Isles florally, having orange capitula that don't open fully and ligules that remain rolled in tubes.

Devon has a number of specialist species groups which provide a phenomenal depth of knowledge, that both DBRC and others often rely on. If you are interested in finding out more about any of these groups, feel free to contact us and we can provide their details.

Projects and initiatives – Summary:

Please see our website for more up to date information, and to keep informed as new projects come forward. <https://www.dbrc.org.uk/projects-surveys/current-projects-and-surveys/>

But here are but of a few of the things we did in 23/24

Biodiversity Monitoring Framework – DBRC, DCC & DWT

The Biodiversity Monitoring Framework in Devon (BMF project) is one of the largest habitat monitoring projects in the UK. The main part of the project involves surveying a number of existing County Wildlife Sites (CWS) following a specific methodology each year. It has been running since 2009, and provides invaluable intelligence on the condition of many of our priority habitats, outside of the statutory sites framework.

During this season we again targeted survey of a number of Unconfirmed Wildlife Sites (UWS), as the designation of more sites brings greater protection and recognition of these important areas of semi-natural habitat. An amazing 27 new sites were designated, and a number of potential sites were also identified for the next survey season.

Through the year we continued to support, and be supported by, volunteers from the Wildlife Warden scheme within Teignbridge, and members of the Ashreigney & Riddlecombe Nature Recovery Group. These volunteers saw a total of 14 sites between them, and critically, they are making use of local contacts where DBRC may have historically been unable to identify landowners on our own.



End of year report 2023 - 2024

Our thanks also go to the members of the CWS panel, who diligently support the designation process, and who sit through a very long day, and review evidence on each site each year. Their expertise alongside that of our team, ensure robust implementation of the criteria which guides the framework. At this year's panel we gave our thanks to Peter Chamberlain, who stepped down as Head of Environment at Devon CC, and as chair of the CWS panel. Peter, was central to the success of the original CWS survey program in the 1990's, and had maintained input ever since. We hope his successor at DCC takes similar interest, and continues to ensure the county council helps resource these important partnership initiatives.

The BMF project remains at the heart of DBRC's field activity, and gathering condition information on these sites, and designating new sites is a crucial role DBRC plays in helping to drive forward nature's recovery in the county. The most common issues found during this years survey season include undergrazing and scrub encroachment, overshadowing in woodlands, and the presence of invasive Non Native Species.

These issues and many other challenges that our landscape faces are covered within a soon to be published report on our CWS monitoring. Working with partners DWT & DCC, we have pulled together the significant data generated by the BMF project since it began, and summarised them for our main audiences. We hope it can raise the profile of these important sites, and help galvanise interest in them at local and national level.

If you are able to help DBRC by providing survey data on CWS, or have a CWS that hasn't been surveyed for many years please go to - <http://www.dbrc.org.uk/biodiversity-monitoring-framework/>

Living Dart – EA, SD National Landscape, Bioregional Learning Centre & DWT

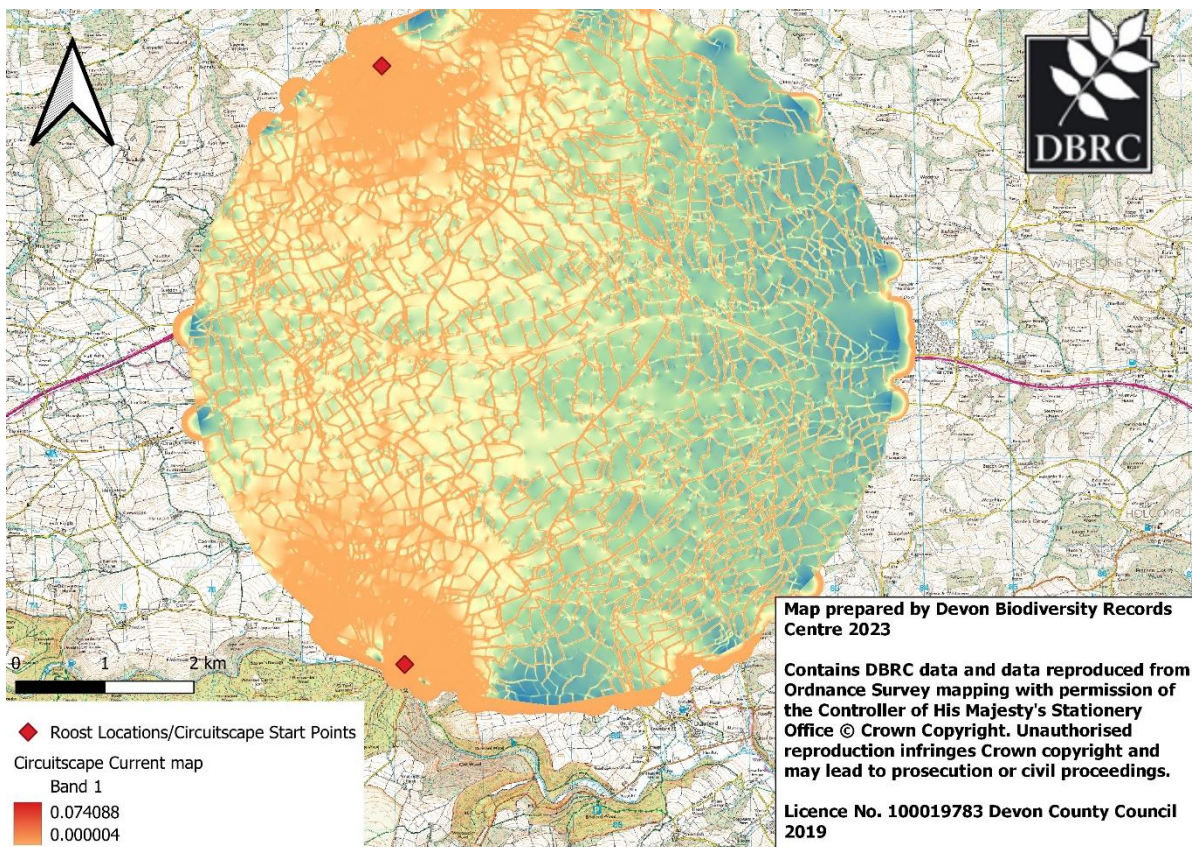
Saltmarshes are incredibly important carbon stores, burying more carbon per unit than terrestrial forests outside of the tropics. Although often overlooked, the Dart estuary still contains small pockets of saltmarsh throughout its banks. The Living Dart project is a partnership of the Bioregional Learning Centre, The Environment Agency, the South Devon National Landscape (AONB), Dart Harbour Authority and Devon Wildlife Trust. It aims to identify, monitor, and ultimately enhance these areas, fostering community connections, supporting biodiversity, and delivering essential ecosystem services.

As a partner of the project the DBRC began in the autumn of 2023, to locate, record and assess existing patches of saltmarsh vegetation throughout the Dart estuary. This involves interpreting aerial photography, ground-truthing sites, and employing vegetation monitoring techniques to identify the communities and species present and assess the ecological condition of the habitats found. The data derived from DBRC's survey work is being used to inform partners' approach to delivering the wider project's objectives around salt marsh restoration and conservation and awareness raising.

End of year report 2023 - 2024

Network for Nature – National Highways

Working for Highways England, and in partnership with DWT & Animex, during the year, DBRC has been modelling the impacts of major road networks on species movement. A short list of protected species were used as indicators, and included barn owls, badgers, dormice, great crested newts, harvest mice, and hedgehogs to name a few. The image below shows the outputs the Circuitscapes model produces for interpretation, for each species you run it for.



An example of our circuitscape output, mapping potential connectivity within the landscape. Orange areas represent areas of higher connectivity in the landscape, blue areas with lower connectivity. In this example, connectivity is highest following linear features through the landscape, modelled using the draft DBRC hedgerow (linear feature) layer.

End of year report 2023 - 2024

Great Crested Newt Survey Project - Grant funder, ED National Landscape, SureScreen Scientific.

Devon is the western fringe of GCN distribution, and they are in low numbers here. Just over a decade ago a number of consultation zones were created, which helped raise awareness of them

within Environmental Impact Assessments and other decision making processes. DBRC had become increasingly aware that the data underpinning many of these zones were ageing, and therefore becoming less relevant. However, it then took over two years to secure the required funding, before we could tackle this issue.

Having built a project partnership with Devon Reptile and Amphibian Group, and secured support from a grant funder, the East Devon National Landscape team, and SureScreen Scientific, who are supplying the eDNA testing kits required, we were finally able to commence in January 2024.

During the last couple of months we have recruited and trained a discrete group of volunteers, and have tried to contact the many landowners where surveys are planned. The survey season is now starting and through the next few months, using mainly eDNA sampling, we hope to check existing records, but also gather potential new records, as we know this species is currently under recorded in the county.

Its also a great opportunity to raise awareness of the species in relevant communities and ask volunteers to complete habitat suitability assessments after suitable training.

Because this project is working with a European protected species there has been a major focus on ensuring the correct protocols and training were in place prior to any fieldwork. As with some other sensitive species, survey for GCN isn't a good fit for general community science, but with a smaller band of well-trained volunteers we should cover over 60 sites in total.



Male (right) and female (left) Great Crested Newts. Image courtesy of Chris Holborow

End of year report 2023 - 2024

South West Peatland Partnership – Vegetation Monitoring Project

In summer 2023, the DBRC partnered with the Southwest Peatland Partnership (SWPP) to deliver detailed vegetation monitoring at peatland restoration sites spanning Bodmin Moor, Dartmoor, and Exmoor. The aims of this long-term project are to establish baseline vegetation data facilitating future analyses on restoration impacts, particularly focused on hydrological changes using vegetation data as a reliable proxy.

Operating in remote and diverse landscapes, the DBRC's field team utilized their botanical survey experience and knowledge to train both staff and volunteers in the identification and recording of species of upland mires and heaths. Mixed teams of volunteers, DBRC surveyors and SWPP staff are using this knowledge to conduct detailed vegetation transects across restoration areas. During monitoring the DBRC also contributed to the refinement of survey methodology to ensure consistency and repeatability for future surveys.

By providing expertise and technical support in the future, it is hoped that the DBRC will support the SWPP to cultivate a motivated and skilled group of volunteers to revitalise the previous peatland monitoring programme that ran between 2006-2019.



Peatland monitoring on Dartmoor



End of year report 2023 - 2024

Drone surveys for DWT nature reserves

Aerial photos are a vital tool for reserve management, however existing satellite imagery like Google earth has its limitations. That is why, over the past two years, DBRC has started mapping Devon Wildlife Trust Reserves using our DJI Mavic Enterprise drone, creating high quality aerial maps at a resolution of 2cm at ground level.

These high-resolution images will be used across the reserves for many purposes, including producing baseline condition assessments, carbon monitoring calculations and tracking the impact of pathogens such as ash dieback. By producing high quality baseline images, we can ensure that the long-term changes to the reserves are easily identified.

Aerial photography and mapping is just the start in remote-sensing for DBRC, as we continue to develop new techniques and data streams with our drone equipment and improve our knowledge of the state of Devon's Nature.

Other projects

Other project involvement over the year included:

- vegetation monitoring at the National Trust's Kipscombe estate on Exmoor
- NVC and trampling surveys at Dawlish Warren for the EA and EDDC
- a preliminary data audit for the East Dartmoor Landscape Recovery Area project
- Supporting North Devon National Landscape's Finding Nature Footprint project
- Ongoing support of Saving Devon's Treescapes, the LNRS and NRN initiatives,
- DWT's species reintroduction research on beavers, pine martens, wildcats,
- Supporting the volunteer teams at The Italian Garden near Totnes and the Bradley Bug Network in Newton Abbot.

Staff update

Jess Smallcombe our Community Ecologist left us in the summer, taking a career change into the world of secondary school education. Whilst we were keen to replace this role, it's been a challenge to bring the required level of expertise in, within our limited pay scales. This has meant a quick rethink on how we deliver areas of our work program such as the GCN project.

On a positive, we were able to swell our technical team's ranks a little, bringing in Chris Calvert as Assistant Officer. Most recently Chris had worked on a national project with Exeter University and The Badger Trust, and has a good track record in developing and managing databases, and apps. He has now taken the reins for our data search service and is further developing that in the coming year.



End of year report 2023 - 2024

Volunteer update

Without an office it's been a little more challenging to offer desk-based volunteer opportunities, but on the flip side, we have seen an increase in the number of volunteers that we've been able to support in other ways through field based projects. DBRC and our host are also currently undergoing a shift to more cloud-based IT solutions, and that may or may not offer insight into how we can link more readily with people who want to help us from the comfort of their own home?

Technical developments

This is an area where internal investment by DBRC is critical to maintaining improvements in our data holdings, the architecture it is managed within, and the way we can output it and add value.

One key project we have wrestled with over the last three years, has been amalgamating our entire land use data, from varying projects and sources, and building a 'Combined Habitat Layer' (CHL). This combines our priority habitat data with non priority habitat data, and provides confidence scores, ensuring that the best available data sits within each individual polygon. Gaps where DBRC does not have data are populated with external sources such as the NE priority habitat inventory, or other publicly accessible data. However, NE's recent removal of confidence scores on their own data has meant we have had to improvise a little, but the layer is now nearing completion.

Whilst this layer isn't comprehensive, and still leaves large parts of the county unmapped, it has significantly increased the information that we can provide partners, in a useable format. We are currently working to provide accompanying support material so that it can be used effectively, and expect to launch it within the next month or so.

In a similar time frame we have been chipping away slowly at creating a Linear Feature layer (hedgerow data). Using a range of modelling techniques and interspersed by ground-truthing surveys. Whilst there are national hedgerow layers currently available, our experience of them was mixed, with apparent gaps in mapping, and differing approaches. Whilst these national layers are fit for purpose for many applications, our need locally required more comprehensive coverage, as this is key to modelling connectivity for pine martin habitat, for example. Again, we need to create accompanying support material and validate accuracy levels etc, but hope to start using this in one or two discrete species reintroduction projects this spring initially.



End of year report 2023 - 2024

Service Level Agreements and Data Agreements

Service Level Agreements (SLAs) are an important source of income for DBRC and a vital service for local authorities and others. SLA partners get access to DBRC's site and species data to underpin their decision making processes, and are able to use DBRC time for enquiries or other work. In 2022 – 2023 we maintained SLAs with:

- Dartmoor National Park Authority
- Devon County Council
- Devon Wildlife Trust
- East Devon District Council
- Environment Agency
- Exeter City Council
- Exmoor National Park Authority
- Forestry England
- Mid Devon District Council
- Network Rail
- North Devon District Council
- Plymouth City Council
- South Hams District Council
- Teignbridge District Council
- Torbay Council
- Torridge District Council
- South West Water
- West Devon Borough Council
- Clinton Devon Estates
- South West Water

Data Agreements with conservation organisations and recording groups are integral to the quality and quantity of data at DBRC. DBRC swaps data with local and national recording groups and schemes, and is also able to offer support in kind to some of these groups. DBRC has formal data agreements with the following organisations, though we also swap data on an *ad hoc* basis with many other groups and individuals:

- Barn Owl Trust
- Botanical Society for the British Isles
- Butterfly Conservation
- Dartmoor National Park Authority
- Devon Birds
- Devon Fly Group
- Devon Fungus Group
- Devon Mammal Group
- Devon Moth Group
- Devon branch – British Dragonfly Society
- Devon Reptile and Amphibian Group
- Dartmoor National Park Authority
- Exmoor Natural History Society
- Natural History Museum
- Exmoor National Park Authority
- Seasearch
- SeaWatch Foundation

Working alongside these organisations and individuals, as well as members of the general public, and through targeted survey and monitoring within our varying projects, DBRC now has access to over **8.3** million species records for the county of Devon.

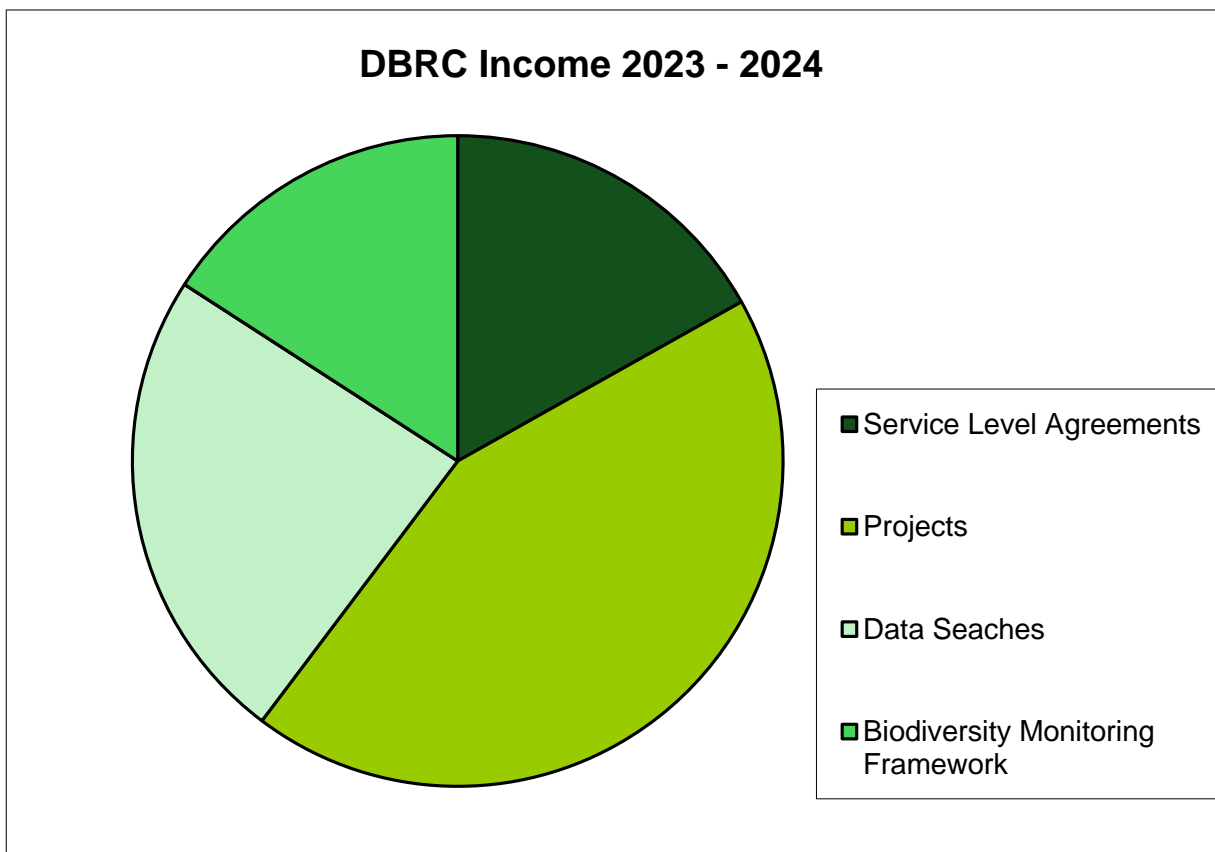


End of year report 2023 - 2024

Financial Summary

The good news is that we ended the year on a small surplus again, which is vital to our ongoing development, as it means we can invest a little back into core projects like the CWS program and GCN survey work etc. Few of our projects and initiatives are fully funded, and we are often expected to provide 'in kind' time as a funding requirement. Having those resources of our own to deploy, even if small, are fundamental to accessing some of the sources of funding such as the New Heritage Lottery Fund, and others.

As a Not for Profit organisation, our target is always to end the year in a positive budget, able to re-invest into the centre, develop new projects, and where possible enable us look to our future IT needs. However, possibly more so at the moment, this also includes being able to invest in staff development, and retention, as the needs of DBRCs work program can require very specific skills.



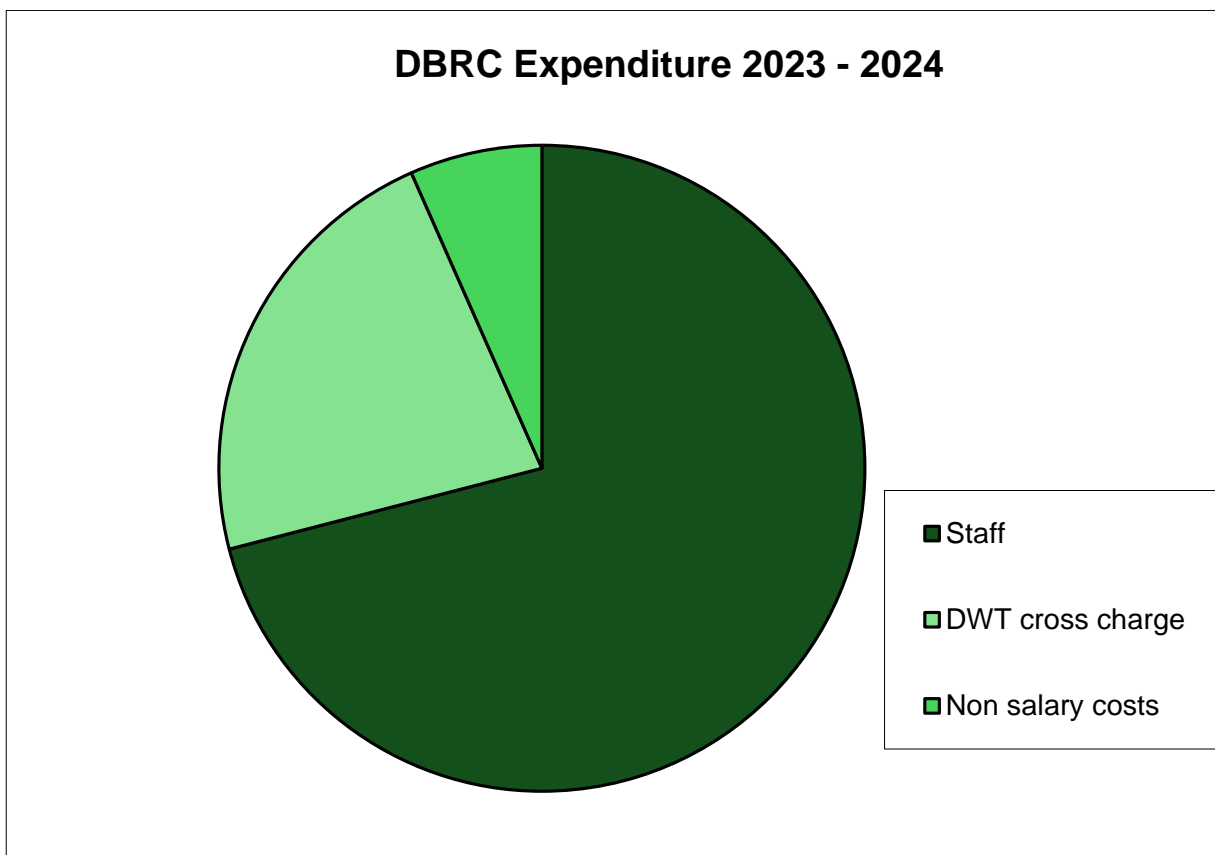
Data search income remained static with no increase over 22/23, and the number and type of search was also similar to that previous year. Income from most other areas remained pretty static



End of year report 2023 - 2024

too, although project income fell slightly. In 'real terms' with inflationary costs still running at 5% or so for the main part of the year, this put a little extra pressure on the end of year outcome.

Whilst we try and hold our charges where possible, we have needed to increase them slightly going into 24/25. Something we will continue to review on an annual basis with our partnership.



Staff costs were affected by a small number of personnel changes during the year, and the use of contractors to fill gaps affected our non salary costs. In addition, the regional Network Rail contract which DBRC manages on behalf of 11 counties was delayed, and this affected both income and expenditure in the last week of the year, but more positive, the move to home working and no physical office is now showing financial dividends, and is helping our bottom line.

Going forward, there are a range of external initiatives that we have yet to work out our place within, for example, where we can sit within the Biodiversity Net Gain framework and whether this offers us opportunities. Similar to the LNRS, little is known about how this national roll out might be positive for DBRC, what will be required of us long term in relation to updates, and if it will help fund some of our future work?



End of year report 2023 - 2024

That's a critical question, because year on year we talk about the known unknowns: over 4000 possible CWS still to filter and survey; a species database with temporal and geographic gaps which make it hard to fulfil its potential; communities with passion, interest and energy to get involved, but few DBRC resources to parachute in, and directly support them.

I reflect on that periodically, as having managed DBRC for over a decade now, there are many things we have resolved and improved in that time, but having enough resources to direct as and where we feel it's most needed, remains the constant challenge. As is ensuring we gather the data of most use to our partnership, in a strategically targeted way.

As we step into 24/25, we are looking forward to working with all of our partners, across a number of interesting projects, which will include a new partnership with Moor Meadows, in the Big Meadow Count project, further development of the South West Peatland Partnership vegetation monitoring program, significant field work within the East Dartmoor Landscape Recovery Area, and the possibility of a DWT 'CWS Champion' role, who will help us promote this program to wider audiences.

I'm in no doubt that those projects will help us generate significant data, alongside all the other work we'll be involved in, and we look forward as a team, to another successful 12 months.

Our continued thanks to all those who have supported DBRC through the course of the year. If you have any questions on the work DBRC undertakes, or you would like to discuss potential projects, please do get in touch iegerton@devonwildlifetrust.org