

Biodiversity Information Service

Manager's Annual Report

to Members

1ST APRIL 2020 - 31ST March 2021

Annual General Meeting
Tuesday, 16th November 2021

20 years of putting
wildlife on the map
20 mlynedd o roi
bywyd gwyllt ar y map



BIODIVERSITY INFORMATION SERVICE
FOR POWYS AND BRECON BEACONS NATIONAL PARK
GWASANAETH GWYBODAETH FIOAMRYWIAETH
POWYS A PHARC CENEDLAETHOL BANNAU BRYCHEINIOG

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Introduction

This is a brief summary report for Powys & Brecon Beacons National Park Environmental Records Centre Ltd (BIS) financial year 1st April 2020 to 31st March 2021.

Staff

- Janet Imlach continued as BIS Manager and Company Secretary part time (3 days/ week) through October 2020.
- Dr. Bradley Welch joined BIS in October 2020 full time as BIS Manager and Company Secretary.
- Janet assisted Brad with the transition to Manager between October and December 2020.
- Ben Mullen continued full time as the Biodiversity Communications Officer.
- Jo Milborrow remained full time Biodiversity Data Officer.
- John Robinson worked for BIS as the IT officer 1 day per week and as LERC Wales Aderyn Development Officer 3 days per week.
- N.B.—Berwyn Powell (pictured above) joined the Team in July 2021.



Directors

Norman Lowe - Chairman
Keith Noble - Vice-Chairman
John F. Wilson - Treasurer
Sue B. Furber
Bob Dennison
Hazel Drewett

Sarah Woodcock (WTSWW)

Andrew James (BBNPA)

Janet Imlach - non-director BIS Company Secretary, April 2019 – October 2020

Bradley Welch – non-director BIS Company Secretary, October 2020 – present

Andrew Lucas (NRW Observer)

Alastair Knox (PCC Observer)

Darylle Hardy (RWT Observer)

Clive Faulkner (MWT Observer)

Finance

The full accounts were reviewed by the Board of Directors on 13th July 2021 and have been circulated to the Members for approval at the AGM on 16th November 2021. A summary of accounts for the last 5 years is set out below (Table 1).

Table 1: Summary of BIS accounts by year for the last 5 years.

£	2016-17	2017-18	2018-19	2019-20	2020-21
Gross profit + Other operating income*	105,107	118,567	121,668	136,312	144,595
Corporation Tax	92	2,192	647	1,138	2,267
Profit for financial year	4,327	17,455	3,919	6,480	14,314

*Formerly 'Turnover'.

This year BIS made a profit of £14,314, despite fears that Covid-19 restrictions would negatively affect commercial income. Sales increased from £28,478 in 2019-20 to £35,961 in 2020-21. Of this sales amount, commercial income reached its highest level (£22,740) in 2020-21. Peaks in commercial sales were seen in July, January and March (Figure 1). Despite having a similar number of commercial requests, some of these were large, bespoke requests which explains some of the additional income garnered through commercial sales. Simultaneously, SLAs were maintained across all sectors with one exception; National Trust are no longer a contributing partner. There was also a reduction in staff costs during this financial year as the IT Officer post was reduced to 1 day per week. The net current assets as of 31st March 2021 were £96,457, an increase from £81,962 in the previous year. These reserves are important to maintain BIS with current staff levels should a major funder pull out or in unexpected circumstances such as Covid-19.

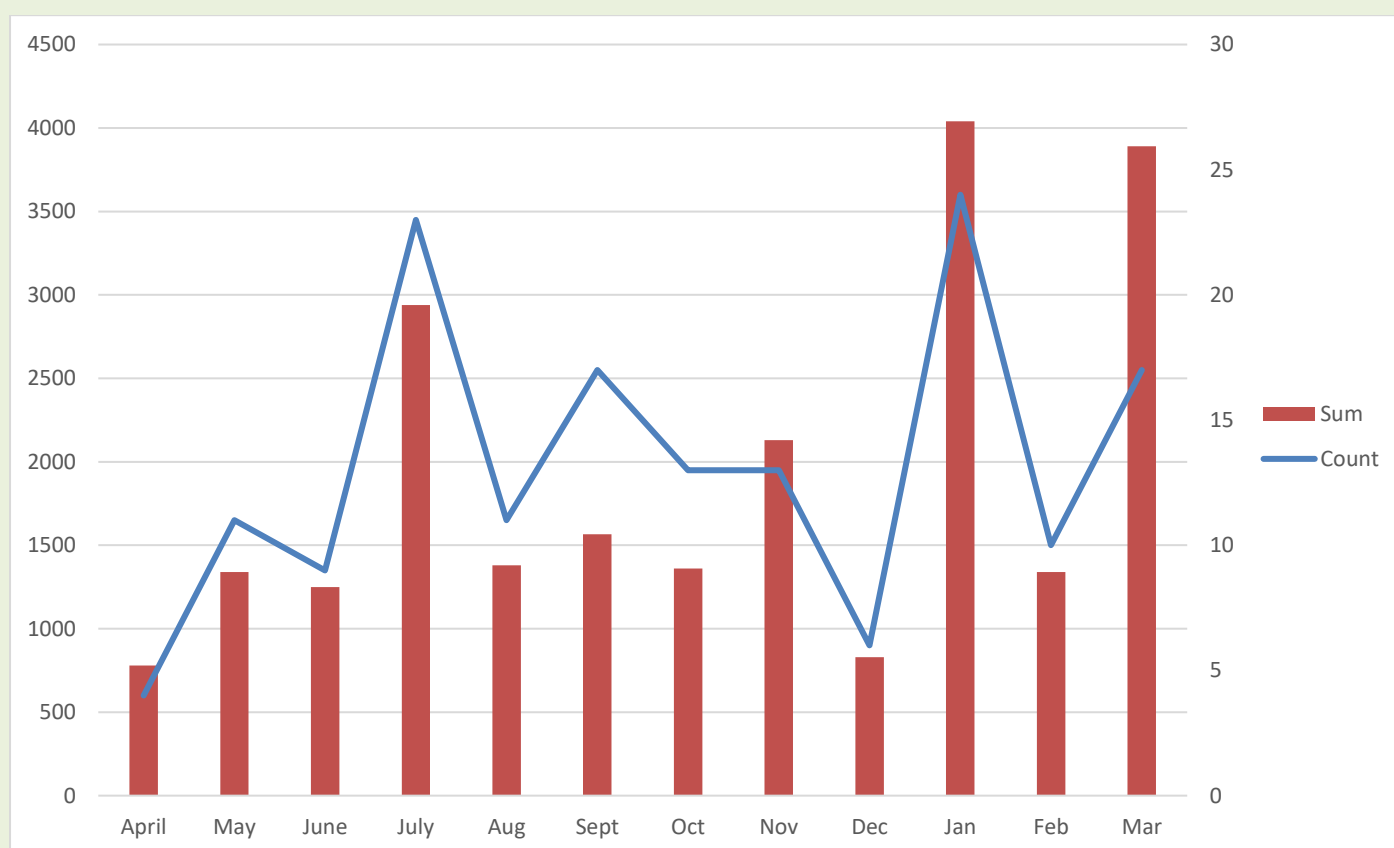


Figure 1. Monthly commercial sales (excluding VAT) and number of enquiries by month for 2020-21.

BIS was able to maintain all services and did not furlough staff. Although BIS does not aim to make a profit, in some years this does happen. It is also worth noting that the variation in corporation tax is because more than one tax payment has fallen into a single year in some instances.

Funding and Partnership Support

The main funding from the partners is for services provided by BIS under a Service Level Agreement (SLA; Figure 2). In 2020-21, 51% of BIS funding was from SLAs (green), 19% core funding (red), 16% commercial income (purple), 11% non-SLA partner work (light blue) and 3% from other sources (amber). National Trust are no longer an SLA partner with BIS.

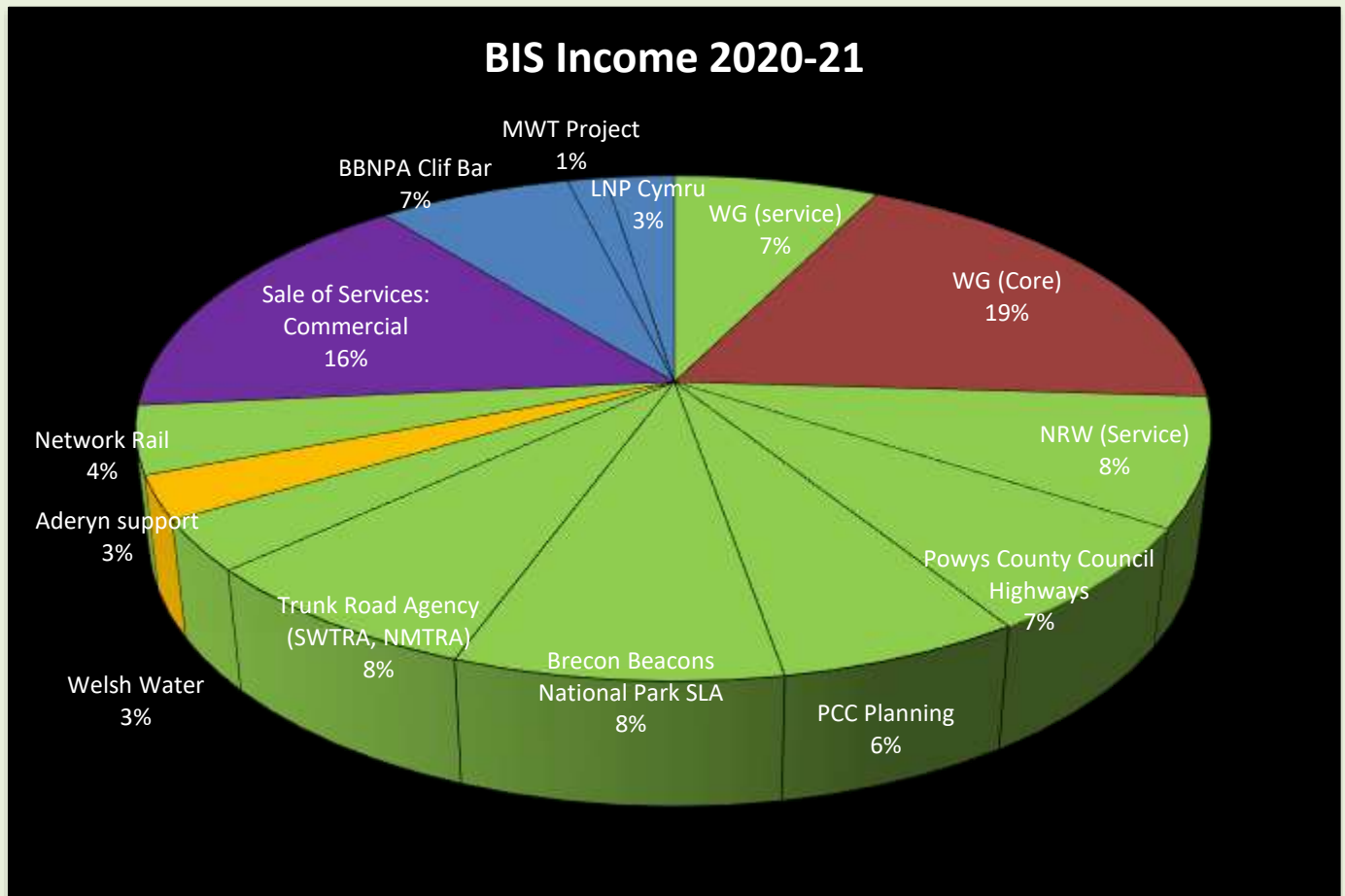


Figure 2. Percentage contribution to BIS income from each partner for 2020-21.

Collectively the four LERCs contribute to the development and maintenance of Aderyn. John Robinson, who has also served as the IT Officer for BIS one day per week, is the Aderyn Development Officer. BIS continues to support the Powys and BBNPA Local Nature Partnerships (LNPs). Staff serve on steering committees and attend regional and national meetings for the benefit of all LNPs in Wales. BIS receives compensation for staff time and associated project work by way of LERC Wales for any work contributing to the LNP Cymru projects, though this is likely to end after 2021-22. The LERCs are funded to provide support and services to their Local Nature Partnerships. BIS also continued its work for BBNPA to provide a wildlife training program throughout 2020-21, though these events were delivered via Zoom training sessions. (See BIS Events section below.) Jo delivered project outputs for Montgomeryshire Wildlife Trust's Nature Recovery Networks project, creating interactive pdf maps for use on tablets in the field (Figure 3), mapping record abundance and species richness (Figure 4), and creating broadscale habitat maps (Figure 5) for SINC site selection.



Figure 3. Screen capture of the Powys grassland connectivity and opportunity map layer adapted as an interactive pdf for field use (March 2021).

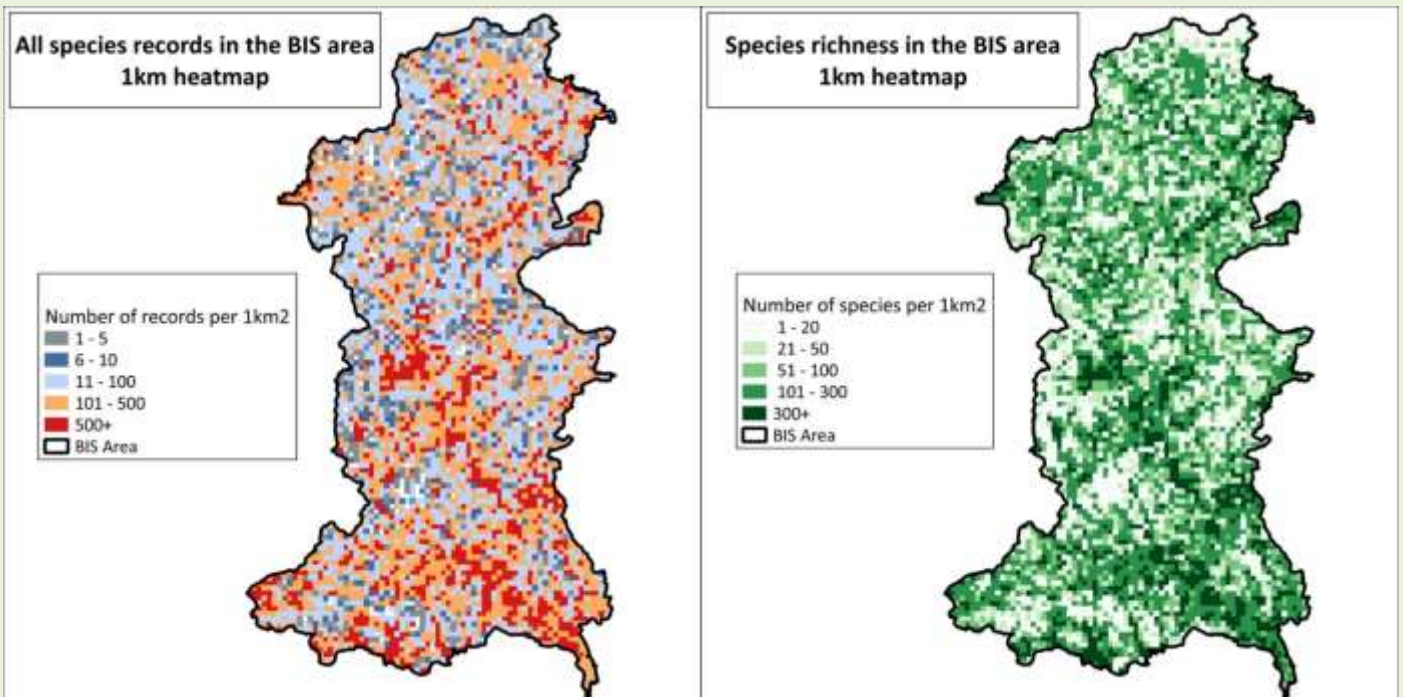


Figure 4. Number of BIS records contained in each 1-kilometre grid square across the BIS area (left) and the number of different species contained in each of those squares (right) as of March 2021.

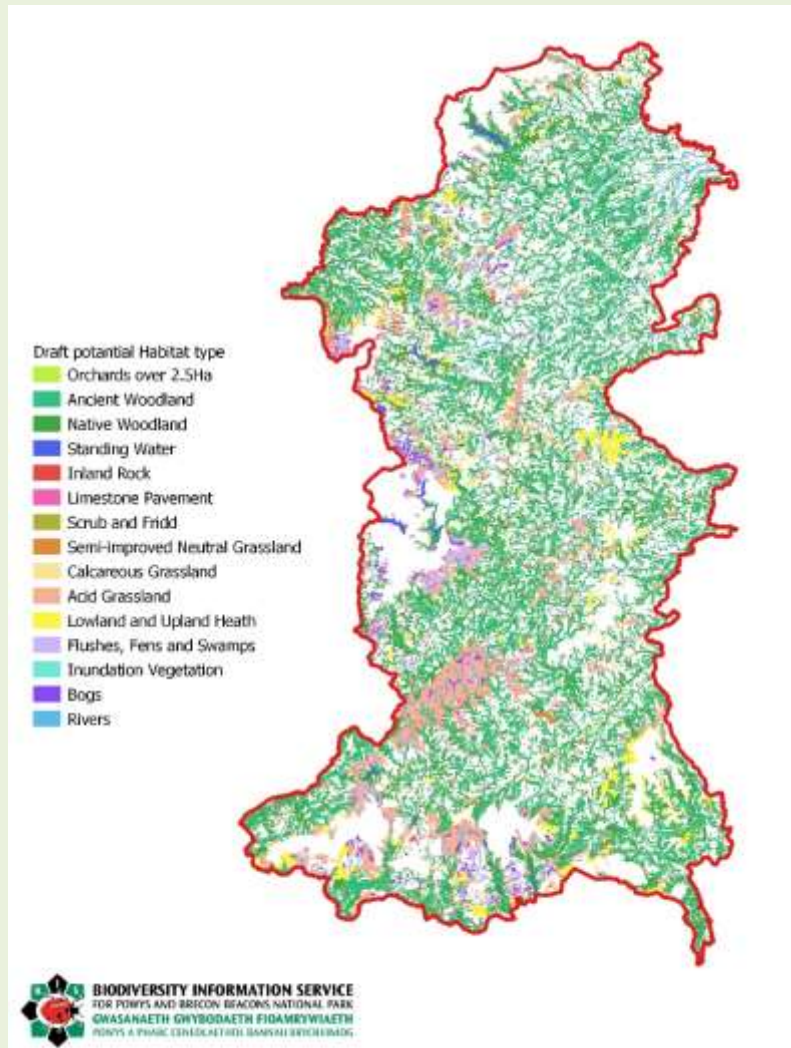


Figure 5. Areas qualifying as potential SINC sites across the BIS region based on habitat criteria only (March 2021).

BIS Records and Data

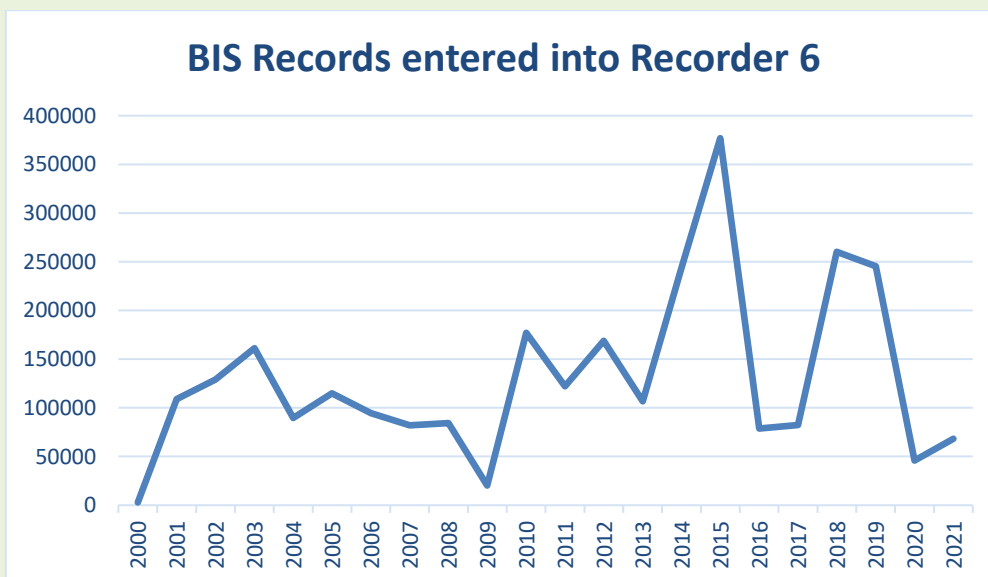


Figure 6: Records entered per year into the Recorder 6 database up to March 2021.

Between March 2000 and May 2021, 2,864,250 records had been entered via the Recorder 6 database. 68,521 were entered in 2020-21 alone. BIS data were then combined with the records from all Welsh LERCs, plus national NRW datasets, in the LERC Wales 'merged database.' Consequently, the total number of records for the BIS area (including those held by other LERCs) in May 2021 was 2,995,821. Also note that 13,442 historical records were verified by county recorders in 2020-21.

The combined data sets from the four LERCs in Wales can be accessed and queried online through the Aderyn website (<http://aderyn.lercwales.org.uk/>). Aderyn is the Biodiversity Information and Reporting Database of Local Environmental Records Centres in Wales. Welsh LERCs store and report species records based on four categories matched to international, national and local designations. These categories are as follows:

- **Category 1 (Priority)** - Species with European and UK Legal Protection, Environment Act (Wales) Section 7 Species & UK BAP Priority Species
- **Category 2 (Species of Conservation Concern (SOCC))**- Global Red List, British Red Data Book, Nationally Rare & Scarce, Welsh Red and Amber Birds & Welsh Vascular Plant Red Data List, where these are not identified in Priority category
- **Category 3 (Local)** – Local Biodiversity Action Plan (LBAP) species not identified as Priority or SOCC. Locally Important Species as specified by local experts
- **Category 4 (Other)** – all other species records that do not fit the above criteria.

Table 2: Number of species records in each conservation category for Powys and BBNP, 2019-2021.

	Powys 2018-19	Powys 2019-20	Powys outside BBNP 2020-21	All Powys UA 2020-21	BBNP 2018-19	BBNP 2019-20	BBNP 2020-21	Totals for BIS area
Cat 1	196,623	202,269	165,641	222,673	69,425	84,755	80,206	245,612
Cat 2	71,399	74,725	49,223	80,817	34,413	42,616	42,948	92,156
Cat 3	387,950	405,992	295,910	409,735	180,127	212,068	188,526	484,247
Cat4			1,464,015	1,896,163			318,119	1,976,074
Total	655,972	682,986	1,974,789 (510,774 without CAT4)	2,609,388 (713,225 without CAT4)	283,965	339,436	629,799 (311,680 without CAT4)	2,798,089

Note that the BBNP figures are lower in 2020-21 than in previous years. There could be several reasons for this discrepancy. Without knowing how the figures were created in past years, it is hard to re-create a comparable figure. Different results will be generated depending on which data system has been interrogated (i.e., the LERC Wales shared database, or Recorder 6). There are also several different query formats on the database that could have been used to create the figures (i.e., a spatial search or a search based on the unitary authority category). Each search works differently, and each would produce a different result. There are also reasons not related to the search criteria that could be having an effect. For example we have removed several tens of thousands of duplicate records over the past 18 months, and the species lists have been amended slightly. Consequently, Jo has calculated figures for Powys using GIS tools with and without the inclusion of the BBNP portion of Powys for comparative purposes. BIS will continue to utilise a standard methodology going forward.

Data in Aderyn can also be analysed by Vice-county (VC, Figure 7) and Taxon Super Group (Figure 8), for example. Other custom searches can be performed as required.

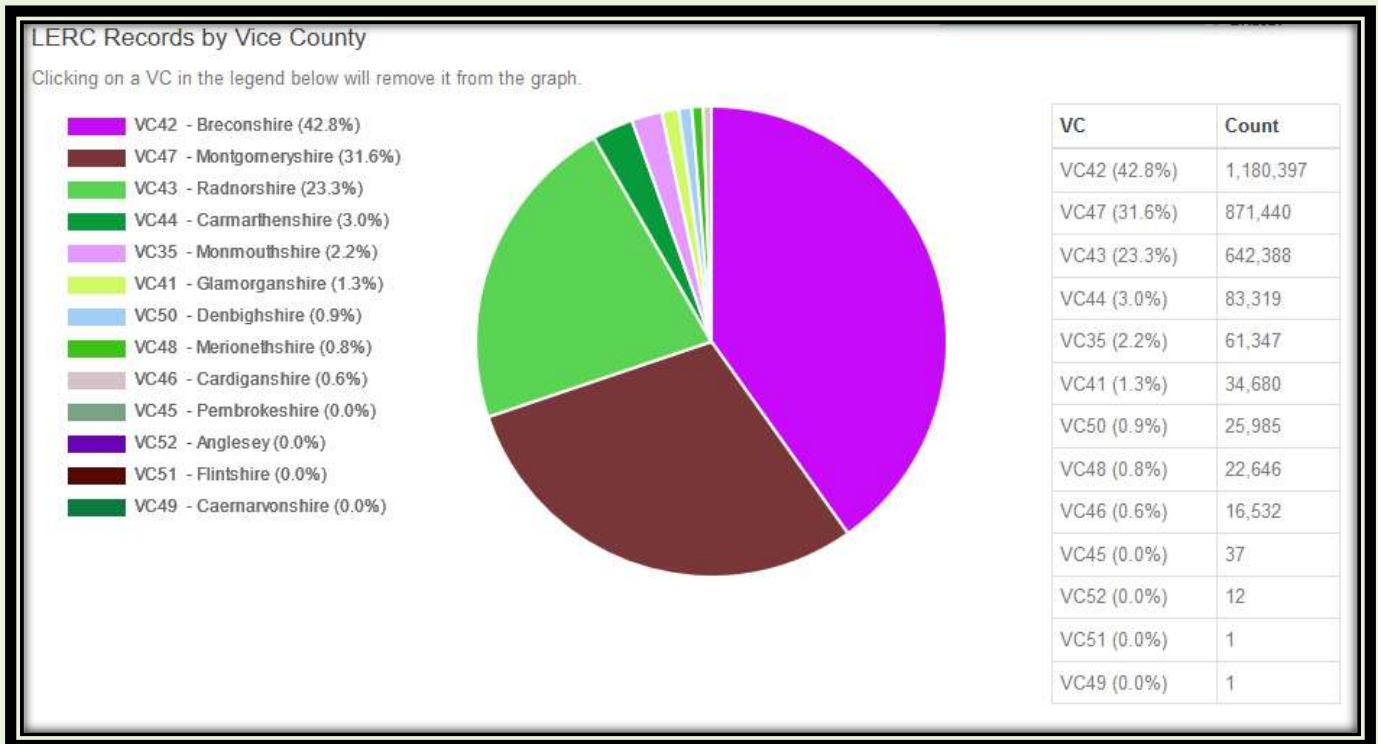


Figure 7: Records from Aderyn held in the BIS area by Vice County up to March 2021.

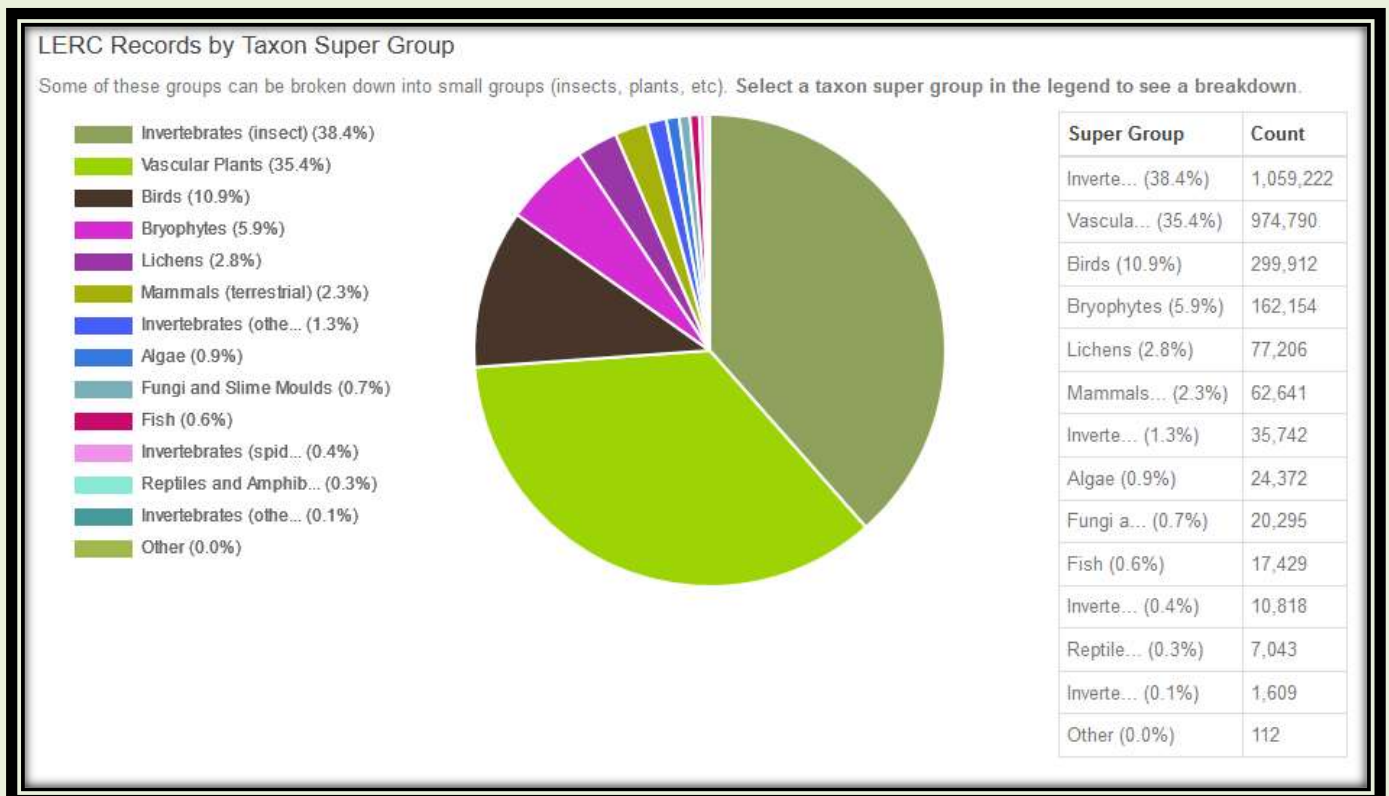


Figure 8: Records from Aderyn held in the BIS area by Taxon Super Group through March 2021.

Record data can also be analysed based on the level of verification for each taxonomic group over the years. For some taxonomic groups, the proportion of verified records (green) to unverified records (red) has increased. This trend is particularly true for invertebrates (Figure 9) and vascular plants (Figure 10). Verification of bird records remained consistently low for a number of years with a dramatic increase in verified records between 2012 and 2019, tailing off more recently (Figure 11). These increases are all, of course, due to the stellar efforts invested by Vice County Recorders and other Local Recorders who assist them. This information not only emphasises the importance of recorders in the verification process but also highlights why BIS continues to support Vice County Recorders and aims to encourage future recorders to develop the necessary skills to assist in the verification process. This will become even more important as emerging tools and technologies expand the volume of records received by the LERCs.

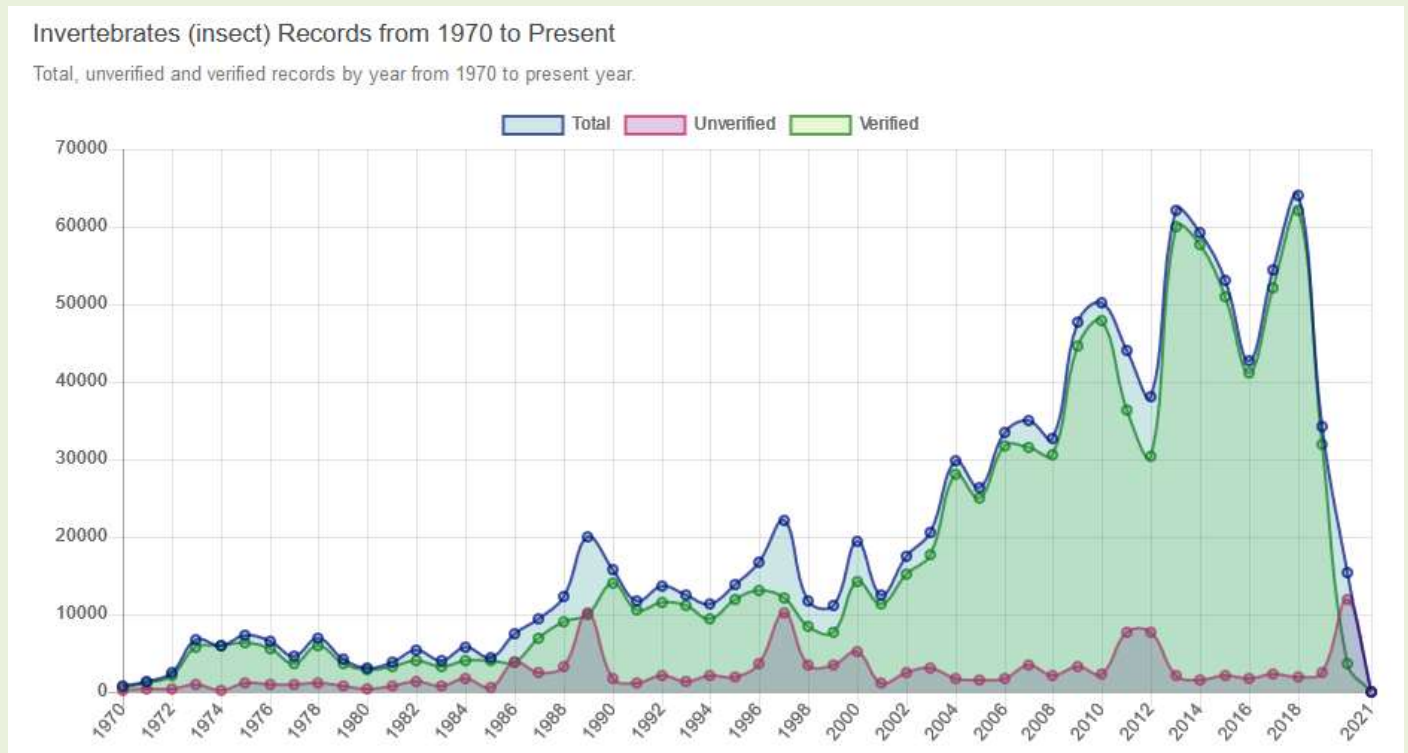


Figure 9: Verification status of invertebrate records for the BIS area between 1970 and May 2021.

Vascular Plants Records from 1970 to Present

Total, unverified and verified records by year from 1970 to present year.

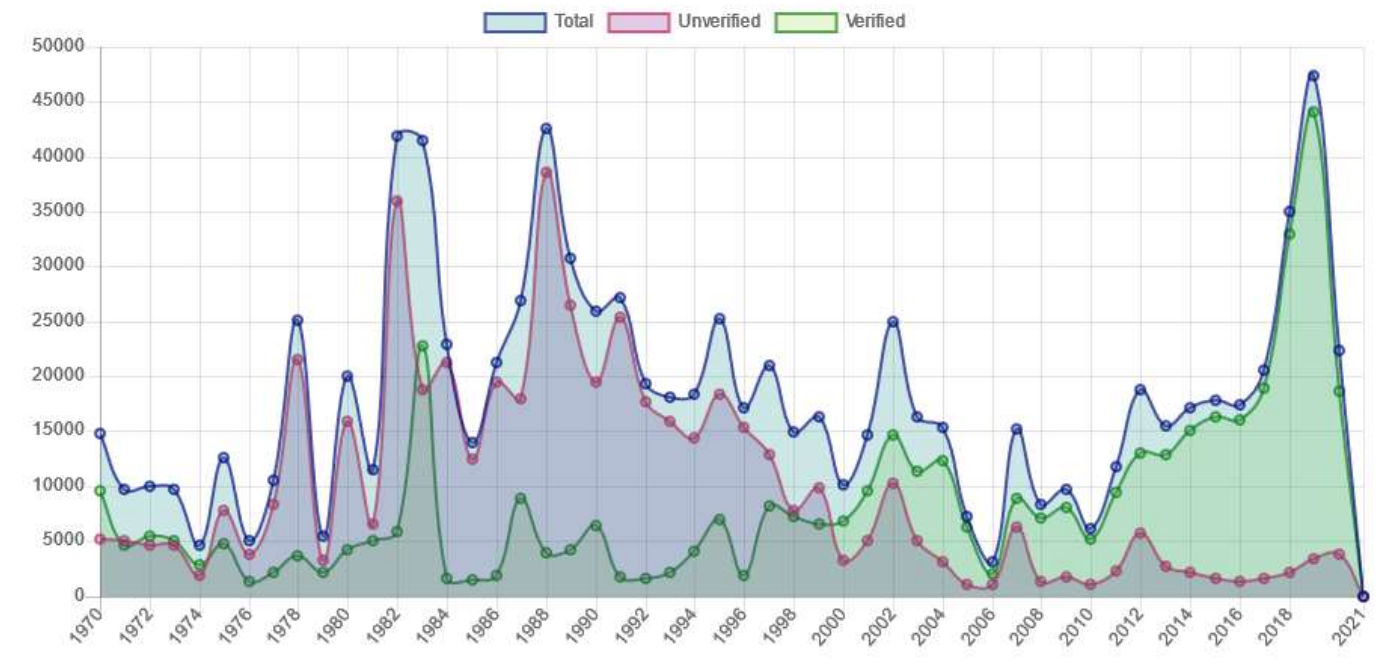


Figure 10: Verification status of vascular plant records for the BIS area between 1970 and May 2021.

Birds Records from 1970 to Present

Total, unverified and verified records by year from 1970 to present year.

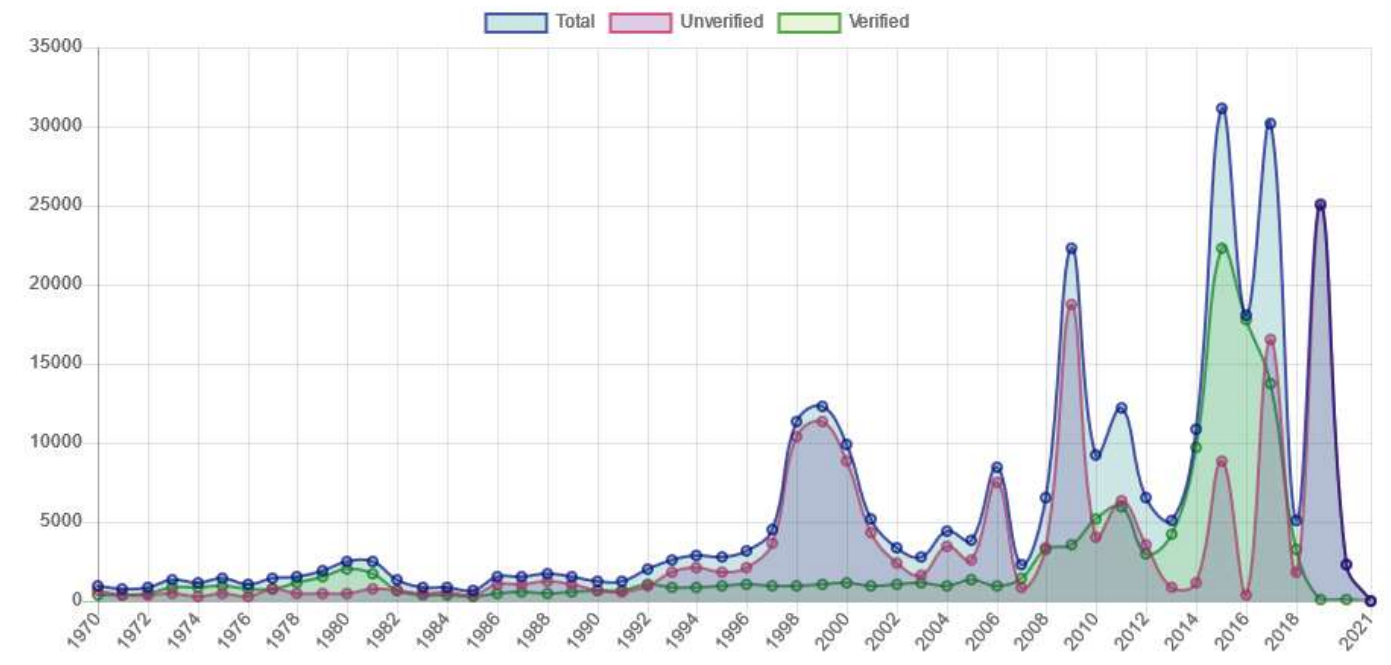


Figure 11: Verification status of bird records for the BIS area between 1970 and May 2021.

Equally Figure 12 (below) highlights how much BIS depends on Local Recorders and why it is important that BIS maintains a supportive relationship with County Recorders. (See the [BIS website](#) for a list of County Recorders.) Nearly two-thirds of the records imported in 2020-21 were sourced from Recorders. NRW are the next most significant contributor of records to BIS. BIS continues to receive an increasing number of records via online submissions and the [LERC Wales app](#), but the proportion of records submitted this way is still relatively small. BIS—along with the other LERCs in Wales—continues to work with other schemes and societies to improve data exchange agreements and data flow. Most of the data received from schemes and societies is downloaded via the National Biological Network's [NBN Atlas](#).

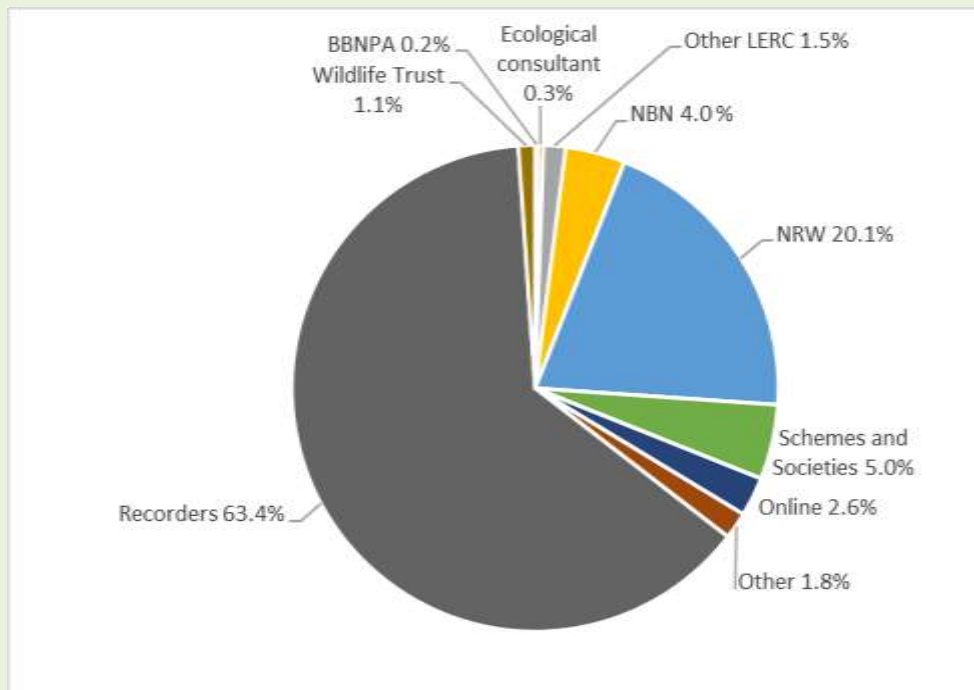


Figure 12: Percentage of records imported by BIS in 2020-21 from various sources.

National Biodiversity Network (NBN) Atlas

In 2020-21 BIS provided 783,349 records to NBN. 442,115 of these records were NRW records and 16,452 INNS (invasive non-native species) records were provided at full resolution (considered public data). 324,692 records were provided at a reduced resolution of 10km square under a CC-BY-NC (creative commons with attribution non-commercial) licence and therefore cannot be used for commercial purposes. 126 NBN Atlas searches were conducted containing BIS records and the total number of records accessed via NBN was 3,362,182. BIS updates the main NBN datasets annually and the INNS (invasive non-native species) datasets every 6 months.

Partnership Services and Data Usage

Access to BIS data and the shared LERC database (via Aderyn) is the primary reason leading most partners to establish a formal agreement with BIS. Table 3 below lists the services provided to these funding partners. As noted earlier in this report, BIS also delivers project-specific work, advice, maps, data analysis and input to committees and working groups.

Table 3: BIS and LERC Wales services utilised by partner organisations.

Organisation	Services
Brecon Beacons National Park	Aderyn planning reports Direct access to Priority species in BIS database Aderyn partner access Biodiversity enquiries Data analysis
Dwr Cymru Welsh Water	Aderyn partner access
Natural Resources Wales	Direct access to LERC Wales shared species database Aderyn planning reports Biodiversity enquiries Aderyn partner access
Network Rail	Aderyn partner access
Powys County Council	Aderyn for Planning and Highways Summary priority species Alert layer Local sites GIS layer Aderyn planning reports
South and North Trunk Road Agency	Alert layer for all Priority, SOCC, Locally important species within 1km of Trunk roads Local sites GIS layer Aderyn partner access
Welsh Government	Direct access LERC Wales merged database Aderyn partner access

Many of our partners use the planning list tools that BIS makes available each week for Powys County Council and Brecon Beacons National Park Authority planning applications. BIS also processes data enquiries for commercial clients throughout the year. Table 4 below compares the number of planning applications and commercial enquiries completed by BIS for the last 3 years.

Table 4: BIS and LERC Wales services utilised by partner organisations.

	2018-19	2019-20	2020-21
BBNP Planning applications	599	658	634
PCC Planning applications	1044	1849	2427
Commercial enquiries	157	159	158

Communication, Recording Events and Public Engagement

BIS continues to promote recording by maintaining a presence on social media platforms and through other mechanisms. Activity on social media has improved over the last year on the [Facebook page](#) (from 27 to 425 followers) and [Twitter](#) (from 256 to 454 followers). Ben has also added Instagram (138 followers) and posts recordings from videos on Youtube (75 subscribers). Ben has distributed 13 BIS bulletins to 189 subscribers via Mailchimp along with two BIS newsletters in 2020-21. The latter were also distributed on social media.



BIS Training and Events

Ben has been very busy over lockdown and post-lockdown, working with the rest of the BIS Team to deliver trainings online and in-person. Ben organised and delivered 11 wildlife awareness events all held via Zoom (Table 5). All but two were uploaded to the BIS Youtube channel as part of the BBNP/Clif Bar funded project. These online events allowed for much larger audiences, but obviously lacked the social interaction element because of Covid-19 restrictions. Of particular note, Farmland Birds partnered with Big Farmland Bird Count to promote this year's Farmland Bird Count. It is hoped that this will lead to data sharing of survey results in future years. Thank you to all the training experts who participated in these online events, giving their time and being patient despite technical difficulties.

Alongside with training events, Ben launched the BIS 20 Recording Challenges to promote recording, celebrate 20 years of BIS and link practical recording activities with recent Zoom trainings. In 2020-21, there were two of these challenges. Record a Tree ran January-February 2021 to stimulate use of winter tree identification skills and resulted in 22 bookings, 9 people recording and 192 new records. Record a Bird ran from March through April 2021 with the same number of bookings and participants, resulting in 487 new records.

Table 5: Online events and attendance for the period April 2020-April 2021.

Date	Zoom Event	Bookings	Attended*	You Tube views**
30 Mar 2021	Camera traps advanced	159	89	102
24 Mar 2021	Adder Awareness	155	104	No recording
20 Mar 2021	Bumblebees	173	86	133
16 Mar 2021	Camera Traps beginners	177	100	199
03 Mar 2021	Iconic Wildlife of BBNP	110	71	44
02 Feb 2021	Farmland Birds	94	Not noted	141
21 Jan 2021	Garden Birds	77	59	173
05 Dec 2020	Winter Trees	Not available	Approx. 29	No recording
03 Oct 2020	Leaf miners	Not available	Approx. 20	244 views
12 Sep 2020	Plant galls	Not available	Approx. 30	150 views
09 July 2020	Wildlife Recording	Not available	Approx. 20	Recording superseded by more recent event

* Maximum audience. ** This does not mean they actually watched it.

During periods of reprieve between lockdowns, Ben did offer four recording days in 2020-21 (Table 6). While there were a limited number of participants, the four events resulted in 846 new records.

Table 6: BIS recording days, number of records and attendance for the period April 2020-April 2021.

Date	Location	Attendees	Records	Species
26 Aug 2020	Capel Gwynfe VC44 BBNP	1	121	93
08 Sep 2020	Glawcoed VC42 BBNP	6	352	254
17 Sep 2020	Crickadarn VC42	4	138	136
24 Sep 2020	Penrhiw VC42	4	235	198

Projects

Ben also worked closely with Powys and Brecon Beacons Local Nature Partnerships to create and deliver the Watching Nature Recover project. BIS facilitated two Zoom events explaining how to use camera traps, which project participants were then able to borrow afterward. In addition, a Facebook group was set up for the project participants. In addition, Ben collaborated with his counterparts across the other Welsh LERCs to organise the Wales Garden Bioblitz and Big Wales Nature Quiz as part of Wales Nature Week which is coordinated by Wales Biodiversity Partnership. Ben worked alongside his colleagues to help generate ideas and discussion leading to the events offered during Nature Week.

