



WWBIC Bulletin No. 29

June 2018

Welcome to the 29th WWBIC Bulletin. Thank goodness for the May sunshine after what seemed to be a long, grey winter. It's great weather to be out in recording wildlife, there's plenty to see. This edition includes some of the regions highlights over the last few months.



© Kate Smith

Large white (*Pieris brassicae*) emerging from chrysalis

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And more . . .

Bees and Bilberry in Pembrokeshire



© Liam Olds *Andrena lapponica*

On the sunny May Bank holiday weekend, myself and Liam Olds (an entomologist working on coal spoils and for Buglife) set out to Rosebush to search for bees, just as we did last May Bank Holiday. This time we were also accompanied by George Ryley, a very keen undergraduate student from Aberystwyth. Last year we had set out to find the Bilberry bumblebee, *Bombus monticola* and this year Liam was spurring us on to look for the Bilberry mining bee, *Andrena lapponica* which has never before been recorded in Pembrokeshire. Within minutes of scouring the beautiful bilberry stands at Rosebush quarry, Liam netted a small *Andrena* which sure enough turned out to be *Andrena lapponica* – a first for the County bee list! We were delighted to have found it so quickly although after another 2 hours of searching we were unable to find *B. monticola* in the same location.

After a well-earned pub lunch at Tafarn Sinc we headed over to Foel Drygarn, a site recommended to us by County Plant recorder Stephen Evans as being particularly rich in bilberry. Again, Liam was the one to find *Andrena lapponica* as we headed towards the summit. We also found several species of bee nesting in the sunny open bank at the bottom of the footpath, including *Andrena cineraria* and its cuckoo bee *Nomada lathburiana* – only second record for the County.



© Liam Olds Clare Flynn & George Ryley hunting for bees

Not having found *Bombus monticola* on the Bank holiday, I used the bilberry maps sent to me by Stephen Evans to pinpoint a site for a search the following week and set out to explore the hills just to the west of Mynachlog-ddu. I spotted several common bumblebee queens including *Bombus pratorum*, *Bombus lucorum* agg. and *Bombus pascuorum* feeding on the plentiful bilberry. It wasn't until I was ready to turn back for home that I spotted a stunning *Bombus monticola* queen – only second county record and a new site for Pembrokeshire. I managed to net her to double check the ID and took a quick snapshot before releasing her back to her bilberry foraging. I was delighted!



© Liam Olds *Bombus monticola*

Both *Andrena lapponica* and *Bombus monticola* are relatively scarce UK species and it has been exciting to add them to the species list for the County over the 2017 and 2018 May Bank holidays. Liam and I are already planning what we might look for next year! I must say a huge thank you to Stephen Evans for providing the information and mapping (BSBI Pembrokeshire Database) we needed to pinpoint our search and gain these important records.

Clare Flynn

WWBIC Recorders Forum

The arrival of the 'Beast from the East' meant (after much deliberation and head scratching) that we postponed our Recorders Forum originally planned for 3rd March. Surprisingly, and without too much difficulty I managed to find a new date that all the speakers could make. Inevitably not everyone who signed up for the original date were available to attend and vice versa. In the end, 34 people attended WWBIC's 2018 Recorders Forum at the Welsh Wildlife Centre, Cilgerran on 28th April.

Jane Hodges chaired the event and in Colin's absence I gave the annual WWBIC update. Dr Hefin Jones from Cardiff University then gave an absorbing presentation titled, 'Climate change, species and habitats'. He began with a generic overview focusing on 5 or 6 main global issues and then more specifically looked at issues relating to species and habitats in Wales. Dr Jones presented IPCC predictions like, an average sea level rise of 12cm by 2030 and 50cm by 2100. He followed this with the statistic that 50% of humanity inhabits coastal zones and there may be an estimated 150 million environmental refugees this century. Closer to home, the Snowdon Lily (*Lloydia serotina*) may be one of the first plants to be affected in Wales. The arrival dates of spring migrants such as the House martin (*Delichon urbicum*) and Sedge warbler (*Acrocephalus schoenobaenus*) will be impacted and food webs are likely to be adversely affected. Dr Jones was delighted to see two of his former students in the audience. During the open floor/discussion period before lunch, Sam Langdon gave a short summary about her project 'Adders are Amazing', and afterwards recorders provided anecdotal evidence of climate change impacts on the species they regularly record.

After a delicious lunch supplied by the Glasshouse Cafe team, we resumed with a talk from Isabel Macho about the Carmarthenshire Bogs Project. As part of the project partnership, Carmarthenshire County Council worked closely with Swansea University who used radiocarbon dating to age peat core samples to 12,000 years ago. Cores revealed heather fragments, charcoal deposits and pollen. Isabel showed artist impressions that revealed how the bog is likely to have developed and how the landscape looked and changed through the ages. Recent management of bogs in Carmarthenshire funded by the project include cutting fire breaks and blocking ditches.

Richard Lucas, Aberystwyth University and Clive Hurford, NRW then spoke about the Living Wales Project. Richard talked about the ability to classify the Welsh landscape using various sources of spatial information, combining 50 or 60 layers, with the resolution so fine that different habitats and landscapes can be picked out. Clive highlighted some of the uses of a tool of this capacity, invasive species could be picked out as well as flower rich grassland. Richard and Clive would like recorders to test the tool to determine whether these classifications are accurate.

Towards the end of the day Jane Hodges introduced herself and Bob Haycock to talk about the surveillance of chough populations in the Pembrokeshire Coast National Park. Jane began by describing the Chough, some behaviours of the species and its associated habitats. Jane summarised the history of chough recording in the National Park and informed us of the current surveillance and monitoring strategies of Chough populations in Pembrokeshire. Bob briefly spoke about the collection, management and storage of data which they have used to monitor Chough population trends over the years. Jane provided a summary and closed what had been an interesting and varied day. We'd like to thank everyone who supported the event, the speakers and staff at Cilgerran.



Interesting records

© Emily Shaw



During my first visit to Marloes Mere in April, I was lucky enough to spot my first sighting of a hoopoe (*Upupa epops*) foraging along the path; I went back the following day to see if it was still around and was able to capture this photo.

<http://pembsbirds.blogspot.co.uk/2018/04/the-recent-marloes-hoopoe-sighting.html>

The WWBIC team spent an enjoyable afternoon in late April visiting the green heron (*Butorides virescens*) in Llanmill, a spectacular first for Pembrokeshire!

A special thanks to Simon Hart and his family for being so accommodating.

Emily Shaw



© Colin Russell

WWBIC Training

We are grateful, once again this year, for Wales Biodiversity Partnership funding which enables us to arrange free training events in our region



© Kate Smith

Nine people attended a free WWBIC Woodland Birdsong Identification training led by Neil Matthew in the beautiful Cwm Rhaeadr community woodland near Cilycwm, Carmarthenshire. More than 20 species were recorded during a 3 hour circular walk of the woods. There was plenty of bird song on this sunny May morning. Wood warblers were heard regularly and mistle thrush (or was it a blackbird?!). A cuckoo was heard in the distance (my first of the year) and later we heard and saw crossbill and redpoll.

A Slugs & Snails ID course led by Imogen Cavadino, took place at the Harlow Room, Welsh Wildlife Centre in Cilgerran. The day began with a fascinating introduction into the taxonomy and classification of Gastropods, a highly diverse class that is largely under-recorded in Britain. Following this, we ventured out into the woodlands to collect specimens to study and identify. With Imogen's knowledge and ID guides, we managed to correctly identify 9 species including the worm slug (*Boettgerilla pallens*), the smooth glass snail (*Aegopinella nitidula*) and the Dusky arion (*Arion subfuscus*).



© Emily Shaw

Ceredigion Bryophytes

An ambitious attempt to map the bryophytes in the county has started. Although there is a modern flora for Mid-west Wales (the Mosses and Liverworts of Mid-west Wales, Jeffrey Bates, 2015), it only covers the northern half of Ceredigion and quite patchily at that. The current recording scheme will aim to collect data from all 529 tetrads in the county. Tetrad bashing as it is popularly called can be quite tedious in some parts of Britain but not in our beautiful landscape and there are treasures to be found everywhere, albeit small ones. The task is being made much easier thanks to Arthur Chater and his superb Flora (sadly out of print). Not only did Arthur also have to visit all of the county but he remembers where to park, where the best areas for mosses are likely to be and the best routes to walk to them. All of this expert knowledge is being of immense help and it is doubtful the project would have got off the ground without it.

The history of recording in the vice-county of Cardiganshire, whose border differs little from the modern county, is quite extensive with over 50,000 records but that is set to double over the next few years. For the most part, existing surveys have tended to focus on visits to the more obvious hot-spots such as Cwm Llyfnant, Cwm Einion, Cwm Clettwr, Cwm Rheidol, Cwmystwyth, the two main bogs at Fochno and Caron, much of the Afon Teifi and the upper slopes of Pumlumon and with less complete coverage of many of the SSSI's. Some of the coastline has been well worked too but there are large parts of the county with few or no records at all and this project is going to fill in the gaps as well as revisiting as many of the known areas as time permits.

All of the Wildlife Trust reserves are being visited with Emily Foot, the reserves officer for Ceredigion and some of these are particularly rich in bryophytes. They are very varied too and have yielded some nice finds including one new to the county (*Bryum tenuisetum*).



© Tom Ottley

The attractive *Bazzania trilobata*, common in several valleys. Photo taken in Cwm Rheidol.



© Tom Ottley

An uncommon liverwort, *Gymnomitrium crenulatum* found in a very few spots but doing well on Pumlumon. The individual shoots are about 0.3 mm wide and stiff, like wire; the tiny leaves are just visible in the photo and are closely appressed to the stems to retain moisture.

In fact quite a few bryophytes completely new for the county have been discovered which was surprising but one of the benefits of methodically recording in this way. All critical species have to be checked microscopically but that need not take long and allows the observer to see the detailed structure, often extremely interesting in its own right, that would otherwise be missed.

At a time when much of the wildlife in the country seems to be under threat, it is heartening to be able to report that the bryophytes of Ceredigion are doing well and there are around 600 species still to be found here.

So the recording continues apace. At the time of writing there are still 200 tetrads with few or no records. Hopefully by the next report that will have shrunk somewhat.

Tom Ottley

VC 46 Bryophyte Recorder

WWBIC May Recording Day

In terms of weather our return visit to Penrallt near Letterston was the extreme opposite . . . we had sunshine and lots of it! The day commenced by going through the 4 moth traps Robin had set the previous evening. The catch wasn't as large or varied as last year (in July) but attractive species such as Emperor Moth (*Saturnia pavonia*) and Puss Moth (*Cerura vinula*) were caught. Several Common cockchafer (*Melolontha melolontha*) were also lured to the traps and as one flew off it was grabbed and tackled by a grey wagtail that was nesting nearby, a hearty feast and a tricky prey! While most people had heads down looking at the moths Bob noticed a goshawk flying overhead. Afterwards, we explored this 22 acre small holding bordered by the western Cleddau. Around 40 bird species were recorded and there was a diverse flora. A slender ground hopper was caught during sweep netting. Our thanks to the landowners for welcoming us back to Penrallt a second time.



© Kate Smith
Checking the moth traps



© Colin Russell
Grey Wagtail wrestling a Common cockchafer

Aderyn Recorders Module

Over the past few months the Aderyn system has undergone further development one of which has been the Recorders Module. This has been designed to aid VC recorders search LERC Wales data for their vice-county and taxon group. As well as the usual search features available to our partners, an "Advanced" tab offers the chance to search by date range, verification level, taxon occurrence key and LERC. There is also a tool to remove duplicates from the search.

WWBIC invites VC recorders from West Wales to register on the system then get in touch with us. We can then enter the VC and taxon group and we will be very interested to get your feedback.

The screenshot shows the Aderyn Recorder Data Search web interface. The top navigation bar includes Home, Public, Planning, Planning Viewer, LERC, Trust, Recorder, Tools, Search History, Admin, and Logout Colin. The main content area is titled "Aderyn :: Recorder Data Search" and includes a welcome message and a "Selected Area" section. The "Selected Area" section contains a message: "Details of the search area you have selected will be shown here. No area currently selected." Below this is a "Recorder Specific Options" section with a message: "As a recorder you have access to the following Vice Counties and Unitary Authorities (geolocks). Select the area you want to search within. The first area you have access to is automatically selected. You must also select at least one taxon group or super group from those you have access to." The interface also features a "User Information" sidebar, a "Search Area" section with date and date range filters, and a "Recorder" dropdown menu.

Bee Wild West Wales and Bumblebee recording

Bee Wild West Wales (BWWW) – a Bumblebee Conservation Trust (BBCT) project has been running very successfully across Pembrokeshire, Ceredigion and Carmarthenshire for almost 2 years now. I have been involved with the project for some time but this May I was appointed as Outreach Officer to deliver the remaining objectives during 2018. This is something I am extremely excited about!

There are 2 strands to BWWW – ‘Buzzing Communities’ and ‘Skills for Bees’. The Buzzing Communities element aims to enhance public understanding of bumblebees and their habitats through public outreach events, enhancement of public greenspaces and development of educational resources. It is the second element which I’d like to highlight here – aptly named ‘Skills for Bees’!

Biological recording underpins this part of the project and aims to improve the capacity and skills for recording bumblebees across West Wales, including the setting up of new Beewalk transects as part of BBCT’s UK Bumblebee monitoring scheme. BeeWalk is the Trust’s national recording scheme to monitor the abundance of bumblebees across the UK. It involves volunteer ‘BeeWalkers’ walking the same fixed route (transect) once a month between March and October (www.beewalk.org.uk).



© Clare Flynn Bombus terrestris



© Clare Flynn

During the last 2 years of the project Sinead Lynch, who was then BBCT Conservation Officer for Wales has delivered several beginner and intermediate bumblebee ID training days alongside guided walks, talks and site surveys. I will be carrying on this work throughout the summer of 2018 and am keen to engage with would-be Bumblebee recorders across the 3 counties. We will be running an intermediate ID training day and several rare bee surveys which will be open to volunteers who wish to come along – these can be a great way to practise your ID skills – please don’t be put off by the fact we are looking for rare bees – it’s inevitably the more common ones we usually see! We will also be running Beewalk Networking and

Information events for anyone who may like to start doing their own Beewalk transect. If you would like to volunteer for the BBCT in other capacities, there will also be opportunities for more general volunteer training and information gathering. We have ID resources, activity sheets and spotter cards for bumblebees such as the Shril Carder bee and the Bilberry bumblebee available too.

If you’d like to come out with me this summer and help with surveys, find out about Beewalk or would just like to know more, please contact me at clare.flynn@bumbleconservation.org.

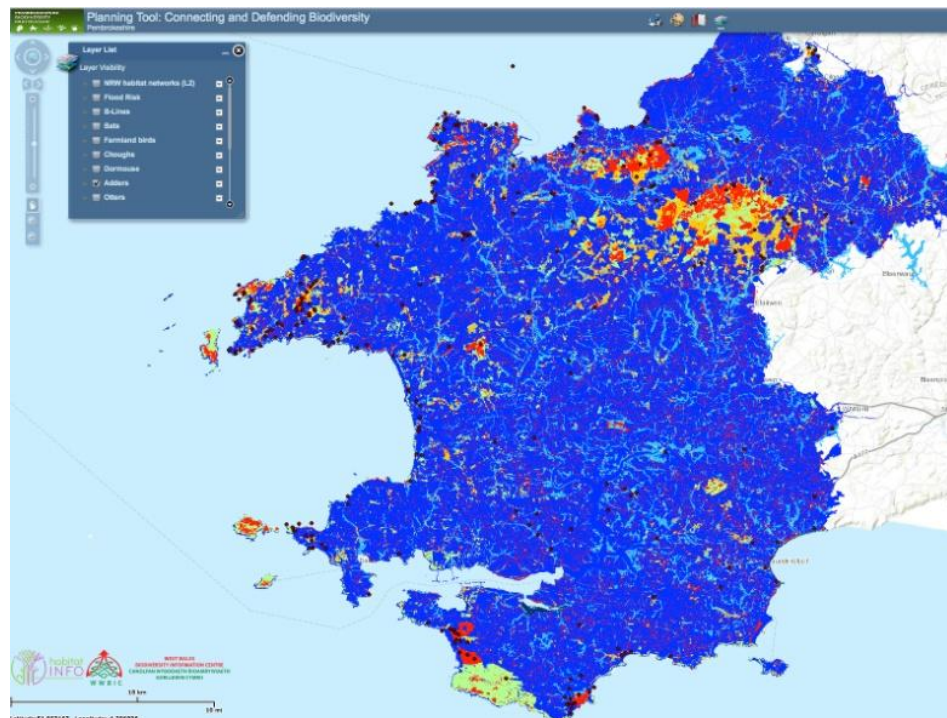
You can also find out more about the project here <https://www.bumblebeeconservation.org/bee-wild-west-wales/> and follow us on Twitter @buzzingwales.

Clare Flynn

Using GIS to find and protect adders

Over the past few years, Sam Langdon and Mark Barber of the South and West Wales Amphibian and Reptile Group (SWWARG) have been busy in Pembrokeshire trying to find one of our elusive local species – the adder. Whilst our Common European Adder (*Vipera berus*) is considered to be widespread, both in the UK and across their global range, they are thought to be in decline.

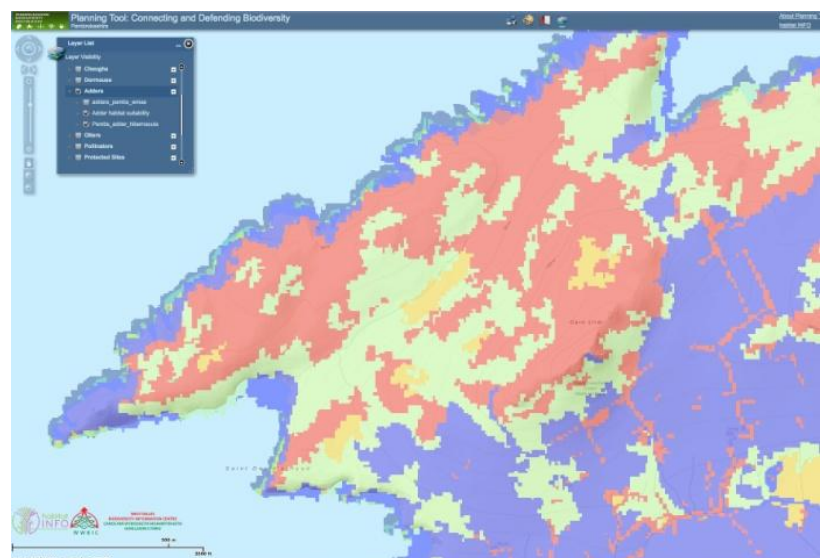
But even though we know about the kind of habitats they are likely to be found occupying, they can be very hard to detect, due to their cryptic nature. They are very under-recorded and we need to know more about their current distribution, so that we can hopefully slow down or stop the current decline towards UK extinction.



Map of Pembrokeshire showing adder habitat suitability and adder records. Blue represents low suitability.

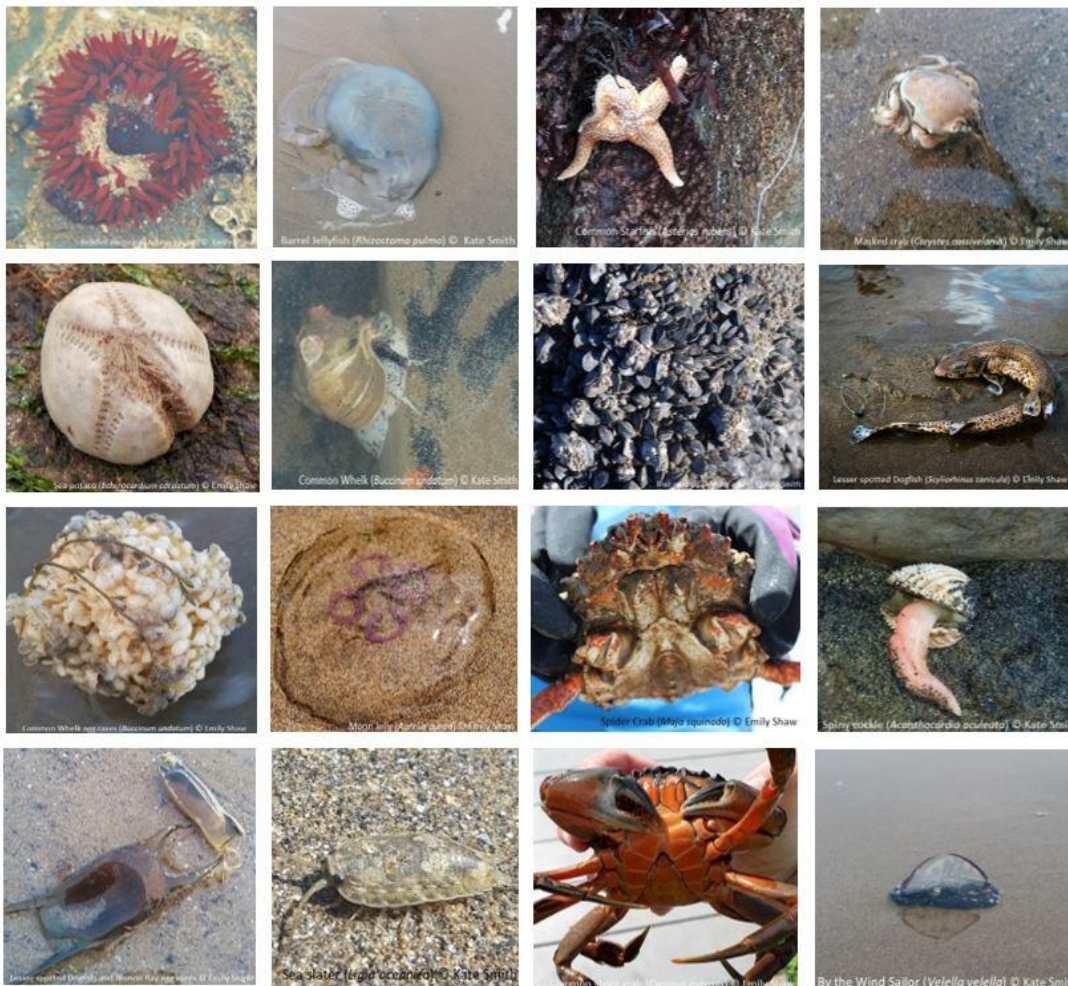
But how do we do this?! How do we even know where to start? Sam and Mark teamed up with WWBIC, Ant Rogers and Phil Barlow and Geraint Jones of Pembrokeshire Coast National Park to explore how GIS technologies can be used to predict adder presence, as well as locating their hibernation areas. Locating such areas is of key importance to their conservation, as well-meaning management works such as burning and scrub control can adversely affect these areas, killing adders whilst they hibernate or leaving them vulnerable to predation upon emergence due to lack of cover.

Together, the team developed a new 'adder' layer for Pembrokeshire within the Land Use Planning Tool, developed by the Pembrokeshire Nature Partnership. To do this, Phase 1 habitat data was coded, scoring 1-10 for adder habitat suitability. This simple technique has enabled the team to rapidly visualise where adders may be occupying in Pembrokeshire, with some interpretation based on current records and common sense of course! It has already been used to assess adder habitat connectivity in the St Davids peninsula and has so much potential for further development.



Map showing St David's peninsula with adder habitat suitability layer switched on

Have you seen any of these shoreline species?



**Please submit your records to WWBIC
online recording**

<http://record.wwbic.org.uk/>

Wildlife Data in the Fire and Rescue Service

Following the attendance of a representative from the Mid and West Wales Fire and Rescue Service at a Pembrokeshire Nature Partnership event last year, the idea was raised that the spatial data we use to identify important wildlife locations in Pembrokeshire could be made available to their operational teams through their in-cab mapping systems. Ant Rogers Biodiversity Officer with Pembrokeshire Nature Partnership has co-ordinated the collation of data with help from amongst others, Mary Chadwick of NRW and Dr. Sam Langdon of ARG UK. They brought together data of known bat roosts, adder hibernacula, skylark nesting areas and other species that might be affected by building or wild fires. These data were formatted by WWBIC who sent it to Mathew Dyer (MWWFRS) who has incorporated it into their data system. It is now available to the firefighters on a call and, where higher priorities do not take precedence, the knowledge that wildlife could be affected might influence how they deal with a fire.

For the present it is only locations in Pembrokeshire which are being trialled. This use of LERC data is a first for Wales and as far as we know a first in the UK.

LERCWales Recording App

A recording App for the Welsh LERCs is soon to be launched. Based on the iRecord App, it has been developed by their team and Dave Slade of SEWBReC who has managed the project on our behalf. The LERCWales version will be bilingual and will be linked to our online recording sites, three of which are based on the Indicia toolkit as used by iRecord. A first beta version of the App has been trialled for the past few months with a second beta version to include the Welsh to be released any day. When the last wrinkles have been smoothed out we will launch so please watch this space.

Job Opportunity

We are looking to recruit a GIS officer to join the WWBIC team. For more information please go to our website: <https://www.wwbic.org.uk/uncategorized/bia-post/>

Thanks to everyone who has contributed to this newsletter. If you have any feedback or comments please email kate@westwalesbiodiversity.org.uk



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