



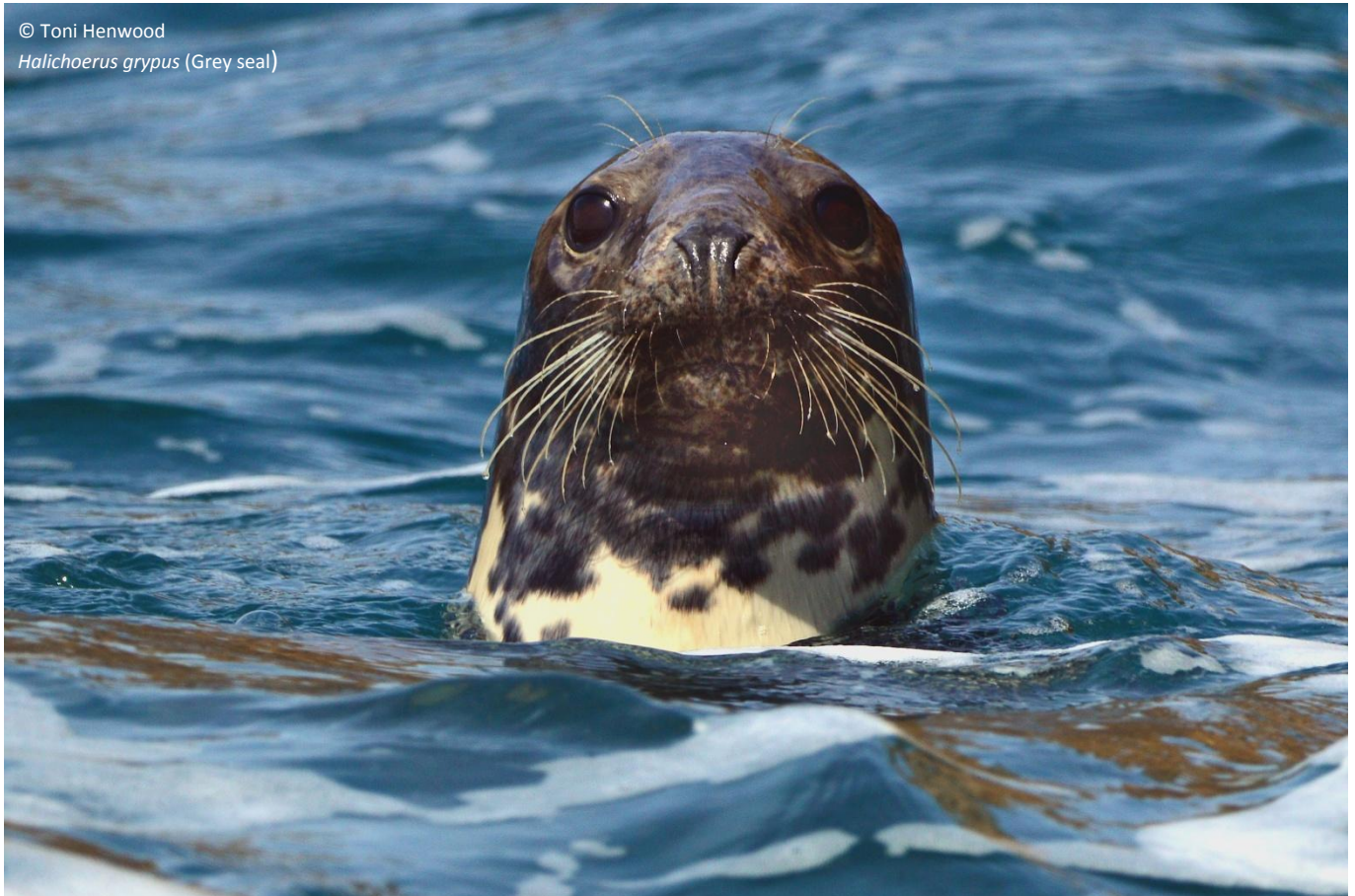
WWBIC Bulletin No. 32

Nov 2019

Welcome to the 32nd WWBIC Bulletin. This edition is later than usual and the festive season is almost upon us. A great opportunity to get outdoors with friends and family to enjoy wildlife and inspire people to record! There are some great articles in this edition to further inspire you. Happy reading.

© Toni Henwood

Halichoerus grypus (Grey seal)



In this edition:

- Mosses and Liverworts
- Eastern Cleddau Estuary Barbastelle Project
- Moth tales from Ceredigion
- WWBIC News
- PFRN
- Establishing a wildlife pond system near Carmarthen
- Waxcap training with Plantlife

And more . . .

Mosses and Liverworts (in Ceredigion)

It's been another good year recording bryophytes in the county. Several new species have been added and some old records chased up and refound. A lot of time was spent in Cwm Rheidol where there is an extraordinary assemblage of rarities but which are often time-consuming to get to as some spots can only be reached safely by specific routes down the steep sides of the valley, dodging the sheer cliffs for obvious reasons. A delicate liverwort, *Hygrobiella laxifolia* was found to be quite common on rocks actually on the viewing path around the waterfalls. Also within reach of this path is a good colony of the uncommon Atlantic liverwort *Harpalejeunea molleri* (found by Chris Forster-Brown) and small patches of the tiny liverwort *Aphanolejeunea microscopica* amongst numerous common to rather scarce species. Further downstream, but much harder to reach, are large patches of the impressive moss *Bartramia halleriana* and a moss only found in one other spot in Wales, *Trichostomum hibernicum*, a plant with an Irish and Scottish distribution as the name suggests. *Leicolea heterocolpos* was refound on rocks by the river where Sam Bosanquet found it in 2005, again tricky to reach, partly because it's well above head height. There are still a few species that have been recorded in the past from the gorge which will be searched for in order to get accurate locations – something that is generally missing with older records and not entirely explained by the absence of GPS. There's little doubt that there are more things yet to find in this impressive landscape feature.

The coastal cliffs are another happy hunting ground but this time even harder to work thoroughly. Nevertheless they have produced some excellent finds, one of the latest being a small liverwort, *Cephaloziella calyculata*, its furthest north location in Britain where it is classified as nationally rare, being a strictly Oceanic species with most records coming from Cornwall and the Glamorganshire coast. It has been good to get some help, particularly in the southern part of the county, from Matt Sutton who has been able to fit in a few moss trips between his paid survey work. Matt has a good understanding of bryophyte identification and has been known to stay up to midnight pondering over tricky liverworts with the microscope and it has been a pleasure to help him.



© Tom Ottley

This bizarre object is an underground tuber attached to the rhizoids of *Bryum riparium*, a scarce moss of wet rocks near upland streams. Uniquely amongst British mosses, the tuber is flat, just one cell thick and looks like a piece of red confetti under the microscope. It is only 0.1 mm across. Tubers are a form of asexual reproduction in many mosses and most are spherical.

The upland parts of the county have not been neglected. The forestry tracks of the Tywi Forest have interesting sandy rides where the uncommon liverwort, *Fossombronia incurva*, is actually quite frequent in several places. Another recent addition to the county flora was the distinctly montane species of moss, *Amphidium lapponicum*, which was found on rocks that had been looked at on at least 3 previous occasions over the years by expert bryologists. It's not even difficult to identify but is hard to spot as it has a superficial resemblance to several much commoner species which grow in abundance there so could easily have been passed by.

A couple of recording days organised by Kate proved useful. Melindwr near Eglwys Fach was very productive with 113 species recorded on the day, an unusually high total for one visit. There would be at least another 20 – 30 present. It demonstrates the value of habitat diversity. Some small ponds that had mostly dried up yielded several mosses not found elsewhere on the site. Had the ponds been 'better looked after' they would have been less rich. Often a little well-judged neglect provides a better range of habitats than a carefully tended landscape. Denmark Farm was also interesting not least because it is all fairly young following its conversion from a farm 30 or so years ago. The lake was the best spot with shallow margins providing a suitable spot for several uncommon mosses to thrive. At least one, *Oxyrrhynchium speciosum*, had not previously been recorded in Cardiganshire

although this example was not completely typical in detail, possibly recovering from last year's drought? Another species of *Oxyrrhynchium*, *O. schleicheri*, was found on the bank of an old stream at the north end of the site and that too had not been previously spotted in the county.

Another bryologist, who was born in Aberystwyth, Sue Rubinstein, detected *Tortula atrovirens* on one of her visits back home. This was on Constitution Hill, astonishing because the hill has been visited by numerous expert bryologists over the years and yet here is this charming little moss growing prolifically in a few spots including right by the edge of a well-used path and never spotted before, its nearest station being near Aberdovey. I was able to show Arthur Chater this one.

The tetrad-recording project continues, although at a slower pace. There are now 74 tetrads left with very few or no records. They look rather dull on the map though being mostly farmland with a few footpaths but sometimes surprises await those with patience and a keen eye.

Tom Ottley
VC46 bryophyte recorder

WWBIC Training

Invertebrate Identification Training in Penparcau – or “How to get more people to make more records of difficult groups!”

As part of the Nature of our Village project in Penparcau we like to challenge our members to take their identification skills out of their comfort zone. Invertebrate records are hard to come by and of course most records will be for those species that are easier to recognise for the wider public, the butterflies and dragonflies. Getting more obscure species both located and recorded is something that we were determined to work on. We were delighted when WWBIC agreed to fund 4 whole days of invertebrate identification training for the recording season of 2019, to allow us to employ Liam Olds and Phil Ward to come to our village, present their pinned specimens and take us out in the field to learn to identify a previously unknown plethora of species. Each day focused on a different “hard to do” group, from Solitary Bees to Late Season Flies, but also allowed us to find and identify every invertebrate that couldn't get away fast enough! The success of the intensive training can be seen from the comments of some of the members who attended:



©Chloe Griffiths

“..a brilliant day with Phil's great knowledge and catching enthusiasm. What a privilege! We hope now with our new knowledge to be able to recognise and contribute some more insect records.”

“It was so nice to see Phil again, another person whose enthusiasm is contagious and what beauty in all those bugs we caught and identified. I rather liked the weevils!”

“Thanks for organising today, it was brilliant, and thank Phil again for me, he certainly taught me a great deal.”

Apart from the satisfying species list with 164 new records, many rarities were found, and much enthusiasm for invertebrate recording was created, a legacy that I hope will continue to pay dividends for biological recording in years to come.

Chloe Griffiths
The Nature of our Village Project
Penparcau

Eastern Cleddau Estuary Barbastelle Project

At present, Pembrokeshire boasts the only Welsh Site of Special Scientific Interest for the barbastelle bat, at Pengelli Forest and Pant-teg Wood SSSI. Since the discovery of barbastelles in the north of the county, though, members of the Pembrokeshire Bat Group have been picking them up in various woodlands along the Eastern Cleddau estuary. Canaston and Minwear Woods seemed to be particular hotspots for the species.

Around 15 years ago, the Bat Group put a lot of effort into trying to locate roosts, but this involved large numbers of volunteers with mostly frequency division detectors and synchronised recorders! They identified the direction of travel of the bats and a very approximate location of where roosting sites might be.

From the winter of 2018-19, to supplement the loan of 14 Anabat Expresses/Swifts from Bat Group members and local consultants, the Mammal Specialist at Natural Resources Wales (NRW) Sam Dyer, loaned us 6 more Expresses along with lock-boxes, python locks, batteries and SD cards. Detectors were set up at various locations within an area roughly 10km by 3km. This comprised privately owned land and the Welsh Government Woodland Estate. Two more Anabats and lock-boxes were loaned by NRW forestry staff.

Being short of some basic kit, we applied to BCT's Partner Group Support Fund for a grant of £400 to provide a set of four lock-boxes, python locks, batteries and cards and were delighted to be given the money. Every 10 days or so, Bat Group volunteers would change over the batteries and cards and move the detectors to different sites, and Margaret Clarke undertook all the analysis of bat calls. A core group of half a dozen volunteers did the bulk of the work, with a few extras helping out when needed – even the East Yorkshire Bat Group lent a hand!

After 7 months of recording (2800 'detector nights') from well over 100 sites, there were enough data for a radio-tracking project, funded by NRW. Geoff Billington undertook the work, with help from Sam and various Bat Group volunteers, during the last two weeks of July. Bats were caught by putting up mist nets at the locations most likely to trap them, mostly at narrow points along footpaths where a bend might catch them unawares! We still await the final report, but we know that 13 different roost trees have already been found and a minimum of 51 barbastelles from three maternity sub-colonies have been counted out of them.

The area is definitely of great significance and we now have the evidence we need to help landowners safeguard their bats.

Mary Chadwick

It must be wall to wall larvae in there!

We like to keep an eye on our dragonfly population in Penparcau, as part of the Nature of our Village project. One species that seems to have done particularly well this season is the Common Darter, (*Sympetrum striolatum*). It has taken up residence at one small garden pond, the size of a bath tub, and this year we were able to observe an incredible 29 larvae climb various plants and emerge from their exuviae as adults, prompting one volunteer to note "It must be wall to wall larvae in there!". We also kept a note of which plants the larvae were using as their emergence sites, and the clear winner was the Creeping Soft-grass (*Holcus mollis*), which is abundant around the pond. A rather less orthodox choice was some Great Willowherb (*Epilobium hirsutum*) which had managed to push a stem up in the middle of the water, and even more surprising was a couple of larvae choosing to emerge on nettle at the edge of the pond!

Very satisfyingly, we were also able to observe two Common Darter adults in a mating flight, who then flew down to the pond and began to oviposit, thus ensuring (we hope) that the whole cycle can begin again. It's amazing what one tiny garden pond can produce, and I urge everyone who can to dig one!

Chloe Griffiths

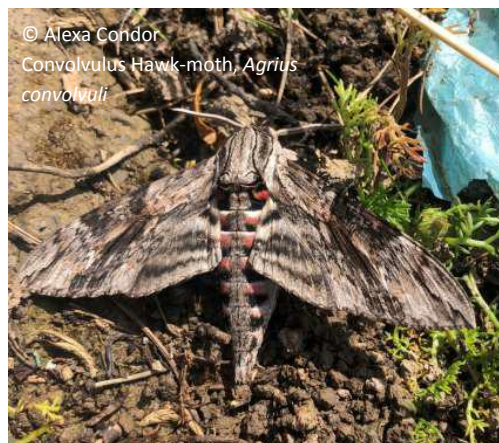


Moth tales from Ceredigion

Migrant moths in Ceredigion 2019

My fascination with moths started 10 years ago, a year in which I attended two courses run by David Brown. The second of these was in Dorset, not far from Swanage, an area which regularly sees the majority of the moths which migrate here from Europe, and sometimes further afield. One night we caught a Clifden Nonpareil, *Catocala fraxini*, a large greyish moth with an amazing blue band running across the dark hindwing, a truly magnificent moth. It is reported that this species has recently colonised parts of the UK and may be spreading northwards. Imagine my surprise and delight when Carolyn and Evan Lynn spotted one on their house wall, about two miles from my home in Talybont. This was the first record for Ceredigion and only the fourth for Wales.

A few days later another rare moth was discovered at rest on a fence post on the dunes at Ynyslas, by Phil Evans, a warden at the reserve. This was a Death's-head Hawk-moth, *Acherontia atropos*, so called because of the skull-like marking on the thorax. This was the 13th record for Ceredigion, and the first living specimen since 1983. A dead specimen was recorded near Clarach in 2015. This very large moth has a habit, when disturbed, of raising its head and front legs in a threat posture and making a squeaking sound. We just had to test this reaction and I can confirm that this one made quite a loud squeak. They are known to enter beehives to feed on the honey. The specimen recorded in 2015 was found beneath a beehive, presumably evicted by the bees.



Another, slightly more frequent visitor to our county, has been recorded three times this year. The Convolvulus Hawk-moth, *Agrius convolvuli*, was reported by visitors to Aberporth and New Quay, plus one other record from Phil Dennis at Cross Inn. Before this year there were 20 county records for this species, most recently 5 records in 2016, one of which was from Phil Dennis at Cross Inn.

In July, another first for the county when an unknown recorder showed a photograph of a moth spotted on the Hafod estate, to a friend of a friend in a pub in Aberystwyth. The Crimson Speckled, *Utetheisa pulchella*, has become a fairly regular visitor to the south coast of England, but rarely gets as far north as Ceredigion. We still do not know the identity of the recorder, so please get in touch if you know who it was.

Phil Dennis at Cross Inn also recorded a Scarce Bordered Straw, *Helicoverpa armigera*, recently. This is only the 23rd record for Ceredigion, 10 of which were from Ynys-hir in September 2006. Also this month a Pearly Underwing, *Peridroma saucia*, was caught at Llanarth by Pete Skinner. This is the 70th record for Ceredigion, with 28 of them since 2000, of which 9 were also in 2006.

This year has seen good numbers of the regular migrants to the county: Silver Y, Dark Sword-grass, and Hummingbird Hawk-moth. The large numbers of Painted Lady butterflies that have been around this year have also been attracted to our moth traps, roosting patiently until we released them in the morning.

Tony Allenby
VC46 Macro-moth recorder

Mothing Highlights Talybont, Ceredigion

This year has been very memorable for our family with our mothing experiences. We live in the foothills near Talybont and have been operating several moth traps in our garden and surrounding woodlands for some years as well contributing to the Garden Moth Scheme. This entails setting a weekly garden moth trap from March to November and together with over 300 other moth recorders we build up a seasonal picture of the moths of the UK which gives comparable results to the Rothamstead Moth Survey.

We try with varying success to involve other members of our extended family in this pursuit as we believe that investing in the future generation is the only way nature has a chance of surviving in this materialistic age. Our granddaughter, living near Knighton is the most receptive, if only because last year's school project in Presteigne was on mini-beasts. This encouraged her to look around for many insects ranging from ladybirds to spiders and moths. Since their locality supports a good crop of Ragwort she has been fascinated by the Cinnabar Moth and subsequently by its numerous caterpillars reducing the Ragwort to ragged stems. Also, being five years old, with her lower height perspective she is able to pick out things we might miss such as a Scarlet Tiger on the pavement when coming home from school.

Her pièce de résistance came on finding a *Convolvulus Hawk Moth* outside her tent when on holiday at Pembrey campsite - the first for Carmarthenshire this year.



© O. Francis
Convolvulus Hawk-moth, Agrius convolvuli

The other branch of the family, living in Scotland, continually send us photographs of moths, larvae and other insects seen on their holidays which they assume we can identify. The latter, I must admit is sometimes only achieved by consultation with more knowledgeable friends and iRecord.

For us, our most memorable moment came when we were meant to be going off for an extended family reunion. Our garden moth trap gave reasonable results, given the night's weather conditions, but then on going out to do final checks on the car before departing, I noticed a large moth high up on our gable end wall close to the site of the moth trap. I had to use the maximum camera zoom of X 60 to have any hope of identifying it. Looking at the markings and its size from the photograph and comparing them to the various ID books, we came to the unlikely conclusion that it was one of the large Underwings - either a Red Underwing or a Blue Underwing, otherwise known as the Clifden Nonpareil which, according to the books, was way off course. Positive proof could only be had by gently lifting the upper wing and checking whether it was red or blue.



© Ina Smith
Clifden Nonpareil, Catocala fraxini

Since time was limited before we had to leave, my picture was emailed to our county moth recorder who only lives a few miles away. Within minutes he hotfooted up the valley to see it for himself. In record time he was up a ladder and successfully netted it. With baited breath he lifted the upper wing of this obliging moth to show a blue under wing and thus was able to confirm this extraordinary record. He then took it back home to photograph and we set off. Later that day we understood that the internet, twitter etc had been fairly buzzing with the information that this Clifden Nonpareil had ventured from either the continent or southern England to land on our wall in Mid Wales - a new county record for Ceredigion, and only the fourth in Wales since records began. We understand that it was later released to continue on its journey of discovery. Luckily for us it was not a bird or else our valley would have been swarming with twitchers!

We live in hope of seeing it more often as it is said to be having a gradual northward spread and as its larval food supply is aspen and poplars which grow in abundance around our property.

Evan Lynn

WWBIC Small Grants

We are pleased to announce that we are making some funds available to volunteer groups and individuals.

We will look for activities that support biological recording in the West Wales region and the submission of records to the LERCs in Wales. Examples of what can be applied for might be; field guides, equipment, help with travel to a site, help with training fees. In order that we can distribute the funds as widely as possible we envisage most requests to be less than £100 however we may consider a larger contribution to the activity. There is no form to complete, just contact us by email at info@wwbic.org.uk and we will consider your request.

This is an opportunity to remind you that WWBIC has a small amount of equipment available for loan, of these the trail camera has proven most popular. We also have two Longworth Traps and an Echo Test Bat Detector suitable for Android devices.

CIEEM Award

In January, a previous member of staff, Georgina Young was shortlisted for CIEEM's Most Promising Professional award. Georgina worked with us during 2016/17 as a Biodiversity Information Assistant before joining London based consultants, WSP and impressed us with her work. We are pleased to say that Georgina won this national award and we pass on our congratulations to her and wish her all the best for the future.

Staff Changes

Since our last newsletter we have again undergone some staff changes. Sophie Pope completed her contract as Biodiversity information Assistant before going off do some travelling and was replaced by Carys Williams. Carys previously worked in various roles with the Wildfowl and Wetlands Trust, Llanelli. Shortly after, Toni Henwood left her post as GIS Officer to join the Sands of Life dune restoration project. We are pleased to welcome Yusef Samari who has joined us as Data Enquiries Officer. Yusef has previously worked in research projects with the Centre for Ecology and Hydrology (CEH) and Edinburgh City Council.

LERC Data meeting the evidence needs in Wales

LERC Wales has been working to provide a suite of data to the Welsh Government's Environment and Rural Affairs Monitoring and Modelling Programme (ERAMMP). The aim of the programme is, to quote their website,

"to deliver a programme of monitoring and modelling which collects data across the Welsh landscape and link(s) any changes to their impacts on a wide range of benefits including their economic consequences."

It goes onto say that this will be a key source of data for future State of Natural Resources Reports (SoNaRR). LERC Wales data (your records in many instances) has undergone a thorough analysis looking into the contribution it can make to the evidence needs of this programme. The analysis was conducted by CEH and its findings published in a lengthy report which can be found from this link.

<https://erammp.wales/sites/default/files/ERAMMP%20Rpt%2022%20LERCS%20v1.0.pdf>

The findings of the CEH work are positive in the contribution LERC data can make and there are two further quotes from the summary I would like to highlight. Paragraph 1.iii,

"that substantial benefits in increased species coverage and precision of modelled trends are likely to arise by including additional LERC data alongside surveillance scheme data already used for trends modelling."

And paragraph 1.vi,

"A key benefit of working more closely with LERC is their ability to identify recording gaps and to mobilise new recording effort among the interested public as well as scholarly recording societies."

And scholarly recorders, I would like to add!

Recorder 6 Licence

Over the past year, ALERC, the NBN and the Recorder 6 (R6) reseller team have been working on a strategy to support R6 following the withdrawal by JNCC. The outcome of their work is a new licence scheme for the software. R6 is the database used by WWBIC and many other LERCs in the UK to store and manage all biological records. If you are an individual recorder or group using R6 you can find out how you can obtain a licence here.

<https://nbn.org.uk/tools-and-resources/recorder6/>

Colin Russell

Pembrokeshire Fungus Recording Network (PFRN)

UK Fungus Day - 5th October 2019

The PFRN team held its 2019 UK Fungus Day event at Orielton Field Study Centre by kind invitation of Sarah Nicholls, Project Manager. The weather, although mostly wet, did little to dampen enthusiasm and the event was well supported with 22 participants who enjoyed a walk around the Centre woodland.

Fungi were mostly found on stacked dead wood: the Centre ensures plenty of dead wood piles are retained to support invertebrate populations providing plenty of opportunities for mycologists to rummage for fungus fruitbodies. A notable find (confirmed after the event) was *Pluteus chrysophaeus* (yellow shield mushroom) - a distinctive yellow fruitbody found on a well rotted tree trunk that was tucked away in a dark corner. This species has just one local record - it was found during the British Mycological Society foray at Stackpole in 2007. Another yellow species found during the excursion was *Clavulinopsis corniculata* (meadow coral) - a coral fungus which is more usually associated with grassland.

The group returned to the Centre where FSC staff laid on hot drinks and biscuits. The group took stock of the morning's collections with time to view exhibits, posters and books. Mike Crutchley manned two digital microscopes whilst group members gave short presentations on grassland fungi (DJH), lichens and thoughts on recording (Trevor Theobald) and bracket fungi (Mike Karpaty). Nigel Stringer rounded off the session with an entertaining chat about rusts peppered with anecdotes in his inimitable style.



Establishing a wildlife pond system near Carmarthen

The continued demise of natural environments is a worry for anyone interested in preserving wildlife. To respond to that threat we considered how to develop our land to reclaim some of the lost habitats of Wales. We realise that this is only a tiny contribution, but every journey starts with a first step.

In the Secretariat of the Convention publication on Biological Diversity 2010 (Global Biodiversity Outlook 3, Available at: cbd.int/gbo3) there is a summary of the challenges we face, some of which are especially relevant to Wales.

1. Habitat loss and degradation, such as the loss of blanket bog.
2. Fragmentation and isolation of habitats for many reasons, such as inappropriate development.
3. Human population increases.
4. Climate change.
5. Excessive nutrient input and other forms of pollution; Over-exploitation and unsustainable use, including agricultural pressures.

We purchased a 3Ha field that has not seen fertilisers for around 30 years. It has a very boggy area in the centre so we decided to excavate a series of ponds there suitable for plants and animals that enjoy water. We eventually ended up with three ponds terraced and linked together as the site has a 1.8 m drop from top to bottom. Each pond is about 1.5 m deep in the centre and has gently sloping sides. The ponds are roughly 15 - 20 m across.



Construction took place from October 24th through October 30th during a period of heavy rain; the rain was both a curse and a blessing because although rain hindered construction, it allowed the ponds to fill rapidly without the need to use other water sources.

Since we have a very heavy layer of clay the ponds did not need lining and seem to retain water quite well. We shall see how they stand up to a dry spell when the summer arrives.

Our philosophy was to construct a system that is as natural as possible, no foreign (to Wales) species will be introduced. As the pond system matures we are hopeful that water birds and insects will find a home there. We will survey the colonisation of our project area over the coming years and hope to develop a better understanding of indigenous Welsh wildlife, both plant and animal.

This project is our very small contribution to rolling back the green desert that has taken over much of Wales. It is important we do not sacrifice too much of our natural habitat to human progress. Natural environments evolve over long periods of time and are very hard to replace once destroyed.



John and Caroline Starzewski

WWBIC Recording Days

Everyone was feeling the heat at WWBIC's Ceredigion recording day at Melindwr in July. 92 species of macro moth were trapped at this picturesque 30 acre small holding. *Martania taeniata* (Barred carpet) was the most notable species (a possible first record for the county). The micro-moth *Pempelia palumbella* was another nice find in the traps and only the third record for the county. An incredible 113 species of bryophytes were recorded. Arthur Chater identified *Lasius fuliginosus* (Black tree ants) travelling up and down a tree trunk near to the farm yard.

Also in July we timed our second Ceredigion recording day to coincide with a bioblitz at Denmark Farm. Over 600 species were recorded during the day by a mix of experts and amateurs. The bryophyte, *Oxyrrhynchium speciosus*, was recorded for the first time and the lichen *Arthopyrenia cinereo pruinosus* was recorded on Geulder-rose, the first phorophyte record for VC46 and perhaps Britain.



Our first Pembrokeshire recording day of the year was in June at Bluestone, a site of approximately 500 acres. 115 moth species were identified from traps on the day. Two nationally scarce species, *Argolamprotes micelle* and *Eudonia delunella* were recorded. Notable plant species recorded included *Dryopteris aemula* (Hay-scented Buckler-fern) and *Orobanche rapum-genistae* (Greater Broomrape), a GB red list species.

Our second recording day in the county was at Constantinople, 8 acres of meadow, newly planted woodland and mature woodland. Moth traps that were checked the previous day due to weather conditions caught the micro-moth *Phylloporia bistrigella*, although a widespread species, it is only the seventh Pembrokeshire record. *Moehringia trinervia* (Three-nerved Sandwort) and *Sanicula europaea* (Sanicle) are two of 132 plant species recorded at the site.



The second Carmarthenshire recording day in August was a wet one. Graigina, a charming and secluded small holding of around 1ha is situated in the north of the county. In a wet meadow alongside the Afon Duar plant species including *Filipendula ulmaria* (Meadowsweet), *Stachys palustris* (Marsh woundwort) and *Valeriana officinalis* (Common valerian) were recorded. Five butterfly species including *Aglais io* (Peacock) and *Maniola jurtina* (Meadow brown) were observed between showers.

A heart-felt thanks to all our hosts and to everyone who attended a WWBIC recording day this year.

Kate Smith

Waxcap Training with Plantlife

Five intrepid fungi enthusiasts attended a training course in Pembrokeshire this autumn under the guidance and tuition of local expert, David Harries. The course was spread over 3 days, allowing participants the opportunity to visit several sites across the County and to gain experience in field identification of these fascinating species. Day 1 was held at Stackpole in the morning where David gave an excellent introduction to grassland fungi and their habitats. WWBIC also attended, delivering a presentation on biological recording and an introduction to the LERC Wales recording app. In the afternoon, Paul Culyer from NRW, also one of our participants led a foray out onto the Stackpole estate where several species were recorded including *Hygrocybe insipida* (Spangle waxcap) and a Big Blue Pinkgill which, pending DNA confirmation, David suspects to be *Entoloma madidum*, part of the *Entoloma bloxamii* complex – listed of Conservation concern on the Wales Section 7 list.

Day 2 coincided with Halloween and we undertook a windy, damp road trip of Lydstep Point and a trail of Pembrokeshire churchyards – a great day, fantastically organised by David and very much enjoyed by all. A variety of species were identified in the field using the British Mycological Waxcap key including *Hygrocybe aurantiosplendens*, a bright orange Waxcap spotted in the grounds of Bethesda Chapel near Tenby.

Our final day was hosted by David and his wife Holly at their beautiful Somerton Farm. Participants were introduced to the molecular aspects of taxonomy and identification with a tour of David's DNA 'lab' and also an introduction to microscope examination of specimens. Nia Siggins, a participant and also manager of the People's Orchard project in St. Dogmaels commented, 'Despite being an absolute beginner prior to the course, I now felt confident to undertake a basic Waxcap survey. David took us through everything in a logical way but the clear guidance has given me the confidence to use the keys and have a go'.

All of our participants will now be supported to carry on recording fungi and identify new grassland fungi sites over the coming years. We will also be running more courses across Wales next year. This is critical to our understanding of these species and their habitat requirements and ultimately their conservation in Wales. This training was facilitated by Plantlife as part of the Welsh Government funded partnership project, Magnificent Meadows Cymru.

David has since been in contact to say that DNA sequencing has confirmed the species as Entoloma madidum.



© Clare Flynn
Hygrocybe acutoconica (persistent waxcap)



© Clare Flynn
Churchyard fungi hunting on Halloween

Clare Flynn
Outreach Project Officer, Magnificent Meadows Wales: Gweirgloddiau Gwych Cymru

Flowering plants for beginners

This summer we funded two training days with the BSBI on flowering plants for beginners, held at Denmark Farm. Barbara Brown, Wales BSBI Officer, led what proved to be popular and informative days.

© WWBIC
Barbara Brown with course participants



The aim was to improve knowledge of plants enough to sort them into families – the idea being that this is a good starting point for beginners and also makes identification easier. The morning part of the session was spent on flower and plant structures, as well as examining some samples Barbara had collected earlier that day. After lunch attendees headed out into the picturesque pastures on site to examine some flowering plants in situ.

We hope that attendees will now feel more confident about recording wildflowers, which are after all vital to the health of Welsh wildlife.

Thank you to Barbara Brown at the BSBI and Denmark Farm for providing two successful training events.

Sophie Pope

And finally. . .

WWBIC Recorders Forum will be held on Saturday 29th February 2020 at the Welsh Wildlife Centre, Cilgerran.

Plans are underway for an **All Wales recorders event in Spring 2020**, expect to hear more in the new year.

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



@wwbic1



West Wales Biodiversity Information Centre