Gwent-Glamorgan Recorders' Newsletter

Issue 15
Autumn 2016

SEWBReC
SOUTH EAST WALES BIODIVERSITY RECORDS CENTRE
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Contents

Front page photo: Sulphur Tufts © Amy Hicks

Welcome to the fifteenth issue of the Gwent-Glamorgan Recorders' Newsletter. It's definitely starting to feel like Autumn. The lime trees outside the SEWBReC office are looking stunning in their new colours, fungi are popping up everywhere (including in pots on my desk), and records of winter visitors are starting to arrive. Now that the clocks have gone back and the evenings are drawing in, what better time to put the kettle on and sit down to read what the recorders of Gwent and Glamorgan have been getting up to.

It's another big issue, and we've got a great selection of articles for you. There's news on interesting sightings of secretive winter birds (p6); rare bees (p4); stunning plants (p10); lost species of fungi (p12); and much more besides. Gail Austen of the Durrell Institute of Conservation and Ecology explains the findings of a fascinating new piece of research with implications for biological recording (p5), whilst Jim Davies and Rob Thomas talk us through a newly developed system for scoring changes in landscape and habitat quality. There's lots of news from exciting projects too, including the incredible progress of the Mary Gillham Archive Project (p16), and of course a chance to catch up on what else we've been up to at SEWBReC.

A huge thank you to everyone who has contributed to what I think is a fantastic issue. Enjoy!

Amy Hicks, SEWBReC (Editor)



New Species for Wales and the UK

Amy Hicks, Biodiversity Information Officer, SEWBReC

2016 has seen many records submitted to SEWBReC of species which are new to the LERC Wales Database. There have even been two species confirmed to be new to the UK, including a bearded vulture (yes, vulture), *Gypaetus barbatus,* filmed by Dale Kedward whilst walking his dog near the Severn Crossing in Monmouthsire! You can read more about this, and see the footage, at: http://www.southwalesargus.co.uk/news/14498921.Rare_Bearded_vulture_spotted_in_Gwent/.

Excepting vultures, the majority of the confirmed new species have been invertebrates, highlights of which include:

Adelphocoris quadripunctatus **(photo top left)** This true bug, found and photographed by Chris Lawrence near Llantrisant, was the first of its kind to be recorded in Britain! Subsequently, Liam Olds of Coal Spoil Biodiversity Initiative has identified specimens of *A. quadripunctatus* within his 2015 coal tip invertebrate samples, and the species has now also been recorded at several other locations across south Wales.

Zyginella pulchra **(photo top right)** This leafhopper was spotted and photographed in Cathays Cemetery, Cardiff by SEWBReC's very own volunteer, Annie Irving, and later identified as a new species for Wales by national expert, Alan Stewart. You can read more on Annie's blog at: https://earthstarblog.wordpress.com/2016/09/27/first-recorded-sighting-in-wales/

Gelis melanocephalus **(photo bottom left)** Also new to Wales, this wingless ichneumon was found in Hailey Park, Cardiff (and photographed) by Stewart Bevan. The identification was then confirmed by Gavin Broad of the Natural History Museum.

Isochnus sequensi **(photo bottom right)** The leaf mines of this weevil were spotted by George Tordoff in Bute Park, Cardiff. In order to identify them, he then reared the tiny larvae inside to adults (as photographed), and had the species confirmed as yet another new one for Wales by expert, Adrian Fowles. You can read George's blog post about the species here: http://eastglamwildlife.blogspot.co.uk/2016/09/a-weevil-new-for-wales.html

New species to the area are always exciting for us at SEWBReC, but they also raise some important questions. Is climate change, or are other factors, affecting the distribution of these species? Have they been here longer than we thought and simply gone unnoticed? And why do new insect species seem to turn up so often in Cardiff?! We may currently only be able to guess, but certainly without biological recording, questions such as these could rarely be answered, if indeed they could even be asked to begin with. After all, without the efforts of recorders in south east Wales we would have no idea the above species were even here at all!

The Shrill Carder Bee is spreading its wings and increasing its range across Newport

Elinor Meloy

The Shrill Carder Bee, *Bombus sylvarum,* until recently was only found in five locations in England and Wales, with the Gwent Levels being one of the last remaining population strongholds.

B. sylvarum is one of the UK's rarest bumblebees and a UK BAP species due to its exponential decline in the last century. It wasn't until 2008 that *B. sylvarum* was first identified at the Gwent levels, and as a result there has been a major change in monitoring and management in this area.

These changes in management efforts, and increase in monitoring efforts, are starting to pay off with this summer alone seeing *B. sylvarum* recorded for the first time at a site in Ebbw Vale [see article below!] and now at the Moorings in Newport. This is excellent news for this species and shows that the increase in management, conservation, and monitoring efforts are working.

The future for the Shrill is starting to look brighter; with the constant narrative of Britain's pollinators in trouble it is brilliant to see that one of the UK's most threatened bumblebee's future prospects are not as bleak as we once thought.

Photo top: B. sylvarum Queen foraging on Meadow Vetchling, *Lathyrus pratensis / Photo bottom: B. sylvarum male foraging on Common Fleabane, Pulicaria dysenterica © Elinor Meloy*

Shrill Carder Thrill: Rare Bee Ventures North

Liz Winstanley, Living Valleys Assistant Reserves Officer , Gwent Wildlife Trust

As a result of the Bumblebee Conservation Trust's Bumblebee ID Course, bee awareness among Gwent Wildlife Trust staff at Ebbw Vale has reached new heights. One of the outcomes from this is that we have set up Bee Walks at several of our nature reserves, including our new nature reserve Central Valley.

Central Valley, once the site of the world famous Ebbw Vale Steelworks is now rich with wildlife offering a range of habitats including; neutral grassland, ponds reed beds, scrubby banks and young trees.

Brimming with enthusiasm, new knowledge and assisted by our French trainee Candice and our trainee ecologist Phoebe, we ventured into this wildlife haven on our first Bee Walk. Our knowledge was soon tested as we spotted a most unusual bee that looked very much like a Shrill Carder. Although we were sure it was one, we doubted ourselves due to the Shrill Carder's small range - which does not reach as far north as Ebbw vale, and as we did not manage to capture it on camera we were left with no record.

Bee expert, Sinead Lynch of the Bumblebee Conservation Trust joined us later in the summer and although she was sensibly sceptical about our suspected sighting of the Shrill Carder Bee (due to the fact that they are very rare and there are only a few populations throughout Britain—the nearest being the Gwent levels some 20 miles away), she was still very optimistic that there was a small chance the record was correct.

To her great delight we spotted and photographed a Shrill Carder Bee. This could be a one off record (two if you include the queen seen earlier in the season) but we will definitely be stepping up our search for the Shrill Carder Bee next year, and hope to be sending news about the most northerly population of Shrill Carders in 2017!

If anyone is interested in getting involved in GWT bee surveys next season, please contact our Ebbw Vale Office on 01495307525 or email Liz on ewinstanley@gwentwildlife.org.

Photo: Becky uses a field guide © SEWBReC

Species identification by experts and non-experts: comparing images from field guides

Gail Austen, Durrell Institute of Conservation and Ecology (DICE), University of Kent

Unlike many wildlife enthusiasts, my passion for local flora and fauna began in my thirties. I was in the third year of a degree. Even at that age I was amazed at the abilities of the army of local recorders. Imagine just looking at a small insect and being able to name it! As a novice, even though I *recognised* something I couldn't necessarily name the species. Reference to an identification guide was helpful, but I wasn't necessarily confident in identifying and naming the unknown specimen from the photos available.

A similar process of matching unknowns with photos happens daily, but with people and security situations such at airports. Studies of face recognition have found that despite being good at recognising familiar faces, we are terrible at recognising unfamiliar faces. Within person variation can be so great that strangers do not link an individual's different photo ids, (e.g. passport, driving licence and work pass) as the same person. Interestingly, when these abilities were tested in an airport, the experience and training of the passport officers had no influence on their accuracy in identifying people from their photo id. This is not a unique situation, and is exemplified by the recent rise of 'super recognisers', so could this be the same in the process of species identification?

Using images from two identification guides, with different illustrators, we tested this theory using a visual matching task. Two bumblebees were presented side by side, on a white background from a dorsal view. Participants were asked if they believed them to be the same or different species; 'don't know' was also an option so people were not forced to guess. The main findings were that overall accuracy in identifying whether pairs were the same or different species was between 54% and 57% for all expertise groups, but that experts were more consistent, and more cautious about committing to an answer if unsure. These were interesting results that fit with similar studies in other disciplines, and show variation between species and inter-observer accuracy. Although an initial study, it would be of great interest to see this tested in other scenarios, for example across different taxa, mimics and with specimen collections.

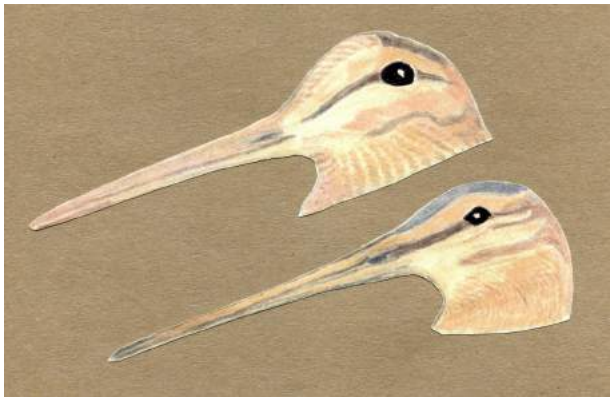
These results may not be a surprise to those involved in recording. I have heard many comments noting that images have limitations, whereas in practice there is much more information to be had by seeing something *in-situ* or examining a specimen. However, with an increase of images being collected by digital means, misidentification errors should be considered when using data to make decisions, such as management plans or policy.

On a final note, while the subject of expertise is a discipline in its own right, it is worth remembering that it changes with new findings and is subject specific. These findings do not detract from the vast knowledge that experts have regarding distributions, interactions and the ecological significance of particular species. As with the examples in face recognition studies, the more we investigate variations on this theme, we may find that the skill is in the image matching ability rather than the subject of the image itself.

The full paper is open access and available at: http://www.nature.com/articles/srep33634.

Woodcock and Snipe in Winter

Colin Titcombe



The birds I refer to above are the Eurasian Woodcock (*Scolopax rusticola*) and the Common Snipe (*Gallinago gallinago*), two British waders which are closely related and similar in being cryptically coloured to blend in with brown-hued vegetation. As in many other resident British birds their numbers are augmented during the autumn and winter by migrants from the colder parts of the continent, so making their populations seem higher than they are.

During this time (referred to here as "the winter") both species inhabit the same sort of terrain as they do during the breeding period but, in addition, they can also be found regularly in perfectly dry habitat, as long as that habitat includes the required "brown-hued vegetation" – typically Bracken (*Pteridium aquilinum*).

One such habitat is to be found, up to the present time at least, on Grey Hill in south-east Gwent (centred at ST/434 936). In 1880 a local man (William Till of Great House Farm, Caerwent) made an entry in his diary for the 4th December of that year. This describes how he and a companion took their guns up onto Grey Hill in order to look for snipe. Obviously they had expected to find Snipe there and indeed, flushed seven or eight on the day.

On the 9th February 1978 I flushed a snipe on Grey Hill myself. My diary for the day records:

"*On a walk over Grey Hill today I flushed a Common Snipe at 11.40am from dry bracken-covered ground. On my way back (at 1.20pm) I flushed a Common Snipe again, possibly the same bird, and from a similarly dry area*"

Recalling previous encounters with Woodcock in this habitat I consulted my diaries again and found that a Woodcock had been flushed from Bracken on the slopes of the Sugarloaf (13th Nov 1983) and "four or five" from the Bracken-covered slope above Canal Cottage near Llanfoist (3rd Mar 2002). I now decided to investigate further.

On the 2nd December 2015 Chris Hatch and I visited Grey Hill specifically to search for Woodcock and Common Snipe. By walking transects through the Bracken-covered areas of the south-facing slope (*see photograph*) we put up a Woodcock and 4 Common Snipe. On this occation the Woodcock was flushed at just one yard distance, suggesting that some birds could well sit tight, unless almost trodden on. This suggests that, potentially, there could be considerably more birds here than our endeavours revealed.

Photo: Sampling Magor Marsh pond © Roger Lindsay

Mollusc Madness: slugs and snails of Gwent Wildlife Trust's Living Landscapes

Imogen Cavadino, The Conservation Volunteers (TCV) Natural Talent Trainee: Non-Marine Molluscs

When we talk about wildlife and biodiversity, it's very easy to think about the attractive species. But what about the less immediately appealing species? Surely they too have value? Over the past 30 years, the slug and snail fauna in Britain & Ireland has seen some major changes. Research for a new FSC guide to the Slugs of Britain and Ireland increased the known slug fauna by about 20% in 2014! Some of these were species thought to have been here a long time and simply overlooked, others are relatively recent introductions that have established themselves in Britain and are becoming more widespread. This is why biological recording is so important – so we can track the changes in the British fauna. Often slugs and snails have a bad reputation, but in reality they are an important part of nature. They play significant roles in food webs, act as detrivores, breaking down unwanted material, and have been shown to play key roles in shaping wild plant communities with their grazing preferences. Many species also act as excellent indicators of habitat quality and suitability. Which is where I come in.

I'm a TCV 'Natural Talent' trainee, one of five trainees based around the UK this year, and the only one in Wales. I'm working with Ben Rowson, senior curator of molluscs at National Museum of Wales in Cardiff. My role is to become an expert in identifying non-marine molluscs: that's slugs, freshwater bivalves, land and freshwater snails. I'm working towards this by studying the molluscs at a selection of Gwent Wildlife Trust sites, with a project in each of GWT's Living Landscape areas: Usk to Wye, Gwent Levels, & Living Valleys.

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‘Living Landscape’: Usk to Wye. Sucking up snails at Pentwyn and Wyeswood

In this area I’m looking at two reserves; Pentwyn Farm and Wyeswood Common. Each site has obviously different flora; Pentwyn Farm consisting of beautiful traditionally managed flower-rich hay meadows, while Wyeswood Common is former modern agricultural land. 40 years of intense agriculture at Wyeswood Common had resulted in little wildlife or plant diversity, which GWT have gradually been reversing since purchasing the site in 2008. This ambitious project to restore the meadows and make them more wildflower rich is a process that could take over 100 years to fully achieve! I was keen to compare the sites with each other so we could see where they are now and what Wyeswood Common could aspire to if Pentwyn proves more diverse with mollusc species as suspected.

To do this I looked at the diversity and abundance of grassland slugs and snails using a suction sampler. This may be the first time it has been used to look exclusively at molluscs. We came up with a survey design of timed samples from each meadow. Sampling took place in early July before the fields were mown, as this could potentially affect our results. Shorter grass means it would be drier, causing slugs and snails to squeeze down into the earth more to avoid drying out, making them harder to suck up. It also meant that snails could possibly be predated by birds more easily. The suction sampler worked amazingly well at sucking up all the tiny snails that would normally take a long time to find searching by hand. It also successfully sucked up slugs, which are generally bigger and stickier than snails. On one of our sampling days we were joined by SEWBREC’s LEMUR+ trainee Laura Parry, who proved a dab hand at wielding the suction sampler.

Now that sampling is complete at these reserves, I’ve been using a microscope to identify the tiny snails we found. One of my favourites so far is the common whorl snail (*Vertigo pygmaea*), a widespread species in grassland that matures at 1.7 – 2.2mm. I’m currently working on the data from these sites, but am already noticing some interesting differences! These are not only between the two sites, but appear to be between different fields as well, possibly reflecting the different types of management (grazing or hay cut) and floral diversity. It’s too early to say whether these results are definitive or significant, but watch this space.

Photo top: Imogen & Laura going through a suction sample. © B Rowson / Photo bottom: Sampling a shaded ditch at Magor. © B Rowson

‘Living Landscape’: Gwent Levels. The molluscs of Magor Marsh & Great Traston Meadows

On the gorgeous Gwent Levels our focus has been more on the aquatic mollusc species: freshwater snails and bivalves. Here I’m looking at the effect of management of the vegetation on the ditch sides on the abundance and presence of mollusc species found within them. In practical terms, this meant taking samples from ditches throughout the sites using a hand net, taking material from a mix of shaded and unshaded ditches. Sampling took place at both sites during May, with a combined total of 58 ditches sampled, as well as 9 full grips (shallow drainage channels in fields). This amount of material should give a really complete species list of freshwater molluscs found at each site and hopefully show some interesting findings.

In mid-July we took on the challenge of sampling the pond at Magor for molluscs. Thanks to the loan of a boat, some makeshift equipment and a sediment core sampler loitering in the museum, we managed to collect some more material to look through. Unfortunately, despite reports of their presence in Magor's pond, we didn't find any evidence of large freshwater mussels. However, we got some interesting results looking sediment cores. These are fascinating as if old shells are present in them, they could show how the species found in Magor's pond may have changed over time. The material from both these sites is taking a while to sort through, but I've already found some interesting species and look forward to sharing the full findings soon!

Photo: Lemon slug at Silent Valley © Imogen Cavadino

'Living Landscape': Living Valleys. Sieving for snails at Silent Valley

At the edge of the Ebbw Valley lies the beautiful Silent Valley reserve, home to the highest Beech woodland in Britain. With the help of keen volunteers, we've sampled three areas of the woodland in this reserve, collecting specimens and bags of leaf litter. These bags are in the process of being sifted, with the species of snail picked out. This means even the tiniest species won't be overlooked. We've already made some exciting discoveries, including finding the elusive Lemon Slug (*Malacolimax tenellus*) [Pictured above]. This mysterious species is restricted to ancient woodlands, appearing only in the autumn and winter to feed on the fruiting bodies of fungi. A distinctive lemon yellow slug species of up to 35-50mm long, with dark brown to violet tentacles. The species can be easy to overlook and is under recorded, with only 37 records of the species in the LERC Wales Database. It's therefore very exciting to have contributed the first record for the Ebbw Valley! Why not head out to your nearest patch of ancient woodland and see if you can find one? The Lemon Slug is recognisable to species from photographs, and we're always happy to confirm slug and snail identifications here at the museum, so please contact me on: Imogen.Cavadino@museumwales.ac.uk if in doubt.

As well as spending lots of time out and about, I've also popped into the SEWBREC offices for a couple of days to shadow LEMUR+ trainee Laura. This was a great opportunity to spend some time working on the Mary Gillham Archive Project, inputting the data for some of her photographic slides and even checking the odd slug and snail identification. Mary's documents and photos really are a fascinating insight to the wildlife of South East Wales and further afield during her lifetime.

The Conservation Volunteers' Natural Talent UK traineeship programme aims to increase expertise across the whole of the UK to protect our less well known species and create awareness of the habitats that support them. The programme is funded by the Esmée Fairbairn Foundation. See http://www.tcv.org.uk/scotland/learning/natural-talent-traineeships for more information.

All the material collected during my three projects will be held at National Museum Cardiff, as a permanent part of the mollusc collection. This is a valuable accessible resource for future research into the wildlife of Gwent. All biological records will be submitted to SEWBREC once my projects are complete, greatly increasing their data on molluscs in the Gwent area. Thank you to Gwent Wildlife Trust for supporting my projects and allowing us to sample their sites.

I look forward to sharing the results with you in the future. In the meantime you can find out what I'm up to via twitter **@I_Cavadino** or **@Natural_Talent** and pick up a few mollusc related facts along the way. For more of the goings on at the National Museum of Wales, try **@CardiffCurator** – especially each **#MolluscMonday**!

Botanical highlights in 2016 in Monmouthshire

Steph Tyler (SJT) and Elsa Wood (EW)

Another field season is almost over – where did the year go?

We have undertaken once or twice weekly walks noting species in poorly covered areas and also monthly walks with the Monmouthshire Botany Group. With all of this effort and some records from other botanists we have entered over 18,500 records this year in monads and tetrads within vice county 35.

New for the vice county was a record by Julian Woodman of Chaffweed *Anagallis minima* from gateways on private land above the Usk Valley near Llanlowell. Another 'new county' record was the hybrid between Pale Toadflax *Linaria repens* and Yellow Toadflax *L. vulgaris*, noted by Heather Colls in August at Rogiet Countryside Park. Also a hybrid between Enchanters' Nightshade and the upland species *Circaea x intermedia* was found by EW and Adrian Wood near Crumlin and also at Cwmcarn which is a new hectad record for that species.

Adder's Tongue fern *Ophioglossum vulgatum*
Photo © Elsa Wood

Then in a barley and adjacent maize field SJT found Lesser Red Knot-grass *Polygonum arenarium*, apparently new for the vice-county but probably overlooked. Maize and barley fields can be rewarding especially for alien grasses. Cockspur *Echinochloa crus-gallii* and Rough Bristle Grass *Setaria verticillata* were both found, the former at several sites and the latter near Talycoed, whilst another alien grass, Water Bent *Polypogon viridis,* is turning up everywhere along roadsides and edges of gardens even in towns. Another grass, Reflexed Saltmarsh grass, *Puccinellia distans* is also turning up along the A48 as a result of all the road salting.

In MOD Caerwent we were delighted to find Green-winged Orchid *Orchis morio* at a new site on the base and literally 100s of Adder's Tongue ferns *Ophioglossum vulgatum* in this grassland.

The first record for *Euphrasia tetraquetra* was found in a limestone quarry near Upper Ochrwyth, its identification confirmed by the national referee.

Stoneworts are under-recorded in the county away from the Levels but *Tolpella glomerata* and *Chara contraria* were found in the shallow pools in Penhow quarry.

A small churchyard at St Davids Church, Penmaen near Oakdale produced abundant Great Burnet *Sanguisorba officinalis* and *Alchemilla xanthochlora*

Photo left page top: Green-veined Orchid © Steph Tyler /
Photo right page top: Dyer's Greenweed © Dick Coates

The sight of great swathes of Cow Wheat *Melampyrum pratense* under oak trees near Penmaen was memorable. Not a rare species but such abundance was remarkable. Oakdale and Penmaen also rewarded us with species-rich damp pastures full of sedges, Sneezewort *Achillea ptarmica*, Saw Wort *Serratula tinctoria,* Meadow Thistles *Cirsium dissectum,* Intermediate Ladies Mantle *Alchemilla xanthochlora,* Ivy-leaved Bellflower *Wahlenbergia hederacea,* Heath Spotted Orchids *Dactylorhiza maculatum* and many other 'goodies'.

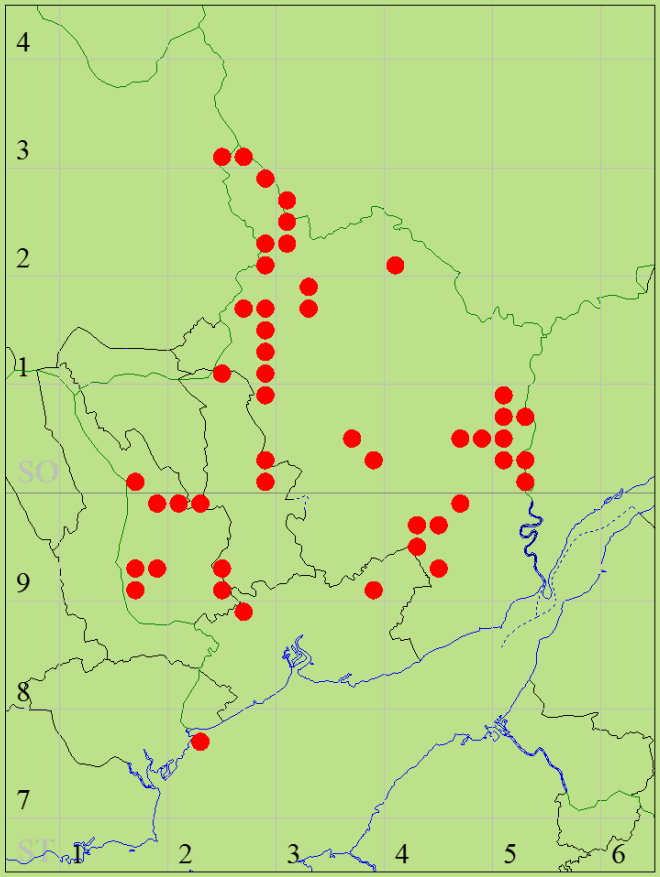
Along Offa's Dyke path going up onto Kings Wood near Monmouth,SJT and Roger Ruston enjoyed the plants in an abandoned sandy field where there were two plants of the Lesser Centaury *Cenaturium pulchellum* among many Common Centaury *C. erythraea* plants and several Yellow-worts *Blackstonia perfoliata*.

It seems that every walk even in the Usk Valley turned up something of note during 2016 even if only a clump of Black Spleenwort *Asplenium adiantum-nigrum* on a roadside bank. In some lovely meadows near Trellech Dick Coates alerted SJT to some Dyer's Greenweed *Genista tinctorial* [pictured above] in 2015 and this year we saw at least six flowering clumps. This is very scarce in eastern Monmouthshire.

Have you seen any harebells this summer and autumn?

Harebells are possibly declining in Wales and we would welcome any records you may have for Monmouthshire vice county 35. Our post 2000 distribution by 2km x 2km squares or tetrads is as shown [to right]. Can you fill in any of the gaps?

Let us know of any sightings please, especially in SO21, 41 and 51. Steph Tyler & Elsa Wood, email: steph_tyler2001@hotmail.com



Harebell *Capanula rotundifolia* post 2000 distribution in Gwent

Photo © Mark Steer

Kew Lost and Found Fungi Update

Mark Steer, Glamorgan Fungus Group

With support from: Brian Douglas, Community Fungus Survey Leader. Lost and Found Fungi Project

Members of Glamorgan Fungus Group have been very active looking for fungi on the Kew Lost and Found Fungi Project Top 100 Target Species List, and two species from the list have been found in the last few months.

The first species, *Puccinia cladii*, a rust fungus on leaves of *Cladium mariscus* (great fen-sedge), was provisionally assessed as extinct in Britain in 2006 due to a lack of modern records (Evans et al., 2006). However, the 2015 Rust Fungus Red Data List (Woods et al., 2015) details a 2004 record for the species by Ray Woods at Crymlyn Bog in Swansea, and a single 2014 find in East Norfolk. As of early 2016 these were the only two records for *P. cladii* in Britain in the last 50 years.

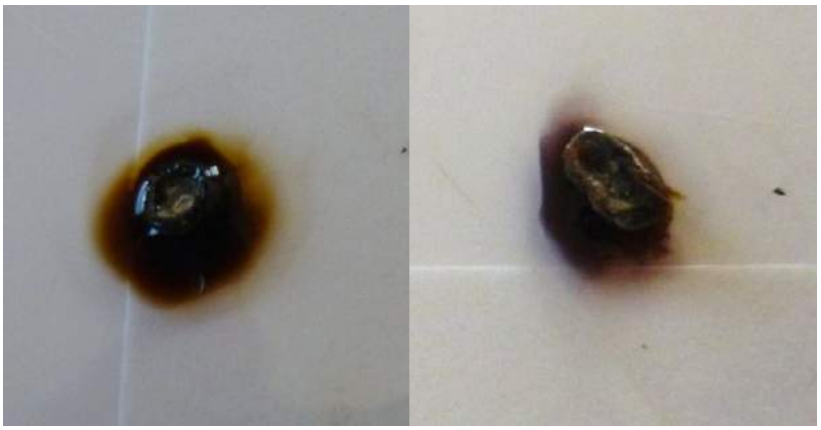
Puccinia cladii* on *Cladium mariscus Photo © Mark Steer

This August we surveyed Crymlyn Bog in order to follow up Ray's record. Brian Douglas (RBG Kew), Jamie Bevan, Sam Bosenquet, Karen Wilkinson (NRW), Ray Woods, and myself spent 5 hours out on the bog (more correctly a fen) looking for this rust. Despite the drizzle and difficult wet terrain, we found the rust on the first clump of sedge examined at each of four distinct locations. This suggest it is probably present as a healthy population on many or most *Cladium* stands throughout the bog, as has been observed in very recent surveys in the Norfolk broads (B. Douglas pers. comm.). Previous searches by myself at Kenfig Pool NNR were unsuccessful.

The second species, *Hypoxylon fuscoides*, a woodwart on *Alnus* (alder), has only been regarded as a distinct species since 2010, before which it was probably confused with the very common *H. fuscum* ("hazel woodwart", although the latter is not host-specific). As would be expected, *H. fuscoides* is very poorly recorded: prior to our Glamorgan find it was known from only two localities in Britain. The two species can be differentiated by testing fruitbodies with potassium hydroxide solution (3-10% KOH): *H. fuscoides* releases a vinaceous purple pigment, while *H. fuscum* produces a yellow-brown pigment. *H. fuscoides* also possesses very slightly smaller spores with more acute ends compared to *H. fuscum*.

Targeting *H. fuscoides*, Emma Williams found woodwart on a number of alders at Coed Ely colliery, and further investigation by myself using KOH solution gave an indication that *H. fuscoides* was indeed present. Specimens were microscopically examined by Brian Douglas at Kew and were confirmed as *H. fuscoides*, making this the third known site in Britain. A further survey by Emma and myself using the KOH test in the field confirmed the presence of this species on a limited number of alders in the area.

Unsuccessful surveys have also been made for *Polystigma rubrum* (blackthorn dotty), last seen in VC41 at Mewslade, Gower in 1953; and *Bovista pusilla* (=*minimum*, the tiny puffball), known from dune slacks at Kenfig, Oxwich, Crymlyn Burrows, and Whiteford Sands, last recorded from VC41 in 1994. The Group continue the hunt for more species on the LAFF list...



***Hypoxylon fuscum* (left) and *H. fuscoides* (right) showing different coloured reactions to potassium hydroxide** Photo © Mark Steer

Further information on Kew's Lost and Found Fungi project can be found at http://fungi.myspecies.info/content/lost-found-fungi-project, and the LAFF page for VC41 can be seen here: http://fungi.myspecies.info/content/glamorgan-vc41.

References

Evans SE, Henrici A, Ing B, 2006. Preliminary Assessment: The Red Data List of Threatened British Fungi. Available online at http://www.fieldmycology.net/Download/RDL_of_Threatened_British_Fungi.pdf

Woods, R.G., Stringer, R.N., Evans, D.A. & Chater, A.O. (2015). Rust Fungus Red Data List and Census Catalogue for Wales. A.O. Chater, Aberystwyth. Available online at https://www.aber.ac.uk/waxcap/links/index.shtml.

Mellinus arvensis

Graham Watkeys

Photo © Graham Watkeys

You don't need to visit the great plains of the Serengeti to witness the dance between predator and prey nor in fact do you have to rely on various big hairy mammals. The dance is the just the same between *Mellinus arvensis* and *Episyrphus balteatus* as between *Panthera leo* and *Connochaetes gnou.* The mechanics and tactics are much the same; the stalk, the ambush, the chase and the catch (or the escape), just replace tooth and claw with mandible and sting. This eternal dance must occur at Taf Fechan every day although getting to see it is a rare thing. I've seen a full hunt from start to finish only once and that ended in failure for the wasp, much more common is seeing the result of a successful hunt. The slow flight of the hunter carrying her prey back to her burrow, sometimes struggling with a fly the same size as herself, it's not surprising that sometimes they refuse to leave their hard won prize even when they have a camera pointed at them.

Aussie snails on terra nova at Ffos-y-Fran, Merthyr Tydfil

Ben Rowson, Mike Wilson & Liam Olds

Dept. Natural Sciences, Amgueddfa Cymru-National Museum Wales, Cardiff

Figure 1. *Paralaoma servilis* - Prickle Pinhead Snail. Scalebar: 1 mm
Image © Ben Rowson

Some tiny land-snails have a colonisation ability seemingly out of proportion to their size and speed. This may confer an advantage when it comes to establishing in brand-new habitats, uninhabited - and at first sight uninviting - for other molluscs. One such example is *Paralaoma servilis* (Shuttleworth, 1852), or "Prickle Pinhead Snail" in its native Australasia (Stanisic et al., 2010) (Figure 1). Having garnered synonyms in numerous countries, this minute species has been recorded spreading all over the world, although many faunas include superficially similar native species (e.g. Christensen et al., 2012). There remain few records from the UK since it was first found here in garden centre gravel at Luton, Bedfordshire in 1985. Records are mainly from disturbed, urban sites, although Kerney (1999) said it was becoming naturalised in the south and west. In Wales there is only one previous record, from a 2008 survey of the grounds of the National Museum, Cardiff by BR, Jen Gallichan and Harriet Wood. However, in 2016, we unexpectedly discovered an additional population of *P. servilis*.

Ffos-y-Fran is a spectacular Land Reclamation Scheme and opencast coal mine on a hill east of Merthyr Tydfil, operated by Miller Argent. Mining at the site commenced in 2007 with coal production scheduled to cease by 2022. During the operational life of the mine, it will produce over 10.5 million tonnes of coal. As part of its operations, an ongoing programme of land reclamation is being undertaken that will see the whole site being restored back to its original common land status by 2024. The reclamation work will then be followed by a five year aftercare period. To date, Miller Argent have restored 32 hectares of land which comprises three distinct phases completed in 2013, 2014 and 2015 respectively.

The reclamation work involves the back filling of rock, extracted from the mine during coal removal. Backfilling continues until the land is brought back to ground level, at which point it is topped with a mixture of soil forming material and soil – all of which is sourced from the mine exclusively. The reclaimed areas are then sown with a mixture of 8 different native grass species including meadowgrass, clover, fescue and ryegrass which reflect the flora of the surrounding common land habitat.

During August 2016, Miller Argent kindly agreed for MW, Head of Entomology at Amgueddfa Cymru – National Museum Wales, to conduct an investigation of the insects present on site, particularly leafhoppers and planthoppers, colonising the various stages of the land reclamation. This was undertaken using a customised suction sampler (a reverse adaptation of a standard leaf blower) to gather insects present at various points along each of the three reclamation phases (Figure 2).

Figure 2. Terra nova! Aerial view of Ffos-y-Fran in August 2015, showing the excavation (left), newly seeded 2015 restoration phase (brown), and 2014 and 2013 phases (green). Image © Miller Argent.

This land, around SO 0652 0615 and around 320m elevation, is at the time of writing still shown as excavations on Google's satellite imagery. The contents of each sample (100 sucks per plot) was frozen and picked through carefully for invertebrates. No snails or slugs were found, apart from around 150 individuals of *P. servilis* in samples taken from the 2013 reclamation phase. These were clearly alive when collected, and included both adults and juveniles of different sizes, so it was concluded that the species is established in the habitat. It is not known whether it was present at the site before excavation, or in adjacent areas from which it could have colonised naturally.

This seems to support the suggestion of the original finder of the species (Guntrip, 1986) that the species is tolerant of both frost and exposure in the UK. It also shows that the species can quickly colonise newly created habitats, in this case within less than three years, and can apparently be the first mollusc to do so. However, *P. servilis* still remains rare in South Wales despite the fact it is well-supplied with renovated upland areas that seem suitable. Last year, brief mollusc surveys undertaken at colliery spoil sites around Rhondda Cynon Taf by BR & LO yielded 29 species including snails as small as *Carychium, Columella, Punctum* and *Vertigo*, but not *P. servilis*. It will be interesting therefore to see whether *P. servilis* spreads and colonises future phases of reclamation at Ffos-y-Fran, or indeed appears elsewhere in Wales in future. Let us know if it does!

Editor: You can contact Ben Rowson, Senior Curator: Mollusca, via the Amgueddfa Cymru-National Museum Wales website at: https://museum.wales/email/?e=163.

References

Christensen, C. C., Yeung, N. W., & Hayes, K. A. 2012. First records of *Paralaoma servilis* (Shuttleworth, 1852) (Gastropoda: Pulmonata: Punctidae) in the Hawaiian Islands. In: Evenhuis, N. & Eldredge, L. G. (eds.) 2012. Records of the Hawaii Biological Survey for 2011. *Bishop Museum Occasional Papers* **112**: 3-7.

Guntrip, D. W. 1986. *Toltecia pusilla* (Lowe, 1831) living in Britain. *Journal of Conchology* **32**: 200-201.

Kerney, M. 1999. *Atlas of the Land and Freshwater Molluscs of Britain and Ireland.* Harley Books, Colchester, UK.

Stanisic, J., Shea, M., Potter, D., & Griffiths, O. 2010. *Australian Land Snails Volume 1: a field guide to eastern Australian species.* Bioculture Press, Mauritius.

Mary Gillham Archive Project update

Al Reeve, Project Officer - Mary Gillham Archive Project

Mary Gillham Archive Project.

Well here we are, well over a third of the way into our project attempting to digitise a lifetime's notes, images and memories. The Mary Gillham Archive Project, for those of you who haven't heard, is a Heritage Lottery Funded project housed within SEWBReC which is working to turn analogue documents into digital stories.

When eminent local naturalist Dr Mary Gillham passed away in 2013 she left behind her vast archive of species lists, notes, illustrations, slides, nature journals and diaries for SEWBReC to pull out all of the wildlife records, and use Mary's adventures to highlight the wealth of wildlife in Wales.

Project volunteers hard at work © Al Reeve

Since February myself and a heroic band of volunteers have been working hard to turn these hundreds of thousands of wildlife sightings into a format that is usable and freely available to the wider public. Consequently with the help of 44 volunteers (who have contributed a massive 1600 volunteer hours) we have entered 45 000 wildlife records, scanned 15 000 slides (transcribing 6100 of them), held a number of outreach events and we are all over the internet like spilt honey (Wordpress website (https://marygillhamarchiveproject.com/), Facebook (https://www.facebook.com/MaryGillhamArchive/), Twitter (https://twitter.com/GillhamArchives), and Flickr (https://www.flickr.com/photos/marygillhamarchiveproject/).

There is still so much more to do though: another 100 000 wildlife records to type up; 10 000 slides to transcribe; 3 unpublished books to make available; and stories, loads of stories to tell – about Mary's life, the impact she and her colleagues had as teachers and environmentalists, and the contents of her archive (invariably interesting or amusing!).

We've just been joined by Nat [see across], who is with us for the next year, but we'd also quite like to be joined by you too! There are opportunities to volunteer both in our offices in Cardiff or from home and I like to think you'll find it interesting (don't just take my word for it, you can read an article by another of our volunteers Annie [on page 18 overleaf]). Take a look at some of the ways you can get involved (https://marygillhamarchiveproject.com/volunteer/) or send me an email and we can have a chat (alan.reeve@sewbrec.org.uk).

Photo top left: One of many great photos from the archive (thought to have been taken by Mary) © Mary Gillham Archive Project / Photo top right: Mary with one of her many publications © Norma Procter

There are also ways you can help out without volunteering:

- We know that Mary travelled widely but the vast majority of images in her archive were taken within the British Isles – do any of you know where some of the international images are?
- We are about to start recording oral histories of people's memories of Mary and her colleagues. Can you suggest someone we should talk to? An ex-pupil? A colleague? A Scrabble opponent? Yourself?
- We'd also like to hear any other memories about Mary, even if you don't want to be recorded, your written words would be gratefully accepted!

At the end of the project all of the wildlife records we've extracted will be freely available via the NBN (https://data.nbn.org.uk/) and Aderyn (http://aderyn.lercwales.org.uk/home), the photographs and oral histories will be conserved via the People's Collection Wales (https://www.peoplescollection.wales/), the stories and highlights of the archive will be available through a legacy website and a touring exhibition (get in touch if you'd like it for a time) and the paper records will be conserved by Glamorgan Archives (http://glamarchives.gov.uk/).

That's all from me, except to say that we have a couple of events upcoming if you would like to join us:

6th November, 10 am start - Guided fungi walk with the Glamorgan Fungi Group around the Llwyn Hir and Cwm Lleyshon quarry section of the Draethen woodland. We will aim to identify as many species of fungi, and record as much 'other' biodiversity, as possible during the walk. Meeting point: https://goo.gl/maps/Qhh3XndTkew / Grid Ref ST20578663.

19th November, 10am-4pm - *Explore your Archives* event at the National Museum Cardiff. Join the Mary Gillham Project, the museum and others in celebrating some of Wales' Wonder Women.

If you'd like to find out more about the project please don't hesitate to email me (alan.reeve@sewbrec.org.uk)!

A word from the project team's newest member

Natalie Christie, Cardiff University

My name is Natalie and I'm a Zoology student from Cardiff University, currently working on the Mary Gillham Archive Project for my Professional Training Year (PTY). The PTY is year-long placement in between my second and final year of university, where I work full time in a professional environment related to my degree. Over this year I will also be carrying out a research project on a zoological topic using Mary's vast archive as my source of data. After only a few weeks of working on the project I have already learnt so much about Mary, and the different species she has recorded around south Wales, and I am excited to explore her archive further! I look forward to getting involved with some species recording days and will be blogging about my project throughout the year. Completing this PTY will give me invaluable first-hand experience working in a field that I am interested in (scientific communication, wildlife conservation) and develop the essential skills needed for my future career; those that cannot be taught in a lecture theatre.

More from the project team on page 18...

Supported by The National Lottery® through the Heritage Lottery Fund
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heritage treftadaeth
LOTTERY FUNDED ARIENNIR GAN Y LOTERI

Surprising biodiversity within the Coryton roundabout

Annie Irving, volunteer—Mary Gillham Archive Project

It would never have occurred to me that a motorway roundabout and its immediate vicinity could be a place to investigate biological diversity until I was working my way through Mary Gillham's records of the many and varied species she found during her walks at Junction 32 of the M4. The Coryton roundabout, where the M4 motorway and one of Wales's main trunk roads, the A470, spin around together, is the largest roundabout in Wales and one of the largest in Britain. That means it contains within its boundaries extensive areas of green space and so is a very rich habitat for all manner of plants and insects.

I have visited this site twice now, once back in June and again in late September. If you can ignore the constant traffic noise and the buzz from the large power pylons, it's a lovely area for a wander, with areas of mature trees and large flower-filled meadows, and, with the added bonus in June of an abundance of native orchids. Several species can be found here apparently, the common spotted and bee orchids, twayblade and broad-leaved helloborines, as well as the pyramidal orchid. During my summer visit I also found quite a few invertebrates enjoying their efflorescent surroundings. My September visit didn't prove quite as productive as the meadows within the roundabout were overgrown and unkempt but the adjacent M4 reserve yielded some interesting fungi finds and was a pretty walk, with the trees showing their first signs of Autumn colour.

This was a most unexpectedly biodiverse location and I'm sure I'll also be heading to many of the other numerous locations I'm discovering through my volunteering work on Mary's archives.

Photos all © Annie Irving. Clockwise from top left: Red-legged Shieldbug *Pentatoma rufipes* / Orchid *Orchis sp.* / Bracket fungi *Phellinus sp* / Garden chafer *Phyllopertha horticola* / Hare'sfoot inkcap *Coprinopsis lagopus*

The creation of a hoverator

Graham Watkeys

A hoverfly hangs at eye height and somehow, despite the massive size discrepancy, manages to issue a bodily challenge that is almost palpable; he may zoom off to deal with other violations of his airspace but always that stare returns, the continual challenge. It's generally pointless trying to outstare your hovering adversary, but maybe a gesture of friendship would reduce the tension? A held out hand is investigated, then quickly touched, then ever so briefly landed on. I wonder what the mind behind those compound eyes makes of me as I stand in the middle of a path trying to ostensibly shake hands with a fly? Anyway, an encounter such as this was my introduction to 'hoverating', or the interest in, and recording of, hoverflies. I subsequently found out my aerial dueller was most likely *Eristalis pertinax*, a territorial beast that defends a patch of sky from other males (including me) while waiting for females to wander by. After this encounter two years ago I have subsequently recorded (at time of writing) 75 species of hoverfly at Taf Fechan. Once you realise the fact that "all those that hover are not all hoverflies" the pretenders can be filtered out (generally for being too ugly), your hoverating generally becomes much easier, and the species list can grow quite rapidly.

Why hoverate? Well aside from the fact that the Syrphidae are a fascinating and diverse group, giving seemingly endless pleasure and at the same time providing endless scope for puns (I want a T-shirt, a mug or even a car sticker with "Gone Syrphing" on it), they are also important indicators of our changing climate. Some species are very sensitive to drought for example, mainly due to their larvae being semi-aquatic, living in water filled rot-holes in trees. Some, like *Volucella inanis*, are extending their range northward as the climate warms or are emerging earlier in the year; *Epistrophe eligans* is probably the best example of this phenomenon as it seems particularly sensitive to temperature during larval development. As with all pollinators, a role in which hoverflies are probably not recognised enough, they are also vulnerable to habitat loss especially as many have complex or specialised requirements to fulfil their life cycles.

My future hoverating goals are to reach over 80 species at Taf Fechan, a goal that is eminently achievable I think as many relatively common species still manage to elude me. *Eristalis arbustorum, Helophilus trivittatus* and *Volucella zonaria* are just three and I'm sure I saw an interesting *Epistrophe* with orange antenna this spring…

A note on the verb to hoverate: this was created by the members of UK Hoverflies Facebook group to describe our shared passion and interest in Hoverflies. A versatile word with many uses I hope it will enter the dictionary in due course.

***Volucella inanis* – this record at Taf Fechan pushed its known range in Wales a little further north**

Photos all © Graham Watkeys. Top left: *Eristalis pertinax* – the first on the list / Top right: *Dasysyrphus tricinctus* - never a common Hoverfly but widespread

The state of nature in your own neighbourhood

Jim Davies and Rob Thomas

Firstly, a reminder of the non-stop erosion of the myriad links between the biosphere's micro-organisms and its larger forms, and especially ourselves. Since 1960, biologists have repeatedly underlined the threat this poses to sustaining life on earth as we know it[1]. Below is a contribution to measuring both the decline of complexity and its counterpart process – regeneration.

Assessing biodiversity change using a new method: Damage and Improvement scoring (DaI)

Biodiversity change is measured indirectly as an annual tally of clear damage and clear improvement to the green fabric of the assessor's chosen area. Species determination is not a requirement, but careful observation is. We see DaI as particularly suitable for the lay person as well as the impatient species specialist!

The area for assessment must be easily accessible by the individual recorder. It could be a garden, an urban park, a sandy bay, a stretch of upland valley.

A Suitable Area for DaI: Looking NE at part of Bedlinog Housing Complex, the authors' homebase. The RSPB 'Big Garden Birdwatch' is already undertaken here. The lawn, cut 14 times a year, has more than 50 flower species (somehow!). *Photo © Jim Davies*

How to score the annual biodiversity change:

Clear Damage scores **-1**

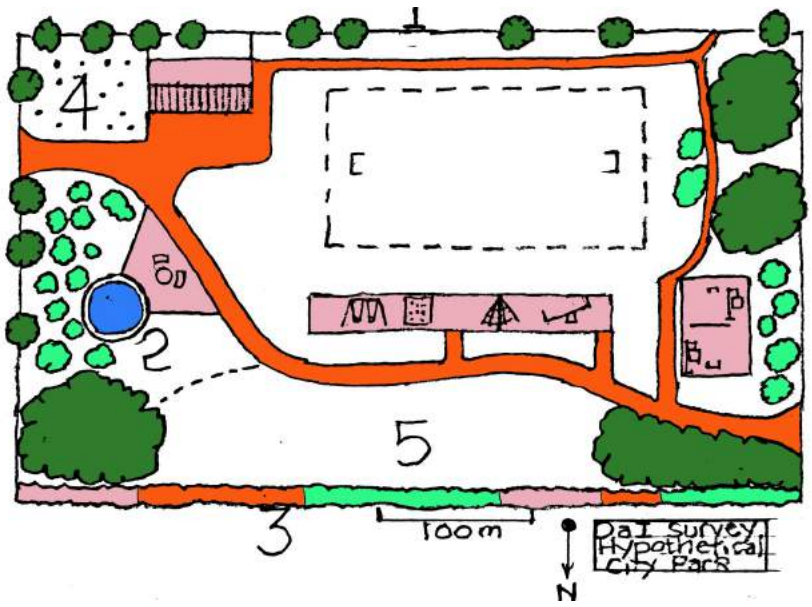
No change scores **0**

Clear Improvement scores **+1**

Exceptionally, award **-2** for, say, the reseeding of a 50+ species lawn, OR **+2** for the establishment of full nature conservation protection

The baseline score for the year's audit must be zero. So that a large number of annual tallies can be compared, the assessment period should be from January to December. Damage or Improvements must be noted as soon as they are spotted.

Example - Scoring change in a hypothetical five hectare urban park:



Target note	Changes noted over assessment period	DaI score
1	4 x 100 year old trees down	-1
2	Fish Pond converted to Paddling Pool	-1
3	Recreation of perimeter hedge of holly, hornbeam etc., to separate park from adjoining housing plots	+1
4	Regraded rubble from old buildings used for self seeding flowering plant site	+1
5	Grass on sitting out bank and elsewhere (50% of the grassed area) with cuts reduced from 12 to 3 per year. All leavings composted. No cuts under trees.	+1

Scoring change in a rural environment

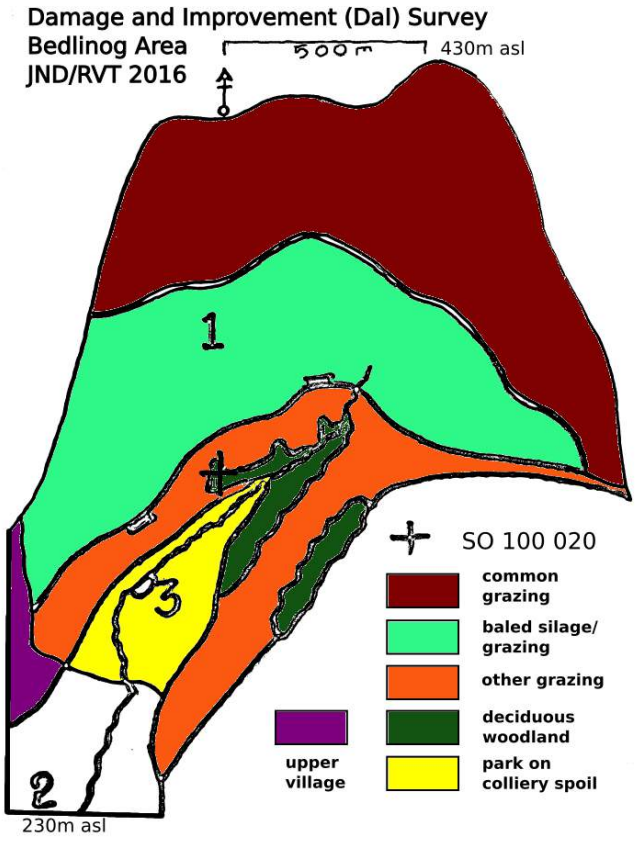
I (Jim Davies) have carried out a DaI assessment, this past 12 months, of an upland valley bordering the north-west of Bedlinog - centred on SO 100 020 and in which I reside. The height above sea level is from 230m to 430m, and the area is about 2km x 1km, but is just sufficiently accessible for major change to be picked up relatively easily.

The area includes the Merthyr Borough's Priority Open Space, Nant Llwynog Park (aka Pitwoods Park) centred on the old colliery and drift sites. The ground material is a fairly coarse coal spoil, mildly acidic in reaction.

Part of the Bedlinog survey site *Photo © Jim Davies*

The public paths traversing or overlooking the extensive stock (mainly sheep) grazings, and Common, make for safe surveying at any time of year. Most of the biodiversity/habitat stewardship of this survey area – and indeed of the entire 10km x 2km area of Cwm Bargod Taf – lies with the farmer/landowners. Their full understanding of this sustaining role is, of course, crucial. Equally, environmentalists must be fully aware of the substantial costs involved in regenerating the green fabric of farms. Unfortunately it seems nothing will stop Ash Dieback killing nearly all our local Ash trees – it has hit Wales very recently and very badly.

Results of the 2016 DaI Assessment for the Selected Bedlinog Rural Area:



Target note	Changes noted over assessment period	DaI score
1	Curlews abandoned breeding after a late pasture treatment	-1
2	Large tree felled and a 50 species paddock grazed out by horses	-1
3	Typha rapidly overtaking swamp	-1

Discussion

Difficulties have arisen over scoring gradual ecological change. For example, Bracken advance, Bulrush smother, Ash seedling overgrowth. In most cases, though, a **-1** score **over 3 years** is appropriate.

The DaI method is new and requires trialing. Readers and their acquaintances are exhorted to begin assessing their own patch this January (2017). Jim Davies will be glad to answer queries. (jnd.jim.bedlinog@gmail.com, 07900 997889).

Should this simple approach to assessing biodiversity change prove useful then training sessions for intending lay-recorders would be arranged.

Conclusions

This simple and quick Damage and Improvement method of monitoring biodiversity loss and regain can be carried out both by lay persons and specialists. It should be considered a citizen science endeavour which would complement and augment the national level 'State of Nature' reports.

We end as we began underlining those same old repeated warnings that there really is a limit to the punishment our life-supporting systems can absorb before finally they succumb[2,3]. It falls on our 21st Century cohort of recorders to measure and highlight, even more, both the declines and the hard won regeneration of today's green fabric.

References

(1) Hoyte, S. Will mass species loss kill us off too? The Biologist, Vol 63, No. 2, P. 9 (2016)

(2) Emmott, S. 10 Billion. Penguin P. 170 (2013)

(3) Juniper, Tony. What's Really Happening to Our Planet. DK. P. 182/3 (2016)

Freshwater Habitats Trust, PondNet Training Day: Duckweed Masterclass, Magor Marsh, Gwent

Hannah Shaw, Welsh Project Officer for People, Ponds and Water.

Whilst often hard to find amongst other duckweeds due it's tiny size and rarity, the surface of this reen was almost entirely *Wolffia arrhiza*! Photo © A.G. Shaw

Myself and over a dozen attendees had a fascinating day at Magor Marsh Gwent Wildlife Trust Reserve on the 9th September. Dr Fred Rumsey from the Natural History Museum London, an expert botanist and duckweed enthusiast, spent a whole morning telling us about duckweeds, their ecology and distribution and showing us the different duckweeds that we have in the UK (Fred brought a fantastic collection of fresh samples with him). The afternoon was spent out and about identifying the duckweeds in the reens at Magor Marsh. Magor Marsh was an excellent location with six of the British species being spotted, including *Wolffia arrhiza* (rootless duckweed) which is almost the smallest flowering plant in the world, the title being claimed by a non-British species of *Wolffia*. It was clear to everyone that identifying the different duckweeds is a lot harder than it seems (with only 7 native species)!

One lady that attended said "*It was a very good day. I will never record [Lemna minor] again without fishing a bit out to look at!!*"

Duckweeds are under recorded in Wales and it is hoped that the Duckweed Masterclass has inspired some new recorders. For anyone interested in identifying and recording duckweeds, the OPAL Duckweed Identification Guide is a good start and can be downloaded from www.opalexplorenature.org/sites/default/files/7/file/water-survey-duckweed-guide-A5-2014.pdf The Duckweed Key published in the article "*Duckweeds and other simple floating aquatic plants*". British Wildlife: 326-334 Vol 23 (5) June 2012, is also excellent and if anyone would like a copy please email me at hshaw@freshwaterhabitats.org.uk

PondNet is an exciting new national volunteer survey to collect information about trends in pond quality and pond species, including rare plants and animals. As well as providing training for volunteers, PondNet is providing a number of identification training events across Wales until December 2017 to help improve identification skills for pond plants and invertebrates. PondNet is a Project co-ordinated by the Freshwater Habitats Trust and funded by the Heritage Lottery Fund.

Attendees being shown the different duckweed species. Photo © A.G. Shaw

Conservation Volunteers Needed in the South Wales Valleys!

Carys Solman, Wildlife Trust of South and West Wales

The Wildlife Trust of South and West Wales are seeking volunteers to help managing Nature Reserves in the Valleys area. People are invited to join the Trust for regular weekday tasks such as woodland management, grassland preservation, wildlife surveys and general maintenance. No experience is required, and work takes place at a number of beautiful sites across Merthyr Tydfil and Rhondda Cynon Taff.

Contact Wildlife Trust Officer Carys Solman for more information on c.solman@welshwildlife.org or 07896 798 371.

Photos © Carys Solman

The Heritage of Orchards and Cider Making in Wales

Jayne Hunt, Heritage Project Manager, Welsh Perry & Cider Society

Photos © Jayne Hunt

The Welsh Perry and Cider Society have secured Heritage Lottery funding for a two-year project called 'The Heritage of Orchards and Cider Making in Wales'. The project aims to secure the future of Welsh varieties of cider apples and perry pears.

We are doing so via three strands: working with 14 community groups across Wales to plant new orchards or regenerate old ones with particular focus on enhancement and protection of wildlife; capturing the stories of modern day cider-making in Wales, via digital stories in partnership with The George Ewart Evans Centre for Storytelling at the University of South Wales. Looking at the Heritage varieties of cider apple and perry pear within Wales, this strand includes DNA testing on unknown trees (cider or perry), single variety fermentation trials and creation of an additional three museum orchards of the known Welsh heritage varieties.

We are searching for old cider apple and perry pear trees to take part in our Spring 2017 DNA testing. This would involve a visit from us to the tree to collect 8 leaves (preferably on a dry day) We then send the samples for testing at East Malling Research Station and receive the results around October time. We would then contact you to confirm the variety of your tree, or discover if it is an unknown variety—at which point we would look to propagate from this and conserve the variety within our museum orchards collections.

The culmination of our work will be a free online resource detailing all our findings along with orcharding guidance and visual and audio recordings of cider making stories.

If you think you may have an old Cider or Perry tree in Wales, or have any stories you could tell us about Welsh orchards and cider making, then please contact us on:

Tel - 01495 240983
or heritage@welshcider.co.uk
www.welshcider.co.uk

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SEWBReC Business Issues Update

Adam Rowe - SEWBReC Manager

This update gives a few brief glimpses under the SEWBReC bonnet, to shine a light on some of the strategic issues and developments in which our team is involved.

Despite wider economic pressures, and now uncertainties created by the Brexit vote, SEWBReC seems to be weathering the storm well and is continuing to demonstrate the resilience of its business model. The importance of the ongoing support of a wide range of data providers and service users cannot be over-emphasised in ensuring the viability of SEWBReC, so thank you all! Our office is now bursting at the seams with a total of eight staff on the payroll this month, as well as a large band of volunteers, mainly associated with the Mary Gillham Archive Project, but also assisting with developing and delivering core SEWBReC activities.

A large challenge facing SEWBReC this financial year has been the slow pace of progress with securing key **FUNDING AGREEMENTS**, in particular that with our key strategic partner Natural Resources Wales (NRW). After long delays we have finally received the good news that the agreement is on the table for signing, so we can now focus on delivering the core services and data products which the agreement covers. Looking ahead, it is the intention of Welsh Government (WG) and NRW that WG should take over core funding the Welsh Local Environmental Records Centres (LERCs) from the start of the next financial year. We are therefore currently calling urgent meetings with WG and NRW to start this process early, to minimise delays and to eventually ensure the future financial security of LERCs and their services. It is also our hope that additional WG funding may allow the provision of LERC services to various WG departments which currently have no access to our data, as well as ensuring the data is better integrated into the planning system in Wales.

Work is progressing well on **ADERYN**, the development of which is being led by our colleagues in the Biodiversity Information Service for Powys and Brecon Beacons National Park (BIS). The public data access module of Aderyn was launched in June (see: http://aderyn.lercwales.org.uk/home). This is the first of a host of Aderyn modules to help deliver LERC services, including enhanced partner data access, recorder data access and ultimately data access for paying commercial customers. All data will be delivered via eMapper (developed by Cofnod in North Wales) which combines mapped data and raw data through an elegant interface.

At the UK level, frenzied work is underway to build and release the replacement for the NBN Gateway (which is due to be retired as early as March 2017). The new UK website will be known as **NBN ATLAS**, with a customised Wales-only

view, known as **NBN ATLAS WALES**, also being developed on the same ambitious timescale. We are heavily involved on the Steering Group of both the UK and Wales Atlases.

We are striving to ensure the viability of the LERC business models and to represent the wishes of our recorders in the face of significant and growing pressure from the **OPEN DATA AGENDA**. We understand the need for publicly-funded data to be made fully open, but we need permanent recognition that the issues are not the same with privately-generated and volunteered data. We believe it should be up to the original data providers, not the national agencies, to decide how their data should be exposed via the NBN Atlases. There is a fear that LERC commercial income streams may be damaged if we are pressurised to be open with all full-resolution data, yet many of our data providers tell us they value the services we provide to them and they think it is right that developers should continue to pay for data searches that provide vital income for LERCs. We remain positive that solutions will be found so that we can be open with coarse-resolution "discovery" datasets and that Aderyn can be somehow signposted within the NBN Atlas Wales as a key source of further high resolution "paid-for" data searches.

Watch this space for further business updates. If you have any queries about the issues raised above, your views would be most welcome. Please email them through to adam.rowe@sewbrec.org.uk.

SEWBReC Membership

SEWBReC is run as a not-for-profit company and is governed by a voluntary Board of Directors which is drawn from its membership. By becoming a member of SEWBReC you will be automatically invited to attend our Annual General Meetings and you will be eligible to stand for election to the Board of Directors.

Subject to Board approval, SEWBReC membership is open to anybody who:

Has read SEWBReC's Memorandum and Articles of Association* and supports the aims of the company;
Understands that as a Member of the Company they accept a liability not exceeding £1 if the Company should be wound up.

We are currently very keen to grow our membership and to this end we have included a copy of our membership application form with this newsletter mailing. Please consider joining and have your say in the future direction of SEWBReC – we need your expertise and enthusiasm!

** The membership form gives details of where to find the Memorandum and Articles of Association via our website. If you don't have access to the internet but are interested in joining, please get in touch and we will send you a copy.*

SEWBReC Events 2016

Thanks to funding from Wales Biodiversity Partnership we were able to run another set of our hugely popular free identification training courses this year. These courses aim to introduce recorders to new taxonomic groups, habitats or techniques to help them expand the scope of their recording. On offer this year were Coal Spoil Biodiversity,; Umbellifers; Hoppers and Spittlebugs; and Identifying Fungi using Microscopy. As always we were swamped with applications and had to pick names out of a hat for each course. Three of the four courses took place over the summer, and were a great success, while the fungi course is due to take place in February 2017. A special thank you to the trainers who have shared their skills and knowledge (or in Mike Bright's case, will do soon!). We hugely enjoy running these courses and hope those of you who attended this year have enjoyed them too. We expect lots of records from you all now!

We were also fortunate this year to be contracted by Rhondda Cynon Taff Council to run a series of Introduction to Biological Recording events across the Unitary Authority. Three classroom based training sessions were delivered to beginner and would-be recorders, followed up by four outdoor recording sessions, at Cefn yr Hendy (near Miskin), Dare Valley Country Park and Cwm Saebren (in Treherbert) where beginners and more experienced recorders worked together to share skills and create some impressive species lists. We're talking about the Welsh valleys here, so obviously there was rain. In fact the reason there were four rather than three events is that the first recording session at Cwm Saebren was so popular, yet so rainy, that we thought it was worth going back for another go. And, obviously, it rained heavily at the second event there too. Like true Brits we kept smiling, kept recording, and altogether recorded 134 species at Cefn yr Hendy, 205 species at Cwm Saebren, and at Dare Valley, where it (mostly) didn't rain, a whopping 342 species! Thankyou to everyone who attended, both as experts and as beginners!

Gwent-Glamorgan Recorders' Forum 2017

It's time to book your place at the next Gwent-Glamorgan Recorders' Forum, taking place on **21 January 2017** at **Park Inn, Cardiff North.**

We've got a got a great program of speakers lined up for you this year, and an opportunity to chat over tea and coffee in the afternoon, with some optional, informal activities to take part in.

The full programme is included with this issue, and can also be found at: http://www.sewbrec.org.uk/event/events-calendar/gwent-glamorgan-recorders-forum.page.

Book your place by emailing **info@sewbrec.org.uk** or calling us on **029 2064 1110**

New staff at SEWBReC

We're delighted to introduce our newest staff member Laura Parry (pictured right), who will be starting her new role as Biodiversity Information Assistant during November. You may recognise Laura, as she has been based at SEWBReC for the last 9 months while completing a LEMUR+ traineeship. The LEMUR+ scheme aims to give trainees the skills and professional experience they need to work in the environment and conservation sector, and we're very pleased to be able to give Laura the opportunity to apply everything she's learned! Laura will be working with us part-time for the next 12 months whilst Becky Wright-Davies is on maternity leave.

Photo © SEWBReC

Also joining us over the next year is Natalie Christie, who will be working on the HLF-funded Mary Gillham Archive Project during the Professional Training Year of her degree course. I won't say too much here as you can meet Natalie properly on page 17!

Welcome to the team Laura and Natalie!

Over 100,000 records on SEWBReCORD!

We love SEWBReCORD! It's a quick and easy way to get your casual records into our database, it's useful for having records verified by experts, and it means we get to see your fantastic wildlife photos. So imagine our glee two weeks ago when we came in on Monday morning to find that over the weekend the SEWBReCORD record count had tipped over the 100,000 mark!

A huge thank you to everyone who has submitted records. Each one is an important part of what we know about the wildlife of south east Wales. Keep them coming!

If you have not yet tried using SEWBReCORD, please visit www.sewbrecord.org.uk and click on the 'Create new account' link. You will then receive an activation email. If that doesn't arrive in your email inbox, it may have been moved to your junk or spam folder. If you have any difficulties registering, or if you have registered in the past but never activated your account, please contact Dave Slade (david.slade@sewbrec.org.uk) who will issue you with a new password and help you get up and running.

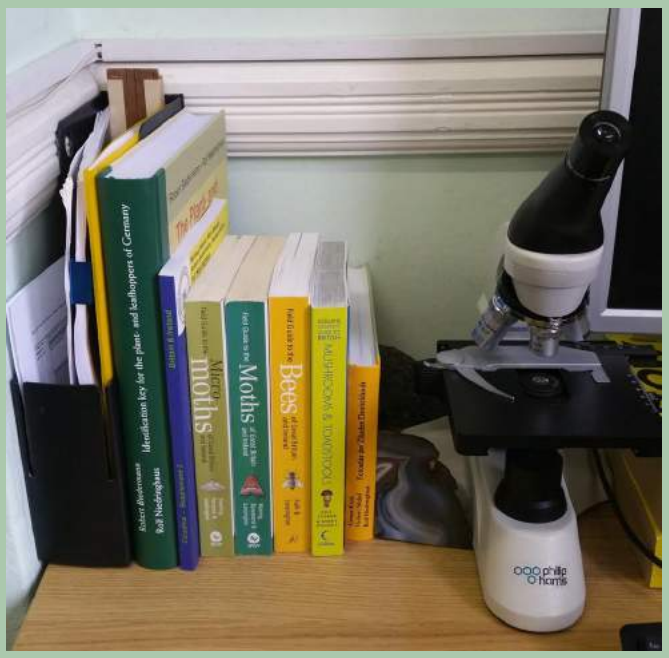

Photo © SEWBReC

Books and equipment free to use!

Did you know that SEWBReC has a library of books and identification guides, and lots of useful bits of recording equipment, from a moth trap to microscopes, all of which are free for recorders to use? You can arrange to pop in to the SEWBReC office to use them, or sign them out to use at home or in the field.

A full list of what we offer is included with this issue, and can also be found at: http://www.sewbrec.org.uk/services…/recorders-resources.page

Is our mailing list up to date?

If the email or postal address to which you prefer to receive communications from SEWBReC has changed, or is about to change, please can you let us know by emailing **info@sewbrec.org.uk** or calling us on **029 2064 1110**

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Greater Gwent Biodiversity Action Group

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BIODIVERSITY
THE VARIETY OF LIFE

Glamorgan Biodiversity Advisory Group