

Gwent-Glamorgan Recorders' Newsletter

Issue 22
Spring 2020



SEWBReC

SOUTH EAST WALES BIODIVERSITY RECORDS CENTRE
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Welcome to the 22nd edition of the Gwent-Glamorgan Recorders' Newsletter. At the time of writing, Wales is still under a lockdown of sorts. Most of us have been forced to remain at home for over eight weeks now, and many of you will have found yourselves exploring your gardens and local areas more thoroughly than you might have otherwise. SEWBRc staff have been amazed at the number of records flooding in over the last few weeks, so many of you have been inspired to record wildlife during this difficult time (p3).

We have another bumper issue for you, and I hope you will enjoy reading the articles we have pulled together. You might not be able to currently visit some of the places mentioned, but the new Dynamic Dunescapes project (p20-22) sounds fascinating and something to keep an eye on as it progresses. If you need any ideas to help you stay connected to nature during this time, make sure you take a look at the SEWBRc list of home-based wildlife resources (p26). Whilst we are unable to hold our typical BioBlitz events this year, you can still get involved in the Garden BioBlitz which kicks off Wales Nature Week on Saturday 30th May (p32).

Nature has certainly been a welcome distraction over the last eight weeks and has helped many people get through the current crisis. Watching wildlife and taking solace in the natural environment or even your own garden has always been really important; but now it seems, more than ever.

Stay safe everybody, and look after yourselves and each other.

Rebecca Wright-Davies, SEWBRc (Editor)

Rapid rise in online recording

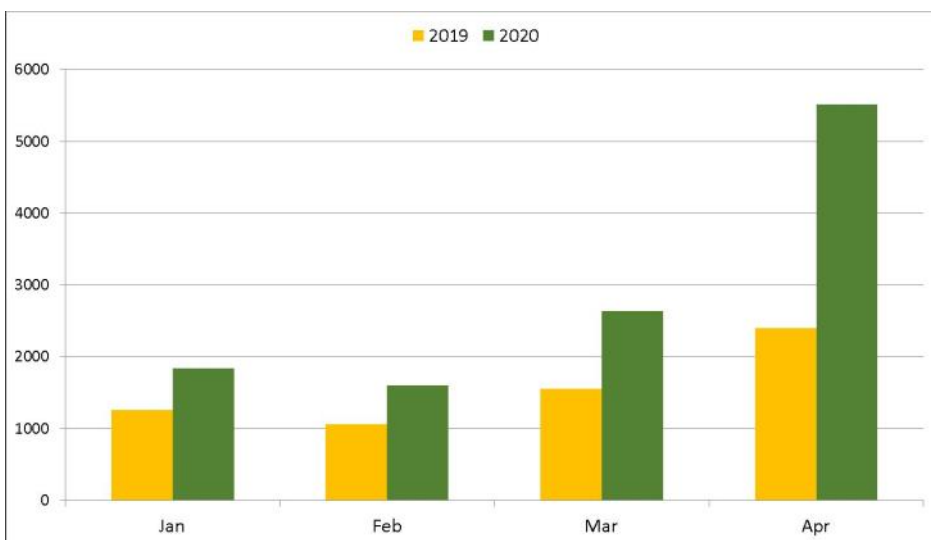
Elaine Wright, SEWBRcC

One of the happy side effects of lockdown life seems to be a great rise in wildlife recording in south east Wales. We had noticed a large number of records being submitted via www.sewbrecord.org.uk and the LERC Wales App this year (Jan-April 2020), and decided to compare it to data numbers from last year (Jan-April 2019). We discovered that there has been an amazing 85% increase in online record submission in 2020, which seems to be growing stronger as the year progresses (there is a 130% increase from April 2019 to April 2020!). The monthly comparison is shown in graph 1.

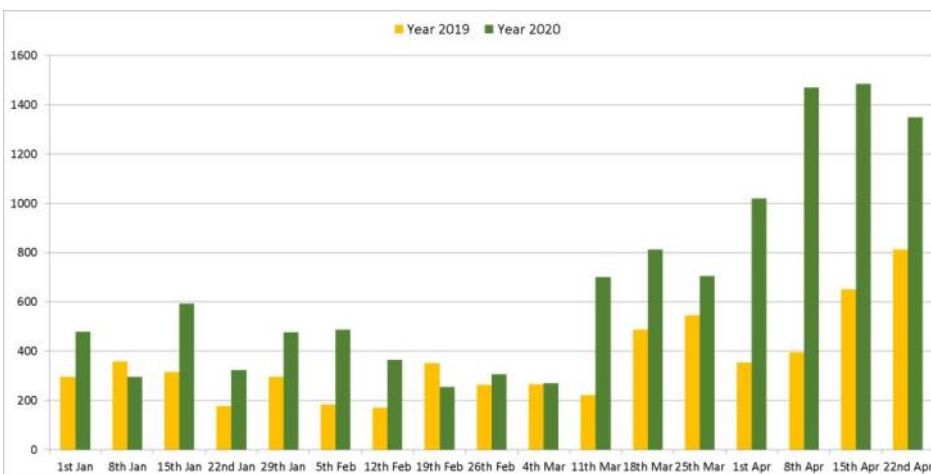
As well as people turning to recording during lockdown, the numbers are probably also influenced by the Alphabet Recording Challenge, an initiative which we launched in Jan 2020. Each week we ask recorders to record species starting with a corresponding letter, e.g. A in week 1, B in week 2 and so on. This has proved popular, with over 2,500 alphabet records submitted so far. It has definitely influenced record numbers in the earlier winter months, show in this weekly comparison for 2019 and 2020 (graph 2).

However, after removing all the alphabet data (e.g. all A species recorded in week 1), there is still a clear increase in records which is undoubtedly due to lockdown life and a change in peoples' activities, shown in graph 3.

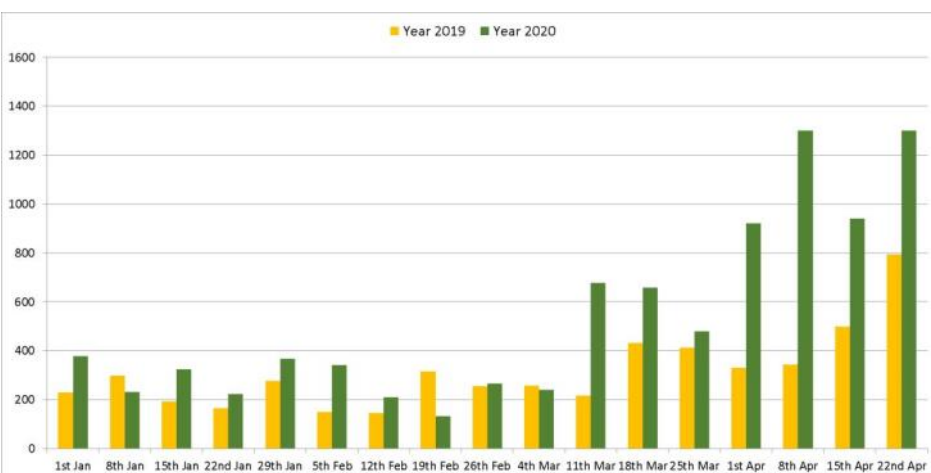
There are always many factors affecting data numbers, for example weather has a definite impact - the peak during week commencing 19th February 2019 coincides with the unseasonal heatwave of last year. However it does seem that the reduced pace of life for many this year has resulted in a bumper time for wildlife recording, and we hope all our recorders have found comfort and enjoyment in discovering the nature on their own doorsteps.



Graph 1: Number of records submitted per month 2019 and 2020



Graph 2: Number of records submitted online per week 2019 and 2020



Graph 3: Number of records submitted online per week with "alphabet data" removed 2019 and 2020

Brandt's in Bridgend

Jessica Dangerfield BSc, Hal Starkie BSc, Neil Price PHD and Mike Shewring MSc
(Corresponding author email address: jessicadangerfield@outlook.com)

Introduction

The *Myotis* genus of bats is poorly recorded owing to the difficulties in discerning species by acoustic methods. In Wales many of the *Myotis* species are also considered much rarer when comparing population estimates with those in England (Wray *et al.*, 2008). The *Myotis* include Bechstein's bat (*Myotis bechsteinii*), a rare woodland species, and Alcathe bat (*Myotis alcathoe*), only recently recognised as resident in the UK and recently documented in Wiltshire, England (*Pers comm* Wiltshire Bat Group). Woodlands are important habitats used by all *Myotis* species (Dietz and Kieffer, 2016), with some of our rarer species exhibiting a stronger reliance on the woodland environment than others.

Existing Data (or lack thereof!)

A desk study undertaken with the South East Wales Biodiversity Records Centre (SEWBRc) in 2018 found a serious paucity in species specific records for all *Myotis* species (Figure 1), with one notable exception of Daubenton's bat (*Myotis daubentonii*). A total of 499 records for *Myotis* bats were received for the three counties. Of these records, only 294 were specific to species level (61 records in Bridgend, 197 records in Cardiff, 36 records in Vale of Glamorgan). The vast majority of the records relate to Daubenton's bat (with the majority of the data derived from the National Bat Monitoring Programme (NBMP) waterway surveys) or 'Unidentified *Myotis*'. When excluding data for Daubenton's bat and 'unidentified *Myotis*' records there is an alarming 76 records for species specific *Myotis* across all three counties. Only a single record is returned for Brandt's (*Myotis brandti*) bat and this record is located in Cardiff County (with no records of this species occurring in the Vale of Glamorgan or Bridgend). This record is derived from acoustic data and therefore may not be reliable. No records for Bechstein's bat or Alcathe bat exist in any of the three counties. Forty-five records for Natterer's (*Myotis nattereri*) and 30 records for whiskered bat (*Myotis mystacinus*) exist. Excluding the NBMP survey data, the remaining *Myotis* records largely arise from surveys of built structures. Very little data exists of these species in the woodland environment in these counties.

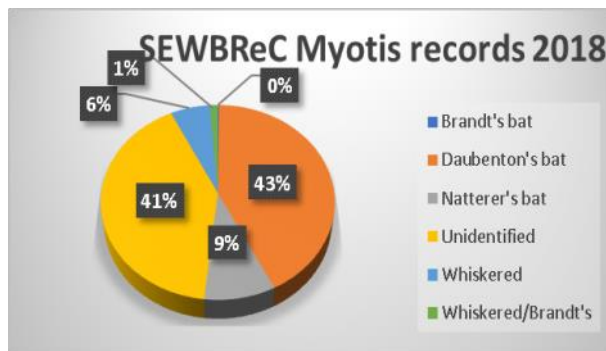


Figure 1: *Myotis* records returned in SEWBRc 2018 data search

The Woodland *Myotis* Project

To address this lack of data Cardiff, Vale of Glamorgan & Bridgend bat groups have formed a collaborative project to target woodland habitats across the three counties in an effort to generate species specific records and establish the presence/absence of *Myotis* species and distribution in the counties. The project looks to survey a total of nine sites across the three counties. Examples of varying woodland habitats have been selected including: plantation on ancient woodland, ancient broadleaved woodland, mixed woodland, wet woodland and broadleaved secondary woodland. Previous acoustic work undertaken by the bat group had already identified a number of sites with high *Myotis* activity that we were keen to include in the study. The methodology employed has involved a set-up of two harp traps with acoustic lures (AT100 and Sussex Autobat) and two mist nets with surveys commencing from around sunset to approximately five hours after sunset.

Preliminary Results

Following the first successful year of running this project a total of ten surveys have been undertaken at five of the selected sites. A total of 152 bats have been caught through the project including 30 *Myotis* bats (Figure 2).

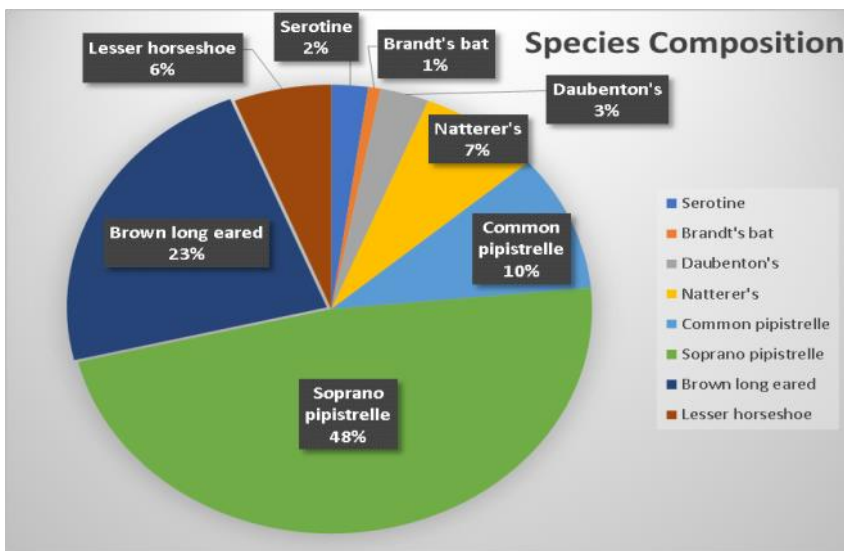


Figure 2: Species caught throughout project (all sites/surveys pooled)

Although only around 20% of our total catch has been the target species, we have considerably contributed to the knowledge and records base for these under-recorded species in this area. In the first year of running this project we have increased the number of records significantly compared to data produced from non-targeted survey possessed by SEWBRc. Most notably, increasing the number of known records for Brandt's bat by 100%, whiskered bat by 50% and Natterer's bat by 20% (Table 1). Additionally, the large by-catch of non-target species has provided an excellent opportunity for training bat group members in handling and identification. To date the project has had over 30 volunteers assisting with surveys.

Species	2018	2019	% Increase
Brandt's bat	1	1	100
Daubenton's bat	212	4	2
Natterer's bat	45	10	22
Whiskered	30	15	50
Bechstein's	0	0	-
Alcathoe	0	0	-

Table 1: All SEWBRc (On request in 2018) data versus 1 season of data collection through targeted project and percent increase in species specific *Myotis* records.

Our most exciting result to date is the discovery of the first Brandt's bat in Bridgend county (and likely only reliable record for this species across the three counties). A male Brandt's bat was caught at one of our sites in August along with several whiskered bats at the same location. Although the project is very much still in its early days we hope that in addition to increasing the number of records for under recorded bat species, we are also able to start to understand how the bats' use of these woodlands change throughout the year and identify important sites and work with landowners and managers to ensure the protection of these sites into the future.

References

- Wray, S., Wells, D., Long, E. and Mitchel-Jones, T. (2010) Valuing bats in Ecological Impact Assessment. *In Practice* 70: 23-25.
- Dietz, C. and Kieffer, A. (2016) *Bats of Britain & Europe*. Bloomsbury, London.

Request for moth recorders: The project group has access to several woodlands across Cardiff, Vale of Glamorgan and Bridgend, and normally trap bats on Friday and Saturday nights between May and September (with a break in June due to bats being pregnant or with young pups). The group are interested in recording moth species at the same time as undertaking their bat work. If there are any moth recorders interested in moth recording at the same time as the group traps bats, please contact Jess Dangerfield. Please note that due to Covid-19 bat trapping/surveying is currently on hold but please contact Jess in order to arrange suitable dates after lockdown has been lifted and it is appropriate to continue to survey. Email: jessicadangerfield@outlook.com

The Cardiff Swift Project

Alan Rosney (Glamorgan Bird Club Swift Project Co-ordinator)

We have reported on the progress of the Cardiff Swift Project in the past. (A joint project between Glamorgan Bird Club, the RSPB and Cardiff Harbour Authority, funded by a National Lottery Heritage Fund (NLHF) grant). The Swift tower was erected last May and some of the local Swifts did show some interest, probably attracted by the speaker playing Swift calls. (Sadly the call player broke down and we were in the process of fixing it when operations were shut down).

We don't anticipate occupancy for some years as Swifts take a while to take up "new" nest sites. As the Swifts have now returned, we're hopeful of success. We had planned to hold several Swift related events this summer but sadly these have been cancelled due to the lockdown.

The second tranche of our NLHF grant has come through. The plan is to fund the next phase of the project and will primarily will involve public engagement and the development of teaching resources for use in local schools.

The Cardiff Swift Survey

For the last two summers GBC and the RSPB have joined forces to undertake a Cardiff-wide survey of Swift nesting sites. Following much number crunching, the results are now available.

Number of nests found in the Cardiff Swift Survey (2018 & 2019)

Area	2018	2019
Flatholm	1	0
Ely	28	29
Riverside	5	3
Canton	7	5
Grangetown	1	0
Cathays	25	11
Roath	8	6
Adamsdown	4	0
Llandaff North	5	5
Whitchurch	1	0
Llanishen	2	1
Trowbridge	1	0
Pontcanna	0	2 *
Bute Park	0	3
Tremorfa	0	1
Radyr	0	1
Cardiff barrage	0	4 **
Total	88	65

Note that there were fewer surveyors in 2019, which is likely to have skewed results. Also many of these nests may be the same pair, returning to traditional nest sites. Further analysis will be required to determine if these are "new" nests. We were planning to go in to our third survey year this summer, as we are keen to build up our knowledge of nesting in the city. This has also fallen foul of the lockdown. However if you see Swifts entering roof spaces in your street you can still log the sighting by going to the RSPB website, which has had a makeover recently:

<https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/safeguarding-species/swiftmapper/>

We would also like records of nest sites from outside Cardiff. Last year (2019) we had only 27 nest logged - 3 in Penarth, 5 in Barry, 6 in Llanharan, 1 in Beddau, 11 in Maesteg and 1 in Bridgend. Surely there are Swifts still nesting in the Rhondda Valleys? We did have one very interesting finding from Gower last summer. A small colony of cliff nesting Swifts was found.

* 1 in a Swift brick ** in nest boxes

Ghost Slugs 2019-2020: Floods and Waves

Ben Rowson

The last year was a bumper one for the Ghost Slug *Selenochlamys ysbryda*. Here is an update on how this non-native predator is spreading, both in the SEWBRc area and nationally. Unusually, I am including a plea for people not only to record the species, but to terminate it whenever it is found.

Nationally, 19 new records of *S. ysbryda* were received between March 2019 and March 2020, equalling the previous annual maximum. Most were chance finds by recorders, mainly gardeners, who sent in photographs or specimens for verification.

As usual, the majority (15 records) were from the SEWBRc area. The winter of 2019-2020 was mild and wet everywhere, but will be remembered in South Wales for the most devastating floods in decades.

These came after weeks of rain in February and March during which soils were saturated. I suspect weather like this encourages these slugs, like the worms on which they feed, out of the ground. *Selenochlamys* is difficult to drown (in burrows, its breathing hole probably acts as a snorkel while the rest of its body is smothered), but every species has its limits. Many of the non-garden records of *S. ysbryda* are from wooded valley floodplains, like those along the Ely, Taff, and Usk, where floods may seasonally aid its spread.

There are now over 250 records of the Ghost Slug, over 90% of them from a triangle between Swansea, Brecon and Bristol. I am certain this is not just due to recording bias. I regularly get enquiries about suspected sightings from across England, Scotland, Ireland, and the US and Canada (where people seem less familiar with pale slugs in general). So the species is definitely more common here than elsewhere. As to its origin, our best guess is that *S. ysbryda* (perhaps just a single slug, or egg) was introduced from Crimea some time before 2004. I have not heard of it being found in any other country in Europe.

This makes it all the more notable that 2019 saw the first confirmed *S. ysbryda* records from two new regions of the UK: North Wales (Bangor) and the West Country (Exeter and Ivybridge). There are other recent, isolated finds in Berkshire (2013), Hertfordshire (2017), West Yorkshire (2017), and East Gloucestershire (2018). It is clear that the species is spreading, and it is highly likely that outlying populations originate somewhere in the core area. As it happens, the correspondents in Bangor think their specimens came in with garden goods bought in Bristol. In some other cases, I suspect the exchange of plants, bricks or logs between gardeners is responsible.

I hope readers will forgive the comparison, but for a long time I have thought that tracking the spread of this species is like witnessing a slow epidemic. This is of course true of non-native species the world over, harmless or otherwise. In this instance, most of the spread is due to humans, and possibly floods. Direct garden-to-garden transmission (slugs crawling beneath fences) cannot be ruled out, but would be a slower process. New sites are still being confirmed. Even during the last six weeks (while under the current lockdown) I have received new records from Killay (Swansea) and Llantrisant in the SEWBRc area, and Llangynidr and Llanberis beyond.

Can the wave of spread be stopped? I suspect not. The first thing Bill Symondson and I did after we identified Cardiff slugs in 2007 was to advise DEFRA that they should be controlled, and ask them for funding to help. No response was ever received. We did, however, persuade Adrian Fowles, at what was then CCW, to give us £1000 of funding. This supported a search for the species in all of Cardiff's parks and allotments, by BSc project student Sam Aberdeen, and the postage to send information to every primary school in Wales, which Danielle Cowell and I did at the Museum. Neither of these immediately yielded any *Selenochlamys* positives, but it was not long before we found that the species was indeed more widespread than we thought. Thank you to everyone that supported our initial efforts, and all who have submitted records since.

People often ask me how to control Ghost Slugs in their gardens. I say the best way is to kill them when found (or to send them to me, to preserve at the Museum). As with any non-native species, they should never be released into the wild. *Selenochlamys* is almost certainly able to self-fertilise, so a single slug can found a dynasty. Any released will certainly eat a few earthworms, and could spread to someone else's garden, if not right now, then perhaps in years to come. So perhaps we should increase our efforts to stamp them out in gardens where we can. I can still receive slugs while working at home (email ben.rowson@museumwales.ac.uk), but please do not send any to the Museum until the lockdown is over. Really, the message should be simple: Stay at home. Squash slugs. Save worms.



© Chris Wright-Davies

Yellow Meadow Ant Hills, a distinctive landscape feature we should endeavour to conserve

Colin Titcombe

Of all our ant species, with the possible exception of the Southern Wood Ant (*Formica rufa*), the Yellow Meadow Ant (*Lasius flavus*) creates the most distinctive and eye-catching nest mounds.

In terms of sheer spectacle, the Yellow Meadow Ant-hills are most impressive when dominating old, unimproved pastures, often on south-facing slopes where the only farm stock are likely to be sheep. These keep the herbage nibbled down tight, so accentuating the dramatic form of the collective nest mounds.

Ant-hills are not just scenic features, however, they also represent an important ecological resource which caters, not only for a diverse subterranean fauna, but also many species above ground level too.

When Yellow Meadow Ant sexuals take to their nuptial flight on warm summer afternoons, they are taken by a wide range of birds, both on the ground and aerially. These include not only the typical aerial predators – martins, swallows and swifts, but other less likely non-specialists such as starlings, jackdaws and black-headed gulls. It becomes something of a free-for-all.

Below ground level a whole range of species take advantage of the Yellow Meadow Ant's creativity – beetles, mites, aphids and crustaceans among others. Even some vertebrates can be found there too. Smooth newts sometimes hibernate within the ant-hills, and slow-worms can also be found there.

Exactly how many lodgers, parasites, symbionts and other associates may be found with the ants is difficult to say, because such information would require wholesale disturbance of a nest, even its destruction. Nevertheless, some investigations have been made and we are informed that, for example, over seventeen species of aphids are known to exist within the nests of Yellow Meadow Ants (M. V. Brian, 1977). These aphids feed on the sap in the grass roots which permeate the nest-mounds. The result of this sap intake is honeydew, and this is taken by the ants. The association is believed to be symbiotic or mutually beneficial. Things are never quite that simple in nature, however, and the ants are also known to feed on "surplus aphids", as well as other soil dwellers which are suitably soft and easily taken.

The crustaceans represented within the ant-hills are woodlice – species such as *Porcellio scaber* for example, but also the more specialised subterranean species *Platyarthrus hoffmanseggi*. It is believed that this last named species feeds on the ant excreta, and so carries out a cleaning role within the nests, so making it a true symbiont. Such species found regularly within the nest mounds of ants are termed myrmecophiles – literally "ant-loving".



Yellow meadow ant-hills on a small patch of pasture at Clydach
© Colin Titcombe



Yellow meadow ant-hills on a small area of low-lying pasture near Llanvihangel Crucorney © Colin Titcombe

Although usually found on well-drained hillsides, the nests of the Yellow Meadow Ants can also be found on low-lying ground which may be prone to flooding. Nevertheless, they can cope with such occasional inundations and are able to persist in these situations.

As well as their various animal associations Yellow Meadow Ants also have their plant "followers" too. Depending upon the soil type and its chemistry, the tops of ant hills may have heather, thyme, Sheep Sorrel or Squirrel-tail Fescue (*Vulpia bromoides*), among others, growing on them, each plant species taking advantage of the particular conditions prevailing according to location.

With all of this fascinating interaction, and the obvious biodiversity, not to mention the sheer spectacle, it would seem that the conservation of Yellow Meadow Ant sites would be of some importance, but this appears not to be the case. Of the examples shown in the following photographs, those at Clydach have now been erased by the widening of the "Heads of the Valleys" road, that at Llanvihangel Cruconey was reportedly destroyed during 2000, while many of the others have certainly been mismanaged. Perhaps an effort should be made to protect at least some of the finer examples before it is too late.

Sources of information

1. *Ants*, M.V. Brian, NN No 59, Collins, 1977

2 *Woodlice*, S.L. Sutton, Ginn & Company Ltd, London, 1972



The above photographs show the nest mounds of yellow meadow ants on unimproved pasture near castle Wood, Garndiffaith. The Gwent coalfield is especially good for this species. © Colin Titcombe



The above photographs show yellow meadow ant-hills on sloping pasture at Newton, Monmouth as it was in March 2003 © Colin Titcombe

Coity Wallia Commons

Stuart Bain

Coity Wallia Commons is a large area of land (over 1,000 hectares) from Sarn to Pencoed and back to Blackmill and Glynogwr, north of Bridgend, South Wales.

It is a beautiful wide-ranging habitat encompassing purple moor grass, ancient oak and deciduous woodland, bracken and wildflower meadows. The habitat is home to two rare butterflies (marsh fritillary and high brown fritillary), the bog bush cricket and one rare bee (shrill carder bee).

In 2010 funding was secured to manage the commons to enable grazing, sympathetic management of ancient woodland and increasing community engagement to reduce anti-social behaviour. The project brought some successes with the reduction in anti-social behaviour as well as the reintroduction of many new species including the lapwing that hadn't been seen since 1989. Winding the clock forward 10 years, the funding has been used and work has ceased.

Was it a success? Has a legacy been left?

Living close by, during the period of lockdown I have spent many hours walking across the common and I was keen to explore whether the project has left a sustainable legacy.

2020 feels like an exceptional year for the recovery of nature. The lockdown has reduced human interference through travel and work. This has reduced pollution, allowed wild flowers to flourish and enabled wildlife to start moving into semi-urban areas. As a result, I have been very lucky to experience vast arrays of colour and increasing diversity in wildlife whilst walking over the commons.

This has enthused me to learn more around my natural surroundings and start making mental notes of what I see and experience. Over the last few months I've spotted a red kite, hobby, kestrel, sparrow-hawk, common buzzards, skylarks, small reptiles, caterpillars and frogspawn appearing in numerous water features. I've also noticed an increased diversity in wildflowers, including lady's smock although my knowledge is too poor to name many of them. Discussing this 'explosion' in diversity with fellow walkers they are in agreement that the Commons are becoming even more diverse in wildlife.

So back to my original question, has the funding in 2010 to Coity Wallia Commons left a legacy of increased natural diversity? Has the lockdown caused an explosion in wildlife on the Commons? Has the warm spring weather contributed to this? Has my increased knowledge and appreciation meant I've noticed more in this period of uncertainty? Or as I suspect is it a combination of all of the above?

I would love to see some feedback from SEWBReC readers and representatives on this point and more generally about their experiences walking over Coity Wallia Commons!

Twitter: @Stubo37

Email: stuandcatherine@hotmail.com



All photos © Stuart Bain

Lockdown world: The garden safari

Graham Watkeys

Gardens are full of wildlife. It's a statement that has been said by many mainly because it's true, but how many of us actually take the time to get to know our own little bit of habitat? How much time do we devote to it when the lure of other places is so strong? Well in these strange and disturbing days there is little choice so now is your opportunity.

The first and most important thing is to spend time in your garden. This seems like a rather dumb statement, but then again how many of us religiously fill our bird feeders then realise we've forgotten to actually watch the birds. The same applies to your wildlife areas, your weedy bits and your ponds. When was the last time you had a good rummage through your weedy bits hmmm?

After you've had a good rummage, try staring at flowers; a very good list of species can be generated by just sitting and watching a single stand of flowers. At this time of year my favourite is the humble Dandelion, but others are available.

If all this inactivity is getting dull and you want some exercise from your garden safari, the next thing on the list is lifting stuff. All manner of species like to be under things, the stones in your old rockery or garden wall, your paving slabs (Err I feel at this point I should probably add an important statement; **please ask permission from your significant others before demolishing your garden fixtures in the name of recording.**) can be a haven for all kinds of interesting things. This can also provide ample justification for leaving those old fence posts/broken plant pots/plastic sheeting behind the shed.

Ah the shed! Always good for the particularly adventurous, especially when it looks like that bit with the spiders in Raiders Of The Lost Ark (cue Indiana Jones music please Editor). Mine actually does have cave spiders in it so the filmic illusion is an apt one, although at time of writing there hasn't been a giant stone ball unless you count the odd falling stack of plant pots.

Ah, but what about night time I hear you ask? Well any number of treats await the somnambulant garden safari-ist. For those of a technological bent you probably already have a moth trap BUT for those who find themselves without that option, just leaving the light on in the bathroom and opening a window can provide hours of fun (sigh, yes Editor **"Please ask permission from your significant others before doing this as being unexpectedly head butted by a Mottled Beauty can legitimately be used as grounds for divorce."** Happy?). If, bizarrely, permission is denied, a powerful torch shone onto a white sheet will also bring in nocturnal species. Plus there is always the chance of meeting the local Hedgehogs as they snuffle around their territories.

I hope this has produced some ideas for recording in a lockdown world. Happy hunting.



Red shanked carder bee © Graham Watkeys



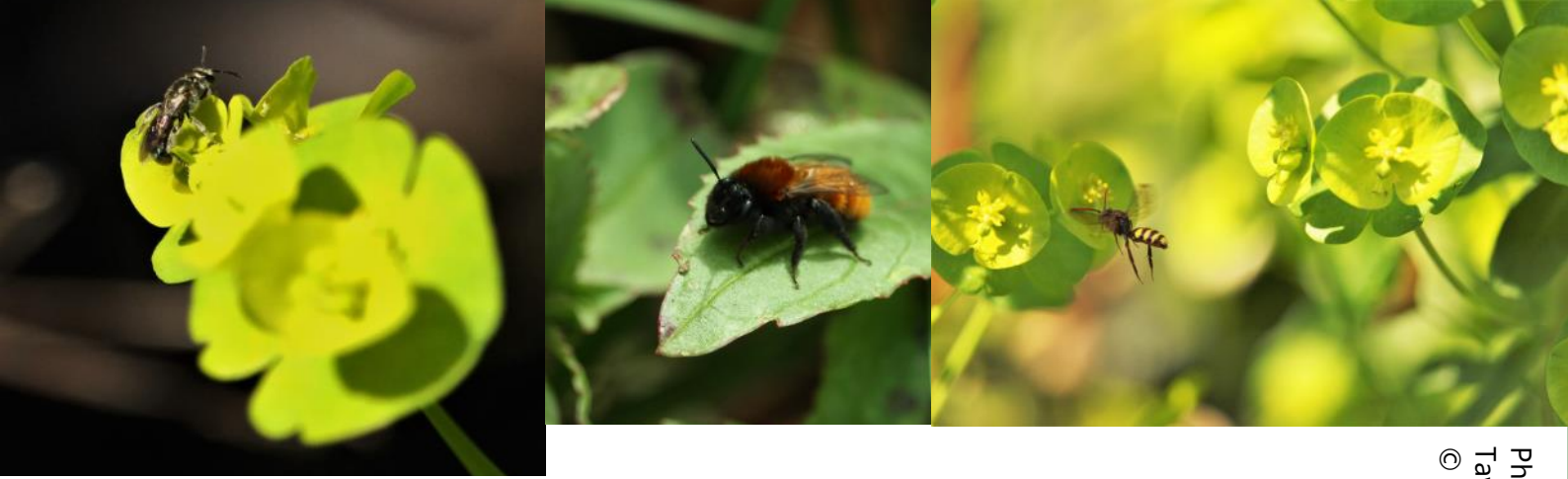
Coeliodes rana © Graham Watkeys



Chthonius ischnocheles © Graham Watkeys



Sepsis cynipsea © Graham Watkeys



Bee-spotting

David Kilner

Back garden and local green space observations have been excellent! Have attached a few photos from our 10x10m garden where I've now recorded 8 species of bee in this tiny space (not much but I am pleased!).

Buff tailed, white tailed, hairy footed flower bee, common carder, *Lasioglossum* sp. Nomada sp. tawny mining bee and *Osmia bicornis* - mason bees.

Photographs (l-r): *Lasioglossum* sp.;
Tawny mining bee; *Nomada* sp
© David Kilner

Lockdown Highlights

Linda Nottage

We are fortunate to live in a small Vale of Glamorgan village with quiet lanes & public footpaths in all directions within a 2 mile radius of home. For the past 5 weeks we've been able to enjoy daily exercise in the sunshine while incidentally adding wildlife records to local one kilometre squares.

We usually range widely across the Vale counting rook nests – this year we visited our nearest 3 rookeries and totalled 75 nests in St. Nicholas, 30 in Bonvilston & 26 by the Llantrithyd deer park.

Finding at least 30 scarlet tiger caterpillars feeding on green alkanet beside the A48 was a thrill. Perhaps one of the emerging moths might make it to our trap. Catches so far have been meagre although waved umber, streamer, water carpet & lesser swallow prominent added interest to the commoner Hebrew characters.

There have been plenty of orange-tips & a few holly blues among the 10 species of butterflies so far. Eggs of the former have been found on garlic mustard and lady's smocks including in our garden. Dock bugs and green, gorse & hairy shieldbugs have been sunning themselves.

Eristalis pertinax hoverflies have been amazingly abundant, now joined by attractive *Epistrophe eligans*, *Leucozona lucorum* & the ramsons specialist *Portevinia maculata*. Incidentally, ramsons seems to be on the march around here, colonising verges and woodland. Early purple orchids seem to have flowered well too.

New for us are the distinctive spider *Gibbaranea gibbosa* and orange-tailed & chocolate mining bees with nomad & other bees still to be sorted out. Steve Bolchover kindly confirmed ID of the impressively-named ground beetle *Abax parallelepipedus*.

With no golf balls flying on our local course, we've been able to stray from the right of way to explore the ponds and other features. We hope for dragonflies later but a mass of pond water-crowfoot made an attractive sight while 2 hares and a pair of stonechats also lifted our spirits.

[Editor: see a selection of Linda's lovely photographs overleaf]



Photographs: 1. Orange-tailed mining bee (*Andrena haemorrhoa*); 2. *Gibbaranea gibbosa*; 3. Hairy shieldbugs (*Dolycoris baccarum*, mating) on honesty (*Lunaria annua*); 4. Orange tip (*Anthocharis cardamines*) egg on garlic mustard (*Alliaria petiolata*); 5. *Abax parallelepipedus*; 6. Gorse shieldbug (*Piezodorus lituratus*); 7. *Epistrophe eligans* (female); 8. Scarlet tiger caterpillars (*Callimorpha dominula*) on green alkanet (*Pentaglottis sempervirens*). All photographs © Linda Nottage



SEWBReC Business Update

Adam Rowe, SEWBReC Manager

In my previous update I outlined how SEWBReC was navigating the tricky waters of Brexit ... little did we know six months ago that we would soon be facing **the impacts of the global Covid-19 coronavirus pandemic!** Once again, I am pleased to report that we are weathering the current storm very well. A few days before the government lockdown was announced, it was decided that all SEWBReC staff should work remotely. Thankfully this is something that most staff have done either regularly or occasionally in recent years and so the transition was almost seamless, helped by the fact that so many of our services are now delivered online via Aderyn.

Initial fears about a sharp drop in income have not come to fruition. Amazingly we have just recorded our **best ever April and May commercial sales figures!** We are also well ahead of normal progress on getting signed Service Level Agreements (SLAs) in place with our local and national public sector partners. These include small charge increases for some local authorities to help us achieve consistent charges across the region, and notably a significant £4k increase in support via the Rhondda Cynon Taf CBC SLA with their Ecologist now able to access SEWBReC data via Aderyn to inform decisions made across Council functions.

As a result of this positive financial situation, we have not yet had to make use of the government's Job Retention Scheme (furlough), but the SEWBReC board is now holding additional monthly meetings (virtually via Zoom, of course – see souvenir photo above), so that we can closely monitor the situation regarding Covid-19 financial impacts.

The only aspect of our work which was put on hold at the start of lockdown was the provision of training courses and recording events, but even these will be restored in virtual form in the coming weeks. SEWBReC and the other Welsh LERCs are stepping up to take the lead on a headline event for **Wales Nature Week** by delivering a **virtual Garden Bioblitz** across Wales all day on **Saturday 30th May** (see page 32). You can take part by recording all the wildlife you see (common or rare) in your garden or on your daily exercise over a 24 hour period. Upload your records to the LERC Wales app (or your preferred recording route) and get involved on Twitter with the hashtag #WalesGardenBioBlitz. You can also share sightings and interact with other recorders in the [Facebook event](#). In addition, we will shortly be delivering our first **virtual Introduction to Wildlife Recording training session** on behalf of the Lost Peatlands Project and we are currently looking at ways of meeting our obligation to deliver a number of training courses in 2020 for the Living Levels project in support of our joint Gwent Levels Wild Watch initiative.



Our work on the Garden Bioblitz forms part of the LERC contribution to the **Local Nature Partnerships Cymru** project. This project, which is funded by Welsh Government via its Enabling Natural Resources and Well-Being in Wales (ENRaW) grant scheme, is gathering pace as it aims to establish a **nature recovery network across Wales** by supporting Local Nature Partnerships (LNPs). You can follow



the project's progress on Twitter via [@LNPCymru](#). SEWBReC, along with the other Welsh LERCs, is providing support, access to data and training for the LNPs across Wales, as well as working on pilot projects to show how LERC data can be fully utilised in the next generation of evidence-based Local Nature Recovery Action Plans. Watch this space for updates on innovative pilot work SEWBReC is currently undertaking on **mapping ecosystem resilience at the local level** in Swansea as part of this project.

SEWBReC also continues to play an active role in the EnRAW **Resilient Greater Gwent** project. We are working with partners to deliver a State of Nature Report for Gwent, as well as supplying access to data for project partners to support their work.

One final work area to highlight at this time is a new initiative, involving all SEWBReC staff, to refresh our **data transfer agreements and arrangements** with all significant data providers (individuals and groups) that share their data with SEWBReC. The aims of this work are to make sure that up-to-date, signed agreements are in place, that regular data flows are happening (including reciprocal data flows back from us, as appropriate) and that we identify and attempt to rectify any significant gaps in our data holdings or blockages to data flows. We also hope to extend the work to look at **improving data verification processes** with the aim of ensuring that more data is verified by experts and that time-lags are reduced.

How can you help, especially if you have more time than usual to work on your records? If you are a regular or occasional provider of data, you may proactively wish to contact the SEWBReC team to **discuss your data sharing arrangements** or to refresh your agreement with us. Perhaps you have a few years' worth of data that you haven't shared with us? This is the perfect time to pass those records on to us, as we currently have plenty of staff capacity to deal with your data. You may also be interested in learning more about the Aderyn 'Recorder' module which allows County Recorders access to all the data we hold for your taxonomic group and vice county. If you have any questions at all about data sharing, please email the team via info@sewbrec.org.uk

As always, I would like to thank every single recorder for every single record submitted (whether via paper forms, spreadsheets, SEWBReCORD or the LERC Wales app!) as well as all of our customers, supporters, the SEWBReC board of directors and our fantastic, loyal, flexible staff. The Covid-19 situation has brought wider attention to the importance to people of contact with wildlife and we hope to really capitalise by encouraging more people to **turn their wildlife sightings into biological records**. So far in 2020 we've had an amazing 85% increase in records coming in via www.sewbrecord.org.uk and the LERC Wales App compared with 2019. Please keep up the good work!

SEWBReC Membership and Governance

If you would like to become a member of SEWBReC, please complete and return an application form.

Current SEWBReC board of directors: Steve Bolchover (Chair), Alison Jones (Vice Chair), Sinead Lynch (Treasurer), Paul Seligman, Kate Stinchcombe, David Clements, Vaughn Matthews*, Andy Karran*, Mark Pavett*. **Observers:** Karen Wilkinson.
Company Secretary: Rebecca Wright-Davies.

*New directors since last newsletter.



Hornet Robberfly (*Asilus crabroniformis*) © Colin Titcombe & Chris Hatch

Notes on the Hornet Robberfly (*Asilus crabroniformis*) in Gwent – an update

Colin Titcombe & Chris Hatch

1. According to the particular authority concerned, *Asilus* is either the largest, or one of the largest, Dipterids in Britain.
2. *Asilus* is a declining species in most of its western European haunts, including those of the British Isles.
3. One of the greatest threats to the ongoing presence of *Asilus*, and other insects of the dung-inhabiting community, is said to be certain veterinary products used to dose farm livestock (avermectins).
4. During the course of its predatory activities toxic injection stills all resistance at the time that the piercing mouthparts enter the prey.
5. Members of the Dipterid family *Milichiidae*, such as the tiny *Desmometopa*, live on the bodies of some spiders and predatory insects such as *Asilus* in the role of a commensal, and partake of a free meal when the predator makes a kill.
6. Information on the larval food of *Asilus* varies from one authority to another. Are they predatory or are they general scavengers? It seems we still do not know!

Personal notes on *Asilus* in Gwent

[The following applies only to the known behaviour of this species in Gwent. In other parts of southern Britain they occur in habitats not present here, and their activities vary accordingly.]

1. *Asilus* occurs, most commonly, on light soils overlying the Carboniferous Limestone or the sandy Alluvium of the Usk Valley. Otherwise they have been found in smaller numbers on the second Terrace Gravels of the Pleistocene – Recent period (of M.O.D. Caerwent), the Glacial Sand and Gravel at Abergavenny, Clytha and Bettws Newydd, and what is described as the “Red Sandstone Group” (Devonian) on sheet 232 of the Institute of Geological Sciences map for the Abergavenny area.

2. My records of *Asilus* began in the summer of 1959 at Brockwells Farm, Caerwent. During the summer of 1981 I looked into the behaviour of these insects in more detail and found them returning to roost in the trees bordering the fields (Upper Rodge Wood). At this time I also witnessed egg-laying (both into a dry cow-pat and also into the grassy area nearby). It was also at this time that I found a female *Asilus* with damaged wings, rendering her flightless, and therefore incapable of capturing prey. It was with this individual that I learned of the “head-down, tail-up” posture adapted for sleep.

3. On two occasions I have found the empty pupal cases of *Asilus* on top of dry cow-pats (see image).

4. I made an effort to study *Asilus* further in the summer of 1997 when I was approached to help with investigations by Peter Skidmore and David Clements. On the 11th August my diary records:

“Later we [Peter Skidmore and I] briefly visited Brockwells Farm fields where we first noted the grey coloured robberfly *Epitriptus cingulatus* on a dry cow-pat. We then disturbed a female *Asilus crabroniformis* with a large prey item. When she settled Peter netted her and we found that her victim was a small male of the same species. This was the first time either Peter or I had witnessed such an event. A bumblebee accidentally trapped in the net at the same time was also attacked by this voracious female.”

5. Later in the month I found that the highest *Asilus* counts were to be made during the late afternoon period. For example, on the 16th August between 1.15pm and 1.50pm I found 12 individual, c6-8 inches above the ground but close to a cow-pat. Was the surface of the cow-pat too hot for them at this time? Between 4.15pm and 4.45pm I repeated the count over exactly the same area and found 32 Hornet Robberflies, most of which were down on the cowpats.

Two Hornet Robberflies were still on the wing at Brockwells Farm on the 5th October 1997.

6. During the long, hot summer of 2018, the first *Asilus* was noted on the wing at Common Coed (ST435889) on the 9th July, in my experience a very early date. Ten days later, Chris and I returned to the same site where we counted 36 Hornet Robberflies in the warm sunshine. During this same year we also checked on a number of known sites for *Asilus* but managed to find only one individual on the fields above Rogiet. It seems that the reported decline of this species is only too real.



Hornet Robberfly (*Asilus crabroniformis*) © Colin Titcombe & Chris Hatch



Hornet Robberfly (*Asilus crabroniformis*) © Colin Titcombe & Chris Hatch

Spittlebug Survey 2020

Did you know that the 'cuckoo-spit' that you see in spring is produced by the immature stage (nymph) of a spittlebug or froghopper? It is thought that the spittle is produced to protect the nymphs from drying out and from their predators. Once the nymphs emerge as adults, usually in late June, they leave their spittle 'nest' behind and become free-flying. The name froghopper reflects the fact that their face is rather bulbous and therefore froglike, and that they are one of the most powerful jumpers in the animal kingdom. There are ten species of froghopper in Britain. The so-called Meadow Spittlebug, *Philaenus spumarius*, is one of our commonest insects and has possibly the broadest diet of any insect, being known to feed on more than 400 species of plant.

Interest in these insects has recently been heightened by the fact that they all feed on the liquid contents of the plant xylem tissue and are therefore capable of transmitting various plant diseases that reside there. One of these, the bacterium *Xylella fastidiosa*, has recently been responsible for the death of millions of olive trees in southern Italy. Fortunately, the *Xylella* bacterium has **NOT** been found in the UK, but there is a danger that it could be accidentally introduced in imported plants (especially lavender, rosemary and olive trees).

We urgently need good data on two aspects of these insects to understand better how the *Xylella* bacterium would spread if it were ever introduced into Britain: the geographical distribution of the different species of spittlebug and what plant species that they feed on. Last year, we ran a very successful national survey, funded by the Biotechnology & Biological Sciences Research Council (BBSRC) and coordinated through the RHS, focused on gardeners recording spittle on their garden plants, especially lavender and rosemary. This year, we want to encourage naturalists and the biological recording community to collect records from more natural habitats in the wider countryside.

Can you help? It would mean recording cuckoo-spit when you see it and especially the plant species on which you find it. Your plant identification skills will help us collect vital information. Please consider contributing to this important survey. Much more information and an online form for submitting your sightings can be found on our website at: www.spittlebugsurvey.co.uk





Photo 1: 5/4/2020 © Mark Steer



Photo 2: 10/4/2020 © Mark Steer

***Gymnosporangium* Stage III**

Mark Steer, Glamorgan Fungus Group

Following on from my article in Spring 2019 Newsletter I was eagerly awaiting a new season in 2020 to try to catch this rust fungus in a more photogenic phase. However my plans have been disrupted by the current restrictions on travel and queues around the Tesco car park and in front of the Juniper bushes.

Not to be defeated I managed a visit early on a Sunday morning and managed to find signs of Stage III starting to erupt. I collected a small twig with eruptions and nurtured it at home in a glass with water and covered with cling film. Photo 1 5/04/2020. Over 5 days the horns developed to about 12mm – not spectacular but an indication of what it can look like. Photo 2 10/04/2020. Subsequently these horns started to go gooey and didn't develop further.

Following overnight rain on 28th April I managed to re visit the site. There were now 20mm horns with some already going to jelly. There were further eruptions that probably would develop into horns with rain over the next couple of days. Photos 3 and 4. This Stage has developed about 3 weeks later than in 2019...probably due to very little rain during April this year.

Teifion Davies in Swansea had read my previous article and contacted me in April – he had found Stage III on a wild Juniper on Gower! In order to establish the species I suggested that he look for Stages 0/I on suitable hosts close to the Juniper. Nearby he advised there is plenty of Hawthorn, Cotoneaster and *Malus* – all possible hosts for Stages 0/I. I have put Teifion in touch with Nigel Stringer who determined the species on Hawthorn very close to my Juniper (*G. confusum*).

I hope to revisit my site in April 2021 to see if I can find Stage III in all its glory!



Photo 3: 10/4/2020 © Mark Steer

Photo 4: 10/4/2020 © Mark Steer

Dynamic Dunescapes

David Kilner

South Wales is blessed with some fantastic sand dune sites – whether you want to simply lose yourself on a stroll, search for butterflies, bees, waders, wanderers, ship wrecks or lost villages – the wildness of our dune systems, their history and ecology are an incredible draw for many of us.

As hostile as these environments may at first seem, dunes are internationally important habitats – homes to otters, bitterns, walkways of orchids and sanctuaries to rare species like the fen orchid and sand lizards.

The diversity of our sand dunes comes about from their dynamic nature; with each hollow, blow out, dune crest, imperceptibly and sometimes dramatically shifting, a mosaic of conditions & habitats are provided. Blown sand within dynamic dune systems stunts succession and creates opportunity for some of Britain's rarest fauna and flora to flourish.

The seasonal transition of dune slacks as they flood; the shifting blankets of flowering fore dunes punctuated by vipers bugloss spikes; these are things we should all see and be able to share with future generations.

However, dunes are listed as one of the most threatened environments in Europe for biodiversity loss and only 20,000 hectares remain in England and Wales.

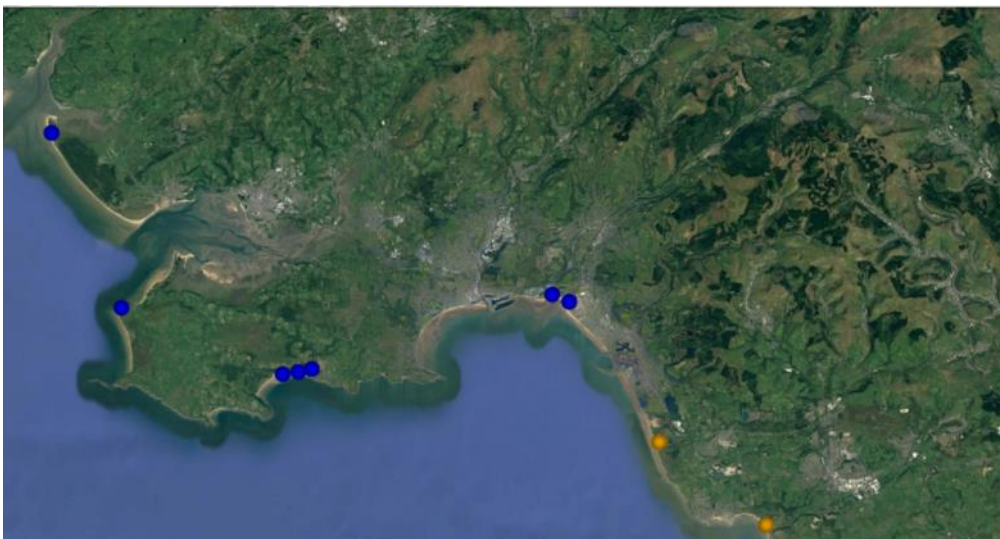
A national three year project has been developed to help our dunes. Dynamic Dunescapes is a partnership project restoring sand dunes across England and Wales for the benefit of wildlife, people and communities, funded by the National Lottery Heritage Fund and the EU LIFE Programme.

A variety of factors have led to the loss of this dynamic, shifting system in the last 50 years on nearly all of Wales' sand dune systems. As our sand dunes have become dormant, stabilized by invasive shrub, crowded by brush and late stage successional plants, the huge abundance of wildlife that carved out their own space in this unique shifting habitat is under threat. Healthy sand dunes need to be free to move and be dynamic for species to thrive.

Dynamic Dunescapes will work with local and national experts, involve schools and local groups, volunteers and visitors of all ages and abilities to help rejuvenate our dunes. Working across 34 sites in England and Wales, the projects aims to undertake conservation restoration works across 7000 hectares of dune habitat, supporting 33 important sand dune species.

Dynamic Dunescapes in Wales

Dynamic Dunescapes will be working across 10 sites in Wales to restore our dunes, led by Plantlife and Natural Resources Wales.



restoring sand dunes to a thriving and biodiverse status. As our projects share many similarities, we keep in close communication and work in partnership where appropriate.



A ride of Orchids on Kenfig

Alongside physical work on the dunes to return their natural dynamic processes, we will be showcasing our dunes, their ecology, their beauty and their heritage.

Working together with our other partners, we will build on the body of research that underlies the principal of our work – healthy dunes are dynamic dune systems.

There is a sister project called Sands of Life being run by Natural Resources Wales across Wales' sand dunes. We are all working towards

South Wales is home to some fantastic sand dune systems – from Merthyr Mawr (and Europe’s second highest dune) to Kenfig NNR, which I’m sure you are all familiar with. We will be working with some smaller and lesser-known sites, including Baglan Burrows, sitting at the easterly end of the River Neath estuary and Crymlyn Burrows across the water.

Further west on to the Gower are the perched dunes of Pennard and Penmaen, where we’ll be restoring dune heath (20% of all dune heath in Wales) while soaking up views across Three Cliffs bay. We will be rejuvenating Oxwich and Broughton Burrows and across to Carmarthenshire and Pembrey Burrows – Cefn Sidan sands – where our work will go alongside ‘Sands for Life’ and work the MOD are doing to mobilise dunes here.

Helping wildlife on the dunes in Wales

A range of conservation works will be happening across south Wales as part of Dynamic Dunescapes over the next three years to support our wildlife:

- Dune slacks are being scraped and restored at Oxwich and Crymlyn – there is hope (and a plan) to see if the Fen orchid will reappear with this restoration and if not it will be reintroduced to Crymlyn, using Kenfig as a hub.
- Notches in fore dunes are being cut at Oxwich to mobilise the sand and facilitate the return to a dynamic ecosystem last seen in the 1950s.
- Scrub control will take place to improve conditions in dune grassland, supporting a variety of wildflowers and insects.
- Areas of bare sand will be created for rare native plants to flourish.
- Work will be undertaken to introduce rabbit populations – these active grazers are, and were in times past, one factor keeping sand dunes moving.
- Controlled cattle grazing will be introduced on selected sites to help keep vegetation in favourable condition.



People at the heart of the project

Dynamic Dunescapes will be working closely with people and communities. There will be a wide range of opportunities to get involved. From walks and talks to family activities, many events will take place across south east Wales – from Merthyr Mawr to Crymlyn.

We especially want to hear about your experiences in these fantastic landscapes – whether it was a holiday on the dunes of Merthyr Mawr, stumbling upon a species you’d never seen, or enjoying getting lost in one of the many dune slacks of Kenfig.

We'd love to hear your dune memories from south Wales! We would also love to **share your photos** of fantastic wildlife finds, beautiful sunsets and the secret histories of these areas.

A national citizen science recording scheme will be running across several sites to help in the monitoring of our conservation efforts and of dune species populations – monitoring the changes we make, through your recording. Please get in touch to find out more.

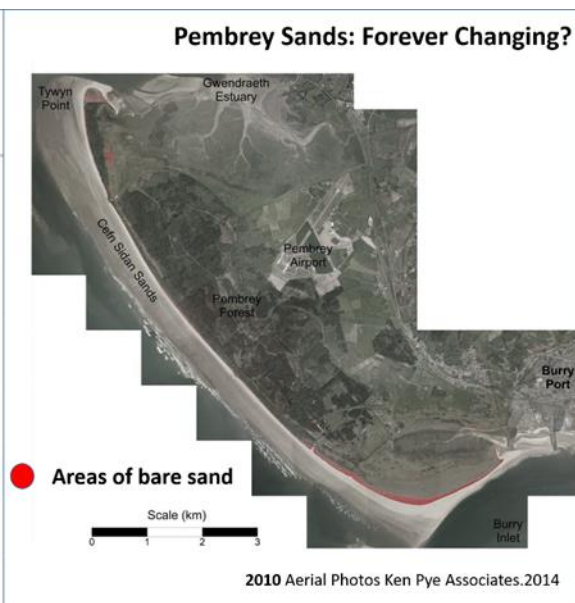
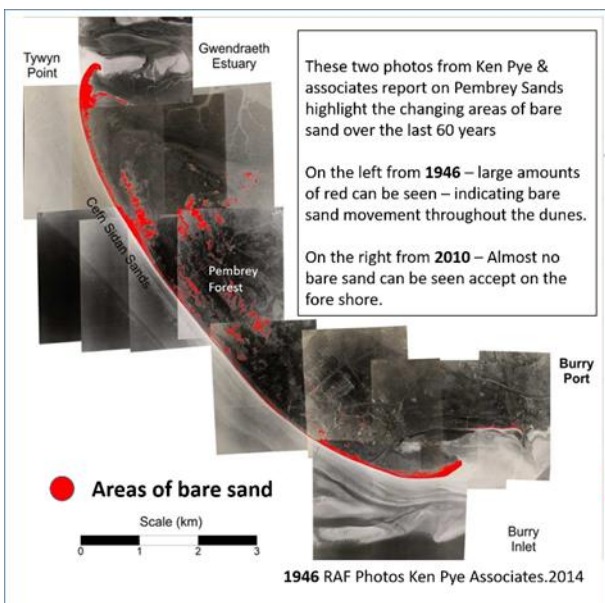
Alongside the ecological importance of dunes we recognize that sand dunes have much wider value.

School partnerships will be developed to engage younger people in the conservation of dunes and provide learning opportunities. Free national educational resources will be available. We will be seeking volunteers to help with a variety of opportunities, from practical conservation, to running of events, to species surveying. Training opportunities will also be provided.

If you would like to find out more, please visit www.dynamicdunescares.org

Twitter [@dynamicdunes](https://twitter.com/dynamicdunes) & [@duneswales](https://twitter.com/duneswales)

If you would like to register an interest in volunteering please email: david.kilner@plantlife.org.uk



Work begins on the northern end of Pembrey sands by Sands of Life – our work will begin in the Autumn

Highlights of 2019

Colin Titcombe

During the course of the past year Kestrels were seen on seven occasions. On the 8th August two were seen flying together between Black Rock and St Pierre Pill.

Jack Snipe were seen on the 17th January on Peterstone Great Wharf (along with 20 Common Snipe) and, in the same area, 20 Oystercatchers. Another Jack Snipe was flushed from the saltmarsh between Black Rock and St Pierre Pill on the 5th November.

While surveying SEWBReC's "Square of the Month" SO4219 on the 21st February, Chris Hatch and I found an old milestone at the side of a narrow no-through road. Inscribed on this stone was the information Monmouth 7 Chepstow 9. Rather ironically it later transpired that this stone was originally located at the side of the A466 in Llandogo (just a hundred yards from my own backdoor).



© Colin Titcombe

On the 6th May 2 Common Cranes were flying near Llangwern and, a little later in the month, a male Pied Flycatcher was holding territory amongst the trees on the edge of Llandogo village.

On the 17th August a Yellow Wagtail was noted on passage, close to Llandogo Church and on the 20th the Tachinid fly *Alophora hemiptera* was seen in the Highlight area of Wentwood, the first to be seen here since 2005. Five days later, a walk along the Severn Estuary coastal path near the Prince of Wales Bridge revealed large numbers of lepidopteral larval webs on the brambles. Images taken by Chris Hatch later enabled Martin Anthoney to identify the species as those of the Brown-tail moth (*Euproctis chrysorrhoea*), the webs of which are shown right.

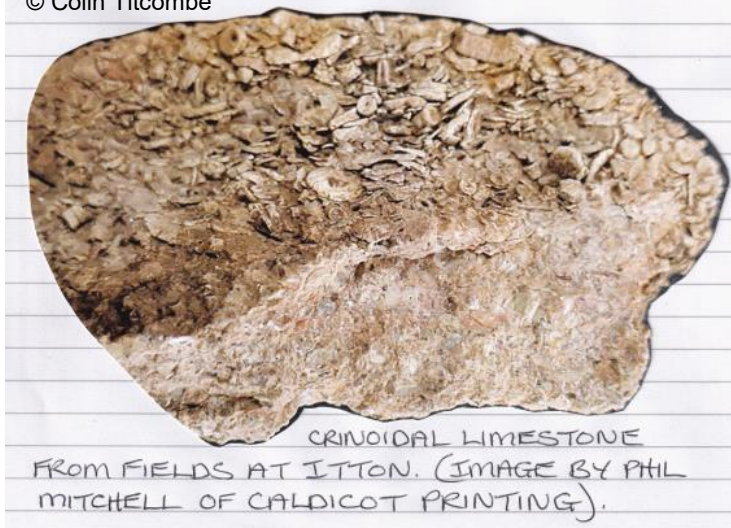


© Colin Titcombe

In mid-September I eventually managed to identify a mystery tree in the Mounton Valley (at ST506936) thanks to the Woodland Trust staff (Emilie Bonnevey) at Grantham, Lincolnshire. The tree, first noted in November 2018, proved to be a Seven Sons tree (*Heptacodium miconioides*), a species not mentioned in any of the books I own.

During October Chris Hatch and I saw a Merlin on the Severn Estuary at Collister Pill on the 15th and watched an Otter in the River Usk below the Bryn (Llangattock-nigh-Usk) for some time on the 22nd. Then, on the 31st, while surveying "Square of the Month" ST4995 at Itton, I renewed my acquaintance with rocks of crinoidal limestone which occur at the surface of the fields in this area (photograph by Phil Mitchell of Caldicot Printing).

© Colin Titcombe



CRINOIDAL LIMESTONE FROM FIELDS AT ITTON. (IMAGE BY PHIL MITCHELL OF CALDICOT PRINTING).

During November 26 Oystercatchers were noted between Sudbrook Point and Caldicot Pill (5th Nov) and, later in the month, I located 2 Green Cellar Slugs (*Limacus maculatus*) in our garden at Llandogo, following a request sent out in the SEWBReC Newsletter.

And finally, on the 18th December, Chris Hatch and I, on a walk along the Severn seawall between Redwick and Whitson, came upon a gathering of waders on the seawall boulders at high tide. These comprised 55 Dunlin, 16 Ringed Plover and 38 Oystercatchers, the largest number of the latter for some time.



© Mark Steer



© Mark Steer

Violet Oil Beetles in Brynna Woods Nature Reserve

Mark Steer

I have been observing Violet Oil Beetles in Brynna Woods Nature Reserve since 2012. At that time I submitted a specimen to Dr Brian Levey at the National Museum of Wales, Cardiff. I met Brian previously at a SEWBRc Voucher Specimen course at the Museum. Brian confirmed that the specimen was *Meloe violaceus*, Violet Oil Beetle and I understand that the specimen was retained as a Voucher Specimen at the Museum. Clare Dinham and Liam Olds have visited the Reserve a number of times and we have confirmed that all specimens checked were Violet Oil Beetles.

In recent years I have been trying to monitor and record as often as possible.

- 2018 saw low numbers with only 7 specimens recorded. This was almost certainly due to very cold spells during February and March and wet weather which restricted my searches.
- 2019 saw an increase in numbers spotted with the earliest on 27th March. A total of 26 specimens were found.
- 2020 has seen a dramatic increase in observations due to the warm sunny weather in April and because I have been surveying nearly every day! First sighting was on 16th March and to date (3rd May) I have recorded a total of 99 beetles. I have also found Violet Oil Beetles in two new locations on the Reserve which I am continuing to monitor as well as other possible suitable locations.

I will continue to monitor this year but by June vegetation growth makes it difficult to see them unless on the paths. One thing I have yet to observe are any triangulins..the larval stage. With almost daily searches I live in hope!

Many thanks to Dr. Brian Levey for his confirmation of identification and Clare Dinham and Liam Olds, Buglife Cymru for their help and encouragement. For further information on Oil Beetles please see Buglife's website: <https://www.buglife.org.uk/projects/oil-beetles>

Photos: *Top right:* Male Violet Oil Beetle; *top left:* Female Violet Oil Beetle (curved antenna rather than kinked). *Bottom left:* A male Violet Oil Beetle excreting a yellow oil from its knee joints for defence. *Bottom right:* A mating pair.



© Mark Steer



© Mark Steer

HAVE YOU SEEN THIS BEETLE?

The Blue ground beetle (*Carabus intricatus*) is the largest ground beetle in the UK, and also one of the rarest.

In 2012, the Blue Ground Beetle was discovered in a log pile in a garage in Skewen.

We need your help to collect more records of the Blue Ground Beetle!



If you see one of these beetles in your garden, shed, garage or local woodland please let us know by emailing wales@buglife.org.uk, including a photo if you can. Thank you!



Photos: Vaughn Matthews, Liam Olds, Rose Revera



YDYCH CHI WEDI GWELD Y CHWILEN HON?

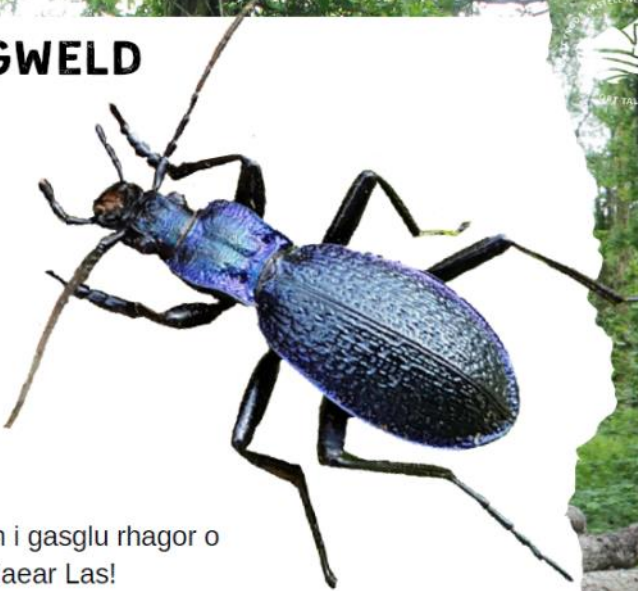
Chwilen Ddaear Las (*Carabus intricatus*) yw'r chwilen ddaear fwyaf yn y DU, a hefyd un o'r rhai mwyaf prin.

Yn 2012, darganfuwyd y Chwilen Ddaear Las mewn pentwr o foncyffion mewn garej yn Sgiwen.

Mae angen eich help arnom i gasglu rhagor o gofnodion am y Chwilen Ddaear Las!



Os ydych yn sylwi ar un o'r chwilod hyn yn eich gardd, sied, garej neu goetir lleol, rhowch wybod i ni drwy e-bostio wales@buglife.org.uk, gan gynnwys llun os yn bosib. Diolch!



Photos: Vaughn Matthews, Liam Olds, Rose Revera



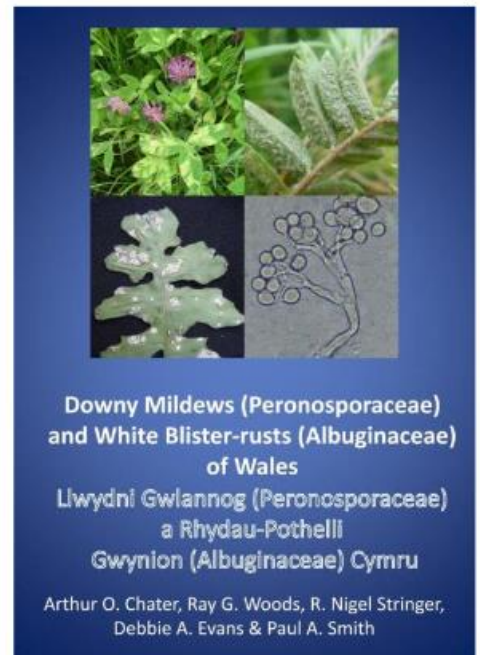
Downy Mildews (Peronosporaceae) and White Blister-rusts (Albuginaceae) of Wales

Arthur O. Chater, Ray G. Woods, Nigel Stringer, Debbie A. Evans & Paul A. Smith

The 'Downy Mildews and White Blister-rusts of Wales' is the latest in a series of books on the plant pathogens of Wales written by the 'Welsh Rust Group'. This volume covers an important group in the Class Oomycetes which can be found infecting a wide range of wild plants, in addition to many horticulturally and agriculturally important plants and crops. The book introduces the Downy Mildews and White Blister-rusts and provides an identification guide to all the species that can be found in Great Britain & Ireland.

Each species is dealt with separately and the book contains a large number of photographs, with both macroscopic and microscopic images of infected plants and the pathogens. A table of host plant species and their Downy Mildews and White Blister-rusts is provided, along with a Census Catalogue of all the species recorded to date in Wales. Using the book and knowing the host plant, it should be possible to identify most of the species found and we hope it will encourage and stimulate more recording of this important group.

The book is in A4 format, spirally bound with a plastic cover and contains over 135 pages and over 250 images. ISBN 978-0-9565750-4-3 Cost is £8.50 plus £3.50 p&p directly from Ray Woods, Ty Mawr Mill, Builth Wells, Powys LD2 3SH. Email: raygwoods@aol.com Copies will also be available from online book suppliers and digital copies will be available to download from <https://www.aber.ac.uk/>



Home-based Wildlife Resources

Living under lockdown has been a challenge for all of us this year, but in the recording community we are fortunate that our favourite pastime is adaptable to the current circumstances.

If you find yourself with more time on your hands at this time, whether due to furlough or being unable to visit your usual sites, there are plenty of online resources and garden based activities to help you stay connected with nature. Many organisations have come up with innovative ways to inspire biological recording from home and are facilitating learning without the need to meet face to face. Many of these resources have been listed on the [South East Wales Biodiversity Records Centre webpage](#).

Suggestions include:

- Watching nature presentations, such as those of the [Linnean Society](#)
- Joining online learning events, such as Field Studies Council's [Virtual Meet Ups](#)
- Taking part in garden based surveys e.g. the [Pollinator Monitoring Scheme](#)
- Identifying specimens you have been saving for a rainy day
- Digitising your old records, for example by entering them on [SEWBRReCORD](#)
- Writing newsletter articles, e.g. we are always looking for Recorders' Newsletter content
- Reading journals and magazines such as [Natur Cymru](#) on [Biodiversity Heritage Library](#)
- Staying connected on social media, perhaps by joining the [SEWBRReC Facebook group](#)
- Taking part in the [Wales Garden BioBlitz](#) on Saturday 30th May

Whether discovering wildlife in your local area during daily exercise, deep-diving into the nature in your garden or simply looking out a window, I hope everyone has found some time and space to enjoy the solace of spring.

The wonders of wood decomposition

Hywel Evans

The wood decomposing Basidiomycetes include fungi that produce brackets, conks and mushrooms for spore dispersal (figures 1 + 2). These are the reproductive structures seen most when looking for fungi. They can reach enormous sizes and come in a vast array of different colours and shapes. We only see a small part of the fungus; the largest part being held in the substrate it grows in. This structure is collectively called the mycelium. Individual hyphae (figure 3) degrade wood using a combination of enzymatic and non-enzymatic mechanisms, whilst generating turgor pressure in their cells to push through the substrate that they consume (Moore, 2020; Goodell, *et al.*, 2008). Contrary to popular belief, wood isn't sterile and decay in trees occurs long before wood hits the ground (Boddy, 2001). Inside the wood lies a complex, dynamic microbial community, fighting for displacement of other competitive microorganisms (Boddy, 2001). Wood decomposers achieve this, by producing an arsenal of volatile and diffusible organic compounds or altering pH in the wood volume (Hiscox, *et al.*, 2017). Defense mechanisms include creating physical barriers of narrow melanised bands of tissue known as pseudosclerotial plates (figure 4) (Hiscox, *et al.*, 2017).

The fungi species community is not like other more familiar ecological concepts; the structure continually changes and the idea of a climax community in fungal ecology is ill-fitted (Boddy, 2001). Woody biomass or lignocellulose forms the most abundant organic biomass on the planet and the most durable source of cellulose in nature is wood (Kameshwar, and Qin, 2019; Watkinson, 2016; Moore, *et al.*, 2020). Fungi play pivotal roles in ecosystems; they create habitat for invertebrates and vertebrates, and they regulate carbon cycling and mediate nitrogen and phosphorus cycles to name only a few examples (Goodell, *et al.*, 2008; Watkinson, *et al.*, 2016; Treseder, *et al.*, 2015). Fungi arrive as vegetative mycelium or as propagules, but more often as asexual or sexual spores (Boddy, 2001). Other wood-decaying Basidiomycetes form what are known as mycelial cords, strands or rhizomorphs (figure 5) which are particularly abundant at the interface of the surface litter layer and the soil (Boddy, 1993). These are collections of hyphae that form linear organs, allowing the fungus to extend over large distances to connect different nutrient and water resources across the forest floor, or as a result of other external stimuli (Boddy, 1993).

Wood decay fungi largely comprise of species contained within Basidiomycota, and can be divided into three categories, white rotters, brown rotters and soft rotters (Goodell, *et al.*, 2008). The white rotters and brown rotters have superficially been split based on their effects on the physical appearance of wood (figure 6) (Goodell, *et al.*, 2008). Wood utilised by white rot fungi, usually has a bleached appearance with a string-like or fibrous texture, occasionally with pockets of rot occurring in the wood (Goodell, *et al.*, 2008). In contrast, wood that has been



Figure 1: *Cerioporos squamosus* or Dryads saddle growing on *Fraxinus excelsior* (Ash). This is one of our largest bracket fungi in the UK



Figure 2: *Postia ptychogaster* or the "Powderpuff Bracket" colonising a rotting conifer log. It grows in an asexual 'cushion' state where it produces conidia, or as a sexual state where it resembles a more poroid structure (Læssøe, & Petersen, 2019). Both stages can be seen in the picture.



Figure 3: Individual hyphae in a basidiomycetous fungus. Here we can see what is known as "clamp connections" which are like small bridges between hyphal compartments, used by some fungi to transfer genetic information in the cell division process (Goodell, *et al.*, 2008).

degraded by brown rot fungi, has a brown appearance, that is usually cracked into distinct cuboidal segments. More specifically, the white rot fungi are able to degrade all components of the plant cell wall, whereas brown rot fungi utilise plant cell wall products without the removal of large amounts of lignin (Wu, et al., 2019). The third type of wood rotting fungi, the soft rotters are largely confined to the phylum Ascomycota (Goodell, et al., 2008; Koddenberg, et al., 2020). Soft rot mostly occurs at the outer surface of waterlogged wood, sometimes penetrating deeper when the wood is at the optimum water content (Goodell, et al., 2008). Soft rot can have a similar appearance to brown rotted wood, being brown in colour with surface checks across the grain (Goodell, et al., 2008).



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Figure 4: Zone lines of pseudosclerotial plates or boundaries of mycelial incompatibility in a cross sectioned oak log (Worrall, 1997). The patterns these features create in wood as well as general discoloration of the wood by fungi is known as spalting to some. The hyphae of pseudosclerotial plates are pigmented and highly branched, forming a barrier against other fungi and water (Watkinson, et al., 2016).

Alongside these attributes of wood decomposing fungi, fungi that grow on (or, more accurately, in) trees can be classified on what part of the tree they feed on. Heart rot fungi colonise the central portion of trees and are important for creating habitats for various different organisms (Parsons, et al., 2003). Other fungi colonise the roots of living trees, and some are parasitic or weakly parasitic. Certain fungi are also selective for particular tree taxa, for example *Fistulina hepatica* predominantly associated with *Quercus* (Boddy, 2001). Other fungi grow in functional sapwood, laying dormant until optimal conditions for growth occur (Boddy, 2001). It is important that we consider this in our conservation efforts towards fungi, a lot of which are currently threatened by climate change, habitat destruction and pollution (Douglas, 2016). Other fungi feed on coarse woody material, and already well rotted material that has landed on the forest floor (Boddy, 2001). The staggering diversity of fungi in the UK means that there is always something new to find. There are around 17,000 species currently recorded in the UK. Despite this staggering number of species, we have still only scratched the surface of potential learning about aspects of fungal biology and ecology.



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Figure 5: Rhizomorphs, cords or strands formed by fungi. The picture on the left are the highly melanised Rhizomorphs of *Armillaria*, and the picture on the right shows the strands or chords of some unknown species.



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Figure 6: White rot (pictured above) and rots with an appearance typical of brown rot (bottom left and right).

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All photos © Rebecca Wright-Davies

Lockdown survival with a young family

Rebecca Wright-Davies, SEWBReC

Like many others, I suddenly found myself at the end of March trying to juggle home-schooling, childcare/entertainment, working a part time job, keeping the house in some kind of order, exercising and looking after my own mental wellbeing.....all within a 2 mile radius of our house in North Cardiff. It has definitely been challenging!

To keep ourselves busy, we have undertaken a myriad of craft projects, sowed countless seeds, relaxed during Cosmic Yoga, sweated at Jo Wicks PE, baked lots of bread and made a wide variety of scrumptious biscuits and cakes. We have read numerous books, coloured at least a million pictures, played maths games, undertaken scientific experiments, created Playdoh monsters, danced at discos, watched films, and have contributed to many Zoom chats. We have planted flowers, made fairy gardens, fashioned an underwater diorama, and used our garden moth trap a few times. My children (3&5) have been fascinated by the different moth species we have attracted such as small quaker, peppered moth, white ermine, angle shades, and light emerald, plus a small army of cockchafer. We have also set up a camera trap in our garden, and have discovered that mice are active near the bird feeder at night, and a fox visits the lane to the rear of the house (plus a very early-bird dog walker!).

When the house and garden cannot satisfy us anymore we have taken ourselves to our local woodland which is handily located a mere 2 minute walk from our front door for our permitted daily exercise. It is an ancient semi-natural woodland with remains of a pre-historic cooking hearth, and is designated as a Site of Importance for Nature Conservation (SINC). It includes many different habitats including woodland, wet woodland, ponds, springs, streams, and grassland. We have recorded many bird species including tawny owl, buzzard, green woodpecker, great spotted woodpecker, treecreeper, moorhen, long-tailed tit and jay. We also have a nice list of plants too: yellow archangel, opposite-leaved golden saxifrage, marsh marigold, figwort, dog-violet, toothwort, bluebell, lesser celandine, lords & ladies, flag iris, fox-glove, heath speedwell and wood anemone to name but a few. We have hunted for insects by using beating trays (improvised from a seedling tray, white paper and a stick), and spotted St Marks fly, red & black cardinal beetles, and common green & parent bug shieldbugs.

We tackled the SEWBReC [A-Z](#) and [rainbow](#) challenges in the woods, and the kids loved completing them, mainly because I armed them with clipboards, pens and magnifying lens, and they relished in looking and feeling like they were on official business! It has been brilliant to watch them explore the woodland habitats and all the amazing species that live there. I have seen my children become more confident and bold in an outdoor setting. They have patiently returned to tiny holes in the ground and watched for the mining bee to return or emerge. They have also watched a pair of moorhens nest and incubate eggs. Sadly the first nest failed, but the parents are trying again...fingers crossed they succeed.

When all else has failed, we have resorted to nature-inspired lego challenges creating a nuthatch, a scarlet tiger moth, a wasp spider and many others to while away the time and keep the kids amused. We have also designed and played a wildlife recording board game, the aim being to collect as many species records whilst traversing the terrain (in this case a woodland)! I have even dug out my old sketching pad, pencils and paints and indulged my creative side by attempting some pictures of some well-loved species including a bank vole, tree bee, barn owl and long-tailed tit.

Nature has certainly been my go-to during lockdown. It has entertained, amazed, enthralled and inspired my young family; and most importantly it has soothed my soul. Connecting to nature and wildlife really has been a welcome tonic during these crazy uncertain times.

Nant Llwynog Park (April 2020 Notes)

Jim Davies

Coronavirus has been all too near Bedlinog and the Park has been a haven, accessible to everyone. Despite their play area being closed, many accompanied children explored the wider park for the first time. Parents clearly enjoyed showing them the highlights of their own childhood.

Tadpoles and toadpoles of various ages were densely massed at the First, Second, and the Angling Ponds and were a 'must see' attraction. At the Round Pond, young, all-black Tadpoles wriggled about its entirety with a nice sense of social distance of 2-3 inches!

The Round and Angling Ponds are constant level, spring fed, significantly biodiverse elements among the Park's habitats. If I chose so, and had a fine mesh, steel framed net, and white sampling trays, I could spend the entire year without difficulty in studying their living contents. As it is, I simply check the principal surface insects: the darting Pond Skaters and the gyrating Whirligig Beetles. Like a majority of insects they grow in bursts, casting a skin each time. Just now the Pond Skaters appear as pairs - one partner the shed skin, the other the enlarged parent insect.

Absent this month were the Water Boatmen. An individual rows upside down via a pair of oar-legs, whilst at the same time clinging to the pond's water film with its other limbs. There are several species of these creatures, each in its own, handsome, contrasting colours, and which can fly several miles from pond to puddle to pool. So, WHERE ARE THEY?

We DO know where approximately our spring migrant birds come from, and that essentially they make landfall as individuals via their own, nervous system based compass. When the warblers, and the swallows and the rest of them arrive here they are exhausted and silent for a day or so after their sensational journeys. Then, in Nant Llwynog, at least, their singing begins with just a few bars that can only be picked up if one's hearing and experience are sufficient.

This year the Cuckoo (only the male says it) was reported from the valleys east of Bedlinog on April 18, then near the Craig Fargod Cemetery on April 24, and at Garth-gynnydd on April 29. Perhaps one will perform in a dawn chorus at the Park next week? The male Tawny Owl 'hooo-hoo-hooo' in years past has signalled nightfall in the east woods of the Park, with Pipistrelles active over the copses, Jackdaws settled at their roost, and the lone Song Thrush repeating his end of day message. This April, the cry of the 'Gwdihw' has only been heard later in the night, and to the distant east. (note that the 'kee-wik' calls between both sexes is typically an autumn communication).

The Nant Llwynog Park vegetation has been checked by the hard March, the spring drought, and the constant winds; not even the Bluebells have flowered. Most sedges (wind pollinated) have done well, but rushes are well behind. In the promising warm spell this March, persisting 2019 fruits of several Rush species supported new Case moth cases, but these rapidly disappeared.

Not surprisingly then, April 2020 has been poor for many other divisions of terrestrial invertebrates with, for example, butterflies down to around six species, and net and line spiders almost to zero. The recovery of the Park's flora and fauna is now an Autumn priority for the Friends Group volunteers, and we look forward to the management challenge.



Angling pond © Jim Davies



Round pond © Jim Davies



Lesser pond sedge © Jim Davies

Garden BioBlitz

Saturday 30th May 2020

Midnight—Midnight

Join LERC Wales staff and the recorders of Wales to discover wonderful Welsh wildlife in your garden. Take part by recording all the wildlife you see (common or rare) in your garden or on your daily exercise for 24 hours on **Saturday 30th May** (midnight to midnight).

Submit your records via your preferred recording route (such as the LERC Wales App) and get involved on Twitter with the hashtag #WalesGardenBioBlitz. You can also share sightings and interact with other recorders on the [Facebook event](#) page.

BioBlitz Gardd

Dydd Sadwrn 30ain Mai 2020

Hanner Nos – Hanner Nos

Garden BioBlitz

Saturday 30th May 2020

Midnight - Midnight

Celebrate Wales Nature Week and join the wildlife recorders of Wales to spot species in your own garden. Help us create a national snapshot of wonderful Welsh wildlife and discover the nature on your own doorstep.

Find more information on www.biodiversitywales.org.uk/Wales-Nature-Week

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