

Gwent-Glamorgan Recorders' Newsletter

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Welcome the **twentieth edition** of the Gwent-Glamorgan Recorders' Newsletter!

In celebration of this small milestone, here are 20 reasons to read the newsletter and record wildlife!

Read the newsletter to...

(1) be dazzled by dragonflies (page 3); (2) be (h)awestruck by hawfinches (page 4); (3) wonder at willow tits (page 5); (4) be inspired by invertebrates (pages 6-7); (5) be bowled over by bird counts (pages 8-10); (6) be fascinated by fungi (pages 12-13); (7) be enthralled by eggs (pages 14-15); (8) be captivated by clubtails (page 18); (9) love the Living Levels (page 20); (10) rave about rusts (page 22-23).

Record wildlife to...

(11) help monitor effects of climate change, pollution & other environmental changes; (12) feed data into conservation and management plans; (13) create an evidence base that can be used for assessing development proposals; (14) help monitor the impact of conservation efforts on species; (15) learn new skills; (16) potentially find something new to science; (17) meet other like-minded individuals; (18) get some fresh air; (19) get over Game of Thrones finishing!; and (20) have fun!

Amy Hicks, Rebecca Wright-Davies & Elaine Wright (Editors)



Early male Clubtail



Mature male Clubtail

Clubtail Dragonflies along the River Wye at Llandogo

Colin Titcombe

In the world of British dragonfly recording, a lot of interest in recent years has focussed on the Common Clubtail (*Gomphus vulgatissimus*). I first came across this species after moving into Llandogo in 1998. In the following years I noted their presence at various localities between Llandogo and Lower Penallt on the Gwent side of the river. I haven't extended my searches beyond this.

It is generally accepted that the typical flight period for *Gomphus vulgatissimus* extends from May into early July. In my experience, along the Wye, they first appear about mid-May (24th May in 2016 and 15th May in 2017) and can then be seen on and off through June and into early July. I say 'on and off' because, once emerged, they vacate the river until they become sexually mature.

In nature there are, of course, always some exceptions, and on the 9th August 2005 I saw a female Clubtail close to the Wye at Whitebrook – an exceptionally late date to my knowledge.

The usual means of recording *Gomphus* is by searching for the emerging exuviae (see specimens, right). Along the Llandogo stretch of the River Wye on which I have concentrated my recording efforts since 2010, one of the most productive sites is a stretch of moss-covered wall just below the Ridingstream Weir (SO526038, see image below). Here the mature nymphs climb up and the teneral dragonflies emerge. In addition to this, the tidal flow dislodges exuviae from elsewhere along the riverbank and these often become snagged on the mossy surface. Otherwise the search area comprises riverside tree trunks and bare areas of riverbank between the Bigsweir Islands (SO537045) and a point upstream from Coed Ithel (SO528034).



Exuviae

Since 2010, when I found 73 exuviae along this stretch of river, the count has fallen considerably. In 2017 I found just 24 exuviae and in 2018, just 18. Is this a consequence of declining water quality? It would appear not to be the case since Banded Agrion Damselflies (*Calopteryx splendens*), which are typically found alongside *Gomphus*, are still doing very well, the hot summer of 2018 being particularly good for them.



Ridingstream Weir

On the 27th June 2018, a Clubtail flew over the river and landed close to me on the fishing croy below Bigsweir Islands. It was a male, very dark black and green, not the black and yellow seen earlier in the season.

This is the colouration of a mature male *Gomphus vulgatissimus* [see New Naturalist 106: Dragonflies by Philip Corbet and Stephen Brooks, Collins, 2008]. Also see images above of a typical early male (top left) and a mature male (top right), photographed in the Cher Valley, France in June 2003.

Editor: Get involved! See page 18 for details of the 2019 Clubtail Count by the British Dragonfly Society



Freshly emerged Common Clubtail



Hawfinch at Fforestganol Local Nature Reserve 2018

Richard Facey & Karen Wilkinson (on behalf of the Cardiff hawfinch team)

With its massive steely grey beak, orange plumage, ornate iridescent wing feathers, and a look that says "I'll hurt you", the hawfinch *Coccothraustes coccothraustes* is an enigmatic species of deciduous and mixed woodland.

Within Glamorgan, the Hawfinch is considered a "scarce resident" and "probably breeds in small numbers at long established sites" with a limited and patchy distribution (East Glamorgan Bird Report 2017). Only a handful of records of the species are made each year from these "long established sites"; although this might be due to the habits of recorders as well as the elusive habits of hawfinches.

In the winter of 2017-2018, a large influx of hawfinch arrived in the UK, driven here by food shortages on the continent. We've tried to catch hawfinches for ringing for several years - without success! An influx year seemed a good opportunity to learn more about the status of hawfinch in Glamorgan; one of the few populations not regularly monitored in Wales. Individually marking birds allows us to gather data to explore factors relating to site fidelity, breeding, movement and survival.

Daily feeding began in earnest during early winter, with catching starting in March. 13 ringing sessions later, we had ringed 39 new hawfinch. While the number of birds seen at the feeding station was often up to 30, we estimate (by comparing the numbers of ringed and un-ringed birds during observations) that more than 150 individuals used the feeding site during winter 2017-2018.

This project has also helped us demonstrate connections with other hawfinch populations - at least three birds initially colour-ringed elsewhere were sighted at Fforestganol by photographers and birders. All three birds were from Monmouthshire and the Forest of Dean (the number may be higher as the rings can be hard to read and not all codes were discernible). Ringing also confirmed more local connectivity and provides an idea of the catchment for the ringing site. A male (T72), initially ringed at Fforestganol on 9th March, was found stunned having hit a window 3km away at Forest Farm on 4th April. Unfortunately, T72 died shortly after being found. We also came a step closer to confirming the species as breeding within the county - one individual caught on 3rd May had a well-developed brood patch and was accompanied by a male. Females can travel up to 17km between feeding and breeding sites at this time, but shorter distances are more typical.



By continuing the project in the future, we hope to learn even more about the hawfinch in Glamorgan – 2019's season is already adding to the picture, but we'll tell you more about that another time!



Willow Tit Survey

Wayne Morris, British Trust for Ornithology (BTO) Rep for East Glamorgan

Glamorgan Bird Club is an Associate Member of the Welsh Ornithology Society (WOS) and has been a beneficiary of their small grant scheme. Recently Wayne submitted an article for inclusion in the WOS eNewsletter. We thought those who don't access this might like to read it.

Following fieldwork for the national Bird Atlas 2007-11, the Glamorgan Bird Club published its own local atlas. The Club then began to evaluate the data. It was clear that several species were showing a dramatic decline in numbers and the Club began to develop ideas about how those species could be best supported. Out of these discussions arose a successful bid to the Welsh Ornithological Society small grant scheme in 2016 and the Glamorgan Swift Champions were formed. This is now a thriving group of volunteers, engaging the public about Swifts and erecting boxes in chapels, private homes and new builds across the region. The Club has worked with Royal Society for the Protection of Birds (RSPB) and Cardiff Harbour Authority to secure National Lottery Heritage Funding, which will culminate in a landmark swift tower being erected later this spring. [Editor: see page 19 for a Swift Project update]

With a successful model in place, the Club then turned to other species in need of aid. As with other parts of the UK, Willow Tit has seen a marked decline in population and distribution in our region. How could the Club help arrest this decline and put measures in place to help this species recover?

With the atlas data nearing a decade old, it seemed sensible to undertake a fresh survey, to establish the current population and distribution. Another successful bid to the WOS small grant scheme in 2018 has, by covering fuel costs, enabled the Club to mobilise many volunteers to visit sites, establishing the current status of Willow Tit in the region. Once the survey dataset is collected and analysed, the Club will engage with landowners, Natural Resources Wales (NRW) and others to find ways of managing habitat, and providing suitable nest sites for this delightful little bird.

Unbeknown at the time of organising and undertaking the local Willow Tit survey, plans were underway at RSPB and the Rare Breeding Birds Panel (RBBP) to carry out a national survey of Willow Tit in 2019-20. Fortunately, once news came through, the Club were primed to take on this project too and details were quickly added to our local Glamorgan Willow Tit Project website to deliver information and documents to volunteers.



The national survey has a methodology that may be unfamiliar to many volunteers, so a training session was arranged to work through the paperwork and fieldwork. On 3 February 2019, 20 volunteers assembled at Garwnant Visitor Centre to take part in survey training, both indoors and in the field, using national survey forms, maps and the playback method. Fortunately, the local Willow Tits obliged and all attendees were able to add a new tick to their year list.

Glamorgan Bird Club is appreciative of the Welsh Ornithological Society's small grant scheme, which has successfully enabled us to focus work on two threatened species and we trust will bring dividends in future. Moreover, by targeting work in this way we have been able to bring new people into our birding network within the region too.

Willow Tit surveyors in a snowy landscape at Garwnant © Alan Rosney



1. *Cheilosia lasiopa*



2. A slightly teneral *Linnavuoriana decempunctata*

Taf Fechan: My favourite species of 2018

Graham Watkeys

Someone recently asked me what my favourite record of 2018 was, to which the clichéd answer would be the last one; however this would be a very short article if I allowed blatant clichés, so I have to think of another answer.

Time for some self-imposed arbitrary limitations: since the question was asked at Taf Fechan, it has to be a species found there; it also has to be a species that hasn't been recorded there before. So looking at my spreadsheet this reduces my options to 165 species all of which have a claim. Hmm that didn't help much, so let's try defining 'favourite'?

If I was to choose from my favourite group, the one that I find most rewarding, it would have to be *Cheilosia lasiopa* [photo 1]. This hoverfly is associated with plantains as its larvae develop inside the roots, but the adults can be found in woodland rides where they bask on sunlit leaves, which is exactly where I found this one.

Like most *Cheilosia* species it is not particularly easy to identify so has very few records, making it rather under-recorded although it is not apparently particularly rare. Leaving pure emotional attachment out of the equation, perhaps I could define 'favourite' as finding something that has very few or no records?

Linnavuoriana decempunctata [photo 2] is a leafhopper usually found on Birch and although the British Bugs website lists it as local, I was surprised it had no Aderyn records. Whilst it is pleasing to add the first 'dot on the map' and it is certainly an important record (for a given value of important), I can't quite equate just 'adding a dot' with 'favourite', plus there are no shortage of Birch trees that this diminutive leafhopper might be sat on unnoticed, so it doesn't add much to the specialness or uniqueness of Taf Fechan. So I feel I'm getting somewhere at last; it has to be something that's not entirely emotional, one that doesn't have many records, yet says something about the uniqueness of Taf Fechan.

Having said that, now seems the time to throw in the fact that last year saw my 1000th species added to the Taf Fechan list, which deserves due consideration.

When I started recording at Taf Fechan around 4 years ago the thought of reaching over 1000 species never even crossed my mind, I was just adding stuff to the list that I thought was glaringly absent, which was in this case everything except birds, flowering plants, liverworts and bryophytes. To pick a favourite from the whole list really is impossible, so don't ask me! Anyway, number 1000 happened to be the larva of the sawfly *Periclista lineolate* [photo 3], which I think does win the year's highly prestigious funkiest larva award; but should it be my favourite?

Something that does fit the aforementioned criteria is the soldier fly *Oxycera pardalina* [photo 4]. A nationally scarce species that has specific habitat requirements, namely calcareous seeps with wet moss covered rock; this describes per-



3. Number 1000 and winner of the year's funkiest larva award:
Periclista lineolata



4. *Oxycera pardalina*

fectly the river gorge at Taf Fechan. This is now yet another specialist species whose presence here indicates the importance and richness of this habitat. It also helps that it's a very beautiful little fly that turned up unexpectedly.

But should surprise be a factor in choosing my favourite? Maybe I should think about the pleasure of deciding to look for something that should be there, and systematically searching until I found it? Perhaps that is more rewarding?

Agromyza alnivora [photo 5] is a dipteran leaf-miner which, as its name suggests, feeds on Alder. Given the hosts prevalence at Taf Fechan it still took over a year of searching to finally find it. The mine itself is not that difficult to spot (when it's there) and the two lines of frass are diagnostic. I must confess feeling a huge amount of satisfaction and pleasure at finally adding it to my list, plus I no longer have to spend as much time staring at alder leaves!



5. *Agromyza alnivora*

Perhaps it should be *Idiodonus cruentatus* [photo 6]? This leafhopper has only three other Aderyn records and is associated with woody heathland plants, a habitat that forms only a very small part of Taf Fechan, but finding *Idiodonus* just serves to highlight the importance of this habitat, and justifies our continued work to improve and conserve it.



6. *Idiodonus cruentatus*

I could go on and on trying to decide what to include; should it be a species from a particularly under-represented group like caddisflies or lichens? finding a parasitic fungus that infects spiders was certainly bizarre, and flat worms are just weird. I could even, if I was that desperate, go for the hideously cute and just ignore all of the above [photo 7]!

7. The hideously cute: a fledgling Blue Tit rescued from the ground and placed back up in a tree.

Yes my favourite may just be one of these (probably)...





Oystercatcher



Black-tailed Godwit



Curlew



Redshank

Severn Estuary Bird Counts: Now and Then

Colin Titcombe and Chris Hatch

During the 1970s I was involved with the 'Birds of Estuaries Enquiry' for the British Trust for Ornithology (BTO). My particular stretch of coast was that lying between Magor Pill and Collister Pill (Undy). The birds counted (in some case estimated) were basically waders, wildfowl and gulls, although for my own interest, I also noted passerines or other birds seen.

With much wildlife now in decline, Chris Hatch and I decided to monitor "my old patch" in order to assess any change - and we found it to be quite considerable.

We made monthly counts from March to September 2018 inclusive, and then matched the resulting figures against those of comparable dates in the 1970s.

Space demanded that we be selective in our choice of species. Gulls were omitted, and so too were some regular waders - Golden Plover and Common Snipe being examples. With hindsight we could have left out Widgeon, Teal and Pintail because they have a largely autumn/winter presence here, and we were limiting our counts basically to the spring/summer.

Two factors in place today and not during the 1970s are (1) the Newport Wetland Reserve which could draw some birds away from "my patch" and (2) the exclusion of the public from the large saltmarsh area below Chapel farm, Undy.

Of the species listed in my charts, only one is regularly present today (2018), and not in the 1970s, and that is Little Egret. Birds which often occurred in the 1970s, and which were rarely seen during our counts between March and September 2018, were Turnstones, Ringed Plovers, Lapwings, Black-Tailed Godwits and Bar-Tailed Godwits.

Other waders which were occasionally noted here in the 1970s were Curlew Sandpipers, Sanderlings, Greenshank and Spotted Redshank. Green Sandpipers were to be found in the "back ditch" (the reen behind the seawall) and Common Snipe (occasionally Jack-Snipe) inhabited the saltmarsh and still do. These birds, however, cannot be seen unless flushed.

As I remarked earlier, the large saltmarsh is now a no-go area and, for this reason, I have excluded the Common Snipe from the charts.

The aforementioned charts show a great reduction in the numbers of some species - Lapwings, Ringed Plovers and Turnstones among them, but the numbers of some species remain on a par with those in the 1970s. These include Mallard, Shelduck and, rather strangely, Curlew. It is known that the breeding numbers of Curlew in Gwent are now very low, yet the figures for the Collister high-tide roost remain, more or less, comparable with those of the 1970s.

In the charts which follow, numbers enclosed in brackets are estimates.

Comparative bird counts of selected species on the Severn Estuary between Magor Pill and Collister Pill (Undy) 2018 (March – September) and the same period in the 1970s

Species	8.3.18	6.3.71	14.3.72	11.3.73	2.3.74
Wigeon	0	20	0	0	0
Mallard	21	30	21	4	5
Pintail	0	2	17	0	0
Teal	0	0	0	4	2
Shelduck	(30)	30	(50)	1	65
Oystercatcher	2	0	0	0	2
Ringed Plover	0	0	0	0	0
Grey Plover	15	20	0	(30)	211
Lapwing	0	3	0	0	0
Knot	0	0	(300)	(40)	2
Turnstone	0	5	(300)	(200)	(100)
Dunlin	(300)	(2000)	(2000)	(5000)	(3000)
Common Sandpiper	0	0	0	0	0
Redshank	(70)	70	(200)	(200)	(100)
Black Tailed Godwit	0	0	0	0	0
Bar Tailed Godwit	0	0	0	0	0
Curlew	(100)	(200)	(300)	(200)	(300)
Whimbrel	0	0	0	0	0
Little Egret	0	0	0	0	0

Species	3.5.18	1.5.71	4.6.72	9.6.73	19.6.78
Wigeon	0	0	0	0	0
Mallard	0	15	20	10	0
Pintail	0	0	0	0	0
Teal	0	0	0	0	0
Shelduck	(100)	(50)	18	(30)	(150)
Oystercatcher	0	2	2	2	0
Ringed Plover	0	100	9	(300)	(50)
Grey Plover	0	2	0	3	0
Lapwing	0	6	6	6	(300)
Knot	0	(100)	22	3	13
Turnstone	0	(100)	59	(50)	2
Dunlin	0	(5000)	(2000)	(4000)	(8000)
Common Sandpiper	0	0	0	2	2
Redshank	0	6	6	10	(10)
Black Tailed Godwit	0	0	0	0	2
Bar Tailed Godwit	0	0	0	58	26
Curlew	8	10	10	32	12
Whimbrel	18	15	15	(60)	27
Little Egret	7	0	0	0	0



Dunlin

Species	1.7.2018	3.7.1971	1.7.1972	1.7.1973	5.7.1975
Wigeon	0	0	0	0	0
Mallard	10	1	(75)	1	0
Pintail	0	0	0	0	0
Teal	0	0	0	0	0
Shelduck	(300+)	(230)	(200)	155	(400)
Oystercatcher	2	4	2	2	2
Ringed Plover	0	0	0	0	1
Grey Plover	0	0	0	0	0
Lapwing	0	(200+)	(500)	(200)	0
Knot	48	(80)	0	7	0
Turnstone	0	30	0	10	7
Dunlin	0	30	(200)	(200)	(500)
Common Sandpiper	2	0	0	2	2
Redshank	0	6	(50)	(200)	(500)
Black Tailed Godwit	0	0	0	0	1
Bar Tailed Godwit	0	0	0	4	8
Curlew	16	1	178	(150)	(300)
Whimbrel	0	5	0	1	1
Little Egret	3	0	0	0	0

Species	12.9.2018	11.9.1971	17.9.1972	8.9.1973	15.9.1974
Wigeon	0	0	2	0	0
Mallard	64	40	24	1	7
Pintail	0	0	1	0	0
Teal	2	2	1	0	0
Shelduck	24	24	(60)	26	12
Oystercatcher	0	0	0	0	0
Ringed Plover		20	(50)	(20)	(500)
Grey Plover	3	4	0	2	0
Lapwing	0	(400)	(500)	(300)	67
Knot	4	0	0	56	0
Turnstone	0	4	0	6	0
Dunlin	(200)	40	(30)	6	(100)
Common Sandpiper	2	1	1	0	0
Redshank	(40)	(250)	(100)	(200)	(300)
Black Tailed Godwit	2	0	2	0	0
Bar Tailed Godwit	1	2	1	5	0
Curlew	(250)	(350)	(300)	(200)	(250)
Whimbrel	2	0	0	2	2
Little Egret	24	0	0	0	0



1. *Ceratosphys amoena subsp. confusa*

2. *Euophryum confine*

5. *Cerylon ferrugineum*



3. *Pogonognathellus longicornis*

4. *Leistus rufomarginatus*

All photos © Graham Watkeys

A winter's recording at Taf Fechan: macro to micro

Graham Watkeys

Whichever definition you wish to use, meteorological, astronomical or the number of layers, winter is often a difficult time to record, but it helps if you are willing to go macro or even micro. As the larger insects disappear into winter quarters or hide away as eggs or larvae, it may seem that nothing is around, but life just gets small - in some cases, really small.

Now, having said all that I will immediately contradict myself with my first example: *Ceratosphys amoena subsp. confusa* [picture 1] is a nationally rare species of millipede which was first discovered and recorded in south Wales. It is not currently known whether it is a relatively recent arrival or just an overlooked native, but the fact that I have now recorded it on both the VC41 and VC42 sides of Taf Fechan indicates how locally widespread it can be. Both of my finds were made under tree bark.

Sticking with dead wood as a habitat now, for a species that is definitely a foreign invader and also certainly fits the category of micro! *Euophryum confine* [picture 2] is a wood boring weevil, originally from New Zealand, that can be a serious pest of structural timbers when present in large numbers. I feel it is particularly ironic, considering the numbers of highly damaging invasive species that have gone to New Zealand over the years, that they managed to send one the other way. Despite, and partly because of, its tiny size, this Weevil is fairly easy to identify due to the obvious flange around its bottom (please note, I have been informed this is categorically not a general trait of all New Zealanders).

Springtails are tiny little creatures that could be used as the very definition of the word miniscule, but just to be perverse here is Britain's largest Springtail with a suitably long name. *Pogonognathellus longicornis* [picture 3] is comfortably larger than our last species, and by Springtail standards is positively gargantuan. They are canopy dwellers and can be very common, but often go unseen; this particular example was found wandering on an Oak branch.

I spent quite some considerable time during winter looking at Springtails, so it was exciting to find one of their specialist hunters. The ground beetle *Leistus rufomarginatus* feeds on ground dwelling springtails using specially adapted mouthparts, giving their jaws a plate-like form. There are a number of different species, but this one has a clear red margin to the thorax (hence the name). This, combined with a distinct blue sheen, make it a rather beautiful beetle.

I think I have to end on by far the smallest thing I recorded last winter (or at least the smallest thing that didn't need a microscope); in fact it was so small, at first I didn't even recognise it as a living thing. All I saw was a tiny bit of colour nestled on a piece of bark, and on a whim decided to photograph it anyway; it wasn't till I got home and enlarged the picture that I found out it was a beetle! Identified as *Cerylon ferrugineum* by the good folk of the [Beetles of Britain and Ireland Facebook group](#), it is another dead wood species often found under the bark of ancient Oak or Beech trees, where it is thought to feeds on fungal hyphae and slime moulds.

The Importance of Fungi

Hywel Evans

In 1825 it was predicted that fungi would be the largest group in the vegetable kingdom by the infamous Swedish Mycologist Elias Magnus Frias, whose work paved the way for modern mycological taxonomy. Of course, we now know that fungi are not plants at all and are in fact their own kingdom with over 7 phyla, with a current global species estimate of 2.2 to 3.8 million species. The prediction set by Frias, therefore, is not far removed from the truth. There are currently 120,000 species of fungi documented globally, 15,000 of which have been recorded from the United Kingdom in the past 100+ years. If fungi were absent from planet earth, then there would be nothing to break down woody material, forests would be impassable and impenetrable, rivers and ponds would be choked with organic matter, and piles of herbivore dung would litter the landscape. Without mycorrhizal fungi (fungi that form symbiotic relationships with plant roots), there would be no forests, grasslands or herbivores in the first place; terrestrial life as we know it would fail to function.

Fungi primarily spread to new habitats using spores carried on the wind or by animals, and use a network of fine root-like structures called hyphae, collectively called the mycelium, to penetrate soils, plants, organic matter and heterotrophs, absorbing nutrients in order to grow. They use a powerful set of digestive enzymes and chemical compounds, coupled with mechanical mechanisms utilising osmotic pressure, to power and digest their way through otherwise recalcitrant and impenetrable woody material and soils. Because of their ability to utilise soil nitrate and ammonia to make their own amino acids in the presence of a carbon source, they are able to convert nitrogen-poor plant remains, abundant in sugars, into protein. They are vital constituents of biogeochemical processes and play major roles in carbon and nutrient cycles, creating unique habitats and opening up new niches for a wide range of invertebrates, vertebrates, plants and other microorganisms in nature. Fungi are a large, extensive and diverse group, which show a multitude of different adaptations to suit a wide variety of different habitats; for example, as a result of the high C:N ratio of some plant materials, there are even predacious fungi that utilise soil invertebrates as a nitrogen source (examples include *Coprinus comatus*, *Pleurotus ostreatus* and *Laccaria bicolor*). Mycorrhizal fungi provide their plant partners with nutrients in exchange for carbon in the form of sugars. Furthermore, they aid water uptake, aggregate soils and prevent disease. Mycorrhizal fungi impact ecosystem dynamics and connect plant communities in a system known as the 'Wood Wide Web'.

The development of human civilisation has in part relied on or co-evolved with certain fungi. Button mushrooms (*Agaricus bisporus*), bakers yeast (*Saccharomyces cerevisiae*) and Penicillin (*Penicillium chrysogenum*), to name a few, have been part of human history for decades, if not millennia, to produce incredibly important medicines and nutritious food.



Oudemansiella mucida Porcelain Fungus



Armillaria Honey Fungus



Laccaria amethystina Amethyst Deceiver



Meripilus giganteus Giant Polypore

In contrast, fungal infections of plants currently destroy around 125 million tonnes of rice, potatoes, soybeans, maize and wheat each year; 90% of global wheat varieties are susceptible to a recently arrived rust pathogen, and Rice Blast (*Magnaporthe grisea*) disease accounts for losses of over 50 million tonnes of rice per annum. The better known Dutch Elm Disease (*Ophiostoma* spp.) and Ash Dieback (*Hymenoscyphus fraxineus*) have caused extensive ecological damage and these threats to biosecurity and global food security highlight our need to desperately develop our knowledge of fungal biology and ecology. Unfortunately fungi that promote ecosystem health are also largely in decline due to climate change, habitat destruction and pollution. It is therefore critically important that the UK starts to integrate fungal surveys and mitigation measures into the current environmental framework and as part of infrastructure projects, just like other protected species here in the UK. For organisms so crucial to ecosystem health and vigor, it is amazing how this does not seem to set any sort of importance when conducting mitigation works. Of the 15,000 species in the UK, only a handful of species in the UK are currently protected.

Discovering which fungi are genuinely threatened or simply under recorded is a real challenge; some fungi in Britain have not been reported in certain sites for over 50 years. This highlights the need for more professional and amateur mycologists alike to record species by conducting survey work individually or through 'fungal forays' organized by local fungi groups. The Royal Botanical Gardens of Kew has compiled a list of 100 species of fungi, which they deem as some of the most threatened fungi in Britain. This list forms the basis of the '[Lost and Found Fungi Project](#)', which encourages amateur mycologists, botanists, naturalists and any other enthusiasts to help record these fungi in appropriate new or historical sites. The aim of the program, with the help of its dedicated volunteers, is to provide enough evidence to place rare species of fungi on the Red List and provide them and their habitats with protection. It is the hope that this will inspire other organisations to follow suit and continue the great work that amateur and professional naturalists have been doing for the past five years on this project. The best thing we can do as naturalists is deepen our knowledge and understanding of fungi in the environment, and give these amazing organisms the recognition they deserve. Planet earth would be very different without them!

Editor: *If you've been inspired to start recording fungi, you can find the Glamorgan Fungus Group's 2019 Foray Programme on page 23.*

Hywel provided a reading list for fungal facts, please get in touch with SEWBRc if you would like his recommendations.



Mutinus caninus Dog Stinkhorn



Amanita muscaria Fly Agaric



Amanita muscaria Fly Agaric





Nest Recording Volunteers Required

Daniel Jenkins-Jones, British Trust for Ornithology (BTO) Regional Ambassador

For many, many years it was searching for birds' nests in childhood and, yes, stealing their eggs that was the spark that ignited a lifelong interest in the natural world for many naturalists. Quite rightly, this practice was made illegal in 1954 as part of the Protection of Birds Act and, from then on, apart from a declining number of hardcore egg collectors, the practice has thankfully faded. By now, even approaching active nests, let alone stealing the eggs, has become a taboo and something that some people frown upon.



However, the breeding season is a key stage in a bird's lifecycle. The productivity of their nests can provide important clues as to why some species are in decline while others are flourishing. It is too important a stage to ignore. So, what's to be done?

The answer lies in the BTO's Nest Record Scheme (NRS). This Scheme gathers vital information by asking volunteers to find and follow the progress of individual birds' nests. The data collected are used to produce trends in breeding performance and to measure the impacts of pressures such as climate change on bird productivity. As with all BTO surveys, the welfare of the birds comes first, and all nest recorders must follow the NRS Code of Conduct, a protocol designed to ensure that monitoring a nest does not influence its outcome.

But, numbers of NRS volunteers has been in decline. In south east Wales, only a small handful of people have been regularly submitting nest records in recent years. Many common species are under-recorded and important data that can inform conservation solutions are missing.



All photos © Daniel Jenkins-Jones

Nest record totals of some under-recorded species in Gwent and Glamorgan in 2017	
Species	Total
Mute Swan*	8
Moorhen	1
Woodpigeon	14
Willow Warbler*	10
Blackcap	6
Starling*	1
House Sparrow	15
Duncock*	13
Chaffinch*	1
Greenfinch*	2
Goldfinch	11

The BTO would like nest recording data for all species, whether they are in decline or not. But, those species marked with an asterisk in the table above are 'BTO Priority Species' - species for which NRS submissions have declined significantly over the past two decades. As you can see, many of them are common birds that may be nesting in your garden or local park.

So, can you help fill in these gaps? It really is a survey for everybody, whether you're a keen birdwatcher or not. Some people watch a single nest box or a Robin nesting in their back garden, while others find and monitor nests of a whole range of species. Every single nest record counts. As well as helping conservation, nest recording really is an incredibly rewarding activity. Whether you're new to birdwatching or an old hand, it will bring a completely new aspect to your enjoyment of watching birds, enabling you to better appreciate and understand birds' behaviour, their breeding biology and the challenges they face. And then there's the thrill of finding each nest!

If you think this is something you can help with, you can find out more information online at www.bto.org/volunteer-surveys/nrs. Here, in south east Wales, we can arrange free of charge 'in the field' training sessions with a mentor or we can pop a NRS Quick Starter Pack in the post to you to get you started. If you're interested, please drop me a line at eastglam-webs@gmail.com



The view from Billy Wynt, Llantrisant; can you spot the SEWBReC office? © Amy Hicks

SEWBReC Business Update

Adam Rowe, SEWBReC Manager

The 2018/19 financial year was a successful one for SEWBReC, as we finally saw an up-turn in commercial enquiries after 2-3 years of slowly declining sales. After a below par Quarter 1, we had a strong Quarter 2 and then record sales in both Quarters 3 and 4. This was very encouraging following previous concerns over why sales were dropping away. Fingers crossed now that the trend continues into 2019/20 (although we have got off to a very slow start to the year)! These figures, combined with solid public sector support, meant that SEWBReC ended the year having returned to a very solid financial position, which enables us to move forwards with more confidence.

We are optimistic that 2019/20 will be another good year for SEWBReC. There have been the usual delays getting public sector Service Level Agreements in place, but we are confident that there will be no nasty surprises. Welsh Government (WG) has indicated that this will be the final year of providing a grant award (effectively core funding which is top-sliced from the Natural Resources Wales budget). We are already actively working with key WG contacts on possible future funding arrangements. A crucial factor will be to ensure that the value of LERC data as a key part of the Welsh evidence base is **fully realised by WG's new Environment and Rural Affairs Monitoring and Modelling Programme (ERAMMP)** and that it feeds into Welsh national sustainability Indicator 44 on biodiversity. **We are also anticipating that additional enquiries may come our way later in the year from other 'public authorities' who all have to report to WG during November 2019 on their performance against their biodiversity and ecosystem resilience duty under Section 6 of the Environment Act (Wales) 2016.**

During 2019/20 we also hope to be benefiting from another source of WG funding, namely the Enabling Natural Resources and Well-Being in Wales (ENRaW) grant. SEWBReC was an active partner in a number of bids to this grant fund, several of which have been successful. Although project leads need to jump through a few more hoops before funding is 100% confirmed, SEWBReC should benefit through involvement in a few projects, the most significant of which (in income terms) will be the Local Nature Partnerships Cymru and A Resilient Gwent projects. Watch this space for more details as they emerge!



At the Wales level, our continued work with the LERC Wales Limited consortium has led to a few further good news stories. The first year of the funding agreement with Dwr Cymru Welsh Water (DCWW) was adjudged a success and they have signed up for a further year, so that they can continue to receive direct access to LERC Wales data via [Aderyn](#), plus additional GIS data layers, for an increased fee. We were approached by Network Rail late in 2018 and a short trial agreement was speedily established to provide them with similar access to that enjoyed by DCWW, but for selected parts of the rail network. This trial was also so successful that it has been extended for a further six months, with an increased fee, to cover the whole of the Welsh rail network.

With a growing number of customers utilising [Aderyn](#) to meet their data needs, the LERC Wales Limited partners agreed last year to seek additional technical staff to support the lead developer (Steve Goddard, based at BIS in Brecon). After a fruitless recruitment effort last year, it was second time lucky when we secured the services of John Robinson who, since March, has been based at (and employed by) SEWBRcC. John is working closely with Steve (and with our own Dave Slade) to work on improving the resilience and performance of Aderyn.

One further growing aspect of SEWBRcC's role is working on public engagement projects to develop the skills of species identification and wildlife recording. As well as running our own species identification training courses, we are increasingly contracted to run introduction to wildlife recording courses and to organise and support field recording days and bioblitzes. For example, this year we have been contracted to develop a bespoke recording scheme and to deliver seven training days and three bioblitzes for the Living Levels project on the Gwent Levels. Further details of how you can take part in "Living Levels Wild Watch" and of our upcoming bioblitzes can be found on page 20. It is likely that there will be more events such as these in the next year or two as we work more with Living Levels and with other delivery partners on various EnRAW projects, so keep a close eye on our [events calendar](#)... we look forward to spotting you at some of these events!

If you haven't yet had a chance to call in to see our fantastic facilities at our Talbot Green base, please do so (but best to ring first!). As usual, I would like to thank every recorder for every record submitted (whether via paper forms, spreadsheets, [SEWBRcCORD](#) or the [LERC Wales app](#)!) as well as all of our customers, supporters and the SEWBRcC board of directors. Without all of you, SEWBRcC would not exist, so thank you!

SEWBReC Membership and Governance

Adam Rowe, SEWBReC Manager

Following our EGM/AGM in January there have been a few changes to the SEWBReC board. Colin Cheesman and Roger James both stood down at the AGM after many years' of dedicated service, for which we are very grateful. We are delighted that Kate Stinchcombe was elected to the board at the same meeting. Changes made at the EGM mean that the board has the power to admit new directors between AGMs (to be ratified at the next AGM). We are very pleased to welcome David Clements as a new director, following the latest SEWBReC board meeting. That meeting also confirmed the appointment of SEWBReC staff member Rebecca Wright-Davies as Company Secretary.

Current SEWBReC board of directors: Steve Bolchover (Chair), Alison Jones (Vice Chair), Sinead Lynch (Treasurer), Paul Seligman, Kate Stinchcombe, David Clements. Company Secretary: Rebecca Wright-Davies.

We are still actively seeking new directors, as we still have up to four vacancies on the board! Although we would like to recruit new directors who bring business skills and experience to the board, there is still plenty of room for anyone with **the enthusiasm to help support and steer SEWBReC. Directors need to be members of SEWBReC, but if you're not already a member, you can join at the same time as expressing your interest in joining the board.** There are four (weekday, day-time) meetings per year, plus an AGM (usually part of the Recordors' Forum meeting on a winter Saturday) with minimal additional time commitment needed between meetings. We usually ask interested people to attend one or two board meetings as an observer, before they confirm whether they wish to join the board.

Please get in touch with the SEWBReC team or with any of the existing directors if you think you may be interested in becoming a director. If you would like to become a member of SEWBReC, please complete and return an [application form](#).

Clubtail Count 2019

Eleanor Colver, British Dragonfly Society

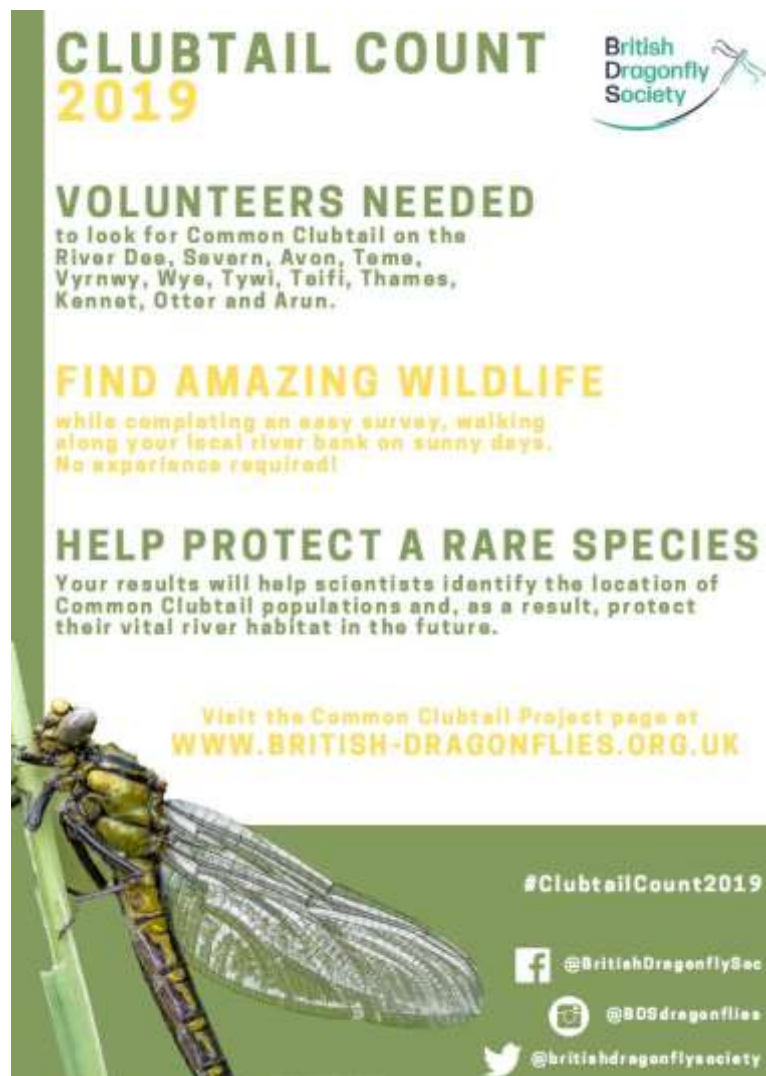
The Common Clubtail is a red listed species that breeds in lowland rivers in England and Wales. This beautiful dragonfly faces a number of threats including pollution, disturbance and habitat destruction. To help save this species we first need to identify the location of its surviving populations, as well as which populations are most at threat, or already declining.

Adult Clubtail spend most of their lives hiding in the tree tops, making them hard to survey. The best way to identify breeding populations is to look for larvae undergoing emergence (transforming into adults) on river banks, as well as their exuviae (shed larval skins) they leave behind, and this is exactly what we want volunteers to do!

Surveys need to take place between May-July on warm, sunny days and ideally Clubtail Count volunteers will visit their survey area 3 times within this period. This year we are surveying the Rivers Dee, Severn, Avon, Teme, Vyrnwy, Wye, Tywi, Teifi, Thames, Kennet, Otter and Arun.

Common Clubtail and their exuviae are very easy to identify so the Clubtail Count is a great activity for beginners looking to learn more about dragonflies and get up close to river wildlife along the way!

For more information visit the [British Dragonfly Society website](#).



CLUBTAIL COUNT 2019

British Dragonfly Society

VOLUNTEERS NEEDED
to look for Common Clubtail on the River Dee, Severn, Avon, Teme, Vyrnwy, Wye, Tywi, Teifi, Thames, Kennet, Otter and Arun.

FIND AMAZING WILDLIFE
while completing an easy survey, walking along your local river bank on sunny days. No experience required!

HELP PROTECT A RARE SPECIES
Your results will help scientists identify the location of Common Clubtail populations and, as a result, protect their vital river habitat in the future.

Visit the Common Clubtail Project page at WWW.BRITISH-DRAGONFLIES.ORG.UK

#ClubtailCount2019

f @BritishDragonflySoc
@BDSdragonflies
@britishdragonflysociety

The poster features a large, detailed illustration of a Common Clubtail dragonfly perched on a green stem. The background is a light green gradient. The text is arranged in a clear, hierarchical layout, with the title at the top, followed by the call to action, the list of rivers, the benefits of participating, and the contact information at the bottom. Social media icons for Facebook, Instagram, and Twitter are included.

The Vegetative Key to Wetland Plants

Article and photo from the Freshwater Habitats Trust [website](#)

This year Freshwater Habitats Trust is trialling a new 'Vegetative Key to Wetland Plants' and we're looking for volunteers to use it, test it, and provide feedback. The key is a product of the National Heritage Lottery Funded "People, Ponds and Water" [PondNet project](#), and we've been developing it for a couple of years, with the help of John Poland, author of the Vegetative Key to the British Flora.

During People, Ponds and Water, we ran a series of wetland plant identification workshops to help beginners on their learning journey, but many commented that the keys were very technical, or covered species they were not likely to encounter, or that they relied too much on flowers which can be inconspicuous or absent for much of the year.

The Vegetative Key to the British Flora by John Poland and Eric Element, published in 2009, has become an essential tool for field botanists. Unlike conventional guides which often rely on the characteristics of flowers or fruit, the vegetative key relies on other plant characteristics, ones that can be found throughout the growing season. The novel structure of the key also allows the relative beginner to be able to correctly identify a plant in just a few steps. With funding from the National Lottery Heritage Fund, Freshwater Habitats Trust approached John to produce a concise version of the Vegetative Key, a version which would only include the wetland plant species relevant to pond quality assessment surveys.

Click [here](#) to download a copy of the vegetative key (pdf).

We want the 'Vegetative Key to Wetland Plants', to be a useful tool for anyone wanting to learn new identification skills. We've produced a draft version initially, in the hope that beginners, intermediate and experienced botanists will try using the key during 2019 and provide feedback through the [Wetland Plants Vegetative Key](#)



[Discussion](#) group on Facebook. Join the group and join in the discussion. We're looking forward to chatting with you!

Glamorgan Bird Club Swift Project update

Alan Rosney, Glamorgan Bird Club

Great news. We've begun the construction phase of the lottery funded Cardiff Bay Swift Tower project. The foundations are going in and the tower should be erected in early May. It will be placed on the Cardiff Bay Barrage, near the Discovery Centre and the old Doctor Who building. There will be 90 nest boxes, with an integrated Swift call player. It is a long term project, as Swifts are slow to adjust to new nesting sites, not breeding until they are at least 3 years of age. Such towers have proved successful on the continent and we are hopeful of success in the bay. Many thanks go to our partners, Cardiff Harbour Authority and the RSPB for all their hard work in getting this project off the ground. Thanks also must go to Centregreat Ltd, who stored the tower, free of charge, whilst we sorted out some fabrication problems. [Editor: Things have moved swiftly(!), and the completed tower is now [in situ at Cardiff Bay](#)]

Our Cardiff wide Swift survey is going in to its second summer. Last year 50 volunteers surveyed much of the city and several "new" nest sites were found. We need to know where Swifts are nesting in order to protect the nesting sites. (You might also consider signing this [petition](#) which aims to tighten up legislation with regard to nest sites for Swifts, Swallows and Martins.) If you are interested in doing some valuable citizen science, please sign up as a surveyor on the [RSPB website](#).

Living Levels: Wild Watch

Rebecca Wright-Davies, SEWBReC Senior Data & Enquiries Officer



The [Living Levels Landscape Partnership \(LLLP\) scheme](#) aims to reconnect people to the Gwent Levels landscape and provide a sustainable future for this historic and unique area. This 3.5 year project, funded by the National Lottery Heritage Fund, will involve three core work programmes which will deliver a variety of projects to achieve the partnership's aims.

The [Wild Watch](#) project aims to engage local people in recording wildlife on the Gwent Levels through a programme of training days and online resources. 12 target species have been selected to concentrate on, one for each month of the year. Over the course of the year volunteer surveyors are asked to look out for and record a range of wildlife, such as barn owls, water voles, mistletoe and shrill carder bees. Volunteers can record one, a few, or all of the target species; and can record the species many times and throughout the year. If you are interested in becoming a volunteer recorder for this project and receiving a free copy of a 2019 wall calendar illustrating the 12 target species, you can [register online](#).

Wild Watch Training Days:

As part of the project, SEWBReC will be running several Wild Watch training courses, which will provide an introduction to wildlife recording plus information about the 12 target species. These sessions are open to all but are most suitable for newcomers to wildlife recording; please feel free to pass on the details to any individuals or groups that you think might be interested in attending.

The courses are free but you must book a space via the Living Levels website. Click on the dates below for further information including a booking link.

[Thursday 20th June 2019, 10:30-16:00, Newport Wetlands.](#)

[Thursday 27th June 2019, 10:30-16:00, Magor Marsh.](#)

[Thursday, 18th July 2019, 10:30 -16:00, The Beacon Centre, St Mellons.](#)

BioBlitzes:

There were also four BioBlitzes across the Living Levels region during 2019, with two still to come. Details of the remaining events are below; no need to book a place, feel free to join us for the whole day or pop in for part of the event.

[BioBlitz the Lake](#), Thursday 13th June 2019, 10:00-15:00: Join us to explore and record the biodiversity of Hendre Lake Park. Meet at Hendre Lake Park, Cypress Dr, St Mellons, Trowbridge CF3. Free.

[BioBlitz the House](#), Saturday 6th July 2019, 11:00-15:00. Join us to explore and record the biodiversity of the grounds of Tredegar House. Meet at Tredegar House, Pencarn Way, Newport, NP10 8YW. Free.

Scenes from BioBlitz the Castle at Caldicot on 17th May: Amy doing some Wildlife Watching © Elaine Wright; *Gnophomyia viridipennis* © Graham Watkeys; Red Valerian on the castle walls © Elaine Wright





© Steph Tyler

A response to Issue 19 article “New opportunities for the growth and expansion of Mistletoe in Gwent”

Steph Tyler (VC35 Plant Recorder)

After reading Colin Titcombe’s interesting article on mistletoe *Viscum album* hosts I checked our Mapmate records entered after 2000 as Colin mentioned that he had found Mistletoe on a new host - Small-leaved Lime *Tilia cordata*. In our records there were two of mistletoe on Small-leaved Limes *Tilia cordata*. One of these was my record from Lone Lane at Penallt in SO5209 where I have known the association between the two species since 1977. The other was also my record from near the Old Church at Penallt in SO5210. Unfortunately, of the other very many records of mistletoe on limes the recorder did not specify

whether the limes were Small-leaved, Large-leaved *Tilia platyphyllos* or the hybrid *Tilia x europeae*.

Purging Buckthorn records on the Gwent Levels

Steph Tyler (VC35 Plant Recorder)

Again I enjoyed reading Colin Titcombe’s article about Brimstone butterflies and the occurrence of the two species of buckthorn in the county. Colin mentioned the presence of *Rhamnus cathartica* (Purging Blackthorn) in several woods along the limestone ridge in south-east Monmouthshire. To these I can add two Levels records - from near Magor in ST4086 in July 2007 and from a hedge by the roadside west of Newport in ST303828 in September 2018. There is also a record from David Hawkins from Rogiet in ST4697 in September/October 2015.

Purging Buckthorn is readily available in native broad-leaved mixes for new hedges so may in future be recorded in new locations away from the limestone and known sites. For example, I planted three Purging Buckthorn shrubs in one of my hedges at Penallt about 10 years ago and all three are doing well.



1. Stage I on a Hawthorn leaf



All photos © Mark Steer

2. Stage I infestation on Hawthorn

Rust Fungi - *Gymnosporangium* species

Mark Steer, Glamorgan Fungus Group

Since listening to a talk on Rust Fungi by Nigel Stringer and much encouragement since from Nigel I have become very interested in these. At times I have had shrugged shoulders and rolled eyes when out on Forays with the Glamorgan Fungus Group. However a number of members have now become very interested as well!

Of particular interest to me have been the *Gymnosporangium* species (4 species recorded in Wales) which have 3 stages in the UK. Stages 0 (spermogonium) and I (aecium) preceded in the same year by Stage III (telium) - unusual for Rusts. Stages 0 and I occur on a number of host plants including Hawthorn, Pear, Apple, Sorbus and Medlar - dependent on species. I have seen on mainly Hawthorn and also Pear in Glamorgan.

Stage III occurs only on *Juniperus* - native and cultivar dependent on species. This stage has rarely been recorded in Wales and I don't think in Glamorgan at all.... yet!

My first find on Hawthorn of Stage 0/I was at a bus stop in Bridgend [photos 1 & 2]. Nigel Stringer kindly confirmed that it was *G. confusum*. My next step was to find *Juniperus* nearby - with 2 plus years searching I finally found some *Juniperus* cultivar in Tesco Bridgend car park in 2018. It was too late for Stage III to be showing so I had to wait until April 2019.

On 8th April 2019 I finally found Stage III! This is presumably *G. confusum* as it was only 2 metres from the original Hawthorn hedge. It had become almost unrecognisable forming a gooey dripping mess [photos 3 & 4]. This Stage only lasts a few days [photo 5]. Already there were signs of Stage 0 appearing on Hawthorn leaves nearby [photo 6]. I am looking forward to 2020 to try and find this in it's more spectacular form - see similar species at: <https://www.first-nature.com/fungi/gymnosporangium-clavariiforme.php>.



3. Stage III on *Juniperus*



4. Stage III on *Juniperus*



5. Four days later, not much to see!



6. Stage 0 on Hawthorn

Glamorgan Fungus Group Forays & Events 2019

Saturday 8th June- Craig Ruperra, Rudry start 10am

Saturday 6th July - Pwll Waun Cynon NR, near Mountain Ash start 10am

Saturday 10th August - Clyne Valley Country Park, Swansea start 10am

Saturday 7th September - Tower Colliery, Hirwaun start 10am

Saturday 5th October - National Fungus Day (venue to be confirmed)

Saturday 19th to Saturday 26th October- BMS Field Study Week. Venues to be confirmed

Saturday 2nd November- Mynydd y Gaer (to be confirmed)

See the [Glamorgan Fungus Group Facebook group](#) for more information.





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