



**WWBIC Bulletin No. 33**

Welcome to the 33<sup>rd</sup> WWBIC Bulletin.

I hope this incredible Spring and prolonged spell of fine weather has helped you through, what has been for many, challenging times. It's business as usual here at WWBIC with all staff working as normal from home. We look forward to getting back to 'normal' and joining many of you in the field before too long. In the meantime, sit back and enjoy the variety of great articles in this edition.

© Toni Henwood  
*Vulpes vulpes* (Red fox)



In this edition:

- More about Brook Lampreys
- Interesting Rust finds during 'lock down'
- A distinctive solitary bee . . .
- Conservation of Welsh Sand Dunes
- A Rolling Stone Gathers No Moss
- Rare beetle found in Wales
- Earth tongues and other fungi

*And much more . . .*

## More about Brook Lampreys

After finding and photographing Brook Lampreys (*Lampetra planeri*) in our small upland (circa 700 feet above sea level) North Carmarthenshire stream in spring 2019, which exits into Afon Cothi, I thought I'd see if this was a one off fluke sighting, or something I could watch again. Given that the weather and stream conditions were broadly similar this April to last year, I began looking earlier, and particularly focused looking around the time of the super pink full moon (April 7th), since last year I found them on the day after the equivalent full moon on April 19th which also happened to be Good Friday. I spent several days before this date, when stream conditions were low, but air temperatures were quite cool, with no luck.

I actually forgot to do my survey walk the day of the full moon, but on the evening of April 11th I once again found a couple of active lampreys, though I think these were nearly spent stragglers just moving a few pebbles to cover where the eggs had already been laid. So perhaps once more they'd been laid very close to the date of this full moon. Was this a coincidence? Or was it a coincidence that once again this sighting happened to be on Good Friday? I guess so, but the following morning I spent time walking the 200 or so yards of stream bank on our land looking for evidence of more spawning sites. In 2019 I'd found just one, but a keen photographer friend found a second location further upstream the following day. In the end for 2020 I found perhaps 4 or 5 probable spawning redds.



I thought I'd include a few photos and thoughts on sections of other suitable streams which others might like to focus on for 2021, if they'd like to survey for them:

They are all within half a mile of the source of our upland stream.

They were all constructed in quite shallow, but fairly central flow areas of the stream, so likely to survive further drought conditions. Sources quote that brook lamprey eggs hatch "within a few days" of spawning.

They were all in areas of the stream which would have received full sun from mid morning onwards, i.e. no tree cover at all to the South and West – open wildflower meadow/pasture grazed by sheep at low intensity. My guess is that this has some effect on water temperatures, and I should add that in both 2019 and 2020, the day of spawning was both very sunny and quite warm for the time of year. Much of the stream below us runs through a very wooded and hence shady upland valley – perhaps even as far as the confluence with the Cothi. Whether this contributes to our small section being favoured for spawning, I obviously don't know.

Or indeed how far the adult lampreys have travelled upstream to spawn. They spend their earlier 5 or so years living beneath silty muddy areas of stream bed, before emerging the previous autumn, but then migrating upstream very close to mating time, which I witnessed last year – which is why spawning time is likely to be the only chance you'd have of actually seeing one.



They were all at the end of sections of the stream where water speed was about to increase as the surface broke into ripples as it sped up over sections with a greater fall. Again this probably impacts on water temperature and oxygen levels.

The key thing to look out for, apart from the lampreys themselves, is evidence of freshly moved clean stones/gravel. In particular fine gravel sitting on top of larger stones on the stream bed. This clearly indicates recent disturbance in such low water levels. After a long dryish spell all of the gravel/stone becomes coated in an olive brown algal boom, so these patches really do stand out. In one of the photos I found what I thought was an obvious, though smaller redd, and only on closer inspection spotted an exhausted lamprey resting quietly beside the disturbed gravel.



© Julian Wormald  
An area of freshly moved 'clean' stones



© Julian Wormald  
Gravel sitting on top of larger stones

Finally in my experience of looking, the mating lampreys are completely unfazed by your presence so it's quite easy to watch them, but like many natural events, the whole process is probably over in just over 24 hours, so midday to late afternoon is perhaps the best time to find the lampreys actually mating.

I hope this encourages other readers to have a look next year, and perhaps get lucky.

#### Sticking with full moon related spawning . . .



© Julian Wormald  
King Ragworm (*Alitta virens*)

On a seaweed foraging workshop at Goodwick on March 11th, just after the March (known as the Worm!) Full Moon, I spotted what I later identified as a King Ragworm, *Alitta virens*, a large polychaete worm, which is normally a reddish brown colour and lives deep beneath the sand surface in a U shaped burrow. The worms change colour to take on these fantastic greenish hues (hence virens) in spring when they leave their burrows to spawn.

Spawning tends to occur in massed events linked to phases of the moon, and when the Ragworm leaves its burrow, it changes form, becoming an epitoke, a morphed version in which the digestive tract disintegrates, and its multiple pairs of bristly parapods (or legs which give the worm its ragged appearance and common name) transform into paddle shaped swimming appendages, seen more clearly in the larger image. A worm of many inches in length, it's an impressive sea serpent like sight. And intriguing that like the Brook Lamprey, it also undergoes a physical metamorphosis before spawning to develop more appropriate morphology for the task in hand.

Paddle shaped swimming appendages



© Julian Wormald

Julian Wormald

## Orange tip's at Penparcau

Orange tip (*Anthocharis cardamines*) butterflies are one of the delights of Spring, the vivid orange tips of the males' wings showing with particular flair against the purple of the Bluebells (*Hyacinthoides non-scripta*) that they seem to enjoy.

It is well known that they lay their eggs on another vernal treat, Cuckoo Flower or Lady's Smock, (*Cardamine pratensis*). This flower of damp grassland and road verges is usually scythed off by contractors at this time of year, but with the restrictions imposed by Covid-19, the management of many of our parks and road-side verges seems to have been temporarily relaxed. During recent permitted walks around my village I have noticed, with some satisfaction, large swathes of Cuckoo Flower on local amenity grassland, where it has never been allowed to flower before. I have also counted 13 Orange tips during one survey, more than has ever been recorded in Penparcau before. Obviously the numbers of adults present cannot have been affected by the mowing regime, but seeing them all active at one time is presumably related to the vastly increased numbers of nectar-providing and larval food plants now available. Let's hope that one small good thing comes out of 2020, a good year for the Orange tip butterfly.



© Chloe Griffiths  
Orange tip (*Anthocharis cardamines*) butterflies mating

Chloe Griffiths

## Adders in Dale

Between the 20<sup>th</sup> and 22nd April no fewer than THREE adders (*Vipera berus*) were spotted in Dale. One was in the walled garden – it was lifted up by a brave soul with a pitchfork and put in a bucket, (pictured) whence it was transported to the area behind the church.

Then two separate adders were found on the road in Castle Way, one at each end of the road.

The question is, what were they doing here? The habitat nearby is gardens, damp pasture and woodlands – not the kind of thing you associate with adders (rough grazing, heathland, gorse, bracken). The time of year is right for dispersing males, leaving the area where they hibernated and looking for females, but where did they come from?

All a bit of a mystery – if anyone in Dale can throw any light on the subject then please let me know!

(Since writing the above, Peter has pointed out that there is good adder habitat in West Dale on the steep bank to the north of the bay. The adders could have travelled from there - tagging studies in the Wyre Forest show they can travel up to a kilometre in search of a mate.)

Rosemary Royle



© Rosemary Royle  
Adder (*Vipera berus*)

## Interesting Rust finds during 'Lockdown'

Despite the 'Lockdown' due to the COVID-19 pandemic people have been going outside their homes for short walks and making interesting finds especially with regards to Rust fungi. This group of fungal parasites can be found throughout the year but many do exhibit a seasonal pattern with regards to their sporulation times and the type of spore they produce. Over the last few weeks Nigel Stringer (RNS) received photographs of rusts taken by Mike Crutchley (Pembrokeshire Fungus Recording Network) and Dr Kevin McGinn (National Botanic Garden of Wales) of rusts presently found on plants near their home.



© Dr Kevin McGinn  
Figure 1 *Puccinia urticata*

One of the rusts found by Dr Kevin McGinn is that on Nettle (Figure 1). It is *Puccinia urticata* and causes distortion of the leaves and stems and is very dramatic in appearance. The rust produces little 'coronet' type structures on the host surface inside which spores are produced. These spores will be dispersed and will infect host plants belonging to the *Carex* (Sedge) family later in the year thus continuing the next phase of the life cycle.

Another rust which forms similar types of sporulating bodies to that on nettle is found on Groundsel. Plants which are severely infected also become deformed where the infection is on the stem (Figure 2). The cup-like coronets are extremely attractive when viewed through a hand lens or under a low power microscope as seen by the photo taken by Mike Crutchley (Figure 3). The outside of the circular coronet is white with the rim slightly torn and reflexed exposing the orange spores in the bottom of the cup. This rust is the same rust that infects Daisies although where the two plants grow together Daisies are rarely infected.



© Mike Crutchley  
Figure 2 *Puccinia lagenophorae*

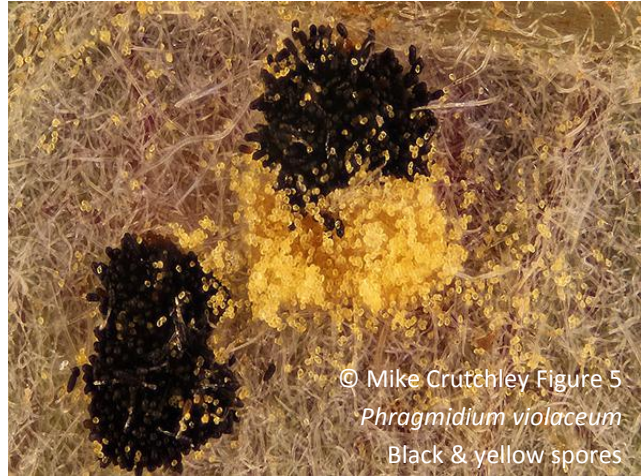


© Mike Crutchley  
Figure 3 *Puccinia lagenophorae*

Lastly, Mike and his wife Nic found a very interesting feature relating to one of the rusts found on Blackberry. This rust (*Phragmidium violaceum*) is extremely common on bramble from late spring well into the autumn and produces two very distinctive spore types during this period (Figure 4). The yellow spores (urediniospores) are formed in early summer and are responsible for spreading the disease throughout the bramble population throughout the summer and autumn. As the season progresses black spores are produced along with the yellow spores in the same fruiting structure (Figure 5) until at the end of the year only black spores (teliospores) are produced. These are the 'overwintering' spores. These have very thick black walls which still protect the contents from desiccation and UV damage and survive on the blackberry leaf through to the spring of the following year.



© Mike Crutchley  
Figure 4 *Phragmidium violaceum*



© Mike Crutchley Figure 5  
*Phragmidium violaceum*  
Black & yellow spores

A few weeks ago, Mike and Nic made a significant discovery whilst looking at blackberry leaves near their home. The black spore masses were speckled with orange flecks. When viewed under the microscope these 'orange' flecks were actually formed by the germinating black spores (Figure 6). The photograph shows a long germ-tube full of orange cytoplasm and from it can be seen little 'pegs' arising from the surface. Two of these pegs have round bodies associated with them. This remarkable picture shows the final stages in the rust life cycle where the black spore germinates to form a 'promycelium' and the round bodies on the pegs are actually 'basidiospores' which are released to infect the newly emerging blackberry leaves in the spring. The basidiospores are equivalent to the spores produced on the gills by more conventional 'mushrooms'.



© Mike Crutchley  
Figure 6 *Phragmidium violaceum* – germinating black spore

This final stage in the rust life cycle is very rarely seen and to capture this image is remarkable.

**Mike Crutchley, Kevin McGinn and R. Nigel Stringer**

## A distinctive solitary bee . . .

It's been strange to be furloughed from my job as Outreach Officer for Plantlife's Magnificent Meadows Cymru project but, like many of us, the time and sunshine has resulted in a wonderful few weeks of wildlife watching. Templeton airfield is just a short walk from our house and has been a key part of our 'daily exercise' and consequently, daily wildlife spotting, during lock-down.

One of the features of the site is the extent of scrub and low tree cover – particularly old, gnarled willows, laden with catkins. As I'm sure most of you know, willow trees are dioecious, having male and female catkins on separate plants. Both are a rich source of nectar but it is the male catkins which carry the bright yellow pollen. This is a critical resource for many spring emerging bees so, during a walk, in early April, I lingered a while at a beautiful willow which was covered in male catkins.



There was a noticeable buzz with several large bumblebee queens up on the higher catkins, honeybees in some number and several hoverflies. Almost immediately though I spotted a distinctive solitary bee which I knew I hadn't seen before. I managed to get some reasonable photos – enough to identify the bee as *Andrena praecox*, the small sallow mining bee.



Liam Olds confirmed the species for me and I was delighted – the bee has only been seen in Pembrokeshire once before (by Steven Coker) in 1986. This was an exciting record for our County list and for the species distribution –

there are only a handful of previously recorded locations in Wales and this is by far the most westerly record in recent decades.

The species is extremely attractive (not a very scientific description!) and is oligolectic on willow (mainly grey and goat willow) pollen to feed its young. This narrow specialism means that *Andrena praecox* requires habitat with extensive stands of mature, flowering willow and adequate undisturbed nesting sites, for example in south facing banks. It would seem that Templeton airfield provides this habitat in abundance. It also provides acres of hawthorn, blackthorn, gorse and other foraging resources to support a rich invertebrate fauna and I hope to be able to record there more extensively in coming years, particularly in early spring. The spring emerging bees are tailing off now but as we move into summer our lockdown walks on Templeton airfield are alive with bird song including skylarks, yellow-hammers and chiffchaffs. It's a very special site.

**Clare Flynn**

## WWBIC Recorders Forum 2020

On Saturday 29<sup>th</sup> February, a few weeks before Covid-19 impacted our lives unrecognisably, WWBIC Annual Recorders Forum took place at the Welsh Wildlife Centre, Cilgerran. Around 40 people filled the Harlow Room looking forward to a day of varied and interesting speakers. Jane Hodges welcomed everyone and Colin Russell, WWBIC manager, was first up with his annual summary. He was followed by Yusef Samari, WWBIC Technical Officer, who explained and described the occupancy-detection modelling work he had been trialling using WWBIC data, a period of discussion followed.

John Archer Thomson, guest speaker, gave a whistle-stop tour of the rocky shore moving from the splash zone to the lower shore. John provided tantalising snippets of detail about the battle for survival for a handful of species in this harsh environment.

Lunch followed and provided an opportunity for attendees to mingle and catch up – as well as enjoy the (now legendary) delicious buffet lunch provided by the Glasshouse Café team.

The afternoon session included the trials and tribulations of managing a large nature reserve described by Dr Brian Briggs; tales of dormice and their ecology presented by Jacqueline Hartley and the definition and history of non-native species summarised by Nigel Ajax-Lewis. Huw Jones summed up and closed the event.

We'd like to express our heart-felt thanks to all of the day's speakers for another fascinating insight in to various aspects of the natural world. Thanks also to everyone who attended.



**Kate Smith**

## Conservation of Welsh Sand Dunes

The Twyni Byw - Sands of LIFE conservation project aims to rejuvenate sand dunes across Wales. Having started in September 2018 and due to finish in December 2022, we aim to recreate natural movement in the dunes and revitalise this important habitat which is home to some of our rarest wildlife. The project covers 10 separate areas of sand dunes across Wales. The project, led by Natural Resources Wales, received €4 million in funding from the EU LIFE programme (75%) and Welsh Government (25%).

Sadly, our wonderful sand dunes have been facing numerous threats. Crucial open sand has disappeared, being replaced by dense grass and scrub. This has caused the dunes to become overly fixed, causing rare wildlife to disappear. This change has been caused by factors such as marram planting, the introduction of non-native species, lack of traditional grazing, a declining rabbit population and air pollution – specifically nitrogen deposition. To help provide our sand dunes with a much-needed boost, a number of monitoring surveys were undertaken across the project sites, before the practical works were started. These surveys included soils, vegetation, hydrology, herptiles and invertebrates. The surveys will be repeated after all the works have been completed in 2022, to evaluate the success of the interventions.

In Carmarthenshire the project covers two sand dunes areas, Laugharne – Pendine Burrows and Pembrey Burrows. The past winter, December 2019 – February 2020, saw our first stage of practical works being completed on these two sites.

Pembrey Burrows is a Local Nature Reserve owned and managed by Carmarthenshire County Council. Our project works on this site included sand scrapes, dune slack creation and deepening existing ponds. Seven sand scrapes totalling 0.5 hectares were created using a tracked digger. Their purpose is to create more areas of bare sand, which helps mobilise sand across the site and prevent the dune grassland from becoming too fixed. It also creates areas for pioneer plants to establish which in turn will benefit invertebrates. Three new dune slacks (pictured) were scraped, lowering the surface to reach the water table, to create wet habitat which will hopefully allow specialised species to colonise. Two existing ponds were deepened to prevent them from drying out during summer months and to facilitate the on-site cattle grazing.

A new dune slack created at Pembrey Burrows which was dug to a depth of 80 cm to reach the natural water table. Pictured is Laura Bowen, the Sands of LIFE Project and Monitoring Officer for South Wales.



© Toni Henwood

Laugharne – Pendine Burrows is an active military range which is owned by the MOD and managed by Qinetiq. Here our aim was to help restore fixed dune habitats by clearing native and invasive scrub. So far, five hectares of scrub have been cleared from Laugharne-Pendine Burrows. The area will then be fenced and grazed by livestock to help prevent the area scrubbing over again and to encourage smaller and rarer specialist dune plants such as Dune Gentian (*Gentianella uliginosa*) to re-establish.

We would like to thank our many project partners and stakeholders across Wales for their invaluable input and support throughout the project.

More information can be found out about the project by visiting our website or following us on Twitter, Instagram and Facebook, search for @TwyniByw or Sands of LIFE.

**Toni Henwood**

*Sands of LIFE Assistant for South Wales*

## A Rolling Stone Gathers No Moss

*Matt Sutton, ecological consultant and farmer, describes the challenges of learning mosses and liverworts.*

Well, I was hardly Keith Richards but life was generally too fast-paced to pay much attention to the more subtle or hidden elements of the landscape. Like many naturalists, I started out as a birder, then learnt flowering plants – enough to get my first job in Wales as a surveyor for CCW. Working on the Phase II Grassland Survey meant that I needed a basic knowledge of bryophytes, and I was sent on an FSC course in Pembrokeshire. I did randomly pull the first county record of the liverwort *Pallavicinia lyelli* out of some rank moor-grass tussocks during the course, but by the end of the third day, every new name that went in seemed to dislodge two from before. I didn't have the staying power for the evening microscope sessions, and sloped off to the pub. Despite my failings, I was more or less safe recording quadrats in dry grassland – many had little more than a couple of common species, and in more varied habitats I bagged up samples for more experienced colleagues to identify.

When I moved on to Conservation Officer duties, Sam Bosanquet arrived in Pembrokeshire to take over Phase II survey work. He was somehow already an expert bryologist in his early twenties, and it's not as if he'd skipped the bird and higher plant stages. I collected a few things for him from SSSIs or habitat creation projects I was responsible for, but his herculean efforts in single-handedly mapping the county bryo-flora went largely unnoticed by me at the time.

It wasn't until I bought some land and left CCW that my appreciation of natural history began to mature properly. My childhood love of patch recording returned and when I'd exhausted the higher plants and birds and had a fair stab at the fungi, I thought it probably time to dust down my copies of Smith's moss book, and Paton's liverworts. I was relieved to discover that there was now a field-guide with photos which made the subject a lot more accessible and not always dependent on keys. And Sam's county flora, published in 2010 with the assistance of WWBIC, was of course an invaluable resource. It soon became apparent that I needed a compound microscope to progress, and I had to build an office of sorts just to have a desk to put it on.

Learning a different branch of natural history is like learning a new language – it's easier to learn Russian if you can already speak in half a dozen other different tongues. However, my early submissions to Sam as vice-county recorder were characterised by lots of schoolboy errors and ridiculously speculative claims. I struggled in particular to appreciate the variations within species, and kept getting thrown by immature specimens. But thanks to his patience, I persevered and after a year or two felt ready to start venturing off the farm. One or two of my interesting finds on the local Saundersfoot coast, like *Dicranella subulata* on slumping clay cliffs, proved correct, and even some of my failed id's turned out to be rarities – the second *Philonotis rigida* for the county, and the first modern record of *Hymenostylium recurvirostrum*.

Sam's assertion that the major distribution patterns were all worked out and I wouldn't find anything too dramatic provoked me into action and I tried to find places that he may not have got to - working further down cliff slopes, up crags or into quarries than might have been sensible at times. The paradox of bryology as an extreme sport appealed. The other appeal was the seasonality, as my summer workload stopped me from studying insects or higher plants properly – dedicating a couple of months at the end of the year to poking about in quiet, wild places was a chance to unwind after a manic summer. These subtle plants may not have the spectacular appeal of a rare orchid, but I love what they say about a place – the interplay of geology, history and climate which marks a particular rock face, streambank or dune hollow as special.

For the last four years now, I've turned my attention to bryophytes for two or three months in the autumn. Tom Ottley has become a most supportive mentor, and I've helped him where possible with his recording efforts in Ceredigion. Now slow-moving enough to find the smallest specimens and patient enough for long evenings in front of the microscope, my rarity-finding abilities have increased. Thus far I've found seventeen new species for

Pembrokeshire and a handful for Ceredigion, as well as filling in lots of gaps at the hectad and tetrad levels. Some of these finds have even upset the known distribution patterns – *Cephaloziella dentata* was previously only known from the Lizard heathlands in Cornwall but there are now dots on the map for Stackpole and Castlemartin, whilst the tiny, ephemeral moss *Micromitrium tenerum*, only seen in Wales before in Anglesey in the 1970s, turned up after some heavy fence-line disturbance adjoining our farm boundary. I've also been rewarded with a couple of paid bryophyte survey jobs, and the *Cephaloziella dentata* finds were made during a monitoring contract for NRW. Although Stackpole and Castlemartin were previously subject to detailed survey, this work has also yielded county firsts in the form of the nationally scarce liverworts *Leiocolea badensis*, *Cephaloziella integerrima*, *Cephaloziella rubella* and *Scapania cuspiduligera*, and the mosses *Pottiopsis caespitosa*, *Microbryum curvicollum* and *Bryum creberrimum*. This thoroughly proves the bryologists adage that 'the best sites always have more'. It also shows that with perseverance and the generous help of county recorders, it is possible to get beyond the hapless beginner stage and start contributing useful records. I do still get caught out by the common species on many occasions though.....



© Matt Sutton



© Matt Sutton



© Matt Sutton

Low cloud on the southern flank of Mynydd Preseli.

A couple of shaded boulders in a rocky stream running south of Carn Menyn were found to hold *Harpalejeunea mollerii*. This tiny, humidity-demanding liverwort is very rare in west Wales, and was previously known only from the Cothi Gorge in Carmarthenshire and Cwm Rheidol in north Ceredigion. Patches of the uncommon Wilson's filmy fern were also found nearby.

**Matt Sutton**

## Rare Beetle Found in Wales



The Short-necked oil beetle (*Meloe brevicollis*), one of the UK's rarest oil beetle species, has been rediscovered in Wales. This very rare species was previously believed to be extinct in Wales, having not been seen since 1944, until its rediscovery in Pembrokeshire by Annie Haycock. Pembrokeshire now supports the only known modern record of this species in Wales. Outside of Wales, the Short-necked oil beetle is currently known only from the island of Coll in the Inner Hebrides, and single locations on the Salisbury Plain and in south Devon. An unconfirmed record from Dorset also exists.

Formerly more widespread, the Short-necked oil beetle experienced a severe decline during the twentieth century and went completely unrecorded in the UK from 1948 until its rediscovery in south Devon in April 2006. Like other oil beetle species, it is dependent upon solitary bees to complete its life-cycle.

Oil beetles are nest parasites of solitary bees and have extraordinary life-cycles. Oil beetles dig burrows in the ground, in to which they lay hundreds of eggs. Once hatched, the active, louse-like larvae, known as triungulins, climb up onto flowers and lie in wait for a suitable host bee. When a bee visits the flower to collect pollen or nectar, the triungulins attach themselves to hairs on the bee's back using hooks on their feet. Once in a suitable bee's nest, the beetle larva disembarks. The beetle larva then feeds on the bee's store of pollen and nectar and develops in the burrow until it is ready to emerge as an adult oil beetle. Such highly specialised life-cycles make oil beetles particularly vulnerable to environmental change.

The Short-necked oil beetle is found in wildflower-rich cliff-top grasslands, heathlands and machair dunes, with adults active in the spring from late March to June and the triungulins active in June and July. It is known to use the Hairy-saddled colletes bee (*Colletes fodiens*) as its host on Coll and at its single Irish site, however its host bee species remain unknown elsewhere.

Due to its small size, measuring up to 24mm in length, Short-necked oil beetle may have been overlooked in some areas so please remain vigilant. They are identified by their rectangular-shaped thorax (which is wider than it is long), its short and straight antennae which are slightly thickened at the tips, and its shiny, blue-black colour. Confusion with the more common and widespread Black oil beetle (*Meloe proscarabeus*) and Violet oil beetle (*Meloe violaceus*) is possible but these species have a roughly square-shaped thorax. Our Oil beetle Identification guide will help you identify your beetles.

If you think you have found a Short-necked oil beetle, please send details of your sightings, along with a photograph(s), to [info@buglife.org.uk](mailto:info@buglife.org.uk).

**Buglife** (*Our thanks to Buglife for allowing us to use this article from their website*)

## Earth tongues and other fungi

One of the advantages of staying in the same place for many years is the chance of seeing how things change and develop. Having a photographic record is helpful in this regard, so the first two images of an area near our upland home show the pretty significant change in visual development of planting, following the removal of a derelict and potentially lethal Dutch barn.



Once the many years worth of accumulated sheep and cattle “guano” had been removed from beneath the barn’s roof, and used elsewhere in the garden, the grassy “lawn” was simply mown several times every year. No grass was sown, it just was left to colonise on its own, so it is now a very moss and lichen filled “lawn”, sometimes derided by more tidy gardeners, owing to the few weeds – clover, selfheal, etc. which now grow amongst the short grass.

Yet in this unlikely environment, over a number of years, different fungi have begun to colonise and appear, mainly in early autumn. A particular recent highlight has been the appearance of 2 small types of fungi which seem to prefer the close cropped, and presumably by now nutrient poor conditions which the site now offers, after 25 years of grass removal with no supplementation.

The first species is *Cordyceps militaris*, the Scarlet caterpillarclub fungus. This is an example of an entomopathogenic fungus, meaning it parasitizes insects, in this case moth pupae. So carefully dig down an inch or two from the orange club shaped fruiting body, and you’ll find it emerging a pupa which has been consumed by the fungal mycelium. Usually appearing in autumn, without heavy frosts this winter, there are still above the ground fruiting bodies heading towards March. Up to 8 of these have been found in a season spread across this almost soil free, shale based mossy croquet lawn.



The second type of fungus found in this lawn this last season in profusion – well over a hundred fruiting bodies, are examples of earthtongue fungi. There are a number of different species of earthtongues – I’m uncertain which these are, but probably *Geoglossum cookeanum*, though some fruiting bodies look like the similar but rarer

*Microglossum olivaceum*. Definitive identification would probably require microscopic identification which is currently beyond me, but again this year these fruiting bodies have persisted for well over 3 months, in spite of occasional frosts, so a reminder that even unremarkable “lawns” can sometimes hold surprises, if left to their own devices.



**Julian Wormald**

## WWBIC Common or Garden Project

In March, WWBIC launched the Common or Garden Project to encourage people to get out and record common species they would find in their gardens and around West Wales.

The project invited the public to record their sightings of six section 7 species, the Common Toad, Blood-vein moth, Brown Hare, Hedgehog, Slow worm and Bullfinch. We have been promoting the project through social media and through our Local Nature Partnership's to target novice recorders.

We have received nearly 200 records in 3 months, with records dating back to 2018, with locations ranging from our region to Glasgow! Within the WWBIC region we have received 163 records. The most recorded species was the Bullfinch with 63 records, and the least recorded species was the Blood-vein moth, with only 1 record.

Following this success, we have decided to update the six species for the summer season. For more information and to keep up to date, follow us on Twitter (@wwbic1), Facebook (@WestWalesBiodiversity) or on our website.

**Carys Williams**

## Wales Nature Week 30 May – 7 June

### 30<sup>th</sup> May 2020 - Big Garden Bioblitz

Record as much as you can in your garden in 24 hours.

Wales Local Environmental Records Centres (LERCs) will be collating records and promoting on social media.

### 4<sup>th</sup> June – The Big Nature Quiz

Hosted by Wales LERCs this will be available on Youtube.

For more information about events during nature week click on the link:

<https://www.biodiversitywales.org.uk/Wales-Nature-Week>

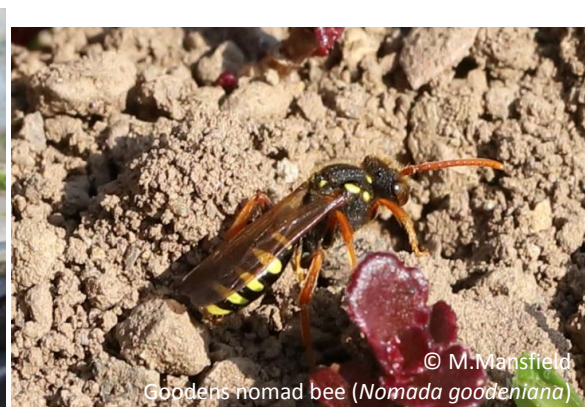
## Nature Spots (from the garden during lockdown)

More time spent in the garden does mean more opportunities to add to our garden bird list. On Sunday we had what must be one of the rarest of garden birds (although there are hundreds of thousands of this species in Pembrokeshire!)

After her 5am visit to her moth trap, following a very misty and dark night, Rosemary mentioned to me (later in the day when I was up) that she had spotted a dead jackdaw at the bottom of a wall under some ivy, and could I remove it. Well it wasn't a jackdaw, and it wasn't dead, but rather a very lost Manx Shearwater hiding, or so it thought, with its head misled by the moth light trap in the poor visibility although we are about 2km from the sea and we were only using an actinic (fluorescent) light. It was not keen on being extricated but was soon secure in a shoebox. (I always have one to hand, usually for rescuing bats from our sitting room!) At dusk, having decided that the Welsh government would have decreed this to be an essential journey if they had chanced to think of this situation, I drove to Martins Haven and, ignoring the coast path closed sign, went to the top of the cliff and released the bird which happily flew into the gloom. Good deed for the day done and one more bird for the garden bird list, although what the Garden Birdwatch website will think of it when we try to enter our details at the end of the week I dread to think!



### Peter Royle



### Blind Optimism?

The ephemeroptera fly *Rhithrogena semicolorata* is commonly referred to as the 'Olive Upright'. The picture shows a male in its sub-imago stage, and these insects of fast-flowing streams do not breed in garden ponds; however, from the end of April through to late July we receive visits by 'lost' souls from the Afon Collen, just 50 metres away. Males in the imago stage dance over our pond in the evening expecting females to appear, unaware that this is not part of their natal stream. Most of them remain unfulfilled, as only occasionally a lost Olive Upright girl drops in... Should have gone to Specsavers!



© P. O'Reily  
*Rhithrogena semicolorata*



© P. O'Reily  
*Bibio marci*

### Going for a Pong

The umbellifer (family apiaceae) *Smyrniium olusatrum*, commonly known as Alexanders, is in full bloom by late April, and to us it really stinks. This Hawthorn Fly, *Bibio marci*, obviously finds the sickly smell and abundant pollen more attractive than we do. The picture shows a male Hawthorn Fly; the females are very much smaller. These terrestrial members of the order diptera can usually be seen on the wing from late April (the specific epithet *marci* refers to St Mark's day, which is 25th April) until the middle of May.

Pat O'Reily



© C. Flynn  
Spurge bug (*Dicranocephalus agilis*)



© J. Starzewski  
Bluebell (*Hvacinthoides non-scripta*)



© H. Mitchell  
Bee fly (*Bombylius major*)



© C. Russell  
Beautiful demoiselle (*Calopteryx virgo*)



© D. Devereux  
Red-legged partridge (*Alectoris rufa*)

© J. Wormald  
Green Longhorn Fairy Moth, (*Adela reaumurella*)



© K. Smith  
Blackthorn blossom (*Prunus spinosa*)



© D. Devereux  
Robin's nest (*Erithacus rubecula*)



© H. Mitchell  
Brimstone (*Gonipteryx rhamni*)



© C. Chalk  
Blue tit (*Cyanistes caeruleus*)



**CLARE FLYNN**  
*Osmia bicornis*



© J. Starzewski  
Canada goose (*Branta canadensis*)



© T. Henwood  
Bank vole (*Myodes glareolus*)



© L. Wilberforce  
Herald moth (*Scoliopteryx libatrix*)

# HAVE YOU SEEN A GLOW WORM?

We need your help! We are looking for records for glow worms (*Lampyrus noctiluca*) in the county. Based on the records we get, this may develop into a reintroduction project.



Adult male ©Guy Freeman

## What to look out for ....

Males look like typical beetles, females have no wings and look similar to the larvae.

Females emit a greeny-orange light from their bottoms at night. They climb up plant stems and glow in order to attract males. Adults are 1.5-2.5cm



Larvae ©John Horne

**Where to look?** Gardens, hedgerows and woodland rides, heathlands and cliffs are all possible habitats for glow worms. Larvae are mainly under rocks, feeding on snails and slugs.



Adult female ©Dom Greves

**When?** Adults are only around for a short period in June and July. Larvae in spring-summer.

If you see, or have seen, a glow worm in Carmarthenshire, let us know at: [glowworms@carmarthenshiremeadows.com](mailto:glowworms@carmarthenshiremeadows.com) with location/grid reference, habitat and date (approx will do) If in doubt—send a photo!

## Spittlebug Survey

The University of Sussex is running a national survey of spittlebugs (aka froghoppers, cuckoo-spit insects) and are asking people to record their sightings of 'cuckoo-spit' and the plant species on which they are found in April-June.

Last year, we had a fantastic response from gardeners, coordinated through the RHS, recording spittle on their garden plants, especially lavender and rosemary. This year, we want to encourage records from more natural habitats in the wider countryside, so we are targeting the amateur naturalist community via LRCs and other natural history-focused organisations.



Meadow spittlebug (*Philaenus spumarius*)

The website supporting the survey includes species information, lots of images (mostly adults) and a blog focussed largely on fieldwork for the project: <https://www.spittlebugsurvey.co.uk/>

The Covid-19 lockdown has had a significant impact on the scope of our activities, so we have developed a couple of additional 'lockdown-friendly' resources. We now have a lovely short video that talks about spittlebugs (nymphs only) and how to distinguish between genera: <https://youtu.be/anfH8DAC7p8>

And a new family-friendly activity sheet with 'fun facts' about spittlebugs that will appeal to children, and an invitation for people to look for them in their gardens (or indeed local parks as the movement restrictions lift): <https://www.jic.ac.uk/app/uploads/2020/05/Spittlebug-activity-sheet-v2.pdf>

Dr Alan Stewart and Dr Claire Harkin

## And finally. . .

The **All Wales recorders event** scheduled for April 2020 has been postponed until April 2021.

For those of you with a bit more time on your hands at the moment all issues of Natur Cymru can be accessed and downloaded here: <https://www.biodiversitylibrary.org/item/269256#page/7/mode/1up>

FSC Biolinks project has some interesting online courses coming up over the next few weeks. Follow this link: <https://www.field-studies-council.org/biolinks-courses/>

---

Thanks to everyone who has contributed to this newsletter. If you have any feedback or comments please email [kate@westwalesbiodiversity.org.uk](mailto:kate@westwalesbiodiversity.org.uk)



@wwbic1



West Wales Biodiversity Information Centre