



# cofnod

Gwasanaeth Gwybodaeth Amgylcheddol Gogledd Cymru  
North Wales Environmental Information Service





## Editorial

Welcome to Cofnod's second Newsletter, packed with plenty of recording suggestions. With Covid-19 restrictions in place most 2020 events have been cancelled or rescheduled, with recording essential restricted to your home and local walks. However, there's still loads of garden species to look out for!

In January Cofnod published its Annual Report for the financial year April 2018 to March 2019. Alongside this we have also published our first Strategic Plan, which sets out our major objectives over the coming years. Both documents are available through the Cofnod [Library](#).



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## Anglesey, In Tunnicliffe's Footsteps

### Howard Harris

Staying in a cottage on the maritime cliffs overlooking Porth Trwyn and the Skerries lighthouse was a quiet location for visiting the haunts on the North Anglesey coast where the artist, Charles Tunnicliffe RA, sketched seabirds. This stretch of coastline is a designated Area of Outstanding Natural Beauty (AONB); a peaceful and timeless landscape of white cottages and scattered small fishing and farming settlements on rocky headlands behind sheltered coves.

We approached our first port of call, Porth Swtan (Church Bay), by the narrow bramble-bordered lanes winding through pony-grazed heathland. Its high stone cliffs are the nesting site for Black-headed Gull *Chroicocephalus ridibundus* (Fig. 1), Fulmar *Fulmaris glacialis* (Fig. 2) and Chough *Pyrrhocorax pyrrhocorax*

while the rocky pools on the shore were the habitat of the Rock Pipit *Anthus petrosus*.

Esgair Gemlyn (Fig. 3) is a curving shingle ridge which divides open sea from a shallow brackish lagoon. The ridge is home to breeding birds like Ringed Plover *Charadrius hiaticula* and Oystercatcher *Haematopus ostralegus* which nest amongst the pebbles. The lagoon is the focus of Cemlyn's famous wildlife spectacle – its summer Tern colony. Common *S. hirundo*, Arctic *S. paradisaea* and Sandwich Tern *S. sandvicensis* regularly nest on the islands at the western end of the reserve, making Cemlyn a nationally important site for these graceful, migratory seabirds. The nearby headland of Trwyn Cemlyn is a top sea-watching spot for seabirds.

Amlwch, a small fishing village on Anglesey's north-east coast boomed big-time in the 18th and 19th centuries when copper mining intensified on nearby Parys Mountain (Mynydd



**Figure 2.** Fulmar *Fulmaris glacialis*.

© Jen Vidal.

Parys) turning it into the largest open-cast copper mine in the world. It is no surprise that the port became a major exporter of copper worldwide. Today, after the 'copper rush' Common Tern loaf about the shores around the Old Harbour and face the prevailing winds off the Irish Sea. The silent Old Harbour now houses Amlwch's maritime and industrial heritage in The Old Sail Loft – Maritime Museum and Copper Kingdom Visitor Centre.

Next stop was Traeth Lligwy, where we spent those always cloudless, rainless sky-blue summers of childhood holidays. Walking the hedgerowed, honeysuckled footpath between the farmhouse and the National schoolhouse; crossing fields and passing Mesolithic stones until we reached the sandy beach. Happy as a

sand boy, I would sea-watch the gulls and waders, amongst them Little Tern *Sternula albifrons* and Sandwich Tern and the hyperactive Sanderling *Calidris alba* chasing the waves.

Our last stop on the journey along the A5025, as it curves around the northern and eastern coast of Anglesey, was the picturesque fishing village of Moelfre. Moelfre Bay has a reputation for shipwrecks; the Royal Charter in 1859 with the loss of 459 lives and £400k worth of gold, the Hindley in 1959 and His Majesty's Submarine Thetis in 1939. In the summer of 1939 Thetis left Cammell Lairds' Birkenhead Yard for sea-trials. She had never made a successful dive and was overloaded by almost 100% with various officials and others. Through



**Figure 1.** Black-headed Gull  
*Chroicocephalus ridibundus*.  
© Jen Vidal.

a combination of fate, human error and delay, the *Thetis* was lost and took 99 trapped men with her. She was beached at Traeth Bychan, Moelfre where Naval personnel worked on her and removed the bodies to be buried in Maeshyfyrd cemetery in Holyhead. As a child this tragedy had a lasting impact on me and today, as I sit in the grey pebbled cove and watch the Cormorants in their heraldic poses drying their wings, I reflect on how it could all have been so different if the rescue system had acted quickly instead of waiting.

What next? Anglesey has a necklace of bays, coves and rocky headlands around its coastline which attract both artists and birdwatchers. On my next visit to the island, I hope to observe on location the seabirds of the east coast – Beaumaris, south coast – Llandwyn Lighthouse, southwest coast – RSPB Cors Ddyga (Malltraeth), northwest coast – RSPB South



**Figure 3.** Esgair Gemlyn shingle ridge.

Stack Cliffs NR and inland there is RSPB Valley Wetlands NR. All are all waiting to be recorded in fieldnotes and sketchbooks.

#### Sources

- Tunncliffe, C. F. 1984. *Shorelands Summer Diary*. Clive Holloway, London.  
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**Howard Harris** is a wildlife enthusiast based in Liverpool, an Associate FSC Tutor and Biological Recorder. His main interests are Botany and Ornithology with a special interest in the ecology of wetlands.  
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## American Razor Shell Clam *Ensis leei* in North Wales Seas

### Ivor Rees

In early December 2018 masses of small razor shells were found on Benllech beach, Anglesey, but it was not clear from initial smartphone images which species they were. Later when samples were examined under magnification it transpired that they were a non-native species (*Ensis leei* = *E. directus*) originating from North America and known over there as the Jack Knife Clam. Similar masses of 0-group young of the year plus some, judged from shell check marks



**Figure 1.** Mass of small shells of *Ensis leei* and a few older ones on top of shell hash from earlier stranding of bivalves. Llanddona Beach, Red Wharf Bay, December 2018.

© Ivor Rees.

to be about 4 years old, were also found at the Llanddona end of Red Wharf Bay (Fig. 1). Together, the records implied that there had been a widespread mass spat settlement of them off the east side of Anglesey in 2018. Surprisingly, an “Invasive Non Native” had escaped notice for several years within a marine Natura 2000 site designated partly for its sea bed fauna. The event highlights the merits of the “Beached!” project which encourages people to report mass stranding so that species identities and amounts can be recorded.

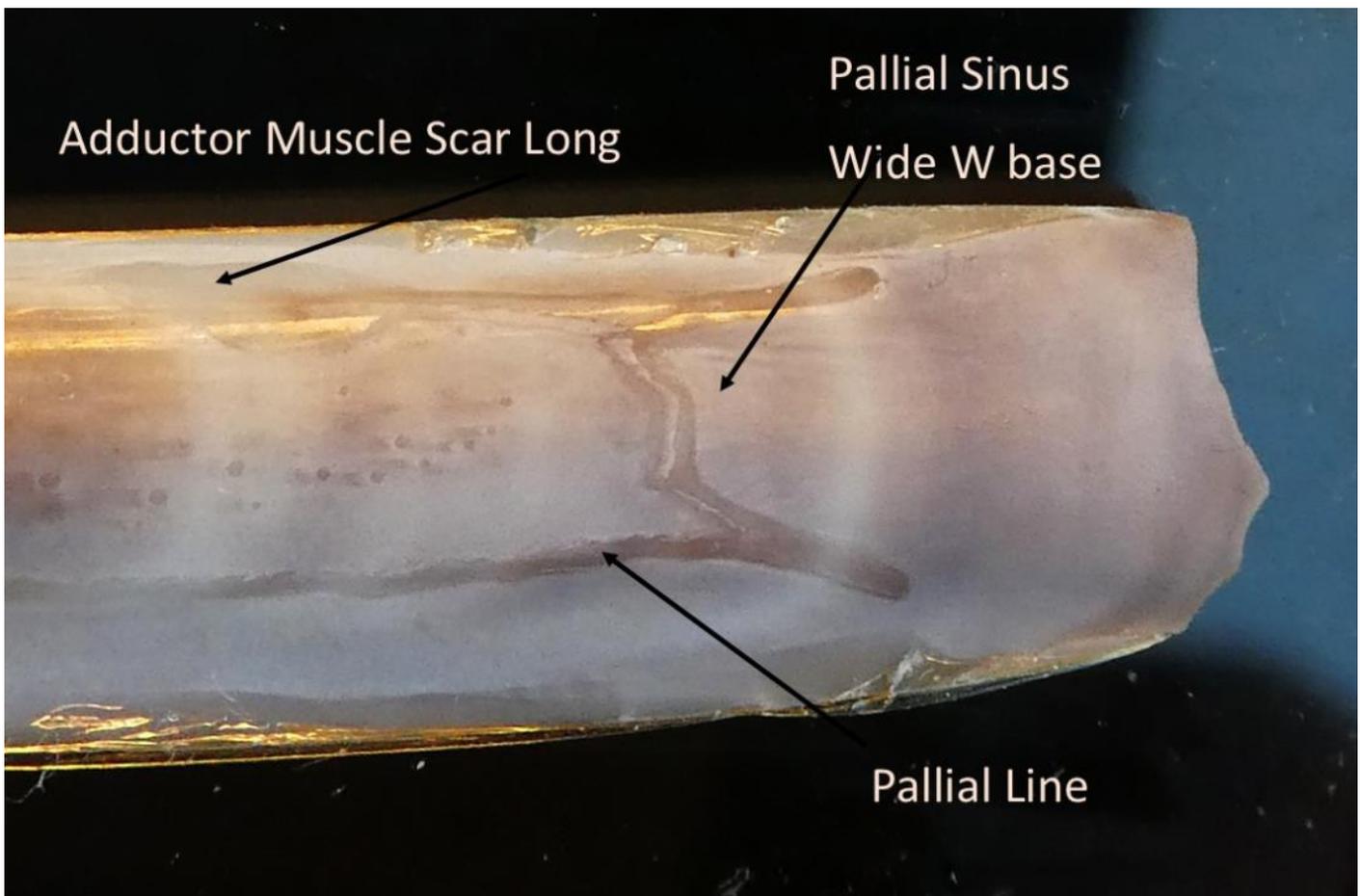
With the addition of *E. leei*, there are now five superficially similar razor shells in the genus

*Ensis* to look out for on North Wales beaches, plus another three bivalves also with elongated shells. To complicate matters, most of the readily available seashore guides do not describe them all (*Ensis* spp.), while taxonomic research comparing fossils with modern shells has resulted in some scientific name changes since the guides were published. Separating the *Ensis* spp. can be challenging as crucial features may not always be easy to see. Detailed descriptions and a key were given by Von Cosel (2009) and the Biodiversity part of the National Museum of Wales website has a section with useful descriptions and photographs of North East Atlantic bivalves including the *Ensis* spp.



**Figure 2.** *Ensis leei* with 3+ growth check rings, Red Wharf Bay, December 2018.

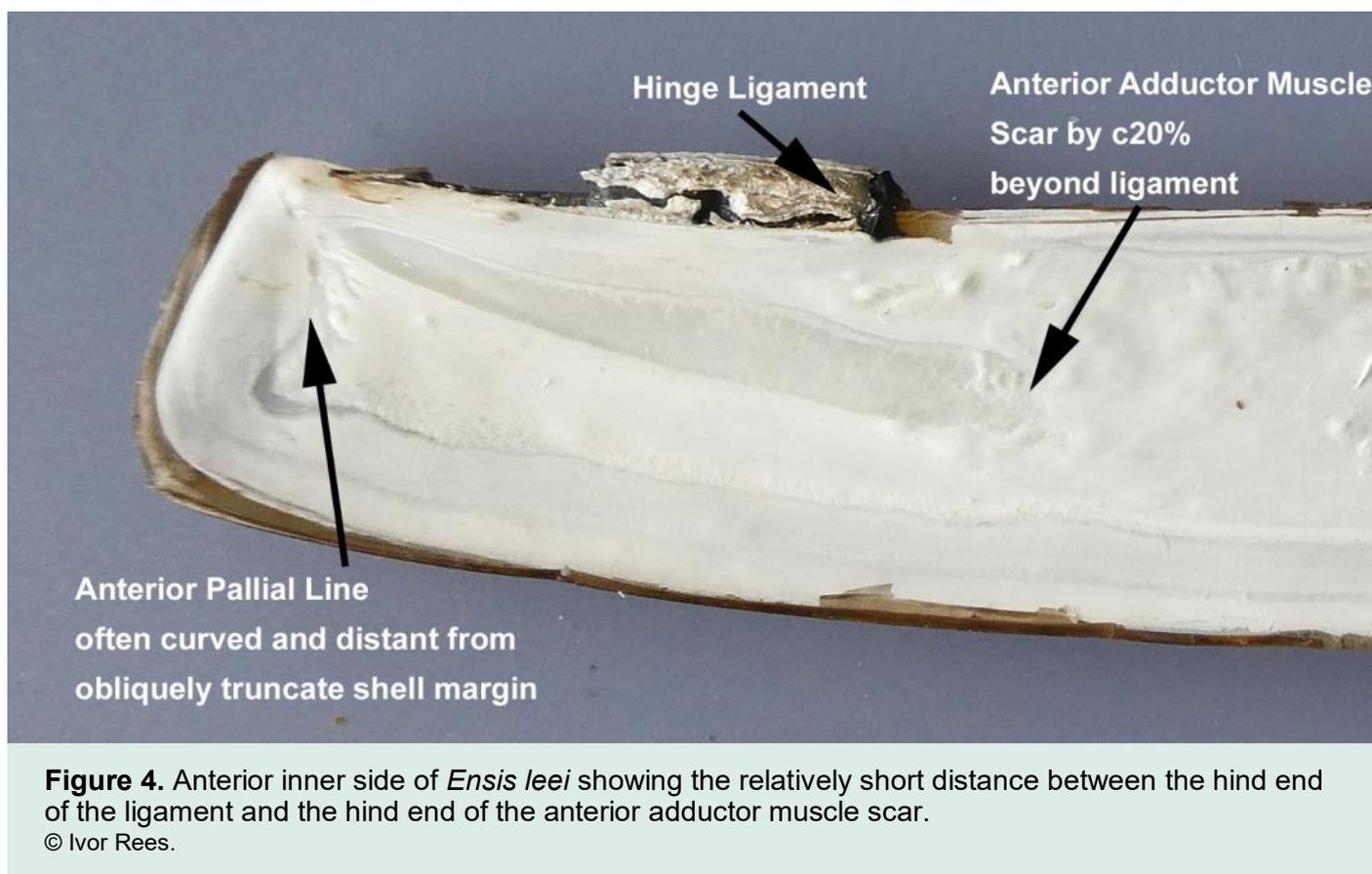
© Ivor Rees.



**Figure 3.** Posterior inner side of a small *Ensis leei*, shell length 37 mm, showing the wide W-shaped base to the pallial sinus and the elongate posterior adductor muscle scar. Red Wharf Bay December 2018. © Ivor Rees.

*Ensis leei* nearly always has a slightly curved shell, hence the “Jack-Knife” common name used in America and it is proportionately

broader than any of the native species (Fig. 2). The crucial features to identify them are inside the paired valves so it helps to understand



orientations. In life the animals live anterior end down in the sediment with the siphons, through which they draw water to filter feed, at the posterior end. The siphons can withdraw into a pallial sinus which varies in shape between species. In *E. leei* the base of the sinus usually takes the form of a wide and often slightly oblique W shape (Fig. 3). This character may not always be clear or conclusive, so features at the anterior end need to be checked as well. Indeed, they may be easier to see and interpret.

The leathery hinge ligament joining the pair of shell valves is near the anterior end and below that there is an elongate scar marking the attachment of the anterior adductor muscle. In *E. leei* the muscle scar only extends back for a short distance beyond the end of the ligament (<20% of the scar length) (Fig. 4). In all the other *Ensis* in the NE Atlantic the anterior adductor muscle scar extends much further beyond the ligament.

*Ensis leei* (= *E. directus*) is native to the east coast of North America from Labrador to South

Carolina. It was first found in European waters in the North Sea off the Elbe Estuary, Germany in 1979 (Gollasch *et al.*, 2015). It is thought that they probably reached Europe as larvae in the ballast water tank of a ship. From the initial introduction they soon spread to Dutch and Danish coasts and then more widely around the southern North Sea before reaching both sides of the eastern English Channel. In parts of the Dutch Waddensee they were reported to have reached very high densities forming a significant part of the benthic biomass on shallow sandy grounds. Both oystercatchers and common scoters were seen feeding on them and they were prone to mass stranding. The first record from the west coast of Britain was at Angle Bay, Milford Haven in 2002. This is a not surprising location given the level of tanker traffic to that port. In Liverpool Bay the first record of a shell was at Prestatyn in 2011, with records the next year on the other side of the channel into the Mersey as well. In Red Wharf Bay the ages of the shells found in 2018 would imply that some had been in this part of North Wales before about 2013. Whether the arrival in Red Wharf



Bay was by spread from the inner parts of Liverpool Bay or through ballast water discharged at the Lynas anchorage off Red Wharf Bay is an open question. Tide driven residual flows south west through the Menai Strait would easily explain the frequent occurrence of them now on the southwest side of Anglesey at both Newborough and Aberffraw. It remains to be seen what impact this non-native may have on the structure of the soft sediment benthos in shallow sandy areas off North Wales.

### References

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Click for more information on the [Beached!](#) project.

### Postscript

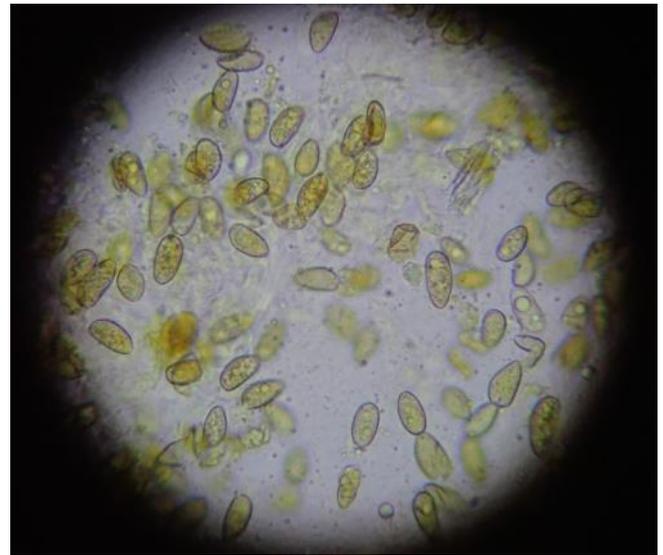
Since the above note was written, the first living *E. leei* have been found off North Wales. Two were picked up in a single 0.1m grab at one station offshore in Conwy Bay during a benthos survey by NRW in June 2019 (information from Matthew Green). Also, in summer 2019, anecdotal descriptions by a bait collector of unfamiliar live small razor clams on Red Wharf Bay beach were probably this species.

**Ivor Rees** was for many years, until retirement, on the staff of School of Ocean Sciences, Bangor University. He has wide experience of the benthic fauna on the bed of the Irish Sea and the oceanographic influences that result in the mass standing of organisms.  
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## Cofnod Fungal Microscopy Course at the World Museum, Liverpool, 1st November 2019

Richard Gallon (Cofnod Recording Specialist)

It's always a treat to have an event on at Liverpool's World Museum. So an early morning start to pick Charles Aron up from Anglesey,



**Figure 1.** Fungal spores down a microscope  
© Richard Gallon.

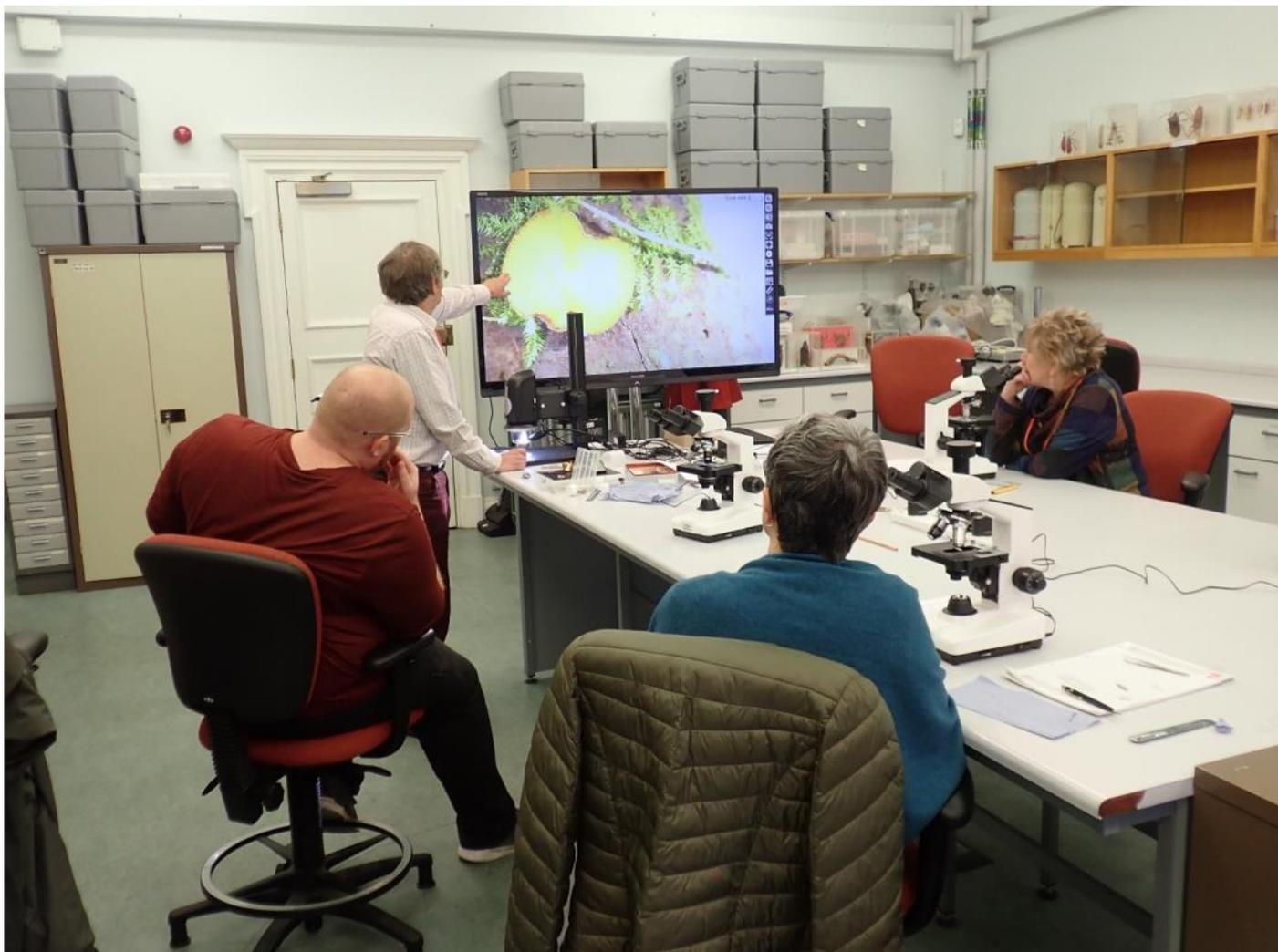
with a quick detour to collect Lucia Ruffino along the way was well worth the effort.

We navigated the Mersey tunnel, chose the wrong filter lane in the city, but eventually gravitated to the museum's carpark. Wendy Atkinson from Botany met us and led us through to Entomology where we would hold the fungal course.

It sounds strange that we held a North Wales LERC course in England, covering fungi in an



**Figure 2.** Spore shooter on a microscope slide.  
© Richard Gallon.



**Figure 3.** Charles Aron using the *Tanyptera Trust* demonstration microscope to show where to sample tissue for spore preparations.

© Richard Gallon.

Entomology department! However, the lab facilities there are amazing and Gary Hedges from the *Tanyptera Trust* kindly made their suite of compound microscopes and superb demonstration microscope available to us.

Six other people arrived at the museum to attend the course, joining Lucia and myself as students for the day. After the customary fire alarm briefing and, so called ‘housekeeping’ – an amusing euphemism for ‘where the toilets and exit are’ and strangely nothing to do with vacuuming, dusting and other household chores – we moved from the Entomology Library to the Lab.

Charles had brought an interesting array of fungal specimens for us to examine. He showed

us how to take a small sample of fungal tissue and squash it between microscope slide and cover-slip with a drop of water. The trick was to know which fungal tissue to select – in many cases it was a fragment of gill, but in others a portion of the upper surface. We soon got the hang of making slide preparations, discovering that it was far more successful to use a tiny fragment of tissue than a large piece.

The diversity of spore shape and size was fascinating. Some of the ‘spore shooter’ species even performed their dispersal method under the microscope, resembling a mini fireworks display!

To add variety to the day Wendy Atkinson



**Figure 4.** Preparing spore samples for microscopy.  
© Richard Gallon.

kindly gave the group a behind the scenes tour of the Botany Department, showing us some of the museum's botanical treasures, fungal herbarium and collection of fungal illustrations.

Returning to the lab we continued on our quest to examine all the specimens Charles had brought with him. By closing time we had all seen a fabulous, diverse range of species. The course was an excellent introduction to fungal microscopy, made all the more enjoyable by Charles' selection of interesting species.

Lucia was so impressed by the museum's teaching facilities that she led a Bryophyte microscopy course at the museum on the 7th February 2020.

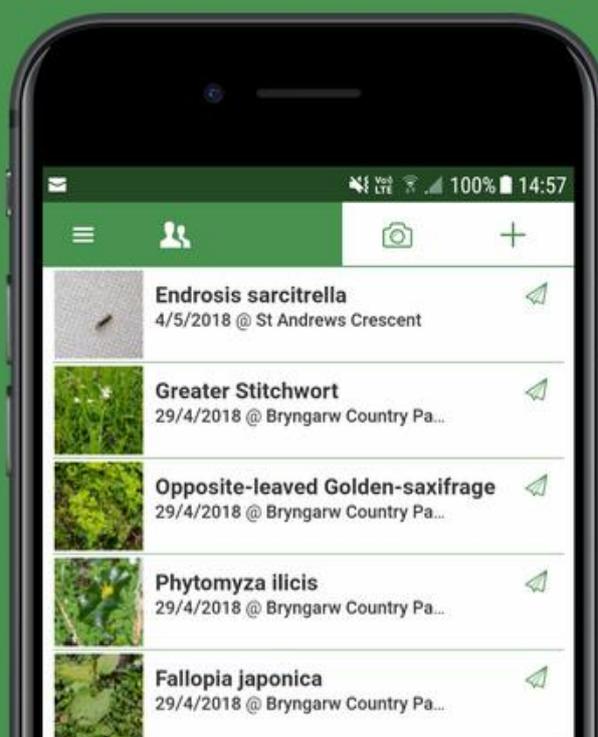


**Figure 5.** An earth tongue fungus reveals its long spindle-like spores.  
© Richard Gallon.



## LERC Wales App

Record any species on the go in Wales.



### Species Focus: *Pholcus phalangioides* Daddy Long-legs Spider

Richard Gallon (Cofnod Recording Specialist)

In every issue of the Cofnod Newsletter we'll be featuring an "easy to identify" species. The aim is to encourage readers to record these species to help map their distribution in North Wales.

If you're not familiar with a particular species group it can be daunting trying to identify something to species. There's always the worry that the animal or plant you've seen might be one of several similar looking species! This feature aims to help by focusing attention to specific examples. Hopefully this will result in lots of new records submitted to Cofnod via the [ORS](#) or LERC Wales App.

As a recorder you are most welcome to send in other suggested species.

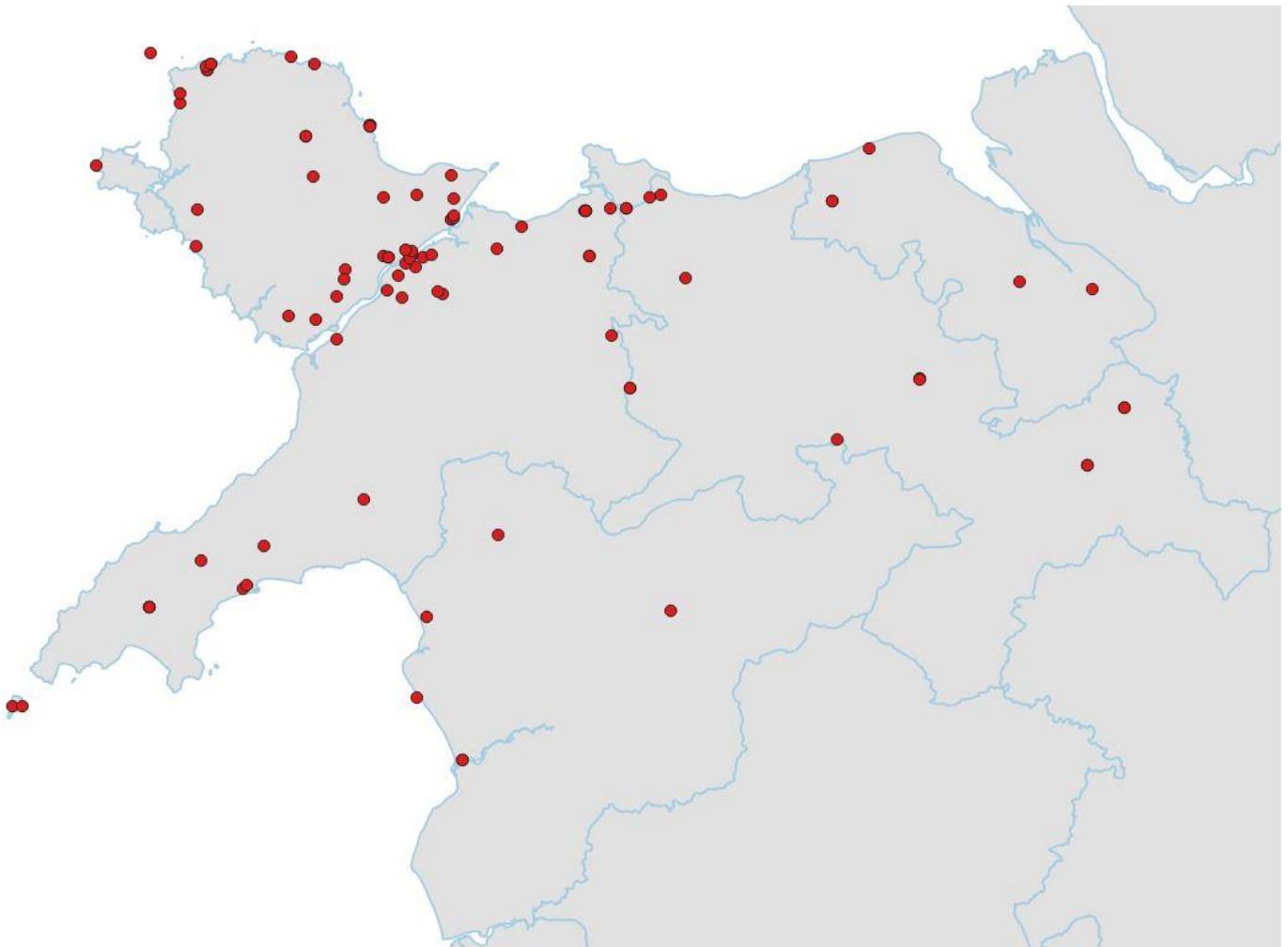
*Pholcus phalangioides* is a very common, but under-recorded, household spider and is almost always found within buildings. Look for it in the corners of a ceiling or behind cupboards. When



**Figure 1.** *Pholcus phalangioides* female.  
Abdomen arrowed. © Richard Gallon.

disturbed it gyrates rapidly in its web, blurring its outline. Females carry a single egg-sac in their mouth and these look like a tiny bag of yellow marbles. To be sure you've correctly identified *P. phalangioides* make sure your spider has two distinct body parts (to exclude harvestmen) and that the abdomen is long (i.e. not tear-drop shaped) when seen from the side or above (abdomen arrowed in image).

This species is very much under-recorded in



**Figure 2.** *Pholcus phalangioides* records held on the Cofnod ORS.

North Wales, with just over 100 records from the Cofnod area (Fig. 2). Why not submit a record and help fill in some of the gaps in this spider's distribution?

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## Equipment Focus: Olympus Tough Camera TG-5

**Richard Gallon** (Cofnod Recording Specialist)

When out recording it's always a good idea to carry a camera with you. It gives you the option to not only photograph the species you're recording, but also take a few habitat shots for reference. A photo attached to a record is also fantastic supporting evidence, helping Vice County Recorders verify your record.

These days many smartphones have excellent built-in cameras, although for obvious reasons these are generally optimised to photograph human-sized objects and 'normal' subject matters, with resolutions designed to look good on a small hand-held screen. Few of us would want to risk dangling an expensive contract phone over a muddy pond, or expose it to the dangers of falling onto rocks.

For several years I used to carry a digital SLR camera with me in the field. However its weight and bulk soon became restrictive and I started leaving the 'brick' at home, rather than taking it with me on walks.

Over a tea-break at work I was introduced to a small point'n'shoot camera. Both Susan Andrew (Cofnod Volunteer) and Catharine Moss had



**Figure 1.** Maximum macro capability of the Olympus Tough TG-5 (uncropped), giving an image width of 20 mm which is fine for many small invertebrates. © Richard Gallon.



**Figure 3.** A waterproof camera gives you the confidence to take photos where other cameras fear to tread. *Crassula helmsi* in a pond. © Richard Gallon.

been using the same model to photograph mosses and liverworts. They described how the *Olympus Tough* not only did focus-stacking, but was waterproof (to 15 m) and shockproof (to a drop of 2.1 m)!

As I mainly record invertebrates I was particularly keen on the photo-stacking facility. Photographing small invertebrates (macro photography) is always challenging – a constant battle compromising sharpness and depth of field. Photo-stacking with the Olympus gets

around this by automatically taking several images (focusing on different parts of the subject) and merging them into a single clear image. To have this capability in a point'n'shoot is fantastic! Even the regular Macro setting is more than adequate. After seeing what this camera could do I ordered one myself.

To take full advantage of this camera's macro capabilities I also ordered the "FD-1 Flash Diffuser". This add-on has no electrical parts and simply guides the flash light more evenly



**Figure 2.** The regular macro setting is good for more mobile invertebrates where the image-stacking option isn't really feasible. © Richard Gallon.



**Figure 4.** Auto and Landscape settings on the Olympus Tough aren't too bad either. © Richard Gallon.



**Figure 5.** The Olympus Tough performs even better in bright sunlight.  
© Richard Gallon.

onto the subject, essentially turning it into a ring-flash.

The first problem I had was fitting the Flash Diffuser to the camera, but with some persistence realised a metal ring needed to be removed first. I normally leave the Flash Diffuser attached to the camera all the time, although you'd probably want to remove it when photographing people indoors (where a regular flash configuration is preferable).

I haven't tested this camera's underwater capabilities yet. However I've seen images that David Hill has taken in ponds and was very impressed by his aquarium-like pictures.

I've been surprised to discover that many other wildlife recorders already own this camera. It seems many of us are looking for the same attributes in a camera: rugged, waterproof, easy to use and good at macro.

As with any piece of kit there are good and bad points. If you're after a camera to photograph a small bird at distance, then this one isn't for you - its zoom capability isn't sufficient. It's not that good in low light levels either, producing somewhat grainy images. The in-built photo-tagging GPS is battery-hungry, but easily turned off with a physical switch on the top of the camera (mine's always left off).

If you're a specialist studio SLR macro photographer, you won't be selling your kit anytime soon. The Olympus Tough's 12 MP resolution doesn't give you much scope for cropping out an image.

However it's a fantastic recorders camera and one that's built for the outdoors – come hell or high water.



Biodiversity Network  
North East Wales  
Rhwydwaith Bioamrywiaeth  
Gogledd Dwyrain Cymru

**amphibian and reptile**  
**conservation**



## Sand Lizards of North Wales

**Mandy Cartwright** (North Wales Officer, ARC)

The sand lizard (*Lacerta agilis*) is Britain's rarest lizard, and has been successfully reintroduced to Wales following regional extinction. In the UK the sand lizard occurs in two habitat types: southern (lowland) heathland and coastal dune systems (located predominantly, but not exclusively, in the northwest).

Although both habitats provide the same broad resources, they differ in some important aspects, with coastal dunes experiencing windier conditions, more mobile sand, lower densities of invertebrate prey, and differences in temporal activity between northern and southern populations. These differences, combined with dispersal and colonisation history, have resulted in three distinct "races" of sand lizard, Sefton, Dorset and Weald, with the most pronounced differences between the



**Figure 1.** Male sand lizard.

northern, dune Sefton race and the Dorset and Weald races found on southern heathland. In Wales, sand lizards only occur in coastal dunes and native sand lizards all belong to the “dune race”.

The sand lizard has undergone sharp declines during the last century and is recognised as a conservation priority in England and Wales. The species is strictly protected by both UK and European law.

The sand lizard is a stocky lizard, reaching up to 20 cm in length. Both sexes have brown varied patterns down the back with two strong dorsal stripes (Figs. 1–2). The male has extremely striking green flanks which are particularly bright during the breeding season in late April and May.

Animals emerge from hibernation from late March to April. The sand lizard lays eggs in late May or early June (Fig. 3). The eggs are left buried in sand exposed to the sun which helps to keep them warm. Eggs hatch between late August and September (Fig. 4). The sand lizard is dependent on well managed heathland or sand dune habitats, where it occupies mature vegetation that provides good cover.

Since its inception, ARC has taken the lead in sand lizard conservation in Britain. Our sand lizard work focuses on five main areas. Firstly, we acquire and manage land of value to the

species. Secondly, we monitor the status of sand lizards, through in house surveys and working with partners. Thirdly, we run a reintroduction programme, bringing sand lizards back to carefully restored areas using captive bred hatchlings. Fourthly, we undertake advocacy work to encourage policies and practice that is beneficial to sand lizards. Lastly, through our regional projects we take actions to help sand lizards, for example in the Gems in the Dunes project on the Sefton Coast.

Sand lizards were first reintroduced at Gronant Dunes and Talacre Warren SSSI in 2003 with further releases up until 2017. In 2008 a structured monitoring programme was created and in 2011 Cofnod created an online database for the project. In 2019 this database expanded to include other sand lizard locations in Wales which include Harlech SSSI and Newborough Warren NNR Warren. Land managers are now including bespoke habitat management for sand lizards which is supporting an increasing population and range within the dune systems.

ARC and partners are running annual training courses to encourage and support volunteers to help survey this rare lizard. All survey effort is greatly appreciated as this contributes to both regional and national population trends, and provides vital information on how we can help sand lizards.

For volunteer opportunities please contact:

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[Sarah.slater@flintshire.gov.uk](mailto:Sarah.slater@flintshire.gov.uk)



**Figure 2.** Female sand lizard.



**Figure 3.** Sand lizard egg with 5p scale.



**Figure 4.** Juvenile sand lizard.

**Mandy Cartwright** is the North Wales Officer for ARC (Amphibian and Reptile Conservation).  
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## **Saving our Meadows with Magnificent Meadows Cymru**

**Tamsin Fretwell**

A few years ago Plantlife Cymru realised there was a desperate problem with meadows in Wales – we were losing our meadows and the associated fauna at a rapid rate and so a plan was hatched to try to stem this tragic loss. Plantlife's *Magnificent Meadows Cymru* project started last summer, aiming to reverse this

decline by:

- Increasing the extent and distribution of species-rich meadows and grassland across Wales.
- Increasing people's awareness of, and sense of care towards, Welsh meadows and grassland.
- Increasing knowledge and skills of land managers, landowners, communities and volunteers.
- Piloting a programme of well-being activities in community meadows and grassland.

The project is doing lots of exciting work across Wales, but in this update we'll focus on what's happening in North Wales.

Our work with schools has already started! We are currently working with a school in Llandudno to develop a mini-meadow that will be used as a training site. Teachers from local schools will be invited to a training day to find out how the mini-meadow was created and learn about exciting and novel ways of engaging children with grasslands (Fig. 1). We'll be looking for other schools to work with in the future, so if you know a school that might be interested please do get in touch.

If you are a land owner you may be interested in joining or helping to establish a meadows group. Meadows groups have proven to be a really excellent way of helping land owners who are keen to develop a meadow but don't have the knowledge or capability. Meadows groups share knowledge, experience, man-power and sometimes machinery and livestock, and so help land owners to develop species-rich meadows (Fig. 2). In North Wales there



**Figure 1.** Meadows can generate lots of public interest. © Aisling May.



**Figure 2.** Horses grazing meadowland near Bangor. © Richard Gallon.

are currently two thriving meadows groups – one in the Gwynedd/Conwy area and one on the Llŷn Peninsula. The project aims to plug the gaps by establishing groups in north east Wales and Anglesey.

The project also aims to establish 30 community meadows across Wales. Community meadows may be on public land or could be on land owned by people who wouldn't mind occasional public use of their land. Community meadows provide a site for the public to enjoy the wonderful experience of being involved with developing a species-rich meadow, perhaps through events on the site or maybe by taking part in practical meadow management. Sites could currently be farmland, amenity grassland, scrub or could already be meadow that just needs a helping hand to get it into better condition. At the moment we have several sites earmarked but are looking for more, so please get in touch if you know of any potentially suitable sites – any size and any condition considered!

We are finding that the well-being aspect of the project is being met with great enthusiasm from health professionals; there is clearly a thirst for this kind of project. We are currently liaising with doctor's surgeries and Ysbyty Gwynedd to find out how the project can help staff and patients get out into local meadows in order to enjoy the proven benefits of interaction with nature. Watch this space for further developments!

In 2019 we ran three grassland fungi training courses with the aim of training up volunteers to be able to survey grasslands. In 2020 the project will be training people in botanical skills relevant to meadows, invertebrate identification skills, meadow management skills and more.

If any of the above interests you, please do get in touch with me: [Tamsin.Fretwell@plantlife.org.uk](mailto:Tamsin.Fretwell@plantlife.org.uk)

**Tamsin Fretwell** is a Magnificent Meadows Outreach Officer from Plantlife Cymru.



## Staff Focus: Tim May (Cofnod Information Systems Manager)

I started working for Cofnod at the beginning of 2006 with relatively little experience of programming, but over the years I've developed my skills and have been slowly carving a niche into the small world of environmental software development. Alongside managing our office's IT systems and the servers we use to host our websites and databases, I spend most of my time developing Cofnod's unique software, including our management system 'Orca' which is now used by several other LERCs across the UK. I also provide support for extracting trickier data into more standard formats, often writing bespoke software, Excel macros and formulae to solve problems.



I'm currently working on a replacement for the Online Recording System, which will keep much of the functionality that people are familiar with while making it faster and more modern, and adding new features that will make it even more useful.

Outside Cofnod, I have a keen interest in the outdoors, particularly long-distance walking (which has been slightly curtailed by the arrival of two children), and can currently be found rebuilding my old Land Rover, which has been waiting patiently in a barn for ten years for me to find some spare time.

## LERC Wales Recorders' Symposium 2021

#WalesRecord21

Saturday 24th April 2021; 9:30–16:00

Centre for Alternative Technology, Machynlleth

This event will give delegates an opportunity to learn of collecting and identification techniques, old and new, which are being employed by biological recorders in Wales and the value of biological records to current evidence needs.

The event will appeal to biological recorders, students and professionals from organisations working in conservation within Wales.

The afternoon session will consist of a series of classroom and field based workshops together with a parallel discussion session exploring ways of encouraging new recorders and supporting biological recording in the future.

An optional recording fieldtrip to Ynyslas NNR is available the following day (Sunday 25th April; 10:00–16:00). Attendees are welcome to come for all or part of the day.



## Call for Volunteers

**Aisling May** (Cofnod Data Manager)

Cofnod is heavily reliant on volunteer help to mobilise paper data (or indeed records contained within reports or other documents which cannot be imported into our database).

If you have some time to spare, perhaps in the Autumn/Winter months when being outside is less appealing and there is less about to record, please get in touch for a chat to see if this might suit you. You will probably be entering records using the Cofnod ORS, so you really don't need to be a computer whizz. You might even be able to do this from home. What is most important is that you have some basic knowledge of at least one species group, and a willingness to carry out what can be a fairly repetitive job in an accurate and consistent manner, knowing that you're helping to make a difference to conservation in North Wales.

### County Recorders

Do you know who your local County Recorder is for mammals, birds or butterflies for example? Cofnod's website has a search facility where you can check this ([Click on Find a Local Expert](#)). Any records you submit using the Cofnod Online Recording System (ORS) or submitted to us in spreadsheet format are made available to the relevant County Recorder via the ORS.

The County Recorder has many tasks, often being part of a specialist Recording Scheme or Society working across the UK, but where Cofnod is concerned they carry out essential data quality checking on an on-going basis. Working voluntarily, these individuals put huge amounts of time and effort into checking individual records and verifying them as fit for use in our database. We are very grateful to them for carrying out this very important role, and thank all who continue to commit their energy and enthusiasm to this, as well as those who have carried it out for a period of time and have had to pass the baton on to others.

## Cofnod Newsletter

The Cofnod Newsletter comes out twice a year (Spring & Autumn) and is a place where recorders and wildlife enthusiasts can publish the following:

- Highlight species or species groups that others could help record. This might be used to assist with documenting the spread of species new to North Wales (like the Ivy bee), or helping to fill in recording gaps across North Wales.
- Publicise locally-based recording groups and their events.
- Reporting interesting species discoveries, perhaps as a yearly round-up of exciting/significant records.
- Fieldtrip, site reports or identification courses, detailing an event you attended or organised.
- Equipment reviews. Share your first-hand experience with others about recording equipment, techniques, gadgets or even outdoor clothing.
- Any other subject matter that may be of relevance to Biological Recording in North Wales.
- Cofnod will also include articles relating to developments within our LERC.

### Guidance to authors

Please prepare your articles using the following guidelines:

- Supply your text in English or Welsh as a Word document, listing any figure captions or references at the end of your article.
  - Avoid using any unnecessary formatting like 'text boxes', footnotes, coloured backgrounds or unusual paragraph formatting, since the Editor would need to undo all of these prior to typesetting.
  - Tables, particularly large ones, are best submitted as separate Excel spreadsheets, rather than created within Word.
  - Send images as separate jpeg files (labelled with their appropriate figure number). Images should ideally have a minimum resolution of 300dpi (with a width of about 12 cm), but if in doubt supply them at their original size.
  - Scientific species names should be in italics with the genus name capitalised (e.g. *Rana temporaria*), family names should be capitalised, but not italicised (e.g. *Ranidae*) unless they are anglicised versions like *ranid*. Common names are not italicised.
  - References within the body of an article should follow the following formats: (Jones, 2019) or (Williams *et al.*, 2018) (please do not use numerical referencing).
- Jones, A. B. 2019. Paper title. *Journal title*, **10**: 1–2.  
Williams, A. B., Jones, C. & Ellis, P. 2018. *Book title*. Publisher, City.
- Articles can be e-mailed to the Editor. Large files (>10Mb) can be sent using Dropbox, WeTransfer or similar file sharing websites.
  - Deadlines for article submission are Spring (1st February) and Autumn (1st October).



Events

Most 2020 events have either been cancelled or postponed for the foreseeable future. We hope to reschedule many of these later in the year or in 2021. Please visit the Cofnod website to see any developments in the months ahead.



Event Bookings

## Cofnod Grant for Biological Recording



Apply for a Cofnod grant to help support your biological recording in North Wales.

Small grants (up to £500) are available for:

- Field/lab equipment
- Identification guides
- Attending courses
- Atlas & checklist publication
- Travel expenses
- Software
- Promotional material
- Digitising records

To apply please fill in an application form. For more details, or an informal chat about your application please contact:

grants@cofnod.org.uk  
01248 672603

» More Information «

» Application Form «

## Submit your records!

There are many ways to submit records to Cofnod:

1. [Cofnod ORS](#)
2. [Wales LERC App](#)
3. [E-mail a spreadsheet](#)

If your records are on iRecord or with a National Recording Scheme they will also come to us – please ask us if you wish us to check but you shouldn't have to enter them twice!



## Aderyn

LERC Wales' Biodiversity Information & Reporting Database

## Article Deadlines

Spring: 1 February  
Autumn: 1 October

Please send articles/submissions to the Editor by the dates indicated above.

[newsletter@cofnod.org.uk](mailto:newsletter@cofnod.org.uk)