# VIOLUSC World July 2022 • Issue 59

Mollusc recording news

Quagga mussels in the UK and Ireland Slug embryo development



The Conchological Society

The seaslug Ancula Conchological obituaries of Great Britain & Ireland

Helping to understand, identify, record and conserve molluscs

# From the Hon. Editor



Cat lovers among you might like this picture of our cat, Delilah, sunning herself under a window next to some shell books!

Welcome to another issue of the Conchological Society's magazine. This is the issue

which, each year, includes the annual reports from the Society's officers. Far from being uninteresting, they are very informative of what has been carried out during the past year and I hope you enjoy reading them. The full set of reports are available on our Web site. The meetings diary as usual is on the back cover and page 35. Please consider attending what promises to be a fascinating regional meeting at the Liverpool World Museum on November 19<sup>th</sup> and our exciting full programme of field meetings continues. You might also consider a conchological project: applying for a grant from the Society is open to all (see p. 35 for details).

An article in the Guardian newspaper from 18<sup>th</sup> May highlighted the discovery by Dr Rob Enever and his team at Fishtek Marine that small LED 'potlights' they designed to help protect fish stocks, by replacing the need to use fish to bait crab and lobster pots, are actually attractive to scallops. Most scallops are caught by dredging, which at an industrial-scale is damaging to marine habitats. Enever hopes scallop potting could create a low-input, low-impact fishery that supplements the income of crab and lobster fishers with this high-value catch. Further work with modified pots is continuing at sites around the coast. See <a href="https://www.theguardian.com/environment/2022/may/18/accidental-discovery-that-scallops-love-disco-lights-leads-to-new-fishing-technique">https://www.theguardian.com/environment/2022/may/18/accidental-discovery-that-scallops-love-disco-lights-leads-to-new-fishing-technique</a>. My thanks to Bas Payne for alerting me to this item.

Earlier this year 'Mollusc of the Year 2022', an international public vote led by the Senckenberg Nature Research Society, the LOEWE Centre for Translational Biodiversity Genomics (TBG) and the Worldwide Society for Mollusc Research, was won by the Cuban painted snail, *Polymita picta*. Professor Angus Davison, from the School of Life Sciences at the University of Nottingham, and Professor Bernardo Reyes-Tur at the Universidad de Oriente, Santiago de Cuba, hope to better understand how this snail evolved, and ultimately, promote their conservation. As a result of winning the vote, funding will be made available to sequence the snail's entire genome, which will hopefully enable further research and conservation of this endangered species. Details of the other nominees can currently be found at <a href="https://tbg.senckenberg.de/molluscoftheyear-2022/">https://tbg.senckenberg.de/molluscoftheyear-2022/</a>.

# Peter Topley

# **About the Conchological Society**

The Conchological Society of Great Britain and Ireland is one of the oldest societies devoted to the study of molluscs. It was founded in 1876 and has around 300 members and subscribers worldwide. Members receive two publications: Journal of

Conchology which specialises in Molluscan Biogeography, Taxonomy and Conservation and this magazine. New members are always welcome to attend field meetings and indoor meetings before joining.



## **Mollusc World**

is intended as a medium for communication between

Conchological Society members (and subscribers) on all aspects of molluscs, in addition to the material found on our web site where many back copies are available for viewing. Mollusc World will also be of interest to all those enquiring about this subject or the work of the Society. We welcome all contributions in whatever form they arrive (see page 34 for further details).

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#### Front Cover:

Introduced Quagga mussels (Dreissena rostriformis bugensis), Lough Ree, western Ireland. (photos: Dan Minchin) (see page 7).

# Scarpetta di cristallo: a pseudoconch of the pteropod, Cymbulia peronii, Sicily, 19<sup>th</sup> April 2022 Peter Barfield



figure 1: Pseudoconch of the pteropod Cymbulia peronii, Sicily.

'This is a very remarkable, though incompletely known, genus of animals of the order Pterodibranches, in the class of Cephalophores molluscs, established by MM. Péron and Lesueur for an animal they found in the Mediterranean, on the coast of Nice.' H.M.D. de Blainville, 1818.

I came across this firm, gelatinous pseudoconch (figure 1) whilst walking along a beach in north-east Sicily. But my first thought as I bent to pick it up was that perhaps it was the remains of a lure used by local fisherman, punched out of some industrial mould in China. Roughly 6 cm in length and looking like a little slipper, there might equally have been some 'Cinderella-of-the-sea', wondering what had become of her shoe.

These idle holiday thoughts were soon dispelled when I used Google Lens to search for similar images online and saw very quickly that what I had found was the remains of a pteropod, most likely *Cymbulia peronii* Blainville, 1818. Images available for the species on MolluscaBase (2022) reinforced this identification.

Before travelling to Sicily I had downloaded the iNaturalist app in anticipation of doing a little biological recording whilst there, and the following day I submitted a record of the find using the app on my phone. This turned out to be the first record of the species entered into iNaturalist for Sicily. Interestingly, a second record from someone else was then entered at the beginning of May, although they had found their specimen a month previous to mine.

Molluscs in the order Pteropoda are thought to do well in spring and abundances can peak at this time (Wikipedia Contributors 2022). This may help to explain, in part, my good fortune in coming across this specimen. Given that the species, when living, has a reported depth range of between 150 and 2000 m, I feel doubly lucky to have found it (GBIF Secretariat 2021)!

'Pteropod' derives from the Greek and means 'wing-foot'. *C. peronii* has several common names. In the 18<sup>th</sup> century French fishermen referred to it as *papillon de mer* and this led to the English term 'sea butterfly'. Very apt for

the living animal as the foot of this snail has formed wide, wing-like flaps which enable it to 'fly' through the water.

An Italian name captures the appearance of the species based on the pseudoconch, which is perhaps appropriate given that most of us will never see the live animal in the water: *scarpetta di cristallo* or 'crystal slipper'.

According to the checklist of the phylum Mollusca (Templado & Villanueva 2010), there are four species of Cymbuliidae found in the Mediterranean: *Cymbulia parvidentata* Pelseneer, 1888; *Cymbulia peronii* Blainville, 1827; *Corolla spectabilis* Dall, 1871; and *Gleba cordata* Forsskål in Niebuhr, 1776

At 4.5 cm the pseudoconch of *G. cordata* is smaller than that of *C. peronii* and is shaped differently, being more rounded and simply covered with a few warts (Naturalis Biodiversity Centre 2022a). The pseudoconch of *C. spectabilis* is up to 4 cm long with a broadly oval shape and covered in large warts (Naturalis Biodiversity Centre 2022b). That leaves *C. parvidentata* which has a similar slipper-like shape to *C. peronii* but is smaller at 3.5 cm and is pinched or laterally compressed in the middle (Naturalis Biodiversity Centre 2022c). Note the distinct spines, arranged in rows, which cover *C. peronii*. Some are quite large with others irregularly distributed between the rows.

This species was chosen as one of the five 'Molluscs of the Year 2022' by the LOEWE Centre for Translational Biodiversity Genomics. It did not win but was selected in part because sea butterflies are considered 'canaries in the coal mine' with regard to ocean acidification.

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# Conchological Society of Great Britain and Ireland

# **Diary of Meetings**

Please check website (www.conchsoc.org) for further details/updates, including other meetings arranged at shorter notice.



#### Field meetings

The Covid-19 uncertainties that impacted the 2021 field programme have declined and so it is anticipated that problems and restrictions will be minimal. We will, however, be keeping a close watch on developments; specific meeting arrangements and other changes will appear on the Society website which Society Members are advised to visit regularly.

<u>It is essential</u> for those wishing to attend ANY of the field meetings, <u>to contact the leader in advance</u> (ideally at least a few days before) to book a place and obtain further details.

#### **Indoor meetings**

Details of whether a meeting is 'live' plus Zoom or Zoom only, will be circulated to members prior to each meeting, together with instructions on how to access the NHM and /or the online Zoom. News updates will also appear on the Society's website.

It is ESSENTIAL to let Catherine Jagger at CIRCA (shellmember@gmail.com) know of your intentions to attend on Zoom or at the NHM, at least a week before each meeting. She will then send you joining instructions and an agenda. If you do not respond on time, it may not be possible to make the necessary access arrangements. Zoom meetings will open from 13.45 and please ensure that you join before the 14.00 start as late admissions may be impossible.

#### Saturday 23rd July 2022; ZOOM MEETING with online exhibits and lecture

Guest speaker: Dr. Jeremy Biggs (Director, Freshwater Habitats Trust)

'Understanding and protecting freshwater Mollusca: the work of the Freshwater Habitats Trust'.

14.00 -16.00 approx. (13.45 Zoom sign in)

#### Saturday 6th August: FIELD MEETING (non-marine): Hartslock Nature Reserve, Goring, Oxfordshire.

**Leader: Tom Walker** This is a joint meeting with the Reading and District Natural History Society. We will be surveying the molluscs in this Reserve which lies on a chalk hillside overlooking the River Thames. It is essential that you contact the leader prior to the meeting who will give directions to the difficult- to find parking area.

## $We dnesday \ 7^{th} \ September: FIELD \ MEETING \ (non-marine): \ Cricklade.$

#### **Leader: Mags Cousins**

This will be a training meeting, terrestrial and freshwater molluscs of meadows and lakes, joint with Wiltshire Wildlife Trust at Lower Moor farm complex, a group of Wiltshire Wildlife Trust reserves. Meet at 10 am at the car park of Lower Moor Farm, Cricklade, SN16 9TW, OS Grid Ref: SU007939. There are toilets, a cafe, and it is easy access.

#### Saturday 10th to Thursday 15th September 2022: FIELD MEETING (marine) mid-Northumberland coast.

**Leader: Rosemary Hill** This meeting will be examining shores which have been less well recorded in the mid part of the county between Amble and Bamburgh including the area Ted Phorson worked for shell sand. Members wishing to participate should find their own accommodation in Amble or up the coast from there.

# Saturday 24<sup>th</sup> September 2022: FIELD MEETING (non-marine): Queenswood Country Park, central Herefordshire (SO 5051). Leaders: Ben Rowson and Tim Kaye

Non marine molluscan recording on a joint meeting held with the NLHF supported 'Hidden Herefordshire' project. Further details will appear on the website.

## Saturday 1st October 2022: FIELD MEETING (non-marine): RHS Gardens, Wisley, Surrey.

#### Leaders: Imogen Cavadino and Hayley Jones

Native and introduced species with a focus on several established and newly created freshwater habitats. Additionally, there may also be opportunities to explore in the gardens, glasshouses and woodland. Meet at 10.30am. Participants must contact the leader in advance, for free access to the gardens and to confirm the meeting point. Places are limited, and members of other Societies may also be invited.

## October Wednesday 5<sup>th</sup> October 2022: FIELD MEETING (non-marine): Wyre Forest, Worcs.

#### Leaders: Rosemary Winnall & Rosemary Hill

Joint meeting with Wyre Forest Study Group to look for *Malacolimax tenellus* in Hunthouse Wood, Worcestershire. This is a WT reserve down some steep wooded dingles with a mixture of ancient woodland and some coal mining sites and also tufa outcrops which have not been looked at previously by the CS. Further meeting and other details will appear on the Society website

#### Saturday 8th October: FIELD MEETING (non-marine): Pewsey, Wiltshire.

**Leader: Mags Cousins** This will be a training and recording meeting focussing on Desmoulin's whorl snail (*Vertigo moulinsiana*) and other molluscs in the fen. Meet at 10.30am at Jones's Mill, the Vera Jeans Reserve, Wiltshire Wildlife Trust, Pewsey SN9 5JN. Parking at OS Grid Ref: SU 16966 61015. Not suitable for wheelchairs and pushchairs.

#### Saturday 8th & Sunday 9th October 2022: FIELD MEETING (marine): Solent, Hampshire

**Leaders: Bas Payne** and **Simon Taylor** A two-day meeting to work Solent shores during the October low spring tides, and also look at lagoon sites for *Cerastoderma glaucum*. Details and rendezvous to be announced on the website.