Molluscs World

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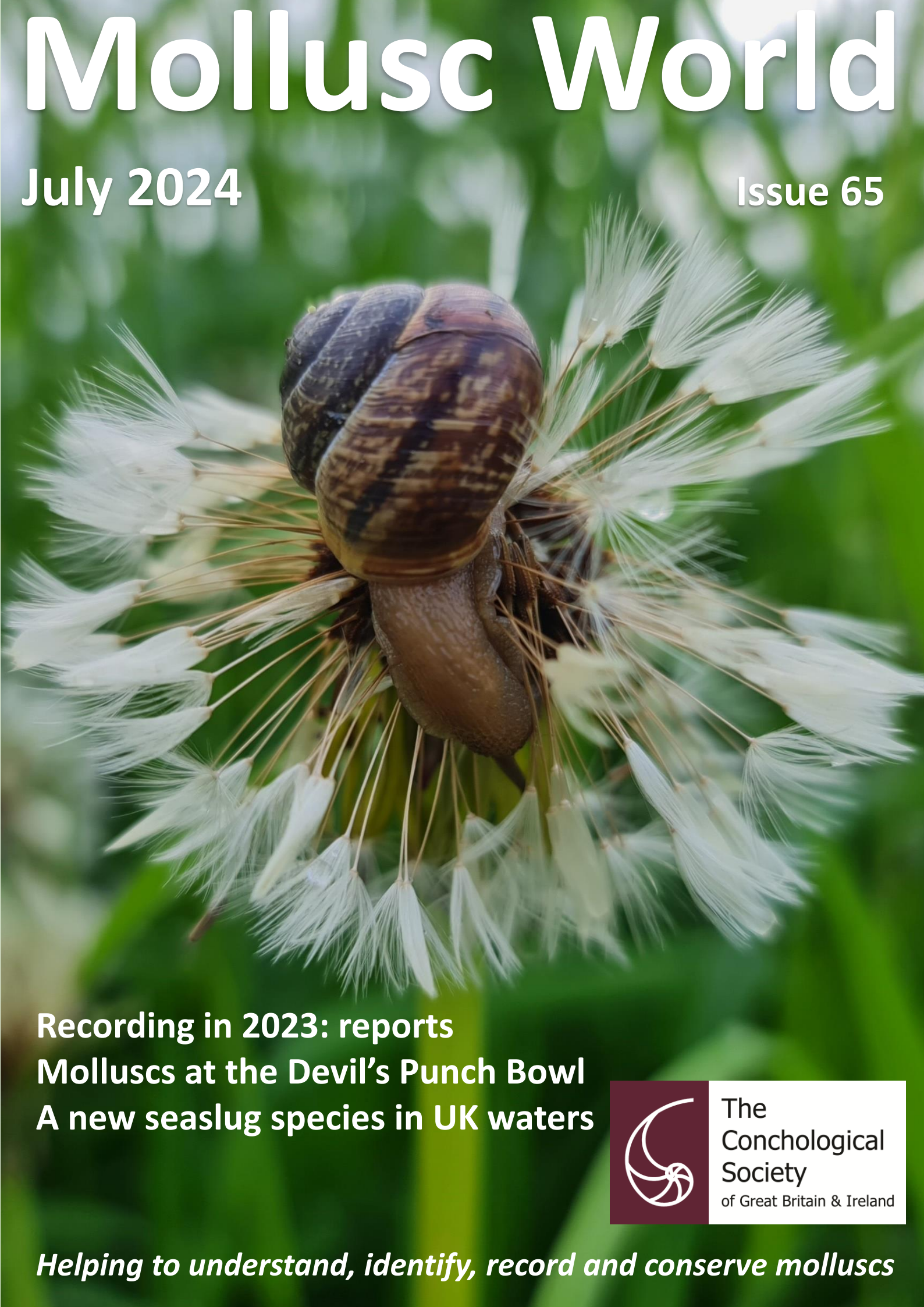
Issue 65



Recording in 2023: reports

Molluscs at the Devil's Punch Bowl

A new seaslug species in UK waters

The Conchological Society of Great Britain & Ireland

Helping to understand, identify, record and conserve molluscs

From the Hon. Editor

The second issue of *Mollusc World* in the year usually includes the reports from recording and conservation officers presented at the AGM (see opposite) and this issue is no exception. There is some interesting reading and encouragement for us all to get out there and record (even in your own garden or local shore).

With this issue we send a huge thanks to Dr Tom Walker for his steering of the Conchological Society as Hon. President over the last three years and we now welcome Dr Ben Rowson to the role (photos below and opposite). He will be familiar to many as our non-marine recorder, a position he has held since 2018. Ben is senior curator: invertebrate biodiversity (terrestrial mollusca) at the National Museum, Cardiff (Amgueddfa Cymru). In his new role, Ben is keen that this Society continues to promote interest in all molluscs, marine as well as non-marine, and to encourage active participation by its members. We also welcome a new journal editor (Robert Forsyth), programme secretary (Dr Matt Law) and web administrator (Nina Hundt) with gratitude to all those who have previously fulfilled these roles so effectively.

Molluscs always seem to be in the news somewhere. Member Paul Dansey reminded me that there is a display (until 4th November) of shells from the Bridget Atkinson (1732-1814) collection (saved from a skip in the 1980's), part of the Clayton Collection at Chesters Roman Fort and museum, including 'two small snail shells from New Zealand, likely collected by George Dixon, an armourer on Captain Cook's third voyage'. In March the Herts and Middlesex Wildlife Trust and Royal Horticultural Society (RHS) launched a campaign to give slugs and snails an 'image makeover' and have produced a guide for gardeners with tips to 'live harmoniously alongside slugs and snails'. In February the Smithsonian Magazine reported on a new online resource 'combining data from 45 different natural history collections to provide easy-to-use information on America's threatened freshwater mussels'. Finally an online natural history book and equipment supplier posted 'The NHBS guide to UK slug identification' (8 species) and a corresponding guide to snails (9 species); unfortunately, one of the snail photos is incorrect and the very small number of species illustrated makes these of minimal use, however as with all such initiatives, 'every little helps'!

Peter Topley

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 35 for further details)**. Back issues are available for download at https://conchsoc.org/resources/mollusc-world.php.

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 265 members and subscribers worldwide. All members receive this magazine. In addition, the *Journal of Conchology*, which specialises in Molluscan Biogeography, Taxonomy and Conservation, is available online at https://conchsoc.org/journal, with volumes prior to 2006 at https://www.biodiversitylibrary.org/. New members are always welcome to attend field meetings and indoor meetings before joining.

Contents

(Note: some titles are abbreviated.)

The Hon. Editor's thanks go to Janet Ridout Sharpe for her vital help with checking and copy editing.

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Front Cover: Copse snail, *Arianta arbustorum* (photo: Anna Moody)

The Conchological Society AGM took place on 21st April at the Angela Marmont Centre, Natural History Museum, London, with members also joining worldwide via videoconference link. Tom Walker handed over the presidency (and the 'official microphone'!) to Ben Rowson. (photos: Peter Topley)

Wanted – a new Hon. Treasurer for the Conchological Society

As ever, this issue of *Mollusc World* showcases the amazingly diverse work of the Society over the last year. It is always impressive to be reminded that our Society, although small, publishes both a magazine and a journal, operates two recording schemes, and runs a varied programme of indoor, online, and outdoor meetings. Then there is our conservation work, the website, book sales, social media, and of course keeping track of our membership!

The Society is kept running by our friendly and approachable Council, who meet a few times a year at our ordinary indoor meetings. (It is also possible to attend council meetings online via Zoom). The variety of council roles is one of the things that has kept us flourishing over the years. In general, council business is a case of 'many hands make light work' (not to mention 'the more, the merrier') and we are always keen for members to join us.

Members may already be aware that the Society's rules require us to have a member in the role of Hon. Treasurer. This is a great opportunity to support the Society by getting involved with Council, and to have a say in how our funds are raised and spent. The treasurer role is not actually a very onerous role, since we have in recent years outsourced all the book-keeping to a third party (the excellent Gill Earle). The Society is also in a satisfactory to good financial situation, with 'enough assets to cope with even a difficult financial climate for several years' (as stated in the 2023 Treasurer's report). If you would like to consider the role of treasurer, or know another member who would, please do contact either myself (president@conchsoc.org) or Brian Goodwin (treasurer@conchsoc.org) by email.

Ben Rowson

Hon. President

Marine Recorder's report 2023

Simon Taylor

One of the highlights of 2022 was the first British report of the colourful nudibranch *Berghia coerulescens* (Laurillard, 1832) (Taylor 2023). As is sometimes the case, though, this British first was a little bit of a 'cheat' as it was an observation made in the Channel Islands, a possession of the British Crown but topographically and biogeographically much more closely associated to mainland Europe and further south even than the Isles of Scilly. Including on the British and Irish list species found only in the Channel Islands always feels somewhat awkward but thanks to David Roberts and Matt Slater this no longer concerns *B. coerulescens*. David observed and filmed the species while diving off Porthkerris in Cornwall in June 2023; video footage can be seen on Facebook (Slater 2023).

The finders of the Channel Islands *B. coerulescens* continued to report more sightings in 2023. One of their number, Nicolas Jouault, also discovered specimens of the rare nudibranch *Atagema gibba* Pruvot-Fol, 1951 at the Les Écréhous site off Jersey (Jouault 2023). This has been seen in Sark before, and its range extends north as far as the extreme south-west of Britain, but observations are few. Nicolas also made further observations of *Pruvotfolia pselliotes* (Labbé, 1923) in association with the *A. gibba*, and added several additional sightings of *B. coerulescens*. There was another nudibranch added to the British and Irish list in 2023, namely *Doris veruccosa* L., 1758 (figure 1). Again it was first found in the Channel Islands, with observations made around Jersey by Peter Mark Crowther, Eleanor Amy and Lou Wagstaffe, who also recorded *Rostanga rubra* (Risso, 1818) and the enigmatic *Onchidella celtica* (Audouin & Milne-Edwards, 1832) (Wagstaffe 2023). The species was also, however, seen by Jenny Mallison in Southampton Water, the inlet of the Solent leading to the port. The animal can grow large, up to 70 mm, is colourful and is covered dorsally in a mass of tubercles of varying sizes, hence it is difficult to imagine it has been long overlooked on the south coast. It is common further south from the Bay of Biscay into the western Mediterranean, so this must surely represent a northern range extension.

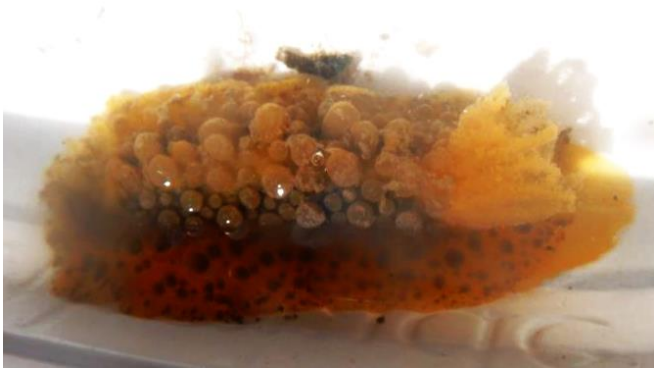

figure 1: *Doris verrucosa* L., 1758, Southampton Water. (photo: Jenny Mallinson)

Another significant 2023 development on the nudibranch front was not a species observation but the long-awaited publication by Bernard Picton and Christine Morrow of the successor to their classic, and indeed now quite rare and collectible, *A Field Guide to the Nudibranchs of the British Isles* (Picton & Morrow 1994). The new, much updated and expanded volume (Picton & Morrow 2023) (figure 2) adds all the new nudibranch species to have been found in or to have colonised the area in the intervening 29 years, as well as adding those which have been revealed to exist through molecular studies that have split what were previously considered single species, or in some cases confirmed suspicions that certain taxa were 'cryptic'. In most cases each species is now covered over a two-page spread and illustrated by multiple photographs, often including spawn and food source (many species having characteristic spawn and being very host/prey-specific). Also included are several of the non-nudibranch opisthobranchs, although this coverage is far less comprehensive than that of the book's core subject. It is recommended to anybody with an interest in the marine fauna of the north-east Atlantic.

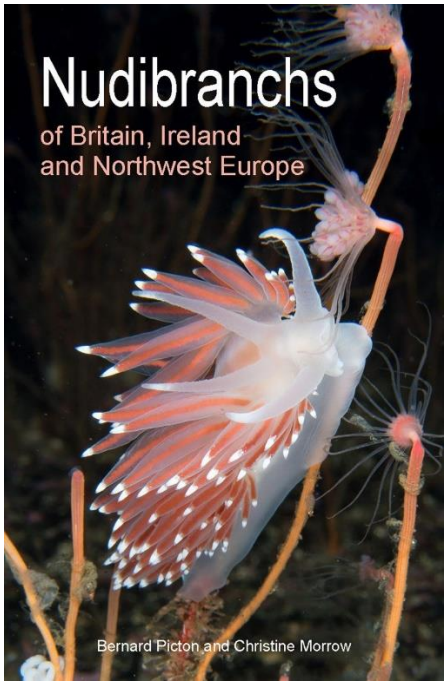

figure 2: The cover of the excellent new volume by Bernard Picton & Christine Morrow, a worthy successor to their previous 1994 field guide. (Princeton University Press)

The earlier and latter parts of 2023 saw several westerly and south-westerly storms in the Atlantic. Whether such a storm will transport significant amounts of flotsam debris across the ocean, and with it a number of rafting organisms, appears unpredictable but all events tend to prompt interest by beachcombers. There were reports this year of the rare pelagic nudibranch *Fiona pinnata* (Eschscholtz, 1831): five individuals, plus spawn, from a clump of goose barnacles washed up on St. Mary's, Scilly (figure 3), reported by Scott Reid; another was found by the prolific south coast worker Steve Trewhella on Chesil Beach amongst the bristles of a stranded plastic toilet brush! Steve also discovered specimens of the limpet *Eoacmaea pustulata* (Helbling, 1779) and the rough scallop *Lindapecten muscosus* (W. Wood, 1828), both inhabitants of the south-eastern USA and northern Caribbean, on an American bait pot on the shore at Worbarrow Bay, Dorset, in early November. Another transatlantic species reported in 2023, although evidently found in November 2022, was a new taxon for the list of rafters: *Pinna carnea* Gmelin, 1791. Although primarily an infaunal species, it will occasionally byssally attach to buoys and the like, and this approx. 5-cm juvenile was found by Nathan Chadwick of Bangor University on a 'Scotty pot' (crab fishing gear in the south-eastern USA) washed up on the shore near Criccieth, north Wales.

figure 3: *Fiona pinnata* (Eschscholtz, 1831) amongst goose barnacles, St. Mary's, Scilly. (photo: Scott Reid)

Two further species were added to the British and Irish list in 2023, although neither was any great surprise. The Marine Recorder's report for 2019 (Taylor 2020) noted the recent colonisation of Dutch waters by the opportunistic invasive mactrid bivalve *Mulinia lateralis* (Say, 1822), warning marine workers to keep an eye open for it here. We did not have to wait long; routine sampling from sites in the outer Thames estuary found one live specimen off Gravesend, Kent, in September 2021 and a further four at two sites off Canvey Island, Essex, in 2022 (Holmes *et al*. 2023). As yet there is no evidence that the population explosion experienced off the Netherlands will happen here but it remains a possibility. Fortunately the sites at which the species was recorded are monitored annually. All marine/brackish workers are advised to check carefully any samples containing mactrids, in particular any with *Spisula subtruncata* (da Costa, 1778) with which both UK and Dutch *M. lateralis* records have been associated.

The next new species is, refreshingly, not a non-native invasive, although one could argue that strictly speaking it is not 'new' either. There has long been confusion associated with the polyplacophoran genus *Acanthochitona* in the north-east Atlantic. In recent years the generally accepted position has been that of two species, *A. fascicularis* (L., 1767) and *A. crinita* (Pennant, 1777), but there has been niggling confusion surrounding a third taxon, *A. discrepans* (Brown, 1827), originally described from specimens from Tenby, Wales. For example, the Linnean Society Synopsis for the Polyplacopohora, (Jones & Baxter 1987) lists *A. discrepans* as a recognised taxon and describes it very briefly, without illustration, but goes on to suggest 'there is no justification' to separate it from *A. crinita*. In 1985 the Dutch chiton expert Piet Kaas published a review of the genus in which he considered *A. discrepans* to be valid, having studied the syntypes and designated a lectotype (Kaas 1985). Recent research by the Senckenberg Research Institute, based in Frankfurt, Germany (Vončina *et al*. 2023) has supported Kaas's conclusion. Utilising DNA analysis and SEM imaging, consistent patterns emerged suggesting morphological features, albeit microscopic ones, enable recognition and separation of *A. crinita* and *A. discrepans*. Their initial conclusions suggest that while *A. crinita* is widely distributed in the north-east Atlantic region, *A. discrepans* may be more restricted, with records noted from Norway south to Strangford Lough and south Wales. Further study is required, which may result in the identification of characteristics by which specimens may be determined, if not in the field then at least with more accessible means of magnification than SEM.

Returning to non-native species, there have been further developments regarding *Acanthocardia paucicostata* (G.B. Sowerby II, 1834). Firstly, specimens emerged from the collection of late Society member David Long which were collected in the Titchfield Haven area some four years earlier (May 2012) than any previous record. Over recent years the species, which has evidently extended the northernmost limit of its distribution to reach southern England, has been a predictable shell find at many Solent coastal sites, but not beyond, and was not found alive until a stranded specimen was discovered by Peter Barfield in August 2019, again at Titchfield Haven (Barfield 2021). In October 2023 Storm Babet kept many beachcombers busy, and on the 19th of the month Michael Preston found a number of *Acanthocardia* stranded on Preston Sands, near Paignton, south Devon. Amongst them were specimens of *A. paucicostata*, including one which was still alive (figure 4). While the disturbance caused by violent storm events should not be underestimated, this find represents a westward range extension of approximately 100 miles, the live specimen making it all the more notable.

figure 4. *Acanthocardia paucicostata* (G.B. Sowerby II, 1834) stranded at Preston Sands, south Devon, 19th October 2023. (photo: Michael Preston)

The slipper limpet *Crepidula fornicata* (L., 1758) is one of the most infamous invasive non-native marine mollusc species in Britain, developing huge habitat-changing populations in some shallow offshore areas. First recorded here from Liver Bay in 1872 and off Essex in the 1890s (although anecdotally from some 20 years earlier: Crouch 1894), it was accidentally introduced along with imported oyster stock. If you have investigated a shore in south-east England where the similarly invasive Pacific oyster *Magallana gigas* (Thunberg, 1793) has naturalised and developed large intertidal populations, you will have noted how well camouflaged specimens of *C. fornicata* can be amongst clumps of oysters (figure 5). Despite the existence of several oyster fisheries around Scotland, it has remained free of *C. fornicata* (figure 6) until recently, when specimens, including juveniles, were found by David McKay in various places along the Moray Firth.

figure 5: Arched stacks of *Crepidula fornicata* (L., 1758), Mersea Island, Essex.

Populations of the native oyster, *Ostrea edulis* L., 1758, have seriously declined for numerous reasons, initiated by over-exploitation in the latter part of the 19th century. With the added recent threat of the naturalised *M. gigas*, *O. edulis* has become something of a flagship species, attracting much funding and support for conservation projects. One current scheme is the Dornoch Environmental Enhancement Project (DEEP; https://nativeoysternetwork.org/portfolio/deep/), a partnership between various organisations including the Marine Conservation Society, Heriot-Watt University and the Glenmorangie Distillery, the latter being keen to promote its environmental credentials and reduce the impact of organic material in the water it discharges into Dornoch Firth. Historically there were native oyster beds in the firth and the aim of the project is to reinstate them, in part so they can provide natural filtration of the water. To that end, large amounts of waste shells from the scallop and mussel industry were dumped in the firth to create culch beds, onto which *O. edulis* stock was then laid. While protocols were observed to prevent the introduction of unwanted contaminants with these materials, the apparently contemporaneous appearance of *C. fornicata* in the area seems unlikely to be coincidental. On a more positive note, given the presence of *C. fornicata* in British waters for over 150 years, there must almost certainly have been more northern accidental introductions of the species in the past and they have evidently been unable to persist. Hopefully, despite the implications of modern climate change, that will prove to be the case in the Moray Firth.

New data

The online facilities iRecord and iNaturalist remain the Society's principal sources of new marine mollusc records, as described in detail in last year's report (Taylor 2023). In 2023 they provided some 2500 and 1300 species observations respectively, with verification in the majority of cases performed by Ian Smith, to whom I remain extremely grateful. One benefit of records received in this way is that they are most often accompanied by photographic evidence, providing access to a further resource which I know Ian has occasionally taken advantage of when researching and producing his excellent species accounts, which continue to be made openly available via ResearchGate.net.

Several members continue to submit data in other ways, mainly via spreadsheets although also occasionally in hard copy using the pro-forma recording cards (they can still be supplied on request).

figure 6: The Conchological Society's records of *Crepidula fornicata* (L., 1758) prior to recent discoveries in NE Scotland.

In the summer of 2023 I was informed that Christine Street, a long-standing member of the Society and formerly a very active marine mollusc surveyor, had unfortunately had to be admitted to a care home. Her husband kindly invited me to collect various papers and samples resulting from Christine's extensive surveys, particularly focused on strandline collecting and shell grit sampling in the Scottish islands. These are currently being worked through and will produce a plethora of records which I know Christine was always keen should be held by the Society, even though she herself struggled to fully process the very large volume of material she gathered on her extensive travels. I am grateful to Adrian Brokenshire who has already assisted with sorting several of the shell grit samples involved.

Online promotion

A webinar concerning the Society's marine mollusc recording scheme was held on 15th May as part of the EntoLive series. A recording of the event, mainly an illustrated talk, remains available via YouTube: (https://www.youtube.com/watch?v=hq4N6WxNJKY&t=17s). The Society's website and YouTube feed (https://www.youtube.com/watch?v=_T0bP40yUoA) also feature a recording of the excellent talk entitled 'The role of serendipity in shell collecting' delivered by David McKay as part of the July online meeting.

The 'British Marine Mollusca' Facebook group continues to attract very regular and pertinent posts, with input from several Society members, many of whom are also active within numerous other related groups, often seeking to glean further species observation records or collaborating with other schemes (e.g. Seasearch, Porcupine) to help determine and verify identification. It can reveal some gems, such as the *Smithiella costulata* (Risso, 1826) – formerly placed in the genus *Mangelia* Risso, 1826 and familiar to many from Graham (1988) as *Cytharella smithi* (Forbes, 1844) – photographed by Iain Dixon and shared in the 'Seasearch Identifications' group (figure 7). One just hopes that the accessibility and proliferation of online groups will not ultimately see the demise of societies such as ours.

figure 7*: Smithiella costulata* (Risso, 1826) off the north coast of Skye. (photo: Iain Dixon)

Fieldwork

David McKay and I risked the bad weather in March in order to target very low spring tides around the north-west coast of Scotland, between Ullapool and the Kyle of Tongue. We were fortunate in that only one day was lost to the weather, when the wind and rain were so strong it was difficult to even open the door of our vehicle! It was possible to fit in three dredging trips – one in Loch Eriboll, one out of Kinlochbervie in Loch Inchard, and one in the various sea lochs accessed from Kylesku (figure 8) – as well as numerous shore surveys on excellent tides. More than a thousand records were added to the Society's dataset as a result.

figure 8: (left) the dredge ready for launch off Kylesku and (right) a diverse haul of samples.

The Society held its own marine week in April, organised by Rosemary Hill and surveying the shores around Bude, specifically targeting an area which had not been surveyed for some years. The coastline between north Devon and Cornwall has a lot of cliffs, with occasional access points, and is not the most biodiverse compared with other parts of both counties, but the shores were worked thoroughly, with weed washing and shell grit samples taken where possible, resulting in numerous new species records for the area and a significant increase, as well as a refresh, of the overall volume of local data. Among the various highlights were *Rhomboidella prideauxi* (Leach, 1815), *Parthenina interstincta* (J. Adams, 1797 and *Limatula subauriculata* (Montagu, 1808) from shell grit and live specimens of *Leptochiton scabridus* (Jeffreys, 1880) – under a stuck stone as usual – and *Similiphora similior* (Bouchet & Guillemot, 1978), only the third observation of this species for Britain and Ireland (Hill 2024).

Adventives

As seems to be the case almost every year now, there were intriguing reports received of adventive finds. During the summer, Christopher Smart made contact regarding an unusual shell he had found near Trevose Head, north Cornwall. He regularly collects specimens of the native *Trivia* species around the Cornish coast and immediately recognised the difference in a pink specimen measuring 30 mm in length, tentatively identifying it as *Triviella aperta* (Swainson, 1822). Looking at the images of the specimen (figure 9) that determination seems reasonable, other than the fact that it is a South African species. As with the majority of these adventives, it is only possible to speculate as to its provenance.

figure 9. *Triviella* cf. *aperta* (Swainson, 1822), near Trevose Head, north Cornwall. (photo: Christopher Smart)

One species which occurs almost with a degree of regularity when it comes to marine adventives in Britain and Ireland is the money cowrie, *Monetaria moneta* (L., 1758). The latest find was made by Adrian Brokenshire on the beach at Instow, north Devon, in September 2023. As the name suggests, this very common Indo-Pacific species was one of those used for centuries as currency throughout its native distribution and far beyond through trade. Its abundance also means that in the modern world it still has a myriad of uses, mainly as an adornment of jewellery, clothing and ornaments. There have been suggestions that old merchant ships carrying shell money were sunk around our shores and are still gradually liberating their cargo. It is a romantic idea but the Instow specimen appears to be relatively fresh and undamaged, implying a more recent provenance.

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Book review: *Blötdjur Snyltsnäckor – skivsnäckor: Mollusca Pyramidellidae – Planorbidae*

by Ted von Proschwitz, Kennet Lundin & Jonas Roth. SLU Artdatabanken, Uppsala, 2023. ISBN 978-91-88506-50-4. 528 pages. Price 599 SEK.

In my account of the origins of *A Field Guide to the Land Snails of Britain and North-west Europe* (*Mollusc World* **63**: 26–27), I mentioned that I had on my shelves guides to the land snail faunas of many European countries. In fact, this book was the last I received, hot off the press. In A4 format, on high quality paper, it is certainly not a *field* guide, weighing in at over two kilos. It is one volume in a series, *The Encyclopedia of the Swedish Flora and Fauna.* With the exception of keys to species (see later), it is entirely in Swedish.

Do not be confused by the subtitle. Aside from the marine Pyramidellidae, this book covers all the pulmonate gastropods of Sweden, and the title reflects the series' aim to cover fauna according to a chosen higher classification. Freshwater and terrestrial operculates are dealt with in a much-simplified way (there is only one terrestrial operculate, *Platyla polita*). They will, no doubt, be dealt with in more detail in another volume.

After a brief introduction, the book deals with each major group, Pyramidellidae, Eupulmonata (what us oldies would call Stylommatophora and the Ellobiidae, i.e. *Carychium*) and the Hygrophila (Basommatophora) in turn. For each, there is an introduction to the group, a key to species, and species accounts. The keys to species are in both Swedish and English, and well-illustrated with small photos at each couplet. Towards the end, there is a key and very brief species accounts of freshwater operculates. It ends with a set of pictures presenting the reader with direct comparisons of similar species in each group, an excellent idea that will aid a quick diagnosis.

The species accounts are magnificent. While the accounts of Pyramidellidae are shorter, those for the land and freshwater species devote more than a page to each. All have excellent photos of the shell in standard views, and nearly all have pictures of the living animals. Details of diagnostic features are also illustrated where needed. Where relevant, there are drawings of the genitalia, especially useful for slugs, where some of the colour variation is also shown. For each species, there is a description, and accounts of its habitat and distribution. There is a map of distribution of each in Sweden. It is truly an encyclopaedia.

At 599 SEK (I think about £60), it is remarkably cheap for a book of this size and production standards. It can be ordered direct from https://www.nationalnyckeln.se although I fear that postage will be expensive*. Most of the species also occur in Great Britain and Ireland; I always tell those learning to identify to consult more than one book. This doubles as an excellent guide to our own species.

A sting in the tail!

I have a particular reason for reviewing this book. Among the various national guides that I possess, the nearest equivalent is the magnificent *Suomen kotilot ja etanat,* the guide to the Finnish land mollusc fauna. It is also profusely and magnificently illustrated, and has accounts of habitat and distribution. Nordic countries at their meticulous best. In Britain and Ireland, only *Slugs of Britain and Ireland,* by Ben Rowson, James Turner, Roy Anderson and Bill Symondson (2014) matches them in quality and comprehensiveness. For land snails, at least, the information is scattered among different books, and has not used the modern capacity for excellent photos. J.W. Taylor had a go with the incomplete *Monograph,* left unfinished more than a hundred years ago. A.E. Ellis's *British Snails* (1926) is badly dated, even after revision in 1969, and badly illustrated. Is it not time we had a comprehensive account of our fauna?

Don't look at me; this is a multi-author task for those at least two decades younger.

Robert Cameron

*This book can currently (04/2024) be ordered in the UK, for example from Pemberley Books for £69.00 + P&P (£5-10). [Ed.]

Conservation Officer's report 2023

Mags Cousins

Mollusc conservation by members continued in 2023 across the full range of conservation activities, from survey of rare species (e.g. *Ena montana*) to collecting specimens for DNA sequencing, promoting access to papers, to policy, publicity and protest at development pressures.

Martin Willing and Ben Rowson continued surveying for *Vertigo angustior* for 'Natur am Byth! Saving Wales' threatened species!' project. This is Wales' flagship Green Recovery project involving nine environmental charities with Natural Resources Wales (NRW) to deliver conservation and outreach for threatened species. Martin and Ben surveyed on the Gower in autumn 2023, including a direct comparison between bulk sampling and suction sampling methods. The results and report are still in preparation and the last surveys will be completed in 2024.

Tom Walker and Mags Cousins led a field meeting to Semley Wiltshire Wildlife Trust Reserve on 13th May with staff from the Natural History Museum 'Darwin Tree of Life' (DToL) project. The purpose of the field meeting was to survey the reserve for molluscs for the first time and to collect specimens for the DToL project. Chris Fletcher from the NHM gave a talk on 17th February 2024 for the Society and explained that the aim of the DToL project is to collect representatives of all eukaryotic organisms in the British Isles and sequence their entire genomes. There were still a number of mollusc species which the project lacked, some due to their rarity, but many widespread species simply because there are not many recorders for this group.

Arising from the legislative changes and government initiatives mentioned in the 2022 report (the legally binding targets of the Environment Act 2021, D4: Relative abundance and/or distribution of widespread species, to halt the decline in species populations by 2030; and the target to reduce the risk of species extinction, D5: Conservation status of our native species) has been the establishment of Local Nature Recovery Strategies (LNRSs). Each LNRS will agree priorities for nature recovery and propose actions in the locations where it would make a particular contribution to achieving those priorities. Responsible authorities have been appointed to lead on preparing a LNRS for their area. Together these 48 strategy areas cover the whole of England with no gaps or overlaps. The LNRSs are generally aligned with county boundaries and the local authorities are currently drawing up their long and short lists of priority species, and requests are starting to filter through (Nottinghamshire and Gloucestershire) to the Conchological Society for help in understanding the conservation priorities for molluscs in their areas.

Predictably pressures on important mollusc habitat continue and a proposal for a golf course at Coul Links has resurfaced. The Society wrote to Lorna Slater MSP for Lothian Region and Scotland First Minister Humza Yousef regarding a called-in planning application for the Coul Links Golf Course proposal, land 1700 m north-west of Embo Community Centre, Embo. A reply was received that 'confirmed Scottish Ministers have called in this application for determination to allow further consideration of the application as the case raises issues of national significance with regard to the proposed development's potential impact on nationally and internationally important natural heritage assets and the need for an appropriate understanding of the scale and degree of potential economic benefits arising from the proposal. A reporter from the Planning and Environmental Appeals Division (DPEA) of the Scottish Government will be appointed, in due course, to examine this proposed development and report, with recommendations, to Ministers who will make the final decision on this application'.

It will interest members that the Mollusc Specialist Group of the Species Survival Commission of the International Union for Conservation of Nature issue an online newsletter called *Tentacle*. The latest issue, No. 32 for March 2024 (https://www.hawaii.edu/cowielab/Tentacle/Tentacle_32.pdf), explains how the *Journal of Conchology* has gone open access and online. This is welcome additional publicity for the journal, for existing and potential authors, and recognition of the huge efforts of (latterly and especially) Tom Walker to orchestrate this change and Peter Barfield to ensure the journals were made available via the Society's website. Past issues back to volume 39 (2006) are available on our website and older issues will be available at the Biodiversity Heritage Library (BHL) website (https://www.biodiversitylibrary.org/bibliography/45410). Members of the Society may submit and publish for free, but non-members are encouraged to either join the Society or pay the £100 fee, or if they are struggling with this fee to apply to the Cameron Fund. This small fund was generously donated by Robert Cameron to assist those that cannot afford to pay the publication fee.

Awareness, and perhaps understanding and tolerance, of molluscs continues to build through the outreach of members in the more popular press. Ben Rowson joined Jack Perks, a wildlife cameraman, as the guest naturalist for the podcast on Slugs: 'Slugs: gardeners' friend (https://beardedtit.podbean.com/e/slugs-gardeners-friend-or-foe-ft-ben-rowson/). Ben gave an informative and entertaining interview about slugs and snails, their ecology, evolution, reproduction and habitat preferences. Other malacologists have also contributed to Jack's natural history podcasts, with Jon Ablett having been interviewed about 'Giant squid: release the kraken!' (https://beardedtit.podbean.com/?s=squid).

The BBC News Gloucestershire article about the ghost slug *Selenochlamys ysbryda*: 'Rare worm-eating ghost slug spotted on Stroud path' (https://www.bbc.co.uk/news/uk-england-gloucestershire-68664252) sparked some submissions of records, although without photos it would be unwise to accept these records as there are other white slugs with which it could be confused by the unsuspecting public.

Further molluscan publicity came from the Royal Horticultural Society (RHS) and the Wildlife Trusts who joined forces to launch a campaign urging people to 'make friends with molluscs' (https://www.wildlifetrusts.org/news/make-friends-molluscs). They produced a friendly-looking leaflet which explains the value of molluscs, and how to identify and learn to live with slugs and snails in the garden.

All is not rosy with molluscs, however, and in 2023 Martin Willing was working on risk assessments for invasive mollusc species for the Non-Native Species Secretariat, reported in *Mollusc World* **64**: 22. Three new mollusc risk assessments (https://www.nonnativespecies.org/non-native-species/risk-analysis/risk-assessment/) were added to the NNSS website, for the Chinese mystery snail *Cipangopaludina chinensis*, the Chinese pond mussel *Sinanodonta woodiana* and the Atlantic oyster drill *Urosalpinx cinerea*. These were available for public comment until 12th April 2024.

As always, many thanks to all the members who have contributed to mollusc conservation in 2023, which I am sure is much more than can be mentioned here.

April 2024

Non-Marine Recorder's report 2023

Ben Rowson

The year 2023 was another very warm year in Britain and Ireland, and was the warmest year on record in Wales and Northern Ireland (Met Office). The UK also experienced its highest *minimum* temperature on record, cold being an important factor in limiting the range of many molluscs. The year was also wetter than average in most parts of the UK other than western Scotland. The Society once again dealt with a very large number of new records from recent fieldwork, as well as from older sources.

All the data from the last two years (2021 and 2022) was submitted to the UK NBN (National Biodiversity Network) in April, and in October appeared online after a series of infrastructure upgrades to the NBN Atlas. This data includes many species for which none of our records was previously available on the NBN (e.g. *Helix lucorum*). We join many other recording schemes in thanking Sophia Ratcliffe, the outgoing NBN Atlas Data Manager, for all her hard work and wish her replacement, Will Millard, all the best.

A talk on the history of the Society's non-marine recording was given at the annual NBN conference in November (which was held at the National Museums of Scotland, Edinburgh). A meeting of the Conservation and Recording Forum was held in Reading. The Society's dataset is currently still held in Recorder 6. A new laptop has been bought on which to install the updated version when the data can be migrated.

New data received

In 2023, over 19,300 new records were readied for import into the Society's database, representing around 200 species and over 60 vice-counties (VCs): 5100 (26%) of these were submitted directly, with 6300 (33%) via iRecord and 7900 (41%) via iNaturalist in iRecord. Once again, I thank Chris du Feu for verifying the majority of the slug records on iRecord and for discussions about some of the more interesting ones.

Thank you to everyone who submitted records. Especially large individual contributions were made by David Adams, Keith Alexander, Joss Carr, Mags Cousins, Terry Crawford, Chris du Feu, Africa Gomez, Rosemary Hill, Bob Merritt, Dave Nicholls, Rob and Linda Nottage, Peter Tattersfield, Peter Topley, Clive Walton, Tony Wardhaugh (who has now taken over from Adrian Norris as Yorkshire coordinator) and Derek Whiteley.

In particular Adrian Sumner made a marvellous effort to extract over 1900 records, mainly from south-eastern Scotland, from the collections held at the National Museums of Scotland, Edinburgh. The extent to which records based on older museum specimens are featured in recording schemes varies enormously, and this can be an excellent way for volunteers like Adrian to contribute. For my part, I have added approximately 300 records of scarce species held in the collections at the National Museum Cardiff (this data has been available online via a Museum website since 2011, but it has not previously been converted into biological records).

New vice-county records

A total of 68 new VC records were recognised for the census this year, as listed below. Records received via iRecord are marked with *, and those from iNaturalist with **. The list includes a few new census records that were previously unrecognised in the dataset, marked with|.

West Cornwall with Scilly (VC1): *Allopeas clavulinum*, Eden Project (hothouse), 4/4/2014, T. Walker; *Striosubulina striatella* (same details).

East Cornwall (VC2): *Selenochlamys ysbryda*, Sladesbridge, 3/2/2023, P. Floyd-Spong*.

South Devon (VC3): *Allopeas clavulinum*, Paignton Zoo (hothouse), 17/6/2016, T. Walker.

Isle of Wight (VC10): *Melanoides tuberculata*, Ventnor Botanical Gardens (hothouse), 21/9/2022, T. Walker; *Planorbella* cf. *duryi* (same details).

South Hampshire (VC11): *Melanoides tuberculata*, Staunton Country Park (hothouse), 28/1/2015, T. Walker; *Planorbella* cf. *duryi; Radix rubiginosa*; *Striosubulina striatella* (all same details).

West Sussex (VC13): *Cochlicella barbara*, Knepp Walled Garden, 17/4/2023, G. Lyons.

West Kent (VC16): *Hawaiia minuscula*, Hall Place Gardens, Bexley (hothouse), 20/6/2022, T. Walker.

Surrey (VC17): *Melanoides tuberculata*, Kew Gardens (hothouse), 10/10/2014, T. Walker; *Planorbella* cf. *duryi* (same details but 20/10/2023); *Afropunctum seminum*, Kew Gardens (hothouse), 6/3/1993, D. Guntrip (see Verdcourt 1993).

South Essex (VC18): *Helix lucorum*, Woodford Green (pavement in residential area), 23/7/2023, C. Nahaboo.

Oxfordshire (VC23): *Melanoides tuberculata*, Oxford Botanic Gardens (hothouse), 19/7/2014, T. Walker; *Planorbella* cf. *duryi* (same details*); Radix rubiginosa*; *Striosubulina striatella* (same details but 1/10/2014).

Cambridgeshire (VC29): *Striosubulina striatella,* Cambridge Botanical Gardens (hothouse), 13/6/2014, T. Walker.

Bedfordshire (VC30): *Deroceras panormitanum* s. str., Whipsnade Zoo, 5/9/2017, P. Topley (conf. by dissection); *Afropunctum seminium*, Whipsnade Zoo (hothouse), 5/5/2017, D. Guntrip; *Streptostele musaecola,* Whipsnade Zoo (hothouse), 5/9/2017, P. Topley; *Melanoides tuberculata*, Whipsnade Zoo (hothouse), 14/7/2022, T. Walker; *Planorbella* cf. *duryi; Radix rubiginosa*; *Striosubulina striatella* (same details).

West Gloucestershire (VC34): *Planorbella* cf. *duryi,* Bristol Botanic Gardens (hothouse), 16/10/2014, T. Walker; *Radix rubiginosa* (same details).

Worcestershire (VC37): *Physella gyrina*, Waseley Hills Country Park, 20/7/2023, K. Galbraith*.

Glamorgan (VC41): *Abida secale*, Porthkerry, 1915, F.W. Proger|; *Subulina octona*, Plantasia, Swansea (hothouse), 9/8/2015, T. Walker; *Hawaiia minuscula*, Duffryn Gardens (hothouse) 17/2/2023, C. Owen & L. Olds; *Zonitoides arboreus* (same details).

Carmarthenshire (VC44): *Selenochlamys ysbryda*, Ferryside, 2/2/2023, V. Haines*.

Pembrokeshire (VC45): *Selenochlamys ysbryda*, Templeton, Narberth, 20/10/2023, K. Greigworth.

Cardiganshire (VC46): *Selenochlamys ysbryda*, Bryngwyn, Newcastle Emlyn, 19/5/2023, M. Grimleigh.

Caernarvonshire (VC49): *Melanoides tuberculata*, Treborth Botanic Gardens (hothouse), 27/9/2017, T. Walker.

Leicestershire (VC55): *Dreissena rostriformis bugensis*, Rutland Water, 30/7/2022, R. Proudfoot**.

Nottinghamshire (VC56): *Ambigolimax parvipenis*, Upper Saxondale, 31/7/2023, C. Cooper*; *Helix lucorum*, Edwalton (hedgerow in residential area), 5/8/2023, C. Rochelle.

Derbyshire (VC57): *Selenochlamys ysbryda*, Wingerworth, Chesterfield, 20/10/2023, D. Harris.

Cheshire (VC58): *Ambigolimax parvipenis*, Tatton Park, 17/8/2018, T. Walker; *Allopeas clavulinum*, Chester Zoo (hothouse), 16/8/2018, T. Walker; *Striosubulina striatella* (same details).

figure 1: *Helix lucorum* along a fence in Hoddesdon, Hertfordshire (VC20). (photo: Maurice Pledger)

South-east Yorkshire (VC61): *Helix lucorum*, Cottingham (domestic garden), 19/4/2023, 'bahini'**; *Hawaiia minuscula,* Bishop Burton Botanic Garden (hothouse), 25/9/2021, T. Walker.
South-west Yorkshire (VC63): *Hawaiia minuscula,* Anston Butterfly House (hothouse), 11/3/2019, T. Walker.
Mid-west Yorkshire (VC64): *Melanoides tuberculata*, Leeds Tropical World (hothouse), 6/9/2018, T. Walker.
South Northumberland (VC67): *Hygromia cinctella*, Gosforth, 31/10/2023, C. Barlow*; *Physella acuta*, Annitsford, 30/5/2008, A. Norris|.
North Northumberland (VC68): *Hygromia cinctella*, Willowburn Trading Estate, Alnwick, 25/6/2023, A.T. Sumner; *Balea heydeni*, Prior's Lodging, Lindisfarne, 25/10/2023, P. Topley.
Westmorland with Furness (VC69): *Helix lucorum*, Ambleside (car park by industrial unit), 9/7/2023, 'pbuchwald'**.
Dumfriesshire (VC72): *Bithynia leachii*, Castle Loch, Lochmaben, 29/8/2018, R. Meritt|; *Aplexa hypnorum*, Downs Moss, Heathhall, 20/6/2016, R. Merritt|; *Sphaerium lacustre*, Loch Ettrick, Forest of Ae, 3/11/2015, R. Merritt|.
Kirkcudbrightshire (VC73): *Physella acuta*, Lauriston Road, Gatehouse of Fleet, 1/4/2022, J. Logan|; *Bithynia leachii*, Lochrutton Loch, Lockfoot, 6/6/2016, R. Merritt.
Wigtownshire (VC74): *Lymnaea stagnalis*, Crook of Baldoon RSPB, 7/8/2018, R. Merritt|.
Roxburghshire (VC80): *Physella acuta*, Tandlaw Moss, Hawick, 7/7/2019, R. Merritt.
Midlothian (VC83): *Allopeas clavulinum*, Edinburgh Botanic Gardens (hothouse), 7/5/2016, T. Walker.
Aberdeenshire (VC92): *Hawaiia minuscula,* David Welch Winter Gardens (hothouse), 5/5/2016, T. Walker.
West Sutherland (VC108): *Balea heydeni*, Ardoe Croft, 27/6/2021, K.N. Alexander.
North Kerry (VCH2): *Theba pisana*, Inch dunes, 10/6/2018, R. Anderson|.
South Tipperary (VCH7): *Geomalacus maculosus*, Galtee Mountains, 30/10/2020, M. Curtin.
Antrim (VCH39): *Hawaiia minuscula*, Belfast Botanic Gardens (hothouse), 19/9/2017, T. Walker.
Londonderry (VCH40): *Dreissena polymorpha*, Magherafelt, 5/3/2023, M.K. Dapifer**.

It was a remarkable year for two heavyweight alien molluscs: the Turkish escargot, *Helix lucorum*, and ghost slug, *Selenochlamys ysbryda*. New sites are found in most years, but 2023 saw four new VC records for each, a more significant spread. For *H. lucorum* this may be partly due to publicity for *Helix pomatia* in Martin Willing's web article for the RHS in 2023. However, it may also be that the spread of these species is accelerating as source populations grow. Some *H. lucorum* populations, such as that in Hoddesdon, Hertfordshire (VC20), are now very large (figure 1). The four new VC records all come from urban habitats, from South Essex (VC18) to Westmorland (VC69). Whether *H. lucorum* will proliferate in northern Britain is uncertain; on the continent, *H. pomatia* naturally occurs much further north than *H. lucorum*.

The new VC records for *S. ysbryda*, as far apart as East Cornwall (VC2) and Derbyshire (VC57), are all from gardens or residential areas. In the autumn I was amazed to spot live *S. ysbryda* on the lawn beside the National Museum Cardiff, Glamorgan (VC41), a new population right outside my office! I have never released a specimen of this species, or seen it elsewhere in the city centre, so can only guess it was brought in while building hoardings were erected around the Museum in 2019–22, or afterwards when parts of the turf were relaid.

The record of the Kerry slug *Geomalacus maculosus* in South Tipperary (VCH7), at a clear-felled area in a conifer plantation (Curtin 2022) is likely to be a recent introduction like those in similar habitats in Co. Galway. A note on the *T. pisana* population in North Kerry (VCH2) was given by Anderson (2022).

2023 saw the first records of *Hygromia cinctella* in both North and South Northumberland (VC67 and VC68). Both records are from urban sites (figure 2) and it can be predicted to proliferate rapidly in Tyneside. This species has a habit of roosting on man-made objects and vehicles, making it a fast mover when not kept at bay by frost.

figure 2: *Hygromia cinctella* in Gosforth, South Northumberland (VC67). (photo: Chris Barlow, via iRecord; CC-BY-NC)

The find of *Cochlicella barbara* (figure 3) living in a walled garden at Knepp, West Sussex (VC13), is unusual given the distance inland and from other sites. Its recorder, Graham Lyons, suggested it arrived with Mediterranean plants. While still very scattered, a recent study suggests that *C. barbara* has been present in Britain since the 1930s and possibly much longer (Walker 2023). Its spread has been remarkably slow compared to some other helicids.

figure 3: *Cochlicella barbara* from Knepp Walled Garden, West Sussex (VC13). (photo: Graeme Lyons)

The iNaturalist record of quagga mussel, *Dreissena rostriformis bugensis*, in Rutland Water, Leicestershire (VC55), is the first precise record we have had from the East Midlands, a new region for this species. I thank Martin Willing for helping to confirm it from the photograph. A press release that I had not previously seen (Environment Agency 2020) had announced the appearance of *D. r. bugensis* in Rutland Water and also in the River Trent at Newton-on-Trent, North Lincolnshire (VC54). The commoner zebra mussel, *D. polymorpha*, has long been present in the Trent but appears to have been recorded in Rutland Water only since 1989. Precise details of these or other new *Dreissena* populations are worth reporting.

Hothouse species and adventives

Nearly half (35) of the new VC records in 2023 result from Tom Walker's intrepid set of visits to hothouses throughout Britain and Ireland over the last ten years. During his visits, During his visits, Tom discovered at least one hothouse species new to the British and Irish list, the details of which will be published soon. Meanwhile, Dave Guntrip recently discovered *Oxychilus translucidus* in Whipsnade, Bedfordshire (VC30) (see Guntrip & Rowson, 2024). Dave's records of another hothouse species, *Afropunctum seminium*, at Whipsnade (VC30) and much earlier at Kew in Surrey (VC17; see Verdcourt, 1993) have also been added to the dataset..

Adventive species continue to appear in the wild. Alarmingly, the pink eggs of an ampullariid apple snail (*Pomacea* sp., possibly *P. bridgesii*) were noted in West Lothian (VC84) by Bronwen Winter, a Countryside Ranger for the council. Martin Willing confirmed the identification as *Pomacea* sp. and SEPA (Scottish Environment Protection Agency) and Buglife have both been informed, with plans to revisit the site in the spring. While unlikely to survive in Britain or Ireland, apple snails are serious pests in tropical countries. The snail laying the eggs was almost certainly released from captivity, the ban on Ampullariidae in the UK aquarium trade having been lifted in 2021.

A live individual of the West African giant snail, *Archachatina marginata*, was reported from Dalston,

Middlesex (VC21), by Joan Oakley, and is believed to be an escapee from a food market in Hackney. A living *Eobania* (or *Otala*) was found in a nursery in Blackburn, South Lancashire (VC59), by Charlie Hart but has not been identified. A 2023 iRecord observation of *Allopeas gracile* from Polaris House, Swindon, North Wiltshire (VC7), by J. Holbourn requires more details; it may be adventive but could conceivably survive in a sheltered garden outdoors.

On iNaturalist, *Rumina decollata* was reported in a salad purchased in Hertfordshire (VC20) by 'shirley63' and shells of *Melanoides tuberculata* were found on an outdoor lawn on the Isle of Wight (VC10) by D.J. King. It is interesting to note that iNaturalist appears to have suggested the names *Fruticicola fruticum* and *Bradybaena similaris* for some live snails recently photographed in southern England. These records appear to concern *Cepaea* or *Monacha* species, but *F. fruticum* was once established in Kent around 100 years ago but is now extinct (Kerney 1999). *Bradybaena similaris*, the so-called 'Asian trampsnail' was listed as one of the species likely to establish in the UK in future in the DEFRA report by Cavadino (2022), as were *Pomacea* species and several hothouse molluscs. On a similar subject, Hausdorf (2023) recently reviewed those alien molluscs in Europe whose origins lie outside the Western Palaearctic, and this is a useful reference work.

Other noteworthy records

A very interesting find (although not a new VC record) was that of *Segmentina nitida* in a lake at Oakmere, Cheshire (VC58), by Lucy Pocock. Reported on iNaturalist and iRecord, the finding was of several empty shells obtained by kick sampling, which Lucy took to check at the World Museum, Liverpool. There are old records of *S. nitida* from Cheshire, and in our recent book on freshwater snails (Rowson *et al*. 2021) we listed a more recent find in Tatton Park (also VC58) as requiring confirmation. Any living populations of *S. nitida* in north-west England would be of conservation significance, given the widespread decline of this species in the last century.

In Kent, an eDNA technique has recently been trialled for *S. nitida* (Rees *et al*. 2023b), as has one for *Cipangopaludina chinensis* (Rees *et al*. 2023a). Unfortunately the spread of the latter was again confirmed in 2023. Two additional sites for *C. chinensis* were identified at rural fishing lakes in South Hampshire (VC11) by Gavin Measures of the Environment Agency. A full risk assessment for *C. chinensis* produced by Martin Willing has been published on the GB Non-native Species Secretariat website (Willing 2024). It concludes that the long-term potential for future spread in Britain is considerable.

Other noteworthy records include a sinistral *Cernuella virgata* from North Devon (VC4) by Adrian Brokenshire. Confirmation was received from David Adams that *Trochoidea elegans* still thrives at Denton, East Sussex (VC14), and Will Watson found the under-recorded *Sphaerium rivicola* at Clevelode, Worcestershire (VC37). Adrian Sumner has compiled a history of all the molluscs found since the 19th century at Duddingston Loch in Midlothian (VC83) (Sumner 2023).

Changes to species names

There have been a few recent changes to species names which affect recording of the British and Irish fauna. The full implementation of these in the UK Species Inventory, Recorder 6, the NBN, NBDC (National Biodiversity Data Centre), iRecord and iNaturalist takes some time, as does the publication of a revised checklist. Briefly, these are:

- The morphology and genetics of large Arion species (the *'Arion ater* agg.*'*) were dealt with in exhaustive taxonomic detail by Reise *et al*. (2020), with particular attention paid to hybridisation. The resulting status changes relate to five taxa in our fauna (although it appears they have not yet been implemented in MolluscaBase [2024]). The two most widespread taxa once again become the subspecies *Arion ater ater* (Linnaeus, 1758) and *Arion ater rufus* (Linnaeus, 1758). The name of the invasive *Arion vulgaris* Moquin-Tandon, 1855 remains unchanged. The continental taxon referred to as *Arion* sp. cf. *empiricorum* by Rowson *et al*. (2014) and earlier authors should now be called *Arion ater ruber* (Garsault, 1764). This subspecies, often brick red in colour, has only been confirmed once in Britain, by Rowson *et al*. (2014) from a cemetery in central London. The more widespread English taxon known as *Arion* sp. cf. *vulgaris* in Rowson *et al*. (2014) and as *Arion* sp. 'Davies' in the subsequent FSC book, still awaits a formal description and name.

- I thank Ian Killeen for pointing out that *Euglesa hibernica* (Westerlund, 1894) is now considered a junior synonym of *Euglesa parvula* (Westerlund, 1893) by MolluscaBase (2024). MolluscaBase does not yet link to an original source for this synonymy, but to the MUSSELp database (Graf & Cummings 2019) which provides two references I have not yet been able to obtain.

- While *Gyraulus laevis* (Alder, 1838) is certainly native to Britain and Europe, the morphologically very similar *G. parvus* (Say, 1817) was until recently considered to be an invasive counterpart from North America. A genetic comparison between the two has found that they are so closely related as to be conspecific, with the older name *G. parvus* having priority (Lorencová *et al*. 2021).

- Populations of *Mercuria anatina* (Poiret, 1801) sequenced from southern England were found by Miller *et al*. (2023) to belong to a western clade they identify as *Mercuria tachoensis* (Frauenfeld, 1865). The authors did not study any *M. anatina* from its type locality near Paris, which may no longer exist. If *M. anatina* and *M. tachoensis* are found to be conspecific, Poiret's name has priority. In the meantime, populations of *Mercuria* from Britain and Ireland may be referred to as *M. tachoensis*.

MolluscaBase (2024) is increasingly accepted as the foremost classification of world Mollusca, with which national checklists should agree, unless there is good evidence to the contrary. Members aware of any other name changes concerning the non-marine fauna are encouraged to let me know.

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Corrigendum

'…life and death of Henry J. Bellars' by *Brian Goodwin*. *Mollusc World* **64**: 6 (2nd paragraph)

Our member Alan Kabat e-mailed to say that Henry J. Bellars was incorrectly identified as the author of the single sheet *Historical Numismatic Atlas of the Roman Empire* (London, W.S. Lincoln, 1859), the actual author being the coin dealer Peter Whelan (d.1863). (See https://londonstreetviews.wordpress.com/2018/02/25/peter-whelan-coin-dealer/).

Snippets from *Ena montana* recording in 2023

Keith Alexander

figure 1: *Ena montana* (Draparnaud, 1801), Asham Wood SSSI, Somerset.

Following publication of the Erlestoke field meeting report in *Mollusc World* **63**: 3, I received an email from Brian Goodwin correcting the spelling of D.G. Pickrell's surname that I had taken from the NBN. It seems that Don Pickrell was an active Conch. Soc. member and that an obituary was written by June Chatfield in *Mollusc World* **31**: 27. Printing this correction encouraged me to report on some other site visits during 2023.

That proved to be an interesting year in my studies of *Ena montana* sites and records. I have been using other meetings, etc, as opportunities to follow up on old *E. montana* records. The AGM of the British Myriapod and Isopod Group (BMIG) was held in April at Cannington College in Somerset and so I was able to target my ostensibly BMIG field expeditions at old *E. montana* sites and especially those in the eastern extremities of the Mendip Hills. The first day, 14th April, focused on Asham Wood, owned by Hanson UK, but with a nature reserve agreement with the Somerset Wildlife Trust (figure 2). This is a 140-ha SSSI and forms part of the Mendip Woodlands SAC (Special Area of Conservation), according to a sign board by one entrance, The SSSI citation mentions that 41 species of molluscs are known here, including *E. montana* and *Acicula fusca*. The core of this very large ancient woodland has been hollowed out by a huge quarry but two mature *E. montana* were found on ash and hazel stems in one area (ST702445) (figure 1) together with *Helicigona lapicida* (figure 3). *E. montana* was only found in this one spot on this occasion. Past records are from 1981, 1988 and 1992, but without precise grid references. The afternoon was spent in Nunney Combe (ST7346) as the snail had been reported from 'Nunney' by M.V. Lebour in 1922. None was found on this occasion but *H. lapicida* was present and so I may have been in the correct place. There are other woods shown on the OS map close by, but I did not have the time to visit them as well.

The following day, 15th April, we headed off in search of a 'Vallis Vale' locality where H.F. Parsons had found *E. montana* in an ash wood in a small gorge in 1886. This area also has an SSSI named Vallis Vale, designated for its ancient woodland vegetation but with no mention of rare snails. Walking down through the steeply-sided wooded valley we very quickly encountered two *E. montana* on an old hazel bush on the riverbank (ST752494) and one more on another old hazel a short distance away. This site also had *H. lapicida*. The snails were found in Old Down Wood

figure 2: Asham Wood SSSI, Somerset.

figure 3: *Helicigona lapicida* (Linnaeus, 1758), Asham Wood.

which largely lies outside of the designated site. The confirmation of a resident population after an interval of 137 years is very encouraging and demonstrates that old records should not be written-off without checking the sites out.

This early success soon ended abruptly once we started visiting Somerset Wildlife Trust nature reserves in the area. West Wood at Harridge Woods Nature Reserve (ST6648) had recently had all of its mature ash trees felled along all of the public footpath routes, which left us lacking suitable stems to search for *E. montana*. Janet Boyd had reported the snail here in 1995. The final day of the trip, 6th April, took us to Long Wood, Cheddar (ST4855), where Arthur Chater had reported *E. montana* in 1987 and John Boyd again in 1992. Unfortunately, we found this reserve to be closed off to visitors due to Chalara ash dieback allegedly making it too dangerous for visitors (figure 4).

The final success story of the year came from a particularly significant site, Slade Bottom (SO5605) in the Forest of Dean (figure 5), where David Long had discovered the only population west of the River Severn in 1987. David and I


figure 4: Ash devastation, Black Rock Drove, Cheddar.

had found it there on subsequent visits in 1992, 1998 and 1999. More recently David and Geraldine Holyoak had seen it there in 2005. It was an obvious target for the current *E. montana* survey, but I had failed to find any by searching the ash tree trunks in 2021 and 2022 while in the area doing some beetle surveys for the Species Recovery Trust. My 7th June visit was going the same way, but I also had a sweep net with me on this occasion as I had been attending a field meeting of the Coleopterists Society a few days before and sweeping ramsons (wild garlic) had produced the target beetle. First my wife swept a juvenile *E. montana* from the ramsons ground cover and then I swept a mature specimen also from the ramsons. The surprising conclusion here is that the snails seem to prefer to remain amongst the ground vegetation rather than ascend the tree trunks. Why the snails should behave differently here is yet another unknown for this fascinating species.


figure 5: Tufaceous stream, Slade Bottom, Forest of Dean.

Conchological Society of Great Britain & Ireland: report of the Council 2023

Rosemary Hill

Council positions

Dr T.M. Walker began his third year as President of the Society. The following Society officers were elected: Hon. General Secretary, Miss R.E. Hill; Hon. Treasurer, Dr B. Goodwin; Hon. Membership Secretary, Ms P. Robbins; Hon. Editor (journal), Ms A.M. Holmes; Hon. Editor (*Mollusc World*), Mr P. Topley; Hon. Marine Recorder, Mr S. Taylor; Hon. Non-Marine Recorder, Dr B. Rowson; Hon. Conservation Officer, Mrs M. Cousins; Hon. Programme Secretary, Dr M.J. Willing and Hon. Webmaster, Mr P.D. Barfield. New Ordinary members of Council were Mr C.R. du Feu and Dr M. Law; Prof. R.A.D. Cameron and Ms I.C.N. Cavadino began their second year. Mr I.J. Killeen, Dr K.N.A. Alexander, Mr R. Carr and Dr E. Moorkens began their third year. Mr I.J. Killeen and Dr E. Moorkens resigned during the year.

Publications

Two issues of the *Journal of Conchology* (Volume **44**, Parts 5–6) and three issues of *Mollusc World* (Numbers **61–63**, March, July and November) were published. The Society's website (www.conchsoc.org) continued to be updated and an issue with PayPal was fixed. The Webmaster welcomes contributions and updates. The Society now has a Twitter (now X) account and more tweets would be welcomed.

Other Council matters

Three Council meetings were held at the Angela Marmont Centre and were also available using virtual technology. Continuing thanks are due to Imogen Cavadino who runs Zoom connections for both the Council and Ordinary meetings. Council continued to discuss finances in the context of increasing costs of printing and postage. It was suggested that the subscription should be increased but the savings in costs from the *Journal of Conchology* going online needed to be realised before a decision is made.

The last printed journal has now been distributed and future issues will be online and open access. *Mollusc World* will continue to be printed and distributed by post. Back issues of the journal are now almost all online with older issues available via the Biodiversity Heritage website; more recent issues will become available via the Society's website.

Two applications for research grants were received in 2023 but no grants were awarded; the Society hopes that more Society members will apply. Finance Committee and the Online Journal Development Group were disbanded. Other matters discussed included Society indoor and field meetings, the Charity Commission and Society Trustees, support for the first South Asian Malacology Conference, and monitoring of terrestrial molluscs. The Society rules have been updated to reflect current practice and improvements made to the wording in some places. These rules will be presented at the 2024 AGM.

The deaths of the following members were announced at indoor meetings: Dietrich Kadolsky, member since 1985; Barry Colville, member since 1985 and a Life Member and Past President; and Judith Nelson, member since 1974.

I would like to thank all members of Council and Society volunteers for their contributions without which the Society could not achieve its aims. Currently the Society is seeking a new Treasurer. All the routine accounting work is done by Gill Earle so this is no longer an onerous job requiring specialist knowledge. If anyone would like more information, please contact the President or any of the Society officers.

(February 2024)

Treasurer's annual report 2023

Brian Goodwin

Firstly, a big thank you to all our members who, through their ongoing financial support, have enabled the Society to pursue its objectives. The Society's overall financial situation remains satisfactory, with enough assets to cope with even a difficult financial climate for several years. However, a persistent issue in recent times has been a shortage of liquid assets. Put simply, our income has fallen short of our expenditure in each of the last eight years. To close this gap and meet our short-term obligations, it has been necessary to sell off investments (£20,000 since 2017). This approach may be acceptable in the short-term, but obviously cannot be sustained indefinitely.

One way to try and create a better balance between income and expenditure would have been to increase annual subscriptions, but Council has been reluctant to do this as it anticipated a steep reduction in expenditure when the *Journal of Conchology* moved to an online platform. As paper issues of the journal have now ceased, it will be necessary to keep a close watch on how much is saved and how that relates to the continued upward pressure on other elements of our expenditure. Fortunately, two slightly smaller journal issues, in conjunction with careful cash-flow management, meant we narrowly avoided having to cash in any investments in 2023.

Two tables showing the audited profit and loss account, and balance sheet, for the year ending 31st December 2023 have been uploaded to the CSGBI webpage (https://conchsoc.org/officer_reports_AGM_2024). Should any member wish to receive copies by email, or if there are any specific queries, please get in touch via treasurer@conchsoc.org.

Finally, I would like to thank: Imogen Cavadino, Martin Willing and Ben Rowson for kind donations (in lieu of lecture fees or book royalties); the relatives of Judith Nelson for donations in her memory; Gill Earle, our excellent bookkeeper, who has assisted me with various challenges, including preparation of the accounts; and Rupert Honnor, our diligent examiner who audited the accounts.

April 2024

Robert Michael 'Mike' Dixon (1941–2024)

Selina Wilkins

Mike Dixon (figure 1) was born in 1941 and developed a passion for shells from his youth as an Army child, which gave him the opportunity to play on beaches in Hong Kong, Bangkok and coastal regions of India. In 1972, Mike placed an advert in the *Exchange & Mart* magazine to find other shell enthusiasts. This led to him co-founding the British Shell Collectors' Club (BSCC) which enables collectors to share, swap and purchase shells between members as well as acquire from dealers. He discovered and joined the Conchological Society in 1973 and he was a member until his death on 25th January 2024. He attended meetings in London in the 1970s when he was keen to meet other shell enthusiasts, collectors and conchologists. Mike became a fellow of the Linnean Society in 1978. His very first naticid was *Euspira nitida* (Donovan, 1803) collected at Bournemouth beach, Dorset, England, in June 1970. This dainty little shell ignited his lifelong passion for the family Naticidae (moon snails or necklace shells).

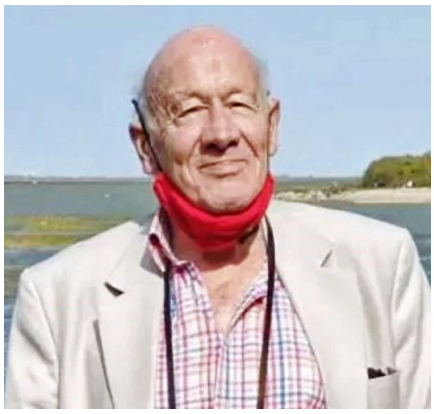

figure 1: Mike Dixon.

(Photo selected by his family for the front cover of the order of service for his funeral on 22nd February 2024)

There are multiple specimens of *E. nitida* and *Euspira catena* (da Costa, 1778) in his collection, with meticulous labels such as 'In run-off channels at low water mark, Paighton, Devon, Sept 1973'.

Mike corresponded with Naticidae experts worldwide and in 1983 was invited by Luis Burnay to write an 'Analytical checklist of Sowerby's species of *Natica*', providing current scientific names and known distributions, to accompany a reprint of 'Monograph of the genus *Natica*' from G.B. Sowerby's *Thesaurus conchyliorum* which reproduced the original colour plates and descriptions of some 144 species from 1883. This work is a testament to Mike's great intellect as this was done before the internet and global access to the WoRMS (World Register of Marine Species) database which is widely used today.

Mike also published with Peter S. Ryall 'Naticidae of West Africa, Part I' (*La Conchiglia* Nos 200/201: 2–14, 1985), describing 15 *Natica* shells and then 'Part II' (*La Conchiglia* Nos 202/203: 4-5, 1986), describing a further four species. In 1992 he was quietly delighted to have a *Natica* named after him, *Natica dixoni* F. Fernandes & Rolán, 1992 (figure 2). Mike was also known for his expertise in another group of gastropods, the Turridae.

Mike was a generous, kind and loving man. His sense of humour brought joy to those who knew him. There will be an obituary in the BSCC club magazine *Pallidula* in October 2024, as well as further recollections and memories from other members.

figure 2: 12.7 mm specimen of *Natica dixoni* from the Graham Saunders collection, now in the collection of Carl and Craig Ruscoe. Collected at 20 m off Corimba, Luanda Province, Angola.

(photo: Simon Aiken)

Conference meeting report: 'Molluscs of South Asia: research, conservation and livelihoods, commemorating the life and work of H.H. Godwin-Austen'

figure 1: Henry Haversham Godwin-Austen. (Public Domain)

This conference, the first ever South Asian Malacological Congress, was held in Bangalore from 11th to 13th December 2023. It was organised by ATREE (Ashoka Trust for Research in Ecology and the Environment, Bangalore) and IISc (Indian Institute of Science, Bangalore). The event aimed to bring together researchers, scientists and students interested in malacology and working on molluscs of South Asia. The conference also in commemorated Lieutenant-Colonel Henry Haversham Godwin-Austen (1834–1923) (figure 1), naturalist, topographer, geologist, surveyor and a past Hon. President of this Society, who made significant contributions to our current understanding of the terrestrial molluscs of the Indian subcontinent. The conference attracted 69 delegates from ten countries, representing a diverse international community. Notably, 82% of the attendees were students, underscoring the importance of fostering the next generation of malacologists. A range of themes were covered during the conference, including the history of Indian malacology, biogeography, ecology and conservation, systematics, and a potpourri section which included topics such as pharmaceutical and medical applications of malacology.

The Conchological Society (CSGBI) provided financial support of £500 towards students' awards for best talk, best speed talk and best poster. The talks and posters were evaluated by Jon Ablett (Senior Curator, Natural History Museum, London (NHM) and member of CSGBI) as Chair, ably supported by Praveen Karanth (Indian Institute of Sciences, Bangalore), G. Ravikanth (ATREE, Bangalore), Naveen Namboodari (Dakshin Foundation, Bangalore) and Devapriya Chattopadhyay (Indian Institute of Sciences, Education and Research, Pune). Awards for two short talks, one speed talk and two posters were given. The total of £500 was equally distributed among the five awardees.

Abstracts of the award-winning talks and posters are given here (as submitted).

Type of larval development is not a good indicator of extent of geographic distribution in gastropods

(Short talk) *Sayoni Banerjee*[1] *& Kalyan Halder*[1]

[1]Department of Geology, Presidency University, 86/1 College Street, Kolkata – 700073, India

The Palaeocene-Eocene gastropods of western India and Pakistan show a high degree of endemism at species level. The mode of development of these species was deduced from protoconch features by methods proposed by Thorson (1950) and Shuto (1974). It was revealed that planktotrophy was prevalent in these species, implying lack of planktotrophy cannot explain this endemism.

Further, published literature was reviewed to know the dominant development mode of the reported genera. No significant differences were found between the maximum geographic distributions of the genera, known solely by non-planktotrophy, planktotrophy and those by both plankto- and non-planktotrophy, in the Mann-Whitney U-test. The Cypraeoidea, Olivoidea and some Volutoidea genera, despite known by only non-planktotrophy, were widely distributed during the Palaeogene (Meyer 2003; Kilburn 1981; Givens 1991).

How planktotrophic gastropods become restricted and how those lacking planktotrophy become widespread are not well understood. Wide geographic distribution, often found in Recent non-planktotrophic species, is explained by dispersal via algal rafting, stepping stones, specialised structures like mucous strings, etc (Beu 2008; Crandall *et al.* 2012; Cumming *et al*. 2014). The influence of dispersal other than larval on the geographic distribution of gastropods is yet to be explored from the fossil record.

figure 2: Sayoni Banerjee receiving the award from Dinarzarde Raheem (Rajarata University of Sri Lanka/NHM).

Inter-basinal faunal correlation of the Eocene of Kutch and Jaisalmer basins, western India: a gastropod perspective (Short talk)

Adrisuta Ghosh[1], Kanishka Bose[1] & Shiladri S. Das[1]*

[1]Geological Studies Unit, Indian Statistical Institute, 203, B.T. Road, Kolkata, India

The Caenozoic of the Kutch and Jaisalmer basins of western India are well known for harbouring a rich haul of marine molluscan fauna. In the present endeavour, the gastropod diversity was evaluated for the Eocene epoch of the two aforementioned basins and further correlated in terms of both taxonomy and ecology. A total sample size of 699 studied gastropod specimens revealed a diversity of 44 species belonging to 31 genera and 17 families for the Jaisalmer basin, whereas for the Kutch basin the diversity was 43 species belonging to 26 genera and 22 families. Correlation of the taxonomic diversity of these two adjacent basins revealed very low faunal similarity, i.e. 10.13% and 20.4% at species and genus level respectively. On correlating the ecological diversity, high abundance of semi-infaunal suspension-feeders (Primary Consumer-1) followed by epifaunal and semi-infaunal carnivore-predators (Tertiary Consumer) and herbivore-grazers (Primary Consumer-2) was observed in the Kutch basin. In the Jaisalmer basin, epifaunal omnivores and herbivore-grazers (Secondary Consumer-1 and Primary Consumer-2) showed high abundance followed by the carnivore-predators (Tertiary Consumer). Thus, the ecological pyramids of number for these two basins show completely different structures during the Eocene. This distinct dissimilarity can be attributed to different palaeo-environmental conditions of deposition.

figure 3: Adrisuta Ghosh receiving the award from Devapriya Chattopadhyay (Indian Institute of Science Education and Research (IISER), Kolkata, India).

Assessment for the conservation status of the freshwater genus *Cremnoconchus* from Western Ghats of India (Speed talk)

Anushree Jadhav[1,2] & N. A. Aravind[1,3]

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[2]Manipal Academy of Higher Education, Manipal 576104, India

[3]Yenepoya Research Centre, Yenepoya, Mangalore 575018, India

The Western Ghats of India are recognised as a significant global biodiversity hotspot, known for their rich diversity of not just terrestrial organisms but also freshwater taxa, including molluscs. The freshwater habitats within the Western Ghats region encounter numerous challenges, including but not limited to upstream pollution, habitat fragmentation, dam development, mining activities, tourism and rapid urbanisation. One of the noteworthy and distinct groups of freshwater organisms is represented by members of the freshwater molluscan genus *Cremnoconchus*. This genus stands out as the only freshwater genus within the marine Littorinidae family. According to recent research utilising fossil evidence, it has been shown that *Cremnoconchus* underwent divergence from its marine ancestors around 90.4 million years ago. The range of these snails is mainly confined to the central (between 12 and 16° N) and northern Western Ghats (between 16 and 21° N), where they are predominantly found in the spray zones of waterfalls. The primary objective of this study was to evaluate the conservation status of six recently discovered *Cremnoconchus* species, re-evaluate three previously known species and develop a comprehensive conservation action plan. The study examined the occurrence of species, the state of their populations and the potential threats to their habitats. Out of the nine species, six can be classified as Critically Endangered, as they are found outside of protected areas and are now experiencing significant threats. Conversely, the other three species are categorised as Vulnerable and are situated within protected areas. An efficient conservation action plan encompasses the implementation of stringent tourism management and upstream regulation of land use, land cover changes and awareness among the forest managers and policymakers for conservation of habitat and species.

figure 4: Anushree Jadhav receiving the award from Jon Ablett (NHM).

Risk taking behaviour and trap entry in giant African snail *Lissachatina fulica* (Bowdich)

(Poster) *Vinitha M.S.*[1] *& Sudhikumar A.V.*[1]

[1]Centre for Animal Taxonomy and Ecology (CATE), Department of Zoology, Christ College (Autonomous), Irinjalakuda, Kerala-680125, India

Understanding the behavioural mechanisms that enable some species to be successful invaders is crucial to analysing the impact of biological invasions and developing efficient control measures. If such behaviours are repeatable, known animal personality traits may shed new light on invasion management. The model organism used in this study was the giant African snail, *Lissachatina fulica*, an agricultural pest with public health concerns. We evaluated risk-taking behaviour (boldness) among juvenile and adult snails (120 individuals) collected from the Kol wetlands in Kerala. Later, we checked the effectiveness of bucket trapping in terms of risk-taking behaviour, which has proven to be one of the most effective methods for trapping giant African snails. In our study, we found that juvenile snails were inconsistent in their risk-taking behaviour, whereas adults were consistent. Lack of repeatability in juvenile giant African snails implies behavioural plasticity, making them more invasive. Generalised mixed modelling with trap entry as the responsive variable and boldness as the independent variable did not show any significant relationship, indicating lack of bias in bucket trapping in terms of risk-taking behaviour.

figure 5: Vinitha M.S. receiving the award from Patrick Faulkner (University of Sydney, Australia).

Abundance and spawning of sea hare *Aplysia oculifera* (Heterobranch: Anaspidea) inhabiting the intertidal area of Veraval coast, Gujarat, India

(Poster) *Drushita Aghera*[1] *& Rahul Kundu*[1]

[1]Department of Biosciences, Saurashtra University, Rajkot 360 005, Gujarat, India

This study was undertaken to investigate the abundance and spawning of *Aplysia oculifera* inhabiting the rocky intertidal flats of Veraval coast, Gujarat, India. The population of *A. oculifera,* along with its egg mass, recruits primarily during the months of November to March and its abundance declines during subsequent months. Spawning of *A. oculifera* was frequently observed during the months of December to February. Mating and courtship behaviour of *A. oculifera* occurred in the form of unilateral copulation with chain formation: a single, cylindrical, egg mass string comprises several egg capsules, encapsulated within a jelly-like layer to protect the embryos. As development proceeds, the colouration of the egg mass changes from yellow to brownish. Results also indicated that the abundance of sea hares has a direct correlation with the growth of algae during the recruitment season.

figure 6: Drushita Aghera receiving the award from Prem Bahadur Budha (University of Antwerp, Belgium).

A highlight of the conference was the insightful panel discussion addressing crucial issues in malacology. Entitled 'Making the most of molluscs', the discussion centred around key challenges such as collaboration, access to specimens, permissions for travel and collection, and the overarching concern of insufficient funding for fieldwork. Participants engaged in meaningful discourse, proposing solutions and highlighting the need for increased funds, especially for capital expenditures. The lack of expert taxonomists was addressed during the panel discussion, and it was suggested and agreed upon by all that universities should involve taxonomists for ecology and conservation research pertaining to all fields of biology. The panel also discussed the encouragement of interdisciplinary research across a wide range of areas from basic biology to palaeontology.

The recommendations from the conference were as follows:

a) Collaborations across regions and disciplines, such as molecular biology and palaeontology, to understand the evolution/conservation of molluscan fauna in South Asia.
b) Support for younger faculties and students to study various aspects of malacology.
c) Encouragement and involvement of traditional taxonomists in different aspects of malacological research.
d) Increased funding opportunities for the study of often overlooked taxa, such as molluscs.
e) Increased emphasis on basic biology and natural history research on molluscs.
f) Easier and affordable access to specimens, museum collections, and lab facilities across institutions in the region.

Report submitted by Aravind Madhayastha

Molluscs at the Devil's Punch Bowl, Hindhead, Surrey 1900–2021: in the footsteps of Swanton and Bensley

June Chatfield

figure 1: Devil's Punch Bowl, Surrey. Panoramic view from car park with telescope donated by the Haslemere Natural History Society. (photo: Peter Topley)

The life and work of E.W. Swanton, member and Past President of this Society, as well as Curator at Haslemere Educational Museum for 50 years, formed the basis of a previous article in *Mollusc World* (Chatfield 2018). While developing this, information came to light on the molluscs of the Devil's Punch Bowl, Hindhead, from accounts of fieldwork by Swanton (Anon. 1959) and others in the first two decades of the 20th century that were supported by specimens and library archives in the museum collections. The Haslemere Educational Museum and the Haslemere Microscope and Natural History Society were both formed in 1888 and some reports on molluscs of the Punch Bowl are listed in their publications. After Swanton's time, Lt. Col. J.F. Bensley (Castell 1957), on the museum committee and also a member of this Society since 1935 (figure 15), set up an ecological survey of the Punch Bowl in 1950 that continued until his death in 1955: two reports were published in the *Haslemere Natural History Society Annual Reports* (Bensley 1953, Jewell 1955) and a total of 30 species of molluscs were recorded. Arthur Jewell (1955) reported little change from earlier records. It seemed appropriate, therefore, to reinvestigate the molluscs a century and more than a half-century after Swanton and Bensley's fieldwork respectively and following recent conservation work associated with the re-routing of the A3 trunk road to a tunnel in 2012, the breaking up of the old road and reuniting the two commons. Accordingly, two CSGBI field meetings were held in 2018 and 2021.

Devil's Punch Bowl: habitats and geology

The Punch Bowl has long been a popular beauty spot in west Surrey and many driving along the old A3 (London to Portsmouth trunk road) in the 20th century must have pulled off for refreshments and enjoyed the view (figure 1). On occasion in the past I have stopped there to pick bilberries. The name Devil's Punch Bowl goes back to the early commoners who were taking a frugal living from this infertile land by making charcoal, and the smoke seen emerging from the hollow led to the name. This was in use in 1781 in Gilbert White's *Naturalist's Journal* for 9th October when 'a grey hen [black grouse] was lately killed on that part of Hind-head which is called the Devil's punch-bowl' (Johnson 1931 and 1970). The hollow is an example of springhead erosion working up the valley where the underlying impervious Atherfield Clay Formation prevents downward drainage of water, while the overlying Hythe Sands Formation (of the Lower Greensand series) are mostly porous and unconsolidated so are easily eroded at the spring line. Leaves of trees collecting alongside the Smallbrook Stream produce black organic mud, so there is a narrow band of slightly more fertile ground along the stream that could be used for grazing cattle on a small scale, hence the small family farms towards Thursley as shown on maps. The farms also tie in with outcrops of the lime-cemented sandstone of the Bargate Sandstone Member of the Lower Greensand shown on the geology map. The Hindhead Commons and the Devil's Punch Bowl were an early purchase by the newly formed National Trust in 1905 (figure 2, right) and Robert Hunter, one of the Trust's founders, lived in Haslemere.

An alternative folklore explanation for the Punch Bowl in local legend was that the Devil kept irritating Thor, a giant who lived in Thursley, and one day Thor, in a rage, picked up a handful of earth to hurl at the Devil, hence creating the hollow!

Much of the woodland on the south side of the Punch Bowl is English oak, a typical climax tree for the acid ground, while on the more open heathy ground birches seed and colonise readily and at the end of the 20th century were closing up the open space that is valued for heather/ling heath communities. Hence much clearance took place as part of the A3 tunnel project and grazing animals have been brought back to manage the vegetation. In the early 19th century the birches were actively harvested to make besom brooms and the local families of commoners engaging in this were called 'broom squires', lending their name to the title of a novel by Baring-Gould (1896 and 1996). The Hindhead crossroads was a good place for them to sell their wares. Some of this old tradition is described in *Hindhead or the English Switzerland* (Wright 1898 and 1907) and more recently *The Rise and Fall of the English Switzerland* (Dell 2016), the latter obtainable from Haslemere Educational Museum.

Field meeting 2018

This was held on 11th August 2018 with ten members, Haslemere Museum volunteers and Natural History Society and Alton Natural History Society members and friends present. As leader, I made two preliminary visits during the summer. I had previously visited the Devil's Punch Bowl to walk the footpaths and to lead a British Bryological Society

local field meeting (mosses and liverworts) in April 2012 and a Selborne Society visit in 2017, and a few mollusc records were made on those occasions. However, the exceptional heat and long drought of summer 2018 did not bode well for molluscs in view of the acid, freely-draining sands over much of the site, but I put my faith in pockets of remaining moisture beneath logs and damp boggy ground at the springs and Smallbrook Stream in the valley bottom, where it was still wet enough to sink into the mud. The stream is fed by springs from the Hythe Formation sands and Atherfield Clay junction. The sides of the Punch Bowl are mostly wooded (oak and beech) on the south side with areas of open common of heathland (bell heather, ling and bracken), mostly on the north side, all habitats poor for molluscs on account of the dryness and lack of lime for making shells, making it neither rich in species or numbers. Bensley (1953) usefully published a map of plant communities, incorporating the route of the streams.

figure 3: Field meeting participants meeting at the visitor centre.
(photo: Peter Topley)

We met in the National Trust car park and visitor centre (figure 3) where we were able to obtain self-guided trail leaflets and the guide book (National Trust 2014) giving the history of the site, highlights of flora and fauna, conservation work being undertaken and the A3 tunnel project now completed. Appreciating the peace and safety of the old A3 route now that the traffic goes underground, the morning was spent exploring the woodland (mostly oak) on the east side of the old A3, being the boundary of Hindhead Common, and returning along the line of the old road which had had its tarmac removed and where, from the species of snails found, we detected some lime enrichment from road drainage and surfacing materials used over the years. Although there were some tussocks of pendulous sedge from former road drainage, we were hampered by the dry conditions of the day as well as low soil pH (acid conditions) (figure 4).

After lunch break at the visitor centre the group descended the valley to the stream and its surrounding black mud and sphagnum moss bog (SU 891362). This proved to be very acid, giving a BDH soil test reading of pH 4 (red colouration) (figure 5).

The oak woodland above the stream was less acid (pH 5.5, yellow). Results of the 2018 survey are given in table 1, a reasonable list of 20 species given the acid location and dry summer. Slugs without external shells are not affected by the lack of lime and we found seven species of these in moist refuges, but only in small numbers. Glass snails (Zonitidae) have small (usually less than 1 cm), thin shells with little need for lime and these dominated the snail finds with six species. One of them, the hollowed glass snail

figure 4: Participants on the old A3, with de-surfaced road and sedges at the side from former drainage points.
(photo: Peter Topley)

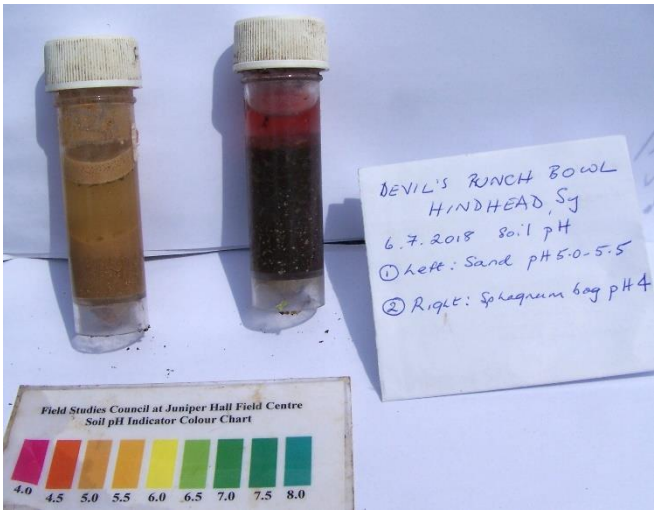

figure 5: Devil's Punch Bowl soil samples showing low pH readings.

(*Zonitoides excavatus*), is actually a calcifuge avoiding lime and has a limited distribution in the south-east. The remaining species of snails included one with a thin translucent shell, the slippery moss snail (*Cochlicopa* cf. *lubrica*) (figure 6), and five with normal opaque shells: (common garden snail (*Cornu aspersum*), *Cepaea* sp. juvenile, strawberry snail (*Trochulus striolatus*), common hairy snail (*Trochulus hispidus*) and rounded snail (*Discus rotundatus*). These were concentrated along the edges of the old A3 that is more calcareous from former road use and drainage. The Smallbrook Stream and springs only produced tiny pea mussels, *Euglesa* (formerly *Pisidium*) *personatum*, collected by Tom Walker (figure 7). Only a small area of the site was covered, as mollusc hunting is slow work, so further field work is needed and in damper conditions as well as searching a greater area. It is interesting to note the greater distance and therefore area covered by the rambles of Swanton and Shaw in the early 20th century, whose exploits took them on to the lime-enriched Bargate stone towards Thursley.

figure 6: *Cochlicopa* cf. *lubrica*, Devil's Punch Bowl.
(photo: Peter Topley)

Year of visit	2018	2018	2018	BBS 2012	SS 2017	2021	2021	2021
Area Species	Wood A3	A3 rim	Springs			Holcombe	Spring/bog	A3 rim
Aegopinella nitidula	A	S					A	
Aegopinella pura	A							A
Arion ater agg.	A		A			A		A
Arion hortensis	A							
Arion intermedius	A		A			A		A
Arion subfuscus			A			A		
Cepaea sp.		A						
Clausilia bidentata				A				S
Cochlicopa lubrica		A						
Columella aspera						S juv		
Cornu aspersum		S						
Deroceras laeve			A					
Deroceras reticulatus								A
Discus rotundatus		A	A	A		A	A	A
Euconulus fulvus			A	A				
Euglesa (=Pisidium) personatum			A			A	A	
Lehmannia marginata					A	A		
Limacus maculatus	A							
Limax maximus	A					A		
Malacolimax tenellus						A		
Nesovitrea hammonis								
Oxychilus alliarius	A	A	A	A		A	A	
Trochulus hispidus	A	S						
Trochulus striolatus		S		A				
Vitrina pellucida	S							
Zonitoides excavatus			A				A	

table 1: Results of recent surveys at the Devil's Punch Bowl (BBS = British Bryological Society; SS = Selborne Society; A = alive; S = shell).

figure 7: Tom Walker using net in open water of the bog.
(photo: Peter Topley)

figure 8: *Lehmannia marginata*, Devil's Punch Bowl, 2017.

Species that the author found on previous visits (2012 and 2017) included the two-toothed door snail (*Clausilia bidentata*) attached to ash trunks near the edge of the old A3 road and clear glass snail (*Aegopinella pura*) in the bog. The visit of the Selborne Society in June 2017 was preceded by all-night rain and on our arrival late morning, with vegetation still dripping, many tree slugs (*Lehmannia marginata*) were prominent crawling on tree trunks of oak near the car park (figure 8). In dry weather during the daytime these slugs would be hiding deep in crevices of the trees and we did not see them on our field meeting in 2018, a very dry day.

Field meeting 2021

This was held on Saturday 11th September 2021, the earlier meeting planned for the same weekend in 2020 being cancelled due to the Covid-19 pandemic. As the 2018 meeting was held in very dry weather, on 8th September I made a preliminary visit to check the terrain, route and collecting conditions, which were much damper and more favourable, and the highlight was finding seven slender slugs (*Malacolimax tenellus*), a very local species of old woodland and new to the site, so something good to show the field meeting participants. The group was made up of ten, with CSGBI members (Martin Bell, June Chatfield and Tom Walker) and others from Haslemere Educational Museum, Haslemere Natural History Society, Surrey Wildlife Trust and Alton Natural History Society. There had been overnight rain the night before so the ground was moist.

The morning was spent descending the path through Highcombe Edge to the bottom of the Punch Bowl and Smallbrook Stream. Just before a path to the right we investigated logs and tree trunks to the left of the path and immediately saw four tree slugs (*Lehmannia marginata*) crawling on trunks of birch trees, a species that had eluded us in 2018. Some log-turning produced more slugs: large black slug (*Arion ater* agg.), hedgehog slug (*Arion intermedius*) and dusky slug (*Arion subfuscus*) with orange slime (duly dobbed head down on the field notebook), leopard slug (*Limax maximus*) with a plain cream foot sole (figure 9) and several specimens of *M. tenellus* (figure 10).

figure 9: *Limax maximus*, Devil's Punch Bowl.
(photo: Chris Glanfield)

figure 10: *Malacolimax tenellus*, Devil's Punch Bowl.
(photo: Tom Walker)

Snails included the rounded snail (*Discus rotundatus*) with its large umbilicus, strong ribs and red squares on the body whorl and the garlic snail (*Oxychilus alliarius*), again small (about 6 mm) but with a flat, thin, brown glossy shell. The latter has two party tricks – the strong smell of garlic when prodded and, when examined from below with a hand lens, the heart beat can be seen through the translucent shell (beating slowly as it is a mollusc!). Leaf litter was taken for sorting.

We then left the Highcombe path by the track to the right and turned over more logs, finding the same species including *M. tenellus* and *L. maximus*. Hearing the flow of water we turned left off the path to the tributary stream from the main spring source, but only found a single live pea mussel (*E. personatum*) in the mud and no molluscs living on the stones. We did not get as far as the board walk with the end of the bog where it meets the Smallbrook Stream.

figure 11: *Zonitoides excavatus*, Devil's Punch Bowl.
(photo: Peter Topley)

After lunch we descended by another path to the head of a valley that marks a spring seepage with wet mud and sphagnum bog, visited in 2018. Being very acid it again yielded few molluscs but pea mussels (*E. personatum*) were again retrieved from the mud. In oak litter at the edge of the bog there were a few small glass snails: *O. alliarius,* waxy glass snail (*Aegopinella nitidula*) and the local calcifuge *Zonitoides excavatus*. This is the same size as *D. rotundatus* and just as tightly coiled with a large open umbilicus below (figure 11), but differs in having a thin glossy brown shell with no ribs. Having exhausted the potential of the bog we ascended the slope to the old A3, now a level path, noting how much the vegetation had grown up since 2018, especially European gorse. Again, the most numerous slug was *A. ater* agg. with *A. intermedius* (figure 12), and an additional slug, the field slug *Deroceras reticulatum* and *Aegopinella pura* (figure 13), indicating a more neutral soil. During the day we had a number of botanical diversions, including admiring some spectacular damp mosses typical of acid soil with a few autumn fungi and insects, all records being forwarded to the National Trust.

figure 12: *Arion intermedius*, Devil's Punch Bowl.
(photo: Peter Topley)

figure 13: *Aegopinella pura*, Devil's Punch Bowl.
(photo: Tom Walker)

Devil's Punch Bowl in the early 20th century

E.W. Swanton came to Haslemere as Curator of the museum in 1897 and soon started to investigate the local molluscs, his specialist group. Charles Pannell, a local naturalist and early member and first Secretary of the Haslemere Microscope and Natural History Society, who had already studied the molluscs of the Haslemere area (Pannell 1902, 1903), refers to Swanton for records of the Devil's Punch Bowl so it was not apparently one of his own collecting locations. Apart from Swanton's British reference collection, recorded in a spreadsheet by the author and the late Ray Ogborn (Haslemere Museum volunteer), data for this site was harvested from Swanton's book of British snails (Swanton 1906), as well as annotations of subsequent finds in Swanton's hand in his own copy of the book in the museum library and also those of James Denyer, another local naturalist from Eashing, who did likewise in his personal copy. Slug records are not represented in the museum collections and so come from literature and archives.

In April and May 1915, Swanton and the Rev. W.A. Shaw from Peperharrow, Godalming (figure 14) respectively led field meetings of the Haslemere Natural History Society, together with some prior visits in preparation. While the annual reports of the society are thin at the time, more detailed accounts were found in old issues of the *Haslemere Herald*, the local newspaper. Here we discover that Swanton was joined by J. Denyer, F.A. Oldaker (local entomologist), the Rev W.A. Shaw and the National Trust warden Mr H.T.G. Watkins. Swanton era records are shown in table 2. It is clear that they walked considerably further than we did and at the time possibly started and ended their day walking the hill from Haslemere, some two miles each way. Doubtless they were grateful for the tea provided at the warden's cottage at the end of the day. In the early 20th century there was a horse-drawn bus and occasionally a motorbus from Haslemere railway station (museum archives), but there is no record of how they travelled.

figure 14: (left) E.W. Swanton (aged about 50); (right) Rev. W.A. Shaw. (photos: Haslemere Educational Museum)

Species	Source of data* and notes	Recorded in 21st century
Acanthinula aculeata	1a ('under holly, upper Punch Bowl'), 2	+
Acicula fusca	1a	
Arion ater	2	+
Arion circumscriptus agg.	2	
Arion intermedius	1	+
Arion subfuscus	2	+
Carychium minimum	2	
Cochlicopa lubrica	3 (April 1915)	+
Cochlodina laminata	2, 3	
Columella edentula	2, 3	
Deroceras laeve	2 ('under holly'), 3	
Deroceras reticulatus	2, 3	+
Discus rotundatus	2, 3	+
Euconulus fulvus	2, 3	+
Lehmannia marginata	2, 3	+
Macrogastra rolphii	3 (April 1915)	
Merdigera obscura	4 (May 1915)	
Nesovitrea hammonis	3	+
Oxychilus alliarius	2	+
Perforatella subrufescens	3 (April 1915)	
Punctum pygmaeum	3	
Trochulus hispidus	5 (April 1915)	+
Trochulus striolatus	2 (Edward Step)	+
Vertigo antivertigo	3 (three shells)	
Vertigo substriata	2	
Vitrea crystallina	2	
Vitrina pellucida	3 (8.4.1915)	+

*Key: (1) = Swanton 1906; (1a) = Denyer annotations to Swanton 1906; (2) = Pannell 1902, record from EWS unless otherwise noted; (3) = EWS, HMC; (4) = H.T.G. Watkins, HMC; (5) = Rev. W.A. Shaw, HMC.
EWS = E.W. Swanton; HMC = Haslemere Museum collections.

table 2: Swanton era: early 20th century mollusc records from the Devil's Punch Bowl.

Written records add some species to those from the museum shell collection. Charles Pannell's *A Short Account of the Land and Freshwater Mollusca of Haslemere, Surrey* (Pannell 1903) published by the museum gives localities for the black *Arion ater* and *A. subfuscus* in Hindhead, with *Lehmannia marginata* (as *Limax arborum*) occurring on trees on Hindhead Road and also *Oxychilus cellarius*, but his only reference specifically to the Devil's Punch Bowl is the prickly snail (*Acanthinula aculeata*) which is attributed to Swanton. Pannell commented that there were very few records of this snail for Surrey. It is, however, small and brown with spines that frequently acquire clods of mud, so is difficult to see in the field and is best retrieved through the sieving of leaf litter, which was not routinely done in early 20th century surveys.

Punch Bowl snail shells in the museum collection were mostly collected by Swanton, resulting from visits in connection with the field meeting that he led on 8th April 1915, and some by others on the subsequent field meetings: J. Denyer, the Rev. Shaw and Watkins, the National Trust warden. The Rev. Shaw was a member and President of the Haslemere Natural History Society who joined the CSGBI in 1904 and was still on the membership list for 1923 (he died in 1938). Pannell was no longer on that list and he seems to have dropped out of both societies by 1913. The whereabouts of Pannell's and Shaw's shell collections are unknown. Only short summaries of meetings were given in the annual reports of the Haslemere Natural History Society but longer accounts prepared by Swanton were printed in the *Haslemere Herald* and clipped for the cuttings file at the museum. Further historic information on molluscs of the Punch Bowl comes from annotations in Swanton's book, *A pocket guide to the British non-marine Mollusca* (Swanton 1906), made by Swanton and Denyer as noted above. Jewell (1955) referred to Swanton's list of 1899, but this has not yet been located at the museum.

Punch Bowl shells from the collection and archives that we also confirmed in 2018 were: *Acanthinula aculeata*, *Cochlicopa lubrica*, *Discus rotundatus*, *Nesovitrea hammonis*, *Trochulus hispidus* and *Vitrina pellucida*. Those that we did not manage to re-find were: *Acicula fusca*, *Cochlodina laminata*, *Macrogastra rolphii*, *Merdigera obscura*, *Perforatella subrufescens* and *Vertigo antivertigo*. In an article entitled 'Vanished and vanishing animals and plants', Swanton (1915) regarded records of *Cochlodina laminata, Macrogastra rolphii* and *Cernuella virgata,* then in decline in the Haslemere area, to have been imported with chalk for the lime kilns during Victorian periods of agricultural prosperity of arable land.

Bensley ecological project 1950–1955

Col. Bensley, instigator of the project, gave a report after the first three years (Bensley 1953) in which he included a map of plant communities and summaries of fieldwork in botany, mammals, birds, invertebrates and geology, concluding with a list of the numbers of species recorded for each group. The total for molluscs was 30, increasing from 25 in 1951, a very respectable achievement in a largely acid area, much of which is dry sandy soil with freshwater only represented by springs originating from the Punch Bowl and the Smallbrook Stream through the valley. Unfortunately, the report does not give the list of mollusc names, but hopefully they might eventually be found in the Haslemere Natural History Society archives. Bensley's report on the molluscs for 1953 is as follows:

> 'The Mollusca (slugs and snails) are surprisingly diverse for an apparently unfavourable locality, although not plentiful in numbers. They are the only group of animals of which adequate records of the past for the Punch Bowl are available. The present-day list agrees almost exactly with Mr E.W. Swanton's lists of 1899, with some additions by the late Mr J. Denyer in about 1910. The only new additions are one or two calcicole (chalk-loving) species near the main road, probably accidentally introduced, and the great grey

slug (*Limax cinereoniger*), which may have come from the Golden Valley, where it is also to be found. This is the largest British slug and may grow to the length of over a foot' (Bensley 1953).

In October 2023 the author made a visit to Golden Valley off the Tilford Road and duly found a single *Limax cinereoniger* in a tussock of pendulous sedge by the valley footpath in damp ground. I am not aware of any records from the Punch Bowl.

In winding up the project with a final report after Bensley's death in 1955, Arthur Jewell (then Assistant Curator and botanist) wrote:

'Although he was a specialist on Mollusca, Col. Bensley had become particularly interested in the interdependence between living organisms and their environment. It was this interest in ecology, coupled with an acute realization of the urgent need to record the flora and fauna of a part of the Society's area which was rapidly changing in character, which led him to organize the Ecological Survey in 1950. Since that time the work continued steadily under his direction so that considerable information regarding the Punch Bowl has been obtained.

'Now that we have so regrettably lost the one who enthusiastically planned and directed the work, it has been decided to conclude the Survey by publishing the brief and final report...'.

While much of this report focused on flora, plant succession and effects of heath fires, species totals were given of the animal life including some invertebrate groups. Jewell pointed out the lack of technical professional help for measuring soil, climate and light and the overambitious nature of a mile square containing complex habitats as well as the small number of active members. That volume of the *Annual Report of the Haslemere Natural History Society* announcing Bensley's death, their President from 1952–1955, carried a frontispiece photograph of him (figure 15). The CSGBI obituary was written by C.P. Castell (1957). Col. Bensley was a retired army man who joined the CSGBI in 1935 and lived in the Haslemere area with his mother on retirement. In the late 1940s he was on the board of trustees of the Haslemere Museum and served as Honorary Curator during a gap in curators just before John Clegg was appointed in 1951 (Castell 1957). He was probably the influencing factor behind another CSGBI member, R.H. Moses, deciding to leave his collection to the museum.

Whilst there were some species from historic records that we did not manage to re-find, the green slug (*Limacus maculatus*) was new to the Punch Bowl list and one that neither Swanton nor Bensley would have known about. It was first found in Britain in the 1960s (as *Limax grossui*), initially in Ireland, but spread first in the north from Liverpool and by 2000 had reached the Thames Valley and is now a very common garden slug, including in my own garden in Alton, east Hampshire (Chatfield 1976, Rowson *et al.* 2014). Another new slug recorded here for the first time in 2021 was *Malacolimax tenellus*, a local species of old woodlands. We also tackled the pea mussels (*Euglesa personatum*), a genus that was poorly known taxonomically in Swanton's time as evidenced by the museum reference collection that he set up.

figure 15: Lt. Col. J. F. Bensley.
(photo: Haslemere Natural History Society)

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Lucinoma borealis – a growth sequence

Andrew Wright

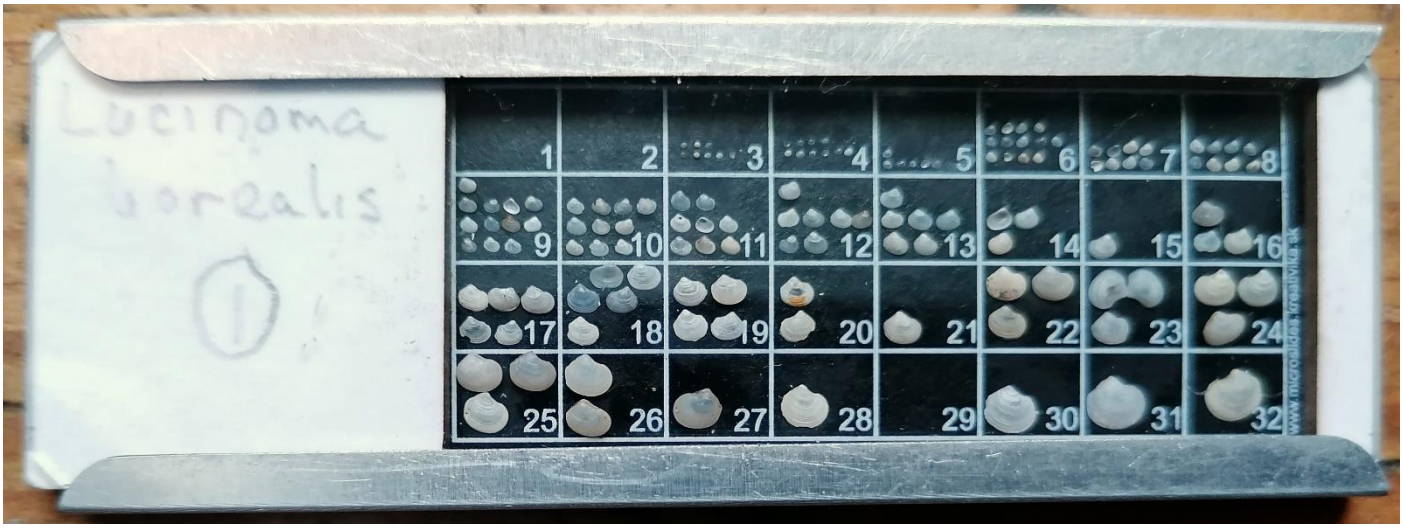

figure 1: Cover slide with juvenile shells of *Lucinoma borealis.*

For the last two or three years I have been looking at beach sand (it is quite addictive – to me anyway!). However, identifying the material can be problematical as the majority of it is of small juvenile shells. To help I have found the excellent resource for bivalves of the National Museum Wales (Oliver *et.al*. 2016), which quite often includes juveniles, and I also found a curious document published online by the 'NE Atlantic Marine Biological Analytical Quality Control Scheme' (NMBAQC) as a 'Ring Test Bulletin' (RTB#52) (Worsfold & Hall 2017), which also gives some pictures of juveniles; there is a separate one for gastropods (Worsfold & Hall 2022).

To help my identification, I am trying to build up a growth sequence for each species. Only occasionally do you get enough shells from one sample to build up a reasonable sequence, and I have found that the best way is to mount them, as I find them, on 2 mm cavity slides with a flat base and 32 labelled squares (figure 1). I pre-glue slides with gum tragacanth so I can add shells, sticking them in place with water. Locations are kept by adding the shells in order. I measure each shell and add it to its appropriate square, i.e. shells 2 to 2.09 mm long get mounted in square 20, etc and that gives spaces for shells up to 3.2 mm. Shells can also be moved easily from slide to slide when they don't look right. Usually I find if the shell is distinctive when adult it is usually distinctive when small, and as I get more material it gets easier to put names to it as the options get less.

One of the species I found difficult to sort out to begin with was *Lucinoma borealis* (figure 2). Although common (I would class this as a 'present almost everywhere' species) there are usually only one or two shells per sample. The description of an adult shell in Tebble's excellent book describes *L. borealis* as: '*Shell solid, equivalve; almost equilateral, beaks just in front of the midline, directed inwards and forwards; approximately circular in outline*' (Tebble 1966). Unfortunately, this is of no help when sorting and naming small juvenile shells out of beach sand. The Museum Wales website (Oliver *et al*. 2016) does not illustrate any juveniles of *L. borealis*; Worsfold *et al.* (2017) illustrate one about 2.4 mm long.

In the beginning I confused *L. borealis* shells with species like *Musculus discors*, *Goodallia triangularis*, *Thracia phaseolina,*etc, but with more material I think I have it finally sorted (figure 3).

figure 2: *Lucinoma borealis* from Mornington Beach, Meath, Ireland (Length 30 mm).

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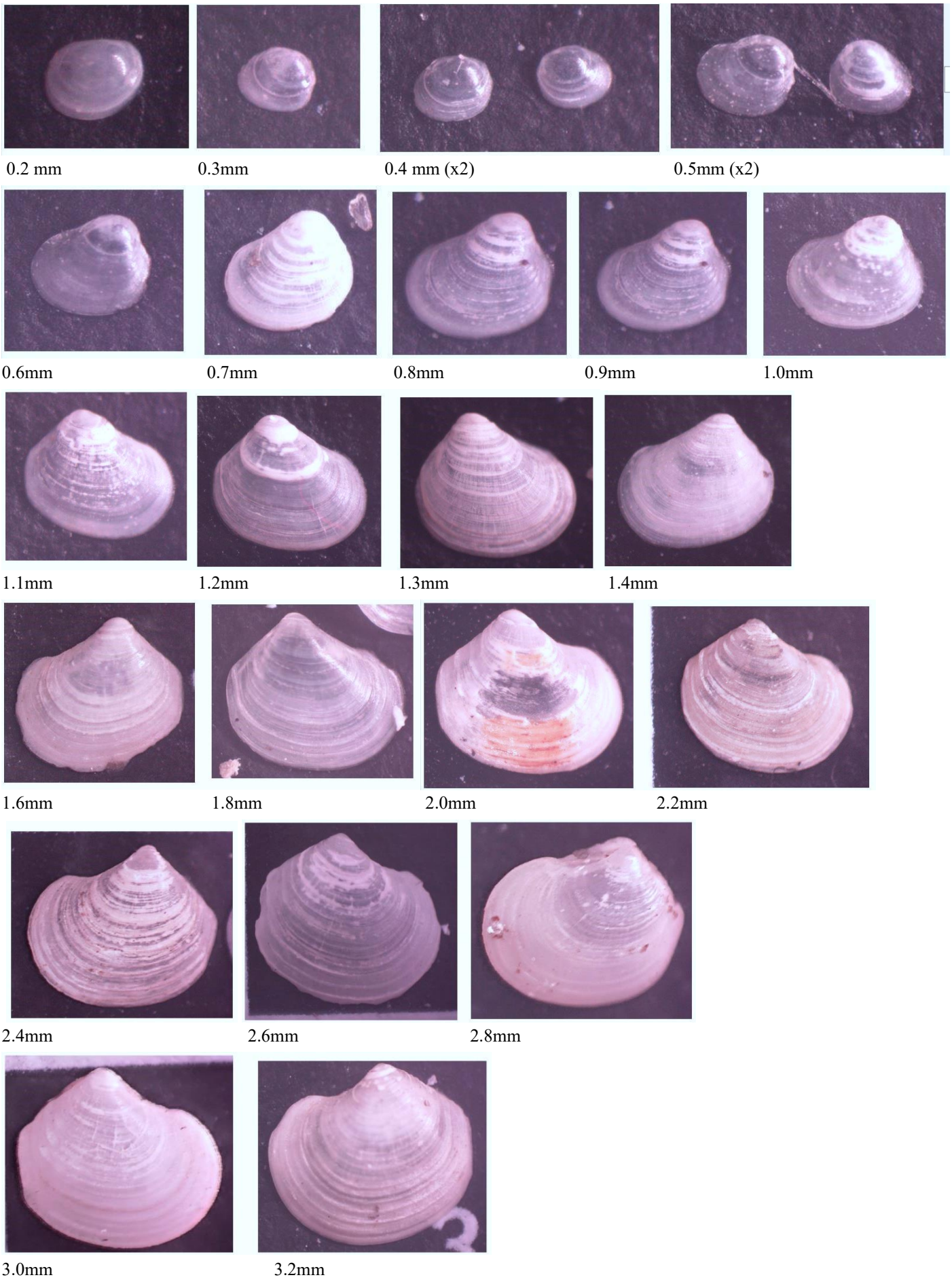


figure 3: Growth sequence of juvenile *Lucinoma borealis* from beach sand.
Lengths are given from the posterior margin to the anterior margin.

New species of sea slug discovered in UK waters[1]

Peter Barry, Ross Bullimore & Hayden Close

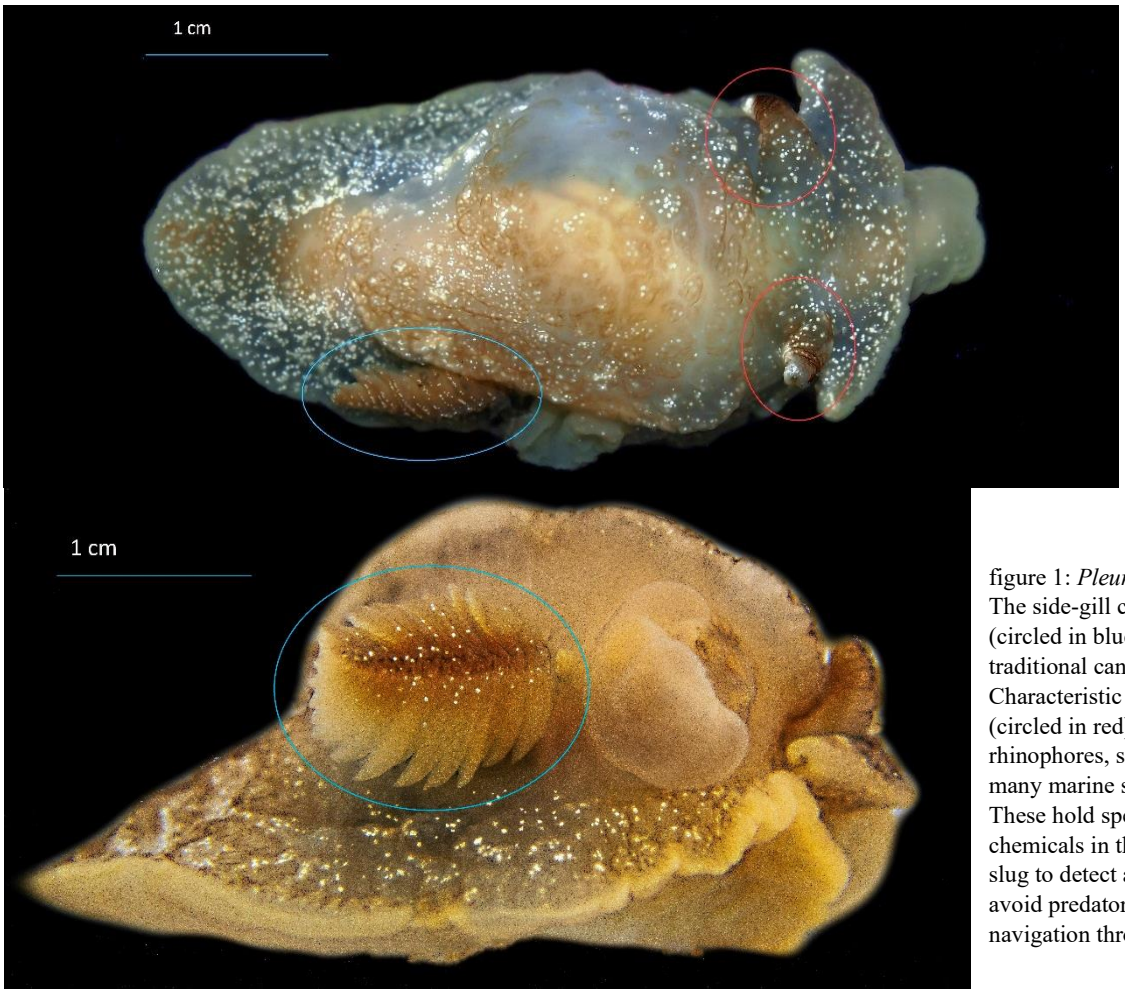


figure 1: *Pleurobranchaea britannica*. The side-gill can be seen in the photo (circled in blue) and is leaf-like, or like a traditional canoe paddle structure. Characteristic aspects of the 'head' (circled in red) are the widely spaced rhinophores, sensory structures found in many marine snail and slug species. These hold specialised cells which sense chemicals in the water and allow the sea slug to detect and locate food, find mates, avoid predators and generally aid navigation through its environment. (photos: Ross Bullimore)

An exciting discovery has been made by researchers in the waters off the south-west coast of England. In the north-eastern Atlantic and Mediterranean Sea, the pleurobranchid genus of sea slugs, *Pleurobranchaea* Leue, 1813, is represented by two species: *Pleurobranchaea meckeli* and *Pleurobranchaea morosa*. The former is a well-known species distributed from northern Spain to Senegal and the Mediterranean Sea, while the second is a poorly described species. A new species, *Pleurobranchaea britannica* Turani, Carmona, Barry, Close, Bullimore & Cervera, 2024, has been identified by scientists from the Centre for Environment, Food and Aquaculture Science (Cefas) and the University of Cádiz, Spain.

Measuring 2 to 5 cm long, *Pleurobranchaea britannica* is a type of side-gill sea slug. This common name refers to the presence of the gills of the animal being externally located on the right side of the body. These gills allow the sea slug to extract oxygen from the water (figure 1).

Specimens of this newly classified species were collected during routine fisheries surveys conducted by Cefas and the Instituto Español de Oceanografía in 2018 and 2019 off south-west England and in the Gulf of Cádiz, south-west Spain (figure 2).

Initially, given the presence of the distinctive side-gill, Cefas scientists tentatively identified the specimens as *Pleurobranchaea meckeli*. However, no previous records of the species in UK waters existed, raising questions around its identity. After a long search to find experts specialising in this type of sea slug, specimens were sent to a team of scientists in Spain for further investigation.

Analysis conducted by the University of Cádiz revealed that the specimens indeed represented a new species. An examination of the DNA, as well as the identification of physical differences in the appearance and reproductive systems when compared to known species, supported the classification of *Pleurobranchaea britannica* as a stand-alone species.

The discovery marks the first recorded instance of a sea slug from the *Pleurobranchaea* genus in UK waters. Scientists believe that this new species could potentially be found from as far south as Spain and Portugal, around the French coast and up to the south-west of the English Channel. Climate change could be one factor behind its appearance in more northern waters.

Sea slugs are an extraordinarily diverse group of animals. Being at the top of the food chain and functioning as both predators and prey, they are essential to marine ecosystems. To protect themselves from predators, several species specialise in recycling parts of the animals they prey on. For instance, absorbing toxins from certain prey and secreting the poison into their own skin. Their sensitivity to environmental changes makes them valuable indicators of ecosystem health, helping scientists understand the impacts of climate change and human activities on marine habitats.

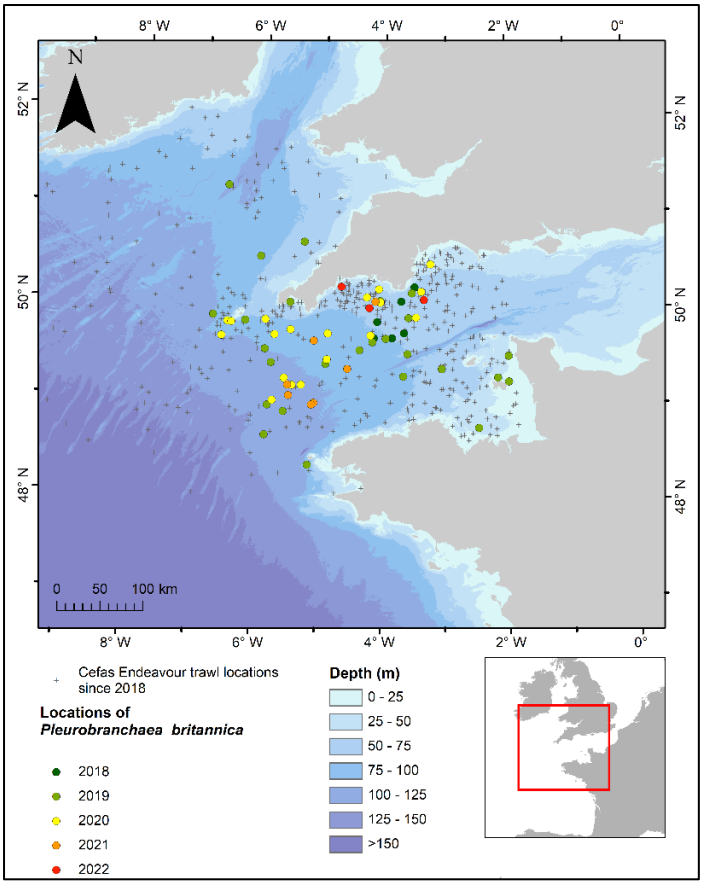


figure 2: Map showing the locations of specimens of *P. britannica* that were collected. (Cefas)

The study, published in the journal *Zoosystematics and Evolution* (Turani *et al*. 2024), highlights the importance of understanding the way species shift and move through the ocean in response to changes to their environment. Scientific surveys, such as those conducted by Cefas' research vessel, the RV *Cefas Endeavour* (figure 3), can play an important role in collecting the data and evidence needed to understand these changes, helping to inform conservation and management efforts to protect marine biodiversity and ecosystems.

figure 3: RV *Cefas Endeavour*. (photo: Cefas)

Reference

Turani, M., Carmona, L., Barry, P.J., Close, H.L., Bullimore, R. & Cervera, J.L. (2024) First occurrence of the genus *Pleurobranchaea* Leue, 1813 (Pleurobranchida, Nudipleura, Heterobranchia) in British waters, with the description of a new species. *Zoosystematics and Evolution* **100** (1): 49–59. https://doi.org/10.3897/zse.100.113707.

Ross Bullimore, *marine ecologist at Cefas*

'It is exciting to see that routine fisheries surveys can still lead to such discoveries. It only took a brief inspection of two specimens to be confident that we had stumbled upon a species of *Pleurobranchaea.* This was thrilling because no other species from this genus had been documented in UK waters, or even this far north. After close collaboration with the University of Cádiz, who carried out a more thorough assessment, we were blown away to discover that we had identified a third, new species. There is often an assumption that we know everything there is to know about species found in UK waters, but this just goes to show that there is still so much to learn in our own backyard'.

Hayden Close,
seabed analyst and modeller at Cefas

'As a marine benthos expert who is often involved in Cefas fisheries surveys that cover a wide geographical area, I have found it exhilarating that we can continue to uncover new species and new sightings of existing species. It just goes to highlight the value of these surveys and serves as a poignant reminder of the ocean's boundless unexplored secrets, even in areas we consider well-charted and studied'.

Peter Barry, *marine biologist at Cefas*

'As scientists, we have learnt a lot from this new discovery. We are talking about differences between species that are almost impossible to see with the naked eye. It shows how easy it is to overlook and miss changes in the distribution and range of species we are familiar with seeing, or in this case, the presence of a whole new species where it isn't expected. It shows the importance of continuing to question what we see if we are to advance our understanding of how our marine environment is changing.'

Dr Juan Lucas Cervera Currado,
full professor of biology at the University of Cádiz, Spain

'When Cefas scientists contacted me and told me that they had collected individuals belonging to the sea slug genus *Pleurobranchaea*, but whose specific identity was not clear, I was really surprised. Firstly, because species from this genus have never been found in the British Isles, and secondly because the possibility of having found a new species of this genus in European waters was really exciting.

'This discovery has helped to advance our knowledge of the British and Spanish marine fauna, with the next steps being a more detailed review, including the use of molecular biology techniques, to understand more about *P. meckeli* and *P. britannica*. We suspect that the new species could be distributed throughout the French Atlantic coasts, northern Iberian Peninsula, mainland Portugal, eastern Andalusia and northern Morocco. We look forward to continuing our new partnership with Cefas as we monitor this new species.

[1] A version of this article was published by Cefas as a press release on 1/3/2024 and is reproduced here with kind permission of the authors. [Ed.]

How pea mussels played a part in the Everest story

S. Peter Dance

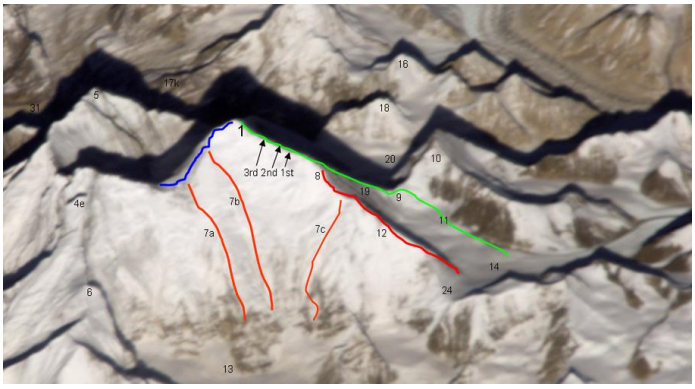


figure 1: Kangshung face, Mount Everest, from east. The typical route north, which is largely identical to the climb of Mallory and Irvine in 1924, is marked in green.
(photo: NASA. Additions: Kassander der Minoer. Public Domain)

This is an addition to my account of some pea mussels collected 100 years ago at high altitudes by an unknown member of the 1924 Mount Everest Expedition (Dance 1967) (figure 1). I discovered them in the 1960s, in a specimen cabinet in my then workplace, the Natural History Museum in London. They were loosely wrapped up in some scraps of paper bearing inked details of the two localities they had come from. Having made a special study of British pea mussels, then generally lumped together in the genus *Pisidium* (family Sphaeriidae), I decided to try to identify them. As they are notoriously difficult to identify, this was no easy task. Without the help of colleagues who had also specialised in these tiny bivalves, the task would have been beyond me.

figure 2: A.W. Stelfox (1883–1972).
(photo: J.G.J. Kuiper, *Journal of Conchology* **27**: 520–522 (1972))

One of the localities was a plateau stream at 14,500 feet [4420 m], at Kampa Dzong, Tibet. The single specimen from this locality was identified as *Pisidium* (*Odhneripisidium*) *stewarti* Preston, 1909[1]. The other locality was under a stone in a stream at 10,000 feet [3048 m], at Yatung, Sikkim, northern India. It featured two species, both apparently new to science. I decided to describe them and tried to think of a suitable name for each. I thought it would be right and proper to honour two prominent students of pea mussels. My first choice was A.W. Stelfox, the man who had taught me most of what I knew about pea mussel identification (figure 2), but when I said I wanted to do this he stopped me in my tracks, saying he did not deserve such an accolade. Fortunately, there were two other pea mussel enthusiasts I could ask. One was Arthur Ellis, a good friend who had published an illustrated identification guide to freshwater bivalves, including pea mussels (Ellis 1962) (figure 3). He was happy to accept[2]. So too was the Dutchman J.G.J. (Hans) Kuiper (figure 4). Widely recognised as the foremost world authority on pea mussels, he was a good friend who had already named one of them after me.

figure 3: A.E. Ellis (1902–1983).
(photo: *Journal of Conchology* **31**: 193─199 (1983))

figure 4: J.G.J. (Hans) Kuiper (1914–2011), on the right. At the Congress of Unitas Malacologica Europaea (now Unitas Malacologica), Vienna 1968 (which I also attended).
(photo: T. Meijer; via Wikimedia Commons, CC BY-SA 3.0)

That would have been end of the story, effectively no story at all. Conversely, there could have been another ending that I think would have made a good story. When I wrote my article I was unaware that George Mallory and Sandy Irvine were two of the principal mountaineers on the 1924 Mount Everest Expedition (figure 5). Mallory, in particular, was unrivalled for his climbing skills. Irvine, though less experienced, was not lacking in courage and was a good climbing companion. The last view of them, still alive, was a mere glimpse, through the clouds, near to the summit of the world's tallest mountain. Seventy-six years later, in 1999, the chilling sight of the partly exposed body of George Mallory was revealed by another mountaineer's camera. All that has been found of Sandy Irvine is his hand axe. I would have named two pea mussels after two climbers whose contribution to the Everest story is legendary. It matters not that I named them after two individuals who never set foot upon that mountain. What does matter is that someone left some fragile pea mussels in a museum cabinet, wrapped in scraps of paper, where I found them and gave them identities. Although they were found in northern India, they may rightly claim to be an integral part of the Everest story.

figure 5: Sandy Irvine (left) and George Mallory (right), Everest expedition, 1924. (photo: Altitude Films/John Noel Collection; https://livesofthefirstworldwar.iwm.org.uk/lifestory/7669562)

References

Dance, S. P. (1967) *Pisidium* collected by the 1924 Mount Everest Expedition, with descriptions of two new species (Bivalvia: Sphaeriidae). *Journal of Conchology* **26**: 175–180.

Ellis, A.E. (1962) *British Freshwater Bivalve Molluscs*. London: Linnean Society of London (Synopses of the British Fauna 13).

[1] Now *Odhneripisidium stewarti* (Preston, 1909).

[2] *Pisidium (Afropisidium) ellisi* Dance, 1967; now *Conventus ellisi* (Dance, 1967).

[3] *Pisidium (Odhneripisidium) kuiperi* Dance, 1967; now *Odhneripisidium kuiperi* (Dance, 1967)

Horse mussels (*Modiolus modiolus*) in kelp holdfasts

Peter Topley

Rosemary Hill's recent report of the Conchological Society's Northumberland marine meeting (*Mollusc World* **64**: 4–5) reminded me that whilst on a separate trip to the same county in October 2023, a large stranding of uprooted kelp (*Laminaria* sp.) at Bamburgh provided the opportunity to check some of them for the presence of molluscs in the holdfasts (figure 1). Kelp holdfasts provide a substrate for a fair number of bivalve and gastropod species depending upon location (for example *Heteranomia squamula*, *Musculus* spp., *Hiatella arctica*, *Patella pellucida, Trivia* spp., *Turtonia minuta*, etc (see Hayward 1988)) and this always makes it worthwhile examining a few of them, with the aid of a penknife, when they are cast up on the shore.

figure 1: *Laminaria* cast up on the shore at Bamburgh, Northumberland, 2023.

The underneath of a couple of the holdfasts that I picked up had the tip of a brown umbo just visible, suggesting that something was completely buried inside. Having carefully cut the holdfasts open these were revealed to be juveniles of *Modiolus modiolus* (Linn., 1758). They were not at all visible otherwise, being completely hidden inside the *Laminaria*, despite having a shell length of around 40 mm (figure 2). Presumably the mussels had been growing in this fashion, together with the kelp, from their settlement following the planktotrophic larval stage and had been somehow able to filter feed despite being almost completely inside the holdfast. It would be interesting to know whether mussels in this position eventually grow to their full size (in the case of *M. modiolus* this can be to a length of around 130 mm), compared with those settled on other substrates.

figure 2: A juvenile *Modiolus modiolus* from a kelp holdfast, Bamburgh, Northumberland (length: 40 mm).

Reference

Hayward, P.J. (1988) *Animals on Seaweed.* Oxford: Richmond Publishing Co. Ltd (Naturalists' Handbook Series 9).

A bit more gastropod gastronomy

Brian Goodwin

In *Mollusc World* issue 56 (July 2021, p.27), I mentioned a possible example of *Cepaea* cannibalism, while in issue 63 (November 2023, p.9), June Chatfield recorded a frugivorous *Cornu aspersum*, and later in the same issue (p.31) molluscs with a taste for cucurbits.

I can now report on further examples of 'gastropod gastronomy'. The first involves three large *Arion* slugs feasting on the carcass of a squashed *Cornu aspersum* (mea culpa, but an accident … honestly!). Two, probably *Arion vulgaris*, were caught in the act (figure 1) while a third individual, *Arion rufus* (figure 2), was very close by and seems to have been making its getaway.

figure 1: Two large *Arion* slugs (probably *vulgaris*) feasting on a squashed 'cousin'.

figure 2: *Arion rufus*; another likely 'guilty party', legging-it (or footing-it) from the scene!

The second event almost tempted me to use as a headline for this article, something along the lines of 'Gastropods gobble a newt!'. Not a live one, of course, but a corpse which I noticed on my patio one June evening. When I ventured out the following morning (less than 12 hours later), I noticed the remnants - little more than a skeletal head and backbone, surrounded by a few scattered bones and bits of skin (figure 3). The low sunlight showed tell-tale slime tracks that confirmed the culprits, although whether slugs and/or snails, I could not tell.

figure 3: The mollusc-ravaged remains of a common newt (head to top right).

And then, just a few weeks later, clear evidence that apples are also on the menu (figure 4). Again, which species were involved, I am left to wonder about …. and also, to reflect on what goes on, just outside our bedroom windows, while we are asleep!

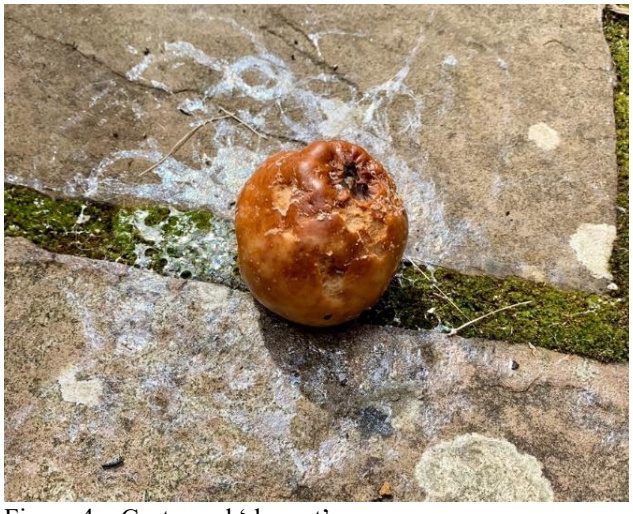


Figure 4 – Gastropod 'dessert'.

Acknowledgement

I am grateful to Ben Rowson for confirming the probable identity of the slugs.

The great Cameron clear-out!

Robert Cameron

Circumstances (otherwise known as knocking on a bit) have had two effects on me: I am no longer likely to do much intensive fieldwork, least of all overseas, and we face the fairly urgent need to move to a smaller home with facilities for disability. This does not mean abandoning my interest, nor a limited amount of time in the field. It does mean reducing the amount of stuff around and, realistically, trying to dispose of potentially useful stuff without landing my family with the task.

With most of my career spent in adult education departments rather than in biological departments, I have been an early adopter of the now widespread trend for 'working from home'. Equipment has accumulated; so also have samples of snails from four continents, several oceanic islands and from Quaternary deposits.

Living in a large, rambling Victorian house has meant that the solution to more stuff has simply been more shelves and more cupboards. Collections of snail shells have been kept in a mix of old medical X-ray cabinets (huge and ideal; think map cabinets) and a set of heavily modified library card index boxes (remember those?) (figure 1).

figure 1: The library card index boxes and my modifications.

I have now catalogued and packed up nearly all the samples of shells that are likely to be of any use or interest in the future. These have been offered to museums and to a local natural history society. Including material already donated, this represents more than 4000 'lots' in museum-speak (this does not represent 4000 species, as many are represented by lots from different places). I have held back only material that I still work on from the Azores, and some material from the UK for use in identification courses.

Equipment and accessories are another matter. A search revealed an astonishing array of stuff, some actually bought by me, others deemed as disposable by the places where I worked, and some given to me as presents or by colleagues from many countries. I have attempted to classify, count and, where necessary, to clean things and arrange them in 'lots' in the manner of an auctioneer. There are *c*. 3800 items split between 66 lots (one lot, No. 4, Greek snails, has gone already).

I have no desire to make any money by disposing of all this stuff. I favour the modern call to 'reuse rather than recycle'. I am arranging a catalogue of lots to be given away, but in the hope that they will generate some funds for the Society or for the local Sorby NHS. I have divided the material into sections: stuff connected with fieldwork and sorting, mostly plastic and some metal; and for storage or display indoors, a mix of plastic, glass and card (figure 2). It is available on the Society website (https://conchsoc.org/robert_cameron). There will be rules for bidding, to give priority to generous donors.

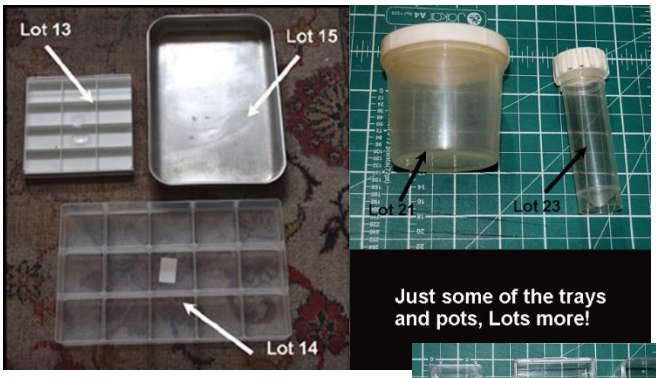


figure 2: Trays for sorting and storing plus collecting pots; some glass tubes and display boxes.

There are some exceptions. The library card index drawers, made with good, varnished wood, comprise a total of 18 drawers in four sets of four drawers and one of two. They make a neat stack nine drawers high (1.12 m). Each has been modified to hold an additional layer in hand-made hard card trays and are filled with thin card trays to make segregation of species easy (figure 1). These are robust and aesthetically pleasing objects. I would look for a donation of at least £50 for them and will invite competitive bidding. Available at the time of writing.

There are also other drawers, including large ones to store medical X-rays. There are a few other items I am not parting with yet, including a Polish hand-made field sieve with bags. Its value is sentimental. Worthy of a line of campaign medals, it has seen service in the Azores, Madeira, the UK, Poland, Ukraine, Romania, Georgia and Australia. Express an interest.

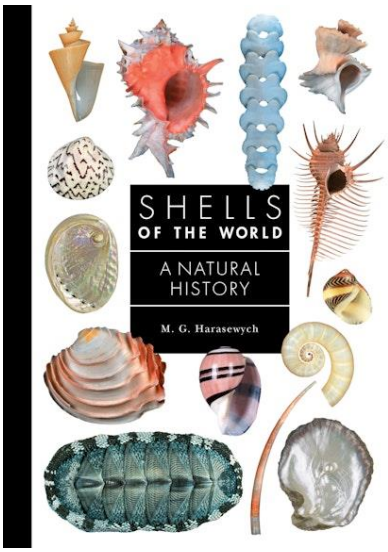
At the end of the catalogue, which has many more pictures, there is an order form, giving the sum which will secure a lot if you are the first to offer it. Lower offers will be accepted after a while if they are the only ones. I am not going to post anything. I can deliver within a 30-mile radius of Sheffield for orders of £25 or more. Otherwise, it will be up to you to call on me, by arrangement, to collect your loot.

I can add that I also have a collection of mostly modern books and monographs on land molluscs and others, sets of conference papers, and print runs over varying periods for *Journal of Conchology* (and *Conchologists' Newsletter/Mollusc World*), *Journal of Molluscan Studies, Malacologia* and *Folia Malacologica*. Also, a huge collection of hard copy reprints, which I do not propose to catalogue. I will prepare a catalogue for the rest in due course.

This is not a 'thank you and goodbye' message. I hope to remain engaged for a while yet.

Book reviews: *Shells of the World – a Natural History* by M.G. Harasewych

Princeton University Press 2024, ISBN 978-0-691-24827-1, 240 pages, hardback. Price approx. £25.00



Jerry Harasewych was Curator of Gastropods at the National Museum of Natural History, Smithsonian, Washington D.C. for 30 years and remains an emeritus curator there. His previous 'popular' conchological writing includes co-authorship of *The Book of Shells* (A&C Black, 2010 – see *Mollusc World* **26**: 20).

This new book serves as an introduction to the world of marine molluscs. It is not intended as an identification guide to species level, although the book is profusely illustrated with excellent colour images of both living molluscs and their shells. In the introduction, which includes brief sections on shell formation, evolution, diversity and current threats, the author summarises the scope of the book: 'Of the more than 700 families within Mollusca apportioned among the six shelled classes, 93 examples have been selected to provide a broad overview of the immense variability in morphology, habitat, and behaviour within the phylum Mollusca'.

The extant shelled classes are each given a chapter; two non-shelled classes (Caudofoveata and Solengastres) are also briefly treated, with a few excellent photos of living animals. Each chapter begins with an introduction to the class and useful labelled diagrams of a typical shell and anatomical features. Each family chosen within the class is given two pages, including a general description of the animal and its shell, some interesting facts and a note on the fossil record. There are images of both shells and living animals. One particular 'standout' image is of the limpet *Lottia emydia* releasing a stream of scarlet eggs into the water in Hokkaido, Japan. Generally the families chosen for inclusion are a good representation of those within the class, but the limitations of the size of the book (a publisher's decision?) has meant that some difficult 'inclusion' decisions must have been made (for example Cancellaridae but not Marginellidae).

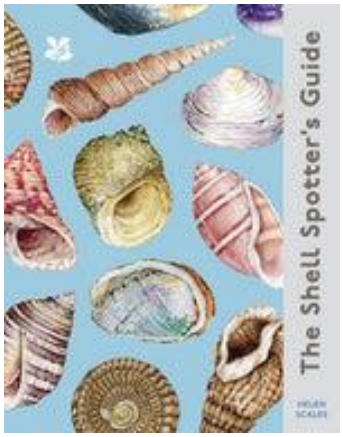
The writing is informed, succinct and well written (a glossary is provided for some of the more technical terms used). In a format similar to *The Book of Shells*, a simple distribution map is included for each family, together with 'small print' notes on distribution, diversity, habitat, size range, diet and reproduction. Although *The Book of Shells* was somewhat fixated upon illustrating shells either life-size or rather over-magnified, shell sizes were given throughout. Unfortunately this is not the case in the present volume; nor are author citations included. Credits for the many wonderful images are given at the end of the book in alphabetical (rather than page) order, making them almost impossible to reference.

Apart from the glossary, the appendices include a small list for further reading, a list of websites (mostly USA based) and an index.

A big recommendation for this book is that I read it from beginning to end in a day; something I rarely do!

The Shell Spotter's Guide by Helen Scales

National Trust 2024, ISBN 978-0-00-864131-3, 112 pages, hardback. Price approx. £9.00



Any new 'popular' book about British shells is to me a minor cause for celebration, so rare have they become. This small book (162 x 130 mm) is the second in what I presume will be a series of 'Spotter's Guides' produced by the National Trust.

The book includes a selection of just 38 species, each comprising a description and a beautiful coloured illustration by Ella Sienna on the opposite page, which gives a good idea of the general form of the shell but often only one view is included and they are not always accurate enough for identification. Rather like in the children's *I-Spy* books, a space is given for the reader to indicate where and when they first 'spotted' each shell; however, the inclusion of species such as *Atrina fragilis*, *Janthina janthina* and *Actaeon tornatilis* at the expense of any tellins (for example) may make this somewhat less likely. The inclusion of two other 'shelled' animals' which might be confused with molluscs (a sea urchin and *Spirorbis*) is useful.

In addition to a short introduction and advice on responsible shell collecting and safety, there are also other items about the nature of tides, the art and uses of shells, hermit crabs, etc. A simple glossary, index (common names) and a short book list is also included. Up to a point, this is a useful introduction to the shells a beginner might find on the shore; but they may be frustrated by the lack of coverage. The good thing is that they will hopefully ask for more.

Peter Topley

Diary of Meetings Field meetings

(continued from the back cover)

The Conchological Society of Great Britain & Ireland

Saturday 7th December 2024: INDOOR MEETING with exhibits and lecture (NHM with Zoom link)
Guest speaker: Louise Firth (Plymouth University). 'Limpets: ecosystem engineers that provide ecosystem services.'
14.00 ─ 17.00 (13.45 Zoom sign in – pre-register with Circa):
Angela Marmont Centre, Natural History Museum, London SW 7 5BD.
(Council members please note that there will be a Council meeting before this meeting (Live and Zoom).)

Further field meetings are often planned, (including some opportunistically, often at short notice) the details of which will be posted onto the Conchological Society website. Society members are encouraged to check this regularly for notification of such meetings as well for updates on the other fixed dates.

How to become a member of the Conchological Society

Subscriptions are payable in January each year, and run for the period 1st January to 31st December. Members joining later in the year will receive all publications issued during the relevant calendar year. • Ordinary membership £33 • Family/Joint membership £35 • Under 18 (receiving Mollusc World only) £5 • Student membership £15 • Institutional subscriptions £47
In view of the high cost of postage for distribution from the UK, members living in the Republic of Ireland and Europe will be asked to pay an additional postage charge of £8, and members living in the Rest of the World an additional postage charge of £17.

See website for further details. Payments in sterling only, to Catherine Jagger, CIRCA Subscriptions, 14 St Barnabas Court, Cambridge CB1 2BZ, (shellmember@gmail.com). For UK residents we suggest payment by standing order, and if a UK tax payer, please sign a short statement indicating that you wish the subscription to be treated as Gift Aid. Another simple and secure way of paying for both UK and overseas members is by credit card online via PayPal from http://www.conchsoc.org/join. Overseas members may also pay using Western Union, but a named person must be nominated, so please use the Hon Treasurer's name, Brian Goodwin.

How to submit articles to Mollusc World

Copy (via e mail, typed or handwritten) should be sent to the Hon. Magazine Editor (contact details above). If sending copy using e-mail please include a subject line 'Mollusc World submission'. When emailing several large file attachments, such as photos, please divide your submission up into separate emails referencing the original article to ensure receipt. Electronic submission is preferred in Microsoft Word. Images and Artwork may be digitised, but we recommend that a digital image size 200Kb- 1Mb (JPEG preferred) be sent with your submission.
All originals will be treated with care and returned by post if requested. Authors should note that issues of the magazine may be posted retrospectively on the Conchological Society's web site. Due to other commitments, please aim for **copy intended for the November 2024 issue to be sent to him before 2nd September 2024**; inclusion in a particular issue is at the Hon. Editor's discretion and depends upon the space available but contributions are always welcome at any time.

Membership update

The following Conchological Society members have not previously been included in either this column of Mollusc World or in the latest edition of the Members' Guide (2022). Please note that to be included here members must sign a data protection consent form. If you have not been included and now wish to be please contact Catherine Jagger at CIRCA subscriptions (details below). The codes after the e mail addresses indicate a member's interests: **B** conchological books **C** – Conservation; **E** – Ecology and pollution; **G** – General malacology including genetics/physiology; **Nf** – Foreign non-marine.

New members Dr A.S.H. Breure bbreure@xs4all.nl B C E G Nf
Mr M. Birtle, 10 Avon Grove, Billingham, TS22 5BH m_birtle@hotmail.com

Updates Mr G.H. Green harryggreen233@gmail.com Dr A. Menez alexmenezgib@outlook.com

Some key Conchological Society contacts (see web site for additional contact details)

HON. PRESIDENT: Ben Rowson
Amgueddfa Cymru/National Museum Cardiff,
Dept. Biodiversity & Systematic Biology, Cathays Park, Cardiff,
CF10 3NP. president@conchsoc.org

HON. GENERAL SECRETARY: Rosemary Hill
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secretary@conchsoc.org

HON. TREASURER: Currently vacant.
All enquiries to Brian Goodwin treasurer@conchsoc.org

HON. EDITOR OF THE JOURNAL OF CONCHOLOGY:
Robert Forsyth journal@conchsoc.org

HON. EDITOR OF MOLLUSC WORLD: Peter Topley
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please apply to: Tom Walker Email: sales@conchsoc.org

RECORDING

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Tolleshunt Knights, Essex, C05 0RX.
marine@conchsoc.org Phone: 01621 810141

HON. NON–MARINE CENSUS RECORDER: Ben Rowson
(contact details see under Hon. President)

HON. CONSERVATION OFFICER
Mags Cousins conservation@conchsoc.org

SUBSCRIPTIONS and MEMBERSHIP

Please send subscriptions or directly related enquiries to
Catherine Jagger, CIRCA subscriptions, 14 St Barnabas Court,
Cambridge CB1 2BZ. shellmember@gmail.com

For general membership enquiries please contact: -
HON. MEMBERSHIP LIAISON OFFICER: Pat Robbins
125 East Lane, West Horsley, Leatherhead, KT24 6LJ.
membership@conchsoc.org

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.

How to attend

Indoor meetings are normally held at the Natural History Museum, Cromwell Road, London (nearest underground station South Kensington) at intervals of four to six weeks between October and April. The main event at these meetings is usually a lecture by a guest speaker or society member. Most meetings also include a show-and-tell session when people have an opportunity to show specimens and anything else of molluscan interest to those at the meeting, and get comments from them. There are also opportunities for informal discussions over tea/coffee. The meetings take place in the Angela Marmont Centre for UK Biodiversity. To find this most easily, come into the Museum at the main entrance. In front of you, you will find a large blue whale skeleton. At the far end of the blue whale skeleton, turn left down a passage past a shop on the right and a cafeteria on the left and you'll see stairs leading down to an open glass-fronted lower-level atrium. The Centre is not open-access, so you will need to ring the bell to the right of the door (close to the end of the atrium) to gain admission. To avoid a long queue at the entrance, it is possible to book a (free) museum entry time slot at https://ticketing.nhm.ac.uk/events.
Attending by Zoom (when available): It is ESSENTIAL to let Catherine Jagger at CIRCA (shellmember@gmail.com) know of your intentions to attend by Zoom, preferably at least one week prior to 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. Please ensure that you join before the 14.00 start as late admissions may be impossible.
News updates will also appear on the Society's website.
Field meetings. Specific meeting arrangements and any changes will appear on the Society website which Society Members are advised to visit regularly. It is essential for those wishing to attend ANY of the field meetings, to contact the leader in advance (ideally at least a few days before) to book a place and obtain further details.

Sunday 15th September – Sunday 22nd September 2024. FIELD MEETING (marine): Anglesey.
Leader: Simon Taylor (ukseashells44@gmail.com;01621 810141 / 07947 388180). Arrangements in progress: further details will appear on the Society website. If you are interested in attending, please contact the leader.

Saturday 5th October. FIELD MEETING (non-marine): Cheddar area, Somerset.
Leaders: Chris Billinghurst (chris.billinghurst@btinternet.com; 07770 665311) and
Keith Alexander (keith.n.a.alexander@outlook.com; 07394 251990).
A meeting focusing on updating the Society's knowledge of *Ena montana*. This rare snail has been known in the Cheddar area for over 100 years but some of the older records are difficult to localise. The aim of this field meeting is to check if it still can be found in Long Wood Nature Reserve (where it was reported in 1987 by Arthur Chater and again in 1992, by John Boyd), so we have a good chance of finding some, but also another area with no specific records but with apparently suitable habitat in plenty (the privately owned Cheddar Wood, where public access is not normally possible). This meeting will be a joint meeting with the Somerset Wildlife Trust.
Please note that both woods are suffering from severe ash die-back and if there is a Met Office weather warning for wind the meeting will be cancelled. Long Wood is now closed for general public access because of the ash die-back so we will be entering by the rear entrance. Walking sticks are advised. Please also note that mobile phone reception is very patchy on Mendip.
Meet at 10.30am at the Blackmoor Nature reserve car park at Charterhouse for car sharing to a lane where there is very limited parking on the grass verge for no more than 3 cars. It is a short, but steep walk to the rear access of the site and involves climbing a gate. Blackmoor car park is at ST5055 5572, just east of the Charterhouse Centre (*not the centre car park).* It is a 15-minute drive from Blackmoor reserve to the Cheddar Wood car park. Meet at the Aggregate Industries *office (not quarry)* car park at ST4486 5593 on the Cheddar to Shipham road. This car park is the second quarry entrance on the right when travelling from Longwood. Please reverse park – this is a quarry safety requirement.

Saturday 12th October 2024. FIELD MEETING (non-marine): Wyre Forest, Worcestershire.
Leaders: Rosemary Hill (rosemaryhi@lineone.net; 0121 4431459) & Rosemary Winnall. This will be a joint meeting with the Wyre Forest Study Group (WFSG). Arrangements in progress: further details will appear on the Society website.

Saturday 19th October 2024: INDOOR MEETING with exhibits and lecture (NHM with Zoom link)
Guest speaker: John Hutchinson (Senckenberg Museum of Natural History Görlitz). 'A slug saga: historical confusions and new findings about *Ambigolimax parvipenis*.' A talk including a fascinating detective saga into what had been named '*Ambigolimax nyctelius*' 14.00 ─ 17.00 (13.45 Zoom sign in – pre-register with Circa):
Angela Marmont Centre, Natural History Museum, London SW7 5BD
(Council members please note that there will be a Council meeting before this meeting (Live and Zoom).)

Saturday 9th November 2024. REGIONAL MEETING in Cardiff.
Organisers: Ben Rowson, Anna Holmes and Martin Willing. The event will be held in the National Museum Cardiff / Amgueddfa Genedlaethol Caerdydd. The meeting will consist of short papers with a particular focus on recent Welsh molluscan projects including those associated with the HLF supported Natur am Byth '(Back from the Brink') project. There will also be opportunities to tour the mollusc collections within the department including several recently acquired ones.
Contributions of presentations (up to 20/25 minutes) will be welcomed. Please contact the organisers for more details.
It is likely that a Conservation and Recording Forum meeting will be held on Sunday 10th November.

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