

The plan is to look at Rhossili Bay on the Friday and The Worm's Head on the Saturday.

This site is at the western end of the Gower Heritage Coast. The Gower is an area of outstanding natural beauty: stupendous cliffs and long beaches. The meeting should see the Barrel Shell *Acteon tornatilis* laying eggs in the sand between the tide-marks on Rhossili Beach. There is a long list of sand-living species from this beach. The Worm's Head should be good for rock dwelling species and Nudibranchs.

Please let Celia Pain know if you would like to attend.

Please arrange your own accommodation. Advice can be given by Celia.

FIELD – Saturday 14 July
River Loddon, Earley, Berkshire
Leader: Rosemary Hill
0118 966 5160 (home)

This meeting should provide an opportunity to sample the River Loddon which rises in the chalk of the Hampshire Downs and is relatively unpolluted. Among the species that can usually be found is *Theodoxus fluviatilis*. Old shells of *Viviparus contectus* have been found in dredging deposits but live animals have not been seen recently. It is also planned to examine a small area of marshland that has escaped the drainage that has affected other wetlands in the vicinity. If time permits, there are also former gravel pits that may be investigated. Should the weather become unpleasantly hot it may be possible to continue to examine material indoors. Meet at 10:30h at the bridge over the River Loddon on the A329 at the public footpath sign next to the petrol filling station (SU 766716). Or for those coming by car at 10:00 h at Loddon Bridge Park and Ride (parking spaces

reserved in front of the small office at SU 768717) signposted from the end of the A329M (first exit northbound after the M4 exits). This car park is behind, but separate from, the multiscreen cinema car park. For those coming by train the easiest station is Earley. Walk to the end of Station Road then turn left down Wokingham Road (A329) until the river is reached (about 20 mins). Alternatively, the Park and Ride bus leaves from stop SY in front of Thames Tower just across the Pelican crossing from Reading railway station.

Please inform the leader if you intend to come. Bring wellingtons and water sampling equipment.

YCS - Saturday 1 September
Squares SE 36 and SE 46, Boroughbridge area.
Contact: David Lindley (0113 2697047) (home), david.lindley3@btinternet.co m

Meet at 10:30h in the town centre car park as signposted, grid ref. SE 398667.

INDOOR - Saturday 8 September:
Museum of Scotland, Chambers Street, Edinburgh
10:00h in the Dunfermline Room
Man and Molluscs: Diversity and Commercial Uses of Molluscs
Joint meeting with National Museums Scotland
Further details from Claire Pannell (C.Pannell@nms.ac.uk)

FIELD - Sunday 9 September
Pease Dean, Berwickshire.
Joint meeting with National Museums Scotland
Leader: Adrian Sumner (01620 894640) (home)

FIELD - Saturday 15 September
Lincolnshire. Slug search.
Leader: Chris du Feu

(01427 848400) (home)
NHM – Saturday 6 October
14:30h in the Demonstration Room.
We welcome as Guest Speakers Fred Naggs and Dinazarde Raheem from NHM London on the subject of 'Sri Lanka: a threatened centre of land snail endemism and diversity'.

YCS - Saturday 6 October
Squares NZ 20/21/30 south of Darlington.
Contact: David Lindley (0113 2697047) (home), david.lindley3@btinternet.co m

Meet at 10:30h at the parking area on A66 at Scotch Corner, grid ref. NZ 209052.

FIELD - Saturday 20 October
Worcestershire. *Malacolimax tenellus* search.
Leader: Harry Green (01386 710377) (home)

NHM – Saturday 3 November
14:30h in the Demonstration Room.
We welcome as Guest Speaker Robert Cameron from Sheffield University on the subject of 'Chasing snails Down Under'.

WKSHP – Saturday 24 November
The annual workshop held in Woking offers members the opportunity to receive tuition on identifying difficult groups. Bookings to Judith Nelson (01483 761210)(home)
Provisional subjects: Identification of Lymnaeidae, Planorbidae and small bivalves

NHM – Saturday 8 December
14:30h in the Demonstration Room.
We welcome as Guest Speaker Tom Walker from Reading on the subject of 'Shells on stamps'.

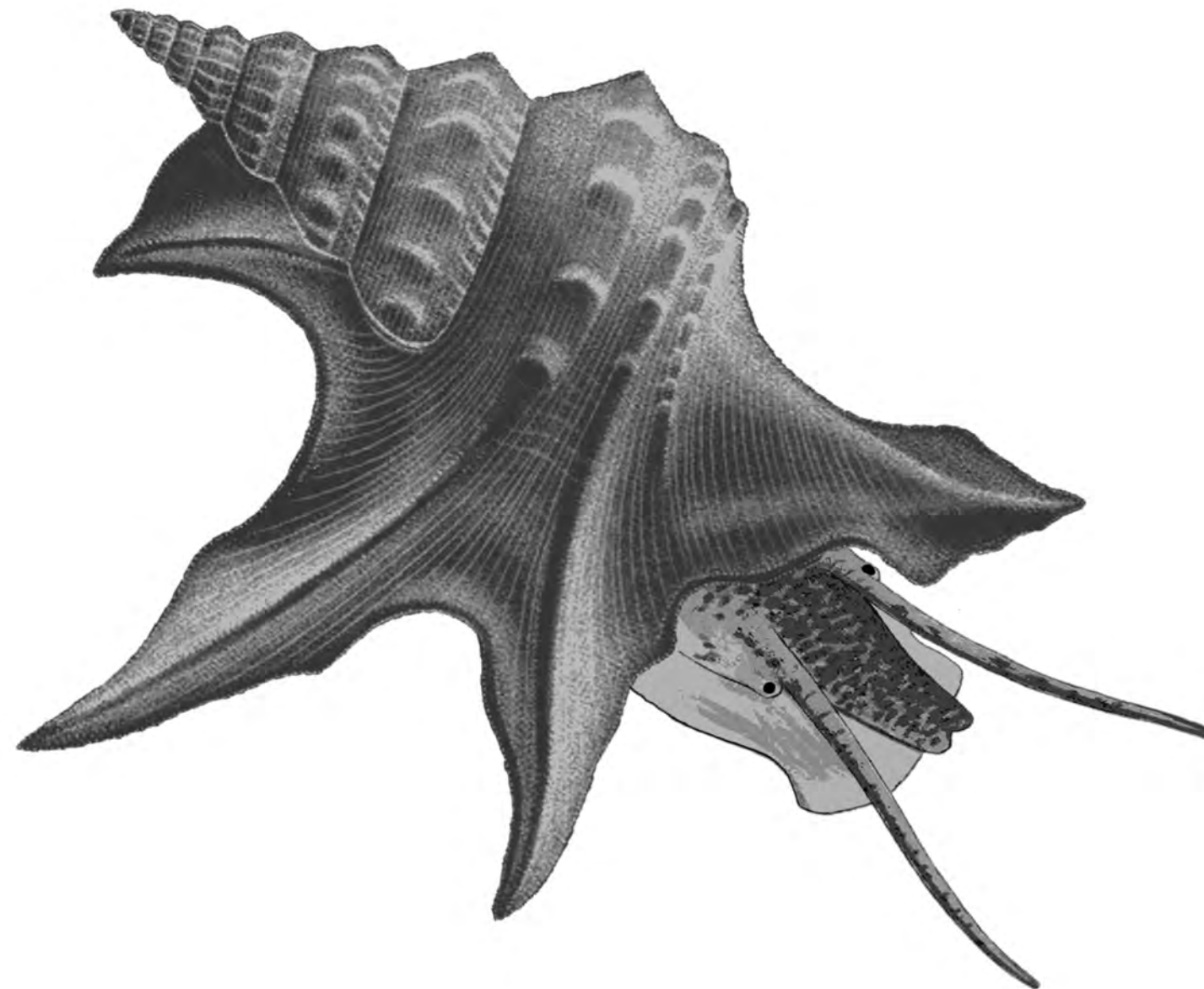
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Mollusc World

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THE MAGAZINE OF THE CONCHOLOGICAL SOCIETY OF GREAT BRITAIN & IRELAND

STOP PRESS: Adrian Norris: Acting Recorder Non-Marine Mollusca

Adrian first joined the Conchological Society of Great Britain & Ireland in 1965. He is a Life Member and a Past President of the Society. He has been the recorder for mollusca for the Yorkshire Conchological Society and the Yorkshire Naturalists' Union for over 25 years.

The Conchological Society's recording scheme is about to be upgraded with all future records being entered into a national database, with most of the old records also

being upgraded into the database in due course. This will allow the information gathered to be accessed via the NBN gateway. The new database will make it possible to produce maps to a much higher standard – 1 kilometre square, rather than the present 10 kilometres square maps that we are used to.

A new recording card, based on the latest checklist, is being produced which will help recorders get used to the many changes in nomenclature. Help with the many identification problems this new list has identified will be available through a

network of volunteers willing to help with these difficult groups. If you are holding records awaiting the appointment of a new recorder, need some help or are willing to help, please contact me. I am particularly interested in hearing from anybody who holds molluscan records in any electronic format, or database, and who is willing to transfer their data to the Society's database to help with the national recording scheme.

Contact Address: Mr Adrian Norris
17 West Park Drive Leeds LS16 5BL

E-Mail AdrianXNorris@aol.com

Mollusc World

Mollusc World is published 3 times a year by the Conchological Society of Great Britain & Ireland at the end of March, July and November, and is issued free of charge to members.

We invite all members to contribute to *Mollusc World*. In addition to the traditional articles, field meeting reports, diary of events and so on, we will be including features, profiles, news from recorders, and identification keys. Do not feel that you have to write long or full page articles. We would particularly welcome short pieces, snippets, pictures, observations, new records, book reviews, mollusc recipes, cartoons, requests for information - anything on molluscs! *Mollusc World* will become an important means of staying in touch with the membership and communicating information to the conservation agencies and promoting molluscs to the wider biological community. So, please contribute!

Copy is acceptable in any format - electronic, typed or legible hand-written. When sending copy by email, please ensure that you include *Mollusc World* in the email title and also include a few lines of text in your message as well as an attachment. Unidentified attachments may not be opened! Please do not include diagrams or pictures embedded in the text - send them as separate attachments. To enable the best reproduction and resolution, any original artwork, diagrams, colour prints or slides should also be sent by 'snail' mail. All will be treated with care and returned. At the present time, we are unable to give precise copy deadlines until we are up and running, but contributors should assume that copy date is a minimum of 8 weeks before publication date.

Neither the Hon. Editor nor the Conchological Society of Great Britain & Ireland accept responsibility for any opinions expressed by contributors.

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Society Notes

Founded in 1876 the Conchological Society of Great Britain & Ireland is one of the oldest existing societies devoted to the study of molluscs. The Society promotes the study of molluscs and their conservation through meetings, publications and distribution recording schemes. The Society publishes *Journal of Conchology* (twice a year) and *Mollusc World* (three times per year).

The Conchological Society of Great Britain & Ireland is Registered Charity No. 208205

The Society's Web Site is at:
<http://www.conchsoc.org>

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These cover 1 January to 31 December and are due on 1 January each year:

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Institutional Membership (GB and Ireland)	£47.00
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Ammonites and the mating game Phil' Palmer

"It is a remarkable fact that all ammonites with lappets (but not necessarily those with rostra) are smaller than those with a simple aperture which most closely resemble them in other respects". W. J. Arkell's succinct summary (1957) of the facts almost says it all, but he was shy of interpreting them, though ideas about sexual dimorphism in ammonites were widespread at the time. The notion of dimorphism in ammonites has a long history but only a brief outline follows. But first, two useful terms may be introduced: microconch (m) for smaller forms with lappets; and macroconch (M) for larger forms with simple apertures. The terms were introduced in this sense by J. Callomon 1962, and fig. 1 illustrates the difference.



As long ago as 1840 a Frenchman, M.H.D. de Blainville, proposed the idea that ammonites were bisexual. He offered no examples, but it was a safe assertion since ammonites are cephalopod molluscs and all known cephalopods are bisexual. His suggestion was that, by analogy with the living *Nautilus*, there would be differences in the inflation of the body chamber, with the egg-bearing female being the larger. But not all cephalopods are dimorphic: Argonauts have minute males parasitic on the much larger female, while the sexes of *Sepia* spp. are morphologically indistinguishable.

Seven years later A. d'Orbigny (1847) offered an example of dimorphism in the Middle Jurassic ammonite *Reineckia*, and based his distinction on slight differences in inflation of the shell, following de Blainville by analogy with *Nautilus*. The idea of sexual dimorphism was certainly in the air but the real criterion for distinguishing males from females still eluded palaeontologists.

W. Waagen in 1869, while classifying the Oppeliidae, noticed that two evolving lineages showed similar, but distinct, forms at the same stratigraphical level throughout the Middle and

Upper Jurassic. Nevertheless, he rejected the notion that the two parallel lineages were males and females of just one evolving lineage.

P. Reynes in 1879 was easily convinced that most species of ammonites have two distinct forms, differing by sizes and ornament, whenever there was sufficient material, and asked "To what to attribute this difference..... if not to sex?"

Then, in 1886, Quenstedt, after noting two examples of small forms with lappets occurring with larger forms with simple apertures, seemed unable to commit himself to the idea that these were males and females of the same species. It is a common experience in science for a worker to have the answer to a problem in his hand and not to recognise it. Analogy with *Nautilus* again got in the way.

The model of *Nautilus* was a mistake leading palaeontologists to compare only macroconchs, large and without lappets, for size differences, while regarding smaller microconchs, with lappets, as irrelevant. Lappets were accepted as significant but no one had any idea what they signified. It continued to be believed that the sexes would be distinguished as small differences of inflation in the body chambers of ammonites. Of course there were many objections as authors cited the contrary conditions in *Argonauta* with its minute males, and *Nautilus* and *Octopus vulgaris* in which the males are slightly larger, as is also the case with humans. So the inductive argument by analogy was not helping. But the analogy with *Nautilus* would not go away and served only as a block to understanding the real significance of the microconchs with lappets.

Relentlessly, the 'fog of research' continued. S.S. Buckman (1887—1907) monographed the ammonites of the Inferior Oolite and amply illustrated the presence of two forms: microconchs with lappets and macroconchs with simple apertures, but doubted that he was looking at males and females, and therefore made nothing of it.

Then in 1913, Rollier went back to the Oppeliids and noted in the Upper Jurassic, small forms with lappets associated with larger forms with simple apertures, but saw the different forms only as useful for classification.

By now we are well into the 20th century, and some seventy years on from de Blairville's claim that ammonites were almost certainly bisexual. Nevertheless, L.F. Spath 1928, while considering the ammonites *Distichoceras* and *Horioceras*, wrote "Rollier.....even held that they were merely the female and male of the same species, but there is little concrete evidence in favour of this view". The tone was still sceptical, and I wonder what he had in mind that could possibly count as "concrete evidence".

A marvelous piece of field research by Brinkmann (1929) resulted in a vast collection of Kosmoceratid ammonites collected cm—by—cm through the lower part of the Oxford Clay near Peterborough, which showed two evolving lineages. On the one hand there were large evolving forms with entire apertures, matched by another series in parallel

but with lappets, each paired form was collected at the same level. Yet he saw them as two different evolving lineages of genera. Each lineage evolved independently, but the pairing was constant. But he was only interested in measuring sizes in each lineage.

Even in the *Treatise on Palaeontology*, Arkell (1957 pp. L87 & L90) gave only a brief discussion of dimorphism, which played no part in the classification of the ammonites.

But then came a decisive argument from J. Callomon (1962) who brought together the greater part of the field of study, producing convincing examples of dimorphic pairs, each pair collected from one distinct horizon. For purposes of objectivity, the terms macroconch (M) and microconch (m) were introduced to designate matching dimorphic pairs from the same stratigraphical level, without committing oneself to the question of whether the two forms were males and females of the same species.

Acceptance is growing, especially among younger palaeontologists, and examples accumulate at increasing rate. It is an interesting historical study of the growth of an idea backed by evidence which no one could see the significance of, because workers were using the *Nautilus* as a model; while the case with ammonites was not subtle at all, the differences were obvious once the model of *Nautilus* was abandoned, and the significance of lappets appreciated. Of course we do not know in the same way that we know about the sexes in *Nautilus* which can be demonstrated, and the shell inflation measured. But we do have an increasing

body of evidence in support of dimorphism, and a growing conviction that the theoretical explanation, that the two forms are males and females, is correct.

Nevertheless most ammonites cannot be matched as dimorphic pairs, and this may be due to collection failure, or to the possibility that dimorphic differentiation took place a number of times when it was an advantage to the ammonites. Another possibility may be that ammonites were basically protandrous hermaphrodites, being male in the young stage and egg-bearing females at a later stage, in the same animal. Then, some stopped growing after the male stage and died, and later evolved lappets on reaching maturity.

It is all speculation but fascinating stuff for discussion, and this article is shamelessly filched from Callomon's 1962 paper, which was published in the Leicester Literary and Philosophical Society, which suggests that he had trouble with referees who were not convinced. Off prints are rare, but, if you can get hold of a copy, I am sure you will be convinced, even if there is no 'concrete evidence.

References:

Arkell, W.J. *et al.*, 1957. Cephalopoda: Ammonoidea. *Treatise on invertebrate palaeontology* (edit. R.C. Moore) part L.
Callomon, J. 1962. Sexual Dimorphism in Jurassic Ammonites. The Bennet Lectures, delivered in the Department of Geology in the University of Leicester, May 31, 1962, and published in the Leicester Literary and Philosophical Society. His extensive bibliography covers most of the key works on ammonite dimorphism.

Planned Symposia:

Sexual selection in Molluscs
Inventorying the molluscan fauna of the world
Micromolluscs
Molluscs as models in evolutionary biology
Molluscs in ecotoxicological research
Molluscs and pest control
Molluscan models: advancing our understanding of the eye
Zoogeography of the non-marine molluscs of the Eastern Mediterranean
Biodiversity at crossroads: freshwater bivalves
Neogastropod origins, phylogeny, evolutionary pathways and mechanisms
Diversity and ecological adaptations in intertidal molluscs
Heart and circulation in molluscs
Quaternary malacology

Accommodation

Convenient, though modest, accommodation on the campus (some double rooms) for 20 and 27€ per night per person including breakfast.
Hotel accommodation in city from 59€ single and 94€ double per room per night.

Pulmonates on Port St Mary ledges

Steve Wilkinson

Last summer the family and I were visiting the Isle of Man to attend a reunion to mark the end of 114 years of marine science at the Port Erin laboratory. The station was finally, after many threats over the years, succumbing to the inevitable. In many ways it was a sad occasion, a good number of the attendees having spent a number of years there with lots of happy memories, but it was also an opportunity to renew friendships and explore some old haunts.

One of the amazing things about travelling with a baby is how something so small can take up so much space in the car. As a result I sadly had to leave all the normal sieves, buckets etc. at home, deciding instead it would give me a good opportunity to concentrate on photography (the camera now accepted as part of the normal baby paraphernalia).

The weather, which can be a bit hit and miss on the island, was fantastic and my wife very kindly allowed me a few days off part-time baby duty to explore some of the local beaches. One of these – Port St Mary – is famous within a relatively select community of rocky shore ecologists for the large, more or less, uniform limestone ledges which lend themselves to field experiments. This has resulted in a long line of literature exploring the relationships between the barnacles, limpets and fucoids.

The beach has a fairly typical rocky shore molluscan fauna. The upper shore has an abundance of *Littorina*

saxatilis and *Melarhaphe neritoides* amongst the barnacles and crevices. Below this of course the inimitable limpets – *Patella vulgata* along with relatively common *Gibbula umbilicalis*, *G. cineraria* and *Littorina littorea*. Lower down there is also evidence of a species burrowing in the limestone but without any means to extract them I couldn't identify them further. I busied myself primarily experimenting with close-up shots of the common upper shore species and then had a rummage around further down the shore. Nothing particularly interesting appeared until I came across a large lower shore boulder one side of which formed a protected overhang. Here whilst sliding around taking pictures of the sponges I spotted a couple of tiny molluscan specimens on the sponge and amongst the red algae. Both at least looked different from anything else on the beach. I popped both in a tube of alcohol and thought nothing more.

Back at home they proved a little more difficult to identify than I expected. After some time leafing through Graham and Thompson & Brown my only conclusion was they were either new to science (which seemed particularly unlikely given how well explored the beaches on the island are!) or *Acteon tornatalis* (in a very untypical habitat) and *Lamellaria perspicua*.

Some time before, Jan Light had very kindly offered to have a look at anything I was unsure of and some months later I passed my specimens on to her. Depressingly both identifications turned out to be wrong – the identifier having been tricked by the lower shore nature of the boulder. They turned out to be the 'marine' pulmonates, *Leucophytia bidentata* and *Otina ovata*. Looking back at the boulder (one of the handy things about having a camera on the shore) it did span a relatively large section of the intertidal zone having *Fucus spiralis* growing on top (see Figure 1, page

9). Even so, the boulder would definitely be completely submerged at high tide.

Excitedly I popped the new names into the NBN Gateway (www.SearchNBN.net) – keen to see whether there were already records of these from the Isle of Man. The Gateway includes most of the Societies computerised records and also a number of other sources. While by no means definitive it does provide a reasonable indication of the currently recorded distributions of species. According to the data on the Gateway, *Leucophytia bidentata* had been recorded there, but there appeared to be no records of *Otina*. I also checked the "Marine Fauna of the Isle of Man" last published in 1962. This refers to a single record of *Otina* at Santan Head (SC3370) recorded in Forbes & Hanley, 1848-53. This definitely made up for the depression of the misidentifications!

The moral of the story to the less experienced shellers out there (like me) is "Don't forget the pulmonates!" they can turn up in some unusual places. It also seems even after 114 years of research the Isle of Man still has a few secrets left to discover.

I would like to thank Jan Light for help with the identification and my long suffering wife Fiona for putting up with such an odd hobby!

Port St Mary ledges (7th July 2006) SC 200667

Full species list:

Lepidochitona cinerea
Patella vulgata
Gibbula cineraria
Gibbula umbilicalis
Littorina littorea
Littorina obtusata
Littorina saxatilis
Nucella lapillus
Mytilus edulis
Leucophytia bidentata
Otina ovata

15-20 July 2007

World Congress of Malacology

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Updates available at <http://www.ucd.ielzoologylunitas> and at <http://www.naturalsciences.be/wcm2007>

DEADLINES:

Travel grant applications 15 March 2007

End of reduced registration fees 30 April 2007

End of abstract submissions 31 May 2007

Congress Registration Fees: before/after 30 April

Full registration, UM-members 220/270€

Full registration, non-UM members 280/330€

Student, UM member 110/150€

Student, non-UM member 160/200€

Fees cover abstract book, icebreaker, lunches and drinks on Monday, Tuesday, Thursday and Friday and wine/beer poster reception, but not congress dinner (50€) or Wednesday excursions.

Papillifera papillaris (Müller, 1774) in Gibraltar

Alex Menez The University of Wales, Cardiff and The Gibraltar Museum, Gibraltar

In September 1989 I went to a wedding reception at the Gibraltar Garrison Library (Photo 2, page 9). Ever on the lookout for snails and slugs, I walked around the Library Gardens and found 3 specimens of a clausiliid on a limestone wall, about 1 metre from ground level. This was a big surprise: I knew clausiliids had not been recorded from Gibraltar, nor indeed from anywhere else in southern Iberia. Adrian Norris, on a visit to Gibraltar a few years later, confirmed these live-collected specimens as *Papillifera papillaris* (Müller, 1774).

Another social function at the Library, this time a retirement in May 2006, found me once again searching on the walls and vegetation. There, on the same wall I had originally found the snails 17 years earlier, were about 10 live adults crawling around! (Photo 3, page 9). I took home a few to keep and study.

The snails live happily in their new home that I set up with soil, empty *Rumina decollata* (Linnaeus, 1758) shells (in which the snails love to shelter), and rocks covered with algae. The snails feed on lettuce but prefer algae. Over the years I have perfected an algal-growing system for feeding snails that is rapid and foolproof. I place rocks in a bowl with water, put this out in my garden (also works indoors under a lamp) and in a couple of days you have an edible algal film on the rocks.

I keep the *Papillifera* habitat container in my garden (along with my other snail habitats such as *Iberus*, *Cantareus* etc.) and throughout the hot summer the snails buried themselves in the soil, not appearing until October, a few days after the first rains. I always place paper with all my snails (plain white kitchen roll is best) and change this weekly. When I picked up the paper to change it, I was surprised to see over 30 tiny baby *Papillifera*s hidden in the folds! (Photos 4 and 5, page 9). Unknown to me, some breeding had taken place, and there were baby snails everywhere.

By February 2007 many of the new snails were feeding well and had reached sub-adult size. They are fascinating to watch as they crawl about on the rocks in their new home and I'll continue to observe them as they grow.

The Clausiliidae (door snails) are widespread throughout the western Palearctic, southern Ethiopia, and the oriental, northern and western Neotropical region. In Europe they reach maximal diversity in the Balkans and Caucasus. *P. papillaris* has a western and central Mediterranean distribution and has been recorded from the Balearics (Süleyman, 2005). It prefers rocky substratum, walls (covered in lichen, mosses and vegetation), and is common in anthropogenic habitats (with some records from these habitats in North Africa). I wanted to find out *P. papillaris*' distribution in Iberia and did an extensive literature survey, and emailed malacologists familiar with Iberian malacofaunas to see if there were any records for this species. Bech (1990) cites early records from 1929 for Tarragona and Barcelona, and records from 1967 for Barcelona. These are the only records for this species I was able to find. Other

malacologists have not found it in Iberia, and have no further records. I have never found the species in southern Iberia, even after many years of fieldwork at many locations. I have sampled in Barcelona as well, but have not found it there.

The species is subject to anthropochorous dispersal (Giusti *et al.*, 1995) and has been transported to many areas in the Mediterranean Basin and other areas in this way (Fechter and Falkner, 1993). Örstan (2006) has found it in Istanbul, and suggested it may have been introduced from Italy on marble as early as 330AD. It has recently been recorded for the first time in Britain as well (Ridout Sharpe, 2005). The snails were found in a country house at Cliveden, Buckinghamshire, and seem to be confined to a balustrade that was brought from a villa in Rome in 1896. The colony is made up of about 100 snails, thought to have been brought in with the balustrade. Anthropochorous dispersal is the most likely explanation for its presence in Gibraltar, too, and the Garrison Library's history substantiates this.

The Library was founded in 1793 by Captain (later Colonel) Drinkwater and is steeped in history. Its fine rooms filled with valuable tomes and artwork provide a sharp contrast with the modern world. The preface to the first minutes of the Garrison Library Committee takes us back to another age, and explains the purpose of the institution (Anon): *Several Gentleman who have long lamented the want of a Public Library in Gibraltar are desirous of forming a Society, for the purpose of, either establishing one by Subscription on a Liberal and permanent principle, or if that Idea should be thought to embrace too serious an Undertaking, to adopt any other Scheme, that may be recommended as more eligible to procure them the perusal of the best and most entertaining modern Publications.*

The Library is an important part of Gibraltar's heritage. But it has not remained a static example of past times; instead it has adapted and changed throughout its 200-year history. Whilst maintaining its charm and character it is now the location of the printing and binding department of the Gibraltar Chronicle, the second oldest English newspaper in the world. And the studious environment provides just the right setting for book launches, poetry recitals and the occasional wedding reception. The building may even become the new venue for the Gibraltar Parliament.

During its military days, when officers and their wives dabbled in natural history and gardening, plants and ornaments from Mediterranean locations would have been brought into the Gardens to augment its collections. Perhaps one of these plants, or ornaments, may have included a few *P. papillaris* and that is how they first came to Gibraltar.

This, and introductions elsewhere, highlight an interesting aspect of clausiliid ecology. Individuals of these molluscs have very

reduced dispersal abilities that are mostly dictated by the proximity of suitable rocky outcrops on which the snails depend for food and shelter. Some snails spend months on a single rock and cannot cross even small distances that are of unsuitable habitat. This has resulted in extreme morphological diversification among these interesting snails (Gittenberger, 1991; Uit de Weerd *et al.*, 2005).

Scale, another very important concept in land mollusc ecology, is also highlighted by these snails. The scale at which the snails are sampled, and the sampling method used, may determine whether or not they are recorded. A detailed and extensive quantitative survey I carried out in October 2006 at the Gardens detected the snails at several locations, but showed that the snails were very clumped in their distribution. For this type of species a random quadrat technique may fail to turn up any individuals, and a timed direct search method (covering a larger area) is more appropriate (Menez, 2001; Cameron and Pokryszko, 2005).

What is remarkable is that the snails have not moved beyond the Gardens into surrounding areas. These areas have the same habitat and support the same molluscan assemblages. This finding, in conjunction with the reduced area where the colony in Britain exists, provides further evidence that these snails, do indeed have limited dispersal abilities. Because of the protected status of the Garrison Library and its Garden, we can be confident that we'll continue to have a viable population of these interesting snails here in Gibraltar for a long time to come.

References

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No shelling without a life-saving certificate

S. Peter Dance

The growing interference of the state in the bringing up of children in the United Kingdom - and possibly elsewhere - is a worrying and controversial trend, but it has yet to become a major issue. It could become one, however, if a few more articles could be devoted to it in the daily papers, articles such as the one that appeared in the *Weekend Telegraph* for Saturday, 27 January, 2007. Under the title "Big Nanny rules", Ross Clark examined the issue at length. The pursuit of total child safety, said this father of two children, becomes counter productive. Restricted to boring playgrounds and denied opportunities to take risks or satisfy an appetite for adventure,

children are likely to gravitate to far more dangerous places, such as railway lines. It seems that excessive monitoring of simple pleasures, such as walking and swimming, has also led to a severe shortage of adults prepared to work with children. Small wonder, he said, that children spend so much time in front of the television set.

Of the few specific instances of bureaucratic interference highlighted by Ross Clark, one, in particular, caught my attention. He had come across a case where a teacher was told that, before allowing children to collect seashells on the beach, he must have a life-saving certificate! Apart from revelling in the absurdity of this notion, I wondered if that teacher rushed away to obtain his certificate or simply refused to let his charges pick up seashells. He may have been bold enough to ignore the

injunction, but as his job could have been on the line he may have complied. Then I began to consider the injunction in the light of my own job: writer of books about seashells for would-be collectors of same, including children.

If I am told that, in future, my books must carry a warning that a child may come to grief while picking up seashells, rather like the warnings on cigarette packets, I doubt that I shall want to write any more of them. On the other hand, if I am allowed to continue advocating the educational, social, and therapeutic benefits of collecting these treasures of the sea, as I have always done, I may write one or two more. In any event, I have no doubt that children will still collect seashells on the beach, whether or not their parents or their teachers have first collected their life-saving certificates.

Older than they look: *Glycymeris* on Israeli beaches

Bas Payne

Dog cockle (*Glycymeris*) shells, often in large numbers, are a common sight on the sandy Mediterranean beaches of southern Israel. Most are worn but still fairly brightly coloured (Fig. 6, page 9). Israeli conchologists have for some time wondered about their age because the dominant species in these accumulations, *G. insubrica* (Brocchi 1814, = *G. violascens* Lamarck 1819), is now very uncommon or even absent today – only a few specimens have been taken live off the Israeli coast in the last hundred years.

In a recent paper, Sivan *et al.* (2006) summarise the literature and publish new information including six new radiocarbon dates. There are now 14 dates on *Glycymeris* shells from Israeli beaches, ranging between 4547+/- 304 yBP and 797 +/- 129 yBP (including a reservoir age correction). The shells are found also in large numbers from Bronze Age and Iron Age sites in the area, such as Lod, Tel Dor, Tel Ashqelon, Megiddo (the Biblical Armageddon) and Tel el-Ajjul, dating between 3500 BC and 500 BC. They conclude that the shells mostly accumulated on the coast between ca. 5500 and ca. 1000 years ago, after which the species became rather uncommon.

Glycymeris is an opportunist filter-feeder living in shallow sandy areas; they suggest that it became common at a time when the sea level stabilised and the inner shelf off Israel became poorer in nutrients and other species became rare; and that its disappearance may be part of a natural succession in which it was replaced by species such as *Maetra corallina*, *Donax trunculus*, *Venus verrucosa*, *Acanthocardia tuberculata* and *Loripes lacteus*.

Glycymeris has a fairly robust shell; and many of these Israeli shells are abraded and broken, often with natural perforations worn at the umbo. However most are still coloured, nearly a third (in random samples taken from a number of beaches) are complete, and more than a tenth of the complete valves are described as “fresh”.

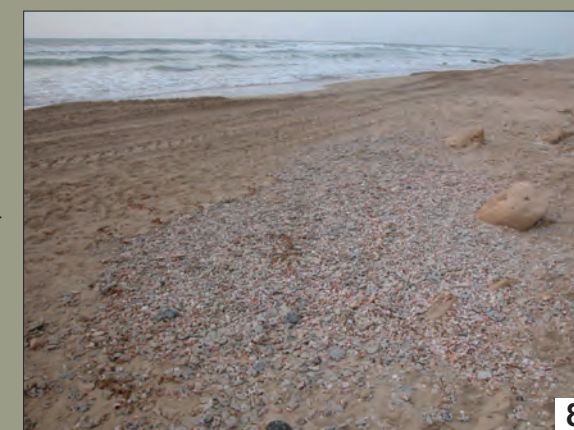
It is not uncommon for species to be found on British beaches which are not found living in the area today; often they are stained suggesting anoxic burial, or have lost much of their colour, and people have long suggested that they may be sub-fossil. But this is an interesting case in which shells which are found in abundance on beaches, and which have been shown by radiocarbon dating to be several thousand years old, are still unstained, preserve their colouration, and some appear fresh.

Reference: Sivan, D, M. Potasman, A. Almogi-Labin, D.E. Bar-Yosef Mayer, E. Spanier and E. Boaretto, 2006: The *Glycymeris* query along the coast and shallow shelf of Israel, southeast Mediterranean. *Palaeogeography, Palaeoclimatology, Palaeoecology* **233**: 134-148.



Images 1-12 relate to specific articles within the magazine.

1. *Fucus spiralis*. Page 5
2. The Gibraltar Garrison Library. Page 6
3. Two adult *Papillifera papillaris* (Müller, 1774) on a lichen-covered limestone wall in the Gibraltar Garrison Library Gardens. Page 6
4. Adult and young *Papillifera papillaris* (Müller, 1774) in captivity. Page 6
5. Young *Papillifera papillaris* (Müller, 1774) bred in captivity. Page 6
6. *Glycymeris* plate. Page 9
7. *Glycymeris*. Page 9
8. *Glycymeris*. Page 9
9. Finvarra and Rine Point - one of the main survey areas in the Burren Field Meeting. Credit Julia Nunn. Page 15.
10. Shipworms. Page 10
11. Shipworms. Page 10



Oil Spillage in the Menai Strait

Tom Clifton

During June 2006, it was reported that there was a five mile long oil slick in the Menai Strait and some members who attended the Anglesey field meeting to this area in April 2006, have expressed some concern about it.

The spillage was of diesel fuel oil and had come from the disused Ferrodo Plant on the mainland shore of the strait near to Caernarfon. After consulting with members of the marine survey team at the Countryside Council for Wales in Bangor, and doing some shore surveys myself, it was considered by CCW that the event had not been serious enough to warrant a clean up operation, and it was

expected that most of the oil would evaporate away.

There was one area at Gallows Point near Beaumaris on the Anglesey shore where there was a shimmer of oil on the surface of the water and a strong smell of diesel oil, see picture. Gallows Point forms a bay between it and Beaumaris Pier and the tidal currents in that area are not strong enabling the spillage to accumulate locally. In most other areas of the strait, the tidal currents are strong four times daily and the oil did not accumulate.

It appears from the observations I have made that the incident has not caused serious damage to the marine environment in that area and visits made six months after the event have shown that there is now no trace of it

One good thing that has emerged from this event is that the Countryside Council for Wales is setting up an emergency response team consisting of experts and volunteers that can be called upon in the event of a major oil spillage.

The traumas of Retrieving Shipworms

Tom Clifton

On 4th October 2006, I was surveying a remote, 2½ miles long stretch of sandy/stony shore some distance east of Pwllheli on the Lleyn Peninsula which eventually leads to Pen-chain headland SH435353, once the site of a Butlin's Holiday Camp, now a private holiday village.

There was not a wide range of molluscan species on the beach which, from the upper drift line to the sub littoral, was a mixture of sand and pebbles and was quite lifeless as is often the case on some stony shores in this area; most of the marine life here seems to be sub littoral. About 1½ mile along the drift line at the point SH420355, I came across something I had been hoping to find for many years. It was a large piece of timber, not wreck timber, but circular in section, light in colour and probably an old piece of pier strut. On one side there were many small holes looking very much like woodworm, but on the other side where the surface had broken away, there was a mass of large holes up to ¼ in diameter, I had finally found one of the shipworm species. Some of the holes still had the white calcareous linings.

Having another mile to travel along the shore to complete the survey, I left the log in the middle of the shore in a prominent position so that it could not possibly be missed on my return. The shore was unusual in that although there were not many species, shells of *Pecten maximus* were abundant, some old and worn, some fresh and some with the recently dead animal still inside. Also present were *Lutraria magna* and *Lutraria angustior*, both new to me.

On my return journey I toiled with the problem that shipworms must sometimes occur in very large pieces of timber as was the case in question, and how on earth was I going to carry it the 1½ miles back to the car? The specimen was large, 10" in diameter and 2' 6" long, wet through and was extremely heavy.

Eventually my initiative kicked in as it sometimes does, and managed to find some old thick rope on the drift line which I was partly able to untangle, the sea ties some very good knots, and tied it into a large loop which I doubled and slung round my neck and over my shoulders. I was now able to carry the log, slung across my chest in a rope sling and with my rucksack on my back, with remarkable ease.

There was a long length of excess rope trailing behind as I did not have a knife with which to cut it, and on the greatly frayed end there was a mass of miscellaneous rubbish, tins, paper, seaweed and other unmentionable items which I had not been able to untangle. My trousers

were now wet through with the water that poured out of the holes in the log but as there was nobody else on the beach at the time, it didn't really matter, I was too happy with my find to worry. There was no way this specimen was going to be left behind.

On reaching the end of my journey, other people started appearing some distance ahead so I jettisoned the log and rope along with the rubbish in the sand dunes and was able to bring the car to a nearer location to retrieve the log without too much embarrassment, in spite of the strange glares from a few bewildered onlookers.

Closer examination at home revealed that the boreholes were made by *Psiloteredo megotara* and opening up the log revealed a mass of boreholes and hundreds of shells some in complete pairs though there were no live specimens. It was interesting to note that the animals had avoided the hard wood knots in the timber by spiralling round them: they also avoided the outer ½ of wood as this presumably becomes waterlogged with salt water. They seem to prefer the softer, dryer parts of the wood in which to bore.

I thought that after 30+ years of shell collecting that this was a good find. Little did I know then that within as little as 10 weeks, my initiative and determination were going to be put to the test again to a greater extent.

On 11th December, I was on the North West coast of Anglesey just south of Church Bay at Porth Trwyn SH296877 where I found some beautiful but large examples of limestone that had been bored out by *Hiatella arctica*, not the usual rounded boulders, these were freshly broken slabs probably disturbed by the recent severe gales. Some of the empty shells were still inside the holes. This was a perfect set of props for a talk I was going to give in March 2007 on "Boring Molluscs".

Further north however on the same day at Church Bay SH310894, I came across another piece of timber which appeared to be full of shipworms. This one was big, 10 inches square by about eight feet long, heavily creosoted and wet through, there was no way I was going to be able to drag this back to the car.

I returned the following day armed with a bow saw complete with new blade and a heavy duty two wheel trolley which a neighbour had given me. It was relatively easy to cut the log into three manageable sections. As I did so, an ominous looking liquid poured from the saw cut suggesting that there may be something still inside the log. As one piece was loaded onto the trolley I noticed a five foot long length of rope nearby which was ideal for tying the log onto the trolley.

It was at this juncture that I realised that two wheel trolleys don't move very well on shingle, especially when carrying a very heavy weight. With an outburst of the foulest language I could muster, it seemed to help at the

time, I was eventually able to get the trolley onto firm wet sand and wheel it along the beach and up a very steep, rough concrete road back to the car. Fortunately I had brought enough bin liners with me to go over the ends of the timber. This exhausting process had to be repeated two more times to retrieve all the wood. As I leaned on the trolley for a few moments to regain my breath before making the second trip, I thought to myself, "you silly b..., you shouldn't be doing this sort of thing at your age".

It was the smell in the car on my way back home that confirmed the existence of decaying bodies inside the timber, along with the disgusting substance that was oozing out of some of the holes as I struggled to lift the heavy pieces out of the car at home. It took many days of various attempts to get rid of the smell in the car.

However, in spite of this, the joy of finding out what was inside the logs greatly outweighed the trauma of retrieving them. If I come across any more timber with shipworms

inside, I will not hesitate to endeavour to bring them back home.

As a result of my pain and efforts, I now have many wonderful examples of *Psiloteredo megotara*, *Teredora malleolus* and *Teredo navalis* along with some fascinating examples of bored timber. I also have some specimens that were still sufficiently intact to justify preserving them in spirit. Adult pairs of *Teredora malleolus* when opened out are far more beautiful than the picture in Tebble suggests, they look like angel's wings. The various shapes of the bored timber fragments make fascinating conversation pieces and are lovely examples of modern natural sculptures and would most likely be highly valued by many people.

It is not often these days that any of these species get washed up on our shores, especially the *Teredora malleolus* which have in the past had a very limited distribution on British shores.

Two new records for *Mytilopsis leucophaeta* in Britain

Martin Gammell

Environment Agency, Spalding, Lincolnshire

On 15th November 2006 I visited the South Forty Foot Drain at Swineshead Bridge, Lincolnshire (TF218429) to collect an invertebrate sample for the Environment Agency's biological monitoring programme. At this site the river was approximately 12 metres wide and over one metre deep. The substrate was predominantly silt with some boulders. Some sections of the bank were artificially reinforced and there was a substantial amount of detritus along the margins. The marginal vegetation was relatively sparse and consisted primarily of *Glyceria maxima* and *Carex* sp. I took a sweep sample consisting of several net-sweeps through the margins with some disturbance of the substrate.

While sorting through the sample in the laboratory I found a number of small mussels with a brown periostracum and lacking the distinctive dark bands of the Zebra mussel, *Dreissena polymorpha*. On internal examination a triangular tooth was observed on the septum, a feature indicative of the Dark false mussel *Mytilopsis leucophaeta* (Killeen *et al.*

2004). Externally, the periostracum was not as coarse as in the photographs of *M. leucophaeta* in Killeen *et al.* 2004. In total, I found seven specimens of *M. leucophaeta* in the sample. Subsequent to this, on 30th November 2006, one of my colleagues, Chris Extence, found one specimen of *M. leucophaeta* in the South Holland Main Drain at Clifton's Bridge, Lincolnshire (TF380189).

Prior to these discoveries *M. leucophaeta* was known from only two sites in Britain, Roath Dock in Cardiff and Cliffe Fort Lagoon in Kent. These new records from Lincolnshire are the first from river habitats in Britain.

At both sites the rivers showed evidence of saline ingress. Although the sites are not tidal there are sluices downstream of the sites which leak. The South Forty Foot Drain at Swineshead Bridge was monitored quite regularly during the second half of 2006. Between 14th July and 27th October, 11 readings were taken. At the top of the water column salinity varied from a low of 0.58 ppt (0.058%) to a high of 7.8 ppt (0.78%). At the bottom of the water column salinity varied from a low of 0.60 ppt to a high of 18.6 ppt. Both sites are also sampled monthly as part of a regular monitoring programme. Approximate salinity levels for each site for 2006 have been

calculated: for the South Forty Foot site the minimum and maximum salinity levels were 0.20 ppt and 7.01 ppt. The average over 12 months was 1.96 ppt. For the South Holland Main Drain site the minimum and maximum salinity levels were 0.89 ppt and 5.62 ppt. The average over 12 months was 2.44 ppt.

Other molluscs present in the sample were *Bithynia tentaculata*, *Radix balthica*, *Lymnaea stagnalis*, *Physa* sp. and *Potamopyrgus antipodarum* in the South Forty Foot Drain, and *Radix balthica* and *Pisidium casertanum* in the South Holland Main Drain. The samples also contained crustaceans commonly found in the saline reaches of rivers, *Gammarus tigrinus* and *Corophium multisetosum* in the South Forty Foot Drain and *G. tigrinus* in the South Holland Main Drain.

It appears that *Mytilopsis* is a relatively recent arrival to the Wash drainage system. Shipping from Holland into the ports of Sutton Bridge on the River Nene, and Boston on the River Witham are a possible source of the introduction.

Reference

Killeen, I., Aldridge, D. & Oliver, G. 2004. *Freshwater Bivalves of Britain and Ireland*. AIDGAP Series, Field Studies Council.

Old Snails, New Names *A guide to the new names for British non-marine molluscs*

Adrian T. Sumner

We are all familiar with the idea that scientific names provide a stable, universal way of referring to species. Nevertheless, as taxonomists investigate matters more closely, new relationships and differences are discovered, and species are placed in different genera, or even given completely new names. For the amateur in particular this can be quite confusing, and sometimes when one looks at the older literature one comes across species that have apparently ceased to exist. Even when we know what the new names should be, it can take a long time for us to adapt mentally. It took me several years to stop calling certain slugs *Agriolimax* after they had been changed to *Deroceras*, and I still think of *Milax budapestensis* instead of *Tandonia budapestensis*, as we should now call it. Now that *Deroceras caruanae* has become *D. panormitanum* it is not only unpronounceable, but nearly unspellable as well! I know I am not alone in being unable to get used to new names.

The latest revision of the names of British non-marine molluscs was published by Roy Anderson late in 2005 (*Journal of Conchology* 38, pp 607–637), with some more recent amendments on the Conchological Society website (www.conchsoc.org). Although many names have remained unchanged (including, thankfully, all the freshwater bivalves, and all *Vertigo* species, for example), there have been some quite substantial changes as well. In the following tables, I have tried to compare old and new names (where these have changed), with the aim of answering two types of question. First, what is the latest name for a particular species? For

example, reference to the appropriate table will show that the species called *Ammicola taylori* by Ellis (British Snails, 1926) should now be called *Marstoniopsis insubrica*. The second question is: what did we used to call this species with the strange name that everybody seems to be using now? *Radix balthica*, for example, turns out to be our old friend *Lymnaea peregra* (or *Limnaea peregra*).

In a few cases, the phrase “Not recognised in previous works” appears against the new name. This indicates that the species is either a new introduction to the British Isles, or has not previously been recognised as a separate species although it may have been here for a long time. Sometimes (particularly with slugs), there is more than one new name against a single old name. This is because it has been recognised that what was formerly regarded as a single species should be split up into two or more. I have not attempted to cite full references for these.

There are separate tables for freshwater snails and for terrestrial species. This is not only because it keeps each table to a manageable size, but also because I have used some different key works for the older names. Within each table, the species are arranged simply in alphabetical order in the first column; there is no attempt at a taxonomic arrangement. Nor have I tried to produce a formal synonymy, which would not only be beyond me, but would probably cause more confusion than clarification.

I hope these lists will be useful, and help to make the transition to the new names easier – until the next revision!

Acknowledgement: Roy Anderson has kindly looked over the material in this article, but any remaining errors are due to me.

Terrestrial Molluscs: what were their old names?

Anderson (2005)	Previous names	Anderson (2005)	Previous names
<i>Acicula fusca</i>	<i>Acicula lineata</i> (E)	<i>Deroceras agreste</i>	<i>Agriolimax agrestis</i> (E)
<i>Aegopinella nitidula</i>	<i>Retinella nitidula</i> (E)	<i>Deroceras laeve</i>	<i>Agriolimax laevis</i> (E)
<i>Aegopinella pura</i>	<i>Retinella pura</i> (E)	<i>Deroceras panormitanum</i>	<i>Deroceras caruanae</i> (A76; KC)
<i>Arion ater</i>	<i>Arion ater</i> agg. (A76)	<i>Deroceras reticulatum</i>	<i>Agriolimax agrestis</i> (E)
<i>Arion circumscriptus</i>	<i>Arion circumscriptus</i> seg. (A76)	<i>Discus rotundatus</i>	<i>Goniodiscus rotundatus</i> (E)
<i>Arion distinctus</i>	<i>Arion hortensis</i> (E; KC); <i>Arion hortensis</i> agg. (A76)	<i>Euconulus cf. alderi</i>	<i>Euconulus alderi</i> (A99; KC); <i>Euconulus fulvus</i> agg. (A76)
<i>Arion fasciatus</i>	<i>Arion circumscriptus</i> (E)	<i>Euconulus cf. fulvus</i>	<i>Euconulus fulvus</i> (A99; E; KC); <i>Euconulus fulvus</i> agg. (A76)
<i>Arion fuscus</i>	Not recognised in previous works (1)	<i>Fruticicola fruticum</i>	<i>Bradybaena fruticum</i> (A76; A99; KC); <i>Eulota fruticum</i> (E)
<i>Arion hortensis</i>	<i>Arion hortensis</i> agg. (A76)	<i>Lehmannia marginata</i>	<i>Limax marginatus</i> (A76; E; KC)
<i>Arion occultus</i>	Not recognised in previous works (2)	<i>Lehmannia nyctelia</i>	<i>Limax nyctelius</i> (KC)
<i>Arion owenii</i>	<i>Arion hortensis</i> (KC); <i>Arion hortensis</i> Form B (A76)	<i>Lehmannia valentiana</i>	<i>Limax valentianus</i> (KC)
<i>Arion rufus</i>	<i>Arion ater rufus</i> (KC)	<i>Leiostyla anglica</i>	<i>Lauria anglica</i> (E)
<i>Arion silvaticus</i>	<i>Arion circumscriptus</i> (E)	<i>Limacus flavus</i>	<i>Limax flavus</i> agg. (A76)
<i>Arion vulgaris</i>	<i>Arion lusitanicus</i> (A76; A99; KC)	<i>Limacus maculatus</i>	<i>Limax grossui</i> (A76); <i>Limax hibernicus</i> ;
<i>Balea biplicata</i>	<i>Laciniaria biplicata</i> (A76; E; KC)		<i>Limax pseudoflavus</i> (KC)
<i>Balea heydeni</i>	Not recognised in previous works (3)	<i>Lucilla singleyana</i>	<i>Helicodiscus singleyanus</i> (A99; KC); <i>Helicodiscus singleyanus inermis</i> (A76)
<i>Candidula gigaxii</i>	<i>Helicella heripensis</i> (E)		<i>Clausilia rolphii</i> (E)
<i>Candidula intersecta</i>	<i>Helicella caperata</i> (E)	<i>Macrogastera rolphii</i>	<i>Limax tenellus</i> (A76; E; KC)
<i>Cecilioides acicula</i>	<i>Caecilioides acicula</i> (E)	<i>Merdigera obscura</i>	<i>Ena obscura</i> (A76; A99; E; KC)
<i>Cerņuella neglecta</i>	<i>Helicella neglecta</i> (E)	<i>Monacha cantiana</i>	<i>Theba cantiana</i> (E)
<i>Cerņuella virgata</i>	<i>Helicella virgata</i> (E)	<i>Monacha cartusiana</i>	<i>Theba cartusiana</i> (E)
<i>Clausilia bidentata</i>	<i>Clausilia rugosa</i> (E)	<i>Nesovitrea hammonis</i>	<i>Retinella radiatula</i> (E)
<i>Cochlicopa cf. lubrica</i>	<i>Cochlicopa lubrica</i> (A76; A99; E; KC)	<i>Oxychilus draparnaudi</i>	<i>Oxychilus lucidus</i> (E)
<i>Cochlicopa cf. lubricella</i>	<i>Cochlicopa lubricella</i> (A76; A99; KC)	<i>Oxychilus navarricus</i>	
<i>Cochlodina laminata</i>	<i>Marpessa laminata</i> (E)		
<i>Cornu aspersum</i>	<i>Helix aspersa</i> (A76; A99; E; KC)		

Terrestrial Molluscs: what were their old names?

Anderson (2005)	Previous names	Anderson (2005)	Previous names
<i>helveticus</i>	<i>Oxychilus helveticus</i> (A76; A99; E; KC)	<i>Tandonia budapestensis</i>	<i>Milax budapestensis</i> (A76; KC)
<i>Oxyloma elegans</i>	<i>Oxyloma pfeifferi</i> (A76; A99; KC)	<i>Tandonia rustica</i>	<i>Milax rusticus</i> (KC)
<i>Oxyloma sarsi</i>	<i>Oxyloma elegans</i> (A99); <i>Succinea elegans</i> (E)	<i>Tandonia sowerbyi</i>	<i>Milax sowerbyi</i> (A76; E; KC)
<i>Paralaoma servilis</i>	<i>Paralaoma caputspinulae</i> (A99); <i>Toltecia pusilla</i> (C)	<i>Theba pisana</i>	<i>Euparypha pisana</i> (E)
<i>Phenacolimax major</i>	<i>Vitrina major</i> (E)	<i>Trochulus hispidus</i>	<i>Trichia hispida</i> (A76; A99; E; KC)
<i>Ponentina subvirescens</i>	<i>Trichia subvirescens</i> (E)	<i>Trochulus sericeus</i>	<i>Trichia plebeia</i> (A76; A99; KC)
<i>Pseudotrachia rubiginosa</i>	<i>Perforatella rubiginosa</i> (A99; KC)	<i>Trochulus striolatus</i>	<i>Trichia striolata</i> (A76; A99; E; KC)
<i>Quickella arenaria</i>	<i>Catinella arenaria</i> (A76; A99; KC)	<i>Truncatellina callicratis</i>	<i>Truncatellina callicratis britannica</i> (A76); <i>Truncatellina britannica</i> (E)
<i>Semilimax pyrenaicus</i>	<i>Vitrina pyrenaica</i> (E)	<i>Vallonia cf. excentrica</i>	<i>Vallonia excentrica</i> (A76; A99; E; KC)
<i>Spermodea lamellata</i>	<i>Acanthinula lamellata</i> (E)	<i>Vitrina pellucida</i>	<i>Vitrina pellucida</i> (A76; A99; E; KC)
		<i>Zenobiella subrufescens</i>	<i>Perforatella subrufescens</i> (A99); <i>Hygromia subrufescens</i> (E)

A76 = *Atlas of the Non-marine Mollusca of the British Isles* (Kerney, 1976). A99 = *Atlas of the Land and Freshwater Molluscs of Britain and Ireland* (Kerney, 1999). C = Cameron, *Land Snails in the British Isles* (AIDGAP guide, 2003). E = Ellis, *British Snails* (1926, reprinted with corrections 1969). KC = Kerney & Cameron, *A Field Guide to the Land Snails of Britain and North-west Europe*

(1) Pincheel et al. (2004) *Biol. J. Linn. Soc.* 83: 23–38. (2) Anderson (2004) *J. Conchol.* 38, 13–26.
(3) Gittenberger et al. (2006) *J. Conchol.* 39, 145–150.

Terrestrial Molluscs: what are they called now?

Older names	Anderson (2005)	Older names	Anderson (2005)
<i>Acanthinula lamellata</i> (E)	<i>Spermodea lamellata</i>	<i>Lauria anglica</i> (E)	<i>Leiostyla anglica</i>
<i>Acicula lineata</i> (E)	<i>Acicula fusca</i>	<i>Limax flavus</i> (A99; E; KC); <i>Limax flavus</i> agg. (A76)	<i>Limacus flavus</i> <i>Limacus flavus</i> ; <i>Limacus maculatus</i> <i>Limacus maculatus</i> <i>Limacus maculatus</i> <i>Limacus maculatus</i>
<i>Agriolimax agrestis</i> (E)	<i>Deroceras agreste</i> ; <i>Deroceras reticulatum</i> <i>Deroceras laeve</i>	<i>Limax grossui</i> <i>Limax hibernicus</i> <i>Limax maculatus</i> (A99) <i>Limax marginatus</i> (A76; E; KC) <i>Limax nyctelius</i> (KC) <i>Limax pseudoflavus</i> (KC) <i>Limax tenellus</i> (A76; E; KC) <i>Limax valentianus</i> (KC) <i>Marpessa laminata</i> (E) <i>Milax budapestensis</i> (A76; KC) <i>Milax rusticus</i> (KC) <i>Milax sowerbyi</i> (A76; E; KC) <i>Oxychilus helveticus</i> (A76; A99; E; KC) <i>Oxychilus lucidus</i> (E) <i>Oxyloma elegans</i> (A99) <i>Oxyloma pfeifferi</i> (A76; A99; KC) <i>Paralaoma caputspinulae</i> (A99) <i>Perforatella rubiginosa</i> (A99; KC) <i>Perforatella subrufescens</i> (A99) <i>Pyramidula rupestris</i> (A76; A99; E; KC) <i>Pyramidula pusilla</i> <i>Retinella nitidula</i> (E) <i>Retinella pura</i> (E) <i>Retinella radiatula</i> (E) <i>Succinea elegans</i> (E) <i>Theba cantiana</i> (E) <i>Theba cartusiana</i> (E) <i>Toltecia pusilla</i> (C) <i>Trichia hispida</i> (A76; A99; E; KC) <i>Trichia plebeia</i> (A76; A99; KC) <i>Trichia striolata</i> (A76; A99; E; KC) <i>Trichia subvirescens</i> (E) <i>Truncatellina britannica</i> (E) <i>Truncatellina callicratis</i> <i>Truncatellina callicratis</i> <i>Truncatellina callicratis</i> <i>Truncatellina callicratis</i> (A76) <i>Vallonia excentrica</i> (A76; A99; E; KC) <i>Vitrina major</i> (E) <i>Vitrina pyrenaica</i> (E)	
<i>Agriolimax laevis</i> (E)	<i>Arion ater</i>		<i>Oxychilus navarricus helveticus</i> <i>Oxychilus draparnaudi</i> <i>Oxyloma sarsi</i> <i>Oxyloma elegans</i> <i>Paralaoma servilis</i> <i>Pseudotrachia rubiginosa</i> <i>Zenobiella subrufescens</i> <i>Zenobiella subrufescens</i> <i>Pyramidula pusilla</i> <i>Aegopinella nitidula</i> <i>Aegopinella pura</i> <i>Nesovitrea hammonis</i> <i>Oxyloma sarsi</i> <i>Monacha cantiana</i> <i>Monacha cartusiana</i> <i>Paralaoma servilis</i> <i>Trochulus hispidus</i> <i>Trochulus sericeus</i> <i>Trochulus striolatus</i> <i>Ponentina subvirescens</i> <i>Truncatellina callicratis</i>
<i>Arion ater</i> agg. (A76)	<i>Arion rufus</i>		
<i>Arion ater rufus</i> (KC)	<i>Arion circumscriptus</i> ;		
<i>Arion circumscriptus</i> (E)	<i>Arion fasciatus</i> ; <i>Arion silvaticus</i> <i>Arion circumscriptus</i> <i>Arion distinctus</i> ;		
<i>Arion circumscriptus</i> seg. (A76)	<i>Arion hortensis</i> ;		
<i>Arion hortensis</i> (E; KC)	<i>Arion hortensis</i> ; <i>Arion owenii</i> <i>Arion distinctus</i> ;		
<i>Arion hortensis</i> agg. (A76)	<i>Arion hortensis</i> ; <i>Arion owenii</i> <i>Arion distinctus</i> <i>Arion owenii</i> <i>Arion vulgaris</i>		
<i>Arion hortensis</i> Form A (A76)	<i>Fruticicola fruticum</i>		
<i>Arion hortensis</i> Form B (A76)	<i>Cecilioides acicula</i>		
<i>Arion lusitanicus</i> (A76; A99; KC)	<i>Quickella arenaria</i>		
<i>Bradybaena fruticum</i> (A76; A99; KC)	<i>Macrogastera rolphii</i>		
<i>Caecilioides acicula</i> (E)	<i>Clausilia bidentata</i>		
<i>Catinella arenaria</i> (A76; A99; KC)	<i>Cochlicopa cf. lubrica</i>		
<i>Clausilia rolphii</i> (E)	<i>Cochlicopa cf. lubricella</i>		
<i>Clausilia rugosa</i> (E)	<i>Deroceras panormitanum</i>		
<i>Cochlicopa lubrica</i> (A76; A99; E; KC)	<i>Merdigera obscura</i>		
<i>Cochlicopa lubricella</i> (A76; A99; KC)	<i>Euconulus cf. alderi</i> ;		
<i>Deroceras caruanae</i> (A76; KC)	<i>Euconulus cf. fulvus</i>		
<i>Ena obscura</i> (A76; A99; E; KC)	<i>Euconulus cf. alderi</i> ;		
<i>Euconulus alderi</i> (A99; KC)	<i>Euconulus cf. fulvus</i>		
<i>Euconulus fulvus</i> (A99; E; KC)	<i>Fruticicola fruticum</i>		
<i>Euconulus fulvus</i> agg. (A76)	<i>Theba pisana</i>		
	<i>Discus rotundatus</i>		
<i>Eulota fruticum</i> (E)	<i>Candidula intersecta</i>		
<i>Euparypha pisana</i> (E)	<i>Candidula gigaxii</i>		
<i>Euparypha pisana</i> (E)	<i>Cerņuella neglecta</i>		
<i>Goniodiscus rotundatus</i> (E)	<i>Cerņuella virgata</i>		
<i>Helicella caperata</i> (E)	<i>Lucilla singleyana</i>		
<i>Helicella heripensis</i> (E)	<i>Cornu aspersum</i>		
<i>Helicella neglecta</i> (E)	<i>Zenobiella subrufescens</i>		
<i>Helicella virgata</i> (E)	<i>Balea biplicata</i>		
<i>Helicodiscus singleyanus</i> (A99; KC)			
<i>Helicodiscus singleyanus inermis</i> (A76)			
<i>Helix aspersa</i> (A76; A99; E; KC)			
<i>Hygromia subrufescens</i> (E)			
<i>Laciniaria biplicata</i> (A76; E; KC)			

A76 = *Atlas of the Non-marine Mollusca of the British Isles* (Kerney, 1976). A99 = *Atlas of the Land and Freshwater Molluscs of Britain and Ireland* (Kerney, 1999). C = Cameron, *Land Snails in the British Isles* (AIDGAP guide, 2003). E = Ellis, *British Snails* (1926, reprinted with corrections 1969). KC = Kerney & Cameron, *A Field Guide to the Land Snails of Britain and North-west Europe*

Freshwater Snails: *what were their old names?*

Anderson (2005)	Previous names	Anderson (2005)	Previous names
<i>Acicula fusca</i>	<i>Acicula lineata</i> (E)	<i>Lymnaea stagnalis</i>	<i>Limnaea stagnalis</i> (E)
<i>Acroloxus lacustris</i>	<i>Ancylus lacustris</i> (E)	<i>Marstoniopsis insubrica</i>	<i>Amnicola taylori</i> (E); <i>Marstoniopsis scholtzi</i> (A76; A99); <i>Bythinella scholtzi</i> (M)
<i>Ancylus fluviatilis</i>	<i>Ancylastrum fluviatile</i> (E)	<i>Menetus dilatatus</i>	<i>Planorbis dilatatus</i> (E)
<i>Anisus leucostoma</i>	<i>Planorbis leucostoma</i> (M)	<i>Mercuria cf. similis</i>	<i>Amnicola confusa</i> (E); <i>Pseudamnicola confusa</i> (A76; M); <i>Mercuria confusa</i> (A99)
<i>Anisus spirorbis</i>	<i>Planorbis spirorbis</i> (E)	<i>Myosotella denticulata</i>	Not recognised in previous works
<i>Anisus vortex</i>	<i>Planorbis vortex</i> (E; M)	<i>Myosotella myosotis</i>	<i>Ovatella myosotis</i> (A76; A99); <i>Phytia myosotis</i> (E; M)
<i>Anisus vorticulus</i>	<i>Planorbis vortex</i> (E; M)	<i>Omphiscola glabra</i>	<i>Lymnaea glabra</i> (A76; A99; M); <i>Limnaea glabra</i> (E)
<i>Bathymorphalus contortus</i>	<i>Planorbis contortus</i> (E; M)	<i>Otina ovata</i>	<i>Otina otis</i> (E)
<i>Bithynia leachii</i>	<i>Bithynia leachi</i> (M)	<i>Peringia ulvae</i>	<i>Hydrobia ulvae</i> (A76; A99; G; M); <i>Sabanea ulvae</i> (E)
<i>Ecrobia ventrosa</i> (2)	<i>Hydrobia ventrosa</i> (A76; A99; E; G; M); <i>Ventrosia ventrosa</i> (Anderson, 2005)	<i>Physella</i> spp.	<i>Physa</i> spp., not <i>Physa fontinalis</i> (A76; A99)
<i>Galba truncatula</i>	<i>Lymnaea truncatula</i> (A76; A99; M); <i>Limnaea truncatula</i> (E)	<i>Planorbarius corneus</i>	<i>Planorbis corneus</i> (E)
<i>Gyraulus acronicus</i>	<i>Planorbis acronicus</i> (E; M)	<i>Potamopyrgus antipodarum</i>	<i>Hydrobia jenkinsi</i> (E); <i>Potamopyrgus jenkinsi</i> (A76; M)
<i>Gyraulus albus</i>	<i>Planorbis albus</i> (E; M)	<i>Radix auricularia</i>	<i>Lymnaea auricularia</i> (A76; A99; M); <i>Limnaea auricularia</i> (E)
<i>Gyraulus crista</i>	<i>Armiger crista</i> (A76); <i>Planorbis crista</i> (E; M)	<i>Radix balthica</i>	<i>Lymnaea peregra</i> (A76; A99; M); <i>Limnaea pereger</i> (E)
<i>Gyraulus laevis</i>	<i>Planorbis laevis</i> (E; M)	<i>Viviparus contectus</i>	<i>Viviparus fasciatus</i> (E; M)
<i>Hippeutis complanatus</i>	<i>Segmentina complanata</i> (M); <i>Planorbis complanatus</i> (E)		
<i>Hydrobia acuta neglecta</i>	<i>Hydrobia neglecta</i> (A76; A99; G)		
<i>Leucophytia bidentata</i>	<i>Leuconia bidentata</i> (E)		
<i>Lymnaea fusca</i>	<i>Stagnicola fuscus</i> (G); not recognised in previous works (1)		
<i>Lymnaea palustris</i>	<i>Limnaea palustris</i> (E); <i>Stagnicola palustris</i> (G)		

A76 = *Atlas of the Non-marine Mollusca of the British Isles* (Kerney, 1976). A99 = *Atlas of the Land and Freshwater Molluscs of Britain and Ireland* (Kerney, 1999). E = *Ellis, British Snails* (1926, reprinted with corrections 1969). G = Glöer, *Die Süßwassergastropoden Nord- und Mitteleuropas*. M = Macan, *A Key to the British Fresh- and Brackish-Water Gastropods*

(1) Carr & Killeen (2003) *J. Conchol.* 38, 67–71.

(2) Amended version of British Non-Marine List on Conchological Society website (www.conchsoc.org)

Freshwater Snails: *what are they called now?*

Older names	Anderson (2005)	Older names	Anderson (2005)
<i>Acicula lineata</i> (E)	<i>Acicula fusca</i>	<i>Otina otis</i> (E)	<i>Otina ovata</i>
<i>Amnicola confusa</i> (E)	<i>Mercuria cf. similis</i>	<i>Ovatella myosotis</i> (A76; A99)	<i>Myosotella myosotis</i>
<i>Amnicola taylori</i> (E)	<i>Marstoniopsis insubrica</i>	<i>Physa</i> spp. (not <i>Physa fontinalis</i>) (A99)	<i>Physella</i> sp.
<i>Ancylastrum fluviatile</i> (E)	<i>Ancylus fluviatilis</i>	<i>Phytia myosotis</i> (E; M)	<i>Myosotella myosotis</i>
<i>Ancylus lacustris</i> (E)	<i>Acroloxus lacustris</i>	<i>Planorbis acronicus</i> (E; M)	<i>Gyraulus acronicus</i>
<i>Armiger crista</i> (A76)	<i>Gyraulus crista</i>	<i>Planorbis albus</i> (E; M)	<i>Gyraulus albus</i>
<i>Bithynia leachi</i> (M)	<i>Bithynia leachii</i>	<i>Planorbis complanatus</i> (E)	<i>Hippeutis complanatus</i>
<i>Bythinella scholtzi</i> (M)	<i>Marstoniopsis insubrica</i>	<i>Planorbis contortus</i> (E; M)	<i>Bathymorphalus contortus</i>
<i>Hydrobia jenkinsi</i> (E)	<i>Potamopyrgus antipodarum</i>	<i>Planorbis corneus</i> (E)	<i>Planorbarius corneus</i>
<i>Hydrobia neglecta</i> (A76; A99; G)	<i>Hydrobia acuta neglecta</i>	<i>Planorbis crista</i> (E; M)	<i>Gyraulus crista</i>
<i>Hydrobia ulvae</i> (A76; A99; G; M)	<i>Peringia ulvae</i>	<i>Planorbis dilatatus</i> (E)	<i>Menetus dilatatus</i>
<i>Hydrobia ventrosa</i> (A76; A99; E; G; M)	<i>Ecrobia ventrosa</i> (1)	<i>Planorbis laevis</i> (E; M)	<i>Gyraulus laevis</i>
<i>Leuconia bidentata</i> (E)	<i>Leucophytia bidentata</i>	<i>Planorbis leucostoma</i> (M)	<i>Anisus leucostoma</i>
<i>Limnaea auricularia</i> (E)	<i>Radix auricularia</i>	<i>Planorbis spirorbis</i> (E)	<i>Anisus spirorbis</i>
<i>Limnaea glabra</i> (E);	<i>Omphiscola glabra</i>	<i>Planorbis vortex</i> (E; M)	<i>Anisus vortex</i> ; <i>Anisus vorticulus</i>
<i>Limnaea palustris</i> (E)	<i>Lymnaea palustris</i>	<i>Potamopyrgus jenkinsi</i> (A76; M)	<i>Potamopyrgus antipodarum</i>
<i>Limnaea pereger</i> (E)	<i>Radix balthica</i>	<i>Pseudamnicola confusa</i> (A76; M)	<i>Mercuria cf. similis</i>
<i>Limnaea pereger</i> (E)	<i>Radix balthica</i>	<i>Sabanea ulvae</i> (E)	<i>Peringia ulvae</i>
<i>Limnaea truncatula</i> (E)	<i>Galba truncatula</i>	<i>Segmentina complanata</i> (M)	<i>Hippeutis complanatus</i>
<i>Lymnaea auricularia</i> (A76; A99; M)	<i>Radix auricularia</i>	<i>Stagnicola fuscus</i> (G)	<i>Lymnaea fusca</i>
<i>Lymnaea glabra</i> (A76; A99; M)	<i>Omphiscola glabra</i>	<i>Stagnicola palustris</i> (G)	<i>Lymnaea palustris</i>
<i>Lymnaea truncatula</i> (A76; A99; M)	<i>Galba truncatula</i>	<i>Ventrosia ventrosa</i>	
<i>Marstoniopsis scholtzi</i> (A76; A99)	<i>Marstoniopsis insubrica</i>	(Anderson 2005)	
<i>Mercuria confusa</i> (A99)	<i>Mercuria cf. similis</i>	<i>Viviparus fasciatus</i> (E; M)	

A76 = *Atlas of the Non-marine Mollusca of the British Isles* (Kerney, 1976). A99 = *Atlas of the Land and Freshwater Molluscs of Britain and Ireland* (Kerney, 1999). E = *Ellis, British Snails* (1926, reprinted with corrections 1969). G = Glöer, *Die Süßwassergastropoden Nord- und Mitteleuropas*. M = Macan, *A Key to the British Fresh- and Brackish-Water Gastropods*

(1) Amended version of British Non-Marine List on Conchological Society website (www.conchsoc.org)

Porcupine Marine Natural History Society

Excursion to The Burren, Co. Clare, Ireland

(Sunday 23rd) Wednesday 26th to Sunday 30th September 2007

Leader: Julia Nunn

Members of the Conchological Society are invited to attend for any part of the trip or for the entire excursion. All those wishing to attend should contact Julia at julia.nunn@magni.org.uk or 028 9181 7710

INTRODUCTION

The area of interest is in south Galway Bay (Sea Area 36). Surveys carried out by myself and Shelagh Smith have identified a number of shores which rank amongst the richest for marine molluscs in Ireland. 219 species of mollusc have been found at the sites to be visited (145 living).

Some molluscan species found on the shore in the area: *Skenea serpuloides*, *Dikoleps pusilla*, *Alvania beanii*, *Graphis albida*, *Mangelia coarctata*, *Turbonilla lactea*, *Aeolidiella sanguinea*, *Arca tetragona*, *Devonia perrieri*, *Irus irus*, *Gastrochaena dubia*. A number of interesting species have only been found as shells, which offers the possibility that they could be found alive.

A survey of brackish loughs in the area was undertaken in 2001 with a grant from the Praeger Committee (Royal Irish Academy), with Roy Anderson and Shelagh Smith. Shelagh and Roy will be participating in this excursion. A number of these lagoons may be visited.

The purpose of this field meeting is to introduce these rich shores to those interested; to survey them and record primarily the intertidal marine Mollusca; to record all other groups where there is appropriate experience; to visit a number of brackish loughs and to explore within the time available, parts of the terrestrial environment for non-marine molluscs.

The excursion is for 8 days, Sunday 23rd September to Sunday 30th September inclusive, to the Burren area, primarily the vicinity of Finavarra. The majority of the fieldwork will be intertidal, for five days from Wednesday 25th to Sunday 30th. The centre for the activities will be around

Lisheen House, a large self-catering cottage near New Quay, and in the heart of the area that we will be exploring. There will be plenty of room for participants to work on material, to get help with identifications and to socialise. The house is within walking distance of Linane's Bar.

A copy of all records generated will be passed to National Parks & Wildlife Service, Dublin, and entered into the Porcupine MNHS database.

PROGRAMME

There will be no fixed programme for Sunday 23rd to Tuesday 25th September – opportunities will be available to explore the Burren (I will have plenty of information about the various tourist 'sights/sites to visit' with me.

Wednesday, 26th September

Brackish/Freshwater: Lough Murree (4 species). *Ventrosia ventrosa* has been recorded here, and shells of *Cerastoderma glaucum*.

Marine: Carrickadda (flaggy shore) 151 species recorded (106 living)

This site is a spit about 1km long. At the shore end there is a storm beach, then boulders on sand and gravel, patches of sand and *Zostera marina* to the south. The reef is composed of limestone, weathered and covered with fucoids. On the northern, more exposed, side there are channels with shell gravel. There are large rock pools with a rich variety of algae. Access is directly from the roadside.

Thursday 27th September

Marine: Strucorrafaan Rapids 73 species (all living). Channel about 100m wide, with a strong ebb current flowing over a drop of at least 1.5m. It is largely a boulder shore and bedrock. There is good algal cover.

Marine: Muckinsh maerl bed 141 species (93 living). This site is a sheltered area within the very large lagoon above the Rapids, with a brisk current running across a maerl bed in a channel. There is gravel and clumps of fucooid at low water. At the lowest part of the shore, humps of living maerl and maerl gravel emerge. Almost half the channel is accessible by wading.

It will be possible to visit both sites on this tide, as low water on the maerl bed is 1.5-2 hours later than at the Rapids.

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This site is a sheltered area within the very large lagoon above the Rapids, with a brisk current running across a maerl bed in a channel. There is gravel and clumps of fucooid at low water. At the lowest part of the shore, humps of living maerl and maerl gravel emerge. Almost half the channel is accessible by wading.

It will be possible to visit both sites on this tide, as low water on the maerl bed is 1.5-2 hours later than at the Rapids.

Friday 28th September

Marine: Parknahallagh, north of Kinvarra 93 species (83 living). This site is a partly sheltered mid level lagoon (shell sand and dead maerl floor) with boulders and a high density of algae. The lower shore is scattered boulders on gravel. In places there is dead and living maerl; patches of *Zostera marina* and oyster beds. The sand contains the echinoderm *Leptosynapta* together with *Devonia perrieri*. The shore is a short walk from the parking area.

Saturday 29th September

Non-marine recording will take the form of examining a range of micro-habitats on the Burren (sites not specified as yet, but public access) to determine the importance of certain species to certain habitats e.g. how important are the limestone walls or the small areas of scrub in maintaining the overall biodiversity. The group may be split into smaller units to cover more ground. The terrestrial fieldwork will be led by Evelyn Moorkens with Ian Killeen.

Marine: New Quay 100 species (91 living). New Quay consists of flat ledges of limestone, with some sand and gravel on them, together with limestone boulders. Many crevices. This site is walking distance from Lisheen House (300m) and overlooked by Linane's Bar!

Sunday 30th September

Terrestrial: as for Saturday.

Brackish: Bishops Quarter lagoon (5 species) & Rine Lagoon (2 species). *Littorina saxatilis tenenbrosa* and *Ovatella myosotis* have been recorded here.

Marine: Rine Point 140 species (71 species living).

This is a long spit (1.5-2km) ending in islets and reefs. There is a storm beach and sand on limestone. The outside is limestone ledges and pools, quite exposed, with a lot of sand covering which reduces the local fauna, but with considerable fucooid cover and some small algae. The inside is a large area of sand and mud with reefs, islets and channels. The provenance of the shell of *Truncatella subcylindrica* needs to be investigated. It is likely to be within Ballyvaughan Bay. Possibly the animals live not just under the surface boulders, but at greater depths within the storm beaches adjacent to seepages nearby.

Your data and the Society

Steve Wilkinson

The article by Julia Nunn (ref) reports on the Review Meeting of the Conchological Society that took place on 11th November 2006. One of the items discussed at this meeting was the 'data policy' this Society should adopt. This article provides an explanation of a data policy, why the Society needs one and outlines the policy the Society has adopted.

What is a data policy?

A data policy is essentially a statement of what the data holder (in this case the Society) intends to do with the data it holds. It is particularly important for organisations like the Conchological Society where the data are provided by a range of individuals and organisations (many of them members of the Society). It is obviously important that those providing data are clear about what the Society intends to do with those data and are happy with that arrangement.

Why are biological data important?

Biological records collected by volunteers have formed a critical plank of conservation over the last thirty years. The data have been used to provide basic information on the geographic range of species, as well as an indication of their relative rarity. Distributions and categories of rarity help to provide a context to decisions involving species, for example identifying those which are under threat and require protection. The data also assist with local planning both by providing a list of species that occur in a particular area and also by highlighting such factors as to whether a particular species is near its biogeographical boundary. More recently, attempts have been made to relate species distributions to the physical environment to allow prediction of where else a species might be expected to occur. Moreover we can begin to assess changes in species abundance and attempt to relate these changes to potential causes. Such observations can be used to influence policy to help conserve biodiversity.

Isn't everyone very open with their data?

Given the potential benefits to nature conservation, it might be expected that holders of biodiversity data would be relatively open about access to, and the use of, the data, but historically the picture has been quite different. Many data holders, having spent large amounts of their own time collating their datasets, have been reluctant to allow very open access to them. This has been due to all sorts of factors including:

- a desire to publish their data first – the data owner may intend to publish an atlas and feel that allowing free access to the data may detract from the impact of the atlas once published;
- fear over loss of control of the data - a feeling that the

data are not really theirs any more once they are more widely released;

- concerns over the data being misused – this could include putting forward a view that the data owner does not agree with, or even using the data maliciously to damage the environment (e.g. through collecting rarities);
- concerned about others making financial gain from the data – in particular if the data can be accessed freely then consultants may use that data when providing advice that they have been paid to create;
- a desire to make financial gain from the data – this is particularly true of local record centres that rely on financial income from services provided using the data. If the data were more freely available the monopoly held by the record centres would not exist.

What holdings does the Society have?

Currently the society holds approximately 95,000 records of marine species in its computer database and thousands of records of non-marine species. Many more are still on paper or cards and there is a lot of work to do (both for marine and non-marine records) to get them all digitised.

What policy has the Society adopted?

Prior to the Review meeting last November, the question facing the Society was what to do with the data we hold. Should we be very open with it or more guarded? Should we allow consultants to have access to it? If we tell people where things are, is there not a risk they would go and collect them? These and other issues were debated at the meeting, and at the end of the debate, Council felt there was greater merit in making data freely available and consequently agreed to a very open access policy. Specifically, that anyone should have full access to the data the Society holds, with a few key exceptions. The exceptions are those species that are conspicuous by virtue of their size and vulnerable to unscrupulous collection, such as the Freshwater pearl mussel and the Roman snail. The policy is outlined below.

POLICY ON RELEASE OF DATA HELD BY THE CONCHOLOGICAL SOCIETY OF GB & IRELAND

This policy refers to the release of data in any form held by the Conchological Society of GB & Ireland, referred to herein as The Society, acting as custodian of that data on behalf of its members and contributors.

All validated records of all species held by the Society will be made freely available, except species that are subject to commercial exploitation namely pearl mussels and Roman snails (Annex A listed species), where a judgement would be made by the relevant Society Recorder in conjunction with the Conservation and Recording Committee (CRC). The Society, or persons nominated to act on behalf of The Society, will not release personal data (such as addresses associated with recorders' names) to enquirers without the express agreement of the originator of that data. Records will remain the property of the recorder at all times.

A copy of the data held by the Society is also held by the

National Biodiversity Network (NBN) where the records are available on the internet to download via the NBN Gateway. All this data on the NBN Gateway will be placed at the full public access level, except for pearl mussels and Roman snails (Annex A listed species).

The Society reserves the right to withhold or impose restrictions on the release of certain data of a sensitive nature at any time if such action is deemed appropriate.

If a member of, or contributor to, The Society does not wish his/her records to be available for release to enquirers under the above policy, then he/she must inform the Society in writing. Any member or contributor of data to The Society may make a separate data release agreement with the Society.

Neither the owner, nor any other person involved in the Society gives any warrant or undertakings as to or accepts liability for the accuracy and currency of the data, whether published on the Society website or elsewhere or for any other purpose to which the data may be used.

This policy was agreed by the Council of the Society on 11th November 2006. Further enquiries concerning any Society records should, in the first instance, be directed to the appropriate Recorder.

Why is the Society being so open?

Council believes that on balance more good than harm will come from openness. You don't have to look too far to see instances where key sites have been lost simply because those involved were not aware of the importance of the site. There are numerous examples of this. In an article describing the status of *Truncatella subcylindrica* in Ireland¹ Julia Nunn noted that the construction of a gravel track had destroyed the tidal regime of a lagoon and since then that species has not been recorded living from the site. There are instances of landowners trashing specific habitats because they fear the occurrence of the rarity associated with that habitat will restrict their usage of their land. While it is not guaranteed that greater access to the data would have affected the decision to construct the track, it certainly could not have done any harm. The Society feels that the only way of addressing this is through being much more open with the data we hold.

Does this mean some people could make money from our data?

Potentially yes. However, in most cases those making money are actually profiting from providing an interpretation of the data. If the mollusc data were not available they would simply proceed with the other data available to them, and the risk is that the molluscan aspects of the case would be omitted from the advice given.

What about people deliberately collecting species – aren't we making it too easy?

Perhaps this is true, but how big is the risk? There are a few species where people may use the data with a view to actually seeking them out, but the vast majority are either very cryptic or relatively common. That said, there are

some that genuinely are at risk (specifically the Freshwater pearl mussel and the Roman snail) and the Society with be much more guarded with records of these.

What happens next?

Julia Nunn will be contacting as many as possible of those contributors who have provided data to the Society, to notify them directly of the data policy and what it means. If you are unhappy with the policy, then you can opt to have your records removed from the Society's main holding, or to make your own personal arrangement with the Society.

It is hoped that the foregoing has helped to clarify the Society's data policy and the reasons for it. It is important that the Conchological Society should be seen to be cooperative and forward-looking in its approach to data collection and dissemination in order to further the aims of Conservation and Biodiversity studies. In the future, new providers of data to the Society's recording schemes will be routinely notified of the policy and invited to give permission for unrestricted dissemination of their records.

¹ Nunn JD, Smith SM, Anderson R (2005) Status of *Truncatella subcylindrica* (Linnaeus, 1797) in Ireland. *Journal of Conchology* 38: 599-601

Do you have an interest or have expertise in the area of Publicity?

The Society is looking for a volunteer who would be willing to help by co-ordinating and implementing publicity on behalf of the Society.

If you are interested, please contact the President, Julia Nunn, by email julia.nunn@magni.org.uk

Report of the Conchological Society Review Meeting

Julia Nunn November 2007

On 11th November, a special Council meeting of the Society was held in the Board Room of the Natural History Museum, London. All officers and elected members of the Council were present, together with a number of Vice-Presidents and the Chair of the Publications Committee. This meeting was called by the President to review and discuss the issues and challenges facing the Society, and possible ways to deal with them. A Review Document was prepared and circulated to the Council. Unfortunately, due to the wide ranging scope of the issues to be addressed, and the limited time available, not all such items were discussed. However, this article is a formal summary of the agreements made on the day, and is published as information for the Society membership. The President would be pleased to hear from any member who wishes to comment on any of the issues addressed.

It was agreed that the Society has a unique role to play in the molluscan world, especially in biogeographical recording.

It was also agreed that there was a lack of knowledge concerning what our members (and non-members) want from the Society.

DATA

A policy on the release of data held by the Society was agreed. An article explaining and detailing this policy is elsewhere in this issue of *Mollusc World*.

It was agreed that this data policy document regarding records would be sent out to the recorders (as far as is reasonably practicable) who have contributed to Society Recording Schemes, and an agreement with this policy requested in writing. The Policy would also be publicised in all our normal and any other appropriate outlets to cover all future records obtained [Journal, *Mollusc World*, Website, Members Guide, Conchology UK Smart Groups].

It was agreed that all data on the National Biodiversity Network (NBN) Gateway www.searchnet would be placed at the full public access level, except for pearl mussels and Roman



snails (Annex A listed species).

It was agreed that it was desirable to exchange data with other individuals and groups (e.g. Biological Records Centres etc.), provided appropriate protocols are in place.

ROLE OF SOCIETY RECORDERS

There was considerable discussion concerning the role of the Society's Recorders. A list of both essential and desirable functions was drawn up. However, it was accepted by Council that the carrying out of all these functions by one person was not possible except in an almost full-time capacity. These functions are listed below:

Verification of records & establishment of new and important records: it was agreed that the Non-Marine Recorder should exercise a degree of common sense and sensitivity, but be able to examine, or have examined by another approved expert, records of importance.

Help with identification of specimens sent by both members and non-members.

Manage the electronic databases of records: it was agreed that Recorders must be computer literate, but not expected personally to enter all the data. The Recorders should manage the records and databases held by the Society

Administration of recording schemes: it was agreed that each Recorder should be the sole overall administrator of the recording system and co-ordinate with those volunteers who run the schemes agreed by the Council.

Compilation of annual report on new and interesting records: it was agreed that an annual report of activities for *Mollusc World* should be produced, not just new records. There should be an emphasis on records which are interesting and important, rather than new.

Attendance at field, indoor meetings or those of other similar groups on behalf of the Society whenever possible,

particularly taking opportunities to support new members.

It was recognised that to carry out all these functions would require a support team. It was therefore agreed that it would be necessary that there should be a team supporting each Recorder. The Recorder will determine who should be in that support team, and should have the skills to be able to work with a team.

RECORDING SCHEMES

It was agreed that the Society would encourage members to submit data to the Society's recording schemes.

It was agreed that Holocene fossil records should be kept (as they shed light on the present mollusc fauna and were included in the last Non-Marine Atlas), and should be sent to the Natural History Museum (London). The Society would not at present actively seek a fossil recording scheme.

It was agreed that Mike Allen (currently a member of Council) would run an archaeological scheme on behalf of the Society. Some considerable amounts of data are already computerised. The importance of these records lies in indicating when mollusc species reached Britain after the last Ice Age.

It was agreed that if the managers of recording schemes wish to partner with the Society, then the Society is willing to do this. The Society should also actively seek such partners.

It was agreed that currently there would be no plans for full-scale published distribution atlases. However, the Society needs to reinvigorate recording nationwide for selected species studies, and supply better interpretation of data.

It was agreed that the Society should provide supportive information, in the form of a Recording Manual, and training, in order to promote the recording schemes. A group will be set up at the next meeting of the Conservation & Recording Committee. The Recording Manual will include suitable Papers for Students. Others may be suitable for *Mollusc World* if updated and illustrated.

It was agreed that the software to be used for the Marine and Non-Marine Recording schemes would be 'Recorder 6'. Mike Weideli, an expert in this software, will be asked to create a front end for Recorder 6 for non-marine records.

It was agreed in principle that the Society should pay to get existing

backlog recording scheme data keyed, if it did not prove possible to find enough volunteers or a grant to do this.

It was agreed that the Society should investigate the acceptance of records online, subject to the provision of a suitable editing process. It is understood that suitable software for this may become available in the next 1-2 years. It was also agreed that this software should be evaluated when it becomes available.

It was agreed that the provision in the future of interactive databases on the web site requires further debate.

JOURNAL

It was agreed that an international Editorial Board for the Journal be appointed. A Society rule change is not required to introduce an Editorial Board. The possibility of e-publishing will be explored.

MOLLUSC WORLD

It was acknowledged that the principal challenge facing *Mollusc World* is to ensure a continuing flow of good copy.

It was agreed that there should be an electronic archive of pdf files of the Journal and Mollusc World articles.

It was agreed that the Society would print the Members' Guide every two years. The 2007 guide would go ahead, but that the Council will consider this question again once the Recording Manual is produced.

It was agreed that in future each special publication should have a full business plan, and where possible be revenue neutral or ensure a profit. It is suggested that the cost for any future conference proceedings be included automatically in the cost of the conference.

WEB SITE

It was agreed that the take-up for online membership was so low that the Society should end the scheme. Those who had paid would be offered either their money back or a discount off full membership. The full content of the web site would be open to all. This policy would be reviewed in the long term.

It was agreed that the Society would pay to join a service to find out how many hits the web site receives.

It was agreed that the content of the web site should be enhanced and that assistance is needed in writing more material.

It is agreed that seeking speakers for meetings is made a routine item for the agenda of the Council meeting before the one immediately preceding the AGM when a 'brainstorming' session should be held.

It was agreed that the old Society Account Books (currently stored by Mike Weideli) should go to the archive in Leeds.

Julia Nunn, President, on behalf of the Council of the Conchological Society of GB & Ireland
12th February 2007
president@conch.soc.org

Recorder's Report: Non-Marine mollusca Geraldine Holyoak

The following new vice-county records have been confirmed since the last Report (*J. Conch.* 38: 722-724, 2005). Unless stated otherwise all were confirmed from specimens collected during 2005. The report is a collation of new verified records received by the Society's Non-marine Recorder, not a review of the published literature. Roy Anderson (2005) published a new list of the non-marine Mollusca of Britain and Ireland (*J. Conch.* 38: 607-638). This provides a welcome update of taxonomy and nomenclature that is followed here.

South Wiltshire (8): *Cochlicella acuta*, Clearbury Down, Just S. of Salisbury (SU153243), P. Mobsby.

East Sussex (14): *Leucophytia bidentata*, Cuckmere Haven, (TV519976), M.J. Willing.

North Essex (19): *Cochlicella acuta*, Harwich, (TM262326); *Hygromia cinctella*, nr Colchester (TM001254) both J.P. Bowdrey.

Cambridgeshire (29): *Corbicula fluminea*, nr Great Ouse, (TL58), M.J. Willing.

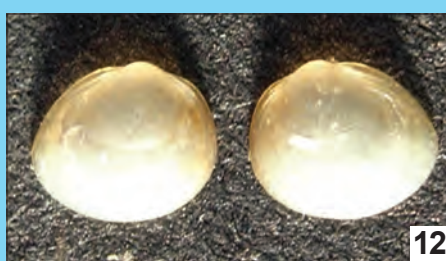
West Gloucestershire (34): *Physella acuta*, Wigpool, Forest of Dean, J. Harper; *Vertigo substriata*, Foxes Bridge Bog (SO631124), J. Harper, conf. D.C. Long.

Monmouthshire (35): *Ferrissia wautieri*, Bryn Bach Country Park, Tredegar (SO124101); *Ventrosia ventrosa* Severn Estuary, Magor (ST435847), both J. Harper.

Staffordshire (39): *Ferrissia wautieri*, Walsall (SO966962) E. Pisolkar; *Hygromia cinctella*, Blakeley,

Wombourne (SO837927), R. Gillibrand.
Carmarthenshire (44): *Vertigo angustior*, Pembury (SN40), J. Harper, conf. D.C. Long.
Merionethshire (48): *Lymnaea fusca*, Glonymorlamawr (SH604049), J.H. Bratton.
Caernarvonshire (49): *Physella acuta*, Church Lane Pastures, Llanberis (SH579599), J.H. Bratton.
North Lincolnshire (54): *Ferrissia wautieri*, River Lymm ((TF482592), A. Constable, det. J. Redshaw.
Mid-west Yorkshire (64): *Vertigo genesii*, nr Malham Tarn (SD96), A. Norris, conf. B. Colville & D. Lindley.
Dumfriesshire (072): *Anisus vortex*, Sanquhar (NS778097), A.T. Sumner.
East Donegal (H34): *Dreissena polymorpha*, north shore of Assaroe Lake (H902610), S.D.S. Bosanquet.

There were two additional records which are particularly noteworthy. John Harper recorded *Peringia ulvae* from the Severn Estuary, Magor in Monmouthshire (vc35) which is only the second record of this species in the county and it updated the original and unlocalised vice county record dating from before 1900. Barry Colville found several live adults of *Truncatellina cylindrica* at Horden in County Durham (vc66) which was otherwise known in that county from an 1848 record from Claxheugh nr Sunderland.



Images 1-13 relate to specific articles within the magazine.

- 1-10. Molluscs in South Florida. Page 21.
- 2. Calusa exhibition
- 3. *Busycon contrarium*
- 4. *Cerion incanum*
- 5. *Onchidella floridana*.
- 6. *Acanthopleura granulata*.
- 7. *Leidyula floridana*.
- 8. On discovery of *Liguus fasciatus lossmanicus!*
- 9. Kim Scheerer
- 10. A bit of fun at Weeki Wachee Springs
- 11. Lake Gormire. Page 22
- 12. *Pisidium lilljeborgii* from Lake Gormire, 13.7.2005. Page 22
- 13. South Forty Fort drain at Swineshead Bridge. Photo taken 28 March 2006

Molluscs in South Florida

Mike Rutherford

Last year my wife Eileen and I were lucky enough to spend close to three weeks in the south of Florida, during that time we had many mollusc encounters.

We travelled up to Gainesville early on in the holiday to take advantage of the University of Florida's Natural History Museum collections. I had been in touch with the malacology collections manager, John Slapcinsky, and he had kindly agreed to show me around their stores and let me examine some specimens. Their collections were beautifully organised and I soon found the genus for which I was looking. In a previous article for *Mollusc World*, I mentioned that whilst in Trinidad I had found a *Gastrocopta* shell that I had been unable to identify further. I had hoped it was a previously undescribed species but after careful comparison with other specimens I concluded it was *Gastrocopta rupicola* - the Tapered Snaggletooth. Through all this time my ever so patient wife had been waiting trying, but failing, to interest herself in some of the mollusc related literature. (Fig.1, page 20)

Heading south from Gainesville we ended up on Sanibel Island on the Gulf coast. The Bailey-Matthews Shell Museum on the island should be the ultimate destination of any conchologist. With R. Tucker Abbott as the founding director the museum got off to a great start. The museum opened in 1995 and has established itself as a popular resource for research and education. As well as displays of shells from all around the world there are a wide range of human objects showing how people through the years have used shells. One of the main displays is about the Calusa, an extinct local tribe of Native Americans who were heavily dependent on shells for all aspects of their lives so much so that it is said they never went through a stone-age level of development instead going through a shell-age (Fig.2, page 20).

The beaches on Sanibel Island provided some of the best shell-collecting I have ever experienced. Hardly anything alive but the empty shells washed up on the shore and in the shallows were amazing. As the locals love to point out I, like many visitors, had adopted the 'Sanibel Stoop' which means walking along the beach bent over looking for shells. Finds included the Florida fighting conch - *Strombus alatus*, the Florida cone - *Conus floridanus*, the Banded tulip - *Fasciolaria hunteria*, the Lettered olive - *Oliva sayana* and the Common nutmeg - *Cancellaria reticulate*.

One of the highlights of the holiday was a boat trip out to Dry Tortugas National Park, a civil war era fort built on sandbanks and reefs, about 70 miles west of Key West. The snorkelling around the island is fantastic with a great range of corals, sea fans, fish and echinoderms. I didn't see any live molluscs underwater just an old empty *Strombus gigas* shell. On the beaches there was a good deal of washed up

debris thanks to the Parks strict no collecting rules. One of the more interesting finds was the egg cases of the Lightning Whelk *Busycon contrarium* (Fig.3, page 20) which I had also seen on other beaches all around Florida. On the small area of land there seemed to be an abundance of peanut shells *Cerion incanum* (Fig.4, page 20). I would have liked to bring a few samples back for further study as there are meant to be hybrid versions between the species found originally on the Florida Keys and introduced species from the Bahamas but I was good and followed the no collecting rule to the letter.

One of the strangest molluscs I came across was on the rocks on the shore right next to where we were staying in the Keys. At first I had no idea what they were, small dark blobs with a pair of tentacles and rough skin. It was only after I got back home and described them to a colleague that I realised they must have been *Onchidella floridana*. (Fig.5, page 20). The Onchidiidae are Pulmonates, have no gills and no shells, they are generally an intertidal group and can survive on land or underwater. In the same habitat I came across a good selection of other molluscs including Fuzzy West Indian chitons - *Acanthopleura granulata* (Fig.6, page 20), Bleeding Tooth nerites - *Nerita peloronta*, Zebra periwinkles - *Littorina ziczac* and Wide-mouthed Purpura - *Purpura patula*.

Just outside the house I was staying in there was a wealth of life in the leaf litter. Whilst carefully avoiding the scorpions I found many *Polygyra cereolus* shells and one of the few native slugs of Florida - the Florida leatherleaf *Leidyula floridana* (Fig.7, page 20). As the name suggests this slug looks like a leathery leaf and it was only the movement and the presence of tentacles that made it stand out.

In the last few days of our holiday we took a trip to the Everglades. As it was the end of the dry season the water levels were low so the air-boat trips that seem almost obligatory were a bit of a disappointment. We did have a very nice walk near one of the visitor centres which had a trail especially set up for *Liguus* snail spotting. I wasn't too optimistic because of the time of year and the very dry conditions but we set out anyway. I was having no luck but thankfully my wife soon got her eye in and was spotting them all over the place finding a *Liguus fasciatus lossmanicus* (Fig.8, page 20) Our friend and host, Kim Scheerer, also proved very adept at finding these beautiful tree snails spotting a *Liguus fasciatus testudineus form marmoratus* (Fig.9, page 20). (Although I have given full names for these *Liguus* species I cannot say for definite that these are correct. As anyone who has studied *Liguus* will know there is a tremendous amount of variation and as I could not collect the snails and study them more closely I was limited to photographic identification.)

One of the weirder places we visited was Weeki Wachee Springs, an old fashioned amusement park with a live underwater mermaid show and the chance to experience what it feels like to be a clam! (Fig.10, page 20)

All in all Florida provided a fantastic range of molluscs in all sorts of habitats and should be high on the list of holiday destinations for any conchologist.

Pisidium lilljeborgii in Lake Gormire, Yorkshire

A. A. and M. Wardhaugh

Lake Gormire lies at the edge of the Hambleton escarpment in North-east Yorkshire (VC 62. Grid ref. SE5183). Situated on oolitic limestone at an altitude of 160m it is a small lake of approximately 400m in maximum length and is unusual in that no streams enter or leave it (Fig.11, page 20). Gormire is one of only two natural lakes in Yorkshire, the other being the somewhat better known Malham Tarn, far to the west in the Pennines.

The pea mussel *Pisidium lilljeborgii* is a boreal relict with a north-westerly distribution in Britain (Kerney 1999; Killeen *et al.* 2004) and in Yorkshire it has been recorded only from Malham Tarn and Lake Gormire, the latter being its most easterly known locality in Britain. Historically, following its discovery in Malham Tarn early in the twentieth century (Stratton 1956), Charles Oldham suggested that it might also occur in Gormire and, in the company of Bernard Lucas, set out to look for it in August 1928. The expedition proved Oldham's prediction correct; in his words "we collected a good many specimens [of *P. lilljeborgii*] in calcareous mud in which *Littorella* [Shoreweed] and *Myriophyllum* [Water Milfoil] were growing, where it was associated with *P. nitidum* and *P. hibernicum*" (Oldham 1929). He went on to add "Mr Lucas on a previous visit collected *P. casertanum*, *milium* and *nitidum* in black vegetable mud at the roots of *Menyanthes* [Bogbean]. Other molluscs living in Gormire are *Planorbis albus*, *Valvata piscinalis* and *Sphaerium corneum*."

Since that time there do not appear to be any further records of the occurrence of *P. lilljeborgii* in Lake Gormire (Adrian Norris, pers. comm. Table 1). In view of this, the lake was

visited on 13th July 2005 with the aim of trying to re-find it. Samples were collected from a series of sites around the margin using a wire mesh sieve of gauge approximately 2mm and diameter 180mm (i.e. a kitchen sieve) attached to a pole extendable to 2.4m. Samples were collected from shallow areas usually less than 0.3m in depth and within 4m of the margin. Five specimens of *P. lilljeborgii* were among the Mollusca collected (Fig.12, page 20) these being from sites along the south-west margin of the lake. *P. lilljeborgii* was not found at sites elsewhere (Fig. 3). GPS grid references could not be taken on the day due to reception problems caused by the tree canopy.

The lake was revisited on 19th November 2006 with the aim of

trying to learn more about the distribution of *P. lilljeborgii*. On this occasion it was possible to obtain GPS grid references and *P. lilljeborgii* was located at four out of five sampling points along the south-west margin, all in areas with little or no vegetation and a substratum of mixed particle size; a silty mud with some grit (Fig. 3 and Table 2). This contrasts with the habitat described by Oldham and noted above; calcareous mud with *Littorella* and *Myriophyllum*. Oldham found *P. nitidum* and *P. hibernicum* associated with *P. lilljeborgii* but in the present survey only the former was noted as an associate, *P. hibernicum* not being found in the lake at all. *P. nitidum* was the most common *Pisidium* in the samples taken.

Table 1: Mollusca recorded from Lake Gormire, a summary

Species	Oldham (1929)	Pators Sept 1967	Lloyd-Evans 7.9.1974	Current Survey 13.7.05	19.11.06
<i>V. piscinalis</i>	*				
<i>P. antipodarium</i>				*	*
<i>P. fontinalis</i>			*		
<i>L. stagnalis</i>					*
<i>B. contortus</i>		*			
<i>G. albus</i>	*		*		*
<i>H. complanatus</i>			*	*	
<i>S. corneum</i>	*		*	*	*
<i>P. casertanum</i>	*		*		
<i>P. milium</i>	*	*	*	*	*
<i>P. subtruncatum</i>				*	
<i>P. lilljeborgii</i>	*			*	*
<i>P. hibernicum</i>	*				
<i>P. nitidum</i>	*			*	*

Table 2: Mollusca recorded at Lake Gormire 19.11.2006

Site no.	GPS Grid Ref.	Species	Substratum
1	SE50176.83152	<i>P. antipodarium</i> <i>S. corneum</i> <i>P. lilljeborgii</i> <i>P. nitidum</i>	Silty mud and grit
2	SE50216.83140	<i>P. antipodarium</i> <i>L. stagnalis</i> <i>P. lilljeborgii</i> <i>P. nitidum</i>	Silty mud and grit
3	SE50277.83096	<i>G. albus</i> <i>P. lilljeborgii</i> <i>P. nitidum</i>	Silty mud and grit
4	SE50323.83093	<i>P. lilljeborgii</i> <i>P. nitidum</i>	Silty mud and grit
5	SE50369.83093	<i>S. corneum</i> <i>P. nitidum</i>	Silty mud and grit with a sparse cover of <i>Littorella</i>

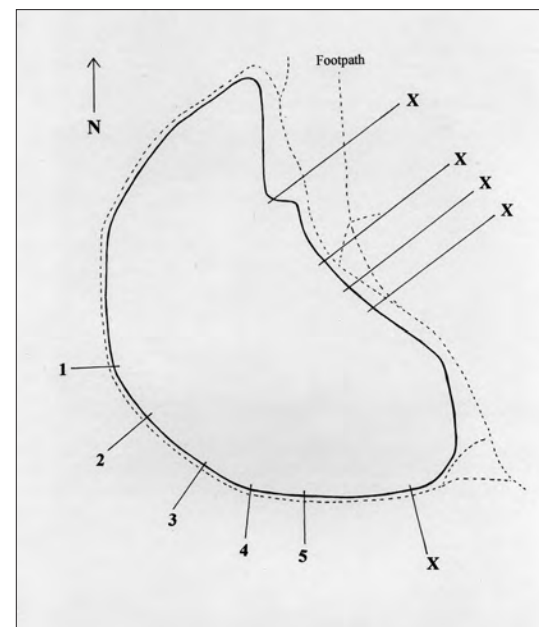


Fig.3: Sketch map of Lake Gormire showing sampling sites. No grid lines are shown as the whole lake falls within SE5083

1 – 4: sites where *P. lilljeborgii* was located on 19.11.2006 5: *P. lilljeborgii* not located 19.11.2006 X: *P. lilljeborgii* not located on 13.7.2005 See Table 2 (above) for Grid references

In 2005 and 2006 extensive areas of bogbean (*Menyanthes trifoliata*) were noted around the lake margin, with a substratum of black, decaying vegetable matter. Samples taken from such sites included *P. milium* and *P. nitidum* along with *Potamopyrgus antipodarium* and *Sphaerium corneum* but not *P. lilljeborgii*.

Acknowledgements

We are grateful to Adrian Norris for confirming identification of specimens of *P. lilljeborgii* collected on 13th July 2005 and for providing records for Lake Gormire collected by J.A. Pators and Dr L. Lloyd-Evans.

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Ruditapes philippinarum and its possible introduction to the Fleet at Weymouth Adrian Brokenshire

On the 11th November 2006 whilst walking the shoreline of the Fleet at low tide, I noticed a large number of bivalves (*Venus verrucosa*, *Tapes decussatus* and *Paphia aurea*) scattered along the shore between the bridging camp and Pirate's Cove. You may well think that this is nothing unusual but all the material was freshly dead with valves united – some individuals were live or moribund. All these species do occur in Portland Harbour and can be found washed up along the shore of the Fleet near Ferrybridge, never in large numbers, and very rarely in this condition.

I decided to collect up a size range of each to add to my collection. At this point I should add that none of the specimens were fully adult. On getting home and having a closer inspection of the shells, some of which I had thought were *Tapes decussatus* were rather different and had the features of the manilla clam *Ruditapes philippinarum*.

The Fleet has a high conservation status with designation at local, national and international level, and, therefore, the possible introduction (accidental or otherwise) of this species was of great concern. I took a selection of the shells to Dan Moxon, Fleet warden at the Chesil Beach & Fleet Centre, Ferrybridge and explained the significance of the find, although neither of us were sure of the identification or the shell's provenance. Subsequent examination by Dennis Seaward at the Fleet Study Group meeting proved inconclusive. Further discussion on the matter with David Harfield at Charmouth pointed me towards Terry

Wimbleton's article in *Mollusc World* 2. Terry kindly agreed to look at some of the Fleet specimens and confirmed that they were indeed sub-adult *R. philippinarum*.

We cannot be certain how the manilla clam has got to the Fleet. The consensus of opinion is that they have come from Poole Harbour where there is a commercial fishery for the species. It is now spreading out from the fishery and can be found around the harbour in fairly large numbers. We think it probable that the manilla clams were brought from Poole to the Fleet by rod and line anglers to use as bait - the unused live individuals being discarded at the end of the day.

The matter is now back in the hands of those responsible for the Fleet Nature Reserve for whatever action they deem appropriate. We cannot be certain whether *R. philippinarum* could reproduce and survive in the Fleet, as the habitat at that locality is probably unsuitable. However, it is quite possible that they will eventually arrive in Portland Harbour and the tidal reaches of the Fleet where habitat and conditions would be much more favourable.

The point of this article is that it brings home the fact of how easy it is for man to spread an alien species into a habitat of high conservation value and the impact it could have on those interests. I would hope that publicity through the local media and angling clubs, plus national angling press might stop this happening again in the Fleet or elsewhere.

Wimbledon Common with the London Natural History Society, September 2006 *June Chatfield*

A joint field meeting of the London Natural History Society and the Conchological Society of Great Britain and Ireland was held on 16 September 2006 with 12 members and friends and Dingo (London Natural History Society dog) present. The aim of the meeting was to record molluscs on Wimbledon Common for the conservators who manage the Common. June Chatfield produced a spread sheet of incidental mollusc records made from her excursions with the South London Botanical Institute since 2000 and also extracted from the book Wimbledon Common & Putney Heath: a Natural History edited by Tony Drakeford and Una Sutcliffe and published by the Conservators in 2000 (ISBN 0950 1887 5 1). The list consisted of 21 species of molluscs.

Wimbledon Common is an oasis of semi-natural open space in a built-up area of south London. In the 1860s it had a narrow escape from housing development but this plan was thwarted by the action of local residents leading to the passing of the Wimbledon and Putney Commons Act 1871 when the Common came into the hands of the Conservators. Since then it has been managed for wildlife and recreation and is a much valued green space as well as being heathland, a habitat that is rare in the London area. Wimbledon Common is an SSSI. The new Visitor's Centre near the windmill and Warden's Office has exhibits on the history and natural history of the Common, a copy of the book for reference and a microscope with large viewing screen that can be used to examine specimens, as we did for a problematical ram's-horn (*Gyraulus laevis*) that needed more than a hand lens to determine.

Wimbledon Common is on an elevated site and the bedrocks are Tertiary deposits mostly of London Clay and Claygate Beds, overlain in places by Thames terrace gravel — hence the heathland habitat. Soils are acidic except in some local areas near the edge where road materials have been deposited in the past and some artificial mounds made. The various ponds on the common are all

man-made being derived from earlier gravel digging. Habitats include heathland (wet and dry), mixed and deciduous woodland (oak and birch), mounds of imported material, ponds, and at the south side, springs draining into the Beverley Brook, a tributary of the Wandle. We did not reach the southern part. The geology, habitats, flora and fauna are further explained in the book (Drakeford & Sutcliffe 2000) and in displays on site in the Visitor Centre.

The Common is a vast area and mollusc-hunting a slow business, so we only explored a small area, leaving the rest for a future meeting. The 1 km grid squares that we worked were TQ/22-72 and TQ/23-73-. Our field work extended into some entomology particularly water beetles and caterpillars of moths.

Seven-Post Pond is by the road on the northern part of the Common known as Putney Heath and is the best pond for molluscs, having a slightly higher pH of 6.6 recorded in the survey of 1996 (Drakeford & Sutcliffe 2000). In September 2006, due to the dry summer there was little standing water and the basin of the pond was covered by a mat of the alien pondweed *Crassula helmsii*. This proved a good protection for the water life left otherwise exposed. The low water level enabled us to reach the centre of the pond and to do a more effective survey.

We confirmed the continuation of living populations of the Common Pond Snail (*Radix balthica*), Great Pond Snail (*Lymnaea stagnalis*), Great Ram's-horn (*Planorbis planorbis* or possibly the similar species *P. carinatus*), River Snail (*Viviparus contectus*) and the Horny Orb-shell (*Sphaerium corneum* agg.) that were recorded in 1996. Closer examination by Peter Wilson of the Planorbis suggested that it might be the Keeled Ram's-horn (*P. carinatus*) on account of its colour and glossy shell but these two are notoriously difficult to separate. We also confirmed the continuation of the alien Pointed Bladder Snail (*Physella acuta*) that I had found in the pond in April 2005. The Bladder Snails are adapted to habitats

that dry up and I met them in swamp woodlands in Michigan USA in 1974. We were able to add some species to the existing list, but none of them were in large numbers. Small bivalves are often overlooked on account of difficulty of identification and the need to take some back for microscope work. Peter Wilson found the Lake Orb-shell (*Musculium lacustre*) and Rosemary Hill found the even smaller Porous-shelled Pea Mussel (*Pisidium obtusale*).

The most exciting find (one living and one shell) was the Smooth Ram's-horn (*Gyraulus laevis*): it is much like the common White Ram's-horn but lacks the spiral lines on the shell. It is a very local species and the *Atlas of Land and Freshwater Molluscs* by Michael Kerney (Harley Books 1999) shows no recent records for the London area and no previous record for Wimbledon. It is however a coloniser of gravel pit lakes, which is the early history of Seven-Post Pond. We also found a shell of another Ram's-horn (*Hippeutis complanatus*). The other species of note is the River Snail (*Viviparus contectus*). This is recognised by the deep sutures or grooves between the whorls of the shell and unlike the other water snails this is a gill-breathing prosobranch mollusc in which the mouth of the shell is closed by an operculum or hard plate on the back of the foot. It is a part of the living mollusc and grows with it, hence the concentric lines. The River Snail is of local distribution in canals and drainage ditches of central and eastern England and is in the Thames. This record was included in the Atlas (Kerney 1999). The Thames valley is the southern boundary of its range in Britain, except for a cluster of records in Somerset.

Some terrestrial species were recorded around the edge of the pond: they were the Great Slug (*Arion ater* agg.), Hedgehog Slug (*A. intermedius*) that hunches up into a hedgehog shape and has upstanding tubercles, Leopard Slug (*Limax maximus*) that is often spotted, Common Garden Snail (*Cornu aspersum*), Slippery Moss Snail (*Cochlicopa lubrica*) and the Garlic Glass Snail (*Oxychilus alliarius*). The Garlic Snail is flat, shiny,



1



2



3



4

brown and small (6mm across) but gives off a strong smell of garlic when prodded with a piece of grass stem. Once encountered, always remembered: it is a popular party trick. The garlic smell has been shown to be a defence against snail-eating beetles.

Kingsmere This was a much larger pond, more a lake, of pH 6.0, with sandy bottom, no water weed and water birds including geese. Both the lake and its margins were very unproductive, yielding

only the Pointed Bladder Snail (*Physella acuta*) that had probably taken a lift on a bird from Seven-Post Pond and the Kentish Snail (*Monacha cantiana*), surprisingly, by the margin. A damp grassy hollow near Kingsmere examined with noses to the ground yielded the Rayed Glass Snail (*Nesovitrea hammonis*) all of 4 mm, more Garlic Glass Snails (*Oxychilus alliarius*) and Hedgehog Slug (*Arion intermedius*), an assemblage typical of acidic wet grass.

The Mounds The last search of the morning was on the mounds of made-up ground where we found the Waxy Glass Snail (*Aegopinella nitidula*), the Pellucid Glass Snail (*Vitrina pellucida*), another Hedgehog Slug, the tiny Eccentric Grass Snail (*Vallonia excentrica*) only 2.5 mm across that is typical of calcareous grassland and examples of the Brown-Lipped Snail (*Cepaea nemoralis*). This has been found elsewhere on the Common. From here we made our way back to the windmill for lunch.

Queensmere and surrounding woodland The afternoon session began with an investigation of Queensmere, another acid lake of pH 6.3 and a poor habitat for molluscs. The Pointed Bladder Snail was found and, after a good deal of effort, the Shining Pea Mussel (*Pisidium nitidum*). The woodland alongside was equally unproductive yielding only *Oxychilus alliarius*.

After a recreational interlude, cheering Dingo in her outpacing of other dogs in retrieving their sticks in the water, we followed Stag Ride in a south-westerly direction.

Stag Ride Here we found Waxy Glass Snail (*Aegopinella nitidula*), Brown-lipped Snail (*Cepaea nemoralis*), Common Garden Snail (*Cornu aspersum*) and the Common Grey Field Slug (*Deroceras reticulatum*). A yellowish Limax slug was seen but disappeared in a crevice in the wood. The abundance of dead wood and logs along the ride provided valuable habitats for slugs and snails. The final tally was 24 species of molluscs, mostly confirming old records, but including some

new ones.
Pond Life Pam Wilson from the Conchological Society added the following records for Seven-Post Pond: the flatworm *Polycelis tenuis*, leech *Erpobdella octocolata*, crustaceans, the American Pond Shrimp (*Crangonyx pseudogracilis*), Water Louse (*Asellus aquaticus*), bugs Plea leachii and Saucer Bug (*Ilyocoris cimicoides*), Soldier Fly larva (*Stratiomys chamaeleon*) and water beetles (*Halipilus ruficollis ruficollis*, *Noterus clavicornis*, *Hydrochus angustatus*, *Helochares punctatus* and *Enochrus coarctatus*). Additional species for Queensmere were: leeches *Hemiclepsis marginata* that feeds on fishes and amphibians and *Helobdella stagnalis*, Water Louse (*Asellus aquaticus*) and the fish Tench.
Insects Two very attractive caterpillars were found in the vicinity of Queensmere and were identified by Rosemary Hill and Ron Boyce as the moths Kent Black Arches (*Meganola albula*) and Bright-line Brown-eye (*Lacanobia oleracea*).

It was an enjoyable and interesting day and the Warden, Dave Haldane, has written to thank us for the records.

Pond surveys at Nonsuch Park, Ewell, Surrey on Saturday 28 April 2007 Members of the Conchological Society are invited to another field meeting of the The London Natural History Society, this one jointly with the conservation group Nonsuch Watch, to investigate the freshwater life of the various ponds in Nonsuch Park. It starts at 10.30. bring lunch. Meet at the Ewell gate car park (off A24 near Briarwood Road) for Nonsuch Park (TQ/226634). Leaders June Chatfield (Tel: 01420 82214) and Mick Massie (mick.massie@gmail.com).

Photographs:
1. Pam and Peter Wilson investigating the centre of Seven-Post Pond, Wimbledon Common. Photo: June Chatfield
2. Examining the catch at Seven-Post Pond with Dingo looking elsewhere. Wimbledon Common. Photo: June Chatfield
3. Examining the catch at Seven-Post Pond, Wimbledon Common. Photo: June Chatfield
4. June Chatfield showing *Viviparus contectus* to the group. Wimbledon Common Photo: Ron Boyce

The Non-marine BAP Priority Species Review – A Progress Report Martin Willing

I wrote in early editions of *Mollusc World* (6: 10; 8: 22) of the UK BAP review process, which was taking place nine years after the publication of the first BAP lists. The review provided an opportunity, using a set of scientific criteria (summarised below), to assess whether the first priority species should retain their 'priority status' and also to consider whether further species should be added. All invertebrate proposals were initially sent to the Invertebrate Link BAP Working Group. This body, co-chaired by Deborah Proctor (JNCC) and Nigel Bourn (Butterfly Conservation), considered all proposals and issued a preliminary recommendations list in summer 2006. Worryingly this first list rejected a number of species that the Society considered met at least one of the assessment criteria. These rejects included *Vertigo moulinsiana*, *V. geyeri*, *V. genesii* and *Segmentina nitida*. Following a short period of further 'appeals' (where Martin Willing and Ian Killeen resubmitted revised proposal forms), the 'final, final, final' list emerged in late October 2006. In terms of Mollusca, the outcome is very pleasing. All of the original 11 BAP Priority Species

remain and all but one of the new candidate species are accepted. The new species add a further eight 'deserving cases' to the molluscan priority listings. These additions include the freshwater snails *Omphiscola glabra*, *Valvata macrostoma* and *Gyraulus acronicus*; the freshwater bivalve *Sphaerium solidum*; the land snails *Truncatellina cylindrica* and *Vertigo modesta*, the tidal ditch / estuarine snail *Mercuria confusa* and the brackish lagoon snail *Heleobia stagnorum*. These species, together with all of the other BAP proposals, have gone to the Priority Species and Habitats Review Working Group (which includes reps. from the Country Agencies, Wildlife Link, DEFRA, the Scottish Executive and Welsh Assembly) for further consideration. The next step in the BAP process will consider what conservation action is needed for each species by compiling priority actions (separated into 10 categories) required for each species. This process will also include 'success criteria' for each species including SMART targets and criteria to assess whether a species might be removed from priority listing. The first steps of this process are to be completed by early spring. For further details visit the BAP website at www.ukbap.org.uk and look at the species and habitats review.

Species from original BAP Priority List	Outcome of Review: ✓ = accepted as proposed BAP Priority Species; x = rejected as BAP Priority Species	Reasons for acceptance (criteria satisfied .. for details see below)	Sketch notes on distribution and conservation issues in the UK
Glutinous Snail <i>Myxas glutinosa</i>	✓	3, 4.4, 4.6	Only known population lives in a single Snowdonian lake. The population is stable, but potentially threatened by eutrophication.
Sand Bowl Snail <i>Catinella arenaria</i>	✓	1, 4.1, 4.4	Living on a sand dune complex in North Devon and in calcareous flushes in the Pennines. The snail is at risk in the dune complex as a result of lowered water tables.
Little Whirlpool Ram's-horn Snail <i>Anisus vorticulus</i>	✓	1, 2, 3, 4.4	Restricted to only three main coastal and floodplain grazing marsh areas in southern and eastern England, this may be one of the UK's most threatened species. One long term risk is from sea level rise flooding many of its sites or raising salinity levels in ditches.
Shining Pond Snail <i>Segmentina nitida</i>	✓	4.4	With a broadly similar, but slightly wider, distribution than <i>Anisus vorticulus</i> this is a species that lives in grazing marsh ditches that have not been cleared for many years. The snail has been lost from much of its former range probably as a result of nutrient enrichment.
Depressed River Mussel <i>Pseudanodonta complanata</i>	✓	4.4, 4.5	A local species living in the slow-flowing lower reaches of some rivers in southern and eastern England and the Welsh borders.
Fine-lined Pea Mussel <i>Pisidium tenuilineatum</i>	✓	2, 4.4	A tiny mussel that lives in fine sediments in some hard water rivers, chiefly in southern Britain. The extremely fragmented distribution and low numbers of this mussel in some rivers is likely to be indirectly associated with high nitrate and phosphate levels.
Pearl Mussel <i>Margaritifera margaritifera</i>	✓	1, 4.1, 4.3, 4.4	A long-lived species present in soft-water rivers in western and northern Britain. Declines are due to a wide range of water quality and other factors (e.g. decline in salmonid host fish, siltation of water courses). Although some Scottish populations are reasonably healthy, those in England and Wales are almost all at risk of extinction. Captive breeding programmes offer one possible 'last chance' in these areas.
A Whorl Snail <i>Vertigo geyeri</i>	✓	1, 4.1, 4.4	A very local species living in the short, unshaded vegetation of upland calcareous flushes, but also in a few open fens at lower altitudes. This species is found in N. Wales, northern England, East Anglia, eastern Scotland and on one Hebridean Island. Risks for the snail include falling water tables and over-grazing of open hillside sites by sheep and deer.
A Whorl Snail <i>Vertigo genesii</i>	✓	1, 4.1, 4.4	A snail with rather similar habitat to <i>Vertigo geyeri</i> , but with a more restricted distribution. It is found very locally in northern England and eastern Scotland and conservation issues are also similar to those of <i>V. geyeri</i> .
Narrow-mouthed Whorl Snail <i>Vertigo angustior</i>	✓	1, 3, 4.4	A tiny whorl snail found in short, humid turf, often close to the coast. The main centres of distribution are in East Anglia, South Wales and the coast of Northern Ireland, with isolated populations in northern England and western and eastern Scotland. Many of the sites lie close to sea level and are threatened with habitat loss resulting from sea level rise.
Des Moulin's Whorl Snail <i>Vertigo moulinsiana</i>	✓	1, 4.4	This snail occurs in calcareous fens amongst un-shaded vegetation (chiefly sedges, sweet-grasses and reeds) bordering many rivers in southern and eastern England. Isolated outlying populations occur in Wales and south-west England. The chief threat to populations of the snail is probably lowered water tables directly or indirectly linked to water abstraction.
Newly Proposed candidate BAP Priority Species			
Large-mouthed Valve Snail <i>Valvata macrostoma</i>	✓	1, 4.1, 4.5	A species with a broadly similar distribution and habitat to <i>Segmentina nitida</i> . Inappropriate ditch management is one of the main risk factors for the species.
Swollen Spire Snail <i>Mercuria similis (= confusa)</i>	✓	4.1	A species restricted to the muddy lower tidal margins of a few rivers in southern and eastern England. A snail living in very low salinity waters, it is at risk from barrage schemes and in the medium term, from sea level rise raising salinity levels.
Mud Pond Snail <i>Omphiscola glabra</i>	✓	4.1	A local species throughout the country, typically living in shallow temporary pools and ponds, often with few other mollusc species. The species is threatened by loss of marginal land as well as pool drainage or enlargement.
Thames Ram's Horn Snail <i>Gyraulus acronicus</i>	✓	3	A very local species restricted to the upper Thames and some of its tributaries. Water quality changes and excessive water abstraction probably pose the greatest threats to the species.
Witham Orb Mussel <i>Sphaerium solidum</i>	✓	3, 4.5	A mussel currently only known to live in the UK in the lower reaches of two rivers in eastern England. In both systems, numbers are declining and there is strong circumstantial evidence associating this decline with eutrophication.
Whorl Snail <i>Vertigo modesta</i>	✓	4.1	A whorl snail restricted to small areas of arctic-alpine vegetation on mountain summits and plateaus in eastern Scotland. It may be at risk from increased visitor pressure in these upland areas disturbing the small areas of low, slow-growing vegetation where the snail lives.
A Chrysalis Snail <i>Lauria sempronii</i>	x		A snail restricted to two old, ivy covered walls in the Cotswolds. Disturbance of these old walls poses the obvious threat to the species.
Cylindrical Whorl Snail <i>Truncatellina cylindrica</i>	✓	3	A very local species found in short, dry, calcareous grassland, often in loose friable stony ground. It occurs at scattered sites in eastern England and Scotland and is threatened by land management changes.
A Spire Snail <i>Heleobia stagnorum</i>	✓	4.6	A snail living in brackish, non-tidal ditches and lagoons; it is confirmed living in one area in southern England. A species threatened with salinity changes and water quality deterioration.
Species 'flagged up' as UK national responsibilities (but no Species Action Plan recommended at this stage – to be kept under review)			
English Chrysalis Snail <i>Leiostryla anglica</i>	x		A species widespread in a range of wetland and woodland habitats, chiefly in western and northern Britain. A 'near endemic' to the UK and Ireland.
Silky Snail <i>Ashfordia granulata</i>	x		A species widespread in a range of humid, usually unshaded habitats throughout most of Britain. A 'near endemic' to the UK and Ireland.
Criteria used to judge BAP proposals: C1: International threat. C2: International responsibility + decline in the UK. C3: Marked decline in the UK (>50% in last 25 years). C4: Other factors: 1) highly specialised habitat; 2) pressure from disease; 3) reproductive failure; 4) factors that caused the original BAP priority designation are still operating; 5) species is declining and is a good 'indicator' or 'flagship' that highlights a conservation issue; 6) species occurs at only a single known UK site and is under demonstrable threat; 7) species qualifies as 'Critically Endangered in Britain or UK' (using IUCN Red List Categories & Criteria V 3.1).			

Diary of Meetings - Conchological Society

Programme Secretary: Ron Boyce, 447c Wokingham Road, Earley, Reading, Berkshire RG6 7EL

IMPORTANT: Please remember to inform the leader if you are attending a field meeting. If you are held up in traffic or your public transport is delayed, it may be possible to ring the Programme Secretary on 0794 109 4395 on the day of the meeting for information on the location of the field site being surveyed.

Indoor meetings at the Natural History Museum will take place in the Palaeontology Demonstration Room at the end of Gallery 30, except for the Annual General Meeting which is being held in the De La Beche Room.

Members attending the Annual General Meeting in the De La Beche Room, which is not in a public access area, will need to sign in at the visitors' window in Museum Lane. Please remember to sign out again when leaving so that Security know that you have left the building.

The Programme Secretary will be happy to receive any offers to lead field meetings or suggestions for speakers for indoor meetings.

Key to meetings:

- NHM** = Natural History Museum, London, indoor meeting
- FIELD** = Field Meeting at outdoor location
- WKSHP** = Workshop on Molluscan topic
- YCS** = Yorkshire Conch. Soc. events

NHM – Saturday 31 March
14:30h in the De La Beche Room.

Annual General Meeting

Presidential Address by Dr Julia Nunn on the subject of 'Lough Hyne Marine Nature

Reserve – a biodiversity hotspot'.

Abstract

Lough Hyne is a sheltered, fully marine lough in west Cork on the south west coast of Ireland, declared a nature reserve in June 1981, and the first statutory Marine Nature Reserve in Europe. Within the reserve area, there is a wide variation of wave-exposure, current speed, depth, light penetration and siltation. Substrata range from vertical cliffs of bedrock, boulder slopes to fine sediments. Lough Hyne is generally accessible and small enough to sample. The wide range of habitats suggests that Lough Hyne may be expected to have a significant number of molluscan species present.

Marine life has been recorded there since the middle of the 19th century. The history of recording in the Lough will be illustrated. Mollusca have particularly been documented since the 1970s, but most recently by me over the last 16 years through diving and visits to the shore. The molluscan fauna of the Lough, and the biogeography of selected species, will be described.

YCS - Saturday 14 April
Kingsdale.

Contact: David Lindley (0113 2697047) (home), david.lindley3@btinternet.com

Meet at 10:30h in the car park by Tourist Information at Ingleton, grid ref. SD 695730.

FIELD - Saturday 28 April
Stoke Albany, Northamptonshire.
Leader: James Potter (0116 279 9029) (home)

The study area will be Stoke Wood [grid ref. SP 800863] west of the B669 about 2 km south of Stoke Albany. Here

we will be met by the warden. The vegetation is ash/field maple with some oak and birch and an understorey including hazel, spindle, wych elm and willow. The ground flora is very diverse. The centre of the wood is vigorously managed coppice with standards, the remainder being neglected coppice or high forest with some rough grassland. There is a stream through the wood.

Meet at Market Harborough railway station at 10:30h.

YCS - Saturday 5 May
Yorkshire Wolds North.
Contact: David Lindley (0113 2697047) (home), david.lindley3@btinternet.com

Meet at 10:30h at the picnic site at Bracey Bridge on the A614 two miles west of Burton Agnes, grid ref. TA 077620.

FIELD - Saturday and Sunday 19-20 May

Littondale and Upper Wharfedale, West Yorkshire. Joint meeting with the Yorkshire Naturalists Union. Leader: David Lindley (0113 2697047) (home), david.lindley3@btinternet.com

On both days the meeting will commence at 10:30h.

On Saturday the meeting is joint with the Yorkshire Naturalists Union's VC64

meeting for the year. (It is also their 850th field meeting). The meeting is to take place at Nethergill Farm at Outershaw just off the Hawes road. This is an area at the very top of the Wharfe valley at about 400m above sea level. There is a mixture of limestone and acid grassland with some limestone outcrops, a small conifer plantation and the usual dry stone walls found in the area. In addition there are a series of calcareous flushes to be examined. It is known

that *Deroceras agreste* occurs close by and other species of interest should be found such as *Clausilia dubia*. If time permits it is intended to visit Upper Langstrathdale in the afternoon which is a couple of miles downstream. The YNU hold a tea meeting for reports following each field meeting which lasts about an hour and commences at 16:30h

The meeting point is at grid ref. SD 862822 (This may change so please check prior to attending).

On Sunday it is intended that we visit the area of Great Close Mire to the east of Malham Tarn. *Vertigo genesii* was discovered in the vicinity recently and there are areas of flush and marsh that still need to be examined. This area can be particularly wet after heavy rain so please be prepared. There are also a number of other species of interest in the area, again *Deroceras agreste* is recorded and the tarn itself holds a number of *Pisidium* spp.

The meeting point is at the car parking area just south of the tarn at grid ref. SD 895658.

Maps: 1:25 000 - Yorkshire Dales Outdoor Leisure 2 and 30, and 1:50 000 - Sheet 98 Wensleydale and upper Wharfedale.

FIELD - Friday and Saturday 15-16 June

Rhossili, Gower, West Glamorgan.
Marine meeting.
Leaders: Celia Pain and Rupert Honnor (01634 261147) (home), [C. Pain@tp006f6896@blueyonder.co.uk](mailto:C.Pain@tp006f6896@blueyonder.co.uk)

Meet at 10:00h at the Rhossili National Trust Car Park, grid ref. SS 415879, on both days.