

The Conchologists' Newsletter

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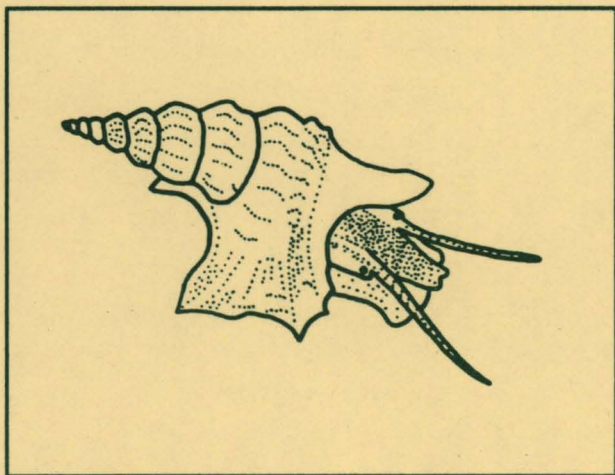
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Report of the Isles of Scilly Field Meeting 23-30 September 1999

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[REDACTED], Rainham, Kent [REDACTED]

This field work was organised to support the DOMMIC English Channel survey and to ascertain the current state of the molluscan biodiversity in a previously very well recorded area. The meeting was led by Jan Light and Tom and Celia Pain.

Eighteen members and their families assembled by the harbour in Hugh Town at the start of the meeting. The party was divided into groups by Jan in order to cover the shores around the west end of St Mary's.

The harbour, not surprisingly, was fairly poor but a reasonable list was procured by hard work. Porth Cressa, opposite the harbour fumed out to be a good location once the problem of leaking wellies had been dealt with by Rupert. An interesting rocky lagoon called the Pilchard Pool was home to a small *Zostera* bed, but no associated molluscs. The Pool was said to have been used by Scillonians to trap pilchards, as the tide was falling. David and Shelagh investigated Old Town Harbour to good effect.

When the tide rose in the afternoon Janet went bird watching along the north coast of St. Mary's. She was rewarded by a red backed shrike, and a pectoral sandpiper, also she found a flint arrowhead in a field, so she was fairly pleased! At the end of the afternoon notes were compared, species checked and plans were made for the next day in Rose Cottage, abode of Judith, Colin and Rupert. This became our headquarters for the week.

The second day was spent on St Agnes and Gugh. The weather was hot and sunny, so we all enjoyed ourselves! The party was again split up by Jan to cover as many shores as possible. The western side of St Agnes is very, very exposed and the shores are difficult to get at and collect from, as well as the fauna being rather restricted: *Patella* spp. As well as looking for shells at Beady Bay, Janet, Mary and Peter were looking for medieval beads from a shipwreck which are

sometimes found there. None were found that day; Janet's luck had run out! The east facing shores were much richer than the western ones. Small red sea weeds abounded between St Agnes and Gugh. Dropnose Porth was a fairly good location for micro-molluscs.

Sunday was spent on Tresco and most people collected in the Tresco-Bryher Channel which nearly dries out at low spring tides. The substrates range from mud to coarse sand and weedy boulders, a lot of burrowing anemones are to be seen in the sand, food of *Epitonium*. A few people made collections elsewhere – Pentle Bay (no *Janthina* today). Throughout the day the weather became increasingly cold with driving rain, and the boat trip back to St Mary's was pretty miserable.

Monday was supposed to be one of the lowest tides, so a visit was organised to the famous St Martin's Flats. We left in the middle of a downpour, showers and high winds all day, typical field trip weather! Jan and Ian managed to borrow a spade from the University of Exeter group to sample the in-fauna of the Flats. They collected a large number of live bivalve records for the survey, particularly *Gari tellinella*. At the end of the day Ian was sure he could predict the bivalve assemblage from the sediment grain size, depth and muddiness. The micro-fauna turned out to be similar to the other islands, millions of *Rissoa parva/interrupta* with a low occurrence of a wide range of other species. The tide failed to go out as far as it should have because we had low atmospheric pressure: the gale. A boatman seeing Rosemary emptying her gumboots said that he had never seen wellies used as a rain gauge before!

On Tuesday the party split into two, visiting Bryher and Tresco. The channel between St Martin's and Tresco has one of the few remaining patches of the marine plant *Zostera*, and had a few live specimens of the characteristic mollusc fauna, *Rissoa membranacea* and *Jujubinus stratus*. There has been a decline in *Zostera* owing to disease throughout Europe. It may not survive in the Isles of Scilly for much longer; the mollusc species living with it will then be lost.

Mike and Helen found live *Crassostrea gigas* in the Tresco-Bryher Channel where they are farmed and supplied to local hotels and where Jan and Ian sampled them of course!

A dredging trip had been planned for Wednesday, but the rough weather prevented this. This was unfortunate because Crow Sound is a famous locality and up-to-date sublittoral records would have been a useful addition to the lists for the trip.

Jan, Ian and Peter explored the east end of St Mary's around Tolls Island. Peter made a remarkable find of a tiny *Tonicella rubra*, new to the Islands. In view of its previously unknown presence in Scilly, the specimen was sent to a specialist for confirmation. Rosemary and Ron also surveyed St Mary's. At Porth Hellick they found a shell of *Buccinum humphresianum*, a rare, deep water species. Although it had previously been recorded from this area this specimen is typical of those from Portugal. So this specimen had probably reached Scilly in a fishing boat, been discarded and floated ashore.

Having found *Paludinella littorina* in granite crevices in Gugh Channel on the second day, Jan and Ian spent a considerable time looking for, and confirming that, *Paludinella littorina* is to be found on all of the islands. This fieldwork has extended knowledge of the species distribution and the data is included in their paper: Killeen I. & Light, J. 1999. New records of *Paludinella littorina* from Cornwall, Scilly and Brittany, *Journal of Conchology*, 36, (6), 85. *Paludinella* was living in granite crevices and in sediments under cobbles at extreme high water springs with *Littorina saxatilis* and *Leucophytia bidentata*. This was certainly the high point of the trip for Ian and Jan!

The trip was rated as highly successful by Jan, so a big thank you to all the participants who worked hard in sometimes very unpleasant conditions. They were: Ron Boyce; Colin Gillard; Rosemary Hill; Rupert Honnor; David Hurd; Ian Killeen; Jan Light; Judith Nelson; Tom and Celia Pain; Shelagh Smith; Malcolm and Lynda Symonds; Mary and Peter Topley; Helen and Mike Weideli. Many people took home samples of weeds and sediments to process. This is an essential adjunct to the field work, but it is very time consuming sorting and identifying the species. Thank you to Colin, Ian, Jan, Rosemary, Ron, Rupert and Shelagh for their hard work.

Most identifications were checked by Jan Light, the Marine Recorder; Tom Pain confirmed the *Buccinum humphresianum* and Allan Jones of Aberdeen University confirmed the *Tonicella rubra*.

A full species list may be obtained by e-mail from c.j.pain@gre.ac.uk or a hard copy by sending a stamped self-addressed envelope to Celia Pain.

COLLECTING LOCALITIES, corresponds to letters at the head of the species list

BRYHER			ST MARY'S		
A-C	The Town Bay	SV883153-5	K	Bar Point	SV915129
D	Green Bay	SV879145	L	Blockhouse Bay	SV923127
			M	Hugh Town Beach & Porth Mellon	SV905107 -909107
	ST AGNES		N	Porth Cressa	SV905102
E	The Cove	SV885080	O	Porth Hellick	SV925107
F	Dropnose Porth	SV893083	P	Tolls Island	SV930120
G	Porth Conger	SV886084			
H	Porth Coose	SV876087		TRESCO	
I	Porth Killier	SV882087	Q	Tresco Flats	SV887142-8
			R	Carn Near	SV894133
	ST MARTINS		S	Gimble Porth	SV888162
J	St Martin's Flats	SV922155	T	Lizard Point	SV902148
			U	New Grimsby Harbour	SV888152
			V	Old Grimsby Harbour	SV896156
			W	Pentle Bay	SV902140-8

LIST OF SPECIES BY ISLAND

ABBREVIATIONS: L = live; S = shell; SF = farmed species; SL = nearly alive; * identification not checked/dissected

COLLECTING LOCALITIES		BRYHER	ST. AGNES	S.MARTIN'S	St. MARY'S	TRESCO
	Total	Isl	Isl	Isl	Isl	Isl
SPECIES						
Lepidochitona cinereus	L		L	L	L	L
Lepidochitona scabridus	L				L	
Acanthochitona crinitus	L		L		L	
Tonicella rubra	L				L	
Tectura virginea	L		L		L	L
Patella depressa	L*				L*	
Patella ulyssiponensis	L	L	L		L	L
Patella vulgata	L	L	L	L	L	L
Helcion pellucidum	L		L		L	L
Monodonta lineata	L	L	L	L	L	L
Gibbula magus	L	L	L	L	L	L
Gibbula cineraria	L	L	L	L	L	L
Gibbula umbilicalis	L	L	L	L	L	L
Calliostoma zizyphinum	L	L	L	L	L	L
Jujubinus striatus	S			S		S
Dikoleps cf nitens	S				S	
Tricolia pullus	L	S	L	L	L	L
Bittium reticulatum	L		L	L	L	L
Lacuna crassior	S			S		
Lacuna pallidula	L		L	L	L	L
Lacuna parva	L		L	L	L	L
Littorina mariae/obtusata	L	S		L	S	L
Littorina mariae*	L	L	L			L
Littorina obtusata	L	L	L	L	L	L
Littorina nigrolineata	L	S	L	L		L
Littorina saxatilis	L	L	L	L	L	L
L.saxatilis neglecta	L		L		L	
Melaraphe neritoides	L		L	L	L	L
Skeneopsis planorbis	L		L	L	L	L
Eatonina fulgida	L		L	L	L	L
Paludina littorina	L		L		L	L
Ceratia proxima	S			S	S	
Barleeia unifasciata	L		L	L	L	L
Rissoa interrupta	L		L	L	L	L
Rissoa membranacea	L			S		L
Rissoa parva	L	L	L	L	L	L
Alvania beanii	L			L		
Alvania punctura	L		L		L	L
Alvania semistriata	L		L		L	L
Cingula trifasciata	L	L	L	L	L	L

COLLECTING LOCALITIES		BRYHER	ST. AGNES	S. MARTIN'S	St. MARY'S	TRESCO
	Total	Isl	Isl	Isl	Isl	Isl
SPECIES						
Manzonina crassa	L				L	
Obtusella alderi	L		S	L		L
Onoba aculeus	L		L	L	L	L
Onoba semicostata	L		L	L	L	L
Caecum glabrum	L			L	L	
Trivia arctica	L			S	S	L
Trivia monacha	L		L	L		L
Lamellaria perspicua	L		L	L	L	L
Polinices polianus	L			L		
Triphora sp	S				S	
Cerithiopsis tubercularis	L			S	L	L
Marshallora adversa	L			S		L
Epitonium clathrus	S	S		S		S
Epitonium clathratulum	S			S	S	
Janthina pallida	S				S	
Vitreolina philippi	L			L	L	
Ocenebra erinacea	L		S	L	L	L
Nucella lapillus	L	L	L	L	L	L
Buccinum undatum	S*				S*	
Buccinum humphresianum	S				S	
Colus sp.	S*			S*		
Chauvetia brunnea	L		L	L	L	L
Hinia reticulata	L	L	L	L	L	L
Hinia incrassata	L	L	L	L	L	L
Oenopota rufa	S			S	S	S
Mangelia nebula	S					S
Mangelia coarctata	L					L
Raphitoma linearis	L				L	
Raphitoma purpurea	L					L
Rissoella diaphana	L		L	L	L	L
Rissoella opalina	L		L	L	L	L
Omalogyra atomus	L		L		L	L
Ammonicerina rota	L		L	L	L*	L
Odostoma plicata	L		L		L	L
Odostoma turrita	L		L	L	L	L
Odostoma unidentata	L		L			L
Brachystomia angusta	S		S			
Brachystomia carrozzai	L				L	L
Brachystomia eulimoides	L		L	L	L	L
Jordaniella nivosa	L		L	L	L	L
Turbonilla lactea	L		L	S	L	L
Philine punctata	S					S
Philine scabra	S				S	

Report of the Isles of Scilly Field Meeting

COLLECTING LOCALITIES		BRYHER	ST. AGNES	S.MARTIN'S	St. MARY'S	TRESCO
	Total	Isl	Isl	Isl	Isl	Isl
SPECIES						
Retusa obtusa	L			S	S	L
Retusa truncatula	L		L	L	L	L
Runcina coronata	L			L		L
Elysia viridis	L		L			
Hermæa bifida	L			L	L	
Limapontia capitata	L		L			
Limapontia senestra	L		L			
Aplysia punctata	L		L		L	L
Berthella plumula	L		L	L	L	L
Ancula gibbosa	L					L
Polycera quadrilineata	L			L		
Archidoris pseudoargus	L					L
Jorunna tomentosa	L		L			
Aeolidiella glauca	L				L	
Leucophytia bidentata	L	S	L	L	L	L
Ovatella myosotis	L		L	S	L	L
Otina ovata	S			S		
Nucula nucleus	L				L	S
Nuculoma tenuis	S					S
Glycymeris glycymeris	L			L	S	S
Mytilus edulis	L		L	S	S	
Modiolula phaseolina	L		L	L	L	L
Modiolarca tumida	L		L	L	L	L
Musculus costulatus	S			S		S
Musculus discors	L		L	L	L	L
Crassostrea gigas	L	LF	L			
Chlamys distorta	L			S		S
Chlamys varia	L	S		L	L	S
Pecten maximus	L	S		L	L	L
Aequipecten opercularis	L			L		L
Similipecten similis	L				L	
Heteranomia squamula	L		L	L	L	L
Lucinoma borealis	L	S	L	L	L	L
Diplodonta rotundata	S	S		SL		
Kellia suborbicularis	L		L	L	L	L
Lasaea adansonii	L		L	L	L	L
Montacuta substriata	L					L
Tellimya ferruginosa	S			S		S
Neolepton sulcatulum	S					S
Mysella bidentata	L		L	L	L	L
Epilepton clarkei	L				L	
Diplodonta rotundata	S	S		SL		S
Parvicardium exiguum	L		S	S	L	S
Parvicardium ovale	L			L	L	

COLLECTING LOCALITIES		BRYHER	ST. AGNES	S.MARTIN'S	St. MARY'S	TRESCO
	Total	Isl	Isl	Isl	Isl	Isl
SPECIES						
Parvicardium scabrum	L		S	L		S
Plagiocardium papillosum	S					S
Laevicardium crassum	L			L		
Cerastoderma edule	L	L	L	L	L	L
Spisula solida	L			L		S
Spisula subtruncata	S			S		S
Lutraria angustior	S			S		
Lutraria lutraria	L	S		L		L
Ensis arcuatus	L	S		L	S	L
Ensis ensis	S					S
Ensis siliqua	S			S		
Angulus squalidus	L	S		L		S
Angulus tenuis	L		S	L	S	L
Arcopagia crassa	L	S		L		S
Moerella donacina	L	S		L	S	L
Moerella pygmaea	L			L		L
Gari costulata	L			L		
Gari depressa	L			L	S	
Gari fervensis	S			S		
Gari tellinella	L			L		L
Solecurtus scopula	S			S		
Abra alba	L				S	L
Abra nitida	S			S		
Scrobicularia plana	S				S	
Venus verrucosa	L			S	S	L
Callista chione	S	S		SL		S
Circomphalus casina	S	S		S		
Gouldia minima	L			L		
Chamelea gallina	L	L		L	S	
Clausinella fasciata	L	L		L	S	L
Timoclea ovata	L			L	S	L
Tapes aureus	S	S		S		S
Tapes rhomboides	L			L		
Tapes decussatus	L	S		S	L	S
Venerupis senegalensis	L			S	S	L
Dosinia lupinus	L	L		S		
Dosinia exoleta	L	L		L	L	L
Turtonia minuta	L		L		L	L
Mysia undata	S			S		
Corbula gibba	S			S		
Hiatella arctica	L	S	L	L	L	L
Thracia villosiuscula	L			L		L
Cochlodesma praetenuis	S					S
Sepia officinalis	L		L	S	S	S

The status of *Lehmannia valentiana* (Férussac) in Ireland

Roy Anderson

[REDACTED], Belfast [REDACTED]
[REDACTED]

The status and distribution of the Spanish slug *Lehmannia valentiana* in the British Isles was reviewed in a recent edition of the *Newsletter* (du Feu, 2001). There have been some interesting Irish records within the last two years which were not available to the author of that article and I am taking the opportunity here to highlight these and to discuss the status of the species in Ireland.

As du Feu (2001) reports, the first recorded site for this species in the British Isles was the Tropical Ravine in the Botanical Gardens, Belfast (Quick 1960). A sizeable colony is still present there notwithstanding the use of slug pellets and other precautions by gardeners to safeguard the plants in the Ravine (Coll. RA, 17/x/99). The Ravine was originally artificially heated although it fell into unheated dereliction for several decades prior to its re-opening in the late 1980s. As a result of this several tropical aliens recorded during its heyday are now gone but temperate or warm temperate species seem to have survived. I have seen *Zonitoides arboreus* (Say), *Helicodiscus parallelus* (Say) and *Hawaiia minuscula* (Binney) recently but none of the subulinids. There are two other disturbed, greenhouse sites in the Belfast area: Lady Dixon Park (J304675; 24/xi/85); Agriculture and Food Science Centre, Queen's University, Newforge Lane (J332697; 28/iii/86).

The species is also present in Belfast gardens, perhaps widely: Newtownbreda, south Belfast (J350694; 22/iv/1995); Cairnshill, south Belfast (J355687; 15/vi/91); Cregagh, east Belfast (J358722). A colony was recently found in a greenhouse at Castlewellan Forest Park, Co. Down about 30 miles to the south of Belfast (J335372; 31/v/99, – not on the map in du Feu (2001)). Adult specimens have also been recorded out of doors in a rubbishy abandoned quarry at Whitehead, Co. Antrim on the coast east of Belfast (J474912;

1/vi/99). A picture is therefore emerging of localised but relatively widespread occurrence in gardens and other disturbed places, usually within reach of warmer refugia. It is difficult to say how frost hardy the species is or whether winter temperature minima have a restricting influence, but the restriction cannot be too great as I have observed activity in animals at a soil temperature of -3°C at the Newforge Lane site. Its appearance in gardens in this area is possibly a recent phenomenon and investment of wild ground is certainly still rare.

The situation farther south in Ireland appears to be different. In Cork there is evidence of a move beyond the usual synanthropic environments into semi-natural woodland. During a visit there last summer (2000), two colonies were discovered in estate woodland to the north and east of Cork City. The first of these was at Blarney Castle estate, Mid Cork (W602753, 10/vii/2000) where two individuals were found under bark of a windthrown mature oak. There is a general perception that *L. valentianus* is strictly terrestrial i.e. non-arboreal and unlikely to be found with the arboreal *L. marginata* (Müller). However, both were present under bark on this tree. *Limax maculatus* Kal. was also present, and in the surrounding area a total of nineteen slug species was recorded including *Tandonia rustica* (Mill.), *Testacella haliotideia* Drap., *Arion owenii* Davies and *Arion flagellus* Coll.

At a second site, Fota Island Wildlife Park, East Cork (W785707, 11/vii/2000), the species was found under bark of a wind-thrown Scots pine. After peeling several square metres of bark off the pine a total of fifty *L. valentiana* were collected. Associates this time were *L. marginata* (about 10), *Limax maximus* L. (several), *L. maculatus* (common), *Arion subfuscus* (Drap.), *A. distinctus* Mab. and *A. hortensis* Fér. Overall, thirteen slug species, including *Testacella haliotideia* and *Limax cinereoniger* Wolf, were found at Fota. It should be pointed out that other niches in these woods were examined, the underside of half-buried limestones, under dead wood, under rubbish, in leaf litter and in soil, but without finding *L. valentiana*. The association with bark on old trees therefore appears to be more than just coincidence. What it might feed on in such places, other than fungi, dead bark and lichens, is difficult to

envisage. However, the formerly clear separation in niche and feeding behaviour from *L. marginata* would now seem to be in doubt. It must be emphasised too that *L. valentiana* is difficult to spot in this niche among similarly coloured *L. marginata*, so it may have been widely overlooked.

Vouchers for most of the above localities are in my collection. At least one specimen from each sample was dissected, largely to exclude the presence of the externally indistinguishable *Lehmannia nyctelia* (Bourg.), but all conformed to the description of *L. valentiana* given by Quick (1960) and other authors. Irish *L. valentiana* are variable in appearance but two main colour patterns may be distinguished. The commonest has a predominant greyish-brown colouration with opaque integument and well-marked mantle bands most often forming conspicuous 'tramlines' down the back almost to the tail. The mantle is nearly always ochre grey or yellowish-brown in colour and darker than the rest of the dorsum. The rarer form retains the juvenile colouration and lacks the darker ochre or grey pigments so that the integument is a translucent pinkish-brown, only slightly darker or more yellowish in the mantle region and usually with very abbreviated lateral bands.

References

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Future developments for the Conchological Society: what do you think?

David C. Long

Cheltenham

One result of the report on the 8th April 2000 meeting 'Molluscs in the New Millennium' (*Conchologists' Newsletter* December 2000, pp 401–413) was that in February I received a letter from member Chris du Feu giving his reaction to the section on the way ahead for the Conchological Society. I circulated his letter around some fellow members and got their reactions, but now it is your turn, readers! Can you let us know what you think, especially because issues such as these will get discussed by the Society's Council in coming months.

The context of this correspondence was consideration of what the Society should be doing in the 21st Century to further its aim of 'the promotion for the benefit of the public of the study of Mollusca in its widest aspects' (Society Rules, Rule 2). The December article suggested that we continue with our two national recording schemes, the programme of field and indoor meetings, and at least our present range of publications plus a Website. No one has so far suggested that the Society should do more or less, or anything radically different. What we are mainly concerned with here is means to further our activities, specifically the uses of computers, acquiring systems, encouraging recording and information about molluscs.

Here are some extracts from Chris's letter (he kindly gave permission for it to be used in this way) plus a combination of some introductory remarks, comments from my correspondents, and an update on where the Society is on some of these issues.

Computers – uses

There is no point in urging the Society, or individual members, to acquire computers and software programmes without having a clear idea of what you want to do with the resulting systems (see what June Chatfield says below). As Chris says there are three main areas of activity – communication (which includes use of the Internet and Web), and the inter-linked activities of data recording and data analysis. On communication the Society now has a Website (see

below) kindly set up by Mike Weideli, but we have as yet no formal email community. The Society will very probably go down the Recorder2000 route for data capture and analysis as this software is designed as a national standard by the Joint Nature Conservation Committee for use on records of all groups of animals and plants.

One option which needs careful thought is making our current range of publications also available in some form on the Web. There are issues here which include intellectual property rights, copyright, and the need for the Society to maintain its income from publishing, to be set against the concept of making knowledge freely available to all. Making abstracts available could be a form of advertising. Chris wrote:

'I wondered what mollusc-specific uses members might make of computers. First, obviously, is the communication through the Internet. Provided any central system provided well planned output, even relatively low powered computers could cope. For example, the Lincolnshire Wildlife Trust has a weekly electronic bulletin. Subscribers receive a weekly text email compiled by the editor from information submitted by members. Because there are no graphic images, it requires low powered machinery only. It is a first rate communication.'

'A second operation would be concerned with data recording and a third with analysis of data. Recording data would require some centralised planning so that members would record in a standard format. This would allow electronic submission of records to county and national recording schemes.'

'I do not know whether software such as Recorder is available to members of naturalist societies at a reduced rate. I do know that the BTO (British Trust for Ornithology) are making arrangement with Minitab (statistical software) for members to buy a copy at the site-licensed price of £50 rather than the stand-alone user price of £600. A good saving indeed.'

June Chatfield, Non-Marine Mollusc Recorder, commented:

'I agree that the non-marine scheme will need to go on computer too, starting with new records post 2000. Previous data already is available in published atlases.'

'The important point on buying computers is knowing in advance what you want them to do. Some advance training will help, perhaps augmented by newsletter article/information sheets.'

'There will continue to be field workers who will not be logging on. Cards will be needed for them. Perhaps they could be linked with a computer owner prepared to process their cards.'

It is worth remembering that computerisation of Marine Mollusc records started in 1998 and has continued until recently (see Marine Recorder's reports, *Journal of Conchology* Vol. 36 Part 6 page 96 and Vol. 37 Part 2 page 240). The data are to be moved from the RECORDIT data base system to RECORDER 2000 (Marine Recorder's report for 2000 presented at the AGM on 24 March and to be published).

Mike Weideli, Membership Secretary, who can also advise on Recorder 2000 commented that:

'I would certainly like to extend what we have done for marine recording to the non-marine, but this could only be done if there are sufficient people interested so that the work involved can be shared.'

'Recorder 2000, is the way I think we need to go, because it controls the movement of data and in a way which will eventually get round the problem of duplicating data, thereby making data exchange simpler. Moving data between systems has, for many years, limited the use of computerised data.'

Colin Gillard, Hon Secretary thought: 'Yes, Recorder 2000 appears to be the way forward.'

As far as a Website is concerned, now have a look at: <http://www.conchsoc.org> on the Conchological Society, and set up by Mike Weideli following such comments as:

'A good idea and a valuable link for new contacts/potential members such as young people, newly retired, the conservation world of Wildlife Trusts etc.' (June Chatfield)

'Website: This should be a funded priority.' (Colin Gillard)

Computers – hardware

The idea of using second-hand computers is a new one. Going down this route to set up people contributing and/or analysing records would almost certainly imply that the 'old' machines would have to meet the minimum specification required for Recorder2000.

'I have been involved with the BTO bird ringing scheme since the late 1970s. During that time we have developed software for ringers and, in order to ensure as many ringing records are computerised as possible, we have tried to obtain computers for computerless ringers. Over the past two or three years the supply situation has eased to the point that we often have surplus computers. Initially the computers we were given tended to be fairly old and low powered. Nowadays people seem to discard computers more frequently and we are seeing fairly high-powered machines being made available.' (Chris).

'Computers tend to get out of date and one ends up with old hardware around the place. I have a number of machines which were brought together for the RECORDIT workshops but which are now very much out of date ... it does seem a wicked waste of resources [to dump them] if there are people out there who would like a chance to cut their teeth on a freebie machine.' (Jan Light)

'Private ownership of computers is increasing but we need to remember cost of initial purchase, updating, coping with technical problems etc.' (June Chatfield)

'Don't most people have up-to-date systems?' (Colin Gillard).

Encouraging recording

If we do not get records for both our recording schemes the Society will be unable to document faunal changes in what is evermore a dynamic environment. Targeted recording, of which Chris suggests one form, could be translated into campaigns for Red Data Book species or new arrivals. If contributors can see the aim of recording and a product in a finite amount of time that would be an encouragement. Publication of the second non-marine mollusc distribution atlas in 1999 produced a surge in new Vice-County records in 2000 (recorded in the Non-marine Mollusc Recorder's annual report, which will be published in the Journal).

'It goes without saying that this is vital in many ways. ...I have been wondering about ways in which to encourage recording. Again, the BTO have vast experience of using members to do the groundwork. I have wondered about some type of operation which would help us answer questions like 'has it been a good year for slugs?'. At present we have no way of knowing other than individuals' gut feelings. All we need is a standardised way of recording abundance of particular target species. I have been trying to assess the slugs in the garden by counting numbers each week under a Beyer Slug Activity Monitoring Mat.' (Chris)

Information about molluscs

Chris has put his finger (below) on another aspect that needs work. General information about molluscs is not readily available in easily digestible form. Identification guides are not easy to find, often not cheap, and they do date. For instance, Michael Kerney and Robert Cameron's excellent field guide to land molluscs of Britain and Europe is now over 20 years old; there is nothing modern in English on freshwater gastropods, and nothing has replaced Tebble's guide on British bivalves. But you need expert authors who have the time to produce the work.

Putting identification information on the Web has possibilities, but one needs a source for the information which does not infringe copyright, a sufficiently large Web resource and people who are willing to input and update the data.

'One problem we do have is that printed information about molluscs is often very out-of-date and may be difficult to find. Even the standard works are not recent and distributions and nomenclature have changed since they have been printed. There is information on the Internet about molluscs, although it is not easy to come by, tends to be of a world-wide rather than British nature and very scattered.

'What would be useful would be a mollusc Website with up-to-date information. I have planned such a web site for slugs, although momentum has been destroyed because my 6th form slug recording class (as part of general studies – see *Conchologists' Newsletter* June 1998) has been cancelled. What I had planned

was a site with identification key, photographs, species descriptions, local and national distribution maps, links to other sites, etc. It would be good if there were to be a British mollusc site. It is amazing how many people find information from the Internet these days and this could be a good way of promoting mollusc recording.' (Chris)

Another comment received was:

(Identification) 'This is a major problem as books stay in print for a short period only. A new Aidgap key to snails (Robert Cameron) is being prepared through the Field Studies Council/Linnean Society.' (June Chatfield)

Once again, please write in (to Rosemary Hill, whose address is on the front inside cover of this Newsletter) with the aim, at the least, of getting your thoughts into print.

With many thanks to Chris du Feu for his letter and to June Chatfield, Mike Weideli, Jan Light and Colin Gillard for their reactions.



For Sale

Two Collectors Cabinets

Number one: Light oak

Height 31", width, 36", depth 27 1/2"

7 drawers of depths from 2 – 3 1/2"

Some treated woodworm on inside of drawers.

Number two: Mahogany

Height 38", width 20", depth 18"

10 drawers each 3" deep

Offers may be made to:

Mrs R. Linnet Sangwine

Bampton, Oxon

Tel.

An extraordinary and rich sample of benthos

Jan Light

[REDACTED], Godalming [REDACTED]
[REDACTED]

Molluscan records from the east central English Channel are not easy to obtain. Whilst I have some records from MAFF (mainly macro species) and from my own dredging trips, many of my offshore records from around the 0° meridian are derived from the epifauna and epiflora on lengths of cord or rope, masses of hydroids, loose cobbles and slabs of bedrock, or on animals such as spider crabs and scallops caught inadvertently during my husband's fishing excursions on his boat, *Aquamanda*. I have found that scrubbing the carapaces and shells and then analysing the residue frequently provides a suite of 10-15 species. Spider crabs, in particular, are regularly brought home for the table in the summer months when they form aggregations on the seabed off Brighton and become entangled in anglers' tackle. Over the past 8 years or so, the spider crab malacofauna has been very consistent and given the mobility of spider crabs, this has interesting implications for benthic dispersal!

On 22 August 2000, I was presented with a more unusual sample from a wreck, which had become ensnared on a fishing hook. The sample consisted of a flat piece of heavily corroded metal, approximately 30 cm x 20 cm, colonised by bryozoans (predominantly *Cellaria* spp., but also *Turbicellepora avicularis*, *Omalosecosa ramulosa* and *Disporella hispida*), hydroids including *Sertularella gayi*, and the anthozoan *Alcyonium digitatum* (dead man's fingers). The sample was collected 31 miles off Brighton in Sea Area 15 (just) at 50°21.08'N, 00° 13.16'W at a depth of 48m. The sample proved to support a remarkable molluscan fauna, yielding 26 species, several of which were recorded for the first time in S15.

Initially I placed the sample in a large white tray filled with seawater and watched at intervals over a period of 24 hours to see what animals crawled out. Eventually I spotted nudibranchs on their food hosts. *Tritonia plebeia* on *Alcyonium digitatum*, *Doto tuberculata* and *Cuthona foliata* on *Sertularella gayi*. *D. tuberculata*

may be recognised by its pale yellow body and black spotted tubercles and feeds exclusively on *S. gayi*. *C. foliata* has a wide choice of hydroid food and may be recognised by the red markings on the head and golden flecks of pigment on the body and cerata. Both were new to S15. Several other molluscs were seen crawling around the tray, especially *Tricolia pullus* and *Rissoa parva*, and others (e.g. *Chlamys distorta* and *Musculus discors*) could be seen attached to the hydroids and bryozoans. Once I was sure that there were no other obvious nudibranchs in the sample, it was processed for microscopic examination. All of the adhering bryozoans and hydroids were pulled off, teased apart and shaken vigorously in a bowl of fresh water and then discarded. The piece of metal was then scrubbed in the same bowl of water to remove all of the remaining epifauna. The residue was then passed over a 0.3 mmsieve.

Although the fine residue comprised little more than a few teaspoonfuls it contained large numbers of molluscs. The sample was dominated by *Musculus discors* (several hundred juveniles) whereas most of the other species were present in low numbers (sometimes only one individual). Several species such as *Pusillina inconspicua*, *Modiolarca tumida*, *Aequipecten opercularis* (spat), and *Sphenia binghami* occur regularly on spider crab carapaces from the area whereas others turn up much less often. However, there were a few surprises!

I picked out five minute specimens of a solenogastre, most probably *Nematomenia banyulensis*, but which I am yet to determine with certainty. There are no records in the east Channel for any species in this class of molluscs. The next surprise was a pristine live specimen of the minute bivalve *Neolepton sulcatulum*. There are very few living records in the British Sea Area and most are from the south and southwest. *Chauvetia brunnea* and *Limatula subauriculata* were also new to S15. The latter was only found as fresh shells but must have been living somewhere in the vicinity of the wreck.

The substrate of the central eastern Channel is comprised mostly of sands, gravels and cobble, and is not noted for a diverse molluscan fauna. Species such as *Spisula elliptica*, *Abra prismatica* and

Antalis vulgaris are typical of this environment. However, artificial substrates such as wrecks (or spider crabs!) provide foci for a greater diversity of marine organisms than could be supported on the seabed itself. The east central Channel is often regarded as an impoverished area for marine molluscs but samples such as my piece of wreck indicate that this may not be the case. There must be many similar samples which are hooked by anglers, brought on board and unceremoniously thrown back. Sublittoral records are not so easy to obtain and it is a shame to waste such serendipitous opportunities. From my experience of examining the variety of 'benthic' samples that have been taken on board *Aquamanda*, not one has failed to yield some mollusc records. Any members who are interested in the recording activities of the Society who are sea anglers, or who know someone else who is, take note!

List of species

**Solenogastre* sp. indet.
(minute specimens)

Diodora graeca

Gibbula tumida

Calliostoma zizyphinum

Tricolia pullus

Rissoa parva

Alvania semistriata

Onoba semicostata

Pusillina inconspicua

Cerithiopsis tubercularis

Chauvetia brunnea

(first live record)

Brachystomia eulimoides

Tritonia plebeia

* = new to S15

**Doto tuberculata*

**Cuthona foliata*

Nucula hanleyi

Modiolarca tumida

Musculus discors

**Limatula subauriculata*

(fresh shells only)

Chlamys distorta

Aequipecten opercularis

Heteranomia squamula

**Neolepton sulcatulum*

Tapes rhomboides

Sphenia binghami

Hiatella arctica



The conch on Himalayan coinage

Fred Pinn

London

The account of 'Shells on Coins' (see *The Conchologists' Newsletter* No. 138) can now be expanded by several additions to the collection with particular reference to the sacred chank of India (*Turbinella pyrum*). This conch trumpet of Vishnu, symbol of victory, has long been an auspicious sign and has been found on Indian coins dating from the beginning of the common era.

Although coins have been minted in Nepal since the Lichhavi dynasty in the 6th century AD, the emblem of the conch does not make its appearance on Nepali coins until the 17th century on the mohar of Jaya Chakravartebdra Malla (AD 1669). The design was so attractive and the coin so rare that it was forged in the 1960s and sold to collectors at a high price; and the presence of the conch, no doubt, caused the coin to be made into amulets and worn for its protective property.

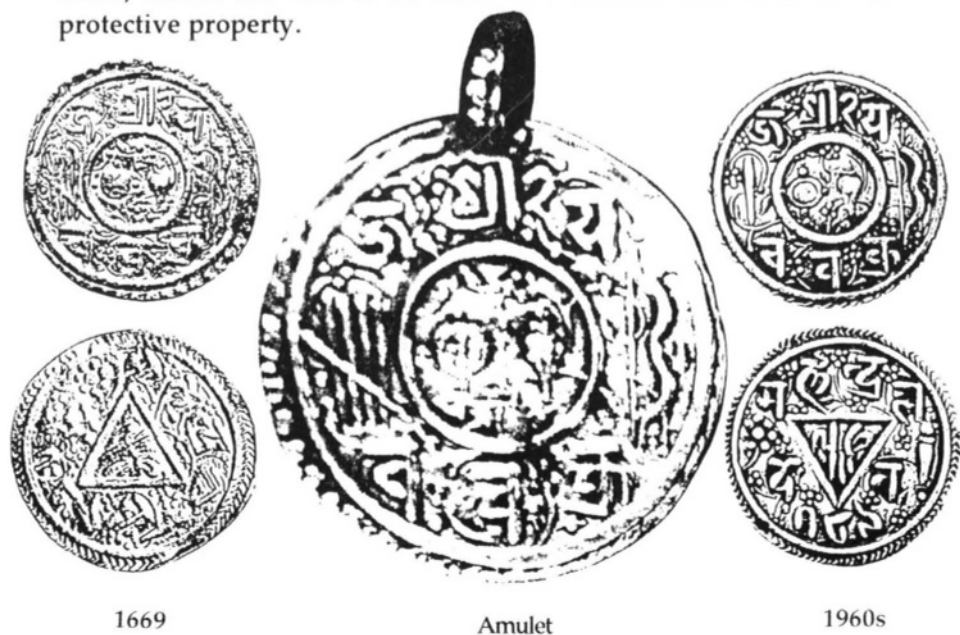


Fig. 1. Coins from Nepal with the sacred chank shell depicted in the right hand of the central circular panel.

A somewhat similarly elaborate mohar was issued during the reign of Jaya Bhupahendra Malla (AD 1687-1700). Nicholas Rhodes writes: 'This is the first of eight-petalled coins, sometimes referred to as "chasing mohars" which were to become so popular in Tibet. This popularity was perhaps partly because of the auspicious Buddhist emblems.'

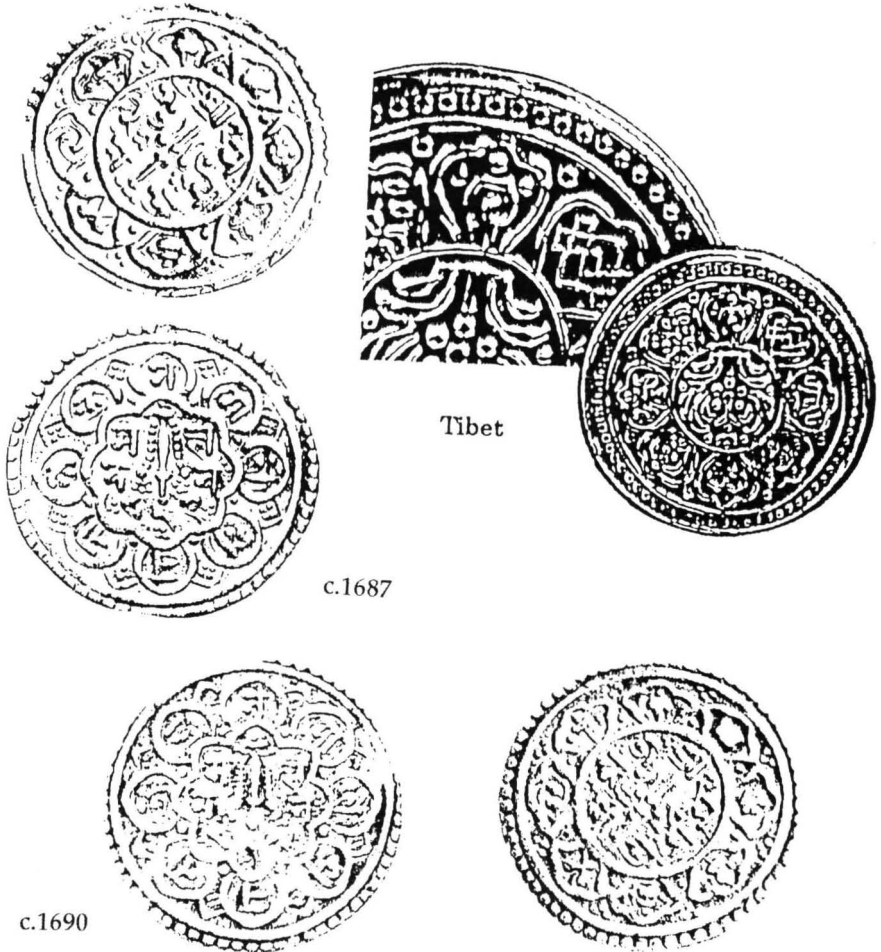


Fig. 2. Coins from Tibet with the sacred chank in the petal motif.

Butan by contrast has a very short numismatic history. Until the 1830s the coin in circulation was the 'Narayani rupee' of Cooch Behar. 'A prejudice appears to have at one time existed against the introduction of mints or any modifications of systematic coinage; but when by the invasion of Cooch Behar the Bhutan Government had obtained possession of the dies which were used by the Rajas of that Province in their coinage of the Narayani Rupee, the practice was introduced in the hills.' (Capt. R.B. Pemberton). However, since the Cooch Behari silver rupees do not have any symbols, it must have been the Nepali-Tibetan coins which provided the model for the use of conch on the Bhutanese coins.

The minting of copper coins in Bhutan began in the 1840s. In Bhutanese these coins are called 'Zang tan' meaning just what they are: 'copper coins' – 'a copper'. The coin with the large conch dates from the late 19th century. The second coin with a conch in the lower left hand square, displaying a much improved workmanship, belongs to the 1920s.



late 19th Century



1920s

Fig. 3. Coins from Bhutan with the sacred chank.

References

Rhodes, N.G., Gabrish K. and Valdetara, C., 1989. *The Coinage of Nepal*.



The Trumpet of Hazor – correspondence

With reference to the note on 'The Trumpet of Hazor' (*The Conchologists' Newsletter* No. 155) the following contribution was gratefully received from member Henk K. Mienis, Curator, National Mollusc Collection, Hebrew University, Jerusalem:

'Concerning the identity of the trumpet: in my opinion we are dealing here with a specimen from the Mediterranean Sea and not from the Red Sea. All the specimens from the Red Sea in our collection are characterized by the presence of a flaring outer lip. This feature is even present in quite young individuals. The Red Sea species is *Charonia tritonis tritonis* (Linnaeus, 1758). Mediterranean specimens have a more constricted aperture and belong to *Charonia tritonis variegata* (Lamarck, 1816). Like the one from Hazor. For a revision of the genus *Charonia* I refer to the many works by Alan Beu.'

Fred Pinn



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the first magazine exclusively for motor caravanners

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Snail logo

A snail features on the logo of the Motor Caravanners' Club and is shown here, taken from their magazine.

I am grateful to Malcolm Taylor, a visitor to the Reading Museums Service mollusc display at Waterfest in Reading during June 2000, for mentioning this and sending a copy of the logo.

June Chatfield



Field Meeting – Grand Union Canal: Saturday 29 July 2000

Pryce Buckle

Boxmoor, Herts.

The venue had been chosen in an attempt to re-find *Pisidium tenuilineatum* Stelfox, 1918 near its type locality, and to sample the *Pisidium* fauna and compare it with that which Stelfox had described (Stelfox, 1918). He had given details of five stations from which material was collected by Charles Oldham. We were interested in only two today, both within the parish of Marsworth, including the type locality for *P. tenuilineatum*.

It was a fine sunny day when eight members and visitors met at the British Waterways car park, Startop's End, Marsworth. Peter Dance had come down from Carlisle to, as he put it, 'complete unfinished business'. He had previously visited Marsworth in search of *Pisidium tenuilineatum* on 11 August 1955, but unfortunately he had been unable to find it. However, he did find on that occasion *P. amnicum*, *P. casertanum*, *P. nitidum*, *P. subtruncatum*, *P. henslowanum*, *P. supinum* and *P. moitessierianum*, all as dead valves.

Peter had brought with him Charles Oldham's scoop which Charles had given to A. E. Ellis, and Ellis had passed it to Peter. It was a duplicate of the scoop which had first gathered *Pisidium tenuilineatum*. Before we started out Peter showed us letters from Charles Oldham to A. W. Stelfox, a photo of Charles collecting in shallow water using a scoop (possibly the same scoop and probably taken in either Wales or Scotland, judging by the view) and the well known photograph of Charles chosen by Oldham himself for use in an obituary notice in case of need (A. E., 1943). We were also able to examine a specimen of *Pisidium tenuilineatum* given to Peter by A. W. Stelfox in 1956 which was one of the original three collected by Charles at Cheddington on 20 October 1916 and referred to in the paper on the *Pisidium* Fauna of the Grand Junction Canal (Stelfox, 1918).

We went first to the station described by Stelfox as 'NW of Marsworth church'. We did not have much luck here. The water was deep and there was very little sediment within reach of our nets and sieves. The locks are all in frequent use by pleasure craft these days, and it is possible that the sediment is constantly being washed down below the locks. We went below the lock (i.e. nearer Cheddington) and found a muddy sediment with many dead shells. Samples of this were taken home to wash and sieve.

We returned to the car park, and had lunch at a picnic table in the shade, as it was still rather warm and sunny. Also the nearby cafe was at hand for drinks and ice creams.

After lunch we went to the station described by Stelfox as being 'Above lock, S. of Hospital Farm, Marsworth (Bucks.)'. My study of the Ordnance Survey map had failed to locate Hospital Farm, but College Farm seemed to me to be a likely contender. In order to confirm this, prior to the meeting I had contacted the Buckinghamshire Archaeological Society who kindly provided me with a photocopy of part of the one-inch Ordnance Survey map of 1894. It was evident from this that Hospital Farm was that now known as Manor House Farm. We were thus able to locate the appropriate lock at map reference SP925139.

Here we were able to reach the sediment in the shallower water and we found some live *Pisidium*. We also collected from the side pond, a small rectangular body of water beside the canal where excess water from the lock drains before discharging below the lock. Live *Pisidium* species were much more frequent here in the fine sediment among the aquatic vegetation, along with other molluscs, and samples were collected for later identification.

At around 4.30 pm we all proceeded to Leighton Buzzard by kind invitation of Tony Swann of Wheldon and Wesley Ltd, where he and his wife had arranged a splendid buffet for us at their home. When we were replete we were able to examine the stock of molluscan books and periodicals, many of which had only arrived in the last few days and Tony was still busy cataloguing them. This completed a most enjoyable day, but we were unable to re-find *Pisidium tenuilineatum*. The list of species found follows. It includes species found at the two sites visited.

List of freshwater species found

Live: *Viviparus viviparus*, *Potamopyrgus antipodarum*, *Bithynia tentaculata*, *Physa fontinalis*, *Lymnaea peregra*, *Bathymorphus contortus*, *Gyraulus albus*, *Anodonta anatina*, *Sphaerium corneum*, *Pisidium casertanum*, *P. milium*, *P. subtruncatum*, *P. henslowanum*, *P. nitidum*, *P. moitessierianum*.

Dead shells only: *Valvata piscinalis*, *Hippeutis complanatus*, *Unio pictorum*, *Sphaerium rivicola*, *Pisidium supinum*, *P. casertanum* var. *hummeriformis*, *P. nitidum* var. *crassa*.

Acknowledgements

I thank Peter Dance for bringing the items connected with Oldham and Stelfox, which added so much to the sense of history for the occasion. I am grateful to Mrs Diana Gulland, the Honorary Archivist and Librarian of the Buckinghamshire Archaeological Society for her assistance in locating Hospital Farm. Thanks are also due to Tony Swann and his wife for their generous hospitality, which was much appreciated after a day in the field. I am indebted to Dr Michael Kerney for his determinations of the *Pisidium* species, without which this article would have been little more than an account of a good day out!

References

- A. E., 1943. In Memoriam. Charles Oldham. *Transactions of the Hertfordshire Natural History Society*, **21** (6) 319-321.
- Stelfox, A. W., 1918. The *Pisidium* fauna of the Grand Junction Canal in Herts. and Bucks. *Journal of Conchology*, **15** (10) 289-307.



Tom Gascoigne – an appreciation

Dennis Seaward

[REDACTED], Sherborne, Dorset [REDACTED]

I was saddened by the piece in the December *Newsletter* (155:437) to the effect that Tom Gascoigne has resigned due to poor eyesight.

This affliction has been with him for some years and must be very depressing for one whose time was largely spent in microscope studies and dissection of certain small molluscs.

He specialises in the Sacoglossan opisthobranchs – *Elysia*, *Stiliger*, *Placida*, *Alderia*, *Hermaea* and *Limapontia* – as his publications testify (for example *J. Conch.* 28:359-364 and 29:253-359; *J. malac Soc Aust* 3:157-172; *Microscopy* 32:512-6 and many *Newsletter* references), and I remember his help and friendship to me as a newly appointed Marine Recorder meeting some of these strange animals for the first time.

Tom taught at Dulwich College before taking his PhD under the late Vera Fretter and Alastair Graham at evening classes.

Now that he has resigned, the Society is likely to lose any contact with Tom and I felt that there should be some acknowledgement of his contributions to conchology and to the Society. I am sure that there are many in the Society who knew him and have benefited from his work who join with me in sending him our best wishes.

Holy Brook at Coley Park Farm, Reading, Berks

June Chatfield

Alton, Hampshire

A field meeting, led by David Notton (Curator of Natural History of Reading Museum Service), was held on the morning of Sunday 30 July 2000 to the Holy Brook and water meadows at Coley Park Farm on the south-western border of Reading (41/70-71-). It was a hot sunny day. Three members of the Conchological Society of Great Britain and Ireland attended, together with a member of the Berkshire Network for Invertebrate Conservation, Coley Residents' Association and Friends of Reading Museum. This site is being proposed as a Local Nature Reserve, so records for all groups are needed.

Molluscs were not particularly plentiful, but over 20 species were recorded and shown in the list below. Some parts of the brook were more profitable for molluscs than others. Bottom material ranged from fine mud to an area of stones, and there were limited water plants, with water lily pads being the most frequent plant habitat for molluscs.

The two most interesting species were the freshwater nerite *Theodoxus fluviatilis* (one found alive), common in the Thames at Reading, and the pea mussel *Pisidium amnicum*, both species of clean lime-rich water. The aquatic gastropods were divided between prosobranchs and pulmonates. There were two species of bladder snail, the native *Physa fontinalis* and the introduced *P. acuta*. The horny orb shell *Sphaerium corneum* and several species of *Pisidium* were collected.

Although the brook is fringed by a belt of reeds (*Phalaris arundinacea*, *Glyceria maxima* and *Sparganium* sp.) there was no litter at ground level, the bank profile being heavily modified by cattle in places. The marsh fauna was conspicuous by its absence, apart from one juvenile Amber Snail, *Succinea putris* and some Ashford's Hairy Snails *Ashfordia granulata*. Only five species of snail and two slugs were seen on land, although David Notton

reported seeing many *Cepaea* on a previous visit. The site would merit further study in cooler weather at a different time of year and with more time to explore the range of microhabitats.

Species list for Coley Park Farm

Gastropods

Prosobranchs

Theodoxus fluviatilis alive

Valvata cristata alive, in shaded tributary ditch by the old railway bridge.

Valvata piscinalis alive

Potamopyrgus antipodarum alive in Holy Brook

Bithynia tentaculata alive in both brook and tributary

Pulmonates

Physa fontinalis alive in tributary, on a brick in a gravel area by a bridge.

Physa acuta alive

Lymnaea peregra alive

Lymnaea stagnalis alive on water lily pads

Planorbis planorbis alive

Succinea putris alive – 1 juvenile in marginal vegetation

Discus rotundatus alive on dead wood.

Arion ater agg. on stem of Reed Sweet Grass

Deroceras reticulatum in grass roots on the bank

Monacha cantiana alive

Ashfordia granulata alive in grass near water edge

Trichia hispida alive in marginal vegetation.

Helix aspersa on dead branch by the brook

Bivalves

Sphaerium corneum alive in silt of Holy Brook

Pisidium amnicum alive

Pisidium spp. alive – to be identified.



Blister pearls in *Diplodonta rotundata*

Henk K. Mienis

National Mollusc Collection, Dept. Zoology, the George S. Wise
Faculty of Life Sciences, Tel Aviv University,
11-69978 Tel Aviv, Israel.

E-mail: mienis@netzer.org.il & [REDACTED]

The well-known bivalve species *Diplodonta rotundata* (Montagu, 1803) (Fam. Ungulinidae) has to be considered an offshore species along the Mediterranean coast of Israel. Living specimens have been dredged from mud bottoms at a depth of 51–69 metres, while empty shells and loose valves were hauled from depths between 9 and 183 metres (Barash & Danin, 1992: 265). Only occasionally a valve is found in beach drift.

A check of the *Diplodonta* samples present in the National Mollusc Collection of the Tel Aviv University (TAU) revealed the presence of an interesting specimen dredged from a depth of 56 metres off Haifa on 29 April 1968 (TAU NS 3258). It is a complete specimen, most probably collected alive, with a length of 12mm. The interesting feature of this specimen is the fact that in both valves a small but conspicuous blister pearl is situated near the edge of the shell at about the spot where the ventral margin merges into the posterior margin.

The pearl in the left valve is slightly larger than the one in the right valve. At the spot where the pearl formation has developed both valves show some irregularities at the ventral margin: several former edges are separated from each other by numerous sand grains. Most probably a sand grain has also triggered the pearl formations.

As far as I know this record constitutes the first report of blister pearl formation in *Diplodonta rotundata*.

Reference

- Barash, A. & Danin, Z., 1992. *Fauna Palaestina Mollusca I – Annotated list of Mediterranean molluscs of Israel and Sinai*. 405 pp, 372 figs. The Israel Academy of Sciences and Humanities, Jerusalem.



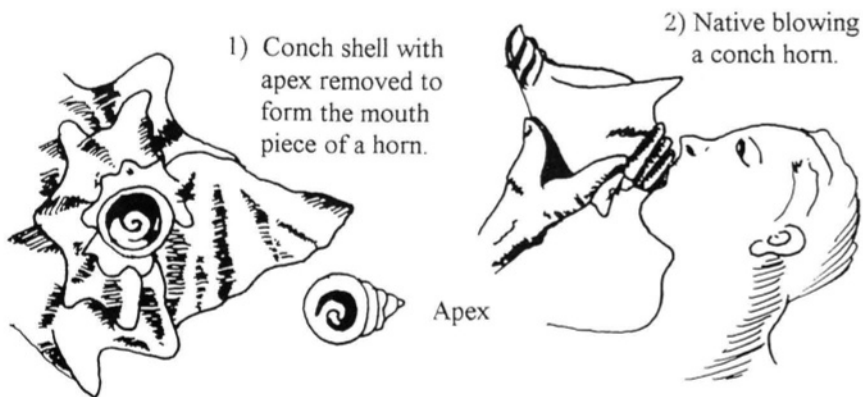
Modern life in the shell lane

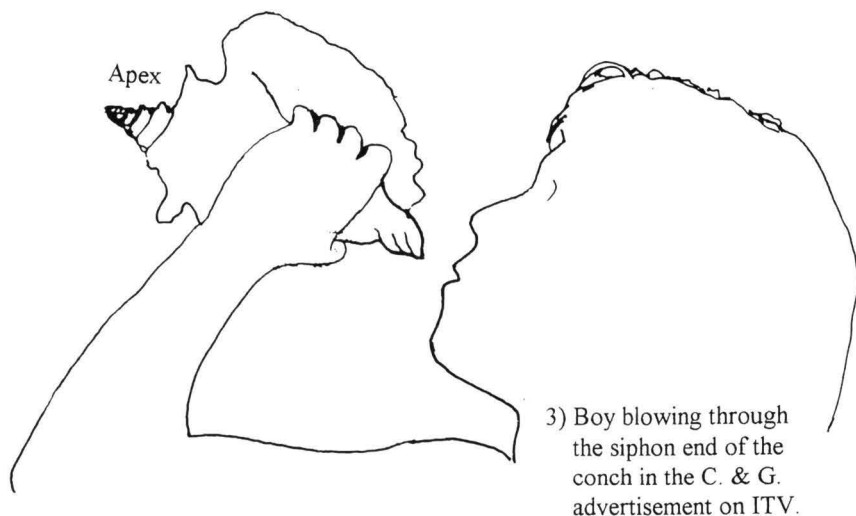
John E. Llewellyn-Jones

West Mersea, Essex

This article is divided into three sections. Each section refers to an incident or person that involved a shell or shells during the year 2000 and which I hope the reader will find of interest.

The first case involves the company *Cheltenham and Gloucester* who have been advertising themselves on television using a small boy and a pearl. You should also have noticed that around the watery 'living space' a number of pearlised pearly nautiluses and starfish are used as decoration. At one point in their advertising campaign last year they again used a small boy but this time blowing a shell trumpet. It was not only obvious visually but also aurally because one could hear the trumpet sound. It was unfortunate that on looking more carefully at the shell trumpet, made from a Queen Conch, that the boy was blowing through the mouth of the shell and not the cut off apex. In fact the apex was still intact! I wrote to Cheltenham and Gloucester who obviously passed my comments onto the advertising Company involved in producing the advertisement for them. A few days later I received a letter from Saatchi & Saatchi who thanked me for my comments and said that they would bear them in mind next time they shoot a Cheltenham and Gloucester commercial in the future. We will see!





The second incident came about quite by accident. I was visiting the Hermitage rooms at Somerset House where the Treasures of Catherine the Great were being shown just before Christmas. The exhibition was good but not exceptional, against the hype. As I was leaving I visited the shop and on the windowsill was the most extraordinary and magnificent cameo light I had ever seen. I asked one of the assistants about it and she took a pamphlet from under the desk and gave it to me saying that it was the last one. It showed an astounding range of cameos and in different species of shell all produced recently and by one *Peter Zaltsman*. After several attempts to get in touch I managed to get through and arranged to visit him at his home and workshop in North London. And so it was on a cold and very wet day I rolled up an hour late because of Railtrack's 'safety first-go slow policy'!

I was greeted by a tall, heavily built bearded man with a pony tail and a large friendly smile. He showed me into a large warmly lit, carpeted hallway where he took my coat while politely telling me that we only had a short time to see his work. He then showed me into what in the past would have been called a reception room. It was gently lit using back lighting and the walls were covered in the most beautiful cameos ranging from miniatures of famous actors,

actresses, artists, authors, ballerinas, composers, dancers, musicians, politicians, generals, religious leaders and royalty, to large pieces of famous buildings around Europe and Russia. Some of the miniatures, many done on tiger cowries, are works of the most refined beauty, such as Westminster Abbey, depicting the 'Rose window' and delicate fan tracery on the ceiling high above or the 'Hermitage Clock' covered in tiny Greek style effigies and paper thin carvings forming a perfect filigree pattern across the surface. And yet Peter's work can be so bold, so sure, producing far larger pieces of incredible strength and light such as the series of grand buildings silhouetted in sunsets and storm clouds taken from around St Petersburg where the light shines through the cameo from behind and yet stand out on their own without any back lighting at all. Nothing is too daunting for him as griffins, lions, fountains, balustrades and lamp standards jostle to surround his buildings. There are whole helmet and nautilus shells covered in the most luscious, curvaceous, sensual nudes that I've ever seen; whole buildings carved in all their architectural glory; clocks mounted in beautifully carved shells; Covent Garden carved into a shell glowing from inside with light; carved cowry shell perfume bottles and the two incredible works, including portraits, of the Fabergé and Cartier families.

Peter's work enriches many collections including the Hermitage (St Petersburg), Museum of Vladimir-Suzdal (Moscow), Musée des Arts Decoratifs (Louvre, Paris), National Gallery (Gdansk, Poland) and many well-known private collections around the world. He won the prestigious Jacques Cartier Memorial Award in 1994 and in 1998 became Freeman of the Goldsmiths Company and City of London. Peter Zaltsman, using only a few hand tools and a burin, turns the simple shell into a work of art. He transforms the raw material into objets d'art in the tradition of the Renaissance artists. But he has brought his art to new heights of perfection using a wide range of shells, increasing the scope of the subject matter in such a way that one can compare his variegated tints to those of an artist's palette. Peter is a unique and inspired artist. Born in 1952, working in St Petersburg until 1990 when he came to London, he has raised the art of shell carving to new heights of artistic sensitivity. You have to see his work to believe it.



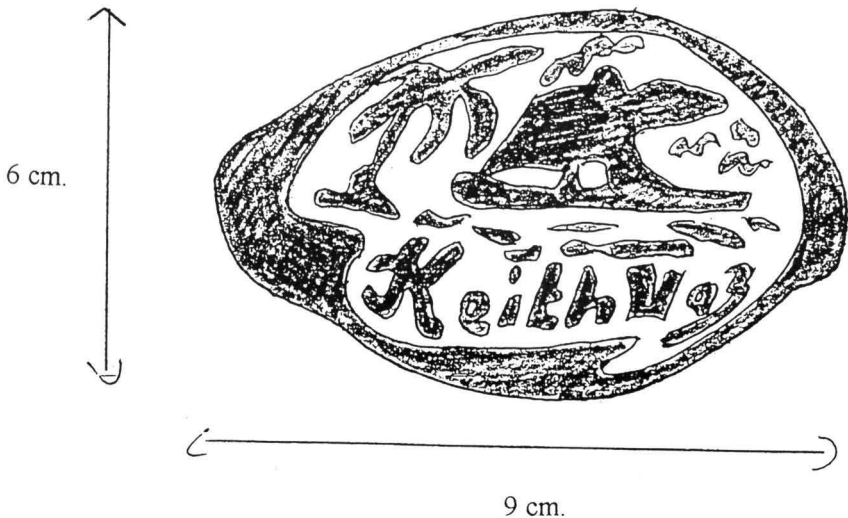
St.Isaac's Cathedral
Monferran St.Petersburg.



Tiger Cowry cameo of Prince Charles

(These sketches by the author do no justification to the originals in any way. JELJ, 2001)

The third and last person who I wish to mention is *Keith Vaz*, MP and Minister for Europe. He became MP for Leicester East in 1987 and was re-elected on May 1st 1997 for Leicester. He is someone who every person today must have heard of! I had completely forgotten that in 1993 I had written to him asking him about a cowry cameo that Eric Badcock told me he owned and had on his mantle-piece. Surprisingly for such a busy gentleman he replied by return with his own sketch of the cameo. He had said in an earlier article that the cameo had been carved in Kenya and given to him by a friend. He corrected this in his letter to me saying that it was actually carved for him while he was visiting Goa in India. Anyway, all the furore about his interest in the billionaire Hinduja brothers and their application for a British passport which had been turned down originally because they were facing criminal charges in India for being involved in illegal arms dealing reminded me of the cameo and so I decided to write this brief article about it with his own illustration of the cowry cameo copied below. (Postscript: Keith Vaz MP has been cleared of all the allegations involving the Hinduja brothers since this article was written).



Palm tree, ship at sea and 'Keith Vaz' underneath.

Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary:

Ron Boyce, [REDACTED] Reading, Berkshire [REDACTED]

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.

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
- MSL = Malacological Society of London

FOOT AND MOUTH PRECAUTIONS

Because of the continually changing situation regarding this disease it may become necessary to change the locations and meeting points for field meetings at short notice. It is therefore more than ever essential to inform the leader if you are attending a field meeting.

Please clean your boots and overtrousers before coming on meetings, respect No Access notices, keep away from livestock, do not discard uneaten food or give it to any animal, and use disinfectant where this is provided.

FIELD – Saturday 9 June

Sydenham Hill Wood and Dulwich Wood, South-East London

Leader: Ron Boyce [REDACTED]

Sydenham Hill Wood is part of the old Great North Wood and is ancient woodland containing mature oaks and beeches with an understorey of holly and coppiced hornbeam and hazel. A railway line once ran through the wood, so there are open areas near TQ 344725 with stone chippings which may increase the molluscan diversity.

Meet at 10.30am at Sydenham Hill railway station (TQ 335721). From there we will cross College Road and enter Dulwich Wood via a footpath from Low Cross Wood Lane. Dulwich Wood is separated from Sydenham Hill Wood by a line of bollards; we will need to keep separate records for the two woods. Sydenham Hill Wood is being surveyed in an ongoing project by John White [REDACTED] of the London Wildlife Trust who will be grateful for a list of our finds.

FIELD – Saturday 23 June
Kimmeridge Bay, Dorset

Leader: Rosemary Hill

A visit to the Purbeck Marine Wildlife Reserve. Meet at 11.00 h at the first car park at SY 909791. There is a toll road at the south end of Kimmeridge village; the charge at this time of year should be about £2 per vehicle, which serves as a car parking fee. There may be some pressure on car parking spaces because of the Foot and Mouth restrictions, and members are therefore advised to turn up early for the meeting if at all possible. Proceed down the toll road and take the first turning at the white house. The area where the car park is should be marked on the map as Gaulter Gap.

Ecologically, the more interesting area is to the west of the car park underneath the firing range, which we are assured does not operate on the Saturday in question. We can work this section only as far west as Charnel. The area to the east is still worth surveying. Fortunately, Kimmeridge Bay has two low tides, the first at about 12.30 h and the second, which is the lower, at about 16.00 h, with not much change in water levels in between, so it will be possible to study both these sites. Care needs to be taken after 16.40 h as the tide here rises extremely rapidly.

FIELD – Saturday 28 July 2001
Gloucestershire

Leader: David Long

Arrangements could be affected by Foot and Mouth Disease precautions. Please ring David Long in the two weeks prior to the meeting.

If restrictions *do not* apply, the meeting will be aimed at examining freshwater sites. First would be the Gloucester–Sharpness Canal and the connected Purton timber ponds, a past site for *Sphaerium transversum*. Meet at 10.00 at the British Waterways car park in Purton approximately SO/692042. (Note: corrected from the March Newsletter). Bring freshwater sampling equipment that can cope with fairly deep water (of the order of 2.0m in the canal).

Second would be a visit to a grazing marsh site at Walmore Common, not examined for molluscs since the late 1960s. Parking details to be finalised – planning delayed by Foot and Mouth precautions.

If Foot and Mouth disease restrictions *do* apply, the meeting will be a visit to the Northcot Brick and Tile Co. at SP/183368, near Blockley, meeting at 10.00, outside the gate to the works, to look for early Jurassic fossils. High visibility clothing recommended, and protective headgear if possible. Attendees must be over 18 for this venue.

Wellington boots and picnic lunch recommended for both options.

**FIELD – Sunday 16 September to Friday 21 September
Fife, Scotland**

Leader: William Penrice [REDACTED]

A week-long meeting to study the marine mollusca of the Fife coast, including dredging trips, the cost of which is already paid for, and a visit to Inchcolm Island. There will also be the opportunity to do some land recording, which is unlikely to be affected by the Foot and Mouth outbreak.

Please note that the spring tides are rather early in the morning at this location. The most convenient centre to seek accommodation will be Anstruther. The tourist information office telephone number at Anstruther is 01333 311073 and at St Andrews is 01334 472021.

Information on meeting places will be provided later on, but the initial meeting point will be on Sunday at 10.30am at Lower Largo in the public car park on the sea front, grid ref. NO 423026.

On Sunday it is proposed to visit Dumbarnie Links and Cocklemill Marsh to look for *Truncatellina cylindrica* and brackish water species. Monday will be spent dredging and visiting Inchcolm Island. On Tuesday we will work the shore at Kings Barns and visit Cambo Den. On Wednesday there will be a further dredging trip, on Thursday we plan to work the shore in St Andrews Bay and visit Magus Muir on the way back, and on Friday there will be shore work in the Anstruther area.

YCS – 1 September: Arnccliffe for Littondale. Meet at village green at 11.00am, grid ref. SD 931718. Contact David Lindley [REDACTED]

YCS – 6 October: Gargrave for Leeds and Liverpool Canal and River Aire. Meet at 11.00am in pub car park on A65 west of Gargrave, grid ref. SD 925542. Contact David Lindley [REDACTED]

YCS – 20 October: AGM and Presidential Address. 1.00pm Leeds City Museum Resource Centre, Yeadon. Contact David Lindley [REDACTED]

NHM – Saturday 8 September: 14.30h. For our first indoor meeting of the new season we welcome as Guest Speaker Michael Weideli from Newbury on the subject of 'The National Biodiversity Network – a new challenge for molluscan recording'.

NHM – Saturday 20 October: 14.30h. Presentations on local land recording schemes by individual recorders.

WKSHP – Friday 26 – Sunday 28 October. The Juniper Hall Snail Course. Field Studies Council Courses 2001. Tutor: Dr June Chatfield. Course fees: Residents £119; Non-residents £93. Contact: The Warden and Director of Studies, Juniper Hall Field Centre, Dorking, Surrey RH5 6DA. Tel. 0845 458 3507. E-mail jsc.juniper@ukonline.co.uk.

MSL – early November 2001. The Malacological Society of London Molluscan Forum 2001. The Natural History Museum, London. For details nearer to the date please see the MSL website: <http://www.sunderland.ac.uk/MalacSoc> (note: MalacSoc is case sensitive).

NHM – Saturday 17 November: 14.30h. We welcome as Guest Speaker Dr Michael Barker from Portsmouth University on the subject of 'Colour preservation in fossil shells'.

WKSHP – Saturday 24 November: 10.00–17.00h The annual workshop held in Woking, kindly hosted for us by Judith Nelson [REDACTED] offers Members the opportunity to receive tuition on identifying difficult groups.

NHM – Saturday 8 December: 14.30h. We welcome as Guest Speaker Dr Graham Oliver from the National Museum of Wales, Cardiff. The title of the talk is not yet confirmed.



Haslemere Museum

S H E L L S

Saturday 1 September – Saturday 6 October 2001

An exhibition of shells consisting of various themed displays
by Conchological Society member
Terry Wimbleton

Incorporating

Shell Road Show on Saturday 22 September

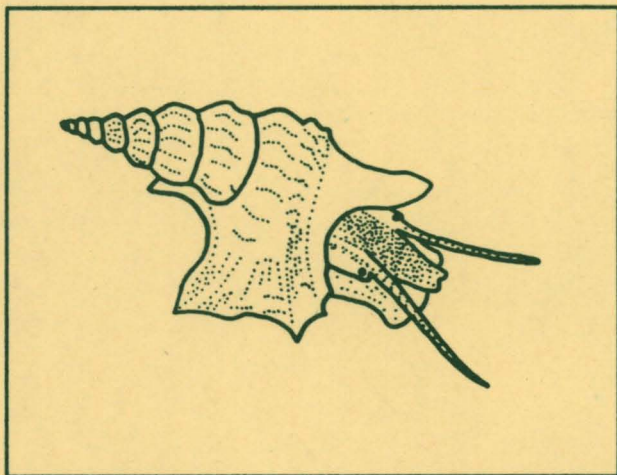
Visitors are invited to bring shells along for
identification and information

Admission free

Haslemere Educational Museum, High Street, Haslemere,
Surrey (opposite the Georgian Hotel)
Tel. 01428 642112

The Conchologists' Newsletter

**Vol. 10, No. 158
September 2001**



Conchological Society of Great Britain & Ireland
(Founded 1876)

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Nerites of the rivers of Viti Levu, Fiji

Malcolm Symonds

, Ashtead, Surrey

A stopover in Fiji, in August 2000, en route to Australia, gave me a chance to take a quick look at the local mollusca. A. Haynes had carried out a detailed investigation of the gastropods of the rivers of Viti Levu, the principal island of Fiji, between 1982 and 1984 listing the species found at each sampling station and checking the water speed, distance from the sea, ion concentration and hardness of the water (Haynes, 1985). She noted that there had been changes at some of the stations previously sampled by Starmühlner (1976: 635-636) and three species recorded by him no longer occurred on Viti Levu, possibly due to increased road building and logging, resulting in soil disturbance and increased turbidity of the water. All three species were, however, still to be found on some of the less developed Fijian islands.

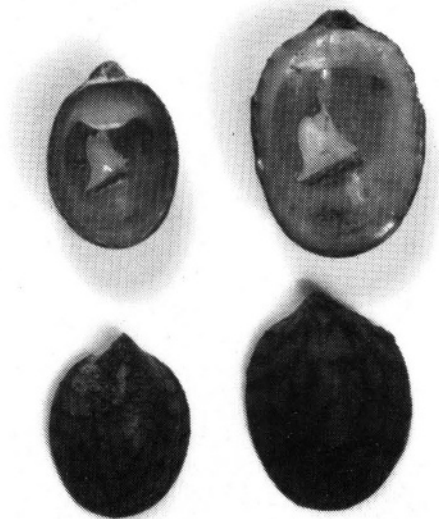


Fig. 1 *Septaria suffreni*. Left: Male. Right: Female.
Note the tongue-like projection on the septum edge of the male.

I decided it would be interesting to visit some of the sites sampled by Haynes to see whether the same nerite species were still to be found there. The first opportunity was provided by a short stop in Nadi where I checked the Nadi River, which is one of the main rivers of Viti Levu, by the town bridge. Unfortunately it was during a tropical downpour and it had been raining heavily for some time with the result that the water was a dark reddish brown in colour and it was impossible to see beneath the surface. The waters edge was crowded with *Melanoides plicaria* (Born, 1780 and *Thiara* sp. crawling on the mud but nerites were not readily apparent. I eventually found a few *Neritina turtoni* (Récluz, 1843) and *Septaria porcellana depressa* (Lesson, 1830) on the concrete bridge piers; the former at or just above the surface and the latter about 30cm below it. In addition to *S. porcellana depressa*, Haynes had also recorded *Neritina squamipicta* (Récluz, 1843), *Clithon diadema souleyetana* (Récluz, 1841) and *Septaria luzonica* (Récluz, 1841) from this site but not *N. turtoni*. On a subsequent visit, when conditions were better and the water lower, I did manage to find a very small juvenile *N. squamipicta* and also a juvenile *Neritina variegata* (Lesson, 1831).

We stayed for most of our time on Viti Levu at the Hideaway Resort on the Coral Coast where I hired a car for a day in order to visit some of Haynes' other sampling stations. I started by driving west to the Sigatoka River, another large, tidal river, where I again managed to arrive at high tide in torrential rain. Despite a lengthy search in the vicinity of the town bridge I only succeeded in finding a few specimens of *N. turtoni*, although I did provide some entertainment for the locals who seemed greatly amused by my activities. Haynes had also found *Neritina auriculata* Lamarck, 1816, *Neritina turrita* (Gmelin, 1790), *Clithon spinosus* (Budgin, 1845) and *S. luzonica*

I then drove East, past the Hideaway Resort, to the Korolevu Creek, a small, clear, fast flowing stream. *Neritina pulligera* (Linné, 1767) and *S. porcellana depressa* were both common on stones and bridge supports, the same two species as listed by Haynes. Then on to the Navua River, another major river, where Haynes had recorded *N. turtoni*, *N. squamipicta* and *Neritilia rubida* (Pease, 1867); these three species were quite common, although the *N.*

squamipicta were all juveniles. *N. turtoni* were conspicuous on rocks just above the water level, the other two species were on stones in shallow water. In addition I found a few *S. porcellana depressa* and what appeared to be a juvenile *Clithon corona* (Linné, 1758) with unusually long spines, neither of which had been collected by Haynes at this site.

Collecting and driving had taken longer than anticipated and I was faced with the choice of going to a couple of sites around Suva before dark or returning to Sigatoka in the hope of having better luck at low tide. Partly influenced by the fact that Mr Speight had taken the government hostage in Suva leading to disturbances there and partly because I wanted to see if almost all the species recorded by Haynes really had disappeared from the site, I decided to go back to Sigatoka. In fact, although the whole island was under martial law, I saw little sign of this apart from the occasional army road-block. Aided by a low tide but handicapped by failing light, I managed to find two *N. auriculata* and a few *N. turrita* near the Sigatoka town bridge but no *C. spinosa* or *S. luzonica* and I was left with the distinct impression that this site had deteriorated, at least as regards the variety of gastropod species, since Haynes had sampled it.

The Hideaway Resort is bisected by a small, clear, fast flowing stream which appeared to be very suitable for mollusca but which proved, on closer inspection, to be devoid of all life, as far as I could see, presumably as a result of past or present pollution. Streams immediately to the east and west of the resort were equally disappointing. However another stream about 1.5 km to the west turned out to be the most productive, in terms of nerite species, of all the sites I sampled. *N. pulligera*, *N. variegata*, *C. corona*, *Clithon olivaceous* (Récluz, 1842), *S. porcellana depressa* and *Septaria suffreni* (Récluz 1841) were all fairly common. In addition I found a single, pitted specimen of *Neritina macgillivrayi* (Reeve, 1855) and a small colony of *Clithon chlorostoma* (Broderip, 1832) on rocks at the mouth of the stream. *C. olivaceous* had not been found by Haynes on Viti Levu but was one of the species previously recorded there by Starmühlner. Neither *N. variegata* nor *C. chlorostoma* had been recorded by Haynes or Starmühlner during their respective surveys

of Viti Levu. The stream in which these species occurred was slightly larger than, but otherwise apparently similar to, the one in the middle of the Hideaway Resort but its most important feature was that it flowed straight from forest covered hills to the sea without passing through any resorts or villages and consequently was relatively unpolluted.

I was particularly pleased to find *S. suffreni* as it is the only species in the Neritidae, as far as I am aware, in which sexual dimorphism occurs. Récluz based his original description on the male of this species, a principal feature of which is the 'tongue-like projection' of the septum edge. This is lacking in the female, which for a long time was considered to be a different species until research by Haynes established the true position (Haynes, 1991). She inspected over 100 specimens matching Récluz's description and found them all to be male. Then she dissected other specimens from the same localities with shells and opercula of similar shape but which lacked the tongue-like projection of the septum; they all proved to be female and moreover had spermatophore sacs containing spermatophores which matched in shape those of male *S. suffreni*.

Unfortunately I only had time to look at 5 sites compared with 47 sampled by Haynes. It seems that the species at some sites have changed somewhat since 1984 while at others they are still the same. For anyone with sufficient time it would be a very interesting and worthwhile exercise to check all the original sites.

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E-mail addresses required

In order to facilitate and encourage interaction between members, I am compiling a list of e-mail addresses. Anyone wishing to be included on the list should contact me at the e-mail address shown below.

Ron Carr

David Aldridge

[REDACTED]

Keith Alexander

[REDACTED]

Ron Boyce

[REDACTED]

Pryce Buckle

[REDACTED]

Ron Carr

[REDACTED]

Brian Eversharn

[REDACTED]

Colin Gillard

[REDACTED]

Rosemary Hill

[REDACTED]

Rupert Honnor

[REDACTED]

Ian Killeen

[REDACTED]

Jan Light

[REDACTED]

David Long

[REDACTED]

Anna McIvor

[REDACTED]

Graham Oliver

[REDACTED]

Stella Turk

[REDACTED]

Mike Weideli

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Martin Willing

[REDACTED]



'One of life's little mysteries'

Janet T. Sawyer

Wembley Park, Middx

There it was, available for all to see at the British Shell Collectors' Club Convention on 28 April 2001, and vouched for by several Conchological Society luminaries attending that meeting, including the Marine Recorder, a specimen of *Bolinus brandaris* (L.1758), a common enough species in the Mediterranean, but this one had been found on the South coast of Britain at Highcliffe in Hampshire!

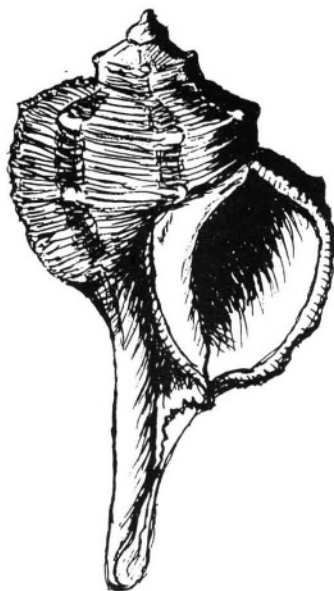


Fig. 1. *Bolinus brandaris* (L.1758). Actual height 56 mm

The recently-occupied shell was discovered in February this year on a patch of shingle by a friend, Elizabeth H. Letts, whom I had invited to join me at the Conchological Society field meeting on 31 March to hunt for fossils along the cliffs around Barton-on-Sea with its famous Barton Beds. Elizabeth has a chalet overlooking Highcliffe Beach and therefore a good opportunity of studying the fauna of the bay. I knew already that she had a fine collection of

shark's teeth found among the shingle there and I had asked her to bring them along to show the rest of the field meeting group. To our delight she also had brought a splendid 4-inch long specimen of the fossil *Clavilithes cylindricus* which she had picked up on the beach the previous day, together with this specimen of *Bolinus brandaris* which she had been unable to identify as a British shell.

Guido Poppe, in Volume I of his book on European Seashells, reminds me that this mollusc was once a source of the dye which the Romans called Imperial Purple and that this species is still widely fished in the Mediterranean as an edible shellfish. In fact when making a tour of the Greek islands many years ago, I came across a large cache of empty shells which had been tipped into a harbour. So our first possibility is that the shell was thrown overboard from a passing cruise liner or tanker, its contents probably already too smelly for human consumption.

The shape of shell of this species is highly variable and there are specimens with and without horns. The one found has only ridges and knobs on the edges of its whorls. It is beige-brown in colour and has the normal orange-yellow aperture. Mr K. Fraussen, a Belgian member of the B.S.C.C., examined the shell and informed me that it was a typical example of the form *polii*, a brackish-water variety well-known from the North Adriatic Sea around the delta of the River Po, but also from the Laguna de Faro on the south-west tip of Portugal. Is it possible that a mollusc could be swept that far by storms and tides? Elizabeth is also finding for me on the same beach broken shells of *Arctica islandica* (L.1767), a species I study, which can be found at low tide on the northern shores of Britain, but which lives in deeper water as far south as the Bay of Biscay and the north-west coast of Spain. However southern Portugal is a good deal further away. Was its arrival on our shores, then, the result of a freak accident, or perhaps a sign of 'global warming'?

Footnote:

Mrs Letts also brought a fresh-looking specimen of a money cowrie found some years previously at Barton to the Kimmeridge field meeting. It was speculated that a house lost over the eroding cliffs at Barton may have had a shell collection in the attic! ■

British land molluscs: they are not that easy – without the help of a friend

(A light-hearted account from a beginner)

David Harfield

██████████, Charmouth, Dorset ██████████

Terry Wimbleton

██████████, Havant, Hants ██████████

I first joined the Conch. Soc. in the middle 1960s having developed an interest in the British marine molluscs. On moving to Liverpool, in 1966 the late Terry Crowley kindly introduced me to Nora McMillan at the City of Liverpool Museum.

In Liverpool I was warmly welcomed and befriended by Nora and a happy band of conchologists. Under Nora's tuition I was able to develop some knowledge of the marine mollusca and collected most weekends between Liverpool and Southport.

The unofficial group of conchologists, based in Liverpool Museum, agreed to help a body developing faunal lists – perhaps the National Trust Nature Reserves. We duly arrived at Cotterill Cluff on 14 January 1967 for my first introduction to the land mollusca. We worked in pairs and I teamed up with a chap whom I think was called Bill. Apparently he was well known for a very good collection of tropical marine shells. As Bill was held in such great respect I assumed he knew what we were about. Bill assumed I knew what we were about!

We set off for our allocated area and started searching. I offered to do the recording as I knew I could not put a name to anything. Bill found lots of specimens, showed them to me and pronounced names which I duly wrote down. We gathered together for a coffee break and Marjorie Fogan volunteered to start a species list. By the sixth species I was trying to hide inside myself. Other members of the group were making very knowledgeable observations – everything from relative shell calcification to the expectation of other species of a given genera or other genera which are usually found together in a habitat. Of thirty or so species on the initial list only *Discus*

rotundatus (Müller) was on my list – and I can still recognise it! Bill had been inventing the names as he went along. He thought I knew the land mollusca and that I was writing down the correct name as he showed me each specimen.

From then on I was happy to collect on such field trips providing someone else did the identification and recording. This statement hides the tremendous amount of tuition I received from members of the Liverpool group.

By 1970 I was back in my home town of Portsmouth and Dr June Chatfield was organising local field trips. Luckily for me these were a balance between marine and land environments. On a farm wall near the parish church of Nursling and Rownham I was introduced to such creatures as *Aegopinella nitidula* (Draparnaud) and *Vallonia costata* (Müller). At Nursling Mill I met *Theodoxus fluviatilis* (Linné). I now more or less knew five non-marine molluscs.

This was a high pressure environment – with Dr Michael Kerney, Dr Bob Cameron (later Professor) and Terry Wimbleton forming the core of the team. Complete overload for me was the discussion about identifying the species of *Succinea* by dissection, and Michael Kerney heading off to examine a bank near the river for *Vertigo* species and other minute creatures. The discussion on the distinctions between *Cochlicopa lubrica* (Müller) and *C. lubricella* (Porro) might well have taken place in Sanskrit. The teaching I received was excellent but I only have a small brain.

On a visit to Kingley Vale, with the same team, I was introduced to *Arion intermedius* Normand, with the helpful tip that it has a spiky skin when contracted. Mike Goodchild was also a member of our group and astounded me by finding a sub-fossil *Helicodonta obvoluta* (Müller) in hill wash chalk from a rabbit burrow. During discussion over lunch Terry Wimbleton offered to provide me with a reference collection – sample specimens of as many species on the British list as he could find. I now felt relatively bullet proof – I had specimens against which I could check my own tentative identifications.

Married life and having a small family brought my interests to an abrupt halt. I moved to Germany in 1982. With no coastline

within accessible distance and not being able to envisage myself studying German land molluscs I left the Society. Sixteen years later I returned to the UK and soon became involved in the volunteers at Charmouth Heritage Coast Centre. The need to develop our range of educational work for schools led to the need for seasonal floral and faunal lists for three or four sites close to our village. Remembering Terry Wimbleton's specimens which had spent some eighteen years in a garage, the land and freshwater mollusca became 'my interest' by default. With a total knowledge of less than ten species I quickly rejoined the Society.

I thought the best place to start would be my garden. It is on sloping ground about 300 metres from the beach, the intervening space being a grass field. An ancient hedged bank forms my boundary with the field. The underlying rock is Jurassic marl, shale with limestone bands. This is capped by a thick clay, the top of which is covered by closely packed, large chert nodules. The top soil in my garden was imported from outside the vale, as were the large Hamstone boulders which now hold the bank in position.

My first experiences of starting a garden around a new house was that as soon as I put in a plant the slugs arrived, as if by invitation to a party. Some would rocket across the ground before I had even finished planting. All that I can say about these slugs is that they have a variety of colours but all have the same physical appearance and all have a bright orange border to their foot. Turning to the books for help I repeatedly read of the necessity to dissect slugs for positive identification. I could probably find the right equipment in my garden shed but have never dissected such a creature. My 'other slug' is a small, grey creature which lives in mucous-covered groups in the space between grass turf and brick walls. A cursory look at McMillan (1968) suggests that my orange-fringed slug is *Arion ater* (Linné). My little grey slugs might be *Arion circumscriptus* Johnston. At some stage I will study them seriously and, perhaps, try a dissection. A brief look into Kerney and Cameron (1979) supports my tentative identification.

Identifying *Helix aspersa* Müller, was easy – I had learnt it at college. It is so common that a walk along my garden bank of an evening can sound like walking on crunchy gravel. One damp autumn

evening I found 251 specimens in an area of less than four square metres before I stopped counting. My identification of *Cepaea hortensis* (Müller) is less definite, in spite of Terry Wimbleton's specimens. He introduced me to the problem that the lip colour is not an absolute diagnostic feature between *C. hortensis* and *C. nemoralis* (Linné). Kerney and Cameron (1979) reinforce this view.

An interesting feature about these two species is that dead shells which have been nibbled away from the apex to the body whorl, leaving the peristome of the shell complete, are very common on my bank. A photograph of this phenomenon can be found in Chatfield (2000). My first thought was about a thrush's anvil. I certainly have the rocks as suitable anvils. However, the shells are not in clusters and I cannot remember ever seeing a thrush in the garden or field. I wonder if a hedgehog is helping me in my battle to grow unchewed plants.

I recognised my only clausiliid for being 'one of those'. My fairly extensive collection of books was of no help, my shell did not resemble any of the illustrations. The texts were of even less use to the uninitiated. My reference collection also let me down. Altogether, I spent about three hours pondering over my solitary specimen. In the end I think it might be *Clausilia bidentata* (Ström) but my interpretation of the texts could not resolve the issue. *Trichia striolata* (Pfeiffer) was easy to identify – I just looked at the specimens and knew what it was. Something must have rubbed off from the patient tutelage of Nora McMillan and June Chatfield. Reference to the books and sample collection confirmed my first euphoria – I had identified something with a degree of confidence.

I am less sure of my identification of *Oxychilus draparnaudi* (Beck) and cannot sort out the other oxychilids with any confidence. *Trichia hispida* (Linné) started to raise my hopes of another positive identification but I could not see any sign of a 'slightly reflected lip and an internal rib' (Kerney and Cameron, 1979, p. 191). Other specimens which also appear to be *T. hispida* appear to have a spire which is too pronounced. I now felt like giving up – the changes in names since 1970 were not helping

at all although the index in Kerney and Cameron (1979) was a great help.

My last chore was two brown and white banded helicids. My reference collection did not initiate any starting point. My best guess is *Cernuella virgata* (da Costa). That leaves me with one specimen tube about which I cannot even be sure of the number of species represented by the three specimens. *Trichia hispida* (L.) is a possibility but my shells seem to have too pronounced a spire. Do I give up? No! I write to a friend, including the specimens (but no slugs) and ask for help. My friend's comments below indicate my degree of success, not having looked at a land mollusc for thirty years. (My friend's comments are representative extracts from a long and detailed letter).

'...Turning to your identification – of course – as I think you know, old dead material is not the most helpful to begin attempts at identification. Also mature specimens are better than juvenile examples. The trouble is, the one thing you need to learn is, how to identify mature examples. Most large land snails have a lip, which is an indication of maturity and that the shell will grow no larger....'

'Well done, a good start considering some of the specimens are juveniles and others lack colour. Seven out of eleven correctly identified is pretty good...'

'Identifying snails is a bit like driving, it gets better with experience and practice. You will always come across the odd ones that will give problems. The main thing is to stick with it and don't get disheartened by the odd problem...'

'*Helix aspersa* – Correctly identified. Second specimen tube – Correctly identified. Two very young specimens.'

'*Oxychilus cellarius* – Incorrectly identified. These are specimens of *Oxychilus draparnaudi* (Beck). They are larger and broader than *O. cellarius*. The easiest way to tell the difference in the shells is to hold the mouth of the shell edge-on towards you, so that you are looking directly into the mouth. See the illustration in Kerney et al. (ibid.).'

'*Cernuella virgata* – Correctly identified.'

'*Trichia striolata* – Correctly identified.'

'*Oxychilus draparnaudi* – Incorrect identification. This is in fact *Monacha cantiana* (Montagu). An almost full-grown specimen. I have put a mature, live collected specimen in the tube for comparison. If you look inside the mouth of this specimen you will see the thickened lip clearly.'

'*Monacha cantiana* – Incorrect identification. This is a specimen of *Ashfordia granulata* (Alder). It is of above average size and is a fully matured example... Living examples are covered with fine straight hairs with a thickened base. The internal rib (lip) thickening may or may not be present.'

'*Trichia hispida* – Correctly identified. One almost mature specimen, the others are juveniles. You can just make out the fine hairs on the shell surface of the juveniles (lens). Second specimen tube – Correctly identified. These are mature specimens. Again the internal lip thickening is evident.'

'*Cepaea hortensis* – Correctly identified. Your broken specimens have almost certainly been predated by birds. Usually blackbirds (two live in my garden!) or thrushes. The broken apex is quite typical of the way a bird 'opens' the shell. In my experience the anvil stones you mentioned are not as common as they used to be. Reasons for this could be:

- i) Thrush numbers are very much reduced in recent years.
A thrush is now an uncommon sight.
- ii) Disturbance by man, traffic noise and urban sprawl.

Anvil stones can still be found, but they are usually in quiet, out-of-the-way places, commonly in woods, away from activity and habitation... Small mammals commonly eat snails (rats, mice, hedgehogs, etc.). The breakage of the shell shows a difference. With mammals, they usually gnaw a channel around the body whorl, leaving the lip and sometimes the apex intact.'

'*Clausilia bidentata* – Correctly identified. The only other species in Britain with which it could be confused is *Lacinarina biplicata* (Montagu), but this is a rare British land snail being found in only a few scattered localities, some around London. It is also much

longer than *C. bidentata*. In *bidentata* the dentition may very well vary and cause confusion.'

There is a moral to this tale. I now know that I have more than two species of slug in my garden – based on their different body shapes when at rest/contracted. So I now need to await the spring feeding frenzy on my plants and look more closely at these creatures. The important issue is that the sharing expertise between members of the Society improves everyone's knowledge and skills. I am not yet a 'convert' to land and freshwater molluscs but I will learn more about them. This indicates the value of field trips and workshops – which means there is some hope for me in the future.

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- Kerney, M.P. & Cameron, R.A.D., 1979. *A Field Guide to the Land Snails of Britain and North-West Europe*, Collins, London.
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Annual General Meeting 20 April 2002

Members are reminded that they can nominate candidates for election to the Council.

Rule No. 12. Candidates for nomination to the Council shall be paid-up members of the Society and shall be nominated by two members. Nominations, other than those made by the Council itself, shall be sent in writing to the Hon. Secretary at least six weeks before the AGM, and shall be accompanied by a signed declaration of the candidate's willingness to serve.

Note: Nominations must be received by the Hon. General Secretary NOT LATER THAN 31 December 2001.

***Onychiurus armatus* (Tullberg), an efficient debrider of small mollusc shells**

Roy Anderson

, Belfast

While examining a piece of turf brought home from the Tropical Ravine in Botanic Gardens, Belfast, in search of small snails, I came across a large number of tiny white animals in soil and moss. These turned out to be poduran springtails (*Collembola*) tentatively identified as the common European soil species *Onychiurus armatus* (Tullberg).

Thinking that they would make useful scavengers in culture with snails, they were placed with several east Asian cyclophorid snails in a disposable snap-tight plastic box and maintained at indoor room temperature. Here they increased rapidly, it appears by feeding on the freeze-dried porridge oats/aquarium fish food (Tetramin) mixture given to the molluscs. After some time two snails died but when the shells were retrieved they were found to have been thoroughly 'cleaned', by agents unknown. Other snails within the culture were the main suspects but my attention was caught by the presence of *Onychiurus* in some numbers within the shells.

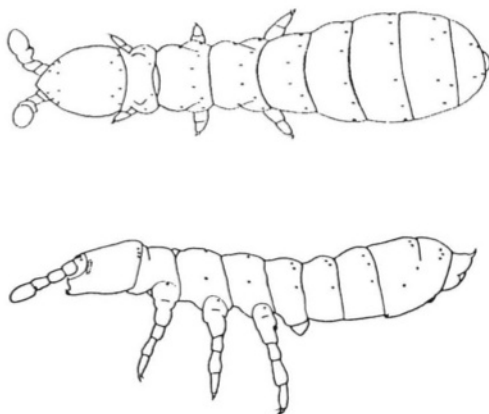


Fig. 1. Dorsal (above) and lateral (below) views of typical *Onychiurus*.

This led to the construction of a small experiment in which mollusc flesh was offered to the *Onychiurus* in separate culture. Cultures were set up in plastic Petri dishes with a thin layer of fine, moist sand on the bottom. Cover for the animals was provided by a few small, dead leaves. *Onychiurus* were introduced and fed for a short time on Tetramin fish food. Small series of *Carychium*, *Lauria*, *Vertigo*, *Discus* and *Clausilia* spp. were then killed by the boiling water method and placed in separate dishes. Within 1–2 weeks most shells were completely cleaned out by the *Onychiurus*. Efficiency of cleaning in the more inaccessible parts of the spires of very small shells was not good at first but improved greatly when whiteworms (Enchytraeidae) were added to complement the springtail scavenging activity. *Onychiurus armatus* is particularly adaptable and will breed and grow rapidly at ambient room temperature providing it is kept in a moist environment. It will feed on a variety of plant, fungal or animal material. In the scientific literature it has reportedly been reared successfully on the soil moulds *Mortierella isabellina* and *Verticillium bulbillosum* (Bengtsson et al., 1991) and on the mycorrhizal fungus *Lactarius rufus* (Shaw, 1988). These are said to be its 'natural' foods. Among food materials offered by me, sometimes inadvertently, have been seaweed (*Ulva lactuca*), Tetramin fish food, dead terrestrial isopods and a variety of dead molluscs. High starch or high fibre foods such as porridge oats are less readily accepted and the main requirement appears to be food of a relatively high protein content. This species of *Onychiurus* may therefore be facultatively carnivorous. I have not observed it to kill living molluscs but moribund individuals do attract attention.

Snail shells with intact animals preserved in alcohol are also accepted as food and cleaned. However, the preserved animals should be rinsed for several days before offering to the *Onychiurus*. When I at first attempted to feed unrinsed material there were disastrous consequences. The culture dish became ringed with groggy and dead *Onychiurus* which, though apparently not put off by the taste, were unable to survive the consequences of imbibing quantities of alcoholic snail flesh.

Mummified snail bodies in stored shells may also be cleaned but require longer and should be steeped in water to soften first. Steeping

should not be prolonged, however, as bacterial activity will degrade the proteinaceous part of the shell epidermis in water. Surprisingly, the *Onychiurus* do not damage the epidermis even of quite thin, fragile shells. The relatively short time required for dissolution of most animal bodies in Petri dish culture also means that macerative decay has not progressed significantly during the debriding process.

I can recommend the use of this process for rapid cleaning of small shells. The method will reveal many internal features which might otherwise be overlooked, as shells are still fresh and transparent when the debriding process is complete.

Regrettably, I cannot offer a recipe for obtaining suitable springtails. *Onychiurus armatus* is very common in soil, and under stones and leaf litter in woods and gardens but there are several closely allied species which may or may not perform as well. I have included line drawings of typical *Onychiurus* spp. (Figure 1) taken from Herman Gisin's (1960) monograph of European Collembola. This will serve to illustrate the general appearance. For identification of collected material I must refer you back to Gisin (1960), however, and wish you luck!

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Mollusca from the Chichester Canal and a small freshwater pearl

Frank Berry,

Chichester, West Sussex,

The Chichester Canal – a three mile length of slow moving water – is all that remains of a strategic waterway conceived in 1813 to link Portsmouth naval base with London, via the rivers Arun and Wey. Opened in 1823, it rapidly fell into disuse and after a long period of dereliction the western end is now conserved by the Chichester Canal Society.

A part of the canal is constructed across chalk exposed in the eastern end of the Portsdown anticline. Water from springs enters it here through a section where the puddled lining seems to have been deliberately omitted. Nearby, water also derived from chalk, enters from the coastal plain gravels.

Environment Agency monitoring in the period 1990–2000 of water away from the reed beds records a range of pH of 7.2 – 8.6, and other items monitored over the same period – nitrate and orthophosphate – suggest a relatively unpolluted regime.

Late last year dredging was undertaken by the Canal Society to clear a way through parts infested with reeds, to provide a route for flood water. The spoil was spread over adjacent banks. Two samples of dumped mud (about 2.5 kg each) were collected from a section invaded by *Phragmites* just west of Cutfield Bridge (SU840014). The hydrosere developed after the removal of a mature sward of *Nuphar lutea* (Yellow Water-lily) in the early 1980s. The substrate which has accumulated over the puddled clay base of the canal is essentially a humose silt, with some fine sand and a little clay. Absence of derived Lower Tertiary foraminifera, etc., suggest a source in the local brickearths. Above this is a thick layer of fine organic detritus, plant debris and rhizomes of *Phragmites* and *Typha*. Most of the silt is bio-turbated and organised as faecal pellets, 1–2 mm in size.

Much of the mud sieved well but some parts consisted of an exasperating tangle of fibrous plant debris and shells. These were dried in the kitchen microwave, placed in a metal tray, doused with methylated spirits and set alight. The resulting collection of singed but intact shells, with the fibres reduced to a friable and granular state was much easier to sort.

In addition a few articulated valves of *Unio pictorum* and *Anodonta cygnea* were collected and the mud enclosed in the valves sieved and sorted separately, in the hope of finding a pearl or two.

The list of mollusca found, excluding terrestrial species, is given below, with subjective indications of abundance or scarcity. Recently live species are marked with an asterisk.

<i>Valvata cristata</i> (C)	<i>Gyraulus crista</i> (C)
<i>Valvata piscinalis</i> (C)	<i>Hippeutis complanatus</i> (C)
<i>Potamopyrgus antipodarum</i> (S)	* <i>Planorbarius corneus</i> (A)
<i>Bythinia tentaculata</i> (A)	<i>Ancylus fluviatilis</i> (S)
<i>Physa fontinalis</i> (F)	<i>Acroloxus lacustre</i> (F)
<i>Physa</i> sp. like ' <i>acuta</i> ') (S)	<i>Unio pictorum</i> (C)
<i>Lymnaea palustris</i> (S)	<i>Anodonta cygnea</i> (C)
<i>Lymnaea stagnalis</i> (S)	* <i>Sphaerium corneum</i> (S)
<i>Lymnaea auricularia</i> (A)	<i>Musculium lacustre</i> (S)
<i>Lymnaea peregra</i> (A)	<i>Pisidium casertanum</i> (C)
* <i>Planorbis planorbis</i> (C)	<i>Pisidium milium</i> (F)
<i>Anisus vortex</i> (C)	<i>Pisidium subtruncatum</i> (C)
<i>Bathyomphalus contortus</i> (S)	* <i>Pisidium henslowanum</i> (S)
* <i>Gyraulus albus</i> (C)	* <i>Pisidium moitessierianum</i> (S)
	<i>Pisidium</i> spp.

(A) abundant (C) common (F) few (S) scarce

The list simply records an assemblage of species which lived in the canal near Cutfield Bridge prior to the early 1980s. After this time the advance of the reeds and change to anoxic conditions clearly did not suit most species. The recently live shells collected were mostly Planorbidae (especially *Planorbarius corneus*) which lived on in reduced numbers, probably favoured by haemoglobin in the blood. *Sphaerium corneum* and a few *Pisidia* (*P. henslowanum*, *P. subtruncatum*) also persisted.

Pisidium moitessierianum is a new record for the 10 km square SU80 but out of place among reeds. *Physa acuta* is also a new record and *Pisidium henslowanum* a new post-1965 record.

A small pearl about 2 mm in diameter of an irregular spheroidal shape also turned up in the sediment from the large bivalves. Sadly, in a moment of confusion, labels got mixed up, but it seems likely *Unio pictorum* was the host.

Acknowledgements

Thanks go to Susan Elsom (Environment Agency) and John Cooper (Canal Society) for information and to June Chatfield for verification of *Pisidium henslowanum* and *moitessierianum*.



A *Leporocypraea mappa* with an encapsulated barnacle on the exterior and blister pearl formation in the interior

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The Map cowry *Leporocypraea mappa* (Linnaeus, 1758) is a well known species from the Indo-Pacific. Only a few records are known from the Red Sea and seem to be confined to its southern part: the Dahlak Archipelago (Schilder, 1967).

In the National Mollusc Collection of the Tel Aviv University (TAU) there is a single shell from the Dahlak Islands. It is most probably one of the specimens recorded by Schilder (1967). This cowry is characterised by bright orange teeth and belongs therefore to *Leporocypraea mappa alga* (Perry, 1811).

This specimen has a length of 67.7 mm and is rather particular in two aspects. On its dorsum it carries a barnacle which managed to grow to a size of 6.3 mm diameter, before it was covered completely with a glossy layer by the cowry. Usually cowries manage to keep their shells free of any epibionts due to the fact that they cover the shells with their mantle flaps. However, occasionally barnacles manage to settle on the smooth dorsum of a cowry.

In its interior the beginning of two cases of pearl formation are visible. The largest one was triggered by an accumulation of sand grains between the mantle and the inner wall of the shell, the second seems to contain as its nucleus a foraminifera.

Reference

Schilder, F.A., 1967. *Mauritia mappa* in the Red Sea. *Hawaiian Shell News* (N.S.) 88: 5.



Marine molluscs of the borrow dykes of north-east Essex

Pam and Peter Wilson

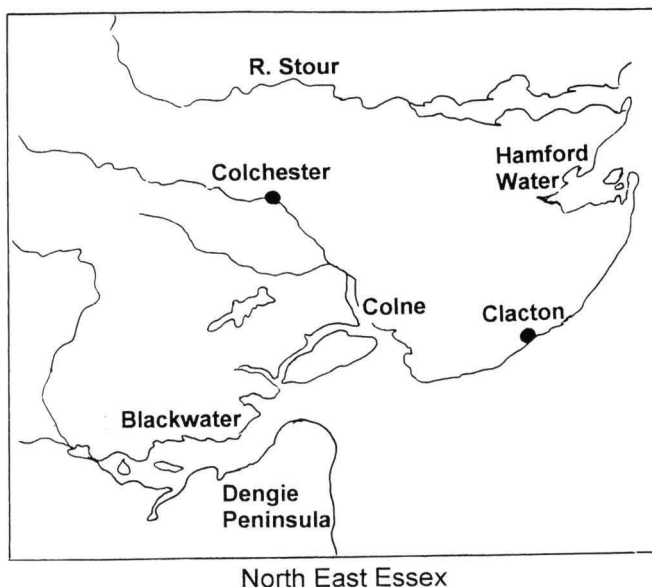
Colchester, Essex

The coastline of north-east Essex (Fig. 1) is about 200 kilometres long and includes the shores around Hamford Water, the Colne Estuary, the Blackwater Estuary and their many associated creeks. The low-lying hinterlands of these estuaries and the coastal plain of the Dengie Peninsula in the southern part of the recording area, are protected from flooding during high tides by seawalls which have borrow dykes behind them for most of their length. Borrow dykes were formed when material was excavated to make protective banks in medieval times or even earlier. Since then, the dykes have been widened and deepened periodically when material has been needed to repair or heighten the sea walls. The dykes now receive drainage water from the land (now largely arable with some coastal grazing marsh) and excess water is sluiced to the estuaries or sea. The water in almost all of the borrow dykes is brackish to some degree. The salinity of a particular dyke depends upon the amount of salt water entering from the estuary (via leaky sluices and by seepage though the seawalls) and the amount of fresh water received from land drainage. Evaporation temporarily increases the salinity of some sites during hot dry weather.

We have been investigating the fauna of the borrow dykes of north-east Essex since 1998. Two hundred and fifty 500 m lengths of dyke¹, spread more or less evenly throughout the coastal area, have been sampled. A sweep net was used to investigate the organisms of the water body and weeds; mud samples were examined and the conductivity of the water recorded. This ranged from 0.7 mS to 67 mS. (The conductivity of seawater is about 55 mS). About half the sample sites were salty enough to support marine and specialist

¹The Environment Agency divides the parts of the seawalls for which they are responsible into numbered sections, each 500m long. These section numbers were used to identify the stretches of borrow dyke selected for sampling.

lagoon species², including several molluscs, which are listed in the table. As would be expected when sampling over such a large area, the quality of the communities in the dykes varied considerably.



The occurrence of *Tenellia adspersa* at a sluice site at Howlands Marsh, Essex, in 1998, has already been reported (Wilson and Wilson, 1999). Since then, many other sluices have been examined and *Tenellia adspersa* was found in five of them. In each case water flowed in and out of the sluice with the tide and a healthy growth of the hydroid *Laomedea flexuosa* was present. Up to 30 adult *Tenellia*, and sometimes their egg capsules, were found on small samples of *Laomedea* (usually enough to spread out in two Petri dishes). At a sixth sluice a piece of hydroid was found with a suspected *Tenellia* egg capsule on it. This was kept carefully (in a cool garden shed!); nine days after collection tiny juveniles were seen emerging from the eggs. This time span accords with Hamond's observations (Hamond, 1972). Seven juveniles developed over

²As listed by Downie after JNCC 1996 (Downie 1996).

a period of seven days; after this time they were 1.5 – 2 mm long and had all the diagnostic features of adult *Tenellia adspersa*. Being a protected species, these were released at their original site. Including the record from Howlands Marsh, *Tenellia* has now been recorded at two sites on the Colne, one site at Hamford Water and four sites on the Blackwater during the past three years.

A sample of *Laomedea* from one Blackwater site yielded not only four specimens of *Tenellia*, but also two other Aeolids: one specimen each of *Tergipes tergipes* and *Eubranchius exiguus*. The latter is the first record for that species in S13. *Limapontia depressa* was the only other opisthobranch recorded from the dykes: a small population was found on *Ulva lactuca* near a sluice at one site and a similar population well away from a sluice at another site.

The BAP species *Ventrosia ventrosa* is widespread throughout the area. It occurred in almost four fifths of the dykes of suitable salinity (99 records) and is very numerous in some dykes. In contrast, the other BAP species, *Hydrobia neglecta*, though often numerous where it was found, was only recorded 13 times and was restricted to the dykes on the southern edge of Hamford Water. Small numbers of *V. ventrosa* were often found with it. This was the first time *Hydrobia neglecta* had been recorded from Essex.

As would be expected *Hydrobia ulvae* is widespread in the dykes of the area, but was found considerably less often than *Ventrosia ventrosa* and there were no large populations. It was usually found fairly near to a leaky sluice.

Cerastoderma glaucum was recorded from twelve widespread sections of dyke (including a large population in a caravan site boating lake just behind the sea wall). This species could be found among *Chaetomorpha linum* if this was present at the site, or if there was no weed, buried in mud on the bottom. Sometimes in this case, the siphons could be seen protruding from the mud under the clear water. In addition to these live records, shells were recorded from twelve other sites. This species was evidently popular with a predator, as piles of freshly opened shells were often found beside the dykes. Many of these shells were undamaged, but a few had a small 'nick' in the posterior margin of both valves.

The only other marine mollusc found live in any significant quantity was *Abra tenuis*; there were five instances of fair size populations in the dykes in the vicinity of sluices and a further eleven records of shells. It seems likely that these populations are transient and perhaps die out and re-establish themselves according to prevailing conditions.

Table 1
Marine molluscs of the N.E Essex borrow dykes
to show status (SL, BAP, RDB, Schedule 5)

Species	SL	BAP	RDB	S5
<i>Littorina littorea</i>				
<i>Ventrosia ventrosa</i>	x	x		
<i>Hydrobia neglecta</i>	x	x		
<i>Hydrobia ulvae</i>				
<i>(Potamopyrgus jenkinsi)</i>				
<i>Limapontia depressa</i>				
<i>Tenellia adspersa</i>	x	x	K	x
<i>Tergipes tergipes</i>				
<i>Eubranhus exiguus</i>				
<i>Ovatella myosotis</i>				
<i>Cerastoderma edule</i>				
<i>Cerastoderma glaucum</i>	x			
<i>Macoma balthica</i>				
<i>Abra tenuis</i>				
<i>Scrobicularia plana</i>				

Key:

SL: Specialist lagoon species; **BAP:** Biodiversity Action Plan Species; **RDB:** Red Data Book; **S5.** Species protected under schedule 5 of the Wildlife and Countryside Act, 1981; **K:** insufficiently known.

With the exception of *Potamopyrgus jenkinsi*, the other species in the table are probably opportunists, only being found occasionally in small numbers near sluices where there was a tidal flow. However, *Scrobicularia plana* and *Cerastoderma edule* appeared to be well established at the site where we first discovered *Tenellia*.

Recorded from 119 sections, *Potamopyrgus jenkinsi* was the most often recorded mollusc in the survey. Although most of the records were from less brackish situations, and not strictly speaking a marine species, it has been included in the table on the grounds that it was sometimes found in more saline conditions. and was recorded with *Ventrosia ventrosa* on 17 occasions.

Tenellia adspersa is undoubtedly the most interesting record mentioned above, but it is worth noting that three non-molluscan protected specialist lagoon species, *Nematostella vectensis*, *Gammarus insensibilis* and *Paracymus aneus*, were also found during the survey. These help to emphasise the conservation value of some of these saline coastal dykes.

The less brackish borrow dykes had a few other species of molluscs, over 50 species of beetles, 26 species of bugs... but that's another story!

Acknowledgements

We would like to thank the Environment Agency and the Blackwater Project for financial assistance for the borrow dyke survey and English Nature for the loan of a conductivity meter and other help. Thanks also to Jan Light for assistance in confirming the identification of *Tergipes tergipes* and *Eubranchus exiguus*.

The work was carried out under English Nature licence numbers 19990778 and 20000798.

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More about *Succinea* species in garden centres and other unusual places

B. Verdcourt

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On 25 June 2000 Adrian Rundle and Fred Gibson collected four live succineids in Squires Garden Centre, Twickenham where they appeared to be quite common. Adrian sent these to me and I kept them for over two months to make sure they were quite adult during which time mating took place on numerous occasions for up to three hours or so. Three were dark due to the mantle being peppered with black spots as well as the actual shell being darker; the fourth was much paler. All proved to have anatomy very similar to that depicted by Quick (1933) for what he called *Succinea pfeifferi* Rossmässler in his classical paper. I borrowed Quick's original dissection from the National History Museum to confirm this. The shells were sent to Michael Kerney who agreed that, if they had been found in a wild site in Britain, he would have called them *Oxyloma pfeifferi* without question (*Oxyloma elegans* of most Continental authors). Recently, P.F. Whitehead (1999) has reported *Succinea putris* (L.) eating the ovisacs of the scale insect *Lichtensia viburni* Signoret on the evergreen *Viburnum tinus* L. in a suburban garden at Evesham, Worcestershire, nearly a kilometre away from the R. Avon and in dryish circumstances. He also reports (*in litt.*) that succineids found in pot plant nurseries in his area have the appearance of *Succinea putris*.

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A 15th century painting of *Helix aspersa*

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During a small exhibition of books put out for a party of visitors in the library at Kew I noticed a very accurate and beautiful painting of an outstretched *Helix aspersa* added as an ornament to a page of plant paintings in a herbal. This was said to be by Matthaeus (Mattheus) Platearius who died in 1161, but the paintings were obviously much later than that. Platearius lived in Salerno which had a medical school world-famous in the Middle Ages. This had its origin as far back as the middle of the 7th century, before Charlemagne founded a college there in 802. This excellence in medical studies was carried on by the university founded by Emperor Frederic II (1194–1250) in the 13th century.

The text of the book I saw was certainly based on Platearius' *Liber de simplicibus medicinis* or *Secreta Salernitana* as it is also called but that was unillustrated. Numerous copies were produced in the centuries which followed and these were illustrated in the style of the times and places concerned. The volume on display is a facsimile published in Barcelona in 2000 of a manuscript kept in the National Library of St Petersburg – Saltykov Chitchev Library MS fr. F. V. VI.1. It was illuminated by Robinet Testart for Charles of Angoulême (1460–1496) and Louise of Savoy (1476–1531) (the parents of François premier) between 1489 and 1495.

Later on snails and other creatures became frequent additions to Dutch flower and still life paintings. Some molluscs such as octopuses are depicted on old Roman mosaics and much earlier in Minoan art but it would be interesting to know about early representations of snails. There must be many much earlier than the one I mention and it would not surprise me if an article has been written about them somewhere.



Notes on Thiariidae: some unpublished names by Preston and Coen

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During the search for type samples belonging to the family Thiariidae present in the National Mollusc Collection of the Hebrew University of Jerusalem (HUJ), I came across several samples which were labelled as if they consisted of syntypes (old cotypes) of species described by either H.B. Preston and G.S. Coen.

The story about H.B. Preston is well known: he authored hundreds of supposed new taxa in the mollusca. Usually he donated part of the type material to a major museum, but cotypes (now called syntypes) were sold to collectors all over the world. This happened also with samples supplied with manuscript names i.e. names proposed by Preston but not yet published. Quite a number of these names remained undescribed and have to be considered as non-existent. However, most major museums in Western Europe are in the possession of samples still supplied with such names.

The story of G.S. Coen, who lived in Venice, Italy, is somewhat different. His goal was the establishment of a natural history museum. For that purpose he acquired material from many sources: both musea and private collectors. As long as the museum existed on paper only, he kept the molluscs in his private collection. As a matter of fact this situation remained unchanged until his death in 1951. After his death, Coen's family decided not to donate his collection to a museum in Italy, because of the treatment Jewish citizens received before and during World War II in Italy.

Although he published a large number of papers containing numerous new taxa, his own collection (now in the HUJ) contained also many samples supplied with manuscript names. Some of these names have turned up in manuscripts which remained unpublished, others have never been dealt with by Coen. Some of these manuscript names are most probably also circulating in Italian collections (especially Genova).

The following manuscript names were encountered:

'enganensis', *Sermyla* Coen, ms: Indonesia, off Sumatra, Enggano Island, leg. E. Modigliani (HUI 7737/1) based on a large specimen of *Melanoides tuberculata* (Müller, 1774) with very strong axial sculpture.

'gestroi', *Melania* Coen, ms: Indonesia, Sumatra, Cauer, leg. E. Modigliani (HUI 7736/1) based on a specimen with stepped whorls and lacking the periostracum of *Tarebia granifera* (Lamarck, 1822).

'griffithsi', *Melania* (*Tarebia*) Coen, ms: Hawaii, Honolulu (HUI 7739/5) based on *Tarebia granifera* (Lamarck, 1822).

'horsleyana', *Melania* Preston, ms: Upper Burmah, Naymzo(? handwriting not clear) (HUI 7740/5) based on an unidentified species of *Brotia*.

'kiwuensis', *Melanoides* Coen, ms: Lake Kivu (HUI 7738/52) based on quite typical *Melanoides tuberculata* (Müller, 1774).

'poudora', *Melania* Preston, ms: Indonesia, Celebes, Toudena (? handwriting not clear) (HUI 7741/1) based on what seems to be a form of *Melanoides tuberculata* (Müller, 1774) with truncated spire, very weak axial and fine spiral sculpture.

'rissoiaesculpta', *Melania* Coen, ms: Indonesia, Sumatra, Cauer, leg. E. Modigliani (HUI 7734/1) based on *Tarebia granifera* (Lamarck, 1822).

'tornata', *Melania* Coen, ms: Indonesia, off Sumatra, Enggano Island, leg. E. Modigliani, 1891 (HUI 7735/18) based on *Melanoides badia* (Henderson, 1898).

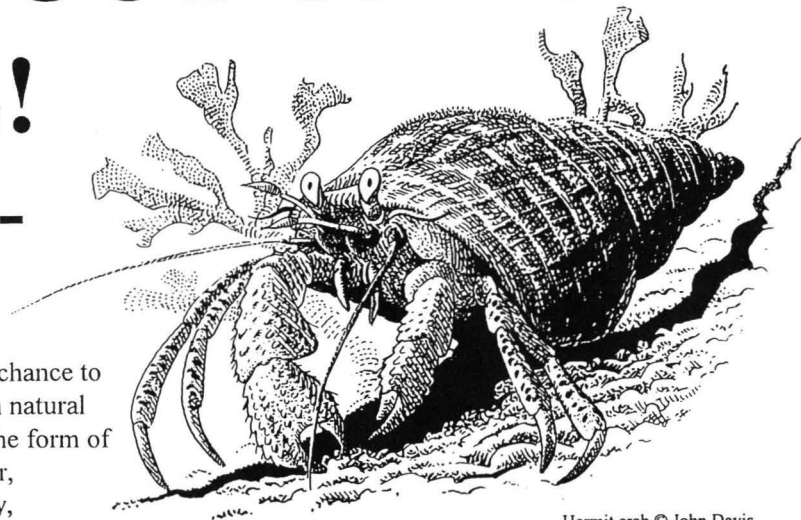


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Hermit crab-© John Davis

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Supplement to Collectors in East Africa No. 28: C. Alluaud

B. Verdcourt

Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB

Through inadvertence I omitted several of the molluscs collected by C. Alluaud, particularly those he obtained in 1912 in the company of R. Jeannel. These are listed below.

Jeannel's book on African mountains (1950) contains pictures of montane vegetation taken by Alluaud; plate 1 is of Alluaud and Jeannel at their camp on Kilimanjaro at Bismarckhügel (complete with pith helmets!). If I do not get around to dealing with René Jeannel (1879–1965) in this series anyone interested can consult Delamere Deboutteville's obituary of him (1965). Jeannel eventually became director of the Natural History Museum in Paris.

Additional list of molluscs described from material collected by C. Alluaud and R. Jeannel in East Africa:

Gastrocopta jeanneli Germ., 1934. Tanzania, Kilimanjaro, upper edge of forest near Bismarck Hill, 2700–2800m (2.iv.1912), *Alluaud & Jeannel* (holotype, P). Same.

Gulella albogilva Germ., 1934. Tanzania, New Moshi, near R. Rau, 800m (12.iv.1912), *Alluaud & Jeannel* (holotype, P). Same.

Lauria alluaudi Germ., 1934. Kenya, Kinangop, 3100m (19.ii.1912), *Alluaud & Jeannel* (holotype, P). *Lauria desiderata* (Preston)

Marconia (*Stenomarconia*) *jeanneli* Germ., 1934. Kenya, Mt. Kenya, 'prairies alpines', 3300–3700m; rocky escarpment on left bank of Haugsburg Valley, 3650m, on giant *Senecio*; between Haugsburg and Teleki Valleys, on dead trunks of tree *Senecios*, 4000m, *Alluaud & Jeannel* (syntypes, P). *Stenomarconia jeanneli* (Germ.)

Mutela alluaudi Germ., 1910. Uganda, Lake Albert, *Alluaud* (holotype, P). Same.

Subuliniscus arambourgi Germ., 1934. Kenya, Thika, Blue Posts Hotel at junction of Thika and Chania rivers, 1250m (1.i.1912), *Alluaud & Jeannel* (holotype, P (lost)). Same.

Truncatellina flavogilva Germ., 1934. Tanzania, New Moshi, near R. Rau, 800m (12.iv.1912). Same.

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Conchological Society of Great Britain and Ireland

MINUTES

1099th (Ordinary) Meeting held on the 16 December 2000 in the Demonstration Room of the Natural History Museum starting at 2:45 pm

In the chair: Dr Rundle with 34 members present and three visitors. The three guests, Ms I. Girvan and Mr M. Newman of the Surrey Wildlife Trust and Mr C. Evans of the Hampshire Wildlife Trust were welcomed to the meeting.

Apologies for absence: Dr Alexander, Mr & Mrs Buckle, Dr Colville, Mrs Long, Miss McIvor, Mrs McMillan, Mr Negus, Mr Norris, Mrs Rands, Mrs Turk, Dr Verdcourt, Mrs Weideli, Dr Willing.

Minutes of the last meeting (of 18 November 2000): The Minutes were read and accepted.

Matters arising: None.

Nomination and election of new members: Two Ordinary and two Family members were nominated and elected:

Ordinary:

Fr. C. Calascoine

[REDACTED], Little Malvern [REDACTED]

Mrs M. P. Ghullam

[REDACTED], North Walsham, Norfolk [REDACTED]

Family:

Mr & Mrs S. Harfield

[REDACTED], Eastleigh, Hants [REDACTED]

Mr & Mrs S. C. Terry

[REDACTED], London [REDACTED]

Announcements and Correspondence

1. Mr Long announced greetings to the Society from the Victoria Branch of the Malacological Society of Australia, following a recent visit to the continent with his wife.
2. Dr Rundle reminded those present that subscriptions for 2001 are due at the end of the year.
3. Mr Evans requested help or advice regarding his current mollusc survey in Hampshire.

The next indoor meeting will take place on Saturday, 27 January, 2001. The Speaker will be Professor Robert Cameron on 'Changes in the land mollusc fauna of the British Isles over the 20th Century'.

Any other business: None

Lecture of the day:

Speaker: Amanda Millar

Title of talk: Woodland snails and coppicing: some results from a woodland in Sussex.

Meeting closed at 4.20 p.m.

Chairman.

Appendix: members' exhibits

- | | |
|--------------------------------|---|
| Adrian Rundle | Worm and slug granules |
| E. O. Bishop | Land shells from Sao Miguel, Azores |
| Ron Boyce and
Rosemary Hill | Photographs of snails in leaf litter
1. <i>Carychium tridentatum</i>
2. <i>Vitrina pellucida</i> |
| Terry Wimbleton | 1. British woodland species from Southern England
2. <i>Buccinum humphreysianum</i> . Bennett 1825
3. <i>Buccinum rossicum</i> forma <i>tsubai</i> . Kuroda & Kikuchi 1933 |
| Kevin Brown | 1. <i>Conchologists' Newsletter</i> No. 155, December 2000 Article 'The trumpet of Hazor' by Fred Pinn.
2. Specimens of <i>Charonia</i>
3. Book <i>Ranellidae & Personidae</i> by T. Henning & J. Hemmen
4. <i>International code of Zoological Nomenclature</i> , 3rd edition + Summary of changes introduced in 4th edition 2000.
5. Book <i>Catalogue & Bibliography of the marine shell-bearing Mollusca of Japan</i> by S. Higo, P. Callomon & Y Goto. |
| E.G. Philp | A new locality for <i>Cochlicella acuta</i> in Kent |
| John Llewellyn-Jones | 1. <i>Cepaea hortensis</i> sinistral specimen
2. Fossil fake? <i>Turritella</i> sp.
3. Cheltenham & Gloucester pamphlet with Queen Conch horn being blown through mouth! |

- | | |
|---------------|--|
| David Long | 1. A Report on a Gloucester nature reserve |
| | 2. Australian Shell News |
| | 3. Three publications on Palaeocene Australian Molluscs by Tom Darragh |
| Colin Gillard | New Programme card |
| Jane Reynolds | 1. Earthcall leaflets |
| | 2. Mad Octopus |



**1100th (Ordinary) Meeting held on the 27 January 2001 in the
Demonstration Room of the Natural History Museum starting at 2:30 pm**

Announcement of death: The death of Mr Dominic Rawlingson-Plant, member since 1997 was announced.

In the chair: Mr Long with 34 members present.

Apologies for absence: Mrs Buckle, Mr Eversham. Dr Kerney, Mrs Light, Mrs Long, Mrs McMillan, Mr Negus, Mrs Rands, Dr Rundle, Mr Smith, Mrs Turk. Dr Verdcourt. Mr & Mrs Weideli.

Minutes of the last meeting (of 16th December, 2000): The Minutes were read and accepted.

Matters arising: None

Nomination and election of new members: One Student member was nominated and elected:

Miss I. E. Lawrence

[REDACTED], Marlborough, Wilts. [REDACTED]

Announcements and Correspondence:

- Mr Long reminded those present that subscriptions for 2001 are now due and can be paid to the Hon. Treasurer, Mr Buckle.
- Mr Gillard has received six items of correspondence. These are listed separately.

The next indoor meeting will take place on Saturday, 17 February 2001, following the auction of books. The Speaker will be Dr David Aldridge on 'Bivalves as pests'.

Any other business: None.

Lecture of the day:

Speaker: Professor Robert Cameron

Title of talk: Changes in the land mollusc fauna of the British Isles over the 20th century.

Meeting closed at 4.30 pm.

Chairman.

Appendix: members' exhibits

- | | |
|-------------------------|--|
| John E. Llewellyn-Jones | <i>Modern Cameos</i> – a book and cameos produced by Peter Zaltsman, a Russian emigré. They have been compared with those beautiful cameos of the Renaissance (Italy). |
| J. Chatfield | Obituary of Professor Alastair Graham Published in <i>The Independent</i> , 19 January 2001. He died in December 2000 |
| Ron Boyce | 1. Photographs of Hyde Dingle (Brockhampton) and of <i>Phenacolimax major</i> .
2. Brochures and provisional information on marine meeting in Fife. |
| P. Dansey | Shells from Naples area. |
| Ron Carr | Preliminary sketches of the anatomy of British <i>Ceruella virgata</i> (Da Costa) and shell specimens |
| Kevin Brown | 1. Book – <i>A Field Guide to Marine Molluscs of Galapagos</i> by C. Hickman & Y. Finet.
2. Specimens of Galapagos species.
3. <i>Chiton goodallii</i> Broderip, 1832 – used for food in Galapagos.
4. Press cuttings
5. <i>Nerita adenensis</i> Mienis, 1978
6. Article: 'The Neritidae (Gastropoda) from the Circumarabian Seas...' by H. Dekker – <i>Vita Marine</i> 47 (2): 26–64, Aug 2000.
7. Article: 'Family Neritidae – Nerites' by T. Eichorst and B. Neville. <i>American Conchologist</i> Vol. 27 (4) Dec. 1999.
8. S. D. Kaicher – card catalogue 'Neritidae'. |



Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary:

Ron Boyce, [REDACTED], Reading, Berkshire [REDACTED]

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.

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
MSL = Malacological Society of London

FOOT AND MOUTH PRECAUTIONS

Because of the continually changing situation regarding this disease it may become necessary to change the locations and meeting points for field meetings at short notice. It is therefore more than ever essential to inform the leader if you are attending a field meeting.

Please clean your boots and overtrousers before coming on meetings, respect No Access notices, keep away from livestock, do not discard uneaten food or give it to any animal, and use disinfectant where this is provided.

YCS – 1 September: Arncliffe for Littondale. Meet at village green at 11.00am, grid ref. SD 931718. Contact David Lindley [REDACTED]

NHM – Saturday 8 September: 14.30h. For our first indoor meeting of the new season we welcome as Guest Speaker Michael Weideli from Newbury on the subject of 'The National Biodiversity Network – a new challenge for molluscan recording'.

FIELD – Sunday 16 September to Friday 21 September

Fife, Scotland

Leader: William Penrice [REDACTED]

A week-long meeting to study the marine mollusca of the Fife coast, including dredging trips, the cost of which is already paid for, and a visit to Inchcolm Island. There will also be the opportunity to do some land recording, which is unlikely to be affected by the Foot and Mouth outbreak.

Continued...

....
Please note that the spring tides are rather early in the morning at this location. The most convenient centre to seek accommodation will be Anstruther. The tourist information office telephone number at Anstruther is 01333 311073 and at St Andrews is 01334 472021.

Information on meeting places will be provided later on, but the initial meeting point will be on Sunday at 10.30am at Lower Largo in the public car park on the sea front, grid ref. NO 423026.

On Sunday it is proposed to visit Dumbarnie Links and Cocklemill Marsh to look for *Truncatellina cylindrica* and brackish water species. Monday will be spent dredging and visiting Inchcolm Island. On Tuesday we will work the shore at Kings Barns and visit Cambo Den. On Wednesday there will be a further dredging trip, on Thursday we plan to work the shore in St Andrews Bay and visit Magus Muir on the way back, and on Friday there will be shore work in the Anstruther area.

YCS – 6 October: Gargrave for Leeds and Liverpool Canal and River Aire. Meet at 11.00am in pub car park on A65 west of Gargrave, grid ref. SD 925542. Contact David Lindley [REDACTED]

YCS – 20 October: AGM and Presidential Address. 1.00pm Leeds City Museum Resource Centre, Yeadon. Contact David Lindley [REDACTED]

NHM – Saturday 20 October: 14.30h. Presentations on local land recording schemes by individual recorders.

WKSHP – Friday 26 – Sunday 28 October. The Juniper Hall Snail Course. Field Studies Council Courses 2001. Tutor: Dr June Chatfield. Course fees: Residents £119; Non-residents £93. Contact: The Warden and Director of Studies, Juniper Hall Field Centre, Dorking, Surrey RH5 6DA. Tel. 0845 458 3507. E-mail fsc.juniper@ukonline.co.uk.

MSL – early November 2001. The Malacological Society of London Molluscan Forum 2001. The Natural History Museum, London. For details nearer to the date please see the MSL website: <http://www.sunderland.ac.uk/MalacSoc> (note: MalacSoc is case sensitive).

NHM – Saturday 17 November: 14.30h. We welcome as Guest Speaker Dr Michael Barker from Portsmouth University on the subject of 'Colour preservation in fossil shells'.

NHM – Saturday 8 December: 14.30h. We welcome as Guest Speaker Dr Graham Oliver from the National Museum of Wales, Cardiff, on the subject of 'Marine bivalves of the Mascarene Islands'.

Annual Molluscan Workshop Saturday 24 November

**This meeting is being held by kind invitation of Judith Nelson at
[REDACTED], Woking, Surrey [REDACTED]**

[REDACTED] from 10.00 hrs prompt until approximately 17.00 hrs

Please note Hilbre is a non-smoking property

Those attending should please bring a microscope and lamps (a few microscopes are available if booked in advance), Petri dishes or other dishes for sorting purposes, a fine water colour paint brush (00), tweezers/forceps, dissecting tools, if possible an extension lead and/or double electric plug, books to help identification, and a packed lunch. Coffee, tea and biscuits are provided.

As numbers for the workshop are limited **PLEASE CONFIRM ANY BOOKING** made by 1 November so that it can be checked whether there are any places vacant.

Those **NOT** confirming by 1 November will be taken as not wishing to attend and their place will go to someone else. **NO REMINDERS WILL BE GIVEN.**

A fee of £5 will be charged to cover expenses.

Accommodation is available for anyone coming from a distance but is very limited. **PLEASE BOOK EARLY.**

The programme for November 2001 is as follows but subject to change:

Small marine bivalves
Barton fossils
Any other British requests

NOTE

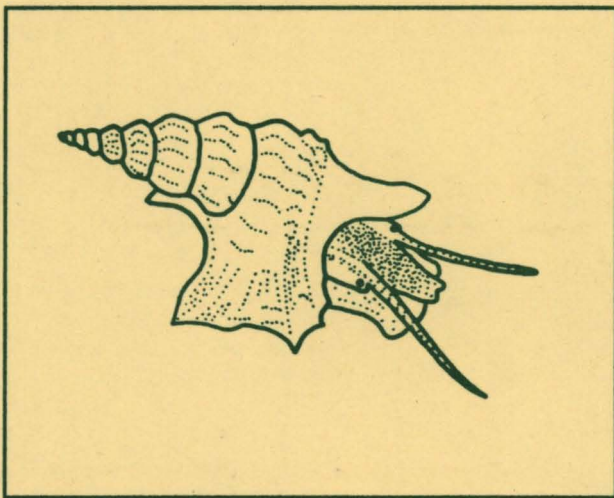
Next year's indoor meetings at the Natural History Museum in London are scheduled for 19 January, 16 February, 20 April, 8 July, 7 September and 14 December. Because of refurbishment work the Palaeontology Demonstration Room will be unavailable from the beginning of April 2002, and arrangements have therefore been made to hold the remaining meetings in the **De La Beche Room**, which is to be found nearby in the Earth Sciences wing.



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How to record slug abundance?

Chris du Feu

Beckingham, Notts

Introduction

Some of Britain's natural populations are well documented with records being collected of their distribution, abundance and temporal variation. At one extreme come birds. They are diurnal, noisy and brightly coloured. Their populations are recorded so well that the government includes bird population data in their collection of Indicators of Sustainability (Defra web site) which they use to measure the well-being of the country.

The same is not true for slugs. They have a bad press and, even though they are of economic concern because several species are major agricultural pests, little is recorded about their national abundance nor annual variation in populations. When asked if it has been a good (or bad) year for slugs, we can only give anecdotal answers.

Assessing slug abundance in a systematic way is not easy, even though slugs do not move fast. They are mostly nocturnal. In dry, cold or windy weather they shelter underground or under cover and cannot be seen. How can their populations be assessed?

In a long-term study the Institute of Arable Crops Research (IACR web site) assesses the numbers of slugs present by removing cuboids of soil 0.25m x 0.25m x 0.1m deep. These blocks are gradually flooded from the bottom forcing all the slugs to rise slowly so they may be counted exhaustively. The method used is fully described in Glen, Wiltshire & Milsom (1992). This method has been in use for nearly 10 years and the IACR dataset is used by researchers such as David Schley and Martin Bees at the University of Surrey, who are researching environmentally-friendly ways of controlling slugs through developing mathematical models of slug-nematode interaction. For more details about this approach and many useful links to other slug-related research, look at David Schley's web site.

Clearly this exhaustive counting method would not be possible to do in a long-term national monitoring operation where the work was to be done regularly, by volunteers, in their own time and without specialist facilities.

A second approach would be to use traps, such as beer traps, which attract slugs to them. These traps are fatal to slugs. Further, their usual aim is to reduce the slug populations – hardly useful for monitoring populations and rather sad for the large, benign and long-lived species such as *Limax maximus* (Linnaeus, 1758).

Another way of counting them is to place some large object on the ground then look for slugs resting under it by day. However, there are problems with this. During 1997 and 1998 I made observations of slugs under a 40 cm x 40 cm paving slab which had been placed in a cool shaded part of a garden. Initially, up to 50 slugs of 10 different species could be found resting beneath it. However, as time went on, the soil below the slab dried and it became less attractive to slugs. After some months it became so dry that it was unusual to find even a single slug under it. A second problem is that the numbers of slugs under objects may depend on the weather, with fewer slugs being seen in hot, dry weather when they have moved to cooler damper conditions underground.

The chemical company, Bayer, produces a slug activity monitoring mat. These are designed for farmers to leave in the fields. When slugs are found resting under them, it is time to scatter yet another dose of slug pellets. Can these mats be used for recording slug populations? They have, after all, been designed to be attractive to slugs. The mats are made of two thin layers of plastic with cardboard between. The upper silvery-grey plastic layer is reflective to keep away heat from the sun. The lower surface is black with slits which allow water to be absorbed by the cardboard. This keeps the underside of the mats moist – ideal for slugs. The question is whether such a mat may be left in the same place or will the soil below it eventually dry. Before attempting to record slug abundance, it is best to ensure that the recording system is not just measuring how effective the recording device is. To this end I have made a comparison of the slugs found under two mats – one which is left in the same place, the other which

is moved regularly so that the soil below cannot become dry. The plan for this was:

- Place two mats near each other in a suitably shady part of a garden.
- Record the numbers of each species of slug below each mat once a week.
- After each observation replace one mat in the same spot, but the other mat in a nearby place.

It is important that the two mats are always close to each other so that both are attracting slugs from the same micro-habitat but that the moveable mat was, as far as possible, placed on a fresh patch. This is illustrated in Figure 1. The fixed mat is F. The moveable mat was intended to be placed in positions 1, 2, 3 ... over successive weeks so that it would be two months before it reused any position and in no two successive weeks would it occupy adjacent patches. The scheme was followed as far as possible – gardening operations sometimes preventing the preferred spot being used. The mat was never placed in the same place for two weeks running.

1	4	7
6	F	2
3	8	5

Figure 1. Ideal positions of fixed and moveable mats

The two mats were left in place from March 1999 to March 2001. Counts of slugs below each mat were made, as far as possible, one in each calendar week with a total of 100 counts over the two years. Most counts were on Saturday or Sunday and made during the late afternoon. Only when circumstances prevented weekend counts were they made on other days. The maximum time between any two counts was 12 days and the minimum 4 days. Table 1 gives the total numbers

of each species counted over the two years under each mat. Note that in the table, any slugs which rested under the mat for more than one week will have been counted more than once.

Table 1: Aggregated counts of each species recorded

Species	Fixed mat numbers	% of total	Moveable mat numbers	% of total
<i>Arion ater</i>	1	0.0	2	0.3
<i>Arion cirumscriptus</i>	1	0.0	3	0.5
<i>Arion distinctus</i>	363	15.8	106	16.1
<i>Arion fasciatus</i>	69	3.0	51	7.7
<i>Arion hortensis</i>	2	0.1	0	0.0
<i>Arion intermedius</i>	1	0.0	1	0.2
<i>Arion silvaticus</i>	5	0.2	12	1.8
<i>Arion subfuscus</i>	133	5.8	45	6.8
<i>Boettgerilla pallens</i>	12	0.5	3	0.5
<i>Deroceras panormitanum</i>	242	10.6	142	21.5
<i>Deroceras laeve</i>	2	0.1	1	0.2
<i>Deroceras reticulatum</i>	478	20.8	189	28.7
<i>Limaz flavus</i>	42	1.8	5	0.8
<i>Limax maximus</i>	3	0.1	1	0.2
<i>Lehmannia valentiana</i>	2	0.1	0	0.0
<i>Tandonia budapestensis</i>	936	40.8	86	13.1
<i>Tandonia sowerbyi</i>	1	0.0	12	1.8
Totals	2293		659	
Totals excluding <i>Tandonia budapestensis</i>	1357		573	

How the mats performed

Figure 2, shows very clearly indeed that, for the first five months, there was little difference between the two mats. Thereafter the fixed mat became far more effective. It remained so almost throughout the two years. Only briefly in the late summer of 2000, when recorded slug numbers were low, did the moveable-mat count approach the fixed-mat count. The very low count in early 2001 was at a time of sub-zero temperature when almost all slugs had gone underground to avoid the frost.

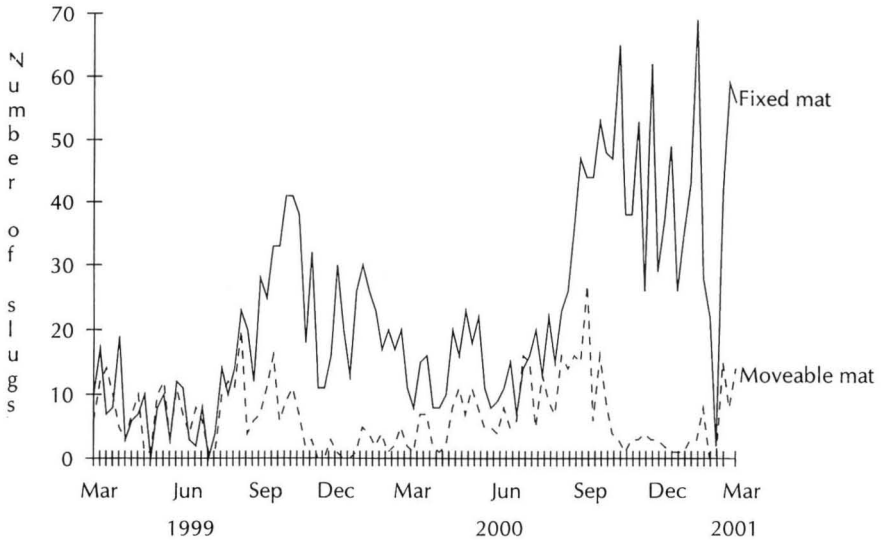


Fig. 2. Numbers of slugs recorded under fixed and moveable mats

The change in effectiveness of the fixed mat was very rapid indeed, taking place within September 1999. Unlike the concrete slab which had been used earlier for counting slugs, the fixed mat retained moisture in the soil directly below. At the time when the fixed mat became so much more effective, the vegetation below it had died (through lack of light) leaving just bare soil.

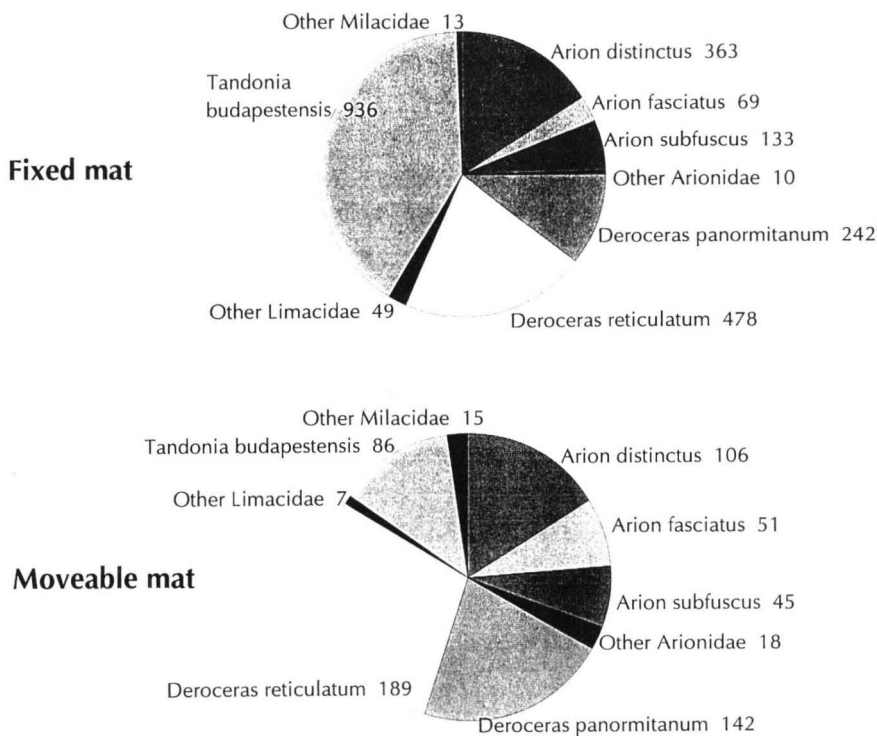
Overall, the fixed mat held more individuals and more species, although the only two species not found under the moveable mat (*Arion hortensis* (Férussac, 1819) and *Lehmannia valentiana* (Férussac, 1821)) were only found under the fixed mat twice.

Relative abundance of species under the two mats

Table 1 and Figure 3 reveal a considerable difference in the relative abundance of species under the two mats. The fixed mat has a far greater proportion of the major pest species *Tandonia budapestensis* (Hazay 1881) – 41% compared with the moveable mat's 13%. If this species were to be removed, the remaining species would show much more similar relative abundances under the two mats. For instance, 478 out of 1357 = 35% of the remainder under the fixed mat were

Deroceras reticulatum (Müller, 1774) as were 189 out of 573 = 33% under the moveable mat.

It seems, therefore, that the fixed mat performs rather better than the moveable mat in both numbers and, possibly, range of species. However, *Tandonia budapestensis* may be over-represented under it.



Note: aggregated numbers recorded are given after the species/group name.

Fig. 3. Distributions of aggregated counts under the two mats

Diversity of slug species

In order to analyse diversity, data from the time when the fixed mat had not yet become fully effective have been excluded from the analysis – for the first five months the fixed mat may have been behaving more like a moveable mat. Thus the data used here, for both mats, are from October 1999 to March 2001 only. There are several ways of measuring diversity – which is related to both numbers of species and numbers of individuals within a species. Of all the diversity indices which are available, the Shannon-Weiner is most suitable here. It has two particular advantages. First is that numbers from successive samples may be aggregated to form one much larger sample, even allowing for the possibility of repeated observations of the same individual. This will allow, for example, a single comparison of the whole dataset for each mat rather than 100 separate weekly comparisons. The second feature is that Shannon-Weiner diversity indices can be tested for differences using the t-test. This will allow us to determine whether observed differences in diversity are likely to reflect real differences in the suitability of the mats rather than just being due to chance. The data are presented in Table 2 and the Shannon-Weiner formula is given in the Appendix.

The differences between the indices is significant ($t = 5.95$, $v = 740$). This result means that the difference between the samples' data is unlikely to be simply a result of chance. We can be confident that it is a result of a real underlying difference in diversity of the slug communities below the two mats. Interestingly, although the moveable mat has fewer slugs it has a higher diversity. The fixed mat seems to be dominated by the single species *Tandonia budapestensis*. This supports the idea that *Tandonia budapestensis* is dominating the species assemblage under the fixed mat.

Conclusions and other observations

The slug monitoring mats are a far more effective recording device than the non-porous stone slabs tried previously. What is not known is whether the slugs found under the mats are representative of the whole slug population in the area. (Certainly, observations at night show far higher proportions of *Limax flavus* (Linnaeus, 1758) although it is large and much easier to see than the smaller *Deroceras* and *Tandonia* species.)

In order to ensure changes in recorded slug numbers are a result of changes in slug population sizes, it is important that either moveable mats are used or else that fixed mats are used but slugs not counted until the vegetation below the mat has died completely – about five months in this case. If the initial wait of five months is not a problem, fixed mats are better for another reason. A moveable mat will be in a different position each week, so that a difference in numbers recorded may be a result of a change in position rather than a change in slug populations.

The time series has shown peaks of abundance in autumn with low points in the late spring and summer. This is encouraging because it agrees with existing knowledge. This pattern is reflected in both the fixed and moveable mats.

If the choice has to be made between a fixed or moveable mat, it seems that the fixed mat is better in the long run, although there is a wait of some months before systematic observations may begin. However, the analysis and observations have uncovered some other points which need to be addressed before the best recording procedure is adopted.

The first problem is that of *Tandonia budapestensis*. If the mats encourage this species more than others, their numbers will be out of proportion to the numbers in the habitat. There is also the possibility that their presence may deter other species. One course of action to investigate is the removal of this species, or perhaps all species, from under the mat after each weekly count. They could be released a few metres away from the mat. The slugs counted the following week would be only those that had arrived at the mat in the last week rather than those that had either arrived or already been present before.

Casual observations revealed that some species were often found resting upside-down, attached to the underside of the mat, whereas others tended to rest upright on the ground below. *Tandonia budapestensis*, for example, was almost exclusively found on the ground. It is very much easier to count only slugs resting on the underside of the mat because sometimes it is difficult to find individuals which maybe hidden in cracks in the soil or under vegetation. A comparison of the different resting postures needs to be

made in order to determine whether the slug count would be better made only of those resting in the inverted position.

The next steps must be to ascertain whether weekly removal of one, or more species, will improve the mat's performance and to compare the species distributions of slugs in the upright and inverted positions.

Acknowledgements

Thanks are due to David Long and David Schley for comments, advice and information and to Richard Lloyd, Technical Support Manager of Bayer plc for the provision of their slug activity monitoring mats.

References

Glen, D.M., Wiltshire, C.W. & Milsom, N.F. (1992) Some aspects of forecasting slug damage in arable crops. *Journal of Medical and Applied Malacology* 4, 147-152

Web sites

David Schley	www.maths.surrey.ac.uk/personal/st/D.Schley/Biocontrol/ details of the research and links to other related sites
DEFRA	www.defra.gov.uk/environment look for sustainable development
IACR	www.iacr.bbsrc.ac.uk Institute of Arable Crops Research – search for 'slugs'

Appendix

The Shannon-Weiner Diversity Index

$D = - \sum \frac{a_i}{N} \ln \left(\frac{a_i}{N} \right)$ where a_i are the aggregated species frequencies, N the grand total of all observations and $\ln$ is the natural logarithm.

Table 2: Shannon-Weiner Diversity Indices

	Fixed mat	Moveable mat
Number of species	14	12
Number of individuals	2024	457
Shannon-Weiner index	1.58	1.83



Field Meeting to the Yorkshire Dales on 12–14 May 2000

David Lindley

, Leeds

It was whilst attending the excellent meeting organised by Barry Colville in 1999 that I mentioned to Ian Killeen I would be happy to arrange one in Yorkshire the following year, then promptly put it out of mind. It was several months later when a phone call re-activated my intentions and the die was cast. The first problem was one of location but knowing (hoping) that there would be members from Southern climes attending, I decided that the Dales would offer a better chance of seeing more Northern specialties than any other natural area. It did not stop there, however, as there are many differing landscapes within the National Park. I finally settled on the Ingleborough area, which contains a large number of SSSI's, as one which would offer most scope and a date was set. The week leading up to the meeting saw a lengthy spell of hot dry weather which no amount of rain dancing could break.

The Friday saw the group meeting in the village of Clapham at 10.30 a.m. for a route which was to take us via the ornamental gardens of the Farrer estate to the lower slopes of Ingleborough. There are old records of *Vertigo pusilla* for the area and I was hoping for a re-discovery. The woods, lake and grottos of the estate were formalised by the botanist James Farrer in the 19th century and many of the trees and shrubs date from that time. The woods were very dry and specimens difficult to locate but it was pleasing to find *Zenobiella subrufescens* in small numbers. A small marsh in the area of Ingleborough cave yielded *Vertigo substriata* and *V. antivertigo* in small numbers; both these species are worthy of note in the upper dales.

Our first glimpse of *Clausilia dubia*, again in small numbers, came from an adjacent wall. Following a pleasant lunch taken in the dry valley of Trow Gill we continued onwards. It was on the sides of the upper reaches of this gill where, checking under deep set stones, we encountered *Vitrea subrimata* at about 1000 ft. It wasn't long before the landscape changed once more as we reached the high open

pastures of the Ingleborough slopes around Gaping Gill pot, after which the limestone soon gave out to the grits of the tops. Species were scarce in the area but it was interesting to see them concentrating in the limestone bottoms of sink holes. Returning by the same route, a grazed banking by Ingleborough cave was checked and revealed a fresh dead shell of *Helicella itala*. There has never been a great number of sites for this species in the dales and it was therefore an interesting find. The total number of species for the day came to 52 from four 1-km squares. Some species, especially slugs, had been difficult to locate due to the weather conditions and this was a pattern which was to repeat itself throughout the weekend.

Saturday found the party (now increased to 12) in Swilla Glen at Ingleton. This is a SSSI much publicised as a reintroduction site for Lady's Slipper orchid. The site comprises two deep glens with typical wet gorge woodland and has been of great interest to naturalists since Victorian times. The purpose of the visit was to provide English Nature with a modern conchological baseline. Within 20 minutes of arriving at the car park Barry Colville found *Vertigo alpestris* on a wall under the railway arch. This confirmed a 1908 record made by W.D. Roebuck and which I had been attempting to re-find for several years. The woodland, although dry, quickly yielded *Azeca goodalli*, *Zenobiella subrufescens* and *Columella edentula*. Much of the banking by the narrow path in one section of the gorge is covered in a thick sward of moss. Careful searching of this revealed a single specimen of *Acicula jusca*, a species limited to only a few sites in the Yorkshire dales. Lunch was again picnic style this time with a wonderful view of Thornton Force, one of the valley's many waterfalls. By now the woods had given way to the open limestone pasture and it wasn't long before *Vitrea subrimata* was again encountered in a ratio of about 1:4 with *V. contracta*. The return to the car park was taken via the upper paths in order to look at the drier walled woods on the valley tops where *Columella edentula* was found in abundance, one 15-inch stick containing 26 specimens. Following a quick stop at the carpark we had a brief venture into the adjoining Twisleton Glen where several more species were added and a known *V. alpestris* site looked at. A total of 62 species was found from four 1-km squares.

The final day was spent on Twisleton Scar SSSI north of Ingleton. This is a typical upper dales landscape with well grazed lower slopes leading to towering blocks of great scar limestone and pavement and it is a favourite of climbers, walkers and naturalists. The parking area available is a farmers field adjacent to the scar and it was with great amusement that we each left our £1 on a courtesy plate which had been placed at the side of the road. The species found were typical of this upland habitat with *Clausilia dubia* in abundance and *V. subrimata* also present. It was not until reaching the 900 ft point that we encountered *Abida secale* which is quite normal for Yorkshire as for some reason it does not favour sites below this height. A total of 28 species were found on Twisleton which, considering the weather conditions, I judge to be a good number. It was interesting to note that *C. bidentata* appeared to be absent.

We returned to the cars for about 1.30 pm as some members had quite a distance to travel. Following their departure only Adrian Norris, Barry Colville, Roy Gillibrand and myself were left. It seemed too nice a day to waste so I suggested we investigate some interesting walls I had noticed in Chapel-le-Dale on my recce. All being in agreement we covered the short distance to the area and began a search of a small walled wood adjacent to the stream. Several species not seen on the scar were found, predominately slugs and woodland snails. On the walls either side of the road a thriving colony of *V. alpestris* was found which brought the total number of extant sites for the species in Watsonian Yorkshire to 20 and a total for the day of 36. There was a total of 67 species found throughout the weekend, with records from eleven 1-km squares and I have included a list at Table 1.

Acknowledgements

I would like to thank the landowners and English Nature for the permissions granted. I would also like to thank those who attended as in my opinion a field meeting is made by those who enjoyed it. Now where's that map of the North York Moors?

Table 1

Localities

a =	Clapham Village outside Estate	SD34/7469
b =	Lower section of Clapham Gorge	SD34/7469
c =	Middle section of Clapham Gorge	SD34/7570
d =	Trow Gill	SD34/7571
e =	Gaping Gill pot area	SD34/7572
f =	Below Swilla Glen outside SSSI	SD34/6973
g =	Swilla Glen SSSI	SD34/6973
h =	Swilla Glen SSSI	SD34/6974
I =	Thornton Force SSSI	SD34/6975
j =	Helks wood SSSI	SD34/6973
k =	Helks wood SSSI	SD34/6974
L =	Twistleton Glen SSSI	SD34/7073
m =	Twistleton Scar SSSI	SD34/7175 u = outside SSSI
n =	Twistleton Scar SSSI	SD34/7176
o =	Chapel-le-Dale	SD34/7377

SITE LETTER	a	b	c	d	e	f	g	h	i	j	k	L	m	n	o
<i>Acicula fusca</i>								*							
<i>Carychium minimum</i>			*			*	*	*	*	*	*			*	
<i>Carychium tridentatum</i>	*	*				*		*	*	*	*	*		*	
<i>Oxyloma pfeifferi</i>			*	*										u	
<i>Azeca goodalli</i>							*	*							
<i>Cochlicopa lubrica</i>		*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Cochlicopa lubricella</i>				*		*	*	*	*	*	*	*	*	*	*
<i>Pyramidula rupestris</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Columella edentula</i>						*	*	*	*	*	*			*	
<i>Columella aspera</i>								*							
<i>Vertigo antivertigo</i>			*									*			
<i>Vertigo substriata</i>			*									*			
<i>Vertigo pygmaea</i>			*	*				*	*		*			*	
<i>Vertigo alpestris</i>						*						*			*
<i>Abida secale</i>														*	
<i>Leiostylia anglica</i>								*							
<i>Lauria cylindracea</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Vallonia costata</i>						*									
<i>V. excentrica</i>									*			*	*		*
<i>Acinthinula aculeata</i>							*	*		*					
<i>Ena obscura</i>	*		*					*	*		*		*		
<i>Discus rotundatus</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Punctum pygmaeum</i>			*			*	*		*	*		*		*	
<i>Arion ater</i>	*	*	*	*	*	*	*	*	*	*		*	*	*	*
<i>A. subfuscus</i>	*				*	*	*					*			
<i>A. distinctus</i>	*					*	*	*	*						

Field Meeting to the Yorkshire Dales

SITE LETTER	a	b	c	d	e	f	g	h	i	j	k	L	m	n	o
<i>A. circumscriptus</i>		*			*	*	*	*	*						*
<i>A. fasciatus</i>	*					*	*	*		*					
<i>A. intermedius</i>	*		*	*		*	*			*					
<i>Vitrina pellucida</i>		*		*	*	*	*	*		*	*				*
<i>Vitrea subrimata</i>				*	*				*					*	
<i>V. crystallina</i>		*	*			*	*	*							*
<i>V. contracta</i>		*	*	*	*	*	*	*	*	*	*		*	*	
<i>Aegopinella pura</i>			*	*		*	*	*		*	*			*	
<i>A. nitidula</i>	*	*	*	*	*	*	*	*	*		*		*	*	
<i>Nesovitrea hammonis</i>		*	*						*		*	*		*	
<i>Oxychilus draparnaudi</i>								*		*					
<i>O. cellarius</i>		*				*	*	*	*	*	*			*	*
<i>O. alliarius</i>		*	*	*	*	*	*	*	*	*	*	*	u	*	*
<i>O. helveticus</i>						*	*	*		*	*				
<i>Tandonia budapestensis</i>						*									
<i>Limax maximus</i>			*			*	*								
<i>Lehmannia marginatus</i>			*	*		*	*		*						*
<i>Deroceras laeve</i>	*		*					*							
<i>D. panormitanum</i>	*					*									
<i>D. reticulatum</i>		*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Euconulus fulvus</i>			*		*	*		*							
<i>E. alderi</i>			*												
<i>Cochlodina laminata</i>		*	*	*		*	*	*		*	*	*			*
<i>Clausilia bidentata</i>		*	*	*		*	*	*	*	*	*	*			
<i>C. dubia</i>			*	*	*						*		*	*	*
<i>Balea perversa</i>	*	*				*				*	*				*
<i>Candidula intersepta</i>												*			
<i>Helicella itala</i>			*												
<i>Ashfordia granulata</i>		*	*	*		*	*	*							
<i>Zenobiella subrufescens</i>		*				*	*	*							
<i>Trichia hispida</i>		*	*	*		*	*	*	*	*	*	*	*	*	*
<i>T. striolata</i>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
<i>Arianta arbustorum</i>		*	*	*		*	*	*		*	*	*		*	*
<i>Cepaea nemoralis</i>		*	*	*		*	*	*		*	*	*		*	*
<i>C. hortensis</i>						*									
<i>Helix aspersa</i>	*					*						*			
<i>Lymnaea truncatula</i>		*	*	*				*	*				u		
<i>Lymnaea peregra</i>		*						*	*						
<i>Gyraulus albus</i>		*													
<i>Ancylus fluviatilis</i>		*	*		*		*	*	*						
<i>Pisidium personatum</i>		*													

■

Wanted – images of British land and freshwater molluscs

Keith Alexander

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e-mail: keithalexander@smtf.ntrust.org.uk*

From time to time the National Trust wishes to use colour or monochrome images of slugs, snails and freshwater mussels in its publicity materials – both for conservation and educational purposes. At present it is all too often difficult to find any suitable images quickly and so the opportunities to promote molluscs are missed. The Conchological Society does not at the moment have its own image library.

I am therefore using *The Conchologists' Newsletter* to appeal for suggestions for sources of images, or even donations of images.

One option might be for someone to volunteer to set up, maintain and run a Conchological Society image library, from which loans could be made to interested parties.

Another option would be to scan images and make them available through a web-site – along the lines already operated by British coleopterists: [www.coleopterist.org.uk/photo gallery](http://www.coleopterist.org.uk/photo_gallery). Images from this site are watermarked with copyright information and can easily be downloaded directly into documents, PowerPoint presentations, etc.

Please contact me at the above address if you are able to offer some help. I will report back to Council on any responses.



The Newsletter Editor sends Seasonal Greetings
and Best Wishes for a peaceful New Year
to every reader.

Many thanks for all contributions to the Newsletter.

Collectors in East Africa

No. 30: Robert [Robin]* Kemp (1871 – ?) (Part 1)

B. Verdcourt

Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB

Robert Kemp was one of the three really important collectors in East Africa and actually had more species described from his material than either Stuhlmann or Percival (see Verdcourt 1988-89, 1997).** Unlike the other two he was not a government employee but a paid collector working mainly for Oldfield Thomas of the then British Museum (Nat. Hist.), collecting small mammals and particularly birds; later he was probably more interested in mammals than birds.

Information on Kemp had always eluded me but a reference in the card index of portraits in the General Library of the Natural History Museum led not only to a portrait but some information (Matthews, 1927, 105-106). Percival (1928) also has scattered brief references to him but by far the most important source of information has proved to be the numerous often voluminous letters Kemp wrote to Oldfield Thomas in a neat thin handwriting mostly easy to read. These are now in the Zoological Archives at the Natural History Museum. I am very grateful to Miss Samantha Collenette for searching out these letters. From these an itinerary of sorts can be reconstructed and this is given at the end of this article.

Robert Kemp was the son of Robert Kemp, an optician, and was born at 60 Windsor Road, Islington, North London on 19 October 1871. His mother Ellen Horne was a gifted woman who did clever illustrations mostly for children's books. She was born in Gracechurch Street in the City on 17 October 1846, the daughter of Robert Horne a decorator (which in those days meant more than just

* Although invariably referred to as Robin Kemp his actual Christian name was Robert. This is made clear in a letter from Kemp to Thomas (15 Sept. 1915) telling him he had his correct name registered on his passport before leaving for Argentina.

** It is however, not correct to claim, as Matthews did, that Kemp was the first individual to collect the minute mollusc fauna of East Africa as will be evident to anyone who has read my series on collectors.

a house painter) and Jane Horne (née Darton). Robin's parents were married at St Margaret's Westminster in June 1869 and lived at the Islington address for at least twenty years. He had an elder sister Jane born in 1870 and a younger brother Humphrey born in 1875. Robin had left the house by the time of the 1891 Census and was presumably away working or studying. The family could not have been too badly off since in 1891 there was a young servant girl from Norfolk living in. I know nothing of his schooling save that he was at a boarding school in the Mendip Hills, Somerset and there had a fight with a Sheffield boy! Later he trained as an accountant and presumably obtained work in England as an accountant for a number of years.

He must also have been interested in ornithology from boyhood. In 1902 he became Assistant Accountant on the Railway Board in Sierra Leone where a new railway was being constructed and collected birds and mammals in his spare time. Among the three collections of birds he made there was at least one new species. During his home leave he worked at the BM naming his collections with the assistance of Michael Roger Oldfield Thomas (1858-1929), Richard Bowdler Sharpe (1847-1909) and George Ernest Shelley (1840-1910). Connolly makes no mention of Kemp in his account of the molluscs of Sierra Leone (1928) so clearly he was not interested in them before 1905 or so. Later he went to S. Nigeria and was certainly there from the end of May to the end of August 1905. His mother wrote to the BM on 25 May, and asked for the usual allowance of copies of a paper written on his Sierra Leone birds. On 7 June she acknowledged 24 copies of a paper in the *Ibis* and asked for the return of about 150 skins her son had left last winter 'when you have quite done with them'. Robin had asked her to get them back and send them elsewhere. On 27 June Ellen acknowledged their return in a letter to Sharpe.

In 1905 his health gave way and he was invalided home 'for good'. In December 1905 he wrote to thank Thomas for £6.10.0 [£6.50] for mammal skins presumably collected in Nigeria and also said, 'By the help of your kindly recommendation I obtained an appointment in Liberia from Sir Harry Johnston. The doctor, however, refused to pass me as fit but I am hoping to get passed in about a month's time',

but presumably was not since in 1906 he went to New Zealand with his brother Humphrey but was not happy and returned to England in 1908. It was at Thomas's suggestion that he undertook the expedition which so added to the knowledge of East African molluscs. The expedition was financed by Mr C.D. Rudd and Kemp was so successful that his engagement lasted two years.

Oldfield Thomas is known to everyone who uses the lift just inside the main entrance of the Natural History Museum since a plaque on the inside states he paid for it. Thomas had married a wealthy woman and privately employed collectors and presented specimens to the museum. Reading through the numerous long letters it would be easy to dismiss Kemp as being a whinger but despite the letters being certainly over-lengthy, even tedious, detailing why he could not get to certain places and full of things that had gone wrong, and failures to collect this or that, it is clear that Kemp was meticulous and thought he should account for every detail to the person funding him.

The cost of such a hand to mouth expedition was really quite small. Kemp reckoned he could manage a second year on £400 and most of this would be wages, train fares and basic food. He certainly was not carrying cases of champagne about like some of the American and European expeditions. Between 23 June 1909 and 3 January 1910 Kemp had received £360 from Thomas, but C.D. Rudd, a South African, had put up the money and it was officially the C.D. Rudd expedition – I have no idea who he was and he is not in the D.N.B. It seems just irony that the man who put up the money should be forgotten and that the collector will always be remembered.

Fares at the time were relatively small, £31.13sh. for a boat from Southampton to Mombasa and £7.7sh. for trains in England and Kenya. Still, although money was continuously sent to various banks in the larger towns, it was constantly short and he had almost none of his own. Later in 1915 he wrote to Thomas 'To tell you exact truth my income is just about £40 per annum as investments go at present – all right down here where the cottagers earn 12 or 13 shillings a week on which to keep a wife and family'. He was, however, much poorer than many ordinary unskilled working class, many of whom were earning £3 a week or more.

It is easy to assume that a collector working in East Africa at this time could go anywhere he wished so long as he had funds and time, but this is not so. Percival could (with permission) since he was a government employee and had staff and armed escorts if necessary but a totally unofficial visitor could have a great deal of trouble obtaining permits to travel and was unlikely to get them if he wanted to go to an area which was dangerous. Even then a murdered visitor could be an administrative nuisance so better to refuse his permit. The early explorers of course had no troubles from any European administration but had to deal with independent and often hostile natives direct by bribery or armed intervention. By 1910, however, British administration had control of most of the country and did not want unofficial Europeans wandering about without impeccable reasons. Even in 1950-1960, a Colonial Office appointed officer like myself had access to large tracts of prohibited areas but still only with permission. Kemp managed an amazing itinerary but was prohibited from many areas.

On arriving in East Africa, Kemp travelled to Elgon since Thomas wished him to look there for francolins. He was beaten on the S. face at 10,000' and thought the only hope was on the W. face but he had to abandon trying to reach the summit. No Kavirondo or Masai would help and his Mumias porters refused to go, save for two who wanted monthly rather than daily pay in exchange. He then got a promise from five Buganda to help him but only three kept to it and it was not enough. There were no francolins and the mammals were poor. On top of this he had had a list of criticisms from Thomas about his skins-tail wires not right, skulls in bags, accuracy of labels and measurements. He began to get sores on his body which would not heal and later, just before Christmas 1909, had bad fever. A sore on his hip got much worse and he had to give up and was carried on a stretcher to Mumias where he was cared for by the two white officials and an Indian doctor (who he refers to as an Aspiration Doctor) in whom he had much faith. He suggested he might teach this man how to collect to add to his small stipend but probably nothing came of this.

He was worried whilst recovering from his fever and wounds. His kit was scattered all over the place, some at Mumias, some at

Malakisi and some in the Elgoni Caves; on top of that his head boy had been arrested for theft. Eventually his fever abated and his ulcer improved after lancing but left a gaping wound. Curiously although he wrote to Thomas* just before Christmas and again on Christmas Day he did not convey any greetings!! By 15 Jan. 1910 he was in the Nandi Forest and the next month in the Aberdares. He writes from 10,000' that he cannot get his bread to rise and 'I see in the Weekly Times that my old friend Dr Sharpe has passed away. I am very sorry, I should have liked to have seen him live to a ripe old age. It was the stuffy museum air that must have finished him off'. 'Difficult getting party through to Kinangop heath – is infested with rhinoceros and elephant. Well if I get charged and slain my blood will be on your head in the cause of science because your instructions were particularly the summit!' On 31 March he was at Voi and had a letter from Thomas about 'his discovery' of the potto (*Perodicticus potto*) in East Africa. Whilst he was at Mumias, Brett, an Assistant District Commissioner caught or obtained the animal when he was collecting hut tax at Kakamega (Kakamega Forest is well known for the West African affinities of its plants and animals) and sent it alive to Matison, Commissioner of Police at Mumias. 'Matison let it climb up a gumtree and then kindly offered it to me. I was to get it down. I was not very keen because I had all the carriers ready waiting to start so we had to shoot it.' After a month in Voi he went to Taveta and spent about a week at the Black Fathers Mission at Rombo on the lower slopes of Kilimanjaro at about 5,000'.

From letters written to Thomas from Taveta it emerges that there had been a suggestion he should go to Pemba and also that he was a Quaker. 'When I reach Mazeras I shall find out what I can about Pemba. There are some Quaker Missions there and as I am a Quaker I'll probably be able to fix up a month'. Later 'I heard from Count Koudenove, an Australian at Taveta that to reach to Pemba I shall have to steamer to Zanzibar and then dhow to Pemba. Do you want

* It is interesting to note that a letter written at Mumias on 22 Dec. 1909 could arrive at the BM on 17 Jan. 1910 – 27 days. Of course the railway had been in operation that far for about 7 years and the boat services to Europe were quite frequent with competing lines.

me to work a month or two in Zanzibar or hasten back to work Nile and Congo'.

He also said he had had a letter from Tom Iredale (late of New Zealand). 'He wants me to work for the rich Australian Matthews but I shall write and decline because my interest is always in Africa.'

Gradually he worked his way to Mazeras, the Shimba Hills and Gazi and then back again to Nairobi. Thomas wanted him to go to Mt. Nyiro but this did not come off. He went on to Nakuru, Baringo and Rumuruti and by December 1910 he was at Solai, W. Mt. Kenya. He wrote 'anywhere north of Rumuruti or Baringo is off so I'm not going to either Kulal or Nyiro.' He had been asked to obtain colobus monkeys and found the mountain vegetation at 9-10,000' difficult to traverse in the very wet conditions. The northern slopes were in a closed district.

From letters about this time it is clear there was a plan to attach him to the Congo/Uganda Boundary Commission and he points out that new campaigns would not be possible without replenishment of cartridges and all the paraphernalia of collecting. But it appears Thomas suggested other things which would make joining the Commission impossible such as visiting the Guaso (Eusso) Nyiro R. and also would involve him sending a runner to the Provincial Commissioner at Fort Hall to obtain permission. In one very verbose letter detailing innumerable possible difficulties he says 'Don't you break my heart and spirit by wanting me to jump about like a frog'. Thomas had again mentioned Marsabit but Kemp said it was quite impossible. He had also mentioned a trip to South America in the future which Kemp had not turned down but had pointed out that he would have to make arrangements for his old mother. He would fix her up in a cottage with her favourite sister - 'my mother has £3 a week income so it is not so much a question of money as of companionship' (now you cannot even buy two pints of Guinness for that!). On Boxing Day 1910 the District Commissioner for Nyeri gave him permission to go north or east. He went east and one of the most interesting facts to emerge from the letters is that Kemp met Percival and spent a few days in the field with him 'Nyama Nyangu [= 'My Meat'] Eusso Nyiro 27 Jan. 1911. Well shortly after Percival came over from his camp he suggested that I should join him

in a flying visit to the Chanler Falls. I slept on it and decided yes... I think we have got all there is down at the falls and not much left for the Swedes... Later 4 Feb. 1911 Swedes are only two days march away – 100 porters and 400 loads – so Percival tells me and they are making the most rotten mammal and birds he has ever seen put up. Of course you will be pleased to hear from Percival that you will get the first share of the Marsabit stuff also Kulal, Rudolph and Mt. Nyiro if he gets through and back safely’.

This was the Swedish Expedition to East Africa, 1910-11 led by Professor Einar Lönnberg, Head of the Vertebrate Department at the Natural History Museum in Stockholm. I am grateful to my friend Dr Inga Hedberg for finding this information.

By the 8th February he was back near Mt. Kenya at Meru and on the 11th 6000 feet up in the Igembi Hills. The local D.C. took him up there and told him he was the first non-official white man ever to have been there. After that he stopped one night at Nyeri on his way to Naivasha and by 21 March he was back in Uganda at Entebbe, then Masaka and Mbarara by early April. Everything now seems to hinge on the Boundary Commission. ‘Major Jack is expected back here in June and arranging a finishing dinner. I will have little more than a month with them. If Boundary Commission falls through is there any money for Kivu on its own account?’ On 15 April he writes he is in Kigezi and that there was no white man at the Boundary Commission Camp but later found it was Ingezi, not Kigezi, in the Mfumbiro (= Virunga) Mts. at about 6000 ft and that Kigezi was two days march away. Then Lake Mutanda, Kiduha on 2 May, the actual base camp of the Commission. On the 17 May he was at Kisenyi on the shores of Lake Kivu. He had written ‘I understand that the Belgians strongly suspect me on my desire to get to Lake Kivu as having some ulterior motive not connected with natural history’ but I have no idea what gave him that idea. A few days later he struck north from the lake to Chaya, Buhumba (where he had a narrow escape from a lion), Burunga and was back at Kiduha on 21 June. All these names will be very familiar to students of East African snails since Preston made up specific epithets from them. He then went via Kumba to Entebbe which he reached on 7 May 1911, thence down the railway to Mombasa. There was a German boat due

to leave on the 22 August which he thought would be most suitable. From the shipping notices in the *East African Standard* it appears this would have been the *Prinzessin* under Capt. Stahl due to leave via Aden on 21 August. The Deutsche Ost Afrika Linie ran a regular service to Europe and possibly had cheaper fares than the BI or Union Castle boats.

After his return to England, Matthews managed to arrange for him to collect in the Cape York Peninsula and Carpentaria in 1912 to 1914 after which he revisited New Zealand where his brother was still living.

Thomas wanted him to go to the neotropics and arrangements were made for him to go to Argentina in September 1915. Everyone told him it was inadvisable and when he got to Buenos Aires he was stuck in a hotel with just not enough finances to continue. He wrote two letters home saying it was all off then wrote another telling Thomas to ignore them. He managed to get to El Carrizal via Villa Dolores where he wrote a letter on 28 November 1915. But on 10 December the whole scheme was finally off. He had made a small collection. The whole fiasco had cost £49.12.6 including a steerage passage from La Plata to London for only £9!! He did, however, go back to Argentina in 1916/1917.

He was in New Zealand again in 1915-1916 and clearly feeling he should be doing something for the war effort. He wrote to Thomas on 11 March 1915 from Auckland 'I leave for home in a few weeks time. Perhaps I can get some Red Cross or stretcher bearing work at home. I feel a certain sense of national duty about the struggle, not at present a very defined one but it may ripen when I see my old mother again. I shall look in again presuming the old ship makes port safely'. On 28 May writing from Long Sutton in Somerset he thanked Thomas for £21.2.0 [£21.10] for Queensland material and mentioned he had immediately applied to the Royal Army Medical Corps but the reply was 'too old'. He felt disappointed. Said he would drop into the Museum on 9 June. In another letter he had withdrawn an application for a job with the Norfolk War Hospital suddenly feeling frightened to lose his freedom and be penned up day after day between four walls.

Kemp was a man of principle as would be expected of a Quaker and as is shown in his detailed accounts of expenses and in such statements as the following comments. Thomas had obviously written in one of his letters that he was sorry an American expedition had made such a good collection at Mombasa. Since this was in late 1909 it could only have been the Roosevelt Expedition with Mearns collecting the birds etc. (Verdcourt, 1996). Kemp replied 'You should not say you are sorry the Americans have made a good collection at Mombasa. I suppose you mean you're glad a good collection was made at Mombasa but you wish Britishers had made it. That's the true naturalist's view is not it?' I suspect this all arose because Thomas was afraid the American expedition had got to Elgon first but Kemp assured him Dundas* (Assistant District Commissioner) had told him no Americans had worked Elgon and that he was the first white man up this southern track [unlikely I think at that date].

There are many references to mollusc-collecting in the letters and a letter to Thomas on 7 August 1911 from Entebbe includes 'Pleased indeed to hear you are passing all the shells to Iredale'. This is really rather odd since it infers that the Mollusca department in the museum was not interested. E.A. Smith (1847–1916) was still Keeper in 1911 and had of course an unrivalled knowledge of African land-snails and had dealt with many of the collections brought home by the early explorers. Did he not want them because he was just too busy or perhaps even tired of the great flood of novelties? I suspect that most of us who still have to deal with it knows exactly how he felt. I have not attempted to trace internal correspondence between Smith and Thomas. It is clear that Kemp expected Smith to deal with them. From Mbarara on 5 April 1911 he writes, 'Will you be good enough if you can find time to press the Keeper of Shells that I want a copy of any published descriptions he may make of the shells I get for him. Also does he want the big things. I have been in the habit of chucking anything bigger than the top of my thumb away

* Later Hon. Sir Charles Cecil Farquharson Dundas K.C.M.G., O.B.E. (1884–1956). He was an Assistant District Officer (1908–1914) and ended up as Governor of Uganda (1940–1944).

but if he wants them I will save them though they clutter up my boxes and stink far worse than mammal skulls. If he wants the minute forms which are pretty certain to be new he ought to send me tubes'.

It is also clear, however, that he had been sending shells to Iredale direct. In a letter to Thomas from Meru 8 February 1911 he writes, 'What about shells. Do you want them. I am interested in the most minute forms and have been doing them in between as a sort of perquisite. But if I go on the Commission I suppose every mortal thing in Natural History must go to Cromwell Road. If you want the minute shells for the national collection you must please tell Mr Smith to supply me with a decent stock of corked glass tubes of all sizes from the tiniest possible to some nearly as big as test tubes. Boys [i.e. native staff] collect big things usually but if given a minute tube they come back with what you want'. A few days later he writes from Nyeri 27 February 1911 – 'You will let me know about shells – whether I can collect the minute forms on my own account if I safeguard the interests of the BM by guaranteeing them a selection as soon as they are worked out. Tom Iredale seems quite delighted with the results of my shell work to judge by his letters'.

Clearly Iredale passed the material to Preston and one hopes Kemp received adequate recompense. It is curious, however, if not distinctly suspicious that Preston makes no mention of the collector in his early papers but this is a feature of his early papers – even when describing new species from Harar in Ethiopia he does not mention who the collector was. Once the man had been paid for his material he ceased to exist but one does wonder if the material really belonged to someone else who funded the expedition.

From the Igembi Hills he writes on 11 February 1911: 'About the minute shells again. A selection of all those I have got so far have been or will be offered for purchase to Mr Smith. I understand he never wants to buy large quantities and prefers just a few selected specimens. When I saw him in 1910 he gave me the impression he didn't care to be bothered with these extremely minute forms'.

The sheer volume of the material Kemp sent home is staggering. Between 15 April and 19 July 1911 40 boxes of shells were sent from

various places in Uganda and E. Congo as part of eleven consignments of natural history material. It is not surprising that Kemp material turns up in so many European museums. During his five months on Elgon he collected 469 small mammals and 250 small birds.

Kemp did not write much himself it seems and what I have found is listed in the bibliography. Apart from these Bannerman (1922) states that Kemp had intended to write up his Nigerian birds but the account was lost or destroyed. Only the short introduction remained which Bannerman obtained from Tom Iredale and published in the reference cited.

Kemp did not belong to the British Ornithologists' Union nor to the British Ornithologists' Club. The expense may be the reason but I suspect he did not enjoy such gatherings. The club held their meetings at Restaurant Frascati in Oxford Street and many of the members were well-heeled. I have not discovered any society he did belong to and have been quite unable to find out when or where he died. Bannermann (1922) mentions he tried to contact Kemp to obtain his permission to publish his notes but could not do so. He would I imagine have known if Kemp had died but that is not certain.

From his very first expedition to his last he discovered new species of birds and mammals and doubtless a list would be quite lengthy. There was a new bush-creeper from Sierra Leone, *Macrosphenus kemp*i (Sharpe) (= *Amaurocichla kemp*i) (Sharpe, 1905), a new weaver from the lower Niger, *Estrilda paludicola anambrae* (Kemp) published as *E. anambrae* (Kemp, 1907)* and a genus of birds was named after him, *Kempiella* Matthews; there was also Kemp's swamp rat, *Otomys kemp*i Dollmann (Dollmann, 1915) and a bat *Rousettus kemp*i Thomas. Other species were named after him which he had not collected like the sunbird *Cinnyris chloropygius kemp*i Ogilvie-Grant (published as *C. kemp*i)

* This was actually part of Bericht über die September sitzung of the Deutsche Ornithologische Gesellschaft under the name of Dr O. Heinroth. Herr Robin Kemp hat an Herrn Reichenow eine neue *Estrilda* von Süd-Nigerien geschickt. The short description is attributed to Kemp who presumably mentioned to Reichenow how it differed. It is a very polite gesture British Ornithologists would not have made.

(Ogilvie-Grant, 1910). *Estrilda astrild kemp* Bates was described much later partly based on material Kemp had distinguished but not formally named (Bates, 1931). Collections of fleas, ticks and other parasites were made for N.C. Rothschild (1877–1923) but his daughter Miriam unfortunately has no information about Kemp despite a large archive about the various collectors for the Rothschilds.

Itinerary

One important result has emerged from these letters; a rough itinerary can be drawn up for Kemp's collecting trip in East Africa. A few other dates have been added.

1902, Sierra Leone, Rotifunk

1903-4, Sierra Leone, Bo

25 May 1905, S. Nigeria

4 Aug. 1905, S. Nigeria, Agouteria, Anamba

20 Aug. 1905, S. Nigeria, Agouteria Creek

11 Dec. 1905, England, The Chase, Halstead, Essex

1906-1908, New Zealand

1909, Kenya, Nairobi – 'today I proceed to Kisumu'

23 Aug. 1909, Kenya, Mumias [spelt then Mumia's – i.e. Chief Mumia's place]

25 Nov. 1909, Kenya, Elgonyi Cave, Mt. Elgon [P.O. Mumias, British East Africa]

14 Dec. 1909, Kenya, Mumias

25 Dec. 1909, Kenya, Mumias

31 Dec. 1909, Kenya, Mumias

15 Jan. 1910, Kenya, writing in Nandi Forest and off to Kibigori (P.O. Naivasha)

30 Jan. 1910, Kenya, P.O. Naivasha

10 Feb. 1910, Kenya 'Aberdare Mts at 10000', 'Kinangop and Kippipieri' (P.O. Naivasha)

17 Feb. 1910, P.O. Naivasha

24 Feb. 1910, P.O. Naivasha

7 Mar. 1910, Kenya, Mt. Kinangop, 11000-12000' (P.O. Naivasha)

13 Mar. 1910, Kenya, Mutaraguda, Aberdares 9000' (P.O. Naivasha)

21 Mar. 1910, 'I hope to move to Voi in a week or 10 days'

31 Mar. 1910, Voi Railway Station, 1820'

*At that date called British East Africa; it became Kenya in 1920.

- 5 Apr. 1910, Voi
17 Apr. 1910, Voi 'talk of going to Taveta and Kilimanjaro'
24 Apr. 1910, River Camp, Voi
26 Apr. 1910, Voi
1 May 1910, 'I expect to start tomorrow for Kilimanjaro'
12 May 1910, Kenya, Taveta [P.O. Voi]
14-19 June 1910, Tanzania, Rombo, Black Fathers' Monastery[†]
24 June 1910, Kenya, Taveta
1 July 1910, Kenya, Mazeras
21 July 1910, Kenya, Shimba Hills, Mombasa R.
5 Aug. 1910, Kenya, Shimba Hills
12 Aug. 1910, 'I expect to get down to Gazi'
19 Aug 1910, Kenya, Gazi
26 Aug 1910, Kenya, Gazi
10 Sept. 1910, Kenya, Nairobi
20 Sept. 1910, Kenya, Nakuru
16, 17 Oct. 1910, Kenya, Baringo
20 Oct. 1910, Kenya, Rumuruti [Rumruti]
2 Nov. 1910, Kenya, Rumuruti
4 Nov. 1910, Kenya, Rumuruti
13 Nov. 1910, Kenya, Rumuruti
1 Dec. 1910, Mt. Kenya, Solai
1 Jan. 1911 ['1910' we all do it!] Mt. Kenya, Solai
27 Jan.-4 Feb. 1911, ['1910'] Kenya, Eusso Nyiro, Nyama Nyangu
8 Feb. 1911, Kenya, N.E. Mt. Kenya, Meru
11 Feb. 1911, Kenya, Igembi Hills, 6000'
27 Feb 1911, Kenya, Nyeri
21 Mar. 1911, Uganda, Entebbe
30 Mar. 1911, Uganda, Masaka
5 Apr. 1911, Uganda, Mbarara
15-27 Apr. 1911, Uganda, Mfumburu Mts., Ingezi, $\pm 6000'$ [wrongly
recorded at first as Kigezi]
2-10 May 1911, Ugands, Lake Mutanda, Kiduha [base camp of
Frontier Commission]
17 May 1911, Rwanda, shores of Lake Kivu, Kisenyi
21 May 1911, Rwanda/Zaire, 12 miles N. of Lake Kivu
21 June 1911, Uganda, Kiduha

[†] Rombo is just inside the Tanzania boundary and it is not clear how far Kemp travelled from there; the main route up the mountain has always been from Marangu.

27 June 1911, Uganda, Entebbe
22 Aug. 1911, Kenya [German boat due to leave Mombasa]
31 Dec 1912, Australia, Queensland, Cape York, Skull Creek
27 Apr. 1913, Australia, Queensland, Normanton
25 July 1913, Australia, Queensland, Cape York, Cable Station
1912-1914, Australia, Cape York Peninsula and Carpentaria and
revisited his brother in New Zealand
21 June 1914, Australia, Queensland, Normanton
28 May 1915, England, Somerset, Langport, Long Sutton
28 Oct.-1 Nov. 1915, Argentina, Buenos Aires, Provence Hotel
28 Nov. 1915, Argentina, El Carrizal via Villa Dolores
11 Mar. 1915, New Zealand, Auckland, Birkenhead, Palmerston
Road
13 Jan.- 3 Feb. 1916, England, Somerset, Langport
April 1916, goes back to Argentina for over a year.



Addenda to previous collectors

Anyone interested in **J.M. Hildebrandt** (with whom I dealt in Collectors in East Africa 10) will find more information in the following.

Beentje, H.J., 1998. J.M. Hildebrandt (1847-1881): notes on his travels and plant collections. *Kew Bull* 53: 835-856.

Dorr, L.J., 1997. Plant collectors in Madagascar and the Comoro Islands. Kew.

Beentje's paper gives a detailed itinerary and gazetteer and also a reproduction of a photograph of this remarkable man after whom 230 higher plants have been named.

I dealt briefly with **W. Doherty** in 1992 (Collectors in East Africa 16). Unfortunately I had not then read Miriam Rothschild's *Dear Lord Rothschild* (1983). She devotes Chapter 20 to Doherty. I hope to produce an updated account of this collector later.

A.E. Craven was the first collector I dealt with and it was with great interest I noticed a reproduction of a photograph of him in Philippe R. Duchamps, 31 Dec. 1999, Dautzenberg et son temps. *Apex* 14: 1-45 [p. 32 fig. 22].



Marine field trip to Kilve, Somerset and some North Devon sites, 27 September – 1 October 2000

Colin Gillard

Taunton, Somerset,

This field trip was organised in an attempt to fill in some gaps in recent marine recording for the southern coast of Sea Area 21. The first day, Wednesday 27 September, was spent at Kilve where the party saw evidence of past attempts to extract oil from the bituminous Liassic shales. The path led to an exposed soft boulder shore with tessellated limestone alternating with soft mudstone (ST143456). A freshwater stream reappeared from the mixed boulders and cobbles of the upper shore to descend to the turbid waters of the Bristol Channel.

The party of Ron Boyce, Colin Gillard, Rosemary Hill, Rupert Honnor, Val and Tony Marshall, Janet Sawyer and Michael Weideli was joined here by John Crothers.

Despite a rather unpromising area and, at times, unsympathetic weather, quite a good species list was compiled. Extensive colonies of *Pholas dactylus* were found in the mudstone while *Lacuna crassior* was recorded on the low shore. This species is usually recorded sublittorally on the gelatinous bryozoan *Alcyonidium gelatinosum*. It was recorded as '...occasional on the lower shore in Greenaleigh Bay and a single individual at Watchet (Helwell Bay), 28.2.75 ...' (Boyden *et al*, 1977), and '...occasional to frequent on the lower shore at Porlock, Greenaleigh Bay and Watchet (Helwell Bay), where several were found in October 1988...' (John Crothers, pers. comm.). It was also recorded, shell only, at Porlock Bay (Palmer, 1991).

For the following day, the party split to survey three shores: Lee Bay, Ilfracombe (SS478466) and, to the west, Combe Martin Bay (SS575474) and the adjacent Wild Pear Beach (SS581477), to reach which involved some steep climbing. The underlying geology here was of steeply dipping Devonian slates with distinctive limestone beds. These were quite exposed shores with evidence of sand scour. An early Spring reconnaissance had shown masses of seaweed and other debris cast up on high strand lines. The day ended with a brief

visit to sample the strandline and shell sand at Barricane Beach (SS452442).

Earlier in the week some members of the group had also walked the strandline of Saunton Sands (SS445362).

On Friday 29 September the party, now joined by Christine and Pryce Buckle, surveyed the shore at Greencliff (SS403271). This was two kilometres north-east of the Higher Rowden/Portledge sites visited on three occasions between 1985 and 1989 (Jan Light, pers. comms.) This extensive, rocky lower shore, part of the Crackington Formation, was backed by a storm-tossed pebble ridge. It provided a range of interesting micro-habitats including embedded boulders, coralline rock pools, underhangs and crevices. *Pomatoceros* was common with occasional colonies of *Sabellaria*. A quite interesting list of Pyramidellids was made including *Odostomia plicata* (live, rare), *Brachystomia eulimoides* (shell), *Brachystomia lukisii* (shell) and *Turbonilla lactea* (live). These species had not been previously recorded at the Higher Rowden/Portledge sites nearby.

Saturday 30 September saw us meeting on the shore at Bucks Mills. Here limestone rock outcrops were interspersed with extensive areas of sand. A boulder spit, 'The Gore', provided shelter for a large bed of *Laminaria digitata* on its lee side (SS350239). Unfortunately the tide did not ebb sufficiently to enable sampling of *Laminaria* holdfast faunas.

After thoroughly exploring the shore, the party repaired to a small café where refreshments were enjoyed and, during a brief but moving ceremony, the field trip's award was presented to Val Marshall who had spotted, by eye, a specimen of *Turbonilla lactea* at Greencliff the previous day. An earlier contender for this prestigious award was Rosemary Hill who had tripped over a fine specimen of *Testacella maugei* on the front step of her accommodation in Barnstaple. After some discussion it was felt that this specimen would have to be discounted as we were engaged in a marine field trip.

On its last day, Sunday 1 October, the group had originally planned to visit Hartland Quay but, as Rosemary Hill and Ron Boyce would be unavailable and had already made interesting

discoveries at Crowe Point, it was decided to go there, a change from predominantly rocky shore environments.

A track, which undulated in places, tested drivers' nerves but led to parking convenient for a shore visit. The saltmarsh area nearby (SS466323) was not sufficiently exposed to reveal the abundance of *Hydrobia ulvae* usually found there.

The party used the board walk over the Braunton Burrows sandhills to reach Crowe Rocks where a steeply shelving sand, then gravel, slope levelled out onto an extensive, slowly draining area of boulders and cobbles with some low profile rock outcrops as the tide fell. This proved an interesting area especially where water flowed from tidal lagoons providing suitable habitats for sponges, bryozoans, coralline algae and other encrusting and foliose fauna and flora (SS457321). Upper shore groynes revealed *Littorina saxatilis* and *Melarhaphe nertitoides*.

Horizontal rain driven across the Taw and Torridge estuary finally led the group to leave the shore to the oystercatchers, to end a fruitful few days' recording in good company.

With thanks to all those who submitted records and other information. A full species list for the nine sites is available from Colin.

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Ron Carr

[REDACTED]

Responses to: 'Future developments for the Conchological Society'

I write in response to the article in *The Conchologists' Newsletter* No. 157, on 'Future Developments for the Conchological Society.' I am in general agreement with the various points raised, but should like to add a few further comments on them.

There seems little doubt that in the future most records will go straight on to computer, and certainly up here in Scotland there seems to be considerable encouragement to buy and use Recorder 2000. I have not yet got it myself, but I have the impression that it would be available to individuals for a lower price than quoted. However, it will not run on older computers, and although I have bought a new computer this year, I have simply not had time to install and learn Recorder 2000. Such innovations need, I think, to be introduced gradually, with plenty of back-up (including training courses in remote parts of the country if need be). There will also always be some people who, for perfectly good reasons, do not or cannot get involved with computers, so there will always be a need for manual handling of records.

Aids to identification on the web would be a good use of computers, but as already mentioned in the article, anything comprehensive is a large undertaking. However, there is a small number of species of molluscs that are encountered regularly, and information on these (say 20–30 species for land molluscs) would be relatively easy to assemble and put on the Society's website, and moreover, this could be updated much more easily than a book. More than once I have been contacted by naturalists to identify even as familiar and distinctive a species as *Helix aspersa*, so information about this and other common species would be useful. The web would also be valuable for disseminating information on, for example, species newly introduced into this country, and for information on how to distinguish, for example, recent segregates of various slugs. If information for identification is to be put on the Society's website, I suggest it would be worth concentrating on the types of information I have suggested, rather than trying to be comprehensive. It could also

be helpful to add names and contact details of people prepared to help with identification of particular groups.

The idea of targeted recording schemes is valuable, both as a means of maintaining recorders' interest, and of mapping faunal changes. However, I do not think this would be a good approach for recording rare species or new arrivals, for which categories it would probably be rather inefficient and unproductive. As a means of studying faunal changes, though, concentrated studies in particular areas over a long period, or repeated at intervals of a few years, would not only record changes, but also help to uncover species previously unrecorded in the area.

Finally, on a point not mentioned in the article, the societies' indoor meetings, and most of the field meetings, are in the deep south. There are no doubt many reasons for this, of which I suspect a principal one may be that most Society members are in that area. Nevertheless, I believe it could be worth exploring the idea of holding meetings in other parts of Britain. And what about holding an annual conference in a different part of the country each year?

Dr Adrian T. Sumner

██████████ North Berwick, East Lothian ██████████
██████████



Some thoughts on the future development of the Society: I will attempt to be succinct.

The indoor meetings at the BM (NH) are part of the lifeblood of the Society. The benefits of these meetings can be listed by anyone. The field visits and workshops are the other part of the lifeblood – people can share their expertise, learn about new environments/groups of molluscs and cement friendships. The Journal is our presence in the scientific community and the Newsletter an informal, sometimes chatty sharing of information, ideas and events. The loss of any of these aspects of the Society would be our collective loss.

The 'Papers for Students', or whatever they were called, seem to be in abeyance. I would like to see these resurrected and am willing

to help. I doubt if I have sufficient expertise to write on anything but have a reasonable PC so can word-process / whatever.

I think a website is almost essential. Apart from advertising the Society and giving people the opportunity to join, it could well reflect what is, perhaps, one of the best Natural History sites on the web: www.ukmoths.force9.co.uk/.

This site demonstrates that we should provide faunal lists, if nothing else. Although this issue is problematic it could identify the problem areas and promulgate the Society's stance on some of these key issues. We might also make certain Society information available, perhaps for a fee. I do not think the following 'for instance' is a good one but better brains than mine might have an idea – e.g. Marshall's Additions to British Conchology.

I wish those who have to decide the Wisdom of Solomon and thus success.

David Harfield

██████████ Charmouth, Dorset ██████████
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I have been wondering for a while about the possibility of starting a UK conchologically orientated e-mail group, as I for one would value discussion of puzzles I have found. There is conch-1, but this is based in the US so not very relevant to us on the whole. I am thinking of something like the Yahoo smartgroups, which include Ukbotany, Ukwildlife and Ukbirding, and which allow images and files to be stored for purposes of identification and interest.

The advantages of such a group could be as follows:

- Queries would be sent to the whole group and not to just one individual, so there would not be pressure on any one person to respond.
- A response might come from a specialist one had not thought of contacting.
- Particularly difficult identifications may benefit from wider discussion.

- Discussion would not need to be limited to just members of the Conchological Society.
- It might encourage outsiders to join the Society.
- It would allow discussion among members who are not able to get to meetings.

I would like to know if others would be interested in this idea. I would be happy to start it so long as there are no objections and people feel it is a good idea. Would people prefer it to be limited to UK finds (using conch-1 for international ones) or is there also a need for wider coverage? Please contact me with your reactions.

Sarah Longrigg



WANTED

1. Volumes 4 and 5 of Donovan's *British Shells*.
2. Volume 4 of Taylor's Monograph on the *Land and Freshwater Mollusca of the British Isles* (Parts 22, 23 and 24).
3. Montagu, *Testacea Britannica* plus Supplement.

Replies with prices required to John Robinson,

Darlington, Co. Durham

Diary of Meetings

This is a list of all meetings so far arranged at the time of going to press.

Programme Secretary:

Ron Boyce, [REDACTED], Reading, Berkshire [REDACTED]
[REDACTED]

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 [REDACTED] [REDACTED] on the day of the meeting for information on the location of the field site being surveyed.

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
MSL = Malacological Society of London

FOOT AND MOUTH PRECAUTIONS

Because of the continually changing situation regarding this disease it may become necessary to change the locations and meeting points for field meetings at short notice. It is therefore more than ever essential to inform the leader if you are attending a field meeting.

Please clean your boots and overtrousers before coming on meetings, respect No Access notices, keep away from livestock, do not discard uneaten food or give it to any animal, and use disinfectant where this is provided.

NHM – Saturday 8 December: 14.30h. We welcome as Guest Speaker Dr Graham Oliver from the National Museum of Wales, Cardiff, on the subject of 'Marine bivalves of the Mascarene Islands'.

NHM – Saturday 19 January 2002: 14.30h. We welcome as Guest Speaker Dr Paul Davies from the University of Bath on the subject of 'Small scale spatial and temporal aspects of molluscan ecology and palaeoecology'.

NHM – Saturday 16 February 2002: 14.30h. We welcome as Guest Speaker David Clarke of the Zoological Society of London on the subject of 'New developments in mollusc species at the London Zoo'.

FIELD – Saturday 23 March 2002
Walton on the Naze, Essex

Leader: John Llewellyn-Jones [REDACTED]

A field trip organised to look at Red Crag fossils and marine molluscs at Walton on the Naze and its environs. The fossils are numerous, well preserved and easy to extract. A packed lunch should be brought that can be left in the car until needed. For collecting, an old knife or similar for extracting the fossils, plastic boxes with liners, paper handkerchiefs and plastic bags for finds. Members should bring warm waterproof clothing and stout shoes. Meet at the railway station at Clacton-on-Sea between 10:40 and 11:10 h. The train departs London Liverpool Street at 09:32 h and arrives at 11:02 h. Members who miss the group at the station should proceed to the car park at the Tower, Walton on the Naze (OS Grid Ref. TM 265237).

NHM – Saturday 20 April: 14.30h in the De La Beche Room. Annual General Meeting with Presidential Address by Dr Adrian Rundle (London).

FIELD – Saturday 18 May 2002
Sandwich, Kent

Leader: Eric Philp [REDACTED]

Non-marine, dry and wet habitats. Meet 10.30 in the public car park at Sandwich (TR 333582), near the railway station.

INDOOR – Saturday 8 June. Leeds Museum Resource Centre, Yeadon. Viewing of collections and archives. Co-ordinator: Adrian Norris [REDACTED]

FIELD – Saturday 15 – Sunday 16 June. Two-day meeting in North Worcestershire [or near Birmingham if Foot and Mouth Disease recurs]. Leaders: Ron Boyce and Rosemary Hill [REDACTED]

NHM – Saturday 6 July: 14.30 h in the De La Beche Room. Short talks by members – Avoiding Foot-and-Mouth. Volunteers required.

FIELD – Saturday 20 – Sunday 21 July. Moffat. Search for unusual freshwater Mollusca in the Loch Skean area; bring waders or be prepared to get wet. Leader: Peter Dance [REDACTED]

WKSHP – Sunday 4 August. Reading Museum, Blagrove Street [or another venue in Reading]. Marine Bivalves. Bookings to June Chatfield [REDACTED]

NHM – Saturday 7 September: 14.30 h in the de La Beche Room. For our first indoor meeting of the new season we welcome as Guest Speakers Jan Light and Ian Killeen on the subject of 'Marine gastropods of Rodrigues'.

FIELD – Saturday 21 September. Nottinghamshire. Field recording in a completely unrecorded square [SK76 Maplebeck/Laxton/Normanton]. Leader: Chris DuFeu [REDACTED]

WKSHP/FIELD – Sunday 6 to Thursday 10 October. North Cornwall. Marine recording: intensive surveying of a few shores including processing and identification. To make this meeting a success we need plenty of members to come as we intend to book a laboratory. Full details later.

INDOOR – Saturday 9 November. National Museums and Galleries of Wales, Cardiff. Joint meeting with the Malacological Society. Arrangements pending.

WKSHP – Saturday 30 November. The annual workshop held in Woking offers Members the opportunity to receive tuition on identifying difficult groups. Bookings to Judith Nelson [REDACTED]

NON-MARINE RECORDS

The Non-Marine Recorder, June Chatfield, would be pleased to receive any non-marine records for 2001 or earlier. Please do not send these records to Michael Kerney.

NOTE

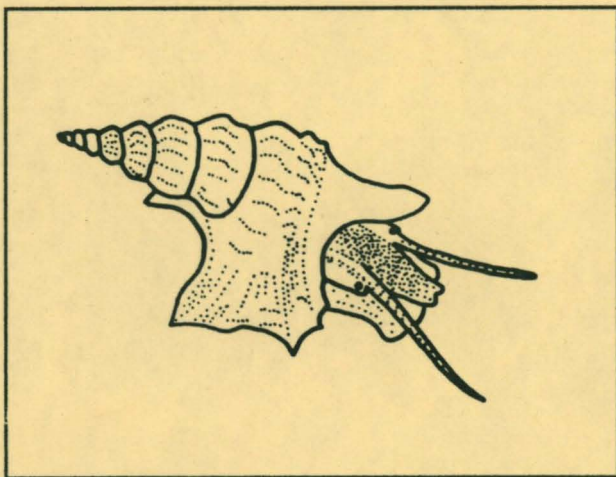
Because of refurbishment work at the Natural History Museum in London, the Palaeontology Demonstration Room will be unavailable from the beginning of April 2002, and arrangements have therefore been made to hold the remaining meetings in the de La Beche Room, which is to be found nearby in the Earth Sciences wing.



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Conchological Society meetings in 2002

Ron Boyce

, Reading

Meetings of the Conchological Society are always well worth attending. We are a friendly and helpful group, and new members in particular can learn a great deal from us. Specimens may be brought to any meeting for identification or advice, with the added advantage of getting to know us! The speakers at indoor meetings are always worth hearing, too, and the advent of data projectors means that the visual components of talks are becoming increasingly adventurous.

The main change for this year is that the venue in London for our indoor meetings will be different ... slightly. It will still be at the Natural History Museum, but instead of meeting in the Palaeontology Demonstration Room at the end of Gallery 30, from April 2002 onwards the meetings will be held in the De La Beche Room, which is on the second floor of the Earth Sciences wing in an area not generally open to the public.

When you go to the Annual General Meeting or subsequent meetings, instead of reporting to the reception desk in the main entrance, you will need to proceed along Museum Lane which is off Exhibition Road just beyond the Science Museum where eventually you will probably be intercepted by Security. Tell them that you are in the Conchological Society, produce your membership card and ask to be directed to the De La Beche Room. The next step is to go to the Key Point window, on the left about 150 yards down Museum Lane. Either there, or at another security window just inside the next entrance door, you will be supplied with a Museum sticker of the same type as is currently provided. Security will then escort or otherwise direct you to the basement staff lift. When you enter the lift you will find a set of control buttons facing you. Do not use these; the lift is operated by the buttons on the same side as the door you came in by. Press 2, and the lift will take you to the second floor. On coming out of the lift you will at last find some direction notices. Turn right – the De La Beche Room (room 208) is then the third entrance on the left.

If you would like to look round the Museum or visit its bookshop you should use the staff lift to reach the ground floor (press G). Turn right and go through the single door. This will lock behind you so you will be unable to return by this route. You will now be at British Geological Survey in Gallery 50. To find the bookshop proceed along Gallery 50 and Gallery 40 to reach Gallery 30 which should be familiar territory.

At the new venue there will still be space for members to bring exhibits of all kinds or specimens for identification, and on 6 July there is an opportunity for individual members to tell us all about the effect that the foot-and-mouth outbreak had on their activities, whether it changed where they went or what they did or what they thought. I hope there will be many offers of contributions to this particular meeting.

There will be further activities at other museums. The Leeds Museum Resource Centre at Yeadon are giving us a cordial invitation to visit their Molluscan collections, and they also have a large archive on the early activities of our society and of the Yorkshire Conchological Society, an organisation which still runs field meetings that are worth attending. In particular, they are going to Beast Cliffe on 11 May (see their full programme at the back of this Newsletter).

Reading Museum has been refurbishing its collections of Mollusca (and also insects) and is eager to see these being made use of. The molluscan collection is particularly good. June Chatfield is organising a workshop on marine bivalves there on 4 August and is particularly anxious that members book early for this, since space at the Museum building in Blagrove Street is very restricted; if the group is above a certain size the meeting would need to take place elsewhere in the town and the specimens would need moving.

The field meeting programme begins with a visit to the Red Crag fossil deposits at Walton on the Naze. The Red Crag strata are very young in geological terms and a high proportion of the species there can still be found alive elsewhere today. Don't discard all the sediments; there are small species here as well as large spectacular ones. Adrian Rundle will be talking about these and other small fossil species in his Presidential Address.

In May we will be going to Sandwich to look for non-marine species, and we hope to find *Monacha cartusiana*, while in mid-June there is a two-day meeting in North Worcestershire. There are considerable difficulties these days with the predictability of transport. If you are delayed and cannot find the group, you can always try ringing 0794 109 4395 and I may be able to supply a grid reference for where we have got to.

In July we intend to visit Loch Skeen in the Scottish borders to survey for scarce Lymnaeids. These do not necessarily all congregate conveniently on the edge of the lake shore, so members who do not like getting wet are recommended to bring waders to this meeting.

In September we intend to break new ground, perhaps literally. There is a ten-kilometre grid square in these islands where no mollusc has ever been seen, at least not officially. I hope I am not sticking out my tentacles too far to say that this is most unlikely, even for a square that contains land with the longest continuously recorded arable cropping history in the country. We will check out the woodlands as well, of course.

More ground is being broken, but figuratively this time, in October when we are holding a field workshop on a seashore at Godrevy Point in North Cornwall. The success of this new venture depends on as many members as possible coming to this meeting. This is a great learning opportunity and not one to be missed.

The main event for having a close look at specimens is, as ever, the annual molluscan workshop in Woking, where all sorts of creatures turn up, even bivalved gastropods!

When all's said and done, we have great fun at meetings. Do come along!



The Molluscan Collections held at the Leeds Museum Resource Centre

Adrian Norris

Senior Curator, Natural Sciences,

Leeds Museum Municipal Buildings, Leeds LS1 3AA

Since the foundation of the museum in 1819, records show over 150 donations to the molluscan collections. Many of these acquisitions were relatively small, but others contain many thousands of specimens. The section of specific collections to represent the museum's holdings in the following account was difficult and, therefore, I have selected just a few of the more interesting ones for a fuller account, whilst leaving others to be dealt with in more general text. The largest, and perhaps the most important, collection held by the museum is that of **Sylvanus Charles Thorpe Hanley** (1819-1899).

The Hanley collection was transferred to Leeds from the Tolson Memorial Museum in Huddersfield in 1957. When it arrived, the collection was contained in some 13 cabinets, and 206 drawers. The collection was built up over some 60 years mainly as a result of correspondence with many of the major naturalists of the period. This included such great names as Isaac Lea, from whom he acquired many rare and now extinct species of *Unio*. He also acquired syntypic material from many collectors including Adams, Anthony, Benoit, Blanfield, Carpenter, Dall, Guppy, Hinds, Jeffries, Leath, Loven, Montagu, Pease, Philippi and Tryon, to list just those identified to date. During his lifetime he published many books and scientific papers and described over 200 new species (see Norris, A. & Dance, S.P., 2001, 'Sylvanus Charles Thorpe Hanley (1819-1899) a nineteenth-century dilettante of the shell world'. *J. Conch.*, 37(4) 363-382).

The collection has had a chequered history. After his death in 1899, the collection became the property of his nephew, Mr Crew Hanley. From him, the British Museum purchased about 104 type sets of marine mollusca. Actually, 117 of the 146 specimens registered in the British Museum's collections are types (S. Wybrow, pers. comm.). The rest of the collection was sold to H. Harvey, a shell dealer of

Houndsditch. Harvey presented the British Museum with a further 1,073 lots, of which 248 are at present listed as types.

Sometime in the early 1920s the remaining collection was placed in storage at the depository of T.R. Roberts Ltd. No information is available to us from this period, and it has not even been possible to trace the site of Roberts' depository. The next time the collection came to light was in August 1932 when Mr J.C. North of Huddersfield donated it to the Tolson Memorial Museum as the Hanley and Harvey Collection. In 1957 the collection was transferred to Leeds under the care of the then Keeper of Biology Mr John Armitage.

Due to what can now only be considered to have been lack of knowledge and some bad advice and guidance in the late 1950s, a considerable amount of irreparable damage was done to the collection, many of the original labels were lost and, as a result, some of the original type and figured specimens are now untraceable. However, the collection still contains many type and figured specimens.

The oldest collection of British land and freshwater mollusca in the City Museum's collections is that of **Charles Ashford** (1829-1894). Born in Baldock, Hertfordshire, Charles Ashford was sent to the Friends' School at Ackworth at the age of nine and remained there for thirteen years, first as a pupil and then as a teacher. In 1854 he published *The Mollusca of Ackworth*. He worked closely with W. Dennison Roebuck for many years and was noted for his early studies of the 'darts' of British land snails. His collection of 43 boxes of *Pisidium*s were examined by Peter Dance and A.W. Stelfox in 1958; many of them were collected and identified by others. Several of these collections date back to the early 1850s, a time when the *Pisidium* fauna of Britain was very little known, and several of our common species were still awaiting description.

The main tropical collection held by the museum is the **Atkinson Memorial Collection**. This collection is of particular interest to the Leeds City Museum, in that it is associated with the very first honorary curator of the museum, Mr John Atkinson. The collection is made up exclusively of land species, and contains material from most areas of the globe. It was acquired over many years by two

generations of Atkinsons – the father, Edward, and his two sons Victor Rupert and Francis E. Atkinson. The collection, however, predates the Atkinsons dating back to William Hey the 2nd, the grandfather of Edward, who started the collection in Palestine in 1858. The collection was acquired by the Leeds City Museum in 1927 from Francis E. Atkinson L.R.C.P. Lond., M.R.C.S., of Bowerley in memory of his father Edward Atkinson F.L.S., F.Z.S., Hon. Surgeon at the Leeds General Infirmary, Past President and Hon. Curator of Zoology of the Leeds Philosophical and Literary Society, and his son Victor Rupert, Sec. Lieut, 1st/6th West Riding (Duke of Wellington's) Regiment, who was killed in action at Passchendale in November 1917.

Most of the material comprising the Atkinson Memorial Collection was purchased from dealers and collectors, and some high prices must have been paid for the rarer material. The collection contains, for example, three sinistral and three dextral specimens of the land snail *Achatina* (*Lissachatina*) *fulica* (Bowdich, 1822) acquired from the collection of **Sir David William Barkley** (1808-1888) and originally from the island of Mauritius. Less than ten sinistral specimens of this species are known (T. Pain, Pers. Comm.).

One of the most recent additions to the museum's collections is that of the late **Mr John Armitage** (1900-1996). This collection includes the bulk of the best and most important material from the collection of **Fred Taylor** of Oldham. The purchase from John Armitage, with the aid of an MGC/Science Museum PRISM Fund grant, of the main elements of the Fred Taylor collection, has resulted in the re-amalgamation of the majority of Fred Taylor's original collection. When Fred Taylor died in February 1949, his shell collection was housed in cabinets at his home in Lanseer Street, Oldham. He wished his collection to be given to John Armitage, a close friend for over thirty-five years. However, due to circumstances prevailing at the time, the collection was split, and the cabinets used for other purposes. John was allowed to remove all he could carry in one large suitcase; his knowledge of the collection ensured that he acquired the most important material. Fred Taylor's daughter retained the remaining elements of the collection. In 1975, and again in 1983, sections of the original collection turned up in the hands of dealers,

the first at Knaresborough with Edward Milborrow and the second at the Cheshire Taxidermy Studios of Sale, Cheshire. This probably still leaves a section of the collection unaccounted for, but by far the most important elements are now back together. This includes the left-handed specimens of *Helix pomatia*, *H. aspersa* and *Trichia striolata* but I can find no trace of the sinistral specimens of *Cochlicella acuta* and *Oxychilus draparnaudi*, which he also had in his collection. Fred Taylor was noted not only for his ability to clean shells immaculately, but also for his generosity.

It was well known that the Leeds City Museum was interested in acquiring material from the original Fred Taylor collection, and many colleagues kept a close watch for likely material. This resulted in several finds, perhaps the most interesting being as a result of a telephone call from the molluscan section of the Natural History Museum in London stating that part of the Taylor collection had turned up in Rotherwick, Hampshire. It was with great interest and anticipation that I made contact. However, the collection proved to have belonged to yet another Taylor, this time a school caretaker in Manchester by the name of **George Taylor**. Fred, in his generosity had given this little-known collector some 36 boxes of material all collected between 1897 and 1908, including two boxes of *Catinella* (*Quickella*) *arenaria* (Bouchard-Chantreaux 1837) collected at Braunton Burrows.

Other collections at Leeds include those of **Charles Allen**; **Hugh Brooksbank**; **J.W. Davis** (1846-1893); **C. Frazer**; **C.H. Moore** (1869-1949); **William Nelson** (1835-1906); **Jack & Vi Saville**; **L.W. Stratton** (1900-1971) (Part); **Arthur Goodwin Stubbs** (1871-1950); **William Temple** (1889-1960) and **W. Thurgood**, plus many smaller collections, and some which remain anonymous.

Further collections are still being added to the museum's holdings, not least of which are those of **Mr Terry Crowley**, whose collection was left to the museum in his last will and testament. This collection is noted for its scientific standing containing as it does many type, figured and cited specimens.

A fuller list of collectors with potted biographies will be published shortly on the Leeds City Council's Web Site:

<http://www.leeds.gov.uk/tourinfo/attract/museums/mrc.html>.



New molluscan storage system at the Leeds Resource Centre



Work station in the molluscan store.

Chalk and cheese: Snails in the East Hampshire Hangers

June Chatfield

Alton, Hampshire

Bright sunny weather is not the first choice for snail hunting, but the woods in deep shaded valleys behind the village of Buriton in East Hampshire remained moist from rain in the previous week. Two of the four target species were found alive and there was shell evidence of a third. Organised by Debbie Wicks of the Hampshire Wildlife Trust and Graham Berry of East Hampshire District Council as part of the Biodiversity Action Plan programme and guided in the field by Conchological Society members (June Chatfield, Martin Willing and Terry Wimbleton), the first training day for local BAP volunteers took place on 16 July 2000. The morning was spent in the Village Hall introducing the four species which had been selected for the survey. They included the easy goal of *Pomatias elegans*, the under-recorded and, in our case, elusive *Helicigona lapicida* and two national rarities *Ena montana* and *Helicodonta obvoluta*. A handout sheet for identification and a record sheet were prepared.

The afternoon was spent in the field, in Buriton Chalk Pits (now wooded over) and in The Hundry, a small piece of ancient woodland in Queen Elizabeth Country Park, both within easy reach on foot from Buriton. Within minutes of entry into the woodland of Buriton Chalk Pits, live specimens of the nationally rare Cheese Snail, *Helicodonta obvoluta*, were found in a log pile: about 10 specimens were found and more than 10 were located in The Hundry. Living specimens of *Pomatias elegans* were also soon found in both sites, where they favoured chalk rubble habitats. Only one shell of *Helicigona lapicida* was found in The Hundry, but this snail is best sought in wet conditions, immediately after rain, and is elusive in dry conditions – it therefore remained a challenge to the local volunteers to seek on an appropriate day. The fourth species *Ena montana* was not found, but another field day is being planned to look for it in Selborne. Following the training days, recorders make their own visits to check on these species from other sites in the hanger woodlands. Another local reserve warden presented tabulated lists of his finds from field work

in various hanger woodlands in previous years to add to the project data.

Hampshire Wildlife Trust are keen to continue the survey and welcome records. They should be sent to: Debbie Wicks, Hampshire Wildlife Trust, 8 Romsey Road, Eastleigh, Hants SO50 9AL.



Note from the Editor

I hope you will enjoy this issue of the Newsletter. At the time of writing it looks likely that foot and mouth will have been eradicated and that we can look forward to all the locations of this year's field meetings with certainty.

I would be most grateful if members of the Society who haven't already kindly given me their ideas on the content and layout of the Newsletter would let me (Email rosemaryhi@lineone.net) know what topics they would like to see covered in the future, or if they have expertise in identification or recording that they would like to share in a newsletter article. Is there any member with graphic design skills who might be interested in helping with updating the cover of the Newsletter or producing promotional material for the Society, please?

If you have or can borrow access to the internet, it is well worthwhile accessing the Society website at www.conchsoc.org. Please send any ideas or items for inclusion to Mr Michael Weideli ().

The Cambridge Mussel Group in Wien!

*Anna McIvor,
Pembroke College, Cambridge CB2 1RF
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Earlier this year, the Conchological Society gave us a grant to go to the World Malacological Congress in Vienna, an event that happens every three years in different locations around the world. It brings together hundreds of delegates working in the large and diverse field of malacology, and therefore collects, in one place, researchers from backgrounds as diverse as functional morphology, genetics, conservation biology, palaeobiology, and many, many more. This makes for a wonderful opportunity, especially for students, to meet the authors of important papers face to face, to exchange ideas with fellow academics working in closely related fields, and, just as importantly, to get a look at methods and approaches used in areas a little further from our own. Also, of course, a week-long congress allowed for plenty of time to meet others on a social basis, and Vienna was a perfect city for doing just that!

Thanks to the Conchological Society, it was possible for all of us from the Cambridge Mussel Group to go to Vienna. So it was that Robert Cathcart, Anna McIvor, Paul Elliot and Stephan Müller set out on 18 August (together with our supervisor David Aldridge, and Richard Preece also from the Zoology Dept., Cambridge) to make our impression on the world of molluscan studies. We all presented posters (and Dave gave a talk), and we had a fun, interesting and inspiring week!

Stephan Müller:

The sheer variety of sessions and talks on offer at this Congress was, at times, quite bewildering. Many of the talks especially in the conservation sessions were brilliant. There were many examples of quite simple, field-based studies that aimed at providing practical answers to real-life problems. There was a sense that a pro-active approach to the conservation of molluscs is becoming more and more important. The Senior Biodiversity Specialist of the World Bank, Tony Whitten, powerfully drove this point home in his keynote address. He challenged the delegates of the world congress to start fighting for

their 'fair share' of the millions of pounds of funding available for conservation projects today. He was astonished that, with hundreds of delegates gathered from all corners of the world to marvel at the fascinating diversity and biology of molluscs, their plight rarely featured where it matters most today – with the organisations and agencies with the real money. The importance given over to conservation sessions in this congress might help to shift the balance – namely towards realising that if we do not preserve what diversity there remains now, there will be little to study in future.

The Congress had more to offer than talks in lecture halls though – the field trip we went on took us, amongst other places, to a beautiful backwater of the Danube, and a small village where we were welcomed, dined and wined by the mayor himself – he was astonished to find delegates from 19 different countries appearing on his doorstep to look at the last remaining Austrian population of *Helicopsis striata*!

All in all, a huge 'Thank you!' must go to the Conchological Society for making our visit to Vienna possible – between a reception in the Natural History Museum on the first day and a dinner in the splendid Town Hall on the last day, the week was filled with meetings, talks, posters, field trips, stimulating discussions, the odd beer, and a few songs in a wine-bar or two!

Paul Elliott:

As a first-year PhD student, this was my first ever conference, and what a way to start! Vienna was a stunning city to host a conference, and in going to the many receptions, talks and dinners, we got to see a fair amount of its imperial splendour. This was exemplified by the first night when there was a wine reception in the stunning Natural History Museum. Here, amidst the cavernous halls with their elegant chandeliers we were able to have a leisurely chat with fellow malacologists about our respective fields and interests. It soon became apparent that everyone, whether professor, doctor, student, or enthusiast, was amazingly friendly. It was this networking and sharing of enthusiasm that I found most useful at the conference. Some of the people to whom I spoke presented fantastic ideas that will inevitably change the course of my PhD. Some even offered to

help in the later stages. There were dangers however. If you weren't careful, before you realised it, you got involved in deep conversations about the penile crests of little-known gastropods. For half an hour.

Many thanks to the Conchological society for helping us go to a fantastic conference.

Anne McIvor:

For me the highlight of the conference in Vienna were my chats with the American scientists who lead the field in unionid research. I felt like I learnt more in our few conversations than I have from reading any number of papers. Their talks and many of the other talks I went to were extremely interesting and relevant, and they have left me with lots of new ideas for my own work.

Vienna is a beautiful city, and we had time before the conference and in the evenings to have a look around some of the spectacular buildings, such as St Stephan's Cathedral. On our field trip to the alluvial forest, we also got the chance to see some of the countryside around Vienna. Walking through the forest, we collected many shells of Vienna's own snail, *Cepaea vindobonensis*, before having a splash in some ox-bow lakes of the River Danube where we collected lots of unionids (but no Depressed River Mussels, *Pseudanodonta complanata*!).

Altogether I had a wonderful time, met some lovely people and got lots of inspiration for my PhD. I would like to say a big thank you to Conch Soc. for the grant that enabled us to go!

■

Field Meeting in Gloucestershire, 28 July 2001

David Long

Leckhampton, Cheltenham

Four members of the Conchological Society of Great Britain and Ireland (Ron Boyce, Rosemary Hill, Tony Smith and David Long), along with Ken Heron from the Gloucestershire Invertebrate Group examined the aquatic mollusc fauna of north end of Purton timber ponds and the adjacent Gloucester–Sharpness Canal, and the terrestrial molluscs of the fen fringe of the timber pond at SO 68500410 on the morning of 28 July 2001. In the afternoon we visited the two parts of Walmore Common, west of Gloucester in SO 7414 and 7416.

The Gloucester–Sharpness Canal, a Thomas Telford creation, is regularly dredged and most of the banks are lined with steel piling so finding molluscs can be hard work. It is now almost exclusively used for recreational boating. The old timber ponds at the side of the canal, but connected to it, have much more aquatic vegetation and consequently larger numbers of non-benthic freshwater molluscs than the canal itself. Mollusc records from the canal by Charles Upton in the early 20th Century included the sphaeriid mussel, *Musculium transversum* (Say, 1829) introduced into Britain from North America, and material in Gloucester City Museum indicates that he also found *Pisidium henslowanum*, and various non-introduced unionids. Recording by me in the autumn and winter of 1992-3, which did not include the timber ponds, produced fresh dead valves of *M. transversum* in the canal east and west of Purton, a limited gastropod fauna, including one specimen of the introduced planorbiid *Menetus dilatatus* at Quedgeley (SO 8014) to the north, and a river and canal bivalve fauna which included *Sphaerium rivicola*, *Pisidium henslowanum* and *P. supinum*, at several localities, and *P. moitessierianum* once at Frampton-on-Severn (SO 7204), along with the introduced *Dreissena polymorpha*. The objective on 28 July was to re-find this fauna and if possible to find live *Musculium transversum*.

Well, we did not re-find *M. transversum* (a long dead valve turned up on 13 June during a reconnaissance) but we did find 17 freshwater

species, including a fresh valve of *P. henslowanum*, and live *D. polymorpha*. Additional species to those recorded earlier included the neritid *Theodoxus fluviatilis* and the planorbiids *Gyraulus albus* and *G. crista*, all three living. Changes in the canal fauna do not appear to be revolutionary but it would have been nice to re-find such species as *Pisidium supinum* and *Sphaerium rivicola*.

A quick look at the land molluscs in the fenny vegetation surrounding the ponds produced 11 species, some characteristic of damp places such as *Succinea putris*, *Zonitoides nitidus* and *Ashfordia granulata*, others being garden species, such as a shell of, probably, *Oxychilus draparnaudi*, and a live full-grown *Helix aspersa* at the water's edge.

Walmore Common is an area of wetland, much of it peaty, on the west (locally north) side of the River Severn about 2 km east of Westbury on Severn, primarily grazing marsh, which floods in winter and is then notable for waterfowl. Much of the area was enclosed (i.e. privatised) by Acts of Parliament in the 19th Century, but two areas still remain as common and Crown Land, administered by a Board of Trustees. The South Common in the NE corner of SO 7414 and the SE corner of SO 7415 is an SSSI for the wintering birds and also for botany, and a RAMSAR site on account of the birds. The North Common in the SW corner of SO 7416 is an SSSI on account of the damp unimproved neutral grassland flora.

Recording, primarily for the Society's 10 x 10 km square recording scheme, included a visit to the North Common in 1969 and to the South Common in 1967. This produced records of 11 freshwater species, all widespread in Britain, and 14 land species which included such typical wetland molluscs as *Oxyloma pfeifferi*, *Vallonia pulchella*, and *Zonitoides nitidus*.

The 28th July was very hot and dry which may explain why we only found three land species (admittedly the meeting was concentrating on freshwater) – *Oxyloma pfeifferi*, *Cochlicopa lubrica*, and *Trichia hispida*. We did better on the freshwater molluscs. Seventeen species were found, mostly common and mostly recorded in 1967 or 1969; the most local species was *Aplexa hypnorum* of which one specimen was found by Tony Smith in a pond which was part of the

North Common. It has turned up in two other Gloucestershire sites in the past 3 years. The deeper drainage ditches (rhines) had large numbers of planorbiids especially juvenile *Planorbis planorbis*. As with the Gloucester–Sharpness Canal at Purton, the freshwater fauna does not appear to have changed radically since the 1960s (when the recording visits were brief, so the more concentrated effort of the field meeting was likely to find additions). The land mollusc fauna could benefit from further recording.

Many thanks are due to Rosemary, Ron, Tony and Ken for their recording, to Viv Phillips of British Waterways for arranging permission to visit the canal and timber ponds and accompanying me on a preliminary visit on 13 June, to Colin Evers and Noel Baker, Trustees of Walmore Common, for giving permission and advice at a time made difficult by the foot and mouth disease crisis, accompanying me on a preliminary visit on 10 July, and being with us on 28th. Thanks are due also to Dr Michael Kerney for kindly examining *Pisidium* species from Walmore Common.



On the identity of *Calliostoma vicentae* Rutllant

Henk K. Mienis

National Mollusc Collection, Berman Building, Dept. Evolution,
Systematics & Ecology, Hebrew University, IL-91904 Jerusalem, Israel
mienis@netzer.org.il and [REDACTED]

Dr Juan Rutllant y Bassets of Melilla, Spanish Morocco, was a well-known shell collector who was a member of the Malacological Society of London from 1947 to 1952. Since he was one of the very few people who had access to molluscs from Spanish Morocco and the former Spanish Western Sahara, his shells were in large demand and found their way to many private and public collections. Such samples were always accompanied with his own labels and with a proper identification.

Some material from Rutllant reached also the National Mollusc Collections of the Hebrew University of Jerusalem (HUJ) and the Tel Aviv University (TAU). Among it are two samples of a Trochid species labelled *Calliostoma vicentae* Rutllant (HUJ 40829/3 and TAU/2). The same name is mentioned in Poppe & Coto (1991: 76) as a synonym of *Callumbonella suturale* (Philippi, 1936). The latter had been based originally as *Trochus suturalis* on a single fossil specimen from Sciacca, Sicily, Italy (Philippi, 1836: 185, plt. 10, fig. 23-23a). However, in a living state it is still encountered in the Eastern Atlantic off north-west Africa and in the Alboran Sea in the western part of the Mediterranean.

Calliostoma vicentae seems to match indeed *Callumbonella suturale*. A check of the literature, in particular the Zoological Record, has revealed that Rutllant, in spite of his malacological interests, never published any paper dealing with molluscs and failed to give a valid description of his *Calliostoma vicentae*. The latter has to be considered therefore a manuscript name without any nomenclature status.

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In this issue we are proud to present an exclusive world first publication of a new short story by Michelle Dickinson. Ms Dickinson is the undisputed doyenne of the Sex, Shopping and Aga Saga, and is a thrice winner of the coveted Golden Treaclespoon award for romantic fiction. When commissioning this story, we gave Michelle a completely free choice of subject. We stipulated only that it should have a strong conchological flavour. (See how many mollusc names and authors you can find!)

Market Forces

By Michelle Dickinson

We had everything, and I should have been happy. We had a large Georgian house in Pinna, where we had moved from a Poirieria of Middlesex. It stood in five acres with tennis courts, stables and swimming pool; and there was an Ampullaria for our children, Tarquin and Jocasta, to play.

My husband, Gervase, had the usual impeccable background of Eaton's, Balliol and the Guards. He was Director of Derivatives at a leading Merchant Bank. I was educated at Roeding, Girton College and the Sorbonne. I was P.R. consultant to the beauty without cruelty industry. (Our products were never ever tested on animals ... only on convicts, orphans and the Armed Forces.) Gervase drove a company Turbo-charged Volva, while I had a Vauxhall Astraea with fuel injection and overhead camshaft – whatever that means.

Yes, we had it all and I should have been happy. But all that changed one morning, when Gervase turned up at our home, with a face like Greek yoghurt spread on Pitar bread. 'Derivatives have gone belly-up in the Far East,' he mumbled. 'The Board are talking about retrenchment, empowerment, outsourcing, downsizing and rationalisation.'

'You mean they've given you the old Sacco,' I sneered. 'Honestly, darling, how could you have let things get out of control like that under your very nose? I've just been reading on the internet about the missing 800 million. Couldn't you and the other Directors just cash in your share options to make up the difference? Anyway, now that

you've lost your job, how can we afford to join our friends on Mustique again this year, let alone our skiing trips to Ostrea? You should have thought of that before sending out that estuary oik to manage the Orient Division. Leyton Orient would be more his mark.'

From then on our relationship went into a steep decline. Gervase started Acteon strangely, completely withdrawing into his shell. He went down badly in my aestivation. The atmosphere got so bad that I developed a stress-related eating disorder. I had to seek counselling from Piers (my Personal Trainer, Life Coach and feng shui adviser) for my Bulimnea nervosa. Soon afterwards I was glad to be invited for an evening out in Knightsbridge. A party plan sales event was being hosted by Tiggy and Minty. They were my oldest friends from our schooldays, when we used to Livonia mile from each other. I was helping them in the kitchen to prepare the buffet beforehand. Amidst their bright, laughing chatter I soon broke down in tears and finally confided in them about Gervase.

'He's become a virtual Récluz,' I complained. 'He just mopes about the house all day studying his weird esoteric hobbies, such as the art of motorcycle maintenance and Xenophora real man, who could take me away from all this and show me the finer things of life.'

The sales party soon went with a swing, and I was impressed by how popular and lucrative these events were. All the household goods on show were immediately snapped up. Notadusta, oven glove or ironing board cover was left unsold. I was delighted to treat myself to a Kwik Krisp Piknik Kooler for just £19.99. When I arrived back home at two that morning, Gervase was still pacing up and down in his study. I proudly showed him my new purchase, but he reacted bitterly. 'Were you Born yesterday?' he snarled. 'Good grief, you mean you paid twenty quid for a plastic box? They really must have seen Hugh Cuming!'

That did it. I could take no more. Within an hour I had stormed out of the house, pausing only to pack my Gucci shoes, platinum credit cards and some of my favourite Sixties LPs: The Rolling Stones, Partula Clark and Garmon & Siphuncle. I crashed down with Tiggy and Minty at their flat, hoping to stay awhile until I could plan a course of action. The next morning found me enjoying a large

Ecuadorian latte at my favourite Knightsbridge bistro. I was idly glancing through a copy of *Watson in London*, which had been left on a chair by a previous customer. My eye was suddenly caught by a notice in the small ads section:

Do you want to be filthy, stinking rich?
Let Michaud you how. Apply Nigel at P.O.
Box 666, Sowerby Bridge, West Riding.
Tel. Or why not visit my website at
www.loadsalucre.com.

My curiosity was aroused, and I contacted him at once on my mobile. I told him I was interested, but that Yorkshire was Tutufa for me to travel. He laughingly explained that the box number was just a convenient Gmelin address. He readily agreed to meet me at his hotel in Central London, where he had a permanent suite.

I instinctively knew it was Nigel, when I saw him advancing confidently toward me through the crowded hotel lobby. He was wearing an Armani suit, a Versace shirt and an amazing pair of von Martens boots with no fewer than 10 pairs of laceholes. 'It's Aplysia to meet you,' he murmured in a rich, deep voice as he bent forward to kiss my hand. He was a real Chama.

After the introductions, he took me to a nearby Greek Cypraeat restaurant. Nigel had moussaka on a Pila of garlic rice, with garlic bread. I just ordered a boeuf Bourguignat with a side salad. I Neverita big meal when discussing business and, anyway, I didn't want to risk getting Haliotis. As we ate, Nigel started pitching his money-making propositions. Basically, these seemed to involve network marketing. Massive bonuses and commissions could be earned, depending on the number of new downline sales agents one could recruit into the pyramid. 'So what merchandise are you actually handling?' I asked in a bored voice, playing hard to get. 'Merchandise?' He sniffed. 'We don't soil our hands on anything as vulgar as material goods. We're offering people a concept. A vision. The chance to become wealthy beyond the dreams of Creseis. So are you up for it, then? I can cut you in for thirty K if you're interested. You might be eligible for a government start-up grant, or you could

get a loan from the Bankivia lucky.' I stared at him disdainfully, as I promptly wrote out a personal cheque for the full amount.

'Splendid,' he smiled. 'I knew I could rely on you to come on board. I could tell from that ruthless, hungry look in your eye. Why not come up to the suite for a celebratory nightcap, to seal our new partnership?'

After we'd raided his minibar, Nigel raised his dry Martini in a toast. Our eyes met, and at once we knew. My pent-up emotions and frustrations all came Tomlin out, as we Lepton each other with unbridled passion. My breath came in short pants as I felt his strong, manly hands slide purposefully down

[Out of concern for our younger readers – and to the disappointment of some of our older ones – this page has had to be cut, due to lack of space.]

Normally, nobody could be Kiener than me on a casual bit of Rumphius-pumphius. But this was different. Here was a man I could admire and devote myself to for years to come. So began our turrid Afer, a delicious mixing of pleasure with business. With Nigel's selling expertise and my own upper-crust social contacts, we very soon made a killing. The money just flowed in unabated. We were like Bonnie & Clyde, Butch Cassidae & The Sundance Kid, and Küster's Last Stand all rolled into one. During those mad, wild weeks I gave little thought to Gervase and the children. We were just too Busyconning the punters out of their cash.

Late one morning I had to return to our hotel suite. My laptop had gone down, and I needed some urgent projections through the business PC. I was about to insert the programme when I noticed a disc already in the slot. I assumed that Nigel had been ogling Lora Croft in a 'Tomb Rehder' game. But on looking more closely I noticed a small label on the disc marked 'Account 666'. I set it to run out of curiosity, and then I saw the light of day. My so-called partner had been systematically siphoning off our agents' income payments into his own personal bank account in the Cayman Islands. He had ripped me off for tens of thousands in a few short weeks. Just then Nigel walked into the room. He looked startled and guilty when he saw me at the VDU.

'So, Nigel, just where did all my Loligo? Here!' I hissed, flinging the disc into his face. 'You loathsome, lying, cheating little toad. Eucosmia fortune in lost commissions. So it's *Hastula vista*, baby – I definitely *won't* be back!' With that, I turned on my heels and walked out of his life.

I turned up next day, sheepish and mortified, at the door of our home in Pinna. I confessed all (or at least the edited highlights) to Gervase. 'I've been a blind, stupid fool,' I sobbed. 'Deep down I must have just been trying to make Euchelus. But then I suppose Unio that all along?'

Gervase then told me that his luck had turned and that he was now back on the gravy train. He had just been appointed Chairman of the new National Widget Development Corporation. 'But, darling,' I scoffed, 'You don't know the first thing about widgets.' 'I know. That's why they said I'd make such an ideal choice to head up a Quango.' We both burst out laughing and then hugged each other affectionately.

'I forgive you, darling. Please come back home,' he pleaded. 'I need you, the children need you and only I can Gibbulasting happiness and financial security.' And so we settled down into a *Modiolus vivendi*, where we tried to understand and respect each other's problems, needs and aspirations. A kind of loving, if you like.

But now, as I listen to my Rolling Stones records, I still often think wistfully of my time with Nigel and about what might have been.

Yes, I used to love him. But it's Oliva now.

■

Postcard from North Devon

Paul Dansey

Woodbridge, Suffolk

On a recent visit to **Woolacombe**, North Devon, the most interesting beach for me was not the main sandy one loved by surfers but the smaller one, Barricaine (Grid Reference SS 453443), as it was covered by shell sand. The only whole specimens evident in August 2001 were cowrie shells and limpets. An adjoining village is picturesque Croyde, and tucked away in the main street is a Gem Rock and Shell Museum, containing 46 species collected from local beaches, especially Barricaine.

There were also species from around the world, for instance a giant clam, rocks and gems, semi precious stones, rock crystals, shell decorations, figures and scenes made of shells. If you are in this area it is well worth a visit and some of you may have seen the museum when it was featured on *Blue Peter* (in the days of John Noakes). There is an adjoining shop. The Museum was opened in 1973 as the result of the life long hobby of the proprietors, Mr and Mrs Fairweather.

Opening hours: Easter to October: 10 a.m. – 5 p.m.
July and August also open evenings 7.30 – 9 p.m.
Winter opening by telephone appointment – 01271 890407
<http://home.btclick.com/croydegem.museum>

When I visited admission was only 30p and allowed me to make a return visit in 2001. I actually arrived just when the Museum was closing at 5 p.m. but the proprietors kindly still gave me time to browse when I explained my interest.

Another worthwhile visit was to **Ilfracombe** Museum and in their Maritime Room there were six drawers of local and foreign shells (some misplaced labels though). The marine aquarium featured shrimps and limpets. Of interest too is the Lundy Room, showing the geology, history and wildlife of this island.

Opening hours: April to October: 10 a.m. - 5.30 p.m. (Everyday)
November to March: 10 a.m. - 12.30 p.m. (Monday to Friday)
Telephone: 01271 863541
www.devonmuseums.net

■

Wanted: Sorter for shell-rich sediment sample

Jan Light

Godalming, Surrey

I have been carrying out my turn-of-the-year turn-out to make more room for 2001 acquisitions! This has brought several treasures to light, some of which I am willing to part with. I have a small quantity (~1/4 litre volume) of dry shelly strandline sediment which I collected from Porthgwarra on the Land's End Peninsula in Cornwall some years ago. Precise locality data are available. I worked up most of this sample at the time and this fraction has remained buried in the cabinet until now. Numerous small shells are present, the sediment being almost entirely composed of carbonate fragments (maximum size approximately 5 mm) with diverse molluscs and bryozoans as the dominant components. This sample has not been picked and I am offering this to a member of this Society to sort and, naturally, to keep the specimens they find. Best results will be obtained by sorting the sample in small amounts under magnification and I would be particularly pleased to send the sample to a newer member, or one who is unlikely to have the opportunity to collect from south-west England. If you haven't worked with shellsand before this is a good opportunity to try some, because deposits like this, from the small coves on the Land's End Peninsula, are some of the most speciose in the British Isles. All I ask, in my capacity as Marine Recorder, is that I receive a species list and I will be happy to help out with confirmation of identifications, or determinations if necessary.

■

The snail in allegory: a drawing by Günter Grass

Peter Topley

 *Clifton, Bedfordshire* 

In April this year I spent a week in the USA at Madison, Wisconsin, on business. Whilst there I had the opportunity to visit the Elvehjem Museum of Art, founded in 1970, which is one of the country's major university art museums.

The Museum was hosting a temporary exhibition of drawings by Günter Grass. Günter Grass is recognised as the greatest living German writer. His first novel, *The Tin Drum*, broke new ground in dealing with post war German identity and it ended the silence then surrounding Germany's recent past. Less widely known is that Gunter Grass is also an accomplished and dedicated visual artist. Prior to his writing career he studied at the Dusseldorf Academy of Arts and for an additional year at the Berlin Academy of Arts.

Amongst the drawings on display, one caught my 'conchologist's eye' in particular. It was a drawing from 1982 entitled 'Traum von Eigenheim' (Dream of an Own Home). In this image, a snail has shed its shell (indicating that the drawing is more about allegory than scientific accuracy!) and is seeking refuge in a World War II Atlantic Wall bunker: a structure which proved unable to provide security against the Allied Invasion. It has been suggested that in this depiction of a creature that succumbs to its expansionist urge and misguided desire for protection, Grass is offering a metaphor for the Germans under the banner of fascism, as well as a symbol of postwar German Society, in which the snail is the victim of its own slowness in dealing with the past.

This interesting example of the use of the snail in art is one more indication that molluscs continue to provide inspiration for artists; both as objects of beauty, or in this case as the basis for depicting an altogether more complex human story in molluscan terms!



Review

Muscheln und Schnecken der Weltmeere by Gert Lindner.

Published by BLV Munich, 1999. ISBN 3-405-15438-3,
319 pp. Hardback. Price approx. £19.

Readers seeing this title listed in recent booksellers' catalogues, as an apparently new publication, may have wondered whether there was any connection with the author's *Muscheln und Schnecken der Weltmeere* first published in 1975 and more familiar in the 1977 English translation *Seashells of the World*. It must be immediately stated therefore that this is a revised edition of the earlier publication.

The book may be described as a work of two halves. The second half consists of 62 colour plates illustrating some 1000 species of, predominantly tropical, marine shells. These plates are identical to those of the earlier version, although the altered layout of the captions is much clearer.

The first half of the book contains a detailed introduction to Molluscan systematics covering the rules of nomenclature, law of priority, status of type specimens, synonyms, homonyms, etc., followed by a detailed systematic list for marine molluscs down to subgeneric level. Brief descriptions and helpful comments are given at family level and the list is interspersed with some 198 black and white photographs emphasising characteristic features of different genera, and variations within species. Again these plates are reprinted from the earlier edition.

The author has taken the opportunity to correct a few misidentifications and amend the names used for a few species to reflect current usage, although it is surprising that while *Harpa cabriti* has replaced *H. ventricosa* as the valid name used on plate 42, *H. ventricosa* still survives in figure 134 earlier in the book.

This is still a good identification guide, although other more comprehensive works have come out since it was first issued. Even more useful, though, is the systematic section, which is the most comprehensive readily available list for anyone not having access to K.C. Vaught's *Classification of the Living Mollusca*. This new edition will probably not replace the old English language version on many readers' shelves, but if an English translation of this revised edition is produced it would be well worth obtaining.

Kevin Brown

British and Irish samples of American freshwater molluscs in the Collection of the Hebrew University of Jerusalem

1. *Musculium transversum* (Say, 1829)

Henk K. Mienis

National Mollusc Collection, Berman Building, Dept. Evolution, Systematics
& Ecology, Hebrew University, IL-91904 Jerusalem, Israel
mienis@netzer.org.il and mienis@hotmail.com

Somehow Great Britain and Ireland seem to have played an important role in the introduction of American freshwater molluscs into Europe. Most of the first records of nearctic species in Europe were based on finds made in Great Britain or Ireland: *Physella gyrina* (Say, 1821), *Physella heterostropha* (Say, 1817), *Menetus dilatatus* (Gould, 1841) and *Musculium transversum* (Say, 1829) are some examples.

A check of the National Mollusc Collection of the Hebrew University of Jerusalem has revealed that the former collection of Arthur Blok is rather rich in samples of such American invaders. In order to save these samples from any further oblivion, I have decided to draw up lists of them, which will be published in instalments. The first part will deal with the Long fingernail clam *Musculium transversum* (Say, 1829).

The Long fingernail clam is probably the oldest introduction of an American freshwater mollusc in Great Britain. Its first record dates back to 1856 when J.E. Gray thought he was dealing with a new species and described it as *Sphaerium pallidum* (Gray, 1856: 466). A few years later it was named *Sphaerium ovale* by Jeffreys, 1862. However, from the beginning these specimens were found to be closely related to North American taxa. Now we know that they were indeed dealing with a nearctic species: *Musculium transversum* (Say, 1829) (Ellis, 1978).

In the National Mollusc Collection of the Hebrew University of Jerusalem (HUI) seven samples are lodged of *Musculium transversum* from British localities: England, ex Jeffreys/ex Monterosato (HUI 8902/1 – both valves heavily damaged = Coen 5224); Worcestershire, River Severn near Upton on Severn, ex Wintle/ex Blok (HUI 8900/3); Lancashire, Manchester, ex Wintle/ex Blok (HUI 8898/2); Lancashire, Canal Ashton under

Lyne, leg. L. Suggit (HUJ 8896/4 = Blok 1139); Lancashire, Canal near Tudor Mill, Ashton under Lyne, leg. F. Taylor, 6 April 1918, ex Dalgleish (HUJ 8897/29 – growth series = Blok 1139A+B); Yorkshire, Salterhebble Canal, Elland, leg. F. Booth, 1908, ex Wintle/ex Blok (HUJ 8899/12); Yorkshire, River Foss at York, ex Wintle/ex Blok (HUJ 8901/2).

Only one specimen from Manchester shows a weak development of a nepionic shell on the umbo.

Today *Musculium transversum* occurs still in Great Britain (Kerney, 1976 & 1999). Here and there it has established even very large populations. From continental Europe it has been reported only once from the Netherlands (Kuiper, 1981), France (Mouthon & Loiseau, 2000) and Germany (Falkner, Bank & von Proschwitz, 2001).

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Tribute to Anne Morrow Lindberg (1906–2001)

Rosie Dansey

_____, Woodbridge, Suffolk _____

Amongst a collection of books on conchology in a second hand book shop a few years ago my husband picked out for me *Gift from the sea* (1955) by the above author and it has provided much inspiration to me when I too struggle to achieve a balance between life, work and human relationships (p.9) because the sea teaches us patience – ‘One should lie empty, open, choiceless as a beach – waiting for a gift from the sea.’ (p.17). The following chapters on the channeled whelk, moon shell, double-sunrise, the oyster, and argonauta give artistic rather than scientific descriptions of each shell, stressing its uniqueness. I collect shells for their beauty, the colours, the intricate patterns and the shapes, but her observations go beyond this to link them with her journey of self discovery.

From a visit to the east coast of North America last Fall I became aware that her influence was widespread on this continent inspiring women especially to find time for themselves, and some have gone on subsequently to write of their own experiences (Adams, 1998, Anderson, 1999) or to facilitate Retreats (McKay). Susan Hertog's life was changed by discovering *Gift from the sea* and she returned the favour by writing the first in depth biography of her mentor (1999). Hertog focuses on Lindberg's struggle to reconcile her need to write with her demanding duties as wife, mother and celebrity but these conflicts paled when her first born son was murdered, driving her more deeply into spiritual reflection. Until then I was unaware of Lindberg's public fame as I had not realised she was the wife of the famed aviator, Charles Lindberg. This very private woman had suffered very public tragedies. However, thrown into public life she was able to find peace in the air and she was a gifted pilot in her own right. In fact she was the first woman to be awarded the National Geographic Society's highest honour, the Hubbard Medal, in 1934.

This courageous and influential woman died in February 2001, aged 94, at her Vermont home. I feel her contribution to conchology is worthy of recognition.

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Conchological Society of Great Britain and Ireland

MINUTES

1101st (Ordinary) Meeting held on the 17 February 2001 in the Demonstration Room of the Natural History Museum starting at 2:30 pm

In the chair: Dr Rundle with 33 members.

Apologies for absence: Dr Alexander, Mrs Buckle, Mr Carr, Dr Chatfield, Dr Kerney, Miss McIvor, Mrs McMillan, Mr Negus, Mrs Rands, Mrs Turk.

Minutes of the last meeting (of 27 January 2001): The Minutes were read and accepted.

Matters arising: None.

Nomination and election of new members: Two members were nominated and elected:

- Mr I.F. Smith

- Mr A. Woods

Announcements and Correspondence

- Mr Buckle announced that the Book Auction had raised over £18,000 for the Society.
- The next indoor meeting will take place on Saturday, 24 March. The Speaker will be Dr Adrian Rundle on 'Love Darts'.
- Bill Pocock will lead a Field Meeting on the following Saturday, 31 March to examine outcrops of the Barton Beds for Eocene fossils.

Any other business: None

Lecture of the day:

Speaker: Dr David Aldridge

Title of talk: The Conservation and Eradication of Freshwater Mussels.

Meeting closed at 4.20 p.m.

Chairman.

Appendix: members' exhibits

John E. Llewellyn-Jones

E. O. Bishop

Cowry cameo belonging to Keith Vaz, Labour Minister and another from Hamburg.

Good representations of shells on napkin rings and trays.

- Terry Wimbleton Notice of Shells Exhibition to be held at Cumberland House Museum, Southsea, 17-25 February 2001; with Shell Identification Days on 24th and 25th February 2001.
- C. Street *Sepia orbigniana* from the Hebrides!
- Kevin Brown
- Book: A. Rombout's *Guidebook to Pecten shells*.
 - Specimens of *Pecten ziczac* Linné, 1758.
 - Press cuttings.
- David Aldridge Malacological Society meeting – Freshwater Bivalves, March 19th and 20th.
- J. Reynolds
- 1. Photocopies of 'Fringe Benefits' by Donough O'Brien re: British Snail Watchers' Soc.
 - Guinness/O'Neills' snail race poster.
- Ron Boyce Publicity for Marine Meeting in Fife.



1102nd (Special General) Meeting held on Saturday 24 March 2001 in the Demonstration Room of the Natural History Museum starting at 2:45 pm

In the chair: Dr Rundle.

This special general meeting was called to discuss and vote upon a proposed change (an addition) to Rule 8. The proposed change is as follows with the addition underlined:

'8. The Society shall be governed by a Council consisting of the President, the Vice-Presidents, the Society's Officers and nine Ordinary Council Members. All members of Council and Trustees shall be indemnified for any loss of the Society's property arising from acts, mistakes or omissions made in good faith and with reasonable supervision or proper advice.

Mr Buckle stressed that the whole point of the proposal is to make clear that, if the members of Council and Trustees should act outside their powers but do so arising from omissions or mistakes made in good faith, then they should be indemnified. He added that he was guided by the Charity Commission booklet CC49.

Dr Rundle asked if there were any speakers against the proposed Rule change. There were none.

Mr Buckle proposed and Miss Hill seconded that the proposed change be adopted.

The meeting voted in favour (with no votes against).

Meeting closed at 2.55 pm.

Chairman.

— ♦ —

**1103rd (Annual General) Meeting held on the 24 March 2001
in the Demonstration Room of the Natural History Museum
starting at 3 p.m.**

In the chair: Dr Rundle with 36 members and 1 visitor present.

Apologies for absence: Dr Alexander, Mrs Buckle, Dr Kerney, Mrs Long, Mrs McMillan, Mr Negus, Mrs Platts, Mrs Rands, Dr Seddon, Mrs Turk.

Appointment of Scrutineers: Mr and Mrs Pain were elected.

Minutes of the last Annual General Meeting (of 11 March 2001): The Minutes were accepted.

Matters arising: None.

Nomination and election of new members: None.

Report of the Council by the Hon. General Secretary: Read and accepted.

Report of the Hon. Treasurer: Read and accepted, subject to examination.

Report of the Hon. Membership Secretary: Read and accepted.

Report of the Hon. Non-Marine Recorder:

Dr Rundle gave an appreciation of Dr Kerney's 40 years as Honorary Non-Marine Recorder. He observed that he had made a remarkable contribution during that time, including producing two Atlases and monitoring a very considerable number of records. Unfortunately he was unable to be present at the meeting but a special presentation would be made at the Museum in the near future.

Dr Willing presented the Report on Dr Kerney's behalf. Read and accepted.

Report of the Hon. Marine Recorder: Read and accepted.

Report of the Hon. Conservation Officer: Read and accepted.

Report of the Trustees: Read and accepted.

Report of the Hon. Programme Secretary: Read and accepted.

Announcements and Correspondence: Mr Long had received a letter from the sister of the late Francis de Bartolomé, congratulating the Society on the successful Auction of Books.

Presidential Address:

Speaker: Dr Adrian Rundle

Title of talk: *Love darts*.

Election of Examiner of the Accounts: Mr Nick Light was elected unopposed.

Results of the Postal Ballot:

President	Dr A.J. Rundle
Hon. General Secretary	Mr C.L. Gillard
Hon. Treasurer	Mr P.U. Buckle
Hon. Membership Secretary	Mr M.D. Weideli
Hon. Editor (<i>Journal</i>)	Dr P.G. Oliver
Hon. <i>Newsletter</i> Editor	Miss R.E. Hill
Hon. Marine Recorder	Mrs J.M. Light
Hon. Non-Marine Recorder	Dr J. Chatfield
Hon. Conservation Officer	Dr M.J. Willing
Hon. Programme Secretary	Mr R. Boyce
Ordinary Council Members	Mr P. Dansey
	Miss E.F.A. Fogan
	Mr I.J. Killeen

Any other business: None.

Meeting closed at 5.00 p.m.

Chairman

Appendix: members' exhibits

Adrian Rundle	Love darts
P. Dansey	American Razor Clams of Genus <i>Ensis</i> .
David Guntrip	<i>Hygromia cinctella</i> from Bedfordshire.
Terry Wimbleton	Commensal Living: <i>Buccinum undatum</i> L. 1758. With attached Oyster, <i>Crepidula</i> , tube worms and barnacle, from Nab Tower, east of Isle of Wight.
Kevin Brown	• Book: Alan Jarrett, 'Marine shells of the Seychelles'. • Alan Jarrett & D. Slimming, 'Cone shells of the Seychelles'.

- Dave Slimming & A. Jarrett, 'Cowries of the Seychelles'.
 - Daniel Oscar Forcelli, 'Molluscos Magallanicos'.
 - H.T. Close, 'Liguus Tree Snails of South Florida.'
 - National Geographic Magazine (March 1965) on Liguus.
 - Gert Lowdner, 'Muscheln und Schnelken der Weltmeere'.
 - Gert Lowdner, 'Seashells of the World'.
 - Press cuttings.
- John E. Llewellyn-Jones
- 'Snails and small kits \$500 for 54 *Helix aspersa*' from America for sale.
 - Handmade oyster paperweights from Mersea Island.
- David Long
- Report on Molluscs of disused Coombe Hill Canal.
- Ron Boyce
- Cartoon depicting love darts by F.P. Nodder (1790).
 - Publicity for Field Meeting to Barton-on-Sea and Kimmeridge.
- J. Reynolds
- Newspaper cuttings.
 - *Acavus phoenix* with distorted shell lip (mantle damage)
 - 'Liguus Tree Snails of South Florida' by Henry T. Close.
 - Shell items from Nora McMillan.
 - *Achatina allisa* (= *iredalei*)
 - Garden Open leaflets.
- William Penrice
- Publicity for Field Meeting in Fife.
- Martin Willing
- 'Invertebrate Link' – conference details.
 - 'Desmoulin's Whorl Snail' – new E.N. leaflet.
- R.E. Hill
- Boxes and capsules for sale.
- Colin Gillard
- BTCV Community Group Newsletter.
 - Letter from the sister of the late Terry Crowley, offering cabinets for sale.



Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary

Ron Boyce, [REDACTED], Reading, Berkshire [REDACTED]
[REDACTED]

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.

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
MSL = Malacological Society of London

YCS – Saturday 9 March. Leeds City Library: 10.00-16.00 h. Exhibition: *Slime: a history and mythology of slugs and snails*. Contact Adrian Norris [REDACTED]. The exhibition itself runs until the end of April and then moves to the Yorkshire Museum in York.

MSL – Friday 22 to Saturday 23 March. Marine Biological Association, Plymouth. Annual General Meeting and Conference: *Molluscs as model organisms for physiological, ecological and evolutionary research*. Please register a.s.a.p. to [REDACTED] using Malacsoc AGM in subject line.

FIELD – Saturday 23 March

Walton on the Naze, Essex

Leader: John Llewellyn-Jones [REDACTED]

A field trip organised to look at Red Crag fossils and marine molluscs at Walton on the Naze and its environs. The fossils are numerous, well preserved and easy to extract. A packed lunch should be brought that can be left in the car until needed. For collecting, an old knife or similar for extracting the fossils, plastic boxes with liners, paper handkerchiefs and plastic bags for finds. Members should bring warm waterproof clothing and stout shoes. Meet at the railway station at Clacton-on-Sea between 10:40 and 11:10 h. The train departs London Liverpool Street at 09:32 h and arrives at 11:02 h. Members who miss the group at the station should proceed to the car park at the Tower, Walton on the Naze (OS Grid Ref. TM 265237).

YCS – Saturday 13 April: Cromwell Bottoms local nature reserve. Recording and workshop. Meet at 11.00 h at car park on A6025, grid ref. SE 124225. Contact David Lindley [REDACTED]

NHM – Saturday 20 April: 14.30 h in the De La Beche Room. Annual General Meeting with Presidential Address by Dr Adrian Rundle (London) on the subject of 'Marine Mollusca in microfossil samples – an introduction'.

YCS – Saturday 11 May: Beast Cliffe woods. Classic site for *Acicula fusca*. Meet at 11.00 h at the car park at Ravenscar, grid ref. TA 981018. Contact David Lindley [REDACTED]

FIELD – Saturday 18 May

Sandwich, Kent

Leader: Eric Philp [REDACTED]

A field meeting to look at freshwater molluscs in the dykes and waterways around Sandwich and the land snails on the dunes at Sandwich Bay. Meet at Sandwich railway station between 10.30 and 10.45 h. Bring adequate clothing for the time of year, the weather in May can be quite changeable. The dykes contain a rich fauna including *Gyraulus laevis* and hopefully perhaps *Segmentina nitida*; the dunes hold good populations of *Cochlicella acuta* and *Monacha cartusiana*.

MSL – Wednesday 5 June. Department of Earth Sciences, Open University, Milton Keynes. Conference: *Fossil molluscs*. Contact Peter Skelton [REDACTED]

INDOOR – Saturday 8 June. Leeds Museum Resource Centre, 1 Moorfield Road, Yeadon (grid ref. SE 217412). Viewing of collections and archives. Co-ordinator: Adrian Norris [REDACTED]. The Resource Centre is just off Yeadon High Street and may be reached by bus services 97, 97a, 736 and 757 from Leeds Central Bus Station.

FIELD – Saturday and Sunday 15-16 June

North Worcestershire

Leaders: Ron Boyce and Rosemary Hill [REDACTED]

This meeting will explore a range of diverse woodland sites on different substrates. Bring packed lunches and wellingtons. Because of restricted parking space at the sites being visited, meet *promptly* at 10.00 h at the main entrance to Webbs of Wychbold garden centre (grid ref. SO 929671) which is well signposted from Junction 5 of the M 5 about 0.5 km from the Droitwich radio masts. The garden centre has toilets and sells sandwiches and wellingtons.

The first site to be visited will be woodland on mixed substrates at the Knapp and Papermill. This is the most difficult site for car parking

(space for about 4 cars at SO 752521), hence the early start. We will visit another site in the afternoon.

We will meet again at Wychbold at 10.00 h on Sunday. Subject to permission being obtained we will visit Pepper Wood (SO 938744) which is ancient woodland on clay substrates, then Uffmoor Wood (SO 948811) which is on Coal Measures.

NHM – Saturday 6 July: 14.30 h in the De La Beche Room. Short talks by members – Avoiding Foot-and-Mouth. **Volunteers required.**

FIELD – Sunday 21 July

Loch Skeen, near Moffat, Dumfries

Leader: S. Peter Dance

A one-day collecting trip to Loch Skeen to look for *Lymnaea burnetti* Alder. Loch Skeen (altitude 1700 ft = 518 m) is the type locality for this form (?subspecies) of *L. peregra* Müller, distinguished from the typical form by its involute shell. The mollusc should be active in July. There should also be ample time to look for other molluscs in and around the loch. It is proposed to stay overnight on the Saturday in Carlisle, a convenient location with reasonably priced accommodation, and to travel 40 miles to the loch via Moffat early the next day. Those who want to go direct to Loch Skeen (Grid ref. NT 1716) on the Sunday morning may rendezvous at the car park there, at 09.00 h. Bring a packed lunch, a scoop and appropriate clothing (waders are useful for collecting in the loch). Be prepared for a stiff climb up a path strewn with loose stones, but be assured that the effort should be rewarded with majestic scenery – and a most unusual snail.

WKSHP – Sunday 4 August. Reading Museum, Blagrove Street [or another venue in Reading]. Marine Bivalves. Advance bookings required to June Chatfield

YCS – Saturday 7 September: Springs on east face of Ingleborough. Meet at 10.30 h (please note earlier time) at the National Park car park in Clapham, grid ref. SD 745693. Contact David Lindley

NHM – Saturday 7 September: 14.30 h in the de La Beche Room. For our first indoor meeting of the new season we welcome as Guest Speakers Jan Light and Ian Killeen on the subject of 'Marine gastropods of Rodrigues'.

FIELD – Saturday 21 September. Nottinghamshire. Field recording in a completely unrecorded square [SK76 Maplebeck/Laxton/Normanton]. Leader: Chris DuFeu

WKSHP/FIELD – Sunday 6 to Thursday 10 October.

North Cornwall

Organisers: Jan Light (Conch. Soc.) and Pamela Tompsett (CWT)

Based at Godrevy Point, N. Cornwall, the purpose of this joint meeting between the Conchological Society of Great Britain and Ireland and Cornwall Wildlife Trust is to improve your marine recording skills by focussing on field surveying and sampling, laboratory processing and identification techniques. Most fieldwork will be carried out during ELWST at Godrevy Point with the aim of sampling as many habitats and microhabitats as time permits. We will then take samples to a laboratory nearby with the aim of working through material, before returning to the shore the next day. There will be an option for individuals to visit and work on a different shores to put learned techniques into practice. The advantage of this approach for the Society's marine recording scheme is that material collected can be worked up on the spot and records logged, leaving participants the option to take home for further work only such samples and specimens as they wish.

Venue and Accommodation: a laboratory at a local College will be hired for which the shared charge will be modest. The charge will also include provision of a hand-out pack. For participants needing to book accommodation it is recommended that hotel, B&B or self-catering reservations should be made at a convenient distance to Godrevy Point.

An early indication of interest would be appreciated as this will enable organisers to gauge uptake for this Meeting, and to be adequately prepared for the Workshop. If you will be travelling to Cornwall by public transport and will need lifts locally, please let us know. A special welcome will be extended to members who are new to Field Meetings.

Further details from Jan Light, [REDACTED], Godalming, Surrey,

Email [REDACTED]

YCS – Saturday 12 October: Pateley Bridge for Ravens Gill (*Limax tenellus* site). Meet at 11.00 h in the car park on the North side of the bridge at Pateley, grid ref. SE 158656. Contact David Lindley [REDACTED]

YCS – Saturday 19 October: AGM and Presidential Address. 13.00 h at Leeds City Museum Resource Centre, Yeadon. Contact David Lindley [REDACTED]

INDOOR – Saturday 9 November: National Museums and Galleries of Wales, Cardiff. Joint meeting with the Malacological Society. Arrangements pending.

WKSHP – Saturday 30 November: The annual workshop held in Woking offers Members the opportunity to receive tuition on identifying difficult groups. Bookings to Judith Nelson [REDACTED]

NHM – Saturday 14 December: 14.30h in the De La Beche Room. We welcome as Guest Speaker Stephan Müller from Cambridge University on the subject of 'The Asian clam in Britain – not as bad as we thought?'

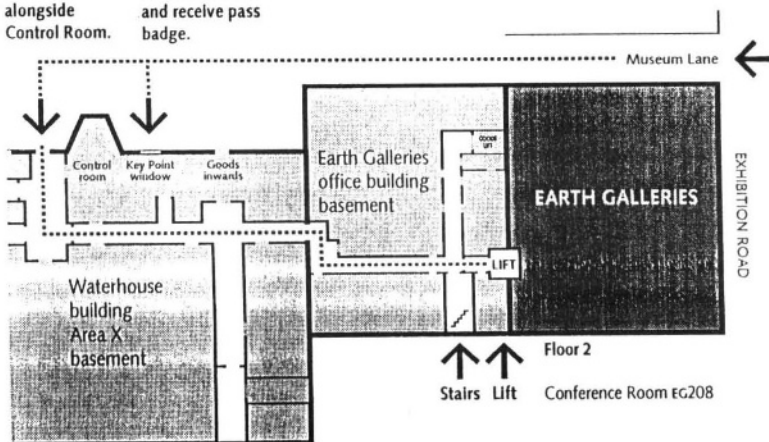
NON-MARINE RECORDS

The Non-Marine Recorder, June Chatfield, would be pleased to receive any non-marine records for 2002 or earlier. Please do not send these records to Michael Kerney.

NOTE Because of refurbishment work at the Natural History Museum in London, the Palaeontology Demonstration Room will be unavailable for our meetings, and arrangements have therefore been made to meet in the De La Beche Room, which is to be found nearby in the Earth Sciences wing.

Access to
Earth Galleries
office building
via door
alongside
Control Room.

Report to
The Natural History
Museum Key Point
window to check-in
and receive pass
badge.

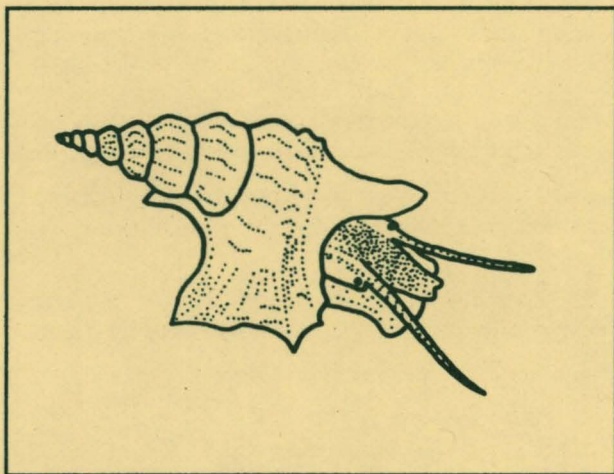


How to find the De La Beche room (No. EG 208)

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The Lothians Garden Survey

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[REDACTED], North Berwick, East Lothian [REDACTED]
[REDACTED]

In 1995-1996, the Lothians Wildlife Information Centre, the biological records centre for the Lothians, decided to carry out a survey of garden fauna and flora in the Lothians. I was asked to record the land and freshwater snails in the gardens. Members of the Scottish Wildlife Trust were asked to volunteer their gardens for the survey, and from these 16 gardens were selected for the survey. Seven were in the City of Edinburgh, and three each in West Lothian, Midlothian and East Lothian. Some of the gardens were very urban, and at the other extreme some were completely rural, surrounded by open fields or woods. Some were well kept, and others rather overgrown. Some had lush vegetation, while others were more open.

In the 16 gardens covered by the survey, 44 species were identified, the maximum in any one garden being 25 species and the minimum nine (Table 1). Although there are, in general, more species in large gardens than in small ones, there seemed to be other factors involved. In fact, the gardens with the least number of species clearly had the least variety of habitats, and the least vegetation. One of the gardens with the fewest species also had the lowest soil pH, indicating relative lack of calcium, necessary for molluscan shell formation. Apart from this, it was difficult to identify any specific factors that might affect the species present. Gardens at high altitudes seemed to have as many species as those at lower altitudes, which presumably had milder climates. Of course, the presence of water was necessary for the aquatic species.

A number of species were present in more than two-thirds of the gardens, although only one, the slug *Deroceras reticulatum*, was found in all (Table 1). The other widely distributed species were *Cochlicopa* spp., *Discus rotundatus*, *Arion subfuscus*, *A. distinctus*, *Aegopinella nitidula*, *Oxychilus cellarius*, *O. alliarius*, and *Deroceras caruanae*. All these are generally common species outside gardens as well.

<i>Vitrea crystallina</i>										
<i>Vitrea contracta</i>							++			++
<i>Nesovitrea hammonis</i>							+			
<i>Aegopinella nitidula</i>		++		++	+	+		++	++	+
<i>Oxychilus draparnaudi</i>	++		++		++					
<i>Oxychilus cellarius</i>	+	++	++	++	+		++	++	++	++
<i>Oxychilus alliarius</i>		+		+		+	++	+	+	++
<i>Milax sowerbyi</i>	++		+				+			
<i>Milax budapestensis</i>	+	+	+	+	+	++		++	++	
<i>Boettgerilla pallens</i>		+				++		++	+	++
<i>Limax maximus</i>		++			++	+	++			++
<i>Limax flavus</i>										
<i>Limax maculatus</i>						++				++
<i>Limax marginatus</i>										
<i>Deroceras laeve</i>						+				
<i>Deroceras reticulatum</i>	++	++	++	++	++	++	++	++	++	++
<i>Deroceras caruanae</i>	+	++		+	+	+		++	+	++
<i>Euconulus fulvus</i>								+		
<i>Clausilia bidentata</i>										
<i>Candidula intersecta</i>			+							
<i>Ashfordia granulata</i>										
<i>Trichia striolata</i>			++			++		+	+	
<i>Trichia hispida</i>								++		
<i>Cepaea nemoralis</i>										
<i>Cepaea hortensis</i>								++		
<i>Cepaea</i> sp.			+					+	+	
<i>Helix aspersa</i>	++	++	++				+			
TOTAL SPECIES	11	14	15	9	12	17	9	19	14	15

Table 1. Distribution of molluscs in Lothian gardens (+ and ++ indicate relative abundance)

	Grid ref.										
Region	Edinburgh	Edinburgh	Edinburgh	Edinburgh	Edinburgh	Edinburgh	Edinburgh	Edinburgh	West Lothian	West Lothian	West Lothian
Altitude (approx.)	20 m	10 m	60 m	45 m	40 m	30 m	75 m	90 m	120 m	60 m	
Soil pH	6.0	6.5-7.0		5.0	6.5-7.0	6.5-7.0	6.5	6.5-7.0	6.5	6.5-7.0	
Area (sq. metres)	110	1500	120	150	150	310	230	1600	200	300	
<i>Lymnaea palustris</i>											
<i>Lymnaea peregra</i>		+									
<i>Ancylus fluviatilis</i>											
<i>Carychium tridentatum</i>											
<i>Cochlicopa lubrica</i>		++	++					++	+	++	
<i>Cochlicopa lubricella</i>										+	
<i>Cochlicopa</i> sp.					+	++					
<i>Lauria cylindracea</i>						++					
<i>Ena obscura</i>											
<i>Discus rotundatus</i>	+	++	++			++	++	++	++		
<i>Arion ater</i>			+								
<i>Arion flagellus</i>			+								
<i>Arion subfuscus</i>		++	+	++	++	++	++	++	++	++	
<i>Arion circumscriptus</i>	++			++	++	+				++	
<i>Arion silvaticus</i>									+		
<i>Arion fasciatus</i>	+				++						
<i>Arion distinctus</i>	++	++		++	++	++	++	++		++	
<i>Arion owenii</i>									++		
<i>Vittrina pellucida</i>			++			++		+		+	

<i>Arion owenii</i>							1
<i>Vitrina pellucida</i>	++	++	++	+	++		9
<i>Vitrea crystallina</i>	+	++	+	+			4
<i>Vitrea contracta</i>	+	+					4
<i>Nesovitrea hammonis</i>							1
<i>Aegopinella nitidula</i>	++	++	++	+	++	++	13
<i>Oxychilus draparnaudi</i>				+			4
<i>Oxychilus cellarius</i>	++	++	++	++		++	14
<i>Oxychilus alliarius</i>	+	+	++	++			11
<i>Milax sowerbyi</i>						++	4
<i>Milax budapestensis</i>			++	++			10
<i>Boettgerilla pallens</i>		+					6
<i>Limax maximus</i>		++	+	+	++	+	10
<i>Limax flavus</i>					++	+	2
<i>Limax pseudoflavus</i>							2
<i>Limax marginatus</i>			+				1
<i>Deroceras laeve</i>							1
<i>Deroceras reticulatum</i>	+	+	++	++	++	++	16
<i>Deroceras caruanae</i>	+	+	++	++	+	+	14
<i>Euconulus fulvus</i>							1
<i>Clausilia bidentata</i>			+	+			2
<i>Candidula intersecta</i>							1
<i>Ashfordia granulata</i>				+			1
<i>Trichia striolata</i>	++	+	++	++	++	++	10
<i>Trichia hispida</i>		++		+			3
<i>Cepaea nemoralis</i>			++				1
<i>Cepaea hortensis</i>	++	++		++			4
<i>Cepaea</i> sp.		+					4
<i>Helix aspersa</i>				++	++	++	7
TOTAL SPECIES	18	23	21	25	11	14	

Table 1 (Continued ...)

Grid ref.	NT 243623	NT 180576	NT 438480	NT 577761	NT 516736	NT 465799	
	Midlothian	Midlothian	Midlothian	East Lothian	East Lothian	East Lothian	No of gardens
Altitude (approx.)	190 m	275 m	220 m	40 m	45 m	5 m	
Soil pH	6.5-7.0			6.5-7.0	6.5	7.0	
Area (sq. metres)	?300	ca. 3000	1300	5000	1000	200	
<i>Lymnaea palustris</i>	+						1
<i>Lymnaea peregra</i>		++	++				3
<i>Ancylus fluviatilis</i>		+	++				2
<i>Carychium tridentatum</i>	++	+					2
<i>Cochlicopa lubrica</i>	++	+	+	++			9
<i>Cochlicopa lubricella</i>							1
<i>Cochlicopa</i> sp.					++	++	4
<i>Lauria cylindracea</i>	++	++	++	+		++	6
<i>Ena obscura</i>				+			1
<i>Discus rotundatus</i>	++	++	++	++		++	12
<i>Arion ater</i>		++		++			3
<i>Arion flagellus</i>	+						2
<i>Arion subfuscus</i>	+	+	++	+			13
<i>Arion circumscriptus</i>				++			6
<i>Arion silvaticus</i>							1
<i>Arion fasciatus</i>			+	++	+	+	6
<i>Arion distinctus</i>	++	+	++	++	++	++	14

Several species were only found in 'rural' gardens (i.e., those adjacent to open country), and these are probably not to be regarded as true garden species (*Ena obscura*, *Nesovitrea hammonis*, *Limax marginatus*, *Euconulus fulvus*, *Clausilia bidentata*, *Ashfordia granulata*, and *Trichia hispida*). *Cepaea nemoralis*, surprisingly, was only found once, in such a rural garden, at relatively high altitude, and in the garden furthest from the sea, although this species appears in general to be less hardy than *C. hortensis*, and in Scotland does not extend so far north or so far inland (Kerney, 1999). *Arion ater* was also largely restricted to rural gardens.

Few species appear to be restricted to specific areas, although *Carychium tridentatum* was only found in Midlothian, *Limax flavus* only in East Lothian, and *Helix aspersa* only in Edinburgh and East Lothian (the last perhaps not surprisingly, since this is essentially a coastal species in Scotland; Kerney, 1999), while *Vitrea* species were not found in Edinburgh. Apart from *Helix aspersa*, no factors are known which might restrict the distribution of the species mentioned, which in any case may simply be the result of the vagaries of sampling.

One of the most interesting finds was the presence of *Boettgerilla pallens* in six out of the 16 gardens studied. This slug was first found in Britain in a garden centre in the Lake District in 1972 (Colville et al., 1974), and relatively few Scottish records were previously available; however, it was present in all three West Lothian gardens and quite numerous in two of them, in two Edinburgh gardens, and one in Midlothian. All the West Lothian gardens and the Midlothian one had acquired plants from garden centres relatively recently, and this could well be the main route of introduction of the species, although at least one of the Edinburgh gardens had not imported any plants from garden centres.

Another interesting find was *Arion owenii* at Midcalder, where it was flourishing. It was presumably an import from Bearsden (on the north-west side of Glasgow), from where plants had been brought, as this appears to be mainly a West Coast species in Scotland (Kerney, 1999). Several of the specimens were pale yellow all over, but were confirmed as this species by Stella Davies.

A couple of other recently segregated species are worth mention. *Arion flagellus* turned up in two gardens (one in Edinburgh and one in Midlothian). *Limax maculatus* was also found in two gardens, one in Edinburgh and one in West Lothian, in good numbers in each case.

In conclusion, no specific garden species of slugs were identified, as all the common species from gardens are widespread in various habitats (although if *Boettgerilla pallens* is spread largely with plants from garden centres, it is likely to be found preferentially in gardens). Nevertheless, the survey provided a valuable insight into the fauna of important areas that are not normally easily accessible for collecting. The survey also extended our knowledge of the distribution of recently introduced or recently segregated species, and it would be interesting to repeat it in a few years time to see how the distribution of some of these species has changed with time.

Acknowledgements

Bob Saville of the Lothian Wildlife Information Centre kindly invited me to take part in this survey, and Stella Davies confirmed the curious yellow slugs from Midcalder as *A. owenii*.

References

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Spanish snail siesta

John Lucey

Kilkenny, Ireland

While driving through the lower Ebro valley, near Móra la Nova in eastern Spain, my eye was drawn to the sight illustrated in the accompanying photograph (Fig. 1) which when shown to one ten-year-old caused her to exclaim 'Oh look mushrooms growing on bushes'. On closer examination the shells were found to be sun-bleached Chartreuse, or Carthusian, snails (*Monacha cartusiana*) and they appeared to show no discrimination between the species of plants. The month was June and the temperature on the day was some 80°F.

As many readers will be aware, this adaptive behaviour is a well-known survival strategy for the dry season, in the animal kingdom called aestivation, whereby a state of dormancy is achieved. Among the gastropods this is done by sealing the mouths of their shells with a false operculum, or epiphragm, formed from a series of membranes of hardened mucus. Thus they seal up their shells to prevent moisture loss and wait until the cooler weather comes.

Although there is nothing unusual in this behaviour, after all the Helicidae are well known to revert to summer aestivation or winter hibernation to overcome the effects of drought or cold, it did seem so much more vivid when encountered in the intense Spanish heat. The same phenomenon can be seen in the British Isles where our Heath snail (*Helicella itala*), for example, can often be seen on thistles and furze bushes in dry weather. The Sandhill snail (*Theba pisana*) will, on the other hand, feed on thistles but will also bury itself in the sand at the roots of plants in the hot dry weather of summer (Step, 1945). It would be interesting to know if the populations of *Monacha cartusiana* in south-east England exhibit the same adaptive behaviour in the height of summer as their southern European counterparts.

M. cartusiana is absent from Ireland and is believed to have been introduced to Britain as a 'weed' of cultivation by prehistoric farmers (Kerney, 1970). Formerly believed to only occur in hollows of the



Fig. 1. *Monacha cartusiana*

South Downs in Kent and Sussex (Step, 1945) it has more recently been recorded also in Hampshire and Suffolk (Alexander, 1998; Kerney, 1999). It had been scheduled for protection on the Wildlife and Countryside Act 1981 but was subsequently removed (Statutory Instrument, 1988).

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The search for the Slender Slug¹

Richard Daplyn

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Felbrigg, NR11 8PR.

Felbrigg Great Wood SSSI is situated on the North Norfolk coast two miles west of Cromer. It is home to several species that are unusual for the East of England. One of these is the Slender Slug, which was first found at Felbrigg by Keith Alexander in June 1988 during the estate's biological survey and then confirmed by Ian Killeen in November 1990. This meant that Felbrigg was one of two sites for it in East Anglia, the other being Epping Forest. For the next 10 years it returned to obscurity. Then Mary Ghullam and I decided to see if it was still there.

The Slender Slug *Limax tenellus* is up to 4 cm long and is, as its other name (Lemon Slug) suggests, a translucent pale yellow colour, with dark, often, purple tentacles. This makes it, as Keith Alexander (2001) says, one of the 'most beautiful' slugs about. It is considered to be an ancient woodland indicator.

We started looking at the end of August 2000 and after several attempts we found our first Slender Slug. Once we had our eye in it became much easier to find. We find it most commonly on large fallen Beech but we have found it on the base of live trees. The literature suggested that *Russula* sp. toadstools would be a major source of food but in our experience there is a close relationship with *Ascocoryne sarcoides*, which grows profusely on dead wood. Weather conditions are also important with warm, humid and still conditions being ideal. The time of year is also vital, as the slug is only big enough to identify by about June and is not usually found later than December. Our most successful hunts have been at night when the slugs are much more active.

¹ First appeared in *The National Trust Nature Conservation Newsletter*, February 2002

The slug seems to be restricted to an area within the estate which has ancient Beech and, although we have expanded the area in which it is found, it seems to have very specific habitat requirements. We are continuing to look in other parts of the estate where the habitat is similar.

Reference

Alexander, K., 2001. Why do slugs have such a bad press? *Views (The National Trust)* Issue 34: 18-19.



WANTED

Journal of Conchology, Vol. 29, Parts 1 and 3; Vol. 33, Part 6
and

Cameron, R.A.D. and Redfern, M., *British Land Snails*.
Linnean Society Synopses of the British Fauna No. 6.
Academic Press 1976.

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Wirral, Merseyside [REDACTED]
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Maizan and Guillain

B. Verdcourt

Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB

Bourguignat rather naturally named many genera after French explorers, missionaries, ship's captains and the like. When I was writing a synopsis of *Maizania* Bourguignat, 1889, a genus of tropical African operculates, I noted it was named after an unfortunate ship's ensign who in 1845 journeyed by ship to Bagamoyo in Tanzania and set out to travel west across the continent. It was apparently the first attempt by a European made twelve years before Burton and Speke followed the same route. He was murdered as he was entering Usagara, his journey scarcely begun.

It was at the end of 1843 that Maizan, educated at the Ecole Polytechnique and then an 'enseigne de vaisseau' in the French Navy, first had the idea of crossing Africa from East to West. He had only just returned from a tour of duty involving a journey to East African waters in 'La Dordogne' captained by Commander Guillain. He sought and obtained official approval for his proposed ambitious exploration and sailed to Réunion (then Bourbon) then crossed to Zanzibar arriving there in November 1844. He stayed there eight months planning, gathering supplies and learning Kiswahili.

The Arabs had of course been crossing Tanzania for years and Bagamoyo became the slave port. Later European explorers used the same well marked route and Maizan must have left Bagamoyo along the east bank of the Ruvu (Kyingani) River but he did not get very far – he arrived at a village Dege la Mhulo (or Mhora) (not marked on modern maps) up stream from the Mafizi ferry on the present Dar es Salaam to Morogoro road in the Country of the Wazaramo. Burton (1860: 73–78) discusses Maizan but he did not arrive in Zanzibar until 1856 by which time the facts were not clear. The official story is that Maizan left Zanzibar with only a Madagascan servant Frédérique and a few followers and that he did not wait for the escort that the Sultan had promised him. Burton states that Maizan crossed to Bagamoyo with 40 musketeers and then left them. Either way he appears foolhardy. Burton was very dismissive of the Wazaramo whom he

described as 'ill-conditioned, noisy, violent and impracticable'. They were certainly the chief obstacles of anyone, Arabs included, proceeding westwards, needing placation with extensive gifts before allowing travellers to pass through their area. It was after all their own territory. Their allegiance to the Sultan was pretty tenuous.

When Maizan first reached the village, the headman received him hospitably and entertained him for several days but then had him trussed to a tree, tortured and then killed by cutting his throat. Thus he perished aged only 26. It appears he had made the mistake of fitting himself out too luxuriously (gold chronometer and gold tent pole knobs) and he was suspected of having valuables which he had hidden. Burton claims he was tortured to reveal their whereabouts.

A French naval frigate of the Bourbon and Madagascar division, 'Le Ducouëdic' commanded by the same Guillain Maizan had served under, arrived in Zanzibar. Guillain demanded that Sultan Sayyid Said should send a punitive force to arrest the murderer and the Sultan promised if he could not be caught some other way he would do so. Burton records that three or four hundred men were sent and captured the poor man who beat the drum at the murder. To please the French he was passed off as the murderer and chained so he could hardly lie or stand in front of the French Consulate; he did not die until 1859. I suspect there is something more to this sad tale than meets the eye. It is likely that the idea of Europeans muscling in on Arab trade routes upset someone and the orders for murder came from them. Sillery (1940) also gives a short account of Maizan headed by a quotation 'And some there be who have no memorial'; he would not have known about *Maizania*, a lasting memorial.

Two genera were named after Guillain, one published by Crosse supposedly in October 1884 for a small operculate from Abd al Kuri, the island off Socotra, and the other a shelled Urocyclid by Bourguignat in January 1885. Bourguignat (1889) deals with this matter in a characteristically vitriolic manner. He even cites Crosse as Crasse which I am sure is not a misprint! Bourguignat claims that Crosse's paper did not appear until 15 April 1885 and that his own *Guillainia* should have precedence, but despite this, to avoid future confusion, he renamed his genus *Bloyetia* (after the 'brave capitaine

Bloyet, le fondateur de la station de Kondoa (Ousaghara)'. Bloyet sent material from Tanganyika to Bourguignat and his name turns up as a specific epithet occasionally. Of course if Bourguignat is correct* then his action is not permissible under the present rules of nomenclature. Fortunately both *Guillainia* are at present synonyms of older names. Bourguignat calls Crosse's *Guillainia* a 'mauvais nom générique établi pour la *Rochebrunia tricolor* Bourguignat, 1882 (actually (L. Pfr.)). Bourguignat hated anything to do with the *Journal de Conchyliologie* and the whole sorry story has been well told by my fellow ex President Peter Dance (1970) in his presidential address.

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- Sillery, A.**, 1940. Maizan. *Tanganyika Notes and Records* No.10: 89-91.

* I looked at the volume concerned, *J. Conchyl.* 32 in the library of The Natural History Museum and found Crosse's paper in part 4; although the printer's note on the back cover states 1884 this part arrived at the Museum 13.4.1885 so I think Bourguignat is correct.

Sillery gives M. Guillain but that is only short for Monsieur. The Royal Empire Society catalogue gives Guillain.*.

Protoconchs of *Capulus ungaricus* and *Velutina velutina*

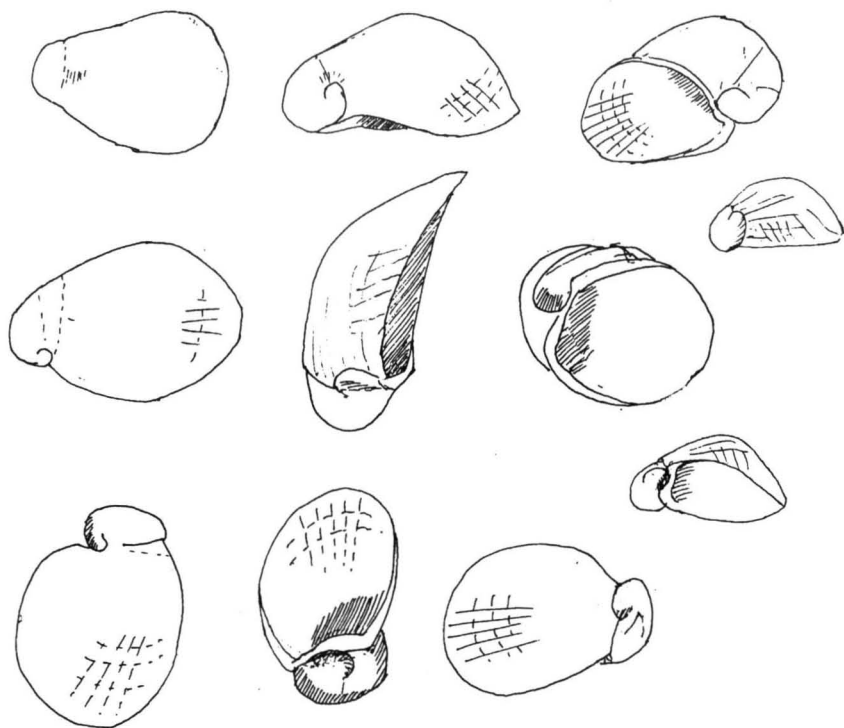
Christine Street

██████████, Barkingside, Ilford ██████████

Distinguishing between juveniles of *Capulus ungaricus* and *Velutina* has always seemed very uncertain, but in my latest shell-sand from Papa-Westray, Orkney, I found a 0.7mm *Velutina* to compare with the 1mm *Capulus* I found in Fetlar, Shetland in 1997. I have been closely examining and trying to draw them, which is very tricky, with microscope needed to see them and glasses to draw. The sketches on the next pages are far from perfect but I hope they give some idea of the difference.

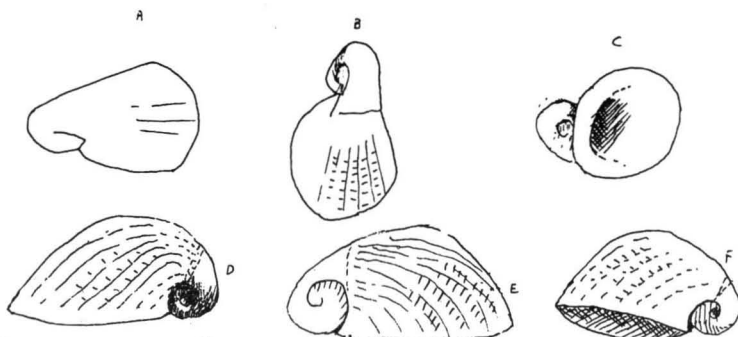
They are similar in both having a finely reticulated surface and a rounded aperture but *Velutina* has slightly less of the even trumpet shape with its lip turned back unevenly to adhere to the protoconch. They both have a curled and twisted protoconch but the *Capulus* is far more of a thin curled tail from which the whorl rapidly widens, while *Velutina* is more like a Plasticine bump which gives the impression of being a much fatter intucked coil from both sides unlike in the adult. In both the overall twist when viewed from above is the same and in both the tip is hidden.

Velutina is translucent with a pinkish tint, while its protoconch is perhaps yellower and is much more delicate, while *Capulus* is a solid creamy opaque white with a more translucent shiny protoconch. The sad postscript is that static made the shell vanish when I thought it was back in its capsule and no amount of searching has found it. Thank goodness for lots of sketches!



Velutina velutina juvenile .7 mm.
WITH PROTOCONCH

South beach, PAPA WEST RAY ORKNEY JUNE 2001



Capulus ungaricus juveniles
WITH PROTOCONCH

A+B 1.0 mm
C+F

D+E 1.4 mm.

FETLAR, SHETLAND. R97

***Pseudanodonta complanata* (Rossmässler, 1835) in the River Medway**

Ron Carr

██████████, Maidstone, Kent ██████████
██

Early in the year, the river Medway is usually lowered artificially by the Environment Agency between the various lock systems for routine clearance of vegetation and so that maintenance work can be undertaken to bridge structures. This procedure obviously presents a good opportunity to look for freshwater mussels. I had hoped to search for the presence of *Pseudanodonta* in the year 2001, but lowering of the river was not undertaken due to the excessive amount of rainfall that had taken place during the preceding winter, the river being regularly susceptible to flooding at that time. I had failed to locate the species in previous searches dating back as far as 1979 and it has been generally accepted that *Pseudanodonta* was absent from Kent (Kerney, 1999).

In January this year I was informed by the Environment Agency that a section of the Medway had been lowered at Tonbridge. A few days elapsed before the opportunity to visit the river became available, but on 25 January I accessed the section of river east of the A26 road bridge at Cannon Lane, Tonbridge (TQ 598465) where I found a number of recently dead *Pseudanodonta* shells on an exposed silty/sandy bank. Many shells of *Anodonta anatina* (L. 1758) were also present, together with abundant small specimens *Unio tumidus* (Philipsson, 1788) and scarce *U. pictorum* (L. 1758). Measurements of *Pseudanodonta* shells were: shell length 55–77mm, shell width 30–38mm (n=8). Unfortunately, on the day of collection, the rain began to pour and although the previous few weeks had been relatively dry, the river was soon in flood once more and further lowering of levels was not undertaken, thus preventing subsequent searching.

The occurrence of dead shells obviously raises the question as to whether these had been washed down from further upstream, though I would consider this probably unlikely in view of the relatively slow current of the river and the preceding rain-free weeks. Previous

invertebrate discoveries have indicated that the quality of the Medway improves west of Tonbridge (Carr, 1984) and it is likely that *Pseudanodonta* may occur in hitherto uninvestigated sections of the river.

References

Carr, R., 1984. Notes on some local Hydrophilidae (Col.) in Kent. *Entomologist's mon. Mag.* **120**: 222.

Kerney, M.P., 1999. *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*. Harley Books, Colchester.



Field Studies Council Courses

5-7 July 2002

Slugs and snails: Critical identification of terrestrial molluscs.

Tutor: Noel Jackson

£130 residential; £104 non-residential

Malham Tarn Field Centre, North Yorks

Tel. 01729 830331

18-20 October 2002

The Juniper Hall Snail Course. Land and freshwater species.

Tutor: June Chatfield

£123 residential; £106 non-residential

Juniper Hall Field Centre, Surrey

Tel. 0845-458-3507

Shells on bank notes

Fred Pinn

London

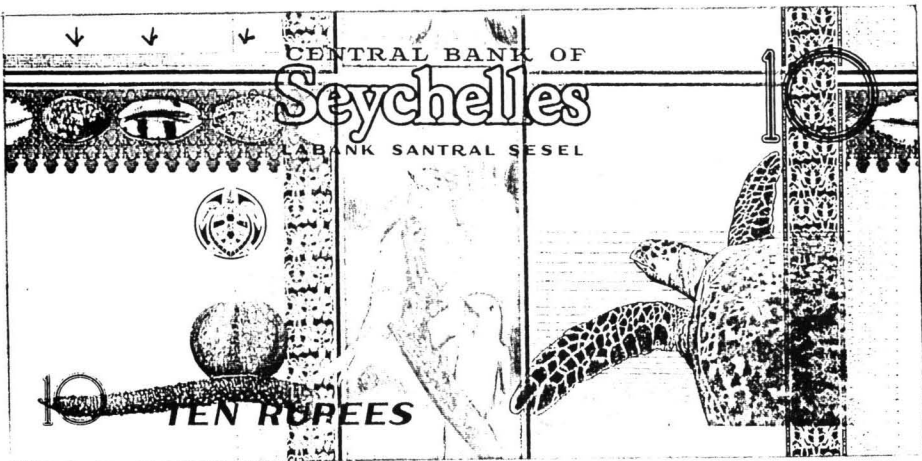
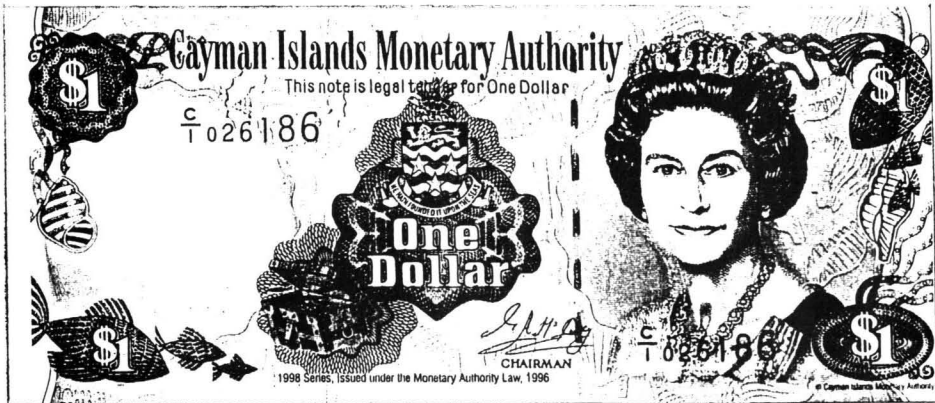
I have discussed in these pages bank notes with shell designs before: Cowries (*Cypraea moneta*) on paper money of the Maldiv Islands and Nigeria, and the chank (*Turbinella pyrum*) on the Tibetan and Bhutanese notes. Other shells have now made their appearance on paper currency of the Cook Islands, the Seychelles and the Cayman Islands (see illustrations on next pages).

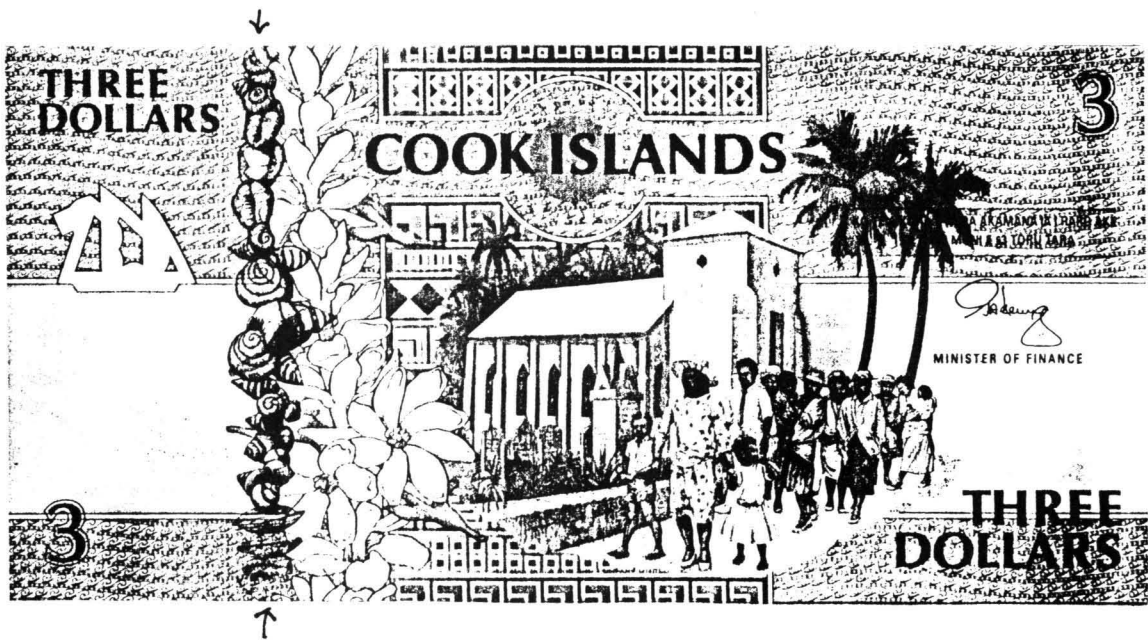
The three-dollar note of the Cook Islands shows a whole string of shells beginning at the bottom with three bivalves; the rest consists of a mixture of several species of cowries and other undefinable species, some looking like tree snails. The other side of the note has among some jolly scenes just one shell only: *Turbo niloticus*.

The Seychelles, on the other hand, have always been famous for their large variety of cowries. The ten-rupee note reminds 'the bearer' of the treasures that can be found in the islands apart from other exotic attractions like the double coconut beside a sea cucumber (it must be the only one on global currency) and other local wildlife.

The Cayman Islands one-dollar note is so modern (1998) and its shells so highly stylised that only their families can just be recognised but no more. But they all, no doubt, came out of the ancient treasure chest.







Shells on bank notes

Conchological Society marine field meeting at Kimmeridge, Dorset, on 23 June 2001

Ron Boyce

Earley, Reading

This meeting was one of the very few in 2001 that we were certain not to have to cancel as a result of the foot-and-mouth epidemic, since access to the coastline at Kimmeridge did not involve crossing farm land. There could have been some difficulties for members cut off by the tide near Chapman's Pool, but when I arrived in the area a few days before the meeting I was delighted to find that most of the restrictions on using the local footpaths had been lifted and the problems had mostly gone away.

Since we knew that the Dorset Wildlife trust had organised a field meeting for school children on the same day as ours on the most accessible ledges in the centre of the bay, Rosemary Hill and I had a quick preliminary look at the central ledges on 21 June so that we could concentrate on the peripheral areas on the Saturday.

Kimmeridge Bay is immediately east of the Lulworth firing range, and the military authorities there were unable to guarantee the absence of live unexploded ordnance to the west of their danger signs. They were however, prepared to allow us to work the shore west of Charnel on condition that we had a military escort and on the further condition that I would sign a personal guarantee of financial liability for any problems. I suspected that this was not a good idea so we restricted our survey to the public access area.

Recent marine field meetings have usually been dull and wet, but this one took place in calm weather with bright sunshine so cameras were much in evidence. Finding the right road to Kimmeridge village was a bit problematic since earlier weeks of wet weather had encouraged the local vegetation to cover up most of the road signs. However, we all managed to find the way



Society members at the Kimmeridge meeting. Photo: Janet Sawyer

successfully, the only problem of any note being the long queue for the Studland Point ferry.

There were six of us in the initial survey party and we were joined later by two others.

The shore was one of the most user-friendly that I have encountered, with large shallow rock pools and plenty of shell sand, and low tide seemed to last for ever. There were fossil ammonites visible in the rocks along the shore. Initially we concentrated on the western part of the bay, where we had particularly been asked to look out for *Monodonta lineata* which is scarce here. We found it at one point only, next to the first Danger notice (SY 904792).

Samples taken of seaweeds at low tide revealed very large populations of *Barleeia unifasciata*, some of which had shells which were entirely red.

A list of the species encountered (Table 1) is on page 186.

Acknowledgements

Many thanks to Peter Tinsley of Purbeck Marine Wildlife Reserve and Major Michael Burgess of Range Control at Lulworth military firing ranges for supplying useful information about the site and on the availability of footpath access during the Foot-and-Mouth outbreak.

**Table 1. List of marine mollusca from
Kimmeridge Ledges, 23 June 2001.**

<i>Lepidochitona cinereus</i> L	<i>Rissoa parva</i> L S
<i>Diodora graeca</i> S	<i>Cingula trifasciata</i> L S
<i>Tectura virginea</i> S	<i>Manzonina crassa</i> S
<i>Patella depressa</i> L S	<i>Onoba aculeus</i> L
<i>Patella ulyssiponensis</i> L S	<i>Onoba semicostata</i> L S
<i>Patella vulgata</i> L	<i>Crepidula fornicata</i> L S
<i>Helcion pellucidum</i> S	<i>Trivia arctica</i> S
<i>Monodonta lineata</i> L [one]	<i>Trivia monacha</i> S
<i>Gibbula magus</i> L S	<i>Ocenebra erinacea</i> S
<i>Gibbula cineraria</i> L S	<i>Nucella lapillus</i> L S
<i>Gibbula umbilicalis</i> L	<i>Buccinum undatum</i> S
<i>Calliostoma zizyphinum</i> S	<i>Chauvetia brunnea</i> L
<i>Tricolia pullus</i> L S	<i>Hinia reticulata</i> S
<i>Bittium reticulatum</i> S	<i>Hinia incrassata</i> L S
<i>Lacuna pallidula</i> L S	<i>Mangelia [Raphitoma] linearis</i> S
<i>Lacuna vincta</i> S	<i>Rissoella diaphana</i> L
<i>Littorina littorea</i> L	<i>Nucula nucleus</i> S
<i>Littorina maria/obtusata</i> L	<i>Nucula</i> sp S
<i>Littorina obtusata</i> L S	<i>Mytilus edulis</i> L S
<i>Littorina saxatilis</i> L S	<i>Musculus discors</i> S
<i>Littorina [Melarhaphe]</i>	<i>Chlamys varia</i> S
<i>neritoides</i> L S	<i>Monia [Pododesmus] patelliformis</i> S
<i>Skeneopsis planorbis</i> L S	<i>Cerastoderma edule</i> S
<i>Eatonina fulgida</i> L (4)	<i>Spisula solida</i> S
<i>Barleeia unifasciata</i> L S	<i>Timoclea ovata</i> S
<i>Rissoa guerini</i> L S	<i>Corbula gibba</i> S
<i>Rissoa interrupta</i> L	<i>Sepia officinalis</i> S
<i>Rissoa membranacea</i> S	

L = Live

S = Shell only



A 'Come out of your shell' Exhibition at Haslemere Museum, Autumn 2001

John Llewellyn-Jones

Colchester, Essex

On Saturday, 22 September I decided to drive down to Haslemere and visit the Shell and Craft Exhibition put on by the Haslemere Educational Museum, including shells from Terry Wimbleton's collection, that had been advertised in the Conchological Society's Newsletter. The main museum galleries were closed due to Lottery Funding refurbishment (re-opening summer 2002) but the usual programme of temporary exhibitions continued in another part of the museum. Museum entrance is free and opening times are Tuesdays to Saturdays 10.00 a.m. – 5.00 p.m.

The 'Come out of your shell' Exhibition was divided into three sections: The Waverley room contained information about the Mollusca in photographs from the Conchological Society's Touring Exhibition, exhibits and beautiful shell displays of marine, freshwater and terrestrial molluscs with special and very professional exhibits on the common garden snail *Helix aspersa* L. and mollusc predation, by Terry Wimbleton.

The next section was made up of artefacts using molluscs or molluscs as inspiration for craftwork set up outside the lecture room. This exhibit was divided up into (a) craft-work using silver, gold, pewter and mosaics; (b) craft-work using the scallop and (c) shell artefacts. The craft-work, produced by members of the Surrey Guild of Craftsmen, especially Nitya McDowell, Louise O'Neill, and Rachel Mulligan, used gold and silver to form exquisite jewellery mainly earrings, necklaces and rings based on shells and fossils (Fig. 1). There was a delicate clear glass amphora and mirror both decorated with pewter shell icons by Bonnie Mackintosh while Jim Honeywood had produced a Welsh slate *Lymnaea stagnalis* L. 1758 paperweight. The Scallop, recognising the book, published with that name by the Shell Oil Company in 1951, had been used by Gillian Gray to design and produce an interesting textile scallop fireguard from recycled materials. Her notebook, a printed skirt, some embroidered prayer

kneelers (from churches at Steep, Petersfield, Hants and Weybridge, Surrey) (Fig. 2), a printed shirt and a number of scallop designs were also displayed with Sally Crockett's beautiful scallop mosaics edged mirror.

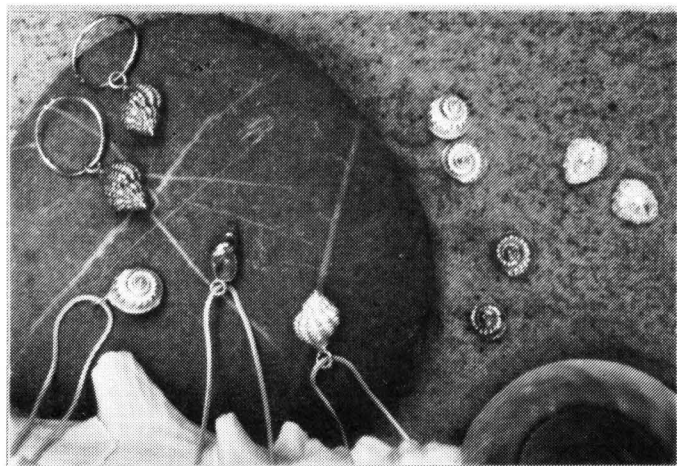


Fig. 1

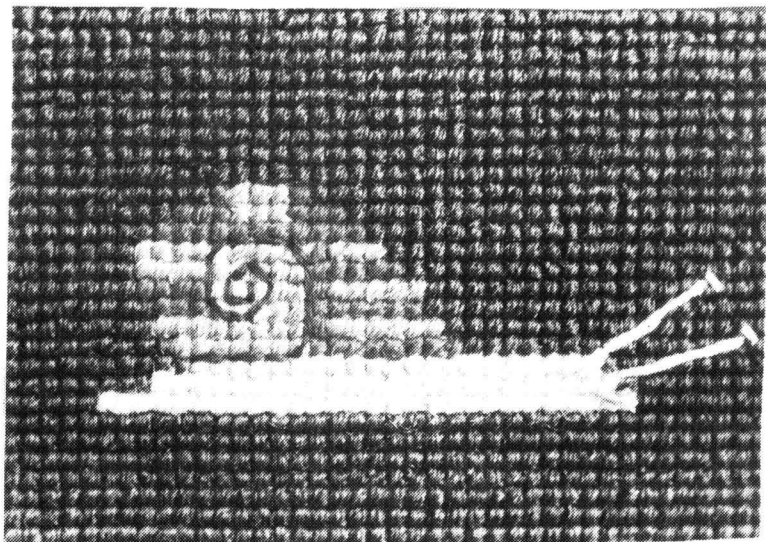
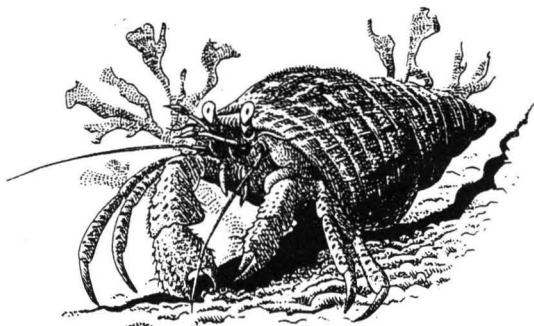


Fig. 2

The last part of this section included a wide range of mollusc artefacts such as tiger and money cowry cameos, a shell pill box, shell disc money, MOP cantons from China, button top hairclip, silver bracelet and box inlaid with abalone, a silver turban purse and two vicious looking fish lures and hook from the Solomon Islands, cowry tablemat, napkin rings, shell bags, a necklace and a *Cassus rufa* L. 1758 with several faux cameos. There were also a number of bowls and plates made from the window pane oyster and the 'pièce de résistance' was a pearlised nautilus shell carved and engraved in Noumea, New Caledonia late last century, probably by a French inmate in a penal colony. All these artefacts came from various sources including Terry Wimbleton's and the museum's own collections.

The last section continued in the foyer where two walls were covered in artwork by local artists and members of the Young Embroiderers' Guild, both drawings and embroideries. Artists included were Freda Chapman (Museum volunteer) who illustrated really beautifully a seashell poem, paintings of a snail by Thelma Ede (Museum volunteer), scraperboard marine molluscs by Christine Barber, John Reaney's black and white sketches of a snail on apple and courgette, and lastly John Davis's glow worm feeding on a garden snail, watercolours of a garden snail and a beach razor shell. His black and white drawing of a hermit crab was used as the motif for the posters and exhibition materials (Fig. 3).



Hermit crab © John Davis

Fig. 3

Also this day had been put aside as a special roadshow day and members, young and old, of the public were invited to bring in shells both local and world-wide which Dr June Chatfield, Gordon Ede (Museum volunteer) and Terry Wimbleton identified and discussed with the owners. The day was a great success with a steady stream of visitors coming in until the museum closed. There was also a selection of books and references laid out on tables for those members of the public to look at while waiting their turn.

The exhibition, as it stated on the posters, really did give the opportunity for people to see, experience and find out about the natural shell, shell art and artefacts inspired by them and made from them.

Thanks must be given to Penny Hollow (a Trustee) and Heather Perry (Assistant Curator) of the museum for all their support and help with the exhibitions. A special thanks must also be given to Angela Gill (Curator) for checking this article although the author accepts full responsibility for any errors, factual or otherwise.



Review

Seashells of Cyprus by John Orr. Published by Efstathiadis Group, Greece, 2001 (UK Distributor: Gazelle Book Services, Falcon House, Queen Square, Lancaster LA1 1RN) ISBN 960.226.588.4. 231pp. Paperback, price £8.50.

This handy, pocket-sized guide will be a useful introduction to the shells of Cyprus for both residents and holiday-makers alike. It covers some 182 species including tusk shells, chitons and cephalopods as well as the usual gastropods and bivalves.

It is a pleasure to find a publication which emphasises living molluscs, in both text and illustration, as much as shells. The book is full of interesting information: '*Apporhais* have separate sexes, the males seeking the females during breeding seasons. Yellow eggs are laid in small groups on muddy surfaces where they soon hatch out as veligers.' *Nassarius mutabilis* has 'false tentacles on the rear of the foot which are an effective decoy.'

The book is lavishly illustrated throughout in colour, showing both shells and living molluscs, the latter include many enlarged micros like *Alvania cimex*, *Truncatella subcylindrica* and *Tricolia tenuis*, and even a few nudibranchs including *Dendrodoris grandiflora*. I was particularly interested to see that the animals from both normal and melanistic shelled *Nassarius gibbosulus* have the same colouring. However, it is a pity that many of the captions do not indicate the scale of enlargement. It is interesting to see radulas from over 30 species, yet I wonder whether the inclusion of extra species might have been more useful for the general readership which this book is presumably aimed at.

A section of hints to collectors, glossary, index and short bibliography complete this book. Advanced collectors may be inclined to dismiss this as a 'beginner's' guide, yet the inclusion of so much information on living molluscs offers much for every collector, and the modest price means that it is easily affordable. A definite buy.

Kevin Brown

***Oxychilus helveticus* (Blum) in Ireland**

Nora McMillan

██████████, Bromborough, Merseyside ██████████

The history of *Oxychilus helveticus* (Blum) in Ireland is confused. Kerney (1978) recorded it as 'new to Ireland' from three sites in Co. Limerick. However, Stelfox's ms. journal, under date 26/2/1911 describes how he with R.J. Welch and N.H. Foster visited Hillsborough, Co. Down, and recorded '*Hyalinia rogersi* B.B.W. A few living in the hottest house with *Helicodiscus lineatus*.'

Unfortunately, these Hillsborough specimens of *H. rogersi* (now *Oxychilus helveticus*) do not seem to have survived: when searched for in the Stelfox collection (now in Liverpool Museum) only an *empty* box, carefully labelled 'Hillsborough 26.12.11' was found. Nor are any Hillsborough specimens of *helveticus* listed in Ross's *Catalogue of the Land and Freshwater Mollusca of the British Isles in the Ulster Museum* (1964) so it would appear that any material collected by Welch has also vanished.

A ms. note by Stelfox in my possession is headed 'Notes on some species of *Hyalinia* in Westerlund Collection in the Dublin Museum by A.W.S.', and here is his note about *H. helvetica*:

'*H. helvetica* Blum from Bantry, Ireland [no collector's name NMCM]. This shell is named wrong it is but the young of *H. cellaria* var. *sylvatica* Morch.'

See also Stelfox's Irish list (A list of the Land and Freshwater Mollusks of Ireland. *Proc. Royal Irish Academy*, vol. 29, B, pp. 65-164 (especially pp. 68, 78 and 128) 1911.

Reference

Kerney, M.P. *Oxychilus helveticus* (Blum) (Pulmonata: (1978). Zonitidae) new to Ireland. *Journal of Conchology*, vol. 29, pp. 261-2.

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More about *Succinea* spp. in unusual places

Dr Verdcourt's note on *Succinea* spp. in garden centres and other unusual places (Conchologists' Newsletter No. 158, September 2001, p. 67) has reminded me that in October 1995 I received a living

Succinea 'from a temperate greenhouse of Greenhill Nursery, Nursery Lane, Garston, Liverpool'. I sent the live specimen to Dr Lloyd-Evans who dissected it, considered it to be Quick's *Succinea pfeifferi*, and commented 'a most unusual habitat, even unique'.

Unfortunately I was unable to follow this up at the time, and now the nursery has disappeared.

Nora McMillan



Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary:

Ron Boyce, [REDACTED], Reading, Berkshire [REDACTED]
[REDACTED]

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.

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
MSL = Malacological Society of London

MSL – Wednesday 5 June. Department of Earth Sciences, Open University, Milton Keynes. Conference: *Fossil molluscs*. Contact Peter Skelton [REDACTED].

INDOOR – Saturday 8 June. Leeds Museum Resource Centre, 1 Moorfield Road, Yeadon (grid ref. SE 217412). Viewing of collections and archives. Co-ordinator: Adrian Norris [REDACTED]. The Resource Centre is just off Yeadon High Street and may be reached by bus services 97, 97a, 736 and 757 from Leeds Central Bus Station.

FIELD – Saturday and Sunday 15–16 June

North Worcestershire

Leaders: Ron Boyce and Rosemary Hill [REDACTED]

This meeting will explore a range of diverse woodland sites on different substrates. Bring packed lunches and wellingtons. Because of restricted parking space at the sites being visited, meet *promptly* at 10.00 h at the main entrance to Webbs of Wychbold garden centre (grid ref. SO 929671) which is well signposted from Junction 5 of the M5 about 0.5 km from the Droitwich radio masts. The garden centre has toilets and sells sandwiches and wellingtons.

The first site to be visited will be woodland on mixed substrates at the Knapp and Papermill. This is the most difficult site for car parking (space for about 4 cars at SO 752521), hence the early start. We will visit another site in the afternoon. We will meet again at Wychbold at 10.00h on Sunday. Subject to permission being obtained we will visit Pepper Wood (SO 938744) which is ancient woodland on clay substrates, then Uffmoor Wood (SO 948811) which is on Coal Measures.

NHM – Saturday 6 July: 14.30 h in the De La Beche Room. Short talks by members – Avoiding Foot-and-Mouth. **Volunteers required.**

FIELD – Sunday 21 July

Loch Skeen, near Moffat, Dumfries

Leader: S. Peter Dance

A one-day collecting trip to Loch Skeen to look for *Lymnaea burnetti* Alder. Loch Skeen (altitude 1700 ft = 518 m) is the type locality for this form (?subspecies) of *L. peregra* Müller, distinguished from the typical form by its involute shell. The mollusc should be active in July. There should also be ample time to look for other molluscs in and around the loch. It is proposed to stay overnight on the Saturday in Carlisle a convenient location with reasonably priced accommodation, and to travel 40 miles to the loch via Moffat early the next day. Those who want to go direct to Loch Skeen (Grid ref. NT 1716) on the Sunday morning may rendezvous at the car park there, at 09.00 h. Bring a packed lunch, a scoop and appropriate clothing (waders are useful for collecting in the loch). Be prepared for a stiff climb up a path strewn with loose stones, but be assured that the effort should be rewarded with majestic scenery – and a most unusual snail.

Sunday 4 August

Marine Bivalve Workshop

Reading Museum Store, Darwin Close

This workshop hosted by Reading Museum Service from 11.00 to 16.00 h will give participants the opportunity to test their skills on unidentified material from Reading's extensive collection. The venue is the Research Room, near the shell store in Darwin Close, which has bench space for up to 8 people. A small number of microscopes and shell identification books are available.

Travel south down Basingstoke Road from Reading, turn right into Bennet Road, right again into Commercial Road and continue to the building at 2-4 Darwin Close. Parking is free, with vehicular access from the Darwin Close side. The entrance to the store is from the Commercial Road side; press the Museum button on the intercom to speak to staff, who will unlock the door. Reading Buses services 6 (stop SL) and 8 (stop SK) travel to Bennet Road (information from 0118 901 5900) but are infrequent and the store is 10 min walk from the bus, so non-drivers are encouraged to get a lift from Reading station if possible. Maps are available on request. There are no shops nearby so please bring a packed lunch and any other necessary sustenance. Further information from June Chatfield or David Notton

YCS – Saturday 7 September: Springs on east face of Ingleborough. Meet at 10.30 h (please note earlier time) at the National Park car park in Clapham, grid ref. SD 745693. Contact David Lindley [REDACTED]

NHM – Saturday 7 September: 14.30 h in the de La Beche Room. For our first indoor meeting of the new season we welcome as Guest Speakers Jan Light and Ian Killeen on the subject of 'Marine gastropods of Rodrigues'.

FIELD – Saturday 21 September. Nottinghamshire. Field recording in a completely unrecorded square [SK76 Maplebeck/Laxton/Normanton]. Leader: Chris Du Feu [REDACTED]

WKSHP/FIELD – Sunday 6 to Thursday 10 October

North Cornwall

Organisers: Jan Light (Conch. Soc.) and Pamela Tompsett (CWT)

Based at Godrevy Point, N. Cornwall, the purpose of this joint meeting between the Conchological Society of Great Britain and Ireland and Cornwall Wildlife Trust is to improve your marine recording skills by focussing on field surveying and sampling, laboratory processing and identification techniques. Most fieldwork will be carried out during ELWST at Godrevy Point with the aim of sampling as many habitats and microhabitats as time permits. We will then take samples to a laboratory nearby with the aim of working through material, before returning to the shore the next day.

There will be an option for individuals to visit and work on different shores to put learned techniques into practice. The advantage of this approach for the Society's marine recording scheme is that material collected can be worked up on the spot and records logged, leaving participants the option to take home for further work only such samples and specimens as they wish.

Venue and Accommodation: a laboratory at a local College will be hired for which the shared charge will be modest. The charge will also include provision of a hand-out pack. For participants needing to book accommodation it is recommended that hotel, B&B or self-catering reservations should be made at a convenient distance to Godrevy Point.

An early indication of interest would be appreciated as this will enable organisers to gauge uptake for this Meeting, and to be adequately prepared for the Workshop. If you will be travelling to Cornwall by public transport and will need lifts locally, please let us know. A special welcome will be extended to members who are new to Field Meetings.

Further details from Jan Light [REDACTED] Godalming, Surrey, [REDACTED]

YCS – Saturday 12 October. Pateley Bridge for Ravens Gill (*Limax tenellus* site). Meet at 11.00 h in the car park on the North side of the bridge at Pateley, grid ref. SE 158656. Contact David Lindley [REDACTED]
[REDACTED]

YCS – Saturday 19 October. AGM and Presidential Address. 13.00 h at Leeds City Museum Resource Centre, Yeadon. Contact David Lindley [REDACTED]
[REDACTED]

INDOOR – Saturday 9 November. National Museums and Galleries of Wales, Cardiff. Joint Meeting with the Malacological Society on the subject of 'Recording schemes and biodiversity analyses'. Presentations from a range of speakers. See pages 198-199.

WKSHP – Saturday 30 November. The annual workshop held in Woking offers Members the opportunity to receive tuition on identifying difficult groups. Bookings to Judith Nelson [REDACTED]

NHM – Saturday 14 December. 14.30h in the De La Beche Room. We welcome as Guest Speaker Stephan Müller from Cambridge University on the subject of 'The Asian clam in Britain – not as bad as we thought?'.
[REDACTED]

NOTE

Because of refurbishment work at the Natural History Museum in London, the Palaeontology Demonstration Room will be unavailable for our meetings, and arrangements have therefore been made to meet in the De La Beche Room, which is to be found nearby in the Earth Sciences wing.



Conchological Society/Malacological Society

Joint Meeting

Recording schemes and biodiversity analyses

Saturday 9 November 2002

National Museums and Galleries of Wales, Cardiff

A series of speakers including some overseas visitors will be leading a meeting discussing marine, freshwater and terrestrial field research programmes investigating biodiversity. Some challenging issues for the future understanding of molluscan biodiversity are:

- How do we (whether amateur or professional) record molluscs to give estimations of molluscan biodiversity?
- What do the biodiversity indices derived from this data mean?
- How do we collect ecological data for integration into such an analysis?
- Can we track changing trends through time (old census data and its use today)? Is there a value to going back to sites recorded 25, 50, 75, 100 years ago?
- What can we derive from collectors' diaries and anecdotal information?

The range of presentations at this meeting will help explore these issues and provide a forum for discussion of future work.

The venue for the meeting is the National Museum & Galleries of Wales Icons Suite (60-80 people) which will also accommodate some posters at the side of the room for individual presentations on the status of county atlases or thoughts on future recording efforts in the UK and abroad.

A full programme including a list of speakers, provisional timetable and local Hotel/Guest House accommodation will be issued with the September Newsletter.

For further information contact:

Dr Mary B. Seddon,

Department of Biodiversity & Systematic Biology, National Museums & Galleries of Wales, Cathays Park, Cardiff. Tel (02920 573343) (Direct), (02920 573224)(Dept Office).

E-mail: Mary.Seddon@nmgw.ac.uk

Conchological Society/Malacological Society

Joint Meeting

Please return this slip to:

Dr Mary B. Seddon,

Department of Biodiversity & Systematic Biology,

Museums & Galleries of Wales, Cathays Park, Cardiff.

Tel.: 02920 573343 (Direct), 02920 573224 (Dept Office).

E-mail: Mary.Seddon@nmgw.ac.uk

I am/We are interested in attending the joint meeting between the Malacological Society and the Conchological Society in Cardiff on Saturday 9 November 2002. Please send further information about the meeting.

■ Please indicate if you are interested in giving a presentation/poster.

■ If you would be interested in using the collections and library at the Museum on Friday 8th November 2001, please indicate your areas of interest below. Please note we need advance notice to prepare passes and ensure that we have staff to handle the request.

Name:

Address:

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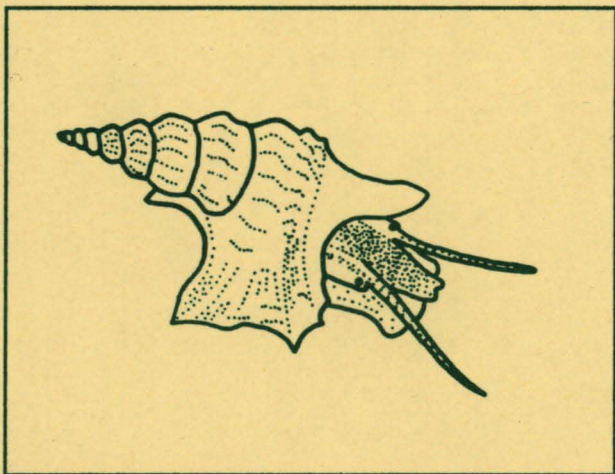
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E-mail:

The Conchologists' Newsletter

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Important notice to members from the Newsletter Editor – All change!

Unfortunately, our Hon. Secretary, Colin Gillard, has had to resign with immediate effect because of ill health and I have relinquished the post of Hon. Newsletter Editor and taken over from him as Acting Secretary. *Please send secretarial business and queries to me, and not to him.* This is the last issue of the Newsletter that I am producing and it made sense to prepare as much of it as I could before taking over as Secretary, which is partly why this is a bumper issue. There is also a very long article that it would otherwise be difficult to accommodate.

The position of Hon. Newsletter Editor is therefore vacant and anyone who would like to take over as Newsletter Editor is welcome to contact me if they would like to know more about the job or to contact the President, Adrian Rundle. Even if you do not wish to take over as Editor but would be prepared to help with the production of the next (December) issue, please volunteer! Until a new Editor is found, please continue to send Newsletter contributions to me by post or Email and I will forward them in due course. More up to date information may be available on the Society's website at www.conchsoc.org for those able to access it.

I have very much enjoyed being Newsletter Editor and I would very much like to thank all of you for contributing such interesting articles and especially Brenda Gower for producing the camera-ready copy for the printers. However I have been Newsletter Editor since 1995 and I am now looking forward to a new role in the Society.

A new graphic designed A4 colour mollusc magazine is planned for April 2003 onwards along with a relaunch of the Society as we need to recruit more members. Anyone wishing to know more about the new mollusc magazine or to check the suitability of articles they plan to write (after the deadline for the December issue – 20 October – of the Newsletter) for the new mollusc magazine should contact Ian Killeen who is coordinating this venture.

Jetplanes endangered by landsnails

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Recently I received for identification a sample of landsnails, which had been collected from the landing strip of the Ramon Airbase in the Negev, Israel, by M. Har-Zion, a ranger of the Israel Nature and National Parks Protection Authority (INNPPA), on 20 December 2001 (HUJ 8941/4 and TAU 34585/4). A second sample was received from Dr. S. Moran of the Plant Protection and Inspection Service of the Ministry of Agriculture and Rural Development, which had been collected from the tarmac of the same airbase on 7 February 2002 (HUJ 12836/4 and TAU 34584/3). Both samples belonged to *Xerocrassa seetzenii erkellii* (Kobelt, 1878), Fam. Hygromiidae.

According to M. Har-Zion, a similar situation existed this winter on the Hazerim Airbase. However, the snails found on the landing strip over there belonged to a different subspecies *Xerocrassa seetzenii seetzenii* (Pfeiffer, 1847).

It appeared that thousands of these snails invaded the landing strip this winter each time after a heavy rainfall. In doing so they created a dangerous situation for the jetplanes during take off and landing in at least three ways:

- the numerous crushed snails caused slippery conditions on the run ways;
- the snails lying on the tarmac were sucked into the engines;
- the snails attracted numerous birds feeding on them like crows and ravens (Corvidae), bustards (Otididae) and Stone curlews (Burhinidae), both during day and night, causing near-collisions with the planes.

At the time the snails caused problems the landing strips were bordered by small bushes and a number of annuals. From these areas

the snails invaded the runways. The use of herbicides to combat the vegetation and molluscicides to control the snails was more or less ruled out beforehand since the airbases are surrounded by large nature reserves. Moreover rangers of the INNPPA are supervising the control of pest species at the airbases. Therefore an alternative, more environmentally friendly solution for combating the problem was proposed: to spray the sides of the landing strips with a highly concentrated solution of brine. Brine will not only control or suppress most of the vegetation or cause a replacement of the latter by less attractive salt-loving plants, but it will also prevent the snails moving from their natural habitat on to the tarmac (White & Davis, 1942; Godan, 1983). Brine is available in unlimited quantities from the nearby Dead Sea Works. It is a cheap material and actually has been used already for years in the prevention of dust forming on unpaved roads in the Negev. Unfortunately I do not know whether the proposed solution has been actually applied at the airbases.

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Collectors in East Africa

No. 31: Baron Carl Claus von der Decken (1833–1865)

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Carl Claus von der Decken was born on 8 August 1833, at 'Kotzen in the Mark' (presumably the one 30 km N. of Brandenburg) the youngest son of Baron Ernst von der Decken, one of an old and wealthy Bavarian family. Ernst had been an officer in the English Legion and fought at Waterloo and later became Equerry and Master of Horse in Hanover to three kings of Great Britain, George III, George IV and William IV who were also Kings of Hanover from 1815–1837, after which the dual role ceased since Queen Victoria, as a woman, was ineligible. George III, also George I and George II, had been Electors of Hanover before 1815. The throne passed to the Duke of Cumberland, Ernest Augustus (1771–1851) and Baron Ernst served him also. Carl Claus's mother was a daughter of a Prussian, Colonel Friedrich von Stechow.

Not surprisingly Claus joined the army at eighteen but spent much of his time studying mathematics, languages, zoology and botany. He travelled extensively in Europe and in 1858 went game shooting in Algeria but he had long wanted to become an explorer. On his return to Hanover the same year he left the army.

He soon had the opportunity to join (and finance) the expedition to East Africa of Dr Albrecht Roscher (?1836–1859) (after whom the very attractive orchid *Vanilla roscheri* Reichb. f. is named). Roscher had in fact already left for Zanzibar and a journey down the coast to Mozambique; by February 1859 he was just north of Dar es Salaam where he met Burton and Speke (Burton, 1872 ii: 332). He reached Mozambique in March but sadly was murdered by Lake Nyasa (Gray, 1958).

Claus arrived in Zanzibar in September 1860 and found out about the murder and set about trying to organise a journey to rescue Roscher's effects and avenge his murder. The perpetrator had actually already been beheaded. When Claus arrived in Kilwa after sailing

down the coast he found everything possible was done to thwart him continuing. After a further 165 miles he gave up and returned to Zanzibar. He gave up the idea of exploring Lake Nyasa and decided to visit Kilimanjaro and Kenya. On 28 May 1861 accompanied by Koralli (a European companion who had nearly died on the journey beyond Kilwa) and by Richard Thornton¹ (1838–1863) Claus crossed to Mombasa and met the missionary Johann Rebmann (1820–1876) at Rabai. He reached Kilimanjaro six weeks later but was only able to reach 2400 m. At least he could confirm the mountain was covered in snow which many in Europe had said was impossible (now 140 years later the snow is receding at an alarming rate). He returned to Mombasa via the Usambaras, the Uмба R. and Vanga; after visiting Takaungu he sailed for Zanzibar calling in at Pangani on the way. On arrival in Zanzibar Thornton left but Claus stayed on Zanzibar from November 1861 until August 1862 waiting for an assistant Dr Otto Kersten (1839–1900) and a hunter named Androk. Whilst waiting he investigated the history, geography, geology, zoology and botany of the island (von der Decken, 1869–79). A new attempt was made on Kilimanjaro and they reached 4200 m, but an attempt to proceed towards Lake Victoria was blocked by Masai and they arrived back in Zanzibar on 30 December 1862. He then had the idea that one could reach Mt Kenya by taking a paddle-steamer up one of the rivers reaching the east coast north of Mombasa. He ordered a boat from Europe and in the meantime decided to visit the Comoro and Seychelle islands, Réunion, Mauritius and Madagascar. Koralli, his companion and servant died in Réunion and Madagascar was in such a state of unrest that he could not leave the coast.

Since no boat of the size he needed could be found he returned to Europe to supervise the building of one himself, arriving in Hanover in September 1863. He was acclaimed in all the major European capitals and in London received the Gold Medal of the Royal Geographical Society. He made arrangements in Hamburg for the construction of a paddle-steamer the *Welf* (cub or whelp) and a steam-launch *Passe partout*. His old friend Count van Goetzen offered to join him and they engaged a staff, two from the Austrian Navy, a doctor, an artist, two mechanics, a carpenter and a cook. Both boats (in bits), von der Decken, Goetzen, the staff and all the stores including 300

tons of coal arrived in Zanzibar in November 1864 where they were received by Kersten who had arrived earlier. The boats were assembled on the sea front at Zanzibar, the steam-launch being ready in February 1865. Claus used it to explore the estuaries of the R. Tana and R. Ozi which used to join about five miles inland. Later in June the *Welf* was launched and flew the Hanoverian flag. At this stage Kersten and Goetzen, both ill, had to return to Europe. For over 200 years the diseases in Africa had been sorting out those Europeans who could cope from those who could not. Some died within a few weeks of arrival; others survived despite catching the diseases, others seemed to be immune to everything. Quinine and other drugs of course soon made it safer for all. East Africa was a healthier place than West Africa; in fact the highlands were one of the healthiest places in the world.

From Lamu both boats proceeded to the Tula R. escorted by HMS *Lyra*. Then everything began to go wrong. Cholera struck and eight men died but Claus survived. On 29 July the boats left for the Juba R.; the *Welf* ran ashore but was refloated. The *Passe partout* was wrecked on the rocks and its mechanic drowned. Claus pressed on and after a month arrived at Bardera 165 miles from the mouth; after a week he moved on but 20 miles further on the *Welf* was also wrecked and the remains were still visible in the 1920s and might possibly be there still. Claus now decided to proceed on foot but had to return to Bardera to obtain provisions. He travelled with Dr Link (1839–1865)² the medical doctor attached to the expedition and interestingly Mabruki Speke who had travelled with Speke. On 1st October the rest of the camp was attacked (little seems to have changed in Somalia!) and Brenner, the only one properly armed shot the marauders. Only five Europeans remained and they returned to the coast rowing. They actually passed Claus's boat without stopping, fearing the worst, reached the coast in five days and arrived in Lamu on 16 October and finally Zanzibar on 24 October. On 15 November Mabruki arrived at Lamu from Brava (Barawa) and reported that von der Decken and Link had been murdered on 2 October.

The publication of von der Decken's results and the account of the journey was entrusted to Otto Kersten by Claus's mother Princess Adelheid of Pless (she had remarried after Ernst's death, Prince Hans

Henry X of Pless) then to Baron Julius von der Decken after her death. The full results of the journey were not completely published for many years. Many new plants and animals were described from the collections made. Everyone who has travelled in the East African bush will know the call of von der Decken's hornbill, *Tockus deckeni* (Cabanis). One of the most spectacular alpine plants in the world is *Lobelia deckenii* (Aschers.) Hemsl. a fitting memorial to this explorer who is scarcely mentioned in English books on African exploration.

List of molluscs described from material collected during the von der Decken expedition

Ampullaria ovata Ol. var. *deckenii* von Mts., 1897. Without locality but certainly Zanzibar I. or Zanzibar coast on mainland, *von der Decken exped.* (type material: ZMB); Zanzibar. I. Mwera-Brücke, *Stuhlmann* (type material: ZMB); swamps N. and S. of Bagamoyo, *Stuhlmann* (type material: ZMB); Pangani, *Schmidt* (type material: ZMB); Usaramo, Mengwe-Teich, *Stuhlmann* (type material: ZMB). *Pila ovata* (Ol.) (note 3).

Buliminus rhodotaenia von Mts., 1869a. Kenya, without exact locality but probably area near Tana R. (holotype: ZMB 15258, see Kilias (1971: 230)). *Rhachistia rhodotaenia* (von Mts.).

Helicarion aureofuscus von Mts., 1869a. Kenya, Mombasa ('Mombas') (type material: ZMB). Nothing like this has been refound – shell has shape of a *Mesafricarion* (see note 4).

Nanina mozambicensis (Pfr.) (as '*mossambicensis*') var. *albopicta* von Mts., 1869a. East Africa, without precise locality (type material: ZMB). *Trochonanina mozambicensis albopicta* (von Mts.).

Nanina pyramidea von Mts., 1869a. Kenya, Mombasa ('Mombas') (type material: ZMB). *Trochonanina pyramidea* (von Mts.).

Parmarion kerstenii von Mts., 1869a. Between Zanzibar and Cape Delgado (holotype: ZMB 17644, see Kilias 1974: 348, fig. 2) ? *Succinea* (note 5).

Physa seychellana von Mts., 1869a. Seychelles (type material: ZMB 95962 lectotype: 9596b, 15 paralectotypes: see Kilias (1961: 161). *Physa acuta* Drap. (= *Physa borbonica* Fér.) (see Starmühlner, 1983).

Von Martens (1869b) described some snails found in bags of sesame seed which had been sent to W. Brauns, a factory owner, in Goslar, Hanover. Since some of these were also described in von Martens

(1869a) it seems reasonable to deal with them here (see note 6). Von Martens pointed out in the paper that *Sesamum* was very widely grown on Zanzibar I. and on the mainland coastal strip, which was also called Zanzibar, so it is not certain from which the shells (both land and marine) mixed with the seed originated, since the coastal produce would also have been sent to Zanzibar for final export to Europe.

List of molluscs described from material found in bags of sesame seed sent to Germany from Zanzibar

Buliminus braunsii von Mts., 1869a, b. Zanzibar, found amongst sesame seed, W. Brauns (lectotype: ZMB 18005a selected by Kiliass (1971: 218, fig. 2); 9 paralectotypes ZMB 18005b). *Rhachidina braunsii* (von Mts.) (see note 7).

Buliminus braunsi von Mts. var. *lunulatus* von Mts., 1897. Zanzibar, found amongst sesame seeds, W. Brauns (two paralectotypes, ZMB 18005c); Tanzania, between Tanga and Mbessa, Conradt (lectotype, ZMB 44716 (see Kiliass (1971: 226); other syntypes were Usegua, W. Schmidt (ZMB) and between Lake Nyassa and the east coast, Thomson (BM). *Rhachidina braunsii lunulata* (von Mts.).

Buliminus braunsii von Mts. var. *hypostictus* von Mts., 1897. Zanzibar, found amongst sesame seeds, W. Brauns (lectotype, ZMB 18005d, see Kiliass (1971: 223–224, fig. 6); Kinga, St. Paul (2 paralectotypes, ZMB 101598); Zanzibar I., var. Dr. Kobelt erhalten (2 paralectotypes ZMB 101588); between Lake Nyassa and the east coast, Thomson (syntype, BM). *Rhachidina braunsii hyposticta* (von Mts.).

Buliminus conulinus von Mts., 1869a, b. Zanzibar, found amongst sesame seed, W. Brauns (holotype: ZMB 18008). *Edouardia conulina* (von Mts.).

Ennea laevigata Dohrn var. *sexdentata* von Mts. (1869b). Zanzibar, found amongst sesame seed, W. Brauns (type material: ZMB). *Gulella sexdentata* (von Mts.).

Nanina plicatula von Mts. (1869a, b). Zanzibar, found amongst sesame seed, W. Brauns (type material: ZMB; see Verdcourt (1960)). *Trochonanina plicatula* (von Mts.).

Notes

1. Thornton, a mining geologist, had previously been with Livingstone and Kirk on the Zambesi Expedition but left them. Later he rejoined them on the Zambesi and died there a few days before his 25th birthday.
2. L.J. Dorr (1997) spells the name Linck and gives some information about him. Hermann Albert ('Albert-Armand') Linck was an assistant surgeon-major in the Prussian Army and is also described as a zoologist.
3. Pain (1961) sinks var. *deckeni* into *Pila adusta* (Reeve) and von Martens originally included Reeve's name with a query under his var. *deckeni*. Brown (1994) treats *adusta* as a synonym of *ovata*.
4. As I have pointed out (Verdcourt, 2000) Mombasa is a virtually impossible locality for a urocyclid of the *Chlamydarion* assemblage and relatives. None has been found on the coast nor have I seen any from the Usambaras, Ulugurus etc. The only place visited by the expedition from which a species is known is Kilimanjaro. The shape is reminiscent of a *Mesafricarion*.
5. Van Goethem does not mention this name in his revision of Urocyclid slugs (1977) nor do Forcart, Simroth or Verdcourt in papers on slugs. Kilius lists it under *Succinea*.
6. I have been unable to establish which of von Martens's 1869 publications appeared first. Kersten's forward to volume 3 of von der Decken's Reisen is dated August 1869, Altenburg, and even making allowance for the amazing efficiency of those days surely could not have appeared the same month or perhaps Kersten dated his preface knowing when it would appear. The paper in the *Nachrichtsblatt* appeared in part 10 of volume 1 which also appeared in August. The fact that von Martens refers in this paper to his work in the Reisen does not necessarily mean it appeared first but that he had page proofs of it. The mollusca from sesame seeds are partly described twice, once in the *Nachrichtsblatt* paper and also in the Reisen on p. '160', the same page as *Parmarion kerstenii*. There is a fault in the pagination of the Reisen (at least in

the copy I examined) - the pages run 158, 150, an unnumbered (= 160).

7. In both 1869 papers von Martens spelt *braunsii* with two *ii* but in 1897 with only one.

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Postscript

Since this article was set up I have, through the kindness of Dr Matthias Glaubrech, of the Museum für Naturkunde, Berlin, been able to see the types of *Physa seychellana* and *Parmarion kerstenii*; a search for material of *Helicarion aureofuscus* proved unsuccessful. The material of *Parmarion kerstenii* has been labelled *Hyalimax kerstenii* and this seems to be the correct disposition. No other material has turned up on the East African coast. The flattened shell, about 7.5 mm long, resembles a miniature *Ostrea edulis* valve in shape but is closely concentrically striate and quite characteristic. H.E. Quick gives a full account of a Mauritian species (see *Mauritius Inst. Bull.* 1(5): 57–62 (1939)). ■

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The on-line publication hypothesis

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In recent years I have had a notion that published papers seem to cite references published nearer the date of the paper's publication, in relation to other citations, than was the case several years ago. It occurred to me this was almost certainly as a result of the ease by which references can be searched on-line from University sources and publishers' web sites. I call this 'the on-line availability hypothesis'.

To see if this is true I scored the first ten cited papers in the first ten published papers in two major malacological journals for citation dates in relation to publication dates (Table 1). This was done for 1993 ('pre-on-line period') and 2001 ('on-line period'). I scored 1, 2, 3, 4, 5 and more than 5 years pre-publication.

The null hypothesis is that there is no difference in the citation year classes for the two periods. Spearman's rank correlations (ρ) were done on the data. If there were no difference between the periods, ρ would correlate with a significant p value. If there were differences, ρ would show no correlation and the null hypothesis is rejected. The alternate hypothesis, that there is a difference between the periods, is then accepted. Table 2 shows the results of the correlations.

The findings show that there are significantly more citations nearer the date of the papers' publication in the 'on-line period'.

Why is this? And what does it mean? Two seemingly trivial questions, but I think the second one has very important implications. I think the findings can be explained as follows. It is less laborious for researchers to search on-line for references than to do a 'physical' search of publications. Publishing pressures, forcing researchers to publish as much as possible (as quickly as possible) has resulted in a process similar to optimal foraging theory in ecology. Optimal strategies for finding a resource (publications to cite) include the quickest ones, i.e. net searches.

The second question demands more thought. Physical searches, once started, enable years of publications in any one journal to be sought out. You scan the contents pages of the journals on the shelves. You may also come across a 'bonus' paper you would not have thought to search for but which is relevant to your work. And most researchers have lists of the 'most used references' in their particular field that they may use over and over. On-line searches generally provide publications dating back only a few years. This means that 'newer' researchers, with no 'most used references' lists already under their belts, will be biased to the more recent publications. A consequence is that older works may not be considered in publications.

If the findings can be explained by the availability of on-line resources, as I outline here, then it may be predicted that there will be a decline in the citation of older works as a function of time.

I have shown this trend in two malacological journals. I accept a more detailed analysis of these and other journals is needed for further substantiation of the findings and other possible causes that may be playing a part. It would be simple to see if the trend occurs in other types of journals and publications. If someone has the time to carry out a fuller survey to prove (or disprove!) the 'on-line publication availability hypothesis' they might be able to show that a risk exists that as time passes a body of scientific knowledge may be assigned to the 'top shelves'.

Tables 1 and 2 follow.

Table 1 Scores of the first ten cited papers in the first ten published papers in two major malacological journals for citation dates in relation to publication dates (see text for details).

	1 year	2 years	3 years	4 years	5 years	>5 years	n
<i>Journal of Conchology</i>							
'pre-on-line period'	2	3	2	5	4	84	100
'on-line period'	5	6	7	5	7	70	100
<i>Iberus</i>							
'pre- on-line period'	6	3	2	3	5	81	100
'on-line period'	5	6	5	7	5	72	100

Table 2 Testing the null hypothesis that there is no difference in the citation year classes for the two periods. If there were no difference between the periods, rho would correlate with a significant *p* value. rho shows no correlation (for either of the journals) and the null hypothesis is rejected. The alternate hypothesis, that there is a difference between the periods, is accepted.

	<i>Journal of Conchology</i>	<i>Iberus</i>
Spearman's rank correlation (rho)	0.358	0.308
2-tailed significance	0.486	0.553

■

Collectors in East Africa No. 30: Robert [Robin] Kemp (1871–?) (Part 2)

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List of species for which no collector was cited but almost certainly Kemp

Acanthinula expatriata Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC, type not found). Same.

Ancylus crassistriatus Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC, type not found; BM 1911. 10.12. 59–60; 1937.12.50. 2240–8. *Burnupia crassistriata* (Preston).

Cerastus nobilis Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: MAC, type not found; BM 1911.18.12. 17–18; 1937.12.30. 2124–6) (has Kemp in Connolly's hand). *Cerastus* roosevelti* (Dall).

Clausilia degeneris Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: BM not found). *Macroptychia degeneris* (Preston).

Curvella alabastrina Preston, 1911b non DaCosta 1906. Kenya, Naivasha (type material: BM 1937. 10. 30. 4146). *Opeas lamoense* (Melv. & Ponsonby).

Curvella deliciosa Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC 14678). Same.

Ennea consobrina Preston, 1911a, (non Ancey, 1892) Kenya, Mt Kenya, 2700–3000 m (type material: MAC 20165). *Gulella syngenes* (Preston) (BM 1911. 8.22. 29–31; 1937.12.30. 640–5 are marked as paratypes but the locality given Igembi Hills and Nyeri is not mentioned in the description).

Ennea iota Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 17543 (holotype fide W. Adam 1954). *Nesopupa bisulcata* (Jickeli).

Ennea iredalei Preston, 1911b. Kenya, Naivasha, (MAC, type not found). *Pupilla fontana* (Krauss).

Ennea keniana Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m and lower country between Rumuruti and Mt Kenya (type material: MAC 17546; BM 1911.10.12. 157; 1937.12.30. 573–6). *Gulella insolita* (E.A. Sm.).

* *Cerastus* Albers was supposed to be a later homonym of *Cerastus* Dejean and *Cerastua* Strand proposed as a substitute but it appears Dejean's name must be treated as a nomen nudum.

- Ennea lacuna* Preston, 1911b. Kenya, Naivasha (type material: MAC 17553). *Gulella lacuna* (Preston).
- Ennea naivashaensis* Preston, 1911b. Kenya, Lake Naivasha (type material: MAC 18372 (holotype fide W. Adam, 1954). *Truncatellina naivashaensis* (Preston).
- Ennea optata* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: MAC 17717; BM 1911.10.12. 153–154). *Gulella ugandensis* (E.A. Sm.).
- Ennea pilula* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: MAC, not found; BM 1911.10.12. 144–145; 1937.12.30. 599–600 & no number). *Gulella pilula* (Preston).
- Ennea pretiosa* Preston, 1911a. Kenya, between Rumuruti & Mt Kenya, & Mt Kenya, 1800–2400 m (type material: MAC, not found; BM 1911.10.12. 141). *Gulella pretiosa* Preston.
- Ennea princei* Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC 17582; BM 1911.10.12. 148; 1937.12.30. 613–6). *Gulella princei* (Preston).
- Ennea simplicima* Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC not found; BM 1937.12.30. 455–61). *Gulella simplicima* (Preston).
- Ennea tomlini* Preston, 1911b. Kenya, Naivasha (type material: MAC 17608). *Gulella tomlini* (Preston).
- Fauxulus duplicatus* Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 17505 (holotype fide W. Adam 1954); BM 1911.10.12. 57–58; 1937.12.30. 3073). ?*Pupilla duplicata* (Preston).
- Homorus egregius* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 (MAC, type not found; BM 1911.10.12. 229–230, marked cotypes). *Subulona egregia* (Preston).
- Jaminia desiderata* Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC type not found; BM 1911.10.12. 57–58; 1937.12.30. 3073). *Lauria desiderata* (Preston).
- Kenia iredalei* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: BM 1937.12.30. 8910). *Nothapalus iredalei* (Preston).
- Kenia suturalis* Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: BM 1937.12.30. 8911). *Nothapalus suturalis* (Preston).
- Krapfiella mirabilis* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: MAC, type not found; Liverpool). Same.
- Limicolaria (Rebmaniella) inepta* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (MAC, type not found). *Limicolariopsis inepta* (Preston).
- Opeas angustior* (sic) Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 14079; Liverpool; BM 1911.10.12. 175–176 (cotypes). *Streptostele angustior* (Preston).

- Opeas orestias* Preston, 1911a. Kenya, Mt Kenya 2700–3000 m (type material: MAC 14083; BM 1911.10.12. 165–168 (marked cotypes)). *Pseudopeas orestias* (Preston).
- Opeas rumrutiensis* (sic) Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 14086; BM 1911.10.12. 177–178 (cotypes)). *Pseudopeas rumrutiense* (Preston).
- Opeas terebra* Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material MAC 14087; BM 1911.10.12. 184 (cotype)). *Streptostele terebra* (Preston).
- Opeas vicina* (sic) Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 14080; Liverpool; BM 1911. 10.12. 179–181 (cotypes)). *Streptostele vicina* (Preston) (syntypes probably not all conspecific).
- Pisidium kenianum* Preston, 1911a. Kenya, between Rumuruti and Mt Kenya & Mt Kenya, 2700–3000 m (type material: MAC not found; BM 1937.12.30. 9060 lectotype see Kuiper, 1966 but not found; BM 1937.12.30. 9063–65; Liverpool; SMF 5421; Leiden). Same.
- Pseudoglessula pusilla* Preston, 1911b. Kenya, Naivasha (type material: BM 1937.12.30. 7116). Unidentifiable juvenile of a *Subuliniscus*.
- Rachis turricula* Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC, type not found; BM 1911.10.12. 212 accession book, n.t.i.). *Edouardia turricula* (Preston).
- Rachis virginea* Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m (type material: MAC 26570; BM 1911.8.22. 98 & 1911.10.12. 210–211; Liverpool). *Rhachidina chiradzuluensis virginea* (Preston).
- Subulina tribulationis* Preston, 1911b. Kenya, Naivasha (MAC, type not found); type material ?: BM 1911.10.12. 114–115). *Cecilioides tribulationis* (Preston).
- Subulina virgo* Preston, 1911b. Kenya, Naivasha (MAC, type not found); type material ?: BM 1911.10.12. 113). *Cecilioides virgo* (Preston).
- Thapsia conuloidea* Preston, 1911b. Kenya, Naivasha (type material: MAC 21772; BM 1911.10.12. 233–235. ?*Kaliella conuloidea* (Preston) (Naivasha omitted as locality in my list).
- Trachycystis approximans* Preston, 1911a. Kenya, between Rumuruti and Mt Kenya (type material: MAC 26210; BM 1911.10.12. 198–199 (as 'approximatus')). *Trachycystis abyssinica* (Jickeli).
- Trachycystis planulata* Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC 27271; BM 1911.10.12. 197). Anatomy unknown – treat as *Halolimnolix* pro tem.
- Trachycystis pseudocharopa* Preston, 1911a. Kenya, Naivasha (type material: MAC 26225; BM 1911.10.12. 200–201). *Trachycystis abyssinica* (Jickeli).

Trachycystis rugosa Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC 27269; Liverpool; BM 1911.10.12. 203–204. *Trachycystis lamellifera* (E.A. Smith)).

Thapsia rumrutiensis Preston, 1911a. Kenya, between Rumuruti & Mt Kenya & Laikipia Plateau, Rumuruti. (type material: MAC, not found (21201 fide van Bruggen); BM 1937.12.30. 1906–1910); specimens labelled Mt. Kenya, BM 1937.12.30. 606–610). *Afrogyppya rumrutiensis* (Preston).

Zingis consanguinea Preston, 1911a. Kenya, Mt Kenya, 1800–2400 m & between Rumuruti and Mt Kenya (type material: MAC 27330; Liverpool; BM 1911.10.12. 241–243 no type indication). Anatomy unknown – treat as *Halolimohelix* pro tem.

Zingis gaziensis Preston, 1911a. Kenya, Gazi (type material: MAC 27331; BM 1911.10.12. 240). Anatomy unknown – treat as *Halolimohelix* pro tem but coast is impossible locality for a true helioid.

Zingis keniana Preston, 1911a. Kenya, Mt Kenya, 2700–3000 m (type material: MAC 27333; Liverpool; BM 1911.10.12. 239). *Trochonanina* (*Montanobloyetia*) *keniana* (Preston).

Preston (1910) wrote a paper on mollusca from the Shimba Hills in Kenya and elsewhere with no collectors mentioned and I have always thought it was not possible it could have appeared so quickly if it had been Kemp who collected them; he collected in the Shimba Hills on 27 July to 5 August 1910 and the part of *Ann. Mag. nat. Hist.* in which the paper appeared is stamped 4 Nov. 1910 in The Natural History Museum copy.

A parcel sent from nearby Mombasa could have reached London by the end of August; only a few days might have been necessary for Preston to write up the material and have the photographs taken. Journals with numerous parts issued per year appeared like clockwork at that time and a manuscript handed in as late as early October could have appeared in early November. It is clear from annotations on specimen boxes made by Connolly that he thought or knew Kemp was the collector. I will list these additional specimens at a later date.

List of molluscs collected by R. Kemp in East Africa

Africrion concavospira Preston, 1914. Uganda, Kiduha, L. Mutanda, Kemp (type material: BM 1937.12.30. 1394). Anatomy and correct genus unknown.

Africrion copiosa Preston, 1914. Zaire, Burunga, Mt. Miken, 1800 m, Kemp (type material: MAC 25372; BM 1937.12.30. 1395). Anatomy and correct genus unknown.

- Africarion kagambahensis* Preston, 1914. Uganda, Kagambah, *Kemp* (type material: BM 1937.12.30 1428; 1912.9.19. 186 "type is best specimen" (Connoll). Anatomy and correct genus unknown.
- Africarion kemp* Preston, 1912b. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 24766). Anatomy unknown, leave as described pro tem.
- Africarion kiduhaensis* Preston, 1914. Uganda, Kiduha, Lake Mutanda, *Kemp* (type material: BM 1937.12.30. 1434 ('holotype' on box). Anatomy and correct genus unknown.
- Africarion microgranulata* Preston, 1912b. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC 24775). Anatomy and correct genus unknown.
- Africarion microstriata* Preston, 1912b. Uganda, Mbarara to Kigezi, *Kemp* (type material: MAC not found). Anatomy unknown, leave as described pro tem.
- Africarion orestias* Preston, 1914. Kenya, slopes of Mt. Kenya, *Kemp* (type material: MAC not found; BM 1937.12.30. 1459–61). Anatomy and correct genus unknown but much material from mountain available for dissection which may be this.
- Africarion oscitans* Preston, 1914. Uganda, Lake Mutanda, *Kemp* (type material: BM 1937.12.30. 1462–3). ?*Chlamydarion oscitans* (Preston).
- Africarion spatiosa* Preston, 1914. Zaire, Burunga, Mt. Mikenno, *Kemp* (type material: BM 1937.12.30. 1472). Anatomy and correct genus unknown.
- Africarion tenebrosa* Preston, 1914. Zaire, Burunga, Mt. Mikenno, 1800 m, *Kemp* (type material: BM 1937.12.30. 1477). Anatomy and correct genus unknown.
- Afrocanidea gemma* Connolly, 1929. Kenya, Shimba Hills, *Kemp* (type material: BM 1937.12.30. 4936). Almost certainly a marine species carried inland but not identified.
- Alaea keniana* Preston, 1912b. Kenya, Mt Kenya, *Kemp* (type material: MAC 18394). *Negulus kenianus* (Preston).
- Ancylus kemp* Preston, 1912b. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC not found; BM 1911.11.2. 106–8; 1937.12.30. 2300–3). *Burnupia kemp* (Preston).
- Auricula gaziensis* Preston 1913a. (corrected from *gaziense* by Preston, 1913b: 212) Kenya, Gazi, *Kemp* (type material: MAC 27352). *Auriculodes gaziensis* (Preston).
- '*Assimania*' *aurifera* Preston, 1912b. Kenya, Gazi, *Kemp* (type material: MAC 26207; BM 1937.12.30. 4983–9; 1911.10.12. 107–9). Probably a new genus of Omphalotropidinae.
- Blauneria exsiliium* Preston, 1912b. Kenya, Gazi, *Kemp* (type material: MAC 27364; BM 1937.12.30. 8712–22; Liverpool). Same (± marine).

- Blayneiyella kisengi* Preston, 1914. German East Africa [now Rwanda] Lake Kivu, Kisengi (Kisenyi), *Kemp* (type material: BM 1937.12.30. 1994; 1912.9.19. 85 (type the best specimen Connolly)). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Buliminus ugandae* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC not found; BM 1911.8.22. 106–108). *Edouardia prestoni* (Connolly).
- Burungaella buhambaensis* Preston, 1914. Zaire, near Lake Kivu, Buhamba, *Kemp* (type material: BM 1937.12.30. 1957) (marked as holotype on box). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Burungaella imperforata* Preston, 1914. Zaire, Mt. Mikeno, Burunga, *Kemp* (type material: BM 1937.12.30. 1783, note on box that larger is type). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Burungaella mutandana* Preston, 1914. Uganda, Lake Mutanda, *Kemp* (type material: BM 1937.12.30. 2010, marked as holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Burungaella oscitans* Preston, 1914. Zaire, Mikeno, Burunga, 1800 m, *Kemp* (type material: MAC, not found; BM 3 syntypes without registration number). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Cerastus kemp* Preston, 1913a. Zaire, Mt. Mikeno, Burunga, 1800 m, *Kemp* (type material: MAC 16452–54). Same.
- Cerastus kemp* var. *masakaensis* Preston, 1913a. Uganda, Masaka, *Kemp* (type material: MAC 16455; BM 1912.9.19. 280). Same.
- Cerastus kivuensis* Preston, 1913a. Zaire, near Lake Kivu, *Kemp* (type material: MAC 16455 (but I (1967 & 1970) have given MRAC 16473 and 16474); BM 1911.11.2. 92–3; 1937.12.30. 2101). *Cerastus bambuseti kivuensis* Preston.
- Cerastus partulaeformis* Preston, 1913a. Zaire, Lake Kivu, *Kemp* (type material: MAC 16475; BM 1911.11.2. 94; 1937.12.30. 2115). Same.
- Cleopatra congener* Preston, 1913a. Kenya, Lake Baringo, *Kemp* (type material: MAC 47412; BM 1911. 10.12. 133–135; 1937.12.30. 4999–5000). *Cleopatra bulimoides* (Oliv.).
- Conulinus athiensis* Connolly 1925. Kenya, Athi Plains, *Percival*; Aberdares, Mt. Kinangop, *Kemp* (type material: BM 1937.12.30. 3805; 1912.9.19. 84 but it is not possible to tell which is from which locality). *Edouardia athiensis* (Connolly).

- Curvella campyla* Connolly, 1923b. Uganda, Mbarara to Masaka, *Kemp* (type material: BM 1912.9.10. 225–226; 1937.12.30. 4149 (marked with red spot by Connolly). Same.
- Curvella entebbensis* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC, not found). Same.
- Curvella masakana* Connolly, 1923b. Uganda, Lake Mutanda, *Kemp* (type material: BM 1937.12.30. 4154 (cited as type by Connolly); also from between Mbarara, Masaka and Kigezi, *Kemp*. Same.
- Curvella mbararaensis* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 14685). Same (genus perhaps *Euonyma*?).
- Curvella solidula* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 14694; BM 1911.8.22. 166). Same.
- Elgonella brunnea* Preston, 1914. Kenya, Rumuruti, *Kemp* (type material: BM 1937.12.30. 1956, marked as holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Elgonella eulotaeformis* Preston, 1914. Uganda, Kagambah, *Kemp* (type material: MAC not found). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Elgonella robini* Preston, 1914. Kenya, Rumuruti, *Kemp* (type material not found). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Elgonella sobrina* Preston, 1914. Kenya, Rumuruti, *Kemp* (type material: BM 1937.12.30. 2049, box marked holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Ena kivuensis* Preston, 1913a. Zaire, Lake Kivu, Kisengi, *Kemp* (type material: MAC 16239). *Pseudoglessula elatior* Thiele.
- Endodonta kemp*i Connolly, 1925, Kenya, Igembi Hills, *Kemp* (type material: BM 1937.12.30. 2762). *Afrodonta kemp*i (Connolly).
- Ennea aberdarensis* Preston, 1913c. Kenya, Aberdares, Kinangop, *Kemp* (type material: MAC, not found; BM 1911.8.22. 19). *Gulella insolita* (E.A. Smith) (probably).
- Ennea adelpha* Preston, 1913c. Uganda, Masaka to Entebbe, *Kemp* (type material: not found). *Gulella vicina adelpha* (Preston).
- Ennea adjacens* Preston, 1913c. Kenya, Nyambeni Hills to Nyeri, *Kemp* (type material: MAC, not found; BM 1911.8.22. 26–27 but labelled between Igembi Hills and Nyeri). *Gulella adjacens* (Preston).

- Ennea buccina* Preston, 1913c. Zaire, Burunga, Mt. Mikeno, 1800 m, *Kemp* (type material: MAC, not found). *Gonaxis buccinus* (Preston).
- Ennea burungaensis* Preston, 1913c. Zaire, Burunga, Mt. Mikeno, *Kemp* (type material: MAC 97606; BM 1912.9.19. 201–202). *Gulella disseminata* (Preston).
- Ennea carea* Preston, 1913c. Kenya, Gazi, *Kemp* (type material: MAC, not found). *Gulella carea* (Preston).
- Ennea curvicolumella* Preston, 1913c. Kenya, Nyambeni Hills to Nyeri, *Kemp* (type material: not found). *Gulella curvicolumella* (Preston).
- Ennea decussatula* Preston, 1913c. Uganda, Kigezi, 2100 m, *Kemp* (type material: MAC 18276; BM 1911.11.2. 58–59; 1937.12.30. 505). *Gulella decussatula* (Preston).
- Ennea disseminata* Preston, 1913c. Zaire, near Lake Kivu, *Kemp* (type material: MAC 17708; BM 1911.11.2. 45); also between Lake Mutanda and the region between that lake and Lake Kivu, *Kemp*. *Gulella disseminata* (Preston) (often put in *Ptychotrema* (*Wilmattina*)).
- Ennea eussoensis* Preston, 1913c. Kenya, Eusso Nyiro, *Kemp* (type material: MAC 17521; BM 1911.8.22. 16). *Gulella eussoensis* (Preston).
- Ennea foveolata* Preston, 1913c. Kenya, Gazi, *Kemp* (type material: MAC 17529; BM 1911.10.12. 158–159). *Gulella foveolata* (Preston).
- Ennea funerea* Preston, 1913c. Kenya, Chanler Falls, *Kemp* (type material: MAC, not found; BM 1911.8.22. 17; 1937.12.30. 544–545). *Gulella funerea* (Preston).
- Ennea hector* Preston, 1913c. Kenya, between Nyambeni Hills and Nyeri, *Kemp* (type material: MAC 17532); Nyambeni Hills, *Kemp*; Mweru *Kemp* (some material at BM from Igembi Hills – 1911.8.22. 20 is marked paratype). *Gulella hector* Preston.
- Ennea ingeziensis* Preston, 1913c. Uganda, Mfumburu Mts., Ingezi, *Kemp* (type material: MAC, not found) & Kigezi, 1800 m *Kemp* (not found). *Gulella disseminata* (Preston).
- Ennea ingeziensis* Preston var. *mbararaensis* Preston, 1913c. Uganda, Mbarara to Masaka, *Kemp* (type material: MAC 18355; BM 1912.9.19. 197). *Gulella disseminata* (Preston).
- Ennea ingeziensis* Preston var. *pusilla* Preston, 1913c. Uganda, Mbarara to Kigezi, *Kemp* (type material: MAC 18361). *Gulella disseminata* (Preston).
- Ennea innocens* Preston, 1913c. Kenya, Nyambeni Hills, 1800 m, *Kemp* (type material: MAC 17489). *Gonaxis innocens* (Preston).

- Ennea insulsa* Preston, 1913c. Kenya, Gazi, *Kemp* (type material: MAC 17545 (holotype fide Adam, 1954), 17440 (paratype fide Adam), Coll. Dautz. (paratype fide Adam); BM 1937.12.30. 3020–4). *Gastrocopta klunzingeri* (Jickeli).
- Ennea intradentata* Preston, 1913c. Kenya, Nyambeni Hills, 1800 m, *Kemp* (type material: MAC not found) & Nyambeni Hills to Nyeri, *Kemp* (not found) (material from Igembi Hills BM 1911.8.22. 28). *Gulella intradentata* (Preston).
- Ennea iridescens* Preston, 1913c. Uganda, near Kigezi, *Kemp* (type material: MAC, not found). *Gulella iridescens* (Preston).
- Ennea iridescens* Preston var. *curta* (Preston), 1913c. Zaire, Burunga, Miken, *Kemp* (type material: MAC, not found). *Gulella iridescens* (Preston).
- Ennea jombeneensis* Preston, 1913c. Kenya, Nyambeni Hills, 1800 m, *Kemp* (type material: MAC, not found; BM 1937.12.30. 566–8) (Preston specifically indicates this as the type locality but also mentions *Kemp* material from Mweru). *Gulella pilula* (Preston).
- Ennea keniana* Preston var. *intermedia* Preston, 1913c. Kenya, Nyambeni Hills, 1800 m, *Kemp* (type material: MAC 17547). *Gulella insolita* (E.A. Smith).
- Ennea keniana* Preston var. *parvula* Preston, 1913c. Kenya, Nyambeni Hills to Nyeri, *Kemp* (type material: MAC 17548). *Gulella insolita* (E.A. Smith).
- Ennea kigeziensis* Preston, 1913c. Uganda, Kigezi, *Kemp* (type material: MAC, not found; BM 1911.11.2. 60). *Ptychotrema kigeziense* (Preston) (also material from Miken BM 1912.9.19. 204–5).
- Ennea kivuensis* Preston, 1913c. Zaire, near Lake Kivu, *Kemp* (type material: MAC 17490; BM 1937.12.30. 52; 1911.11.2. 48–50). *Gonaxis kivuensis* (Preston).
- Ennea (Ptychotrema) kombaensis* Preston, 1913c. Uganda, Komba, *Kemp* (type material: MAC 19229 (lectotype chosen by Adam, Van Bruggen and Van Goethem)). *Ptychotrema kombaense* (Preston).
- Ennea malasangiensis* Preston, 1913c. Uganda, Malasani, *Kemp* (type material: MAC, not found). *Gulella malasangiensis* (Preston).
- Ennea margarita* Preston, 1913c. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC 16228, 16229; BM 1911.11.2. 51–52; 1937.12.30. 56–58). *Gonaxis margarita* (Preston).
- Ennea masakensis* Preston, 1913c. Uganda, Masaka, *Kemp* (type material: MAC 17562). *Ptychotrema masakaense* (Preston).
- Ennea mikenensis* Preston, 1913c. Zaire, Burunga Mt. Miken, *Kemp* (type material: MAC, not found; BM 1912.9.19. 203). *Gulella mikenensis* (Preston).

- Ennea mutandaensis* Preston, 1913c. Zaire, Lake Mutanda to Lake Kivu, *Kemp* (type material: MAC, not found – MAC 18135 fide Adam). *Truncatellina mutandaensis* (Preston).
- Ennea mweruensis* Preston, 1913c. Kenya, Meru, *Kemp* (type material: MAC 17558 'type', 134496 paratype; BM 1911.8.22. 21) & Nyambeni Hills, 1800 m, *Kemp* (type material: not found). *Gulella pervitrea* (Preston) (probably).
- Ennea optata* Preston var. *majuscula* Preston, 1913c. Kenya, Aberdares, Mt. Kinangop, *Kemp* (type material: MAC 17729). *Gulella ugandensis ugandensis* (E.A. Smith).
- Ennea optata* Preston var. *obesa* Preston, 1913c, Kenya, Aberdares, Mt. Kinangop, *Kemp* (type material: MAC 17939; BM 1911.8.22. 18). *Gulella ugandensis ugandensis* (E.A. Smith).
- Ennea papyracea* Preston, 1913c. Zaire, near Lake Kivu, *Kemp* (type material: MAC, not found; BM 1911.11.2. 46; 1937.12.30. 588–589). *Gulella papyracea* (Preston).
- Ennea pollonerae* Preston, 1913c. Zaire, Lake Kivu, *Kemp* (type material: MAC, not found; BM 1911.11.2. 47). *Ptychotrema pollonerae* (Preston).
- Euonyma eussoensis* Connolly, 1923b. Kenya, Eusso Nyiro, *Kemp* (type material: BM 1937.12.30. 4139). Same.
- Euonyma pernitus* Connolly, 1923b. Kenya, Eusso Nyiro, Chanler Falls, *Kemp* (type material: BM 1937.12.30. 4143). Same.
- Eussoia inopina* Preston, 1912b. Kenya, banks of R. Eusso Nyiro, *Kemp* (type material: MAC; Liverpool; BM 1937.12.30. 5065–73). Same.
- Falloonella larogiensis* Preston, 1914. Kenya, Larogi Hills, *Kemp* (type material: BM 1937.12.30. 3552). *Trochonanina (Falloonella) larogiensis* (Preston).
- Gudeella aranea* Preston, 1914. Uganda, Entebbe to Masaka, *Kemp* (type material: BM 1937.12.30. 1513). *Thapsia aranea* (Preston).
- Gudeella consobrina* Preston, 1914. Uganda, near Lake Kivu, Mukanda, *Kemp* (type material: BM 1937.12.30. 1530). *Thapsia consobrina* (Preston).
- Gudeella consueta* Preston, 1914. Uganda, Mbarara to Masaka, *Kemp* (type material: MAC 80157, paratype; BM 1937.12.30. 1531). *Thapsia consueta* (Preston).
- Gudella densesculpta* Preston, 1914. Uganda, Kagambah, *Kemp* (type material: MAC not found; BM 1937.12.30. 1549). *Thapsia densesculpta* (Preston).
- Gudeella inclinans* Preston, 1914. Zaire, Burunga, Mt. Mikeno, 1800 m, *Kemp* (type material: MAC 23593, paratype; BM 1937.12.30. 1560). *Thapsia inclinans* (Preston).
- Gudeella inflata* Preston, 1914. Zaire, Burunga, Mt. Mikeno, 1800 m, *Kemp* (type material: MAC, not found; BM 1937.12.30. 1561). *Thapsia inflata* (Preston).

- Gudeella kampalaensis* Preston, 1914. Uganda, Kampala, *Kemp* (type material: BM 1937.12.30. 1569); Entebbe, *Kemp* (not found) Jinja (Jinga), *Kemp* (not found). *Thapsia kampalaensis* (Preston).
- Gudeella kigeziensis* Preston, 1913c. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC, not found; Liverpool; BM 1937.12.30. 1570; 1911.11.2. 11–13) *Thapsia kigeziensis* (Preston).
- Gudeella masakaensis* Preston, 1914. Uganda, Entebbe to Masaka, *Kemp* (type material: BM 1937.12.30. 1578). *Thapsia masakaensis* (Preston).
- Gudeella mime* Preston, 1914. Uganda, Kagambah, *Kemp* (type material: MAC, not found; BM 1937.12.30. 1585). *Thapsia mime* (Preston).
- Gudeella mukandaensis* Preston, 1914. Uganda, near Lake Kivu, Mukanda, *Kemp* (type material: BM 1937.12.30. 1598–9). *Thapsia mukandaensis* (Preston).
- Gudeella mukandaensis* var. *mutandana* Preston, 1914. Uganda, Lake Mutanda, *Kemp* (type material: BM 1937.12.30. 1600). *Thapsia mukandaensis mutandana* (Preston).
- Gudeella multistriata* Preston, 1914. Zaire, near Lake Kivu, Buhamba, *Kemp* (type material: BM 1937.12.30. 1601). *Thapsia multistriata* (Preston).
- Gudeella usitata* Preston, 1914. Uganda, Masaka to Entebbe, *Kemp* (type material: MAC, not found; BM 1937.12.30. 1617). *Thapsia usitata* (Preston).
- Gulella pisa* Connolly, 1922. Kenya, Eusso Nyiro, *Kemp* (type material: 1937.12.30. 601). (marked as holotype). Same.
- Halolimnohelix iredalei* Connolly, 1925. Kenya, Laikipia, Rumuruti, 2100 m, *Kemp* (type material: BM 1911.10.12. 247–249; 1937.10.12. 247–249, a specimen with blue wool in it was selected as type by Connolly) (apart from the types other material was also cited – Mt. Kenya, Solai, 2100–2700 m *Kemp* and Cherangani Hills, *Pitman*). Same.
- Halolimnohelix iredalei* var. *zonata* Connolly, 1925. Kenya, Rumuruti, *Kemp* (type material: Liverpool; BM 1911.10.12. 244–6; 1937.12.30. 1990–93), Connolly has selected and marked a 'holotype'; Cherangani Hills, *Pitman* (type material). Same.
- Halolimnohelix viatoris* Connolly, 1925. Uganda, Mbarara to Kigezi, *Kemp* (type material: BM 12.30.2053) (marked as holotype). Anatomy unknown, leave as *Halolimnohelix* pro tem.
- Helicarion aethodus* Connolly, 1925. Kenya, Mt. Kenya, *Kemp* (type material: BM 1937.12.30. 1383–4). Not dissected and generic position not known; retain as same pro tem.

- Homorus foveolatus* Preston, 1912a (non Preston 1909). Kenya, Aberdares, Kinangop, Kemp (type material: MAC, not found). *Nothapalus robinkempi* (Pilsbry).
- Homorus iredalei* Preston, 1912b. Uganda, between Mbarara and Kigezi, Kemp (type material: MAC 8535; Liverpool). *Oreohomorus nitidus* (von Mts.).
- Homorus kenangopensis* Preston, 1912a. Kenya, Aberdares, Kinangop, Kemp (type material: MAC, not found). *Nothapalus kenangopensis* (Preston).
- Homorus rex* Preston, 1913a. Kenya, Mt. Kenya, Kemp (type material: MAC 9936). *Subulona rex* (Preston).
- Hydrocena kenyana* Connolly, 1929. Kenya, Mt. Kenya, 1950 m, Insole (type material: BM 1928.8.2. 50–69 “type”) & same locality, 1800–2700 m, Kemp (1937.12.30. 5001–6, paratypes). Same.
- Kaliella consobrina* Preston, 1912b. Kenya, Igembi Hills to Nyeri, Kemp (type material: MAC 26104; Liverpool; BM 1937.12.30. 1665–8). *Kaliella barrakporensis* (Pfr.).
- Kaliella depauperata* Preston, 1912b. Kenya, Igembi Hills to Nyeri, Kemp (type material: MAC 26106; BM 1937.12.30. 1669–1672). Same.
- Kaliella iredalei* Preston, 1912b. Kenya, Igembi Hills to Nyeri, Kemp (type material: MAC 26107; Liverpool). Same, but probably needs new genus.
- Kaliella kigeziensis* Preston, 1912b. Uganda, Mbarara to Kigezi, Kemp (type material: BM 1911.11.2. 16–18) and several places near Kigezi Kemp (type material: MAC 26109; BM 1937.12.30. 1673–4 ‘paratypes’). *Kaliella barrakporensis* (Pfr.).
- Kempia burungaensis* Preston, 1913a. Zaire, Mt. Mikeno, Burunga, 1800 m, Kemp (type material: MAC, not found). *Pseudoglessula burungaensis* (Preston).
- Kempia kivuensis* Preston, 1913a. Zaire, Lake Kivu, Kemp (type material: MAC, not found). *Pseudoglessula pilsbryi* Connolly (not *Ena kivuensis* Preston which is also a *Pseudoglessula*).
- Kempioconcha* Preston, 1913b, new name for *Kempia* Preston (1913) non Matthews (1912) (a section of *Pseudoglessula*).
- Kenia obesa* Preston, 1912a. Uganda, Entebbe to Mbarara, Kemp (type material: MAC not found). *Nothapalus paucispira* (von Mts.).
- Larogiella fonticula* Preston, 1914. Uganda, Lake Mutanda, Kemp (type material: BM 1937.12.30. 1973). Anatomy and correct genus unknown, probably best referred to *Halolimnolimax* pro tem.

- Larogiella kombaensis* Preston, 1914. Uganda, Komba, *Kemp* (type material: BM 1937.12.30. 1995–7). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Larogiella malasangiensis* Preston, 1914. Uganda, Malasanji *Kemp* (type material: BM 1937.12.30. 2000). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Ledoulxia adjacens* Preston, 1914. Kenya, Aberdares, Kinangop, *Kemp* (type material: BM 1937.12.30. 3613 (marked on box as holotype); 1911.8.22. 65–7 (also 1937.12.30. 3488 given as type in accession book). *Trochonanina levistriata* (Preston) (*adjacens* omitted from my 1983 checklist).
- Ledoulxia eussoensis* Preston, 1914. Kenya, Eusso Nyiro, *Kemp* (type material: MAC, not found; BM 1937.12.30. 3532 (marked holotype). *Trochonanina eussoensis* (Preston).
- Ledoulxia jingaensis* Preston, 1914. Uganda, Jinja, *Kemp* (type material: BM 1937.12.30. 3634 (on box) (also 1937.12.30. 3545 given as type material in accession book). *Trochonanina jingaensis* (Preston) (but perhaps not distinct from *T. mozambicensis* (Pfr.).
- Ledoulxia levistriata* var. *nyeriensis* Preston, 1914. Kenya, Nyeri, *Kemp* (type material: BM 1937.12.30. 3564) (omitted from my 1983 checklist). *Trochonanina levistriata* (Preston).
- Leucochiloides chanlerensis* Preston, 1912b. Kenya, Eusso Nyiro, Chanlers Falls, *Kemp* (type material: MAC 26709; BM 1937.12.30. 3301–2). *Pupoides coenopictus sennaariensis* (Pfr.).
- Leucochiloides consanguineus* Preston, 1913a. Kenya, Gazi, *Kemp* (type material: MAC, not found; BM 1911.10.12. 99 (accession book n.t.i.). *Pupoides coenopictus sennaariensis* (Pfr.).
- Leucochiloides gaziensis* Preston, 1912b. Kenya, Gazi, *Kemp* (type material: MAC 26712). *Pupoides coenopictus samavaensis* (Paladilhé).
- Leucochiloides iredalei* Preston, 1912b. Kenya, Eusso Nyiro, *Kemp* (type material: MAC 17536; Liverpool; BM 1937.12.30. 3313–5). *Microstele iredalei* (Preston) (probably not a true *Microstele* but a *Pupoides* with a tooth).
- Leucochiloides soror* Preston, 1912b. Kenya, Eusso Nyiro, Chanlers Falls, *Kemp* (type material: MAC 26708; Liverpool; BM 1937.12.30. 3326–31). *Pupoides coenopictus coenopictus* (Hutton).
- Limicolaria kemp* Preston, 1913d. Extreme SW. of Uganda, *Kemp* (type material: MAC, not found; BM 1911.11.2. 86). *Limicolaria martensiana karagwensis* Kobelt.

- Limicolaria kivuensis* Preston, 1913d. Zaire, Lake Kivu, *Kemp* (type material: MAC 4814). *Limicolariopsis kivuensis* (Preston).
- Limicolaria laikipiaensis* Preston, 1913d. Kenya, Laikipia, Rumuruti, *Kemp* (type material: MAC not found; Liverpool; Crowley Coll.; BM 1911.6.20. 25–27). Same.
- Limicolaria nakuruana* Preston, 1912c. Kenya, Nakuru, *Kemp* (type material: MAC 1238). *Limicolaria martensiana catharia* Dall.
- Limicolaria pellis-lacertae* Preston, 1913d. Kenya, Aberdares, Kinangop, *Kemp* (type material: MAC 617). *Limicolariopsis keniana* (E.A. Smith) (fide Crowley & Pain, 1961).
- Limicolaria (Rebmanniella) percurta* Preston, 1912b. Kenya, Igembi Hills to Nyeri, *Kemp* (type material: MAC 4828). *Limicolariopsis percurta* (Preston).
- Limicolaria (Rebmanniella) perobtusata* Preston, 1912c. Kenya, Aberdares, Kinangop, *Kemp* (type material: MAC 4829). *Limicolariopsis perobtusata* (Preston).
- Limicolaria scabrosa* Preston 1913d. Kenya, Nyambeni Hills, *Kemp* (type material: MAC 618). *Limicolariopsis scabrosa* (Preston) (this, of which I have seen material collected on the Nyambeni Hills by H. Beentje does not seem the same as *L. keniana* with which Crowley & Pain united it).
- Lymnaea kemp*i Preston, 1912b. Kenya, Kisumu, *Kemp* (type material: MAC 28464; BM 1911.8.22. 206–208). *Lymnaea natalensis* Krauss.
- Lymnaea mweruensis* Connolly, 1929. Kenya, Meru, *Kemp* (type material: BM 1937.12.30. 9299). *Lymnaea truncatula* (Müll.) (wrongly spelt *truncata* in my checklist).
- Malania* (sic)* *maraensis* Preston, 1913a. Kenya, Eusso Mara R., *Kemp* (type material: MAC 41713). *Melanoides tuberculata* (Müll.).
- Martensia levistriata* Preston, 1913a. Kenya, Mt. Kenya to Eusso Nyiro, *Kemp* (type material: MAC not found; Liverpool; BM 1937.12.30. 3635–6, marked paratypes). *Trochonanina levistriata* (Preston).
- Mikenoella akena* Preston, 1914. Zaire, Mt. Mikeno, Burunga, 1800 m, *Kemp* (type material: BM 1937.12.30. 1947, marked holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnolimax* pro tem.
- Mikenoella neglecta* Preston, 1914. Uganda, Kiduha, *Kemp* (type material: BM 1937.12.30. 2011, marked as holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnolimax* pro tem.

* Corrected to *Melania* (p. 212 same year).

- Nakuruella soror* Preston, 1914. Zaire, Mt. Mikeno, Burunga, *Kemp* (type material: BM 1937.12.30. 2050, marked as holotype). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Natalina permembranacea* Preston, 1912b. Uganda, Kigezi, *Kemp* (type material: MAC 27279). Anatomy and genus unknown, best referred to *Halolimnohelix* pro tem.
- Nothapalus adelus* Connolly, 1923a. Probably Zaire, between Lake Mutanda and Lake Kivu, *Kemp* (type material: BM 1937.12.30. 8899). Same.
- Nothapalus ugandanus* Connolly, 1923a. Uganda, Kigezi, 1800 m, *Kemp* (type material: BM 1911.11.2. 71-73 & Ingezi, Mfumburu Mts., *Kemp* (type material: BM 1937.12.30. 8896-98); Zaire, Buhamba, *Kemp* (not found) & Burunga, Mt. Mikeno, *Kemp* (not found). Same.
- Opeas aphantum* Connolly, 1923b. Kenya, Mt. Kenya, *Kemp* (type material: BM 1937.12.30. 4186). Same.
- Opeas (Micropeas) callipeplum* Connolly, 1923b. Kenya, Eusso Nyiro, *Kemp* (type material: BM 1937. 12.30. 4219, lectotype) (also a tube labelled *Subulina eussoensis* Preston MS ?*Kemp*, 1911.8.22. 168-169); Lorian Swamp, *Percival* (material not found). *Cecilioides callipeplum* (Connolly)..
- Opeas glischrum* Connolly, 1923b. Uganda, Mbarara to Masaka, *Kemp* (type material: BM 1937.12.30. 4189). Same.
- Opeas marginatum* Connolly, 1923b. Kenya, Rumuruti, *Kemp* (type material: BM 1937.12.30. 4194). Same.
- Opeas pervitreum* Connolly, 1923b. Kenya, Gazi, *Kemp* (type material: 1911.10.12. 172-174; 1937.12.30. 4198-4200). Same.
- Opeas suavissimum* Connolly, 1923b. Kenya, Nairobi, *Falloon* (type material: BM 1937.12.30. 8823, cited as type by Connolly); Marsabit, *Percival* (type material: BM, not found) Gazi, *Kemp* (type material: BM, not found). Same.
- Opeas tapeinum* Connolly, 1923b. Kenya, Rumuruti, *Kemp* (type material: BM 1937.12.30. 4206); Igembi Hills, *Kemp* (not found). Same.
- Opeas thomasi* Connolly, 1923b. Zaire, near Lake Kivu, Mukanda, *Kemp* (type material BM 1937.12.30. 4207 cited as type by Connolly); Uganda, between Mbarara & Kigezi, *Kemp* (not found).
- Opeas toroense* Connolly, 1923b. Uganda, near Fort Portal, *Fisher* (type material: BM 1937.12.30. 4208); Mbarara to Kigezi, *Kemp* (a box lid at BM has this locality crossed out but no specimen). Same. (Connolly did not select one as the type).

- Physa exserta* Preston, 1913a. Kenya, Lake Baringo, *Kemp* (type material: MAC not found; BM 1911.10.12. 28–30 marked cotypes). *Bulinus tropicus* (Krauss).
- Physa laikipiaensis* Preston, 1913a. Kenya, Laikipia Plateau, 2100 m, *Kemp* (type material: MAC not found). *Bulinus ?tropicus* (Krauss).
- Physa masakaensis* Preston, 1913a. Uganda, Masaka, *Kemp* (type material: MAC, not found). *Bulinus globosus* (Morelet).
- Physa mutandaensis* Preston, 1913a. Uganda, Lake Mutanda, *Kemp* (type material: MAC, not found). *Bulinus mutandaensis* (Preston) but always called by the later name *Bulinus ugandae* Mandahl-Barth.
- Physa permembranacea* Preston, 1912a. Kenya, Aberdares, *Kemp* (type material: MAC, not found; BM 1911.8.22. 195–197 marked cotypes). *Bulinus permembranaceus* (Preston).
- Physa rumrutiensis* Preston, 1913a. Kenya, between Rumuruti and Mt. Kenya (actual box label states Rumuruti to Eusso Nyiro), *Kemp* (type material: BM 1911.8.22. 118–200, marked as cotypes). *Bulinus ?tropicus* (Krauss).
- Physa syngenes* Preston, 1913a. Kenya, Lake Naivasha, *Kemp* (type material: MAC, not found; BM 1937.12.30. 11969–74). *Bulinus tropicus* (Krauss).
- Planorbis kigeziensis* Preston, 1912b. Uganda, Kigezi, *Kemp* (type material: MAC 29686; BM 1911.11.2. 100–102). *Ceratophallus kigeziensis kigeziensis* (Preston).
- Planorbis kisumiensis* Preston, 1912a. Kenya, Kisumu, *Kemp* (type material: MAC 29687; Liverpool; BM 1937.12.30. 11532–38, not found in collection). *Ceratophallus kisumiensis* (Preston).
- Planorbis sperabilis* Preston, 1912b. Kenya, Gazi, *Kemp* (type material: MAC 29554; BM 1911.10.12. 208–9 (n.t.i.), not found in collection). *Ceratophallus natalensis* (Krauss) or perhaps distinct allied species.
- Pseudoglessula mutandana* Connolly, 1923a. Uganda, Lake Mutanda, *Kemp* (type material: 1937.12.30. 8060). Same (but may be a form of *P. cruda* Pilsbry).
- Pseudoglessula perobtusa* Connolly, 1923a. Zaire, Burunga, Mt. Miken, *Kemp* (type material: BM 1912.9.19. 238; 1937.12.80. 8113 two syntypes). Same.
- Pseudopeas burunganum* Connolly, 1923b. Zaire, Burunga, Mt. Miken, *Kemp* (type material: BM 1937.12.30. 4218). Same.
- Pseudopeas chlorum* Connolly, 1923b. Kenya, Eusso Nyiro, *Kemp* (type material: BM 1937.12.30. 4227). Same.
- Pseudopeas elgonense* Connolly, 1923b. Uganda, Mt. Elgon, Woodhouse (type material: BM 1937.12.30. 4252–3) also from Mbarara to Kigezi and Lake Mutanda, *Kemp* (not seen) & Tanzania, Dar es Salaam, *Connolly* (not seen).

- Same. (Connolly states "Mt. Elgon (type Woodhouse)" and it is clear from information he gives that 4252 is the holotype).
- Pseudopeas igembiense* Connolly, 1923b. Kenya, Igembi Hills, 1800 m, *Kemp* (type material: BM 1937.12.30. 4266). Same.
- Pseudopeas iredalei* Connolly, 1923b. Uganda, between Entebbe and Masaka, *Kemp* (type material: BM 1937.12.30. 4267). Same.
- Pseudopeas stenoterum* Connolly, 1923b. Kenya, Igembi Hills to Nyeri, *Kemp* (type material: BM 1937.12.30. 4279). Same.
- Segmentina eussoensis* Preston, 1912b. Kenya, Eusso Nyiro, Chalers Falls, *Kemp* (type material: MAC 29554; BM 1911.8.22. 212). *Segmentorbis eussoensis* (Preston).
- Segmentina kemp* Preston, 1912b. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC 29691; Liverpool; BM 1911.11.2. 103–5). *Segmentorbis angustus* (Jickeli).
- Sitala iredalei* Preston, 1912b. Kenya, Aberdares, Kinangop, *Kemp* (type material: MAC 26208; BM 1911.8.22. 69). *Afroconulus iredalei* (Preston).
- Sphaerium congener* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 55021; BM 1911.8.22. 15). *Sphaerium (Pseudocorbicula) victoriae* E.A. Smith.
- Sphaerium iredalei* Preston, 1912a. Kenya, Kisumu, *Kemp* (type material: MAC 55023; BM 1911.8.22. 9–11; 1937.12.30 8995–97). *Sphaerium nyanzae alluaudi* (Dautzenberg).
- Sphaerium kigeziense* Preston, 1912b (as "kigeziensis"). Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC 55024; Liverpool; BM 1911.11.2. 199–200). *Pisidium kenianum* Preston.
- Sphaerium naivashaense* Preston, 1912a. Kenya, Lake Naivasha, *Kemp* (type material: MAC, not found; BM 1911.8.22. 12–14; 1937.12.30. 9002–5). ?*Sphaerium stuhlmanni* von Mts. forma.
- Streptostele (Raffraya) auriformis* Connolly, 1922. Kenya, Laikipia Plateau, Rumuruti, 2100 m, *Kemp* (type material: BM 1937.12.30. 145, labelled holotype). Same.
- Streptostele columna* Connolly, 1922. Kenya, Laikipia Plateau, Rumuruti, 1800 m, *Kemp* (type material: BM 1937.12.164., labelled holotype). Same.
- Streptostele elongata* Connolly, 1922. Kenya, Aberdares Kinangop, *Kemp* (type material: BM 1911.8.22. 36; 1937.12.30. 184 (marked as holotype by Connolly). Same.
- Streptostele exasperata* Preston, 1912a. Kenya, Mt. Kenya, *Kemp* (type material: MAC 17289, 55027; BM 1911.8.22. 35; 1937.12.30. 185–190). Same.

- Streptostele (Graptostele) iota* Connolly, 1922. Kenya, Mt. Kenya, 2100–2700 m, *Kemp* (type material: BM 1937.12.30. 202 (marked as type) and Igembi Hills to Nyeri, *Percival* (box states *Kemp*) (type material: 1937.12.30. 203–5). Same.
- Streptostele (Graptostele) jod* Connolly, 1922. Kenya, Rumuruti, *Kemp* (type material: BM 1937.12.30. 206, marked as holotype). Same.
- Streptostele kenyana* Connolly, 1922. Kenya, Mt. Kenya, *Kemp* (type material: BM 1937.12.30. 207, marked as holotype). Same.
- Streptostele oribates* Connolly, 1922. Kenya, Igembi Hills to Nyeri, *Kemp* (type material: BM 1937.12.30. 220, marked as type). Same.
- Streptostele polymorpha* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 16969; Liverpool; BM 1911.8.22. 38; 1937.12.30. 223). Same.
- Subulina kemp* Preston, 1912a. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 12501; Liverpool). *Opeas (Nothapalinus) kemp* (Preston).
- Subulina taruensis* Connolly, 1923a. Kenya, Taru Desert, *Kemp* (type material: BM 1937.12.30. 8123) & Uganda, Mbarara to Kigezi, *Kemp* (type material: BM 1937.12.30. 8124) (in the original description Connolly alludes to the Taru shell as “the typical form”). Same.
- Subulina viridula* Connolly, 1923a. Uganda, Kigezi, 1800 m, *Kemp* (type material: 1911.11.2. 81 “2154”; BM 1937.12.30. 8147) & Zaire, near Lake Kivu, Mukanda, *Kemp* (type material: BM 1912.9.19. 227–229; 1937.12.30. 8148). Same (8145 and 8146 mentioned in accession book not found).
- Succinea eussoensis* Preston, 1912a. Kenya, Eusso Nyiro, Chanlers Falls, *Kemp* (type material: MAC, not found; BM 1937.12.30. 8624–28). Same (true genus will not be known until dissected).
- Succinea kemp* Preston, 1912b. Uganda, between Entebbe and Mbarara, *Kemp* (type material: MAC 26274; BM 1937.12.30. 8638–41). Same (true genus will not be known until dissected).
- Succinea princei* Preston, 1912b. Kenya, Nakuru, *Kemp* (type material: MAC 26300; BM 1937.12.30. 8636–37). Same (true genus will not be known until dissected).
- Succinea simplicissima* Preston, 1912a. Kenya, Eusso Nyiro, Chanlers Falls, *Kemp* (type material: MAC 26333; BM 1937.12.30. 8621–23). Same (true genus will not be known until dissected).
- Tayloria shimbiensis* Connolly, 1922. Kenya, Shimba Hills, *Kemp* (type material: BM 1913.7.31. 65; 1937.12.30. 143, marked as type). Same.
- Thapsiella millestriata* Preston, 1912b. Near Kigezi, 1800 m, *Kemp* (type material: MAC 23707; BM 1937.12.30. 1584). *Thapsia millestriata* (Preston).

- Thapsiella opposita* Preston, 1912b. Kenya, Aberdares, Kinangop, *Kemp* (type material: MAC, not found; BM 1911.8.22. 83–84 (only one specimen found)).
Afrogyppya rumrutiensis (Preston).
- Trachycystis bernardinae* Connolly, 1925. Kenya, Solai Forest, Mt. Kenya, 2100–2700 m [the only Solai I know is in Nakuru District] *Kemp* (type material: BM 1937.12.20. 2077). *Trachycystis iredalei* Preston.
- Trachycystis igembiensis* Connolly, 1925. Kenya, between the Igembi Hills and Nyeri, *Kemp* (type material: BM 1937.12.30. 2078). Material poor, may be a *Punctum*.
- Trachycystis iredalei* Preston, 1912b. Kenya, Igembi Hills to Nyeri, *Kemp* (type material: MAC 27278). Same.
- Trachycystis nigrotincta* Preston, 1912a. Kenya, Mt. Kenya to Eusso Nyiro, *Kemp* (type material: BM 1911.8.22. 45; 1937.12.30. 2054 ('type best' fide Connolly)). Anatomy unknown but clearly a helioid best referred to *Halolimnohelix* pro tem.
- Trichotoxon kemp*i Pollonera, 1911. Kenya, between Igembi Hills and Nyeri, *Kemp* (type material: not found by van Goethem). *Trichotoxon heynemanni* Simroth.
- Trichotoxon kenianse* Pollonera, 1911 (as *keniensis*). Kenya, Mt. Kenya, 2740–3050 m, *Kemp* (type material not found by van Goethem). *Trichotoxon heynemanni* Simroth.
- Trochozonites buhambaensis* Preston, 1914. Zaire, Lake Kivu, Buhamba, *Kemp* (type material: MAC 24441, paratype; BM 1937.12.30. 2158). Probably *T. medjensis* Pilsbry.
- Trochozonites expatriata* Preston, 1914. Zaire, Mt. Mikenno, Burunga, *Kemp* (type material: BM 1937.12.30. 2161). Same.
- Trochozonites kemp*i Preston, 1914. Zaire, L. Kivu, Buhamba, *Kemp* (type material: BM 1937.12.30. 2168). Same (Connolly's suggestion on box that this a juvenile of *T. leptalea* E.A. Sm. is not correct).
- Urguessella capillata* Preston, 1914. Zaire, Mt. Mikenno, Burunga, 1800 m. *Kemp* (type material: BM 1937.12.30. 1964). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem.
- Urguessella cuticularis* Preston, 1914. Uganda, Malasani, *Kemp* (type material: BM 1937.12.30. 1967). Anatomy and correct genus unknown, probably best referred to *Halolimnohelix* pro tem. but not distinguishable from *Larogiella malasaniensis* Preston.
- Varicostele curvicollella* Connolly, 1922. Uganda, Jinja, *Kemp* (type material: BM 1937.12.30. 179, marked as holotype). Same.

- Vitrina compacta* Preston, 1912b. Uganda, Mbarara to Kigezi, *Kemp* (type material: MAC 25471). Anatomy unknown, probably a 'helicarionid' of some sort.
- Vitrina lactea* Connolly, 1925. Kenya, Mt. Kenya, *Gregory* (syntypes), 6000–9000'; *Kemp* (1911.8.22. 41–43; 1937.12.30. 1440 "type largest"). Same.
- Vivipara rubicunda* var. *kisumiensis* Preston, 1912b. Kenya, Kisumu, *Kemp* (type material: MAC 38480). *Bellamyia jucunda* (E.A. Smith).
- Zingis aurea* Preston, 1913a. Kenya, Nyambeni Hills 1800 m, *Kemp* (type material: MAC 27328) (I have miscited this as 27238 elsewhere); Nyeri, *Kemp* (not found); Meru, *Kemp* (not found); material in type collection at BM bears locality Igembi Hills BM 1911.8.22. 48–49; 1937.12.30 1951–54). *Vicariihelix gregorii* (E.A. Smith).
- Zingis bullata* Preston, 1913a. Kenya, Nakuru, *Kemp* (type material: MAC 27329). *Halolimnohelix bullata* (Preston).
- Zingis kemp*i Preston, 1912. Uganda, Mbarara to Kigezi, *Kemp* (type material: MAC 27332). Anatomy unknown, treat as *Halolimnohelix kemp*i (Preston) pro tem.
- Zingis papyracea* Preston, 1912. Uganda, Kigezi, 1800 m, *Kemp* (type material: MAC 27334). Anatomy unknown, treat as *Halolimnohelix papyracea* (Preston) pro tem.
- Zingis planispira* Preston, 1912. Uganda, Entebbe to Mbarara, *Kemp* (type material: MAC 27335). Anatomy unknown, treat as *Halolimnohelix planispira* (Preston) pro tem.

I have not had time to thoroughly search for type material. Some information is entirely derived from the accession books in The Natural History Museum which indicate 'paratype, cotype and holotype' not always in accordance with present day more stringent interpretations. Occasionally a few numbers are cited which are obviously original material but are not labelled with any type indication – for which I have used the abbreviation n.t.i, but probably not consistently. There may well also be type material in the general collection. The expression 'MAC not found' does not mean the material is not at Tervuren but it was not found under the original name. It is likely that almost everything that should be there is there but its position has probably been moved due to a name change or reidentification. It would not have been reasonable to expect staff there to hunt further in such circumstances. I am very grateful to Dr R. Jocqué for the information he sent. Anyone wanting to borrow material must give all the possible names under which it might be found. When the MAC material is listed by Schouteden as a type and consists of a single specimen it could be a holotype and is at least the obvious choice as a lectotype since Schouteden is merely publishing what Preston originally wrote on the labels. When Connolly has

marked a single specimen of one of his own species as holotype that can be accepted; when he has separated out in some way a specimen from a series of his own or other persons' species it is obviously the prime choice as a lectotype.

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Addenda to previous collectors

I dealt with J.E.S. Moore in Collectors in East Africa 20. The following species was omitted from my list which I discovered whilst dealing with Kemp.

Biomphalaria smithi Preston, 1910. Zaire/Uganda. Lake Albert Edward (= Lake Edward), J.E.S. Moore (type material: BM 1909.8.25. 66–77; 1937.12.30. 11416–17). Same.

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- J.E.S. Moore** (The Tanganyika Problem: 130 (1903)) mentions only *Planorbis sudanicus* from Lake Edward which could not be confused with *smithi*. It is curious that he did not deal with this species himself, or at least mention it. It also seems clear that Smith passed the material on to Preston to deal with.



For Sale

- ♦ **Kleine Beitrage Testaceotheologie 1760 JH Chemnitz 1 Plain Plate Original Publishers Boards £250**
- ♦ **Land and Freshwater Conchology 1845 T Brown 27 Handcoloured Plates £200**
- ♦ **Linnaean System of Conchology 1823 J Mawe 37 Handcoloured Plates Quarter Leather £450**
- ♦ **Zoology of NewYork - Conchology and Crustacea 1843 JE de Kay 53 Handcoloured Plates, Half Leather £250**
- ♦ **Oysters 1890/91 JR Philpots 2 Volumes, original blue bindings, rarely offered for sale £400**

For details contact:

John Robinson

**[REDACTED] Darlington
Co Durham [REDACTED]**

Telephone: [REDACTED]

Email: [REDACTED]

Shells in house construction

Fred Pinn

██████████, London ██████████

Along the south coast of Sinai in the Gulf of Aqaba are a number of nature reserves under the Ras Mohamed National Parks Authority, all distinguishing themselves by being rich in coral growth and consequently a most fascinating marine life. Nuweiba and Dahab have been among the sites very popular with scuba divers and snorklers for a long time. Now a new reserve has been added about half way between the two – the Ras Abu Gulam Reserve. This locality is:

'characterised by spectacular granite mountains that plunge sheer to its beaches, Abu Gulam is distinguished by its rich and varied ecosystems as well as its coral reefs. In this area 167 desert plant species have been identified some of which are not found in the neighbouring Ras Mohamed and Nabq ... Diving sites and Beduin fishing reserves are well indicated so as to safeguard the protected area.'

The quotation is taken from a most beautifully illustrated book *Sinai Holy Mountains and a Coral Sea* by Fabricio Calcia and Marco Moroccolo with exceptionally fine photographs of local marine life. There seems to be something of every species except one – Molluscs. But the shells are not quite absent as there is the picture of a fisherman's hut which is built entirely of mud and lambis shells that had been found 'scattered along the beach.' There appear to be rather too many shells in this hut for being just picked up 'scattered.' It is suggested that many of the shells have been fished for the animal as in South India where they are turned into delicious curries. (A project for investigation.)

In this connection Kevin Brown very kindly sent me two references to Southern and Eastern Arabia:

Lambis truncata sebae (Kiener 1843) ... It is extremely solid and strong, so much so that fishermen in ancient times used hundreds of dead, piled-up shells as walls for seaside huts ...' (D. & E. Bosch, *Seashells of Southern Arabia*); and from Eastern Arabia:

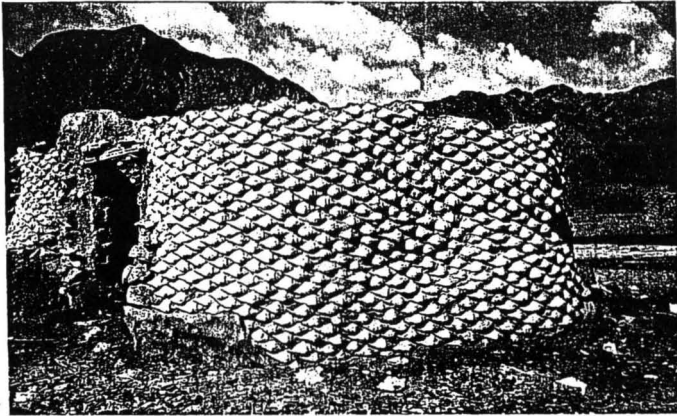
Lambis truncata sebae (Kiener 1843). The largest and heaviest gastropod in eastern Arabia ... In some places it is common, even in shallow water, and Omani fishermen usually know where to find it. Long ago, they used to accumulate piles of this solidly constructed species to form the walls of crude seaside huts ...'

Kevin comments:

'It would be interesting to know how widespread this use of the species was: your reference is to the Red Sea and the two above to the Arabian Gulf/Arabian Sea. Presumably this was a "common" practice for Arabian sailors/fishermen. It would also be interesting to do a rough count from the picture to see how many shells would be involved. A considerable number even for one hut!

I wonder whether the species was first collected for food and the discarded shells were later used, or whether dead beach collected were used, or were the shells specifically collected for construction? Interesting to speculate.'

Whatever the answers to these questions are, 'in ancient times' and 'long ago' seem to be still the present in the Gulf of Aqaba.



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**Conchological Society Field Meeting
to Sydenham Hill Wood and Dulwich Wood,
south east London**

June Chatfield

██████████, Alton, Hants ██████████

Rosemary Hill

██████████, Earley, Reading ██████████

Access restrictions due to the national epidemic of foot and mouth disease in 2001 led to the cancellation of the field meeting originally planned for the Medway in Kent and its replacement, arranged by Ron Boyce, by a visit to a London site on Saturday 9th June. The sites chosen were Sydenham Hill Wood (TQ344724), a London Wildlife Trust Reserve, and Dulwich Wood (TQ340725) where five members attended a meeting enjoyable particularly for its slugs. The first site, Sydenham Hill Wood, is a string of woodland adjacent to Dulwich Wood which follows a former railway line. (Both these woods were once part of the Great North Wood – an ancient pasture woodland SE of London.) There is a steep cutting by the old (now blocked) railway tunnel with much dead wood, and this damp, shaded habitat provided a good start to the collecting, especially for slugs.

The most interesting find was the Yellow Slug *Limax flavus* (adult and juvenile) under damp logs. It is probable that a population lives in the crevices of the eroded mortar work of the tunnel wall as this is a species usually associated with walls. Also present with it was *Limax maximus* and *Arion subfuscus* (both woodland slugs), and a species of disturbed sites, *Tandonia budapestensis*. Removed from the site were some small very thin slugs which looked like dark forms of *Boettgerilla pallens* but when grown on (by Rosemary Hill) these showed a voracious appetite for vegetarian food (carrots) and developed the typical features of *T. budapestensis*.

Near the railway tunnel a pathway leads off the old railway track to a small pond (fenced off) and a grassy ride/glade where species typical of more open country were found. These included abundant specimens of the Common Hairy Snail *Trichia hispida*, the slugs *Arion circumscriptus*, *Deroceras reticulatum* and the Rayed Glass Snail *Nesovitrea hammonis*. The Garlic Snail *Oxychilus alliarius* was common

below wet logs the length of the railway. Two further species of disturbed sites found along the railway at the Cox's Walk end were the slug *Deroceras panormitanum* and Draparnaud's Glass Snail *Oxychilus draparnaudi*. The remaining species found were *Carychium tridentatum*, *Lauria cylindracea*, *Discus rotundatus*, *Arion ater* agg., *Arion distinctus*, *Vitrea crystallina*, *Aegopinella pura*, *Euconulus fulvus* and *Helix aspersa*. A small bag of leaf litter was taken for sorting but this had a low yield of species and added only the Pygmy Snail *Punctum pygmaeum* to the list of species.

In all 21 species were recorded, all common and widespread and tolerant of disturbance. In spite of the wet spring, little rain fell in May and the ground was dry in many parts of the wood, which is on acid London Clay, but the railway ballast is of limestone. Various omissions for the expected list viz *Cochicopa lubrica*, *Acanthinula aculeata*, *Arion intermedius*, *Vitrina pellucida*, *Lehmannia marginata*, *Cepaea hortensis* and *Clausilia bidentata* would be worth seeking on another occasion, perhaps in autumn and after rain which might bring the Tree Slug *L. marginata* out of the deep crevices where it usually rests in the daytime.

The adjacent Dulwich Wood was explored after lunch but with deteriorating weather it became difficult to identify species because of lack of light under the trees so the meeting ended early. The species found were *Lauria cylindracea*, *O. alliarius*, *L. maximus*, *D. rotundatus*, *A. ater* agg., *A. subfuscus*, *A. hortensis*, *Thispida*, *D. reticulatum*, *D. panormitanum*, *L. flavus*, *O. cellarius*, *T. budapestensis* and *A. distinctus*. Leaf litter sieving also produced *P. pygmaeum* and *Carychium* sp. juv. When the site was reconnoitred for the field meeting earlier in the year (23 May, Ron Boyce and Rosemary Hill) *Lehmannia marginata* was also found but could not be relocated on the day of the meeting for a member who wished to see one!

London Wildlife Trust have also taken on the embankment of Sydenham Hill Railway Station as a nature reserve and a previous visit (by June Chatfield) to Sydenham Hill on 9 May produced a list of seven species found whilst waiting for the return train to London. These were *A. distinctus*, *O. draparnaudi*, *D. reticulatum*, *D. panormitanum*, *T. striolata*, *C. hortensis* and *Helix aspersa*. Although

inaccessible except from station platforms, railway land provides important green corridors through urban areas.

Thanks are due to London Wildlife Trust for permission to visit Sydenham Hill Wood and for arranging permission for us to visit Dulwich Wood at rather short notice.



New E-group

There is now an Email discussion group for members interested in British marine, terrestrial and aquatic mollusca and their shells.

This includes an option to post images of finds which are of interest or requiring identification. This is kindly managed by Sarah Longrigg who contacted all those members for whom she had Email addresses. Everyone is welcome to join, either by contacting Sarah directly at [REDACTED] or by going to the Smartgroups website at:

<http://www.smartgroups.com/groups/conchology-uk>.

Images of New Zealand snails

Bernard Verdcourt

Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB

My sister Ann who lives in New Zealand sent me a copy of *150 Treasures* published by the Auckland War Memorial Museum, 2001 (ISBN 1 86953 499 9) because she had noticed a picture of a hairy snail in it. Although very few of the 150 pictures are of molluscs they are of such quality that it is worth drawing attention to them by listing them.

Dendrodoris denisoni (G.F. Angas); *Archidoris wellingtonensis* (Abraham); *Ceratosoma amoena* (Cheeseman); *Paryphanta* (*Powelliphanta*) *hochstetteri* (Pfr.); *Cytora hirsutissima* (Powell); *Provocator mirabilis* (Finlay); *Astrea* (sic) *heliotropium* (Martyn); *Argonauta nodosa* Lightfoot; *Rhytida* (*Rhytidarex*) *buddlei* Powell and *Placostylus hongii* (Lesson).

I have added authorities from A.W.B. Powell's *New Zealand Mollusca* (1979). I have assumed that *Ceratosoma amoena* is another combination of *Glossodoris amoena* which is listed in Powell. *Provocator mirabilis* is listed as *Iredalina mirabilis* in Powell and by Dance and Abbott and Thiele. *Astraea* is the correct spelling.



Conchological Society of Great Britain and Ireland

MINUTES

1104th (Ordinary) Meeting held on the 8th September 2001 in the Demonstration Room of the Natural History Museum starting at 2:30 p.m.

In the chair: Dr Rundle with 19 members present.

Apologies for absence: Dr Alexander, Mr Carr, Mr Eversham, Mr Gillard, Mr Long, Mrs McMillan, Mr Negus, Mr Pain, Mr Pinn, Mrs Rands, Miss Reynolds, Miss Sawyer, Mrs Turk, Dr Verdcourt, Dr Willing.

Minutes of the last meeting (of 17 February, 2001): The Minutes were read, accepted and signed without amendment.

Matters arising: None

Nomination and election of new members: None

Announcements and Correspondence: None

Any other business:

It was suggested that the Society might wish to lobby for increased access to the countryside and, on the further suggestion that the Tourist Industry would already be doing this, to let them do it.

Mr Boyce reported that he had information on the forthcoming meeting in Fife and asked anyone who might be interested in attending to get in touch with him.

Lecture of the day:

Speaker: Michael Weideli

Title of talk: The National Biodiversity Network – a new challenge for molluscan recording.

Meeting closed at 4.32 p.m.

Chairman.

Appendix: members' exhibits:

J Chatfield

- Photocopy of article 'In search of slugs and snails' from Surrey Wildlife Trust's *Nature Line: a survey of Chertsey Meads*.
- Bulletin of the Malacological Society of London, August 2001.

- Barry Colville Biodiversity Action Plans: Contributions from Cumbria and the North West.
- Ron Boyce Photographs taken at Kimmeridge Ledges, 23 June 2001
- A deep rock pool with *Gibbula umbilicalis*
 - A fossil ammonite
 - Members working the shore line
- Janet Sawyer Photograph of Conchological Society members at Kimmeridge Bay, 23 June 2001.
- John E Llewellyn-Jones ▪ Freshwater pearls over the last 50 years with book *People and Pearls*.
- Paper art works based on marine animals by FABRICA.
 - Debenham's shell advert plus shells (*Fasciolaria trapezium* L.)
- P Dansey Garden path gravel: fossil and recent shells.
- Adrian Rundle Some mollusks from the Palaeocene Blackheath Beds of Abbey Wood, London, SE2
- Kevin Brown ▪ Book: *Chitons of the World* by Frans. J.A. Slieker.
- Specimens of chiton from South Africa.
 - Press cuttings.
- William Penrice Itinerary for the Fife meeting on 16-23 September 2001.

■

1105th (Ordinary) Meeting held on the 20th October, 2001 in the Demonstration Room of the Natural History Museum starting at 2:30 p.m.

Announcement of death: The death of Dr Lloyd Evans, member since 1965, was announced.

In the chair: Dr Rundle with 31 members and 1 visitor present.

Apologies for absence: Dr Alexander, Mrs Buckle, Mr Carr, Mr Killeen, Mrs Light, Mrs Long, Mrs McMillan, Mr Negus, Dr Nicholson, Mr & Mrs Pain, Mr Pinn, Mrs Rands, Mr Terry, Mrs Turk.

Minutes of the last meeting (of 8 September, 2001): The Minutes were read and accepted.

Matters arising: None

Nomination and election of new members: 6 Ordinary and 2 Student members were nominated and elected:

Ordinary:

Miss E S Bolton

[redacted] Cottingham, East Yorkshire, [redacted]

Mr N H Cooper

[redacted] London, [redacted]

Mr J Davidson

[redacted], London, [redacted]

Mrs E H Letts

[redacted], Stockbridge, Hants, [redacted]

Mr R F Taylor

[redacted], London, [redacted]

Mr N E Widden

[redacted], Surbiton, Surrey, [redacted]

Student:

Mr P Elliott

Department of Zoology, Downing Street, Cambridge, CB2 3EJ

Miss G T Moller

[redacted], Ruthin, Denbighshire, [redacted]

Announcements and Correspondence: The next indoor meeting will take place on Saturday 17 November. The speaker will be Mike Barker on 'Colour preservation in fossils'.

There will be a Workshop at the home of Miss Judith Nelson on Saturday 24 November. The main topics are 'Small marine bivalves' and 'Barton fossils'.

Any other business: None

Lecture of the day:

The subject was 'Local land recording schemes'

After an introduction by Dr Chatfield, Mr Weideli introduced his work at Breach Copse, Berkshire. This was followed by a general discussion.

Meeting closed at 4.26 p.m.

Chairman.

Appendix: members' exhibits:

John E Llewellyn-Jones	Newspaper cuttings: ▪ The £300 000 bikini made up of black and white pearls ▪ Saving the Scottish pearl mussel, Independent, April 15th 2001 ▪ Savibel Island and shell collecting, Mail on Sunday, April 15th 2001
Janet Sawyer	▪ Miscellaneous items ▪ Countryside Alliance petition re: FMD
E O Bishop	▪ Croatian land shell queries ▪ Book and article referring to Croatian mollusca
P Dansey	Pond snails and dermatology
Peter Topley	<i>Megaspira ruschenbergiana</i> Jay, 1836
Kevin Brown	▪ Centenary of birth of A W B Powell ▪ Book: A W B Powell, <i>New Zealand mollusca</i> ▪ Book: A W B Powell. <i>Shells of New Zealand</i> ▪ Book: A W B Powell, <i>Indo-Pacific mollusca</i>, Parts 5, 7, 10 & 15 ▪ Specimens of Turris ▪ <i>Charonia rubicunda powelli</i> Cotton, 1957 ▪ Press cuttings
June Chatfield & Terry Wimbleton	Haslemere Shell Exhibition – September 2001.
Anna McIvor & other members of The Aquatic Ecology group	Poster, press cuttings & photographs
Phil' Palmer	Thank you to the Conch. Soc! – The Aquatic Ecology Group at the World Congress in Vienna, 2001
Ron Boyce	Mollusc shells as a substrate for other organisms
David Long	Photographs of the dredging trip in Fife, 17-19 September, 2001
	Reports of single site surveys

Rosemary E Hill

Barton Bed fossils (from Barton and from I.O.W.)

Also boxes and capsules for sale

Jane Reynolds

- Press cuttings
- Oyster/octopus toys for sale
- Racing snails



1106th (Ordinary) Meeting held on the 17 November 2001 in the Demonstration Room of the Natural History Museum starting at 2:30 p.m.

Announcement of death: The death of Dr Nigel Nicholson, member since 1993, was announced.

In the chair: Dr Rundle with 28 members present.

Apologies for absence: Dr Alexander, Mrs Buckle, Mr Dansey, Mrs Long, Miss McIvor, Mrs McMillan, Mr Negus, Miss Nelson, Mr Philp, Mrs Rands, Mr Terry, Mrs Turk, Dr Verdcourt.

Minutes of the last meeting (of 20 October, 2001): The Minutes were read and accepted.

Matters arising: None

Announcements and Correspondence:

It was announced that a further book from the library of the late Francis de Bartolomé would be auctioned after the tea break: Louis Germain's *Les Helicidae de la faune Francaise*, Volume 13.

The next indoor meeting will take place on Saturday 8 December. The speaker will be Dr Graham Oliver on 'Marine bivalves of the Mascarene Islands'.

There will be a Workshop at the home of Miss Judith Nelson on Saturday 24 November. The main topics are 'Small marine bivalves' and 'Barton fossils'.

Any other business:

Dr Rundle asked for proposals for Council.

Dr Rundle outlined proposals for changes to the Conchologists' Newsletter, to help swell membership and encourage more interest in molluscs, that is, to reach a larger audience. He asked for ideas and suggestions.

Lecture of the day:

Speaker: Mike Barker

Title of talk: 'Colour preservation in fossils'

Book auction:

This raised £135 for Society funds.

Meeting closed at 4.48 p.m.

Chairman.

Appendix: members' exhibits:

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|---|--|
| Martin Willing | Copy of the new <i>Atlas of the Land and Freshwater Molluscs of Cornwall and the Isles of Scilly</i> |
| Dr Nigel Nicholson
(via Terry Wimbleton) | ▪ Guardian report
<i>Helix aspersa</i> – research on love darts at McGill University, Canada |
| Kevin Brown | ▪ Albanism in <i>Conus leopardus</i> (Röding, 1798) and <i>Plagiocardium pseudolima</i> (Lamarck, 1819)
▪ Article 'Do spots equal stripes?' by R Gunderson & R Minton; American Conchologist: 25 (4), Dec1997
▪ Specimens of <i>Puperta pupa</i> (Linne, 1758) and <i>Puperta tristis</i> (Orbigny, 1842) |
| Phil' Palmer | Spiral colour bands in a lower Jurassic ammonite, <i>Liparoceras haptoneis</i> , from Gloucester |
| John E Llewellyn-Jones | Fossil Nautilus, bivalve and piece of straight ammonite showing pearly surface.
Three cowry cameos, one with tropical beach but titled 'Greenland'. |
| Jane Reynolds | Press cutting <i>Acaulus</i> photos |
| Barry Colville | 1000 th meeting of Conchological Society |
| D C Long | ▪ Kaenozoic colour marked fossils
▪ Late Pliocene mollusks from near Barberino val d'Elsa, Tuscany |
| Rosemary Hill | Boxes/capsules for sale |

**1107th (Ordinary) Meeting held on the 8 December 2001 in the
Demonstration Room of the Natural History Museum starting at 2:30 p.m.**

In the chair: Mr Eversham with 28 members and visitors present.

Apologies for absence: Dr Alexander, Mr and Mrs Buckle, Mr Carr, Dr Chatfield, Mrs McMillan, Mr Negus, Mr Pinn, Mrs Rands, Dr Rundle, Mrs Turk, Dr Verdcourt, Dr Willing.

Minutes of the last meeting (of 17 November, 2001): The Minutes were read and accepted.

Matters arising: None

Announcements and Correspondence:

Some out-of-date Society posters 'Shells for everyone' were offered to those present.

The next indoor meeting will take place on Saturday 19th January, 2002. The speaker will be Dr Paul Davies on 'Small scale spatial and temporal aspects of molluscan ecology and palaeoecology'.

Any other business:

There are now five nominations for the three Council vacancies for 2002.

Lecture of the day:

Speaker: Graham Oliver

Title of talk: 'Marine bivalves of the Mascarene islands'

Meeting closed at 4.55 p.m.

Chairman.

Appendix: members' exhibits:

- | | |
|-----------------------------|---|
| E O Bishop | <i>Land and Freshwater Mollusca of Sussex</i> , a manuscript book by J.G. Dalgliesh with original watercolour plates by A.G. Stubbs (plus two letters). |
| Christine Street | A descendant of Martin Lister regarding his book of 1685-92 |
| Graham Oliver & Ian Killeen | BIOMOR4 The Thyasiridae of the British Shelf & North Sea Oilfields. |
| Kevin Brown | <ul style="list-style-type: none">▪ Book – B. Tursch & D. Greifeneder <i>Oliva shells: the genus Oliva and the species problem</i>.▪ Book – E.J. Petuch & D.M. Sargent <i>Atlas of</i> |

- the living Olive shells of the world.*
- Book – R.F. Zeigler & H.C. Porreca *Olive shells of the world.*
 - Specimens of Olive.
 - Antiquarreat Junk catalogue
 - Snail-shaped book and novelties
 - London Naturalist (Non-marine Atlas review p. 227).
- J Reynolds
- Ron Boyce
- Rupert Honnor
- J.E. Llewellyn-Jones
- Diary of meetings 2002.
- How to find the De la Beche Room (maps). Publications and merchandise order form 2002.
- Shell artefacts and book entitled *People and Pearls* by K.I. Hackney & D. Edkins.



Annual General Meeting

12 April 2003

Members are reminded that they can nominate candidates for election to the Council.

Rule No. 12. Candidates for nomination to the Council shall be paid-up members of the Society and shall be nominated by two members. Nominations, other than those made by the Council itself, shall be sent in writing to the Hon. Secretary at least six weeks before the AGM, and shall be accompanied by a signed declaration of the candidate's willingness to serve.

Note: Nominations must be received by the Hon. General Secretary NOT LATER THAN **31 December 2002**.

Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary:

Ron Boyce, [REDACTED], Reading, Berkshire [REDACTED]
[REDACTED]

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.

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
MSL = Malacological Society of London

YCS – Saturday 7 September: Springs on east face of Ingleborough. Meet at 10.30 h (please note earlier time) at the National Park car park in Clapham, grid ref. SD 745693. Contact David Lindley [REDACTED]
[REDACTED]

NHM – Saturday 7 September: 14.30 h in the de La Beche Room. For our first indoor meeting of the new season we welcome as Guest Speakers Jan Light and Ian Killeen on the subject of 'Marine gastropods of Rodrigues'.

Meeting – Saturday 21 September 2002

Laxton, Nottinghamshire

Leader: Chris du Feu [REDACTED]
[REDACTED]

Ten-kilometre square SK76 is the only one in England in which no species of mollusc are recorded in the 1999 Atlas. This event is aimed at addressing this omission. The square has a variety of rural habitats including ancient woodland and the Laxton strip farming system whose documented history stretches back to the Domesday Book.

Meet at the Laxton Visitor Centre at 10:30 h, SK 724 669, at the centre of the village. This centre has ample free parking, toilets, a room open all day which can be used as a base and is adjacent to the Dovecote Inn where hot meals are available from midday.

It is likely that we will make forays in small groups into different habitats in SK76, returning to the visitor centre at pre-arranged times. Details of the location of these hunts will be displayed prominently in the visitor centre.

Marine Field Meeting

North Cornwall

A Joint Meeting between the Conchological Society of Great Britain and Ireland and Cornwall Wildlife Trust

Sunday 6 to Thursday 10 October 2002

Organisers: Jan Light (Conch. Soc.) and Pamela Tompsett (CWT)

Tutors: Ian Killeen and JL

This short notice is to remind you about this meeting and that if you are intending to come you should contact Jan Light (details below) in good time to receive a detailed circular with outline programme, and to ensure adequate provisions are made.

The meeting point on Sunday 6 October is at 10.00 a.m at Godrevy Point. There are several NT car parks but they may not all be open. If possible park in the one furthest towards the headland (SW581431). We will be working on the large platform below that point for at least 2 hours. If you fail to meet up at Godrevy, my mobile tel. no. is [REDACTED]

If you are travelling to Cornwall by public transport and will need help with travel during the course please let us know.

All enquiries: Jan Light, 88 Peperharow Road, Godalming, Surrey, GU7 2PN. Tel. [REDACTED]

email: [REDACTED]

YCS – Saturday 12 October. Pateley Bridge for Ravens Gill (*Limax tenellus* site). Meet at 11.00 h in the car park on the North side of the bridge at Pateley, grid ref. SE 158656. Contact David Lindley [REDACTED]

YCS – Saturday 19 October. AGM and Presidential Address. 13.00 h at Leeds City Museum Resource Centre, Yeadon. Contact David Lindley [REDACTED]

INDOOR – Saturday 9 November. National Museums and Galleries of Wales, Cardiff. Joint Meeting with the Malacological Society on the subject of 'Recording schemes and biodiversity analyses'. Presentations from a range of speakers. For details see insert.

Annual Molluscan Workshop

Saturday 30 November

This meeting is being held by kind invitation of Judith Nelson at [REDACTED]
[REDACTED] Woking, [REDACTED]
from 10.00 hours prompt until approximately 17.00 hours

Please note Hilbre is a non-smoking property

Those attending should please bring a microscope and lamps (a few microscopes are available if booked in advance), Petri dishes or other dishes for sorting purposes, a fine watercolour paint brush 001, tweezers/forceps, dissecting tools, if possible an extension lead and/or double electric plug, books to help identification, and a packed lunch. Coffee, tea and biscuits are provided.

As numbers for the workshop are limited PLEASE CONFIRM ANY BOOKING made by 1 November so that it can be checked whether there are any places vacant.

Those NOT confirming by 1 November will be taken as not wishing to attend and their place will go to someone else. NO REMINDERS WILL BE GIVEN.

A fee of £5 will be charged to cover expenses.

Accommodation is available for anyone coming from a distance but is very limited. PLEASE BOOK EARLY.

The programme for November 2001 is as follows but subject to change.

Pyramidellidae Lymnaeidae and Succineidae, including dissection

If you would like any other subject dealt with, please inform Judith by 1 November.

NHM – Saturday 14 December. 14.30h in the De La Beche Room. We welcome as Guest Speaker Stephan Müller from Cambridge University on the subject of 'The Asian clam in Britain – not as bad as we thought?'.

NOTE

Because of refurbishment work at the Natural History Museum in London, the Palaeontology Demonstration Room will be unavailable for our meetings, and arrangements have therefore been made to meet in the De La Beche Room, which is to be found nearby in the Earth Sciences wing.

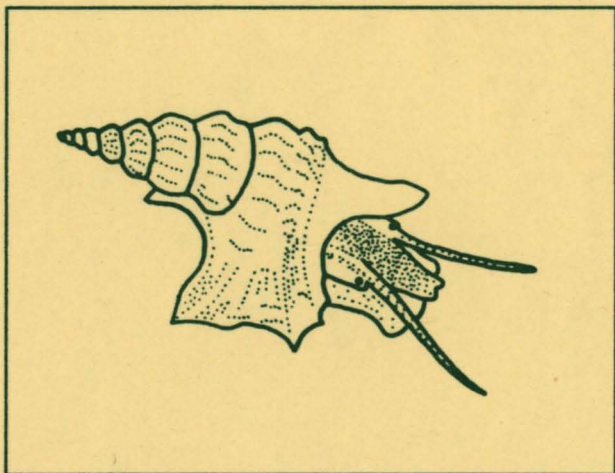


The Conchologists' Newsletter

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Conchological Society of Great Britain & Ireland
(Founded 1876)

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Mollusc World

This is the last issue of *The Conchologists' Newsletter*. At the end of March 2003 the Society will be launching a new magazine called *Mollusc World*. This will be in A4 format and will be produced with four full-colour pages. It will be produced three times per year at the end of March, July and November. We have engaged graphic designers to produce the magazine in an attractive modern style, which will enable the inclusion of many pictures and illustrations. This is an exciting venture for the Society which we hope will entertain you and provide a vehicle for promoting the Society and enticing new members.

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 6–8 weeks before publication date.

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! Please send articles to:

Ian Killeen,

[REDACTED], Felixstowe, Suffolk [REDACTED], UK
[REDACTED]
[REDACTED]

Records of non-African tropical land snails Part 1

Bernard Verdcourt

Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB

For many years, whenever a botanical expedition was going somewhere interesting I have asked the participants to look out for non-marine molluscs. I have not expected them to prepare material of living snails suitable for dissection; collecting plants is arduous enough without additional chores, but it takes no effort to put dead shells in a container nor does this injure the mollusc populations in any way. Well localised material with ecological details can add much to our knowledge. So much material in our museums merely says 'Central Madagascar' or 'Peru' which is hardly useful. Professional workers on Mollusca are busy enough already so I have had to name the material myself as well as I could; it was then deposited in the Natural History Museum, London (except where otherwise stated). Naming molluscs from an area of the world one does not know is fraught with difficulties and dangers even with the best library in the world at one's disposal, but I feel my results are worth publication to draw attention to the material. Specimens named only to genus have usually been omitted but exceptionally, where of obvious interest, have been included. Much remains to be named, particularly from Madagascar, including several species which are probably new. Unfortunately great difficulties have been caused by most of the Madagascar material of the Muséum National d'Histoire Naturelle, Paris being unavailable for study and the loss of the material of the genus *Kalidos* belonging to the Natural History Museum whilst on loan to Paris. The records are arranged according to the family order given by Taylor and Sohl (1962). Although old it is convenient for this practical purpose. The genera and species are then arranged alphabetically.

HELICINIDAE

Emoda pulcherrima pulcherrima (Lea, 1834).

Cuba: Sierra Maestra, Alto de Naranjo, 950 m; 20° 25' N 76° 52.5' W; 15 Oct. 2000, J. Bayliss.

Ustronia acuminata (Poey, 1851).

W. Cuba: road Candelaria to Bahia Honda, Villa Soroa, limestone karst, 19 Feb. 2001, G.P. Lewis.

CYCLOPHORIDAE

Cyclophorus (Salpingophorus) courbeti Ancey, 1888.

China: Yunnan, Maguan (Makuan) near North Vietnam border, limestone, 1400 m, May 1998, P. Cribb.

The single specimen is worn and lacks all periostracum and I am not confident about the determination. The locality is about 250 miles north of the type locality of Tuyen Quang in Vietnam.

Cyclophorus jourdyi L. Morlet, 1887.

N. Vietnam: Tan Lai, NE. of Hanoi, c65 km SW. of Langson, forest on limestone, 200 m, 2 Oct. 1999, P. Cribb.

Pterocyclos berthae Dautz. & de Hamonville, 1887.

N. Vietnam: Tan Lai, NE. of Hanoi, c65 km SW of Langson, forest on limestone karst, 200 m, 2 Oct. 1999, P. Cribb.

REALIIDAE

Pollicaria rochebrunei (Mabille, 1887).

N. Vietnam: Tan Lai, NE. of Hanoi, c65 km SW. of Langson, forest on limestone karst, 200 m, 2 Oct. 1999, P. Cribb.

HAINESIIDAE

Acroptychia metableta (Crosse & Fischer, 1873).

Madagascar: NE., Marojejy Nature Reserve, Sambava, 700 m, Nov. 1989, J. Dransfield.

Hainesia crocea (Sowerby, 1847).

Madagascar: Cap Ste. Luce, forest on sand, 10 m, P. Cribb (only one unlocalised specimen in BM).

PILIDAE

Pila cecillii (Philippi, 1848).

Madagascar: N., Antsiranana Province, Montagne des Français, 4 Dec. 1992, G.P. Lewis; c 5 km S. of Vilanandro, S. of Soalala, on limestone boulders and pinnacles, 'tsingy', D. Dupuy.

NEOCYCLOTIDAE

Farcimen camarguayanum camarguayanum Torre et al., 1942.

Cuba: Camagüey Province, Sierra Cubitas, Hoyo Bonnet, limestone, 1993, *Lulu Rico D'Arce*.

Neocyclotus dysoni dysoni (Pfr., 1851).

SW. Belize: leaf litter, 540 m, 2500 mm rainfall, *A. Munro*.

Tomocyclus simulacrum (Morelet, 1849).

SW. Belize: leaf litter, 540 m, 2500 mm rainfall, *A. Munro*.

POMATIASIDAE

Tropidophora chavani Fischer-Piette, 1949.

W. Madagascar: Plateau du Bemaraha, May 1995, *D. Dupuy* (type locality).

Tropidophora cuveriana Petit de la Saussaye, 1841.

Madagascar: N., Antsiranana Province, Ankarana Massif, on limestone, 20 Nov. 1992, *G.P. Lewis* – eight shells measuring 4.3 x 2.8, 4.4 x 3, 4.4 x 3.1, 4.6 x 2.6, 4.7 x 3.2, 5 x 3.2, 5 x 3.2 and 5 x 3.4 cm; second collection 28 Nov. 1992, 14 shells, 3.4 x 2, 3.5 x 2, 3.5 x 2.2, 3.5 x 2.2, 3.5 x 2.2, 3.8 x 1.9, 4 x 2.4, 4 x 2.4, 4 x 2.5, 4.1 x 2.2, 4.3 x 2.5, 4.4 x 3.3, 5.5 x 3 and 5.8 x 3.3; the one 5.5 x 3 proved to be still alive but after one brief incomplete emergence it died and was put in spirit; the animal is dark grey. This population gives a very good idea of the variation in size but the smallest are very much smaller than the dimensions given in literature. The smallest are very similar to *Tropidophora occlusa* (Mörch) but do not show the peristome hiding the umbilicus. I think the differences need further investigation with developmental studies; S. of Diego Suarez, Ankarana Massif, in mouth of large cave, in limestone escarpment and 'tsingy', sharply eroded with no soil, *D. Dupuy*.

Tropidophora cf. fulvescens (Sow., 1843).

Madagascar: NW. Antsiranana Province, Montagne des Français, 12° 35' S, 49° 19' E, on limestone, 18 Nov. 1992, *G.P. Lewis*.

Tropidophora humberti Fischer-Piette, 1949.

Madagascar: N., Ankarana Massif, exposed, outcrop of sharply eroded limestone 'tsingy', end Mar. 1989, *D. Dupuy*.

Tropidophora multifasciata (Grateloup, 1840).

Madagascar: NE., Marojejy Nature Reserve, Sambava, 700 m, Nov. 1989, *J. Dransfield* (smaller than types at BM and margin

thinner, more flared and orange just inside mouth but I think the same species).

Tropidophora semidecussata (Pfr., 1847) sensu lato.

Madagascar: SW. of Majunga, Tsingy de Namoroka, on limestone massif, sharply eroded and with no soil, amongst boulders and pinnacles and in gullies, Oct. 1989, D. Dupuy.

Tropidophora semidecussata macareae (Petit de la Saussaye, 1853).

Madagascar: SW. of Majunga, Tsingy de Namoroka, on limestone massif, sharply eroded and with no soil, amongst boulders and pinnacles and in gullies, Oct. 1989, D. Dupuy.

Tropidophora thesauri Fischer-Piette, 1949.

(*Cyclostoma desmoulinii* auctt.; Sowerby, Reeve etc. non Grateloup).

Madagascar: N., Antsiranana Province, Forest of Analamerana, SE. of Irodo Village, near the mouth of the Irodo R., S. of the Baie d'Irodo, hill NE. of the Ampondrakey R. valley, on limestone boulder outcrop covered by dense low deciduous native forest, 12° 42' S, 49° 35' E, 350 m, 21 Mar. 1994, D. Dupuy.

Tropidophora tricarinata bicarinata (Sow., 1843).

Madagascar: Amby Forest (remnant), 21° 45' S, 47° 55' E, moist forest, 80 m, 8 Jan. 1993, H. Beentje; Ifanadiana, Mt. Vatovavy, 280 m, moist evergreen forest, 5 Nov. 1994, H. Beentje.

Tropidophora tricarinata campanulata (Pfr., 1846).

Madagascar: Mananara Avaratra Biosphere Reserve, 14 km W. of Antanambe, rain forest near R. Mavohoho; 240 m, 24 Oct. 1994, H. Beentje 4816.

Tropidophora betsiloensis (Smith, 1882).

Madagascar: 5 km S. of Antanambe, forest on white sand with humus layer, H. Beentje 4634.

Tropidophora virgata (Sow., 1843).

Madagascar: N., Antsiranana Province, lower slopes of Montagne des Français, on limestone, Dec. 1992, G.P. Lewis.

CERASTIDAE (ENIDAE)

Conulinus rufoniger (Reeve, 1849).

Madagascar: N., Antsiranana Province, near village of Irodo, on limestone 'tsingy', 22 Nov. 1992, G.P. Lewis.

STROPHOCHEILIDAE

Strophocheilus leucostomus (Sow., 1835).

Peru: Junin, near San Ramón, wet forest, c 1000 m, Nov. 1998, T. Pennington.

Strophocheilus oblongus (Müll., 1774).

Venezuela: Edo Merida, Distrito Sucre, Rio Chama Valley, road between Lagunillas and San Juan, 2.7 km towards San Juan from turn off to La Huerta, cactus scrub and sparse ground cover, 1050 m, N. Taylor.

ACHATINIDAE

Achatina fulica Bowdich, 1822.

Madagascar: Manakara Pokontany, 42 km NNW of Manakara on RN 12, Ambia remnant forest, disturbed forest on slope, 70–85 m, H. Beentje 4718; same forest 80 m, 8 Jan. 1993, H. Beentje; S. of Farafangana, Manombo Forest Reserve, 23° 05' S, 47° 45' E, forest on white sand, 10 m, 5 Jan. 1993, H. Beentje (a shell 11.5 x 5.7 cm resembling form called *A. fulica hamillei* in East Africa).

Leucotaenius cf. favannii (Lam., 1822).

Madagascar: SW., eastern shore of salt Lake Tsimanampetsotsa, on sand, 13 Jan. 1989, D. Dupuy.

Leucotaenius procteri (Sow. III, 1894).

Madagascar: SW., eastern shore of Lake Tsimanampetsotsa, on sand, beside salt lake, 13 Jan. 1989, D. Dupuy; SE end of Lake Tsimanampetsotsa, 13 Jan. 1938, D. Dupuy.

STREPTAXIDAE

Edentulina alluaudi (Dautz., 1894).

Madagascar: N., Antsiranana Province, near village of Irodo, on limestone 'tsingy', 22 Nov. 1992, G.P. Lewis.

Edentulina minor (Morelet, 1851).

Madagascar: SW. of Majunga, Tsingy de Namoroka, on limestone massif, sharply eroded and with no soil, amongst boulders and pinnacles and in gullies, Oct. 1989, D. Dupuy (compared with type).

ACAVIDAE

Ampelita cf. calypso (Pfr., 1861).

Madagascar: NW., Antsiranana Province, Ambanja to Ankarany, Maromandra, on limestone, 15 Nov. 1992, G.P. Lewis; N. Antsiranana Province, Ankarana Massif; on limestone, 15 Nov. 1992, G.P. Lewis.

Ampelita cf. funebris (Morelet, 1877).

Madagascar: NE. of Maroansetra, about 6 km E of Sahavary, tall humid forest, c400 m, 25 April 1989, D. Dupuy.

Ampelita gaudens (Mabille, 1884).

Madagascar: NW., Antsiranana Province, Montagne des Français, 12° 33' S, 49° 19' E, on limestone, 18 Nov. 1992, G.P. Lewis; Montagne D'Ambre, evergreen montane forest, c 1300 m, June 1989, D. Dupuy; NE., Forêt de Makira, 15° 28.8' S, 49° 27.7' E, 500 m, Aug. 1998, J. Bayliss.

Ampelita lamarei sakalava (Angas, 1877).

Madagascar: NE., Masoala Peninsula, Antalavia, Bay of Antongil, Antalavia R. valley, on floor of tall wet dense rain forest (30–40 m canopy) over granite, acidic soil, amongst leaf litter, 250–350 m, D. Dupuy; Mananara N. Biosphere reserve, Andravolasoa, forest remnant at 350 m, H. Beentje 4642; Baie D'Antongil, Nosy Mangabe, 20 Apr. 1989, D. Dupuy.

Ampelita lancula (Fér, 1821).

Madagascar: NE., 40 km W. of Antanambe, Mananara Avaratra Biosphere Reserve, rain forest slope, 300 m, 27 Oct. 1994, H. Beentje 4828.

Ampelita cf. madagascariensis (Lam., 1816).

Madagascar: NE., NE. of Maroansetra, c 6 km E. of Sahavary, tall humid forest, c400 m, 25 Apr. 1989, D. Dupuy.

Ampelita namerokoensis Fischer-Piette, 1952.

Madagascar: SW. of Majunga, Tsingy de Namoroka, on limestone massif, sharply eroded and with no soil, amongst boulders and pinnacles and in gullies, Oct. 1989, D. Dupuy.

Ampelita omphalodes loucoubeensis (Crosse, 1881).

Madagascar: Nosy Be (Nossi-Be), Lokobe Forest, 100 m, July 1992, H. Beentje 4702.

Ampelita cf. sepulcralis (Fér., 1821).

Madagascar: Mananara Avaratra Biosphere Reserve, 14 km W. of Antanambe, near R. Mavahoho, rain forest, 240 m, 24 Oct. 1994, *H. Beentje* 4817; 5 km S. of Annambe Forest on white sand with humus layer, *H. Beentje* 4635.

Ampelita stilpna (Mabille, 1884).

Madagascar: N., Antsiranana Province, near village of Irodo, on limestone 'tsingy', 22 Nov. 1992, *G.P. Lewis*.

Ampelita xystera (Pfr., 1841).

Madagascar: Mt. Vatovavy, moist evergreen forest, 320 m, 5 Nov. 1994, *H. Beentje* 4834; Cap Ste. Luce, forest on sand, 10 m, *P. Cribb*.

Clavator anteclavator Germain, 1913.

Madagascar: SW., SE. end of Lake Tsimanampetsotsa, 13 Jan. 1988, *D. Dupuy*.

Clavator grandidieri (Crosse & Fischer, 1868).

Madagascar: unlocalised through confused labels, *D. Dupuy*.

Clavator obtusatus (Gmelin, 1791).

Madagascar: Cap Ste. Luce, forest on sand, 10 m, *P. Cribb*; unlocalised through confused labels, *D. Dupuy*.

Clavator sp., not matched in BM.

Madagascar: Fort Dauphin, Andohela Reserve, 700 m, Nov. 1989, *J. Dransfield* (specimen was sent to Paris but no acknowledgement or name has been received – a word of caution, if you believe you have something new never send it to anyone until you have exhausted all possibilities of naming it yourself).

Helicophanta amphibulina (Fér., 1839).

Madagascar: N., Antsiranana Province, near village of Irodo, on limestone 'tsingy' 22 Nov. 1992, *G.P. Lewis*.

Helicophanta cf. *bicingulata* (E.A. Sm., 1882).

Madagascar: near Fort Dauphin, Andohahela, moist tall lower montane rain forest, 700–900 m, Dec 1989, *D. Dupuy*; Manakara, Ambia remnant moist forest, 42 km NNW. of Manakara on RN 12, *H. Beentje* 4721 (matches material so-named but not the type; needs comparison with *H. ibaroensis*); Manombo Forest Reserve, 23° 05' S, 47° 45' E, forest on white sand, 10 m, 5 Jan. 1993, *H. Beentje* 4780; St. Luce Forest, forest on white sand, 20 m, 13 Dec. 1992, *H. Beentje* 4757.

Helicophanta cf. *geayi* Fischer-Piette, 1950.

Madagascar: S., Cap Ste. Luce, forest on sand, 10 m, *P. Cribb* (no material in BM).

Helicophanta goudotiana (Fér., 1839) (= *Helicophanta oviformis* Grateloup, 1839).

Madagascar: N., Antsiranana Province, Forest of Analamerana, SE. of Irodo village, near the mouth of the Irodo R., S. of the Baie d'Irodo, hill NE. of the Ampondraky R. valley, on limestone boulder outcrop, covered by dense low deciduous native forest, 12° 42' S, 49° 35' E, 350 m, 21 Mar. 1994, *D. Dupuy*; Ankarana Massif, semi-deciduous forest on basaltic soil, 150 m, 28 May 1989, *D. Dupuy*; Nosy Be, Lokobe Forest, 100 m, July 1992, *H. Beentje* 4703; Ifaradiana, Mt. Vatovavy, rocky area in moist evergreen forest, 385 m, 5 Nov. 1994, *H. Beentje* 4836; W., Plateau de Bemara, May 1995, *D. Dupuy*; unlocalised through confused labels, *D. Dupuy*.

Helicophanta cf. ibaroensis (Angas, 1879).

Madagascar: Andohahela Reserve Naturelle Integrale, moist forest, 540 m, 15 Dec. 1992, *H. Beentje* 4762; without locality, *D. Dupuy*.

Helicophanta magnifica Fér., 1819.

Madagascar: 60 km S. of Lake Alaotra, Ambatondrazaka, *Didieria* montane forest, 1000 m, *P. Cribb*; Perinet, 950 m, 22 Dec. 1988, *D. Dupuy* (transparency only).

Helicophanta vesicalis (Lam., 1822).

(= *Helicophanta cornugiganteum* (Chemnitz, 1795) auctt.

= *Helix cornu giganteum* Chemnitz, 1795 proposed in a non-binomial work).

Madagascar: Fort Dauphin, Andohahela Reserve, 700 m, Nov. 1989, *J. Dransfield*.

BULIMULIDAE

Anostoma depressum Lam., 1822.

Brazil: Ceara, Irauçuba, very dry caatinga vegetation, open rocky burnt-over slopes, 220 m, 11 Jan. 1985, *G.P. Lewis*.

Auris swainsonii (Pfr., 1846).

Brazil: Bahia, Município de Ilhéus, estrada Olivença para Vila Brasil, 5 km SW. de Olivença; vegetation mata higrófila (transition with restinga), 8 Feb. 1982, *G.P. Lewis*.

Drymaeus loxensis (Pfr., 1846).

Ecuador: Loja Province, Catamayo to Las Chinchas, 4 km past military checkpoint at San Pedro de la Bendita, on calcareous soil, semideciduous thorn scrub, 1950 m, 23 Feb. 1997, G.P. Lewis. (compared with types at BM; I had initially named it as *Drymaeus tigris* (Broderip, 1832) by comparison with material so named. The two species are put in separate subgenera but they look identical).

Otostomus signatus (Wagner in Spix, 1827).

Brazil: Bahia, Município de Ilhéus, estrada Olivença para Vila Brasil, 5 km SW. de Olivença, vegetation mata higrofila (transition with restinga), 8 Feb. 1982, G.P. Lewis.

Porphyrobaphe iostoma bilabrata Pilsbry, 1899.

Ecuador: El Oro, bosque petrificado de Puyango, 24 Aug. 1996, G.P. Lewis; Guayas, Machalilla, dry woodland, 29 May 1997, G.P. Lewis.

Thaumastus hartwegi (Pfr., 1846).

Ecuador: Loja Province, Catamayo to Las Chinchas, 4 km past military checkpoint at San Pedro de la Bendita, 1950 m, on calcareous soil, semideciduous thorn scrub, 23 Feb. 1997, G.P. Lewis (17 specimens showing variation in shape).

Thaumastus integer (Pfr. 1855).

Ecuador: Loja, Chaguapamba – Catamayo, March 1997, G.P. Lewis.

(compared with type in BM; close to and perhaps not distinct from *hartwegi*).

ODONTOSTOMIDAE

Tomigerus clausus (Wagner in Spix, 1827).

Brazil: Ceara, Irauçuba, very dry caatinga vegetation, open rocky burnt-over slopes, 220 m, 11 Jan. 1985, G.P. Lewis.

CERIONIDAE

Cerion maritimum (Pfr., 1839).

W. Cuba: E. of Matanzas, Varadero Peninsula, Hotel Brizas de Caribe, on white sand, palm beach, 26 Feb. 2001, G.P. Lewis.

HELICARIONIDAE

Bathia madagascariensis Robson, 1914.

Madagascar: SW. of Majunga, tsingy de Namoroka, on limestone massif, sharply eroded and with no soil, amongst boulders and pinnacles and in gullies, Oct. 1989, *D. Dupuy* (compared with type from 'Nemoroku'); c 5 km S. of Vilanandro, S. of Soalala, on limestone boulders and pinnacles 'tsingy', *D. Dupuy*.

ARIOPHANTIDAE

Hemiplecta densa (Adams & Reeve, 1850).

E. Sabah: Danum Valley, recently logged forest close to unlogged forest, 10 km from Danum Valley Study Centre, near road, open secondary scrub with *Ageratum*, 27 Feb. 1986, *P.J. Edwards*.

Kalidos bournei Robson, 1914.

(= *Hemiplecta bathensis* Robson, 1914).

W. Madagascar: Mahajanga (Majunga) Province, c 13 km SW. of Antsalara, Tsingy de Bemaraha (western area), Andranopasazy, global positioning unit map reference 18° 42' 28" S, 44° 42' 58" E, in tall deciduous forest over limestone boulders and crags, the canopy 15–20 m tall, 90 m, 1 March 1995, *D. Dupuy*. The two species described by Robson are actually juveniles and adults of the same species described in different genera. They were sunk by Fischer-Piette in 1966 and then kept separate by Fischer-Piette et al. in 1994. From the juveniles and adults collected by Dupuy in one place I am convinced of this synonymy.

UROCOPTIDAE

Brachypodella subtilis (Morelet, 1849).

SW. Belize: 540 m, on limestone outcrops, rainfall 2500 mm, *A. Monro* (compared with the type from Peten in Guatemala).

Coelocentrum tomacella clava Pfr., 1856.

SW. Belize: leaf litter, 540 m, 2500 mm rainfall, *A. Monro* (perhaps what Solem recorded as *C. fistulare* (Morelet) – Haas & Solem in the *Nautilus* 23: 129–131, figs 5–7 (1960).

CAMAENIDAE

Beddomea trifasciata (Bruguière, 1789).

Ceylon: Hambantota District, Bundala Sanctuary, *Salvadora*, *Acacia*, *Scaerola* dry woodland, near sea level, 19 July 1972, *N. Hepper*.

Camaena cicatricosa ducalis (Ancey, 1885) dark form.

China: Guangxi, Napo County, in forest on karst limestone, close to N. Vietnam border, May 1997, *P. Cribb* (specimen measured 40 x 60 mm; type from Kouy-tcheou (Kouy-Yang-fou) measured 67 x 74 mm). N. Vietnam: Tan Lai, NE. of Hanoi, c65 km SW. of Langson, forest on limestone karst, 200 m, 2 Oct. 1999, *P. Cribb*.

Caracolla marginella (Gmelin, 1790).

Cuba: Camagüey Province, Lome Buena Vista, Mpio Nuevitas, deciduous forest with secondary growth, with *Guettarda*, *Lysiloma sabicu*, *L. latisiliquum*, *Ateleia cubensis* etc, 1993, *Lulu Rico D'Arce*; Camagüey Province, Hoyo Bonet, Sierra Cubitas, limestone, *Lulu Rico D'Arce*.

Zachrysia auricoma (Fér., 1821) vel aff.

Cuba: Salto del Cabuini, Topes del Escambray, 80° 1.5' W, 21° 56' N, (about 20 km W. of Fomento), 22 Oct. 2000, *J. Bayliss*; Alto de Naranjo, Sierra Maestra, 950 m, 76° 52.5' W, 20° 2.5' N, 15 Oct. 2000, *J. Bayliss* (I am uncertain of the identity – other 'species' look identical). Camagüey Province, Hoyo Bonet, Sierra Cubitzo, limestone, *Lulu Rico D'Arce*; Havana Botanic Garden, limestone, 21 Feb. 2001, *G.P. Lewis*; E. of Matanza, Varadero Peninsular, Hotel Brizas de Caribe, 25 Feb. 2001, *G.P. Lewis*.

XANTHONYCHIDAE

Polymita muscarum (Lea, 1834).

Cuba: Camagüey Province, Hoyo Bonet, Sierra Cubitas, limestone, 1993, *Lulu Rico D'Arce*.



*The Newsletter Editor
sends Seasonal Greetings and Best Wishes
for a peaceful New Year to every reader.*

*Many thanks for all contributions
to the Newsletter.*

Chanks and cowries in Thailand

Fred Pinn

[redacted], London [redacted]

The Thai religion is a strange amalgam of Hindu Brahmanism and Theravada Buddhism. Hinduism had come to Thailand in the first centuries of the Common Era via Burma, whilst Buddhism had arrived through Cambodia in the early tenth century with the penetration of the Thai tribes from China. Though most temples in Thailand are dedicated to Buddha and the Thais call themselves his devotees, Vishnu and Shiva together with goddesses and other divinities take their place in the Thai pantheon; however, the strict Buddhists would reject the Hindu gods. Similarly, a number of Hindu rituals were taken over and adapted as well as the objects required in the worship, such as the sacred chank of India. A description of the enthronement of a Thai king demonstrates the respective part played by Brahmanism and Buddhism in which water has a most important role: water is the agent that cleanses, purifies, sanctifies, protects and blesses – whichever it is meant to do – water everywhere:

‘For three days before the actual day of crowning, the Court Brahmins performed sacrifices to Fire in a ceremonial pavilion specially erected near (the throne room) in which nine basins of Water were purified by the recitation of specific texts. Leaves from certain medicinal trees were steeped in the water and oil and sent to the king, while others were dipped in honey and placed in the fire. At the beginning of these ceremonies offerings were also made to the Hindu deities in the Brahmin temples, before the royal white umbrellas and before the images of the city guardians. Simultaneously with the Brahmin ceremonies, Buddhist services took place in all the sections of the royal residence ...’

On the morning of the next day ‘the Chief Brahmin invited the king to take a ceremonial bath of purification and anointment ... Finally, ministers and elder relatives poured water over the king’s hands ...’

‘After the ceremonial bath the king retired and reappeared in full regalia before making his way to the (throne room) preceded by Brahmins and the Court Pandits bearing images of Ganesha and the Buddha image of Phra Chai Lang Chang. Other Brahmins played drums and blew conches, while another scattered roasted grains of rice.

'On entering (the throne room) the king seated himself on the Octagonal Throne beneath the seven-tiered white umbrella. Opposite each face of the throne stood a small table bearing an image of the guardian of that particular direction and the ceremonial water and conch. Beginning with the east, the direction in which the king faces, the Pandit for this point advances and hands the king a conch for him to anoint himself while offering a blessing relating to the eastern region. Next comes the direction of the south-east and so on clockwise with the king turning to face each Pandit in turn. After each blessing the king promises to protect the kingdom, its Buddhist religion and its people.'

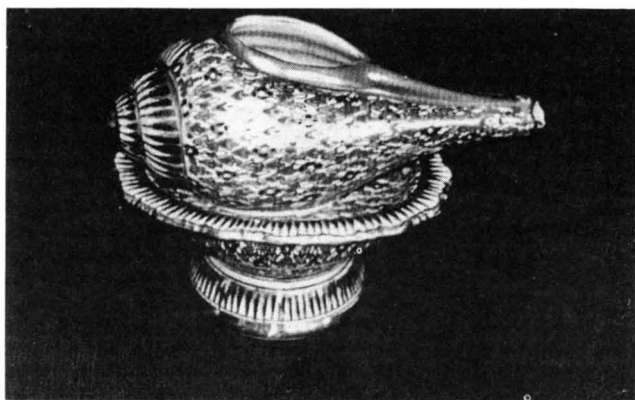
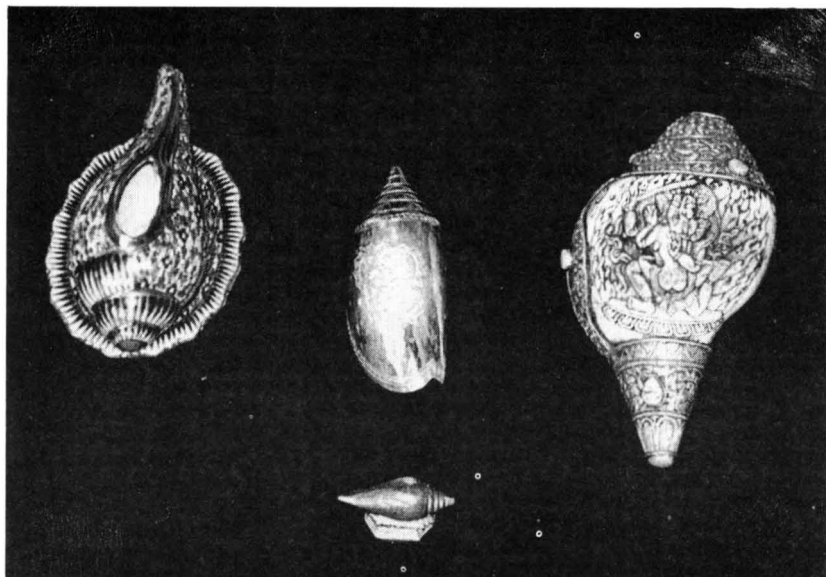
More processions, another coronation ceremony, more ritual but no more water ...

The four conches illustrated clearly served different purposes: The conch on the left, made in two pieces of china, and the silver conch had been used in pouring holy water; the shell on the right, a beautifully carved specimen from Nepal, is a trumpet, and the little conch of brass had probably been standing among the usual paraphernalia of a house altar. It was this item which I bought first from a pavement pedlar and was so happy with my find that I was ashamed of knocking down the price from 180 baht (£1.60 to £1.30); though the woman had agreed I gave her one hundred – we were both happy then ... It was the only specimen of its kind I ever saw.

As for the cowries: The 'Buddhist Market' (Talaat Phra) in Bangkok must be one of the largest amulet bazaars in the world where about one million Buddhas from the size of 1 cm to 2 m can be bought without difficulty. The purchase of an amulet image appears to be a science by itself because stalls are often surrounded by men (never women) inspecting most thoroughly with the help of a magnifying glass their prospective buys. Size, age, style, material, place of origin and other aspects determine the quality and eventually the price of the object. They can be had ready to put round your neck, or you can choose separately the image, its container and the chain. Unfortunately, lack of language prevented me from penetrating deeper into the mystery of Buddha shopping.

The other amulets for sale were cowries. Eight species of cowries used to be legal tender in Thailand for at least 600 years until minted coinage was introduced in the 1860s; of these I have been able to identify just three: *Cypraea moneta*, *Cypraea annulus* and *Caput serpentis*. The rest remain to be discovered though their Thai names

are known. The strange thing is now that of all the cowrie money only *Caput serpentis* has qualified to join the cowrie series of amulets; *Cypraea arabica*, *mauritana* and *tigris* were never part of the accepted standard set of cowrie money. They may, however, be thought of possessing power to promote female fertility – the male organ is sold in large quantities and all sizes in the bazaar and by the pavement traders. As far as I could make out, the cowries here depicted assure protection against evil influences and generally good luck.





Lustration with a conch shell

The Conchological Society Archives

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The archives of the Conchological Society of Great Britain and Ireland are in the care of The West Yorkshire Archives Service, based in Sheepscar, Leeds. The West Yorkshire Archives Service holds one of the largest series of natural history archives to be found in the north of England. As well as the Conchological Society's archives, it also holds those of The Yorkshire Conchological Society, The Leeds Naturalists' Club and Scientific Association and The Yorkshire Naturalists' Union and many of its sections.

It also holds personal and company files of such well known naturalists as Greevz Fysher, a member of the Conchological Society, who owned Kingfisher (Lubrication) Ltd, engineers, formerly lubricant manufacturers of Meanwood, Leeds.

The archives came to Leeds, the original home of the Society, in order to safeguard the large quantity of archive material held in garages, sheds, cellars and even under beds in the homes of members from Cornwall to Edinburgh.

A full list of these extensive archives would fill several editions of the Conchologists' Newsletter. I have therefore selected and listed below a sample of just some of the items held within the archives.

Nos. 1 to 9 Minute Books 1876–1950

10 Manchester Conchological Society Minute Book
1888–1895

11 London Branch Minute Book 1929–1939

21 Accordion file containing correspondence: 1888–1977

22 Roebuck & Y.N.U. Examples of how Denison Roebuck
collected his census information before entering it into
the books: 1884–1917

- 23 Events and Personalities – papers and correspondence 1887–1975
- 24–25 Taylor's papers relating to his monograph 1884–1927
- 44 Holograph collection A–Z and duplicate holographs and signatures 1883–1972
- 45 Ronald Searle Cartoon from *Punch*. Original 1953
- 47–57 Dr B. Verdcourt, letters, drawings, photographs etc. of research projects in Africa 1946–1966
- 58 Box of photographs, including many Presidents 1884–1968
- 60 Painting of Guy L. Wilkins etc. 1973
- 62 1 large framed photograph 19" x 24" 'Founder Members'
- 117 Text and illustrations for a projected book by A.E. Ellis on 'Mollusca of Land and Inland Waters' 1957–78
- 118–9 Large Scrap-book with label A.E. Ellis. Personalia and many letters, pamphlets and off-prints.
- 129 Duplicate Conchologists' holograph letters (from S.P. Dance) 1893–1985.

The archives also include a run of the *Journal of Conchology*, *The Conchologists' Newsletter*, Papers for Students and most of the other publications published by the Society, as well as many off-prints from members and correspondents. A large part of the archives are also taken up with the large quantity of material, correspondence, documents, record cards etc which has always been the core activity of the Society, the census mapping of the land, freshwater and marine mollusca of Great Britain.

Access to the Conchological Society's archives is by appointment only, and during normal office hours. A full list of the Society's holdings runs into many pages and is not completely documented and filed, due to recent acquisitions.

If you wish to have access to the archives please contact me at the above address for further details. Restrictions apply to some documents due to the 30-year rule. If you wish to examine documents under 30 years old, written permission of the Council will be required. ■

Is the Lessepsian migrant *Cellana rota* replacing native limpets along the Mediterranean coast of Israel?

Henk K. Mienis

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Cellana rota (Gmelin, 1791), Fam. Nacellidae, is a common limpet species from the Indian Ocean. For a discussion of its correct name I refer to Christiaens (1980 & 1986). It occurs abundantly on intertidal rocks throughout the Red Sea (Sharabati, 1984; Christiaens, 1987).

In 1961 the well known limpet specialist Ir. Joseph Christiaens collected eight empty shells of *Cellana rota* from among rocks 15 km north of Akko, Israel (Christiaens, 1967). This constituted the first record of it from the Mediterranean Sea.

Barash & Danin (1973) reported an additional empty shell from the beach of Herzliyya, leg. Y. Nagy, 4 July 1965. That record turned out to have been based on a misidentification. In fact we are dealing here with an eroded, high conical shell of *Patella caerulea* (Linnaeus, 1758) (Mienis, 2000).

The presence of viable colonies of *Cellana rota* along the Mediterranean coast of Israel was reported by Mienis (2000), who recorded it from Palmahim, Tel Barukh just north of Tel Aviv, Hadera and Haifa. All the material had been collected between July and September 2000. At all these localities the local *Patella caerulea* occupied rocks exposed to the surf, while *Cellana rota* was encountered at more protected sites.

On 17 December 2001, I collected at random a sample of forty limpets from sandstone rocks high in the littoral on the beach just north of the outlet of the power station of Ashdod. A check at home revealed that the sample consisted of 39 specimens belonging to *Cellana rota* and one specimen only of *Patella caerulea*! A few years ago *Patella caerulea* was the only limpet inhabiting the same rocks at that locality. A quite interesting development. This raises the question whether the Lessepsian migrant *Cellana rota* is replacing the native *Patella* species not only near Ashdod, but also elsewhere along the Mediterranean coast of Israel.

Near Ashdod the development of large colonies of *Cellana rota* has been stimulated most probably by the release of cooling water with a higher temperature than the seawater just south of the collecting site. Similar power stations do exist just south of Tel Barukh and Hadera, but not near Palmahim and Haifa. It seems worthwhile to monitor the colonisation rate and success of *Cellana rota* at those sites at regular intervals.

Voucher specimens of *Cellana rota* from Ashdod have been lodged in the National Mollusc Collections of the Hebrew University of Jerusalem (HUJ 8939/23) and the Tel Aviv University (TAU-MO 31365/16). The single specimen of *Patella caerulea* forms part of the Tel Aviv collection (TAU-MO 31364/1).

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Cowries of Gold

Fred Pinn
London

The Mediterranean Sea is the habitat – though not exclusively – of five species of cowries, namely *Cypraea spurca*, *C. lurida*, *C. pyrum*, *C. gracilis* and *C. (Schilderia) achatidea*. Of these the last is supposed to be found in the western Mediterranean, but experts seem to know little about it and it therefore gets no mention in a general shell guide. *C. gracilis*, according to John Orr, is 'an elusive intruder from the Red Sea' and is equally ignored. That leaves the modest number of three cowrie species: *C. spurca*, *C. lurida* and *C. pyrum*. (See: Peter Oliver, *Shells of the World* for description and colours.)



Cypraea gracilis



Cypraea spurca



Cypraea gracilis



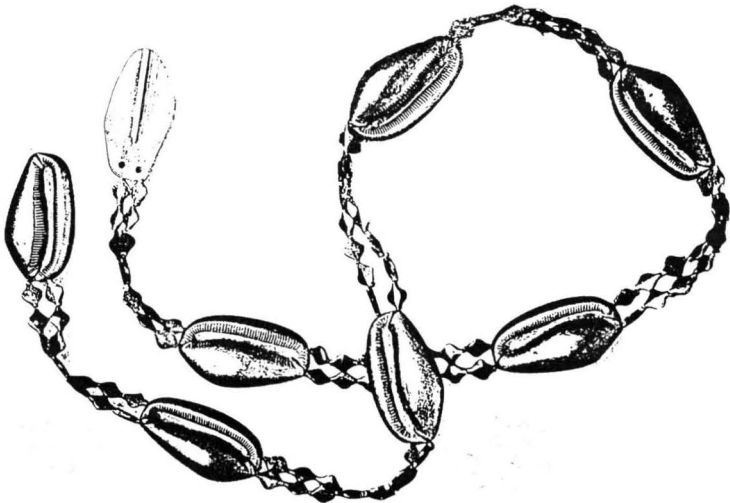
Cypraea lurida



Cypraea pyrum

When in 1272 Marco Polo visited China he came across the use of the money cowrie – *C. moneta* – as local currency. Though this species does not exist in the Mediterranean region, Marco Polo recognised it as belonging to the cowrie family when he wrote: 'For money they use white cowries, i.e. the sea-shells that we used to make necklaces for dogs.'

Three thousand years before Marco Polo the Mediterranean cowries served as models for necklaces and girdles not for dogs but, made in gold, for Egyptian royal ladies. The piece of jewellery shown in the illustration dates from the 12th Dynasty reign of Senusref III (1878–1841 BC). It was found in the tomb of Princess Sit Hathor and was first thought to be a necklace (70 cm long). However, a similar one but longer discovered in another tomb made it appear to be a girdle with some parts missing. The eight gold cowrie shells are linked by double rows of beads in the form of acacia seeds. The beads are of semi-precious stones (carnelian, lapis lazuli and feldspar) and are perforated to allow them to be threaded on a string. The last shell slides apart revealing the tongue and groove that form the girdle's clasp. Inside the other shells were small pellets that would have made a tinkling noise as the wearer walked.



The shape of these golden cowries is not an exact copy of any of the Mediterranean species but rather a kind of 'cross' between *C. spurca* and *C. lurida* – a new species created by the goldsmith-artist – '*Cypraea egyptica*'.

As the cowrie makes only a rare appearance in the animal world of religious significance in ancient Egypt, it does not seem to take the place of an amulet with a sexual connotation as in Paphos, for instance.

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Conchological Society Field Meeting to North Worcestershire, 15-16 June 2002

Ron Boyce

██████████, Earley, Reading, ██████████

Rosemary Hill

██████████, Earley, Reading, ██████████

Seven members and friends met at the Knapp and Papermill Nature Reserve of Worcestershire Wildlife Trust under dull conditions that brightened up. The reserve, on the edge of the Suckley Hills near Leigh Alfrick, contains a wide range of habitats and complex geology, ranging from acid to more alkaline areas consisting of Silurian mudstones and Lias deposits, with the Malvernian Fault passing through. The habitats range from dry (oak) to wet (alder) woodlands, unfertilised grasslands with anthills, a fast flowing trout stream and remnant orchards, and the reserve has been described as the quintessential English Midlands landscape.

Thirty-seven species were found, including *Macrogastrer rolphii*, and records indicated that *Balea perversa* and *Azeca goodalli* have been found previously, but these eluded us on the field meeting. Additional records, some possibly from a pond to which we did not have access on the day, included *Lymnaea stagnalis*, *Planorbis carinatus* and *Ashfordia granulata*. Species not found yet which one might have expected included *Arianta arbustorum* and *Cochlodina laminata* for which the wet woodland and marshland adjacent to the Leigh Brook appeared ideal, and *Vallonia* spp. in the botanically rich grasslands where surprisingly few molluscs were found.

The size and variety of this reserve could have kept us entertained for the entire day, but it was decided to omit the drier woodlands higher up in the reserve so that Crews Hill wood on the Suckley Hills could be visited briefly. This is made up of very old limestone quarries, and even in an hour's visit before the day turned dull and drizzly, 22 land molluscs were found, including live *Pomatias elegans* in a new area near the entrance to the wood, close to its only known site in Worcestershire. The potential of further

exploration of the Suckley Hills wood along with ancient woodland and tufa sites in the Teme Valley at a future field meeting was discussed and plans laid for another meeting in 2003.

Fewer participants were available on the Sunday, but both days gave the opportunity to get to know new members. It was decided only to visit Uffmoor Wood, which is near Halesowen and on the coal measures. More and less acid soil types may be distinguished on the basis of the vegetation. This ranges from thin birch woodland to ash woodland, with a number of small streams, ditches and a damp water pipeline wayleave with a species rich grassland. The reserve also includes the obligatory small pond with *Lymnaea stagnalis*. The reserve belongs to the Woodland Trust. There is a lot of brushwood, as timber from an assortment of tree species in the reserve was harvested for paint brush handles when Harris owned it. The ground flora is varied and several groups of common spotted orchids livened up a dull damp day. The tall vegetation near the damp ditches yielded a plentiful supply of *Arianta arbustorum*, so puzzlingly absent the previous day. Most species were found near a small deeply incised stream under ash trees, with the more acid regions of the wood proving disappointing. The damp weather encouraged *Clausilia bidentata* and *Cochlodina laminata* to climb the trees and there was a steady two-way traffic of *Lehmanna marginata* on the tree trunks.

In all 24 species were found, with plenty of the wood still left to explore on another occasion. It would be reasonable to expect to find more *Columella* to determine the species and *Zonitoides excavatus* may prove to be somewhere in the more acid parts. Searching earlier in the season in other years has failed to find *Phenacolimax major*, but this site may be too far north. However like many ancient woodlands, Uffmoor is slow to give up its secrets and further visits are likely to be worthwhile.

Thanks are due to the Worcestershire Wildlife Trust for permission to visit the Knapp and Papermill and to Harry Green of the Trust for arranging permission to visit Crews Hill wood. The Woodland Trust kindly gave permission for the Society to visit Uffmoor Wood.

List of species found in North Worcestershire

Species	Knapp & Papermill SO 748515	Crews Hill Wood SO 734531	Uffmoor Wood SO 952811
<i>Valvata piscinalis</i>	L		
<i>Lymnaea stagnalis</i>			L
<i>Lymnaea peregra</i>	L		
<i>Bathymophalus contortus</i>	L		
<i>Ancylus fluviatilis</i>	L		
<i>Pomatias elegans</i>		L	
<i>Carychium tridentatum</i>	L	L	
<i>Succinea putris</i>	L		
<i>Cochlicopa lubrica</i>	L	L	L
<i>Cochlicopa lubricella</i>	L		
<i>Columella</i> sp. [juv.]			L
<i>Vertigo pygmaea</i>	L		
<i>Acanthinula aculeata</i>	L	L	
<i>Ena obscura</i>	L		L
<i>Punctum pygmaeum</i>	L		
<i>Discus rotundatus</i>	L	L	L
<i>Arion ater</i> agg.	L	L	L
<i>Arion subfuscus</i>	L	L	L
<i>Arion circumscriptus</i> seg.	L	L	
<i>Arion silvaticus</i>			L
<i>Arion hortensis</i> seg.			L
<i>Arion distinctus</i>	L	L	
<i>Arion intermedius</i>	L	L	
<i>Vitrea crystallina</i>	L		L
<i>Nesovitrea hammonis</i>	L		
<i>Aegopinella pura</i>	L	L	L
<i>Aegopinella nitidula</i>	L	L	L
<i>Oxychilus cellarius</i>	L	L	L
<i>Oxychilus alliarius</i>	L	L	L
<i>Oxychilus helveticus</i>	L	L	
<i>Limax maximus</i>	L	L	L
<i>Limax marginatus</i>	L		L

Species	Knapp & Papermill SO 748515	Crews Hill Wood SO 734531	Uffmoor Wood SO 952811
<i>Deroceras laeve</i>	L*		
<i>Deroceras reticulatum</i>	L	L	L
<i>Cochlodina laminata</i>		L	L
<i>Macrogastra rolphii</i>	L		
<i>Clausilia bidentata</i>	L	L	L
<i>Monacha cantiana</i>	L		
<i>Perforatella subrufescens</i>	L		
<i>Trichia plebeia</i>	L		L
<i>Trichia hispida</i>	L	L	L
<i>Arianta arbustorum</i>			L
<i>Cepaea nemoralis</i>	L	L	L
<i>Cepaea hortensis</i>	L	L	L
<i>Helix aspersa</i>	L		

*Recorded by the organisers on their reconnaissance visit.



Book Review

Chitons of the world: An illustrated synopsis of recent Polyplacophora

Frans J. A. Slieker, 2000. Pub. Mostra Mondiale Malacologia.
ISBN 88-86070-05-5. Hardback A4 Format: Price 79 Euros.

Compared to other classes of mollusc, chitons, otherwise known as coat-of-mail shells, are a relatively neglected group: they do not attract many students and collectors, nor are they widely worked on in the academic world. There are doubtless several reasons for their neglect, and this is not helped by the poor attention the Polyplacophora have received in the literature. Often the large, lavishly illustrated encyclopaedia- and compendium-style books omit them altogether. In this sense this book fills a niche: it is the first full-colour general overview of the class Polyplacophora worldwide.

In the main body of the volume, of some 850 extant species, over 500 are included. Most omitted taxa are from the deep sea. A brief description is accompanied by a colour figure of the dorsal view, as a series of 50 plates, each with a matched facing page. Most of the chitons are illustrated from preserved specimens (of varying quality), with a few shown as living animals *in situ*. This layout is user-friendly and the reader is assisted further by the grouping of species into 12 regions representing faunistic provinces. This arrangement is a useful feature, as it provides the reader with information on the range of species one might expect to find within a geographical area. Where a species occurs in more than one region, or is cosmopolitan, the relevant entry is made in the region where it is most abundant. Care needs to be taken over the interpretation of size of individual species. There are no scales on the plates, although a maximum specimen length is given in the description. Although an illustration of one species might not always show exactly the correct proportion when related to another illustrated species, the differences between large, medium and small species are represented.

The main body of the book is preceded by a short introduction to chitons with a rather meagre description of overall morphology, and the accompanying line drawings omit an important diagnostic feature, namely the ctenidia, which are variable in number. Two conditions are recognised, the holobranch condition where the gills extend forward to the head and the merobranch condition where the gills only extend part of the way to the head. The text accompanying the figures is scanty and biased towards collection locality, location of figured specimen, name of publication of species description, type locality and location of type specimen. Size, distribution, abundance and habitat are despatched in two or three lines! Whilst not setting out to be a definitive identification guide, it is nevertheless a pity that the author does not indicate whether the individual species are holobranch or merobranch. For the British species this is a particularly useful diagnostic feature: the commonest species *Lepidochitona cinereus* is highly variable and often presents problems with identification, particularly for novices and during field recognition. It is holobranch and this condition immediately separates it from those other species with which it might be confused and which are all merobranch chitons. A classification of recent (sic) chitons gives brief descriptions of families and genera and a list of extant species. This classification is based on Kaas & van Belle (1998) with 'minor modifications' made by the author. Presumably one such modification is the listing of *Lepidochitona cinereus* as *Lepidochitona cinerea*. This is, in fact, incorrect: the specific name should take its gender from the genus, *Lepidochitona* Gray, 1821, which is masculine, although why it was erected in the accusative form is unclear (Winckworth 1926). The same argument applies to *Acanthochitona 'crinita'*.

Chitons are conspicuous members of the littoral and sublittoral fauna in many parts of the world, but the species occurring around Britain and Ireland are mostly small, drab and number 11, excluding deeper water taxa. These appear to be correctly figured, although the magnification and resolution of the figured specimens do not allow the differing granular ornaments present on the valves of the three *Leptochiton* species to be discerned.

A long list of acknowledgements to individuals and institutions indicates that the author has consulted others widely in order to gain access to specimens for inclusion. There is also a lengthy list of primary References and a section on General Literature for further reading. As a compendium on chitons, this book would be a useful addition to a molluscan library, although at approximately £50 this is a considerable outlay for a picture book with a limited potential market. It does not pass a stand-alone test as an identification guide, nor does it purport to, but used alongside the more thorough treatments carried out by authors such as Kaas (cited extensively in the References), it does provide a compilation of colour figures to augment the detailed descriptions and line drawings in the more taxonomically disciplined monographs available.

References

(Unfortunately the Kaas & van Belle 1998 reference I quote does not feature in the list of References in the book! Other literature for these authors is cited, but I cannot be sure whether the date of 1998 is erroneous or whether the reference is correctly cited in the text and omitted from the references in error.)

Winckworth, R. 1926. Notes on British Mollusca – 1. *Journal of Conchology* 18: 13–15.

Jan Light
[REDACTED], Godalming,
Surrey [REDACTED]

Sinistral *Helix aspersa*

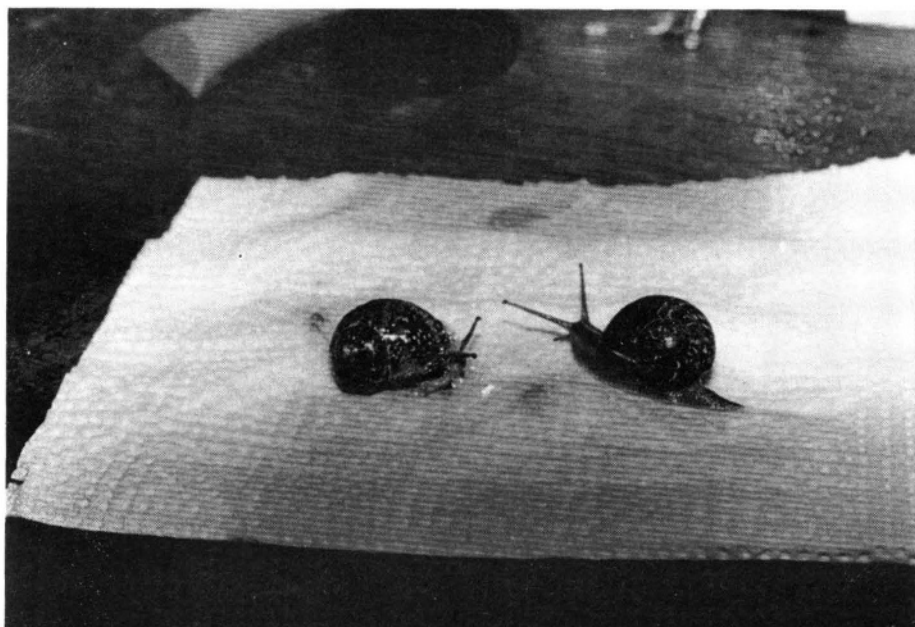
Jane Reynolds

[REDACTED], Holloway, London [REDACTED]

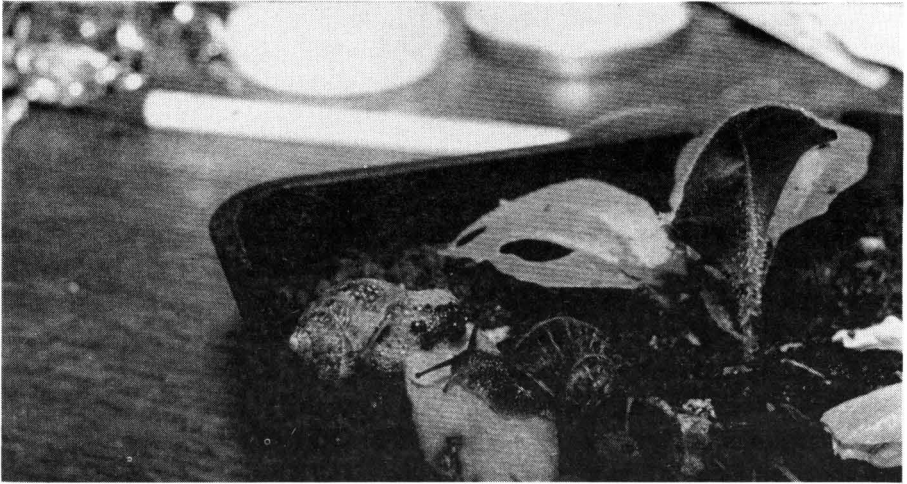
On 20 August 2002, a somewhat drizzly day, as I returned from work I found something I have been searching for for as long as I can remember. Manoeuvring my bicycle around the garden snails on my front path, as usual, I noticed one looked a little odd. I did a double take, realising in a flash that there in front of me, literally on my doorstep, was a sinistral snail.

I was somewhat confused as to what to do next – should I bring in my bike first or get the snail? – but eventually decided on a course of action and procured the snail before my downstairs neighbour came out and squashed it, as is her wont. It is a normal *Helix aspersa* in all other respects, about half adult size, now set to live like a king for the rest of its days!

Some photos, with a normal specimen, are included here.



Sinistral Helix aspersa



Our Humble Chum

Frank Berry

Chichester, West Sussex

I like to read Zoology
And a little of Psychology,
As I wonder, what in thunder makes me tick,
But enthusiasm pales
Beside the lure of snails,
For they're jolly and, by golly, not too quick.

As we see, the Entomologists
And bearded Anthropologists
They run with nets, chase monkeys up a tree,
But our lowly snaily friend
Foots it slowly, end to end,
So cannot well defend
Its entrails from the likes of you and me.

Long before our human dawn,
When Gabriel blew his horn
And trumpeted the rise of Sapient Man,
The archaic Pulmonata,
Disliking salty water,
Climbed out upon the shore-line with élan.

There they browsed like cattle
And had no need to battle,
But could not see what lay so far ahead,
For Science lay in wait
To dissect the pulmonate
And cork it in a bottle, stiff and dead.

We now send them, narcotised
For other prying eyes
To elucidate their taxonomic features;
Practise questionable didactics
And morbid, probing tactics
On these lowly, slowly, easy-going creatures.

These words, they come unbidden,
They are with conflict ridden,
I write them down in haste before they pale,
Conservation or dissection?
I vote for the protection
Of our little, humble chum, the jolly snail. ■

Subscriptions

Subscriptions for 2003 will become due on 1 January 2003 and members are asked to remit promptly, without further reminders, to the Membership Secretary:

Mr M.D. Weideli

Newbury, Berkshire

Cheques should be made payable to 'The Conchological Society'. Overseas members must pay in sterling. International money orders, Eurocheques, Bankers drafts or transfers to our bank account are acceptable. Our bankers are: National Westminster Bank Plc, Bolton Branch, PO Box 2, 24 Deansgate, Bolton, Lancs. BL1 1BN, Account 0652384602. We regret that we cannot take credit card payments.

Rates are unchanged from 2002 and are:

Ordinary Members	£23.00
Family Members	£25.00
Student Members	£10.00
Institutional Members (UK)	£32.00
Institutional Members (Overseas)	£35.00

Ordinary Members, Family Members and Student Members may deduct £1.00 from the above if paid before 31 March 2003. Will all members with Standing Orders please check that the amount they are paying is correct. The £1.00 early payment discount will not apply if it is necessary for us to request additional payment.

Conchological Society of Great Britain and Ireland

MINUTES

1110th (Ordinary) Meeting held on the 6th July 2002 in the De La Beche Room of the Natural History Museum starting at 2.30 p.m.

In the chair: Dr Rundle with 9 members present.

Apologies for absence: Dr Aldridge, Dr Alexander, Dr Chatfield, Dr Colville, Mr Dansey, Mrs Fogan, Miss Fogan, Mr, Gillard, Mr Killeen, Mrs Light, Mr Llewellyn-Jones, Mr Long, Miss McIvor, Mrs McMillan, Mr Negus, Mr Pain, Mrs Pain, Mrs Rands, Dr Seddon, Mr Smith, Mrs Turk, Dr Verdcourt, Mr Weideli, Dr Willing, Mr Woodward.

Minutes of the last meeting (of 16th February, 2002): The Minutes were read and accepted.

Matters arising: None

Nomination and election of new members: None

Announcements and correspondence:

- Mr Gillard had resigned as Hon. Secretary because of ill health. Miss Hill has taken over as Acting Hon. Secretary and the post of Hon. Editor Conchologists' Newsletter is now vacant.
- When attending indoor meetings, please would members sign in at the security desk at the Museum Lane entrance to the Natural History Museum and not at the Life Sciences desk at the main entrance to the museum.

Forthcoming meetings:

- The next meeting will be a field meeting at Moffat on Sunday 20 July, led by Peter Dance.
- There will be a workshop at Reading Museum Resources Centre on marine bivalves on Sunday 14th August, tutor June Chatfield.
- The next ordinary meeting will take place on Saturday 7th September. The speakers will be Jan Light and Ian Killeen on 'Marine gastropods of Rodrigues'.

Any other business: None.

Lectures of the day (short talks):

Speaker: Mr Ron Carr

Title of talk: The Genus *Rumina*

Speaker: Mr Peter Topley

Title of talk: Breeding *Achatina reticulata* in captivity

Speaker: Mr Ron Boyce

Title of talk: Some observations on locomotion in slugs

Speaker: Mr Kevin Brown

Title of talk: 'She sells sea shells' by Veronica P. Johns (1968) – an extract

Meeting closed at 5.15 pm

Appendix: Members' exhibits:

- | | |
|--------------|--|
| Ron Boyce | Two carved wooden slugs, one of them a refrigerator magnet. |
| Kevin Brown | 1. De la Beche's cockle, <i>Nemocardium bechei</i> (Reeve, 1847).
2. Book: <i>Classic Natural History Prints: Shells</i> by S. P. Dance & D. Heppell.
3. <i>Marginella desjardini</i> Marche-Marchad 1957. |
| Ron Carr | <i>Stagnicola fuscus</i> (C. Pfeiffer). A species distinct from <i>S. palustris</i> (Müller) and new to the British list. |
| Peter Topley | <i>Achatina reticulata</i> Pfeiffer 1845 in captivity. |



Diary of Meetings

This is a list of all meetings in date order.

Programme Secretary:

Ron Boyce, [REDACTED], Earley, Reading, Berkshire [REDACTED]
[REDACTED]

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.

Members attending indoor meetings in the De La Beche Room at the Natural History Museum, 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.

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
MSL = Malacological Society of London

NHM – Saturday 14 December 2002: 14:30 h in the De La Beche Room. We welcome as Guest Speaker Stephan Müller from Cambridge University on the subject of 'The Asian clam in Britain - not as bad as we thought?'

NHM – Saturday 8 February 2003: 14:30 h in the De La Beche Room. We welcome as Guest Speaker Anna McIvor from Cambridge University on the subject of 'Freshwater mussels as biofilters of algae'.

MSL – Friday-Sunday 28-30 March 2003. Universities Marine Biological Station, Millport, Isle of Cumbrae, Scotland. Conference: *Evolution and biology of marine limpets*. Contact Hugh Jones, hugh.jones@man.ac.uk

FIELD – Saturday 29 March 2003

Blockley Quarry, Gloucestershire

Leader: David Long [REDACTED]

This is a return visit to the Northcot Brick & Tile Works (grid ref. SP 182369) with its excellent exposure of the *lbex* zone of the Lower Lias. This field meeting is made possible by the kind permission of the management of the works. Please note that visitors must be over 18 for Health and Safety at Work indemnity reasons. Waterproof footwear is required but not a hard hat.

Meet at the site at 10:30 h.

Please inform the leader if you plan to attend this meeting.

FIELD – Saturday 5 April 2003

Hampshire hangers

Leader: Terry Wimbleton

Possible sites for *Phenacolimax major*. Meet in the car park at Petersfield railway station, grid ref. SU 744235 at 10:30 h (subject to train times). Bring lunch.

NHM – Saturday 12 April 2003: 14:30 h in the De La Beche Room. Annual General Meeting with Presidential Address by Dr Adrian Rundle (London) on the subject of 'Marine mollusca in microfossil samples – some special examples'.

FIELD – Wednesday 14 May to Sunday 18 May 2003

Isle of Arran, Scotland

Leader: William Penrice

A meeting to study the marine mollusca of the coast of Arran. Arran is a fabulous location for the study of natural history in general and has often been described as Scotland in miniature. It boasts tremendous and dramatic coastal locations, courtesy of an exciting and variable geology which has been studied by generations of students. The society has not visited the island previously and a very good haul of a range of interesting species is expected. We also hope to enjoy some of the wider natural history and some non-marine mollusc recording, particularly as the tides are relatively late in the day.

The meeting will be centred on Brodick, which has a wide range of accommodation, including camping. Brodick is also the main town and ferry port. The programme is as follows:

- Wed 14 May – Corrie. Meet at 13:00 h to look for non-marine molluscs in the limestone outcrops and 15:30 h for marine at NS 024435 (low tide 17:20 h).
- Thursday 15 May – Lochranza. Meet at Brodick Tourist Information (Ferry Pier NR 022359) at 14:00 h. (low tide 18:10 h) to look at marine molluscs on the rocky Newton Point to Cock of Arran coast. This is also the site of Huttons famous geological unconformity.
- Friday 16 May – West Arran. Meet at Brodick Tourist Information (NR 022359) at 14:30 h to look at coastal habitats between Blackwaterfoot and Machrie. We will also visit the Machrie Moor stone circles (low tide 19:00 h).
- Saturday 17 May – South Coast. Meet at Brodick Tourist Information (NR 022359) at 15:00 h. (Low tides are at 07:20 h or 19:40h).
- Sunday 18 May. Non-marine recording to be confirmed.

**FIELD – Saturday 31 May 2003
Old Sulehay,
Northamptonshire**

Leader: Brian Eversham [REDACTED]

This visit is to a newly acquired Wildlife Trust reserve on oolitic limestone and containing ancient woodland, some limestone grassland, former quarries and a spring fed mire site. There are areas of boulder clay, ironstone and small lenses of acidic sands, adding to its diversity. The molluscs are not well known yet, but the site is known to support many rare insects. In the oak-ash forest, *Cochlodina laminata* and *Lehmannia marginata* are abundant, and *Columella edentula*, *Acanthinula aculeata*, *Oxychilus helveticus*, *Trichia plebeia* and *Helicigona lapicida* have been recorded. The nearby quarry and grassland support *Vertigo pygmaea*, *Pupilla muscorum*, *Cermea virgata*, *Candidula intersecta*, *C. gigaxii* and *Helicella itala*: it would be useful to know the extent of the current population. A spring-fed mire with a shallow tufa-forming stream and willow carr has *Euconulus alderi*, *Arion silvaticus* and *Ashfordia granulata*. Many more species should be present in such diverse high-quality habitats.

Meet at grid ref. TL 054983, at the entrance to the nature reserve on the east side of the road, opposite the entrance to Old Sulehay Lodge, at 10:30 h. The gates will be opened, and cars will be parked within the quarry. A detailed site map and more information on the species recorded will be provided in advance of the meeting to those who contact the leader (email: beversham@aol.com).

**FIELD – Saturday and Sunday 21–22 June 2003
Knightwick, Worcestershire**

Leader: Harry Green [REDACTED]

A meeting to study the Mollusca of tufa sites in wooded dingles along the River Teme valley upstream of Knightwick, mainly between Stanford Bridge and Newnham Bridge. Visitors may be able to visit Hell Hole, Devil's Den, Deaths Dingle or Hanley Dingle, deep side valleys irrigated by lime-rich water from the Psammosteus limestone and containing tufa deposits of every size and shape. These sites are little explored for molluscs although some are known to have a rich fauna. Given time, there are also nearby Silurian limestone pastures worthy of study. The river will also be worth sampling.

Meet on the Saturday in the Talbot Hotel car park at Knightwick (SO 733560) at 10:30 h.

NHM – Saturday 5 July 2003: 14:30 h in the De La Beche Room. We welcome as Guest Speaker Paul Elliott from Cambridge University on the subject of 'The distribution and effects of the zebra mussel in Britain and a new method for its control'.

**FIELD – Saturday 12 July
Winchester, Hampshire**

Leader: Martin Willing [REDACTED]

This is essentially a freshwater meeting to record in the Hampshire and Isle of Wight Wildlife Trust reserve at Winnall Moors. Further Hampshire Wildlife sites will be visited in the afternoon if time permits.

Meet in the car park at Winchester railway station, grid ref. SU 477299 at 10:30 h (subject to train times). Bring lunch, wellingtons and water sampling equipment.

WKSHP – Sunday 3 August. Reading Museum, Darwin Close. Cowries. Advance bookings required to June Chatfield [REDACTED]

NHM – Saturday 13 September: 14:30 h in the De La Beche Room. We welcome as Guest Speaker Dave Clark from the Zoological Society of London on the subject of 'Recent developments in molluscan conservation at the London Zoo'.

FIELD – Saturday and Sunday 27-28 September. Marine meeting in the Exmouth area. Leader: Janet Sawyer [REDACTED]

FIELD – Saturday 11 October. Ightham Mote. Leader: Ron Carr [REDACTED]

NHM – Saturday 15 November: 14:30 h in the De La Beche Room. We welcome as Guest Speakers Jan Light and Ian Killeen on the subject of 'Molluscs in the modern day culture of Rodrigues'.

WKSHP – Saturday 29 November: The annual workshop held in Woking offers Members the opportunity to receive tuition on identifying difficult groups. Bookings to Judith Nelson [REDACTED]

NHM – Saturday 13 December: 14:30 h in the De La Beche Room. We welcome as Guest Speaker John Llewellyn-Jones from West Mersea on the subject of 'Mother-of-pearl molluscs, how they are worked and uses'.

■