

Conus marmoreus Linne

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NOTICE OF MEETING

The next meeting of the Branch will be held on the 19th October at the Melbourne Camera Club Building, cnr. Dorcas & Ferrars Sts South Melbourne at 8pm.

Our speaker for the night will be Dr. Hugh Macintosh, The topic will be “Shipworms: Wood-boring bivalves”.

Dr. Macintosh, a Canadian national, completed his PhD “Competition and coexistence in tropical shipworms” at James Cook University in 2014 and is currently Project Officer Marine Biology at Museum Victoria.

The November Meeting will be held on the 16th which will be our Annual Meeting and a member’s night unless otherwise advised.

Raffles and supper as usual.

Secretary / Treasurer Michael Lyons Tel. No. 9894 1526

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Interesting distributional records, #1 – *Pedicularia pacifica* (Pease, 1865)

In 2009 and 2010 I was regularly examining and photographing the Museum Victoria collections, and also working on a checklist and bibliography of the shelled gastropods of the Bass Strait region. The latter project has now been shelved, or at least postponed, to enable other projects to be developed, however during this period I made some interesting discoveries pertaining to species whose existence in our region was (and still is) either unknown or poorly known. I thought it might be worth featuring a few of these in a short series of articles on 'interesting distributional records'. Most of these will pertain to the area encompassed by my draft checklist, and to my activities within Museum Victoria, however some may relate to specimens from other parts of south-eastern Australia, even as far north as northern NSW, and originate from my own personal collecting.

One of these interesting records came in the form of the figured specimen, which I found in the MV collections. It was collected from a depth of 500 m on the continental slope east of the Freycinet Peninsula in Tasmania (41°58.6'S, 148°38.8'E) on 27 July 1986. It is still stored where it was initially found, namely in a jar labelled "Ovulidae", within a tray labelled "continental slope" in the MV wet collection, near the Muricidae and Buccinidae. It is not yet registered. The specimen measures 6.2mm, but there are a couple of smaller shells in the same lot. I express thanks to Platon Vafiadis for taking the photographs.



These appear to represent the first record of Pediculariidae from Tasmanian waters. They were probably first examined by Robert Burn, but apparently have not been published and were certainly a surprise encounter for me amongst the multitude of material housed by MV. *Pedicularia* live parasitically on corals and their taxonomy is quite difficult according to a review by Lorenz & Fehse (2009). The south-western Pacific species is generally considered to be *Pedicularia pacifica* (Pease, 1865). Hedley (1903) reported *Pedicularia* living on *Stylaster* corals taken from the continental shelf off Woolongong and Sydney, NSW – material he named *Pedicularia stylasteris* Hedley, 1903. Powell (1979) figured material from New Zealand waters.

An enquiry sent to the Australian Museum, and the subsequent response courtesy of Ian Loch, yielded a further surprise – namely that *Pedicularia* is also known from Victorian waters. The Australian Museum holds one lot (C.423611) from New Zealand Star Bank, from 46 m of water on a craypot. This was the first I had heard of the locality, which is a shallow submarine bank about 10 – 20 km SE of Gabo Island and Cape Howe in the extreme east of Victoria. An interesting report on a survey of this area is available on the internet (Beaman, 2005). The bank rises from surrounding seabed in 60 – 120 m of water to depths of mostly 30 – 40 m, but at one point only 10 m. I have not personally examined this material, however *Pedicularia* ought to be fairly easy to recognise, so misidentification is hopefully unlikely.

Pedicularia was previously considered to belong to the family Ovulidae, in the subfamily Pediculariinae, however recent authors such as Lorenz & Fehse (2009) have elevated this to family level as Pediculariidae. An excellent little paper on *Pedicularia* was published by Braga-Henriques et. al. (2010), who reported on *Pedicularia sicula* from the Azores. Their work includes SEM images of the shell, including the protoconch, and also *in situ* photographs of the shell on its host coral taken via submersible at a depth of 450 metres.

As an aside, I mentioned a draft checklist of Bass Strait area shelled gastropods earlier in this article. The geographic area encompassed by this checklist is the area of marine habitat bounded by the length of the Victorian coast, a line due east from the VIC/NSW border at Cape Howe to the bottom of the continental slope (approx. 2000m), this contour followed south to a line due east of Eddystone Point in north-eastern Tasmania, the northern Tasmanian coast, a line due west from Cape Grim in north-western Tasmania to the bottom of the continental slope and this contour followed north-west to the intersection with a line drawn due south as an extension of the VIC-SA border. A similar area is covered by Robert Burn's opisthobranch checklist of a few years ago. The record of *P. pacifica* from New Zealand Star Bank brings it onto the checklist.

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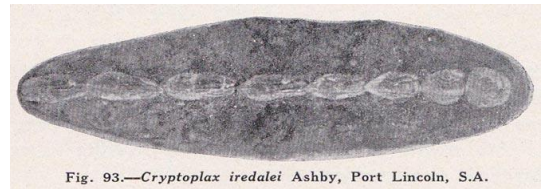
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Lynton Stephens

Beware of the mighty *Cryptoplax*

In early 2013, I accompanied Audrey Falconer and Leon Altoff to investigate the intertidal along the eastern shore of Spencer Gulf, South Australia. Many novelties, molluscan and otherwise, of minute size proved to be considerable range extensions from both east and west. This little tale relates to just one.

Bluff beach lies a few kilometers south of Port Victoria where we were based. The weather was not great (cold, wet and windy), but none-the less we were happy with our finds and the algal samples for later study of the animals that might creep out as the oxygen levels depleted. A very nice clean *Cryptoplax iredalei*, about 35-40 mm long was one of the finds, and was soon crawling around in a petro dish with other species to be identified.



Moving from specimen to specimen with the microscope, a minute shining white bubble shell with wavy red lines caught my attention. Although it was little more than 1mm long, I knew what it was but could not believe my eyes. Audrey immediately came over to see what all the excitement was about, and so she too experienced this most wondrous of sights. A moments talk about what it was and I resumed my place at the microscope in order to make notes on the animal and shell. Just in time to see the little specimen disappear for ever, squashed, under the foot of the *Cryptoplax*.

And what was all the excitement about? This little bubble shell was the early crawling stage of *Micromelo undatus* (Bruguière, 1792), family Aplustridae, a species that has never been reported from South Australia. *Micromelo undatus* is a circumglobal species, occurring as far south as Sydney on the east coast of Australia, and Rottneest Island on the west coast.

However, without a specimen, how can we prove what we saw.

Figure : Line drawings of the protoconch of *Micromelo undatus* from the Cape Verde Archipelago, North-east Atlantic: shell shining white, lines bright red (copied from : Rolan,E. 1999, *La Conchiglia* 35(306):55-57.

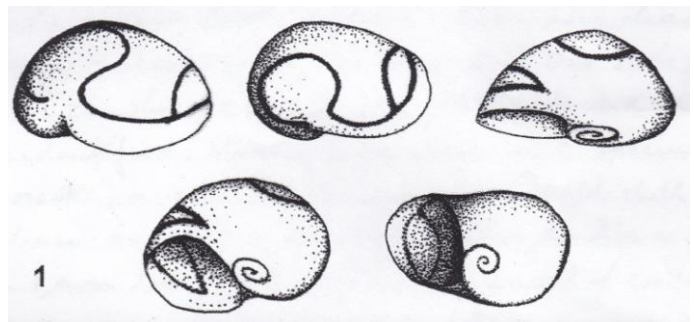


Figure 93: *Cryptoplax iredalei*, taken from Cotton 1964 *South Australian Mollusca* (Chitons)

Robert Burn

On *Clanculus maugeri* and *Clanculus leucomphalus*

In two previous Victorian Branch Bulletin articles (Stephens, 2009a; Stephens, 2009b) I discussed the distribution of *Clanculus maugeri* (Wood, 1828) and whether or not it should be retained as a member of the Victoria / Bass Strait fauna. Records from Westernport Bay (see Beechey, 2015; Jansen, 1995; Stephens, 2009b) and from King Island (e.g. May, 1923) seem dubious to the extent that they are probably best disregarded. However, in the second of those short articles (Stephens, 2009b) I noted that I had retrieved via the internet information indicating that Museum Victoria held a lot from Wilsons Promontory. Details of this lot can be viewed by using the collection search tool on the Museum Victoria website. The specimens (F.083012) were collected on 18 Nov 1981 from approx. 8 km south of South Point (39.215°S, 146.455°E) at a depth of 65 metres.

Subsequent to providing this short note I was able to physically examine this lot. In doing so I found the specimens to be misidentified examples of *Clanculus leucomphalus* Verco, 1905. As a result there are, at least in this author's opinion, no credible records of *C. maugeri* from anywhere in Bass Strait or along the Victorian coast and the species becomes an endemic of New South Wales. An online search of the Australian Museum database yields records spanning Iluka in the north to Broulee in the south, however the known southern limit for the species is probably Bermagui (see Stephens, 2009b).

C. leucomphalus is itself an interesting species – a rare and obscure *Clanculus* which inhabits the continental shelf. Since the early days of Verco and Cotton the species has very seldom been collected, mentioned or illustrated. Macpherson & Gabriel (1962) noted its occurrence in Victoria, however Wilson (1993), who provided a sketch of the species, only included SA and southern WA within its range. The best reference for the species is Jansen (1995), who provided the sole colour figure that I'm aware of and gave the distribution as from Spencer Gulf, SA to Lakes Entrance, VIC including northern TAS, in 38 to 77 m of water.

I have examined several lots of *C. leucomphalus* in Museum Victoria, photographing 2 of these specimens. The species exhibits at least two colour variations. The specimen figured by Jansen (1995) is a rich, reddish shell from the Lakes Entrance area and I have photographed a similar specimen within MV. Another form is cream or fawn with obscure cinnamon to reddish-brown axial flames. The shell illustrated here is from the Spencer Gulf, originally from Verco. It is 9.8mm in diameter. The specimens in MV misidentified as *C. maugeri* (F.083012) are still labelled as such, at the time I did not seek to have the label and the database record corrected since doing so would only have added to the workload of the collection managers. There are countless thousands of identification errors in the Museum Victoria gastropod collection, as is probably the case for any museum. In a perfect world it would be subjected to a comprehensive revision, in preference to mere tinkering at the margins, but in reality there is not the time, funding, personnel, collective will – arguably not even the right references – to fulfill such a task.

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C. leucomphalus Verco, 1905. Specimen from Spencer Gulf SA. Originally from Verco: 9.8mm diameter

Lynton Stephens

Tegulaherpia tasmanica

Aplacophoran molluscs are generally small to very small worm-like animals without shell, but often covered with projecting glassy spicules, that are found in the cold deep waters of the world’s oceans. Shallow water species are uncommon, though there is one species in south Western Australia found at 3m depth. A number of genera and species, not all of which are named, are known from south-eastern Australia. Some species are quite common in benthic sediment samples.

In her quest to evaluate the ribbon-worm (Nemertea) fauna of our temperate waters, Audrey Falconer of the MRG (FNCV) has been sampling one small intertidal area at Shoreham, Westernport. From her June, August, September and October 2013 samples, she recovered each time one specimen of a 3.5 – 5mm long by 1mm diameter cylindrical worm-like animal with a brownish silky sheen. When processed as a possible ribbon-worm, long spicules were observed but in the wrong part (posterior) to where these occur (middle to anterior) in ribbon worms. Discussion with Dr. Robin Wilson, worm curator at Museum Victoria, suggested the animals might be aplacophoran molluscs. Literature search and comparison of our specimens with voucher material in Museum Victoria indicates that the aplacophoran *Tegulaherpia tasmanica* Salvini-Plawen, 1988 is the more than probable correct identification of this little species. Three of the Shoreham specimens have been deposited in the Museum Victoria collections. Photographs and video, notes and sketches of the live specimens are available.

Tegulaherpia tasmanica was first described from 50-55m depth off the northern coast of Tasmania between Burnie and Penguin. Subsequently, it was redescribed and figured from an additional 20 specimens collected in depths of 60-120m during the Bass Strait Survey 1980-1986 (Scheltema, 1999).

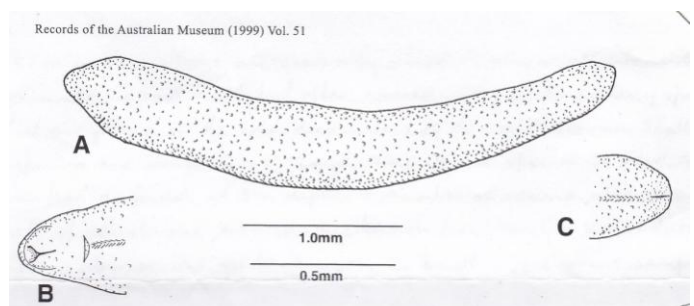
But whatever the species, as far as we can discover, Audrey’s finds are the first report of intertidal aplacophorans world-wide.

Reference

Scheltema, A.H. 1999. Two solenogaster molluscs, *Ocheyoherpia trachia* n.sp. from Macquarie Island and *Tegulaherpia tasmanica* Salvini-Plawen from Bass Strait (Aplacophora: Neomeniomorpha). *Records of the Australian Museum* 51: 23-31.

- Figures A: Dorsal view of voucher specimen, head to left.
- B: Underside of head of voucher specimen.
- C: Underside of posterior end of voucher specimen

All copied from Scheltema, 1999.



Robert Burn

CHANGES TO CARDITIDAE made by HUBER, 2010.

Below are the changes made to the Australian species of Carditidae by Dr. M. Huber in his book, Compendium of Bivalves published in 2010. The species numbers are as shown in Lamprell and Whitehead, Bivalves of Australia Vol 1, published in 1992 and Vol. 2, Lamprell & Healy, 1998.

156. *Cardita crassicosta* - No change
157. *Cardita incrassata* - a synonym of *Megacardita turgida*
158. *Cardita marmorea* - a synonym of *Megacardita nodulosa*
159. *Cardita preissii* - Genus change. *Megacardita preissii*.
160. *Cardita muricata* - a misidentification of *Cardita pica* Reeve, 1843
161. *Cardita excavata* - Now *Cardita aviculina* Lamarck, 1819
162. *Cardita variegata* - No change. Has a strongly serrated interrib.
163. *Beguina semiorbiculata* - No change
164. *Cardiocardita (Bathycardita) raouli* - Genus now *Bathycardita raouli*
165. *Glans (Centrocardita) cf hirasei* - *Centrocardita sp.*
166. "*Venericardia*" *cardioides* - misidentification of *Centrocardita squamigera* (Deshayes, 1832)
167. "*Venericardia*" *bimaculata* - *Purpurocardia bimaculata*
168. "*Venericardia*" *amabilis* - *Purpurocardia amabilis*
169. "*Venericardia*" *rosulenta* - Genus change. *Centrocardita rosulenta*
170. "*Venericardia*" *quoyi* - pictured is *Purpurocardia purpurata*
171. "*Venericardia*" *cavatica* - *Purpurocardia cavatica*

Addendum in Vol.2 (Lamprell & Healy)

714. to 720. and 724. have all been transferred to **Condylocardiidae**.
721. *Vimentum dilectum* – no change. 722. *V. excelsior* is a synonym.
723. *Cyclocardia delicatum* - is a juvenile of *Purpurocardia amabilis*.
725. *Cyclocardia calva* - is a fossil only.

Additional species and notes

Megacardita depressa (Lamarck, 1819) has been misidentified previously as *Cardita incrassata* which is a synonym of *Megacardita turgida*.

The genus *Venericardia* is considered to be a genus applying to fossils only. The species that has been recorded as *Venericardia columnaria* Hedley & May, 1908, requires further study to determine its true position.

T.Joan Hales. 3/15

June Meeting Notes.

Don Cram gave a power point presentation on his research into deep water Bass Strait and Tasmanian specimens of *Notocypraea*, discussing the current taxonomic status of *N.subcarnea*, *N.albata*, *N.emblema* and *N.molleri*. Along with examining type specimens, shell, animal and radular studies on existing museum specimens and from his own and private collections, additional DNA studies are being done with a view to a joint publication.

August Meeting Report

1. Simon Wilson showed underwater video footage taken off Rottneest Island in May of this year. Simon showed diving in limestone caves in 15-22 metres of water, looking for *Zoila* cowries and how they are found on cave roofs nestled amongst sponges. Simon showed two species; *Zoila venusta* and *Zoila marginata* including a female of the latter species brooding eggs. He noted that *Z. marginata* often lay and brood their eggs in quite exposed positions, making them vulnerable to over-collection. He also showed footage of hunting for *Cypraea cribraria rotnestensis* in 7 metres of water. They are found in a characteristic red-orange sponge and are camouflaged by having a similarly coloured mantle.
2. Geoff Macaulay tabled new publications he has added to his library:
ZooKeys – hard copies with papers on land snails, Novapex and a new book, Living Muricidae of the World by R. Houart.
Geoff also showed shells collected during a recent dive at Portsea, some land snails from the Philippines, a chiton from New Caledonia and a doubtful record of a *Notocypraea comptoni* labelled "Quobba Western Australia" which, if correct, would represent a remarkable range extension.

Michael Lyons