

*Conus marmoreus* Linne

**THE MALACOLOGICAL SOCIETY  
OF AUSTRALASIA Inc.  
VICTORIAN BRANCH BULLETIN**

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VIC. BR. BULL. NO. 284

JUNE/JULY 2016

NOTICE OF MEETING

The next meeting of the Branch will be held on the 20<sup>th</sup> of June at the Melbourne Camera Club Building, cnr. Dorcas & Ferrars Sts South Melbourne at 8pm.

Members are invited to bring along items of interest, shells, live shell images, trip and research reports. This can be another sell and swap night.

There will be no meeting in July.

Raffles and supper as usual.

A Bulletin will be issued prior to next meeting to be held on the 15<sup>th</sup> of August.

Branch Bulletin issues from VBB169 can be accessed via the Society's website.

[http://www.malsocaus.org/?page\\_id=91](http://www.malsocaus.org/?page_id=91)

Secretary / Treasurer Michael Lyons Tel. No. 9894 1526

### Interesting distributional records, #4 – *Conus klemae* (Cotton, 1953)

The Victoria / Bass Strait area does not possess a high diversity of Conidae. Macpherson & Gabriel (1962) reported only three species from the state – *Conus anemone* Lamarack, 1810, which is very common, *Conus rutilus* Menke, 1843, which is moderately uncommon, and *Conus seagravei* Gatliff, 1891. The latter is currently known as *Conus clarus* Smith, 1881 and good quality specimens are very rare in Victorian waters. A fourth species of Conidae was noted from Victoria by Wilson (1994) – *Conus papilliferus* Sowerby, 1834, which he reported from Mallacoota. Several other subsequent references note this same distribution.

Recently I acquired the figured specimen (figs. a&b) of *Conus klemae* (Cotton, 1953) from a prominent local collection. It is a rather large shell at 84.4mm, dead taken but still quite colourful and well preserved. This species ranges west to Geraldton, WA according to Wilson (1994). The furthest east that the species has previously been noted is the Victor Harbour / Backstairs Passage / Kangaroo Island area (P. Clarkson via. S. Wilson pers. comm. 2016). However, the data for the figured shell (fig. c) states that it is a “Crabbed specimen from crayport [sic] of Pt. MacDonnell S.A. fisherman. He sets pots off the coast near Nelson on Vic. side of border. March 1984.”

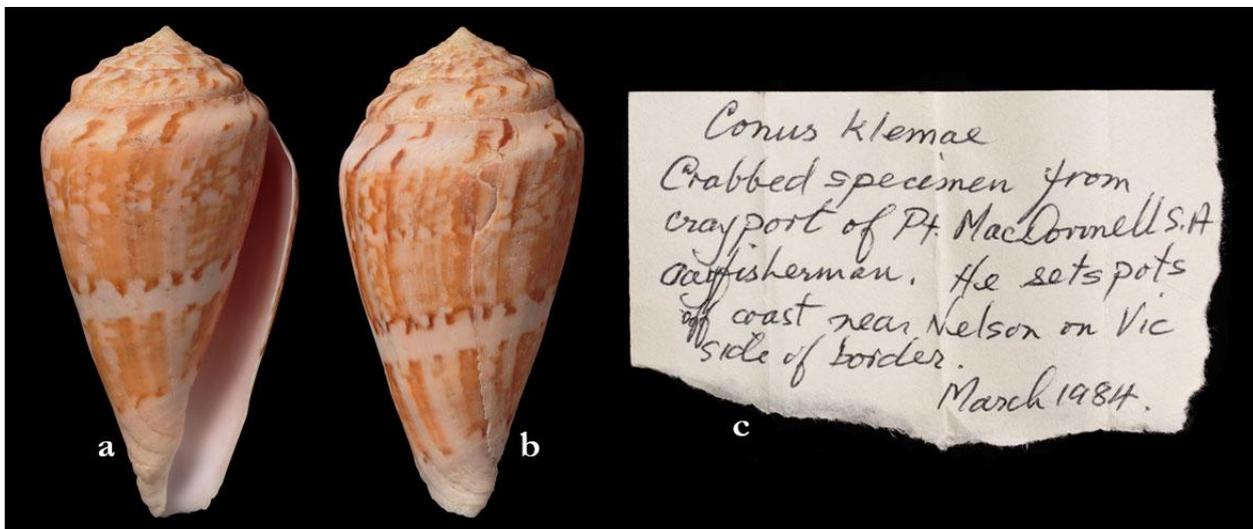
If taken at face value it this represents a considerable range extension and the fifth Conidae species to be reported from the Victoria / Bass Strait region. Additional specimens would be good for confirmation, however the data is quite specific and there doesn't seem any good reason to discount it. The deep reefs off western Victoria and the limestone coast of SA are poorly known, and conchological surprises from this area should not be surprising, so to speak. As per Beechey (2016) a few other species extend deep into the south of New South Wales, on the continental shelf, and these might be an off chance of occurring in the extreme east of the state, around Gabo Island. These include *Conus angasi* Tryon, 1883 and the very rare *Conus howelli* Iredale, 1929, both reported from off Eden, and *Conus minnamurra* (Garrard, 1961), recorded from off Tathra.

Beechey, D. L. (2016). *Family Conidae. Cone shells*. Available online at [http://www.seashellsofnsw.org.au/Conidae/Pages/Conidae\\_intro.htm](http://www.seashellsofnsw.org.au/Conidae/Pages/Conidae_intro.htm) [Accessed on 9 Mar 2016.]

Macpherson, J. H. & Gabriel, C. J. (1962). *Marine Molluscs of Victoria*. Melbourne University Press & National Museum of Victoria, Melbourne. 475pp.

Wilson, B. R. (1994). *Australian marine shells, volume 2*. Odyssey Publications, Kallaroo, WA. 370pp.

Lynton Stephens

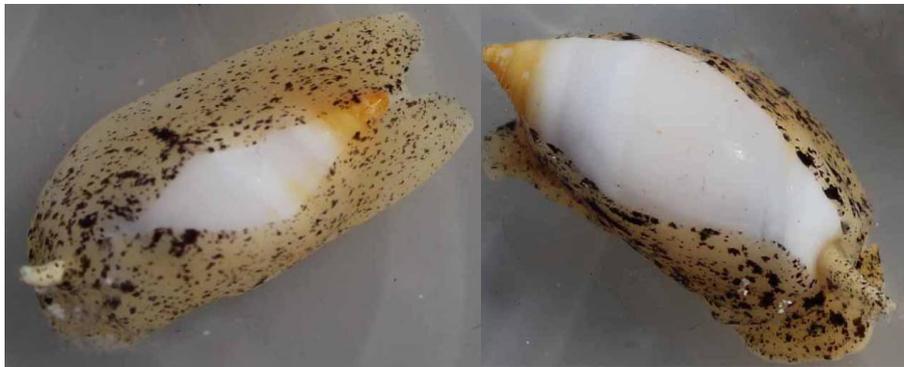


***Amalda petterdi* (Tate, 1893)**

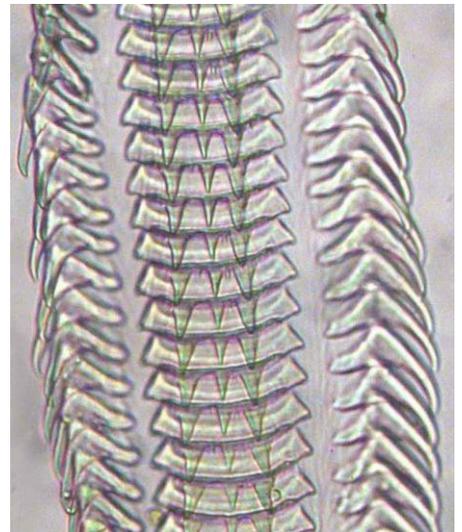
In VBB 279, I compared the radulae of two Victorian species of the subfamily Ancillinae listed in Wilson 1994:2 *Australian Marine Shells* in the genus *Alocospira* Cossmann, 1899 - ie, *Alocospira marginata* and *Alocospira edithae*, noting their differences from each other, but differing from a species of *Amalda australis* from Nelson in New Zealand.

In March this year, Geoff Macaulay while diving at Port Fairy Victoria found specimens of *Amalda petterdi* crawling in sand. This species is listed in Wilson 1994 as *Alocospira fusiformis* (Petterdi, 1886) with *A.petterdi* as a synonym. The World Register of Marine Species (WoRMS), lists *Amalda petterdi* as a valid species.

The radula of one specimen of *A.petterdi* was extracted, sealed on a slide in Aquamount and a photomicrograph showing the tooth structure is presented here.



*Amalda petterdi* Photo Geoff Macaulay



←Shell and radula → of a 19.2mm specimen. Radula ribbon length 1.8mm, central tooth 80 microns wide



The radula is similar to the New Zealand *Amalda australis*, having a broad slightly arched central tooth with three strong cusps, the central being smaller than the other two and simple hooked laterals.



Small radular section of *Amalda australis* featured in VBB279.

There is now three species listed in Wilson 1993 in the genus *Alocospira* that have a differing radular form.

According to *The Southern Synthesis* Page 835, “the radula of all olivids is typically stenoglossate with a broad central tooth with three or more cusps and broad based arcuate lateral teeth”. An SEM image of the radula of *Oliva miniacea* is shown.

A photomicrograph of the radula of a specimen of *Oliva miniacea* from East Hope Island collected during our trip there in August 1988 is shown here for comparative purposes.



VBB 279 3-4 can be accessed by this link: [http://www.malsocaus.org/?page\\_id=91](http://www.malsocaus.org/?page_id=91)

**Interesting distributional records, #5 – *Thalassocyon bonus* Barnard, 1960.**

Several years ago I was exploring the Museum Victoria collections, in particular a series of deep continental slope samples, when I was most interested to encounter one of the illustrated shells (figs. a-c). The specimen was retrieved from slope station 69, 1750 – 1840 m deep, about 76km south of Point Hicks off eastern Victoria on 26 Oct 1988 by a professional research vessel. The shell was taken by an epibenthic sled from a sandy mud / fine shell substrate at coordinates 38°29.33'S to 38°26.81'S, 149°19.98'E to 149°20.78'E. It measures 37.9mm. The scale bar is 1cm.

The specimen can be identified rather easily as *Thalassocyon bonus* Barnard, 1960, a member of the Ficidae. Although described from off South Africa the species has a wide range throughout deep southern hemisphere temperate waters including Kermadec Island, northern New Zealand, south-eastern Australia and Amsterdam Island in the southern Indian Ocean. It probably has a much wider distribution than currently indicated, but such depths are not frequently sampled. The New Zealand taxon *Thalassocyon tui* Dell, 1967 is a synonym.

Wilson (1993) reported *T. bonus* from southern QLD to southern NSW, however the Australian distribution was extended by Beechey (2000) to include eastern Tasmania. Hence, the occurrence of the species off the eastern Victorian coast is not much of a surprise, nevertheless it was of interest to me to see it added to the list of Victoria / Bass Strait gastropods. Museum Victoria holds another specimen (figs. d-f), measuring 43.7mm, from 1190 – 1273 m of water about 41 km NE of Cape Tourville on the Freycinet Peninsula, Tasmania. These specimens are currently unregistered and from my memory they are currently housed in a couple of trays labelled 'continental slope', stored just after the Muricidae section of the wet collection. The bathymetric range of *T. bonus* in Australia seems to be about 500 – 2000 m. Beechey's (2000) illustrated specimen was from 560 – 590 m of water off Ulladulla, NSW. Two additional references for the species are Warén & Bouchet (1990) and Verhaeghe & Poppe (2000).

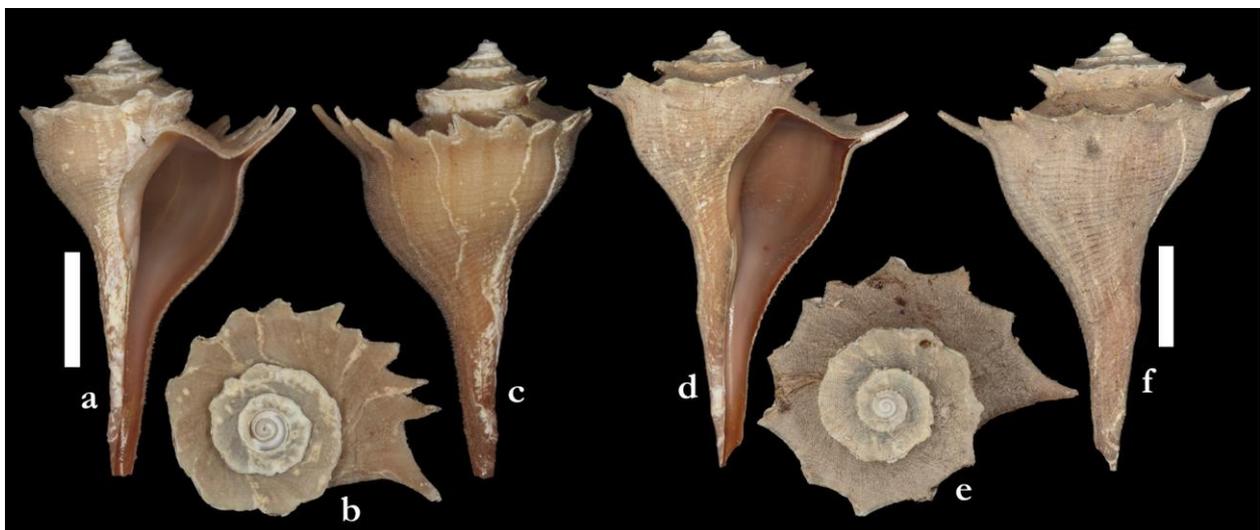
Beechey, D. L. (2000). *Family Ficidae*. Available online at [http://www.seashellsofnsw.org.au/Ficidae/Pages/Thalassocyon\\_bonus.htm](http://www.seashellsofnsw.org.au/Ficidae/Pages/Thalassocyon_bonus.htm) [Accessed on 10 Mar 2016.]

Verhaeghe, & Poppe, G. T. (2000). A conchological iconography – the family Ficidae. Conchbooks, Hackenheim, Germany. 31pp, 27pls.

Warén, A. & Bouchet, P. (1990). Laubierinidae and Pisanianurinae (Ranellidae), two new deep-sea taxa of the Tonnoidea (Gastropoda: Prosobranchia). *The Veliger*, 33: 56-102

Wilson, B. R. (1993). *Australian marine shells, volume 1*. Odyssey Publications, Kallaroo, WA. 407pp.

Lynton Stephens



*Thalassocyon bonus* Figs. a-c Museum Victoria 1750 – 1840 m deep, about 76km south of Point Hicks  
Figs. d-f Museum Victoria from 1190 – 1273 m of water about 41 km NE of Cape Tourville on the Freycinet Peninsula, Tasmania.

### **Neville Coleman Reef**

Neville Coleman (1938-2012), underwater photographer, writer and publisher, has been honoured by the naming of a previously unnamed coral reef in the Mackay/Capricorn Management Area of the Great Barrier Reef Marine Park. Neville Coleman Reef lies due east of Mackay at Lat.20.966°S, Long.151.403°E, somewhat to the north of Swain Reefs.

In September 2015, the GBR Marine Park Authority received a submission to name the reef in honour of the late Neville Coleman. I was pleased to be asked to support the submission. On 24 March 2016, I received notification that Neville Coleman reef has been named and that his name will appear on all future maps of the area.

Robert Burn

### ***Polybranchia* Pease, 1860**

*Polybranchia pallens* (Burn, 1957) is a largish sacoglossan seaslug occurring in southern Australian intertidal and subtidal waters. Little is known of its green algae food preferences, but it has been observed on and close to *Caulerpa flexilis*. Its body has dense lateral coverings of large leaf-like cerata which will break off and stick to fingers if touched. Its main claim to fame is that it lays a ribbon of very few very large eggs from which emerge crawling young of 5-7mm length.

The genus *Polybranchia* was proposed by the Hawaiian conchologist in 1860 in one of his very early papers. In 1864, the same genus was described as *Phyllobranchus* by Alder & Hancock and in 1866 Pease decided that his 1860 name was inappropriate and unnecessarily renamed it *Lobiferi*. Then in 1929, O'Donoghue pointed out that there was a prior *Phyllobranchus* in use and that *Polybranchia* was the earliest valid name for this group of sea slugs. Unfortunately he spelled this latter name *Polybranchus*. Then entered the French malacologist Alice Pruvot-Fol. In 1933 she proposed *Phyllobranchillus* for the preoccupied *Phyllobranchus*. In 1947, having apparently forgotten her 1933 action, she proposed *Branchophyllum* for the preoccupied *Phyllobranchus*. Then in 1954, in an unfortunate double lapse, she wrote *Branchophyllus*, thus changing the gender of her 1947 *Branchophyllum* and listed *Polyphylla* as a synonym of *Branchophyllus*. *Polyphylla* was already in use from 1840 for an insect, so Pruvot-Fol's use of this name is invalid though it must still be attributed to her.

According to WoRMS (World Register of Marine Species), there are four good and three doubtful species of *Polybranchia* world-wide. Genera proposed and their misspellings total eight, indicative of how little is known about this genus and its species.

Robert Burn

### **March Meeting Notes**

Geoff Macaulay showed images taken on a recent overseas trip including slugs in Scotland and an octopus in Spain. Geoff also showed images of the live animal and the shell of *Amalda petterdi* from Port Fairy, as well as shells collected from Portsea and Stony Point. Geoff also showed a recent addition to his library; *Neritidae of the World, Volume 1* by T.E. Eichhorst.

### **April Meeting Notes**

Don Cram reminded us of the radula studies of local ancillids, *Amalda edithae* and *A. marginata* and *A. australis* from New Zealand he published in issue 279 of The Victorian Branch Bulletin. Don noted that the radula of *A. marginata* and *A. edithae* are quite different, indicating they should perhaps be in different genera. Don extracted the radula of *Amalda petterdi* recently collected by Geoff Macaulay at Port Fairy. The radula of this species is very similar to *A. australis*.

Each of these shells have a spiral Ancillid groove at the base of the whorl that terminates in a notch on the outer lip. Don also showed a specimen from Western Port Bay, *Zemira australis* with its radula, its shell also having a spiral groove terminating in a notch on the outer lip.

Hugh MacIntosh reported on a new compact Scanning Electron Microscope (SEM) that was recently demonstrated at Museum Victoria by Hitachi. The unit is about the size of a desktop computer tower, simple to use and significantly less expensive than conventional SEMs. The unit operates under low vacuum and

specimens can be loaded and imaged in approximately 2 minutes. This lends itself to quick imaging of specimens in greater detail allowed than light microscopy and has the potential to make electron imaging cheaper and more accessible. Different electron sensor modes provide different perspectives, with a backscatter electron sensor showing composition of the subject and secondary electron showing topography. Hugh showed detailed SEM images he was able to take of some small bivalves, including *Nucinella dalli* from deep water off South Australia.

Simon Wilson showed photos and videos of shells and other marine life seen whilst diving at North West Solitary Rocks off Coffs Harbour, NSW in April 2016. *Cypraea teres pellucens*, *Cypraea carneola*, *Cypraea caurica* (large shell on eggs, one of two seen), an *Ovula ovum* crawling across the sand. Also a large wobbegong shark, a green sea turtle and a black coral tree in 20 metres.

Simon also showed footage taken swimming over reef in 20-25 metres of water in the D'Entrecasteaux Channel in Tasmania. Visibility was rather poor however large finger sponges (*Callyspongia* sp.), sea whips and other sessile marine life dominated the underwater landscape. The only shells visible for most of the video were the introduced 'screw shell', *Maoricolpus roseus* until a live specimen of *Umbilia hesitata* came into view.

### May Meeting Notes:

First off we looked at a slide show of a shelling trip off the coast of Queensland in 2010. It was interesting trying to identify who the participants were and where they were. There were interesting photos of live molluscs and crustaceans as well as what looked to be an enjoyable time on board the vessel.

Don Cram showed a photomicrograph of the radula of *Amalda petterdi*. He also showed scanned slide images of live cowries taken by R.J.Griffiths in about 1959, sent to him from England by the late John Griffiths' son in law.

Geoff Macaulay on a trip. to Coffs Harbour and Brisbane, collecting south of the Warrumbungles located dead specimens of *Galadistes pilligaensis*, whilst a second stop at Moonbi Gap produced *Austrochloritis nundinalis*, *Levidens ponderi*, *Brevisentis atratus*, *Gouldiliropa carlessi* and *Paralaoma caputspinulae* from litter samples. At Yamba, several large *Sphaerospira fraseri* were found on footpaths after heavy rain as well as a single specimen of *Ponderoconcha cf morosa*.

In the Coffs Harbour area, productive night shore dives located many species in Hermit Crab aggregations. Some of the more interesting were, *Euchelus ampullus*, *Phasianotrochus eximeus*, *Notogibbula bicarinata*, *Turbo exquisitus*, *Opalia balinensis*, *Cymatium exaratum*, *Natica alapapilionis*, *Fusinus consetti*, *Peristernia brazier*, *Latirus sp*, *Cancellaria undulate*, *Thais ambustulus*, *Chicoreus denudatus*, *Phyllocoma speciosum*, *Mipus arbutum*, *Amalda marginate f. dyspetes*, *Amalda petterdi*, *Amalda cf rubrofasciata*, *Bellovia leucozona*, *Amoria zebra*, *Epidirona hedleyi*, and a pair of nice *Ataxocerithium serotinum* from yellow sponge in an overhang in 4m.

Platon Vafiadis reported on the excursions immediately following the Molluscs 2015 conference which was held at Coffs Harbour from Sunday November 29th to Wednesday 2nd December 2015 (and themed 'Frontiers in Molluscan Research').

Both excursions took place on Thursday 3rd December – one group (Platon included) went to Dorrigo National Park and undertook a ranger-guided walk through the rainforest. The other group went to the Woolgoolga Headland rocky intertidal zone where they also collected nudibranchs and shelled sea slugs in preparation for a post-conference nudibranch/sea slug taxonomy and ecology workshop conducted by Dr. Richard Willan at the National Marine Science Centre (on Friday 4th and Saturday 5th December).

Platon also presented photographs of the land snails *Hedleyella falconeri*, *Ngairea dorrigoensis* and also an unidentified semi-slug from Dorrigo as well as *Bullina lineata*, *Chelidonura hirundinina*, *Chromodoris aspersa*, and *Mexichromis festiva* from Woolgoolga. Also shown was a semi-slug, possibly *Fastosarion virens*, from a Coffs Harbour garden.

Michael Lyons

**M.S.A Victorian Branch Financial Statement 31/01/2016**

Balance as at 31/01/15		\$1879.85
<b><u>Receipts</u></b>		
Raffles	\$23.00	
Subscriptions received	\$285.00	
Shell sales	\$60.00	
Society rebate	\$550.00	
Bank Interest	\$16.64	
	<b><u>\$934.64</u></b>	
		<b><u>\$934.64</u></b>
		\$2814.49
<b><u>Expenses</u></b>		
Postage	\$60.15	
Subscriptions out	\$285.00	
	<b><u>\$345.15</u></b>	
		<b><u>\$345.15</u></b>
Balance as at 31/01/2016		<b><u>\$2469.34</u></b>

**Michael Lyons (Hon.Sec/Treasurer)**