

Conus marmoreus Linne

THE MALACOLOGICAL SOCIETY OF AUSTRALASIA Inc. VICTORIAN BRANCH BULLETIN

(Mailed to financial members of the Society within Victoria)

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VIC. BR. BULL. NO. 278

APRIL/MAY 2015

NOTICE OF MEETING

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

With increasing restrictions on the taking of shells, it is often only by sourcing shells from old collections that today's collector can add to their collection. Tonight's meeting, as well as being a member's night, will also be the first of our buy/sell/swap sessions. Bring along surplus shells/ books/ papers to trade or sell.

The May meeting will be on the 18th and will be a Member's night unless otherwise advised.

Supper and Raffles as usual.

Thanks to all who have contributed to this and past bulletins. It shows the diversity of interests of our members. Many stunning images taken by our members of never before seen alive species, especially micro-molluscs have been shown at meetings and duly recorded in meeting reports.

Secretary / Treasurer Michael Lyons Tel. No. 9894 1526

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VALE CHRIS BUNYARD

Chris Bunyard, wife of Fred, our recently retired long time chairman of the Victorian Branch, passed away peacefully on 9/2/2015.

Chris' first shell collecting experience was when she was a girl on holidays in Devon, collecting beach shells, which she then varnished. She emigrated to Australia in 1965 and on her first holiday to Queensland bought some seashells as a souvenir for her mother. Back at the motel she decided that she liked them for herself and so started her collecting in Australia. She went to op shops, markets and anywhere to get more shells also buying every shell book that she could find and absorbing all the knowledge. When her daughter Debbie was three years old, there were a lot of surplus toys and together with other "stuff" from around the house, she set up a market stall at St. Andrews.



Doing well on the first try, she went back a second Saturday and this time she took her varnished shells. They went like "hot cakes" and Chris thought that there could be a niche here. She went down to Frank Rossack's in Geelong, bought some shells and she was hooked. They sold well and Chris was soon back to Frank's buying more.

From this she branched out doing markets at Greensborough and Camberwell and started getting stock by post from overseas. As the orders got bigger she talked with Noel Coleman who was doing markets in Geelong and also bringing stock in from overseas by mail. Noel then suggested that they combine and put in an order to get a part container. Stock arrived from Africa and the Philippines and Chris (and Noel) had such fun opening the tea chest and cartons when each container arrived. All the time Chris was adding to her knowledge of shells.

Chris, Fred and Debbie joined the Malacological Society. They also joined the Port Phillip Bay shell group where she ultimately became the secretary and held that post until her passing. She helped to raise funds for the MSA by selling shells on commission at a Gem Fair. This raised \$300, which the MSA gave to Hope Black for her to use in compiling her History of Malacology.

As secretary of the Port Phillip Bay shell group she was instrumental in Melbourne hosting its first Shell Show. Chris did all the work involved in setting up the categories for the entries; writing to dealers and collectors offering tables where they could sell shells. There was trepidation within the club that they could lose money and fold. This was not to be the case, as the show was an outstanding success, having 37 dealers from overseas and interstate participate, after expecting only 15. The club took over \$2,000 and this set the club up for the future. A second show came later, which, while still making money, was more costly to put on and had fewer dealers.

At the MSA Victorian Branch meetings with Fred she organised raffles of donated shells for the benefit of branch funds and also did the collating, copying and posting of the Branch Bulletin to members.

Chris became an authority on shells. Travelling many times with Fred to Yeppoon and Townsville she would be asked to be a judge at their shows. Chris gave the occasional talk at MSA meetings and her last talk was only a couple of months before she passed away.

With her passing, the clubs that she was a part of and those that she supported have lost a lovely and knowledgeable person; she will be greatly missed.

Geoff Macaulay

CHANGES TO ARCIDAE NOMENCLATURE

The second chapter to document changes to the Australian species, with particular reference to “Bivalves of Australia” Volume 1 by Lamprell and Whitehead and Volume 2 by Lamprell and Healy, is the family Arcidae. The web-sites, “Codes for Australian Aquatic Biota”, <http://www.marine.csiro.au/caab/> and World Register of Marine Species (WoRMS) <http://www.marinespecies.org/> have both been used as references.

Changes to ARCIDAE, checked 2015 ----

“Bivalves of Australia Volume 2”, Lamprell and Healy. p. 44 - 61, species numbers 50 – 96.

- *Arca (Arca) navicularis* No change.
- *Arca (Arca) ventricosa* No change.
- 52. *Arca (Arca) avellana* Synonym of *Arca patriarchalis*
- 53. *Barbatia (Nipponarca) bistrigata* Genus change – *Mesocibota bistrigata*
- 54. *Barbatia (Barbatia) foliata* No change.
- *Barbatia (Barbatia) grayana* No change.
- *Barbatia (Barbatia) parvivillosa* No change.
- *Barbatia (Barbatia) trapezina* No change.
- 58. *Barbatia (Barbatia) coma* Error. Illustrated is the type of *B. cometa*.
- *Barbatia (Barbatia) pistachia* No change.
- 60. *Barbatia (Barbatia) amygdalumtostum* No change.
- *Barbatia (Barbatia) obliquata* Illustration 61b is the type of *obliquata* but according to Huber it does not occur in Australia. However illustration 61a *Barbatia scazon* does occur in Australia and is the correct name.
- 62. *Barbatia (Barbatia) benthicola* Genus change to *Calloarca benthicola*.
- *Barbatia (Barbatia) wendti* Genus changed to *Miratacar wendti*, possibly monospecific.
- 64. *Barbatia (Barbatia) saviolum* Genus changed to *Mimarcaria saviolum*.
- *Barbatia (Barbatia) terebrans* No change.
- 66. *Barbatia (Destacar) metella* (correction of 'mella') Changed to *Destacar metella*
- 67. *Barbatia (Calloarca) tenella* *Barbatia* deleted, now *Calloarca tenella*
- *Barbatia (Acar) reticulata* (correction of riculata) This is a synonym of *Acar squamosa*. Huber states that *Acar reticulata* is “nom. dub.” unless the type can be found. Other synonyms are *laminata* and *m'coyi*. *A. squamosa* is distinct from *plicata* in commarginal sculpture and elongated shape.
- 69. *Barbatia (Acar) plicata* No change. Illustration for sp. 71 is the same species.
- 70. *Barbatia (Acar) iota* A synonym of *Acar congenita* which grows to 20.6mm and is also found in the Philippines. It is more compressed than *plicata* being broad, truncate, not rounded at the posterior end, coarser, cancellate and squarish in weaker dentition and fewer teeth.
- 71. *Barbatia (Acar) dubia* An illustration of *Acar plicata*. However, *A. dubia* may be a valid species. Accepted by Indo-Pacific Mollusca database. Distribution???
- 72. *Barbatia (Acar) botanica* Now *Acar botanica*. It has a smooth internal margin.
- 73. *Barbatia (Acar) laterosa* Changed to *Vitracar sulcata*, considered monospecific.
- *Trisidos tortuosa* No change.
- *Trisidos semitorta* No change.
- *Anadara (Anadara) antiquata*
- *Anadara (Anadara) trapezia* No change.
- 78. *Anadara (Tegillarca) granosa* Remove from *Anadara* to full genus *Tegillarca*. Now *Tegillarca granosa*. 17-21 nodulose ribs, narrow, flat, chevroned ligament and a break in the hinge line under the beaks. Iredale's *bessalis* is not separable.
- 79. *Anadara (Tegillarca) addita* As above. Now *Tegillarca addita*.
- 80. *Anadara (Mabellarca) dautzenbergi* Similarly, now *Mabellarca dautzenbergi*.
- 81. *Anadara (Scapharca) vellicata* No change.
- *Anadara (Scapharca) crebricostata* No change.
- 83. *Anadara (Scapharca) secticostata* Not *secticostata*, which is from America. Illustration appears to be *A. auriculata*, an Australian species

Anadara (Scapharca) rufescens No change. It has more ribs than *inaequivalvis*. Up to 57.3mm in size.

- *Anadara (Scapharca) inaequalvis* No change.
- *Anadara (Scapharca) passa* No change.
- 87. *Anadara (Scapharca) gubernaculum* No change.
- 88. *Anadara (Scapharca) jurata* Currently accepted but could be a synonym of *gubernaculum*.
- 89. *Anadara (Cunearca) pilula* No change.
- *Anadara (Cunearca) rotundicostata* No change.
- *Anadara (Cunearca) ferruginea* No change.
- 92. *Anadara (Cunearca) craticulata* The illustrated species is *Tegillarca disessa*.
A. craticulata is not considered to be an Australian species.
- Bathyarca perversidens* No change.
- *Bathyarca corpulenta* No change.
- *Bathyarca adelaideana* No change.
- *Samacar strabo* No change.

Additions

Anadara aliena Iredale, 1939. Is larger with more ribs and different than *A. inaequalvis* where it is listed as a synonym. The periostracum and strong hinge division as described by Iredale are also different.

Anadara angicostata (Reeve, 1844) Distinct, high shape with about 30 ribs. Old BMNH label for 'possible holotype' gives locality as NW Australia.

Anadara bataviensis (Lamy, 1907) Like *A. pilula*. Squarish, weakly carinate with a broader hinge and umbones off-centre.

Anadara nugax Iredale, 1939 A small, stout, solid, Nth Qld, valid species with 33-36 ribs.

Anadara oceanica (Lesson, 1831) Previously misidentified in Australia as *A. antiquata*. Further work required for the definitive answer.

Anadara rugifera (Dunker, 1866) Uncommon, c 80mm species. Often has yellowish umbones. Heavy, strongly inflated, ribs often undivided with a strong commarginal sculpture. Lamellate periostracum, strong in the interribs, without bristles.

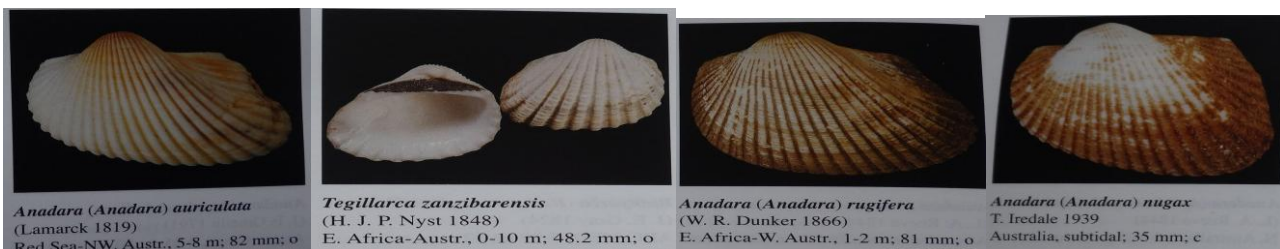
Tegillarca zanzibarensis (Nyst, 1848) Like *granosa* but usually fewer ribs, at most weakly noded posteriorly, narrower, more pointed umbo. Broad ligament 'deeply bent inwards'. Teeth line more regular with no break. Broome specimens examined.

Trisidos torta Huber agrees with Iredale's interpretation (1939) that *T. torta* is a separate species.

Tegillarca sp 1 Rare species known from Australia.

Tegillarca sp 2 Rare species known from Australia.

Bentharca asperula (Dall, 1881) Appears to be a rare species with cosmopolitan distribution. A 9.9mm specimen from off Wollongong was studied. CAAB does not accept this species as Australian.



Anadara (Anadara) auriculata
(Lamarck 1819)
Red Sea-NW. Austr., 5-8 m; 82 mm; o

Tegillarca zanzibarensis
(H. J. P. Nyst 1848)
E. Africa-Austr., 0-10 m; 48.2 mm; o

Anadara (Anadara) rugifera
(W. R. Dunker 1866)
E. Africa-W. Austr., 1-2 m; 81 mm; o

Anadara (Anadara) nugax
T. Iredale 1939
Australia, subtidal; 35 mm; c

A. auriculata

T. zanzibarensis

A. rugifera

A. nugax

The search for the missing Philobryidae

In about 1974, Peter Noonan, then a member of the Malacological Society of Australia set about to sketch and describe every species of Bivalve found in Victorian Waters. This was to culminate in a book of all the Victorian Bivalves, all hand drawn. Sadly Peter passed away in November 1992, leaving the book unfinished, and the collection languished at his home, untouched until his wife Margaret, who was moving interstate in 2013, offered the collection to me for safe keeping. Included in the collection was a significant amount of correspondence both from Australia, New Zealand and overseas.

One of the groups, the Philobryidae had concerned him for many years as many actual specimens did not fit their descriptions. Some specimens that had been based on tonal differences were found to be synonyms of something else. In two articles Peter wrote in 1986 in ASN No. 61 he argued that *P subpurpurea* should be seen as a synonym of *P crenatuliferus* and in ASN no. 62 he explained that there had only been 4 recognised species of Philobryidae in Victorian waters;

Philobrya fimbriata Tate 1898

Philobrya pectinata Hedley 1902

Notomytilus rubra Hedley 1904

Micromytilus crenatuliferus Tate 1892, but Coleman, 1961 had added another;

Micromytilus francisensis making five.

Cotton 1961 attributed *Philobrya tatei* to Victorian species, but that had some serious doubt. Peter's collection of Philobryidae stretched to 15. A lot of them didn't seem to fit any then currently described species. In 1986 the 15 specimens described in the article in ASN No.62, of which five were unidentified were sent to Dr Richard Dell of the Wellington Museum, New Zealand for his opinion and identification. They weren't identified until 1997 five years after Peter had passed away. Dr Dell died in 2002, and staff thinking they were a donation, absorbed them into the Wellington Museum Mollusc Collection.

I had decided when I started curating Peter's Collection, that I would return any specimens that I found had belonged to another museum or institution despite the nearly 30 year time frame and similarly any material that had found its way into a collection somehow should stay there. I have informed Dr Bruce Marshall, the current collections manager that the 15 specimens sent to Dr Dell should remain in Wellington. The catalogue details, list the collector as Peter Noonan, which is what would be expected along with collection sites and dates.

There are no images available on the Wellington web-site as to what the unidentified specimens were. Although they all were identified it is still unclear as to what they were. When comparing the few available photographs of Philobryidae with Peter's sketches of the same species leaves little chance of an incorrect identification.

The following species of Philobryidae from Peter Noonan's collection are now in the Wellington Museum and his drawings and description of these 8 species have been taken from his 1988 article in *Australian Shell News* No.62: 2-5. Another 7 species were described and illustrated, but listed as unidentified. The accompanying drawings are Prodisso conchs (laval shell) of the right valves, viewed from above, showing shape and pattern.

1: *Philobrya fimbriata*: Tate, 1898

2: *Philobrya pectinata*: Hedley, 1902

3: *Verticipronus crenatuliferus*: Tate, 1892 = *P subpurpurea* May, 1923

4: *Verticipronus francisensis* Cotton, 1931

5: *Verticipronus ruber*. Hedley, 1902

6: *Adacnarca pharetra*: Iredale, 1931 = *P tatei*

7: *Philobrya tardiradiata*: Cotton, 1931

9; *Verticipronus robensis*: Cotton, 1931

The correspondence from the names below, all dated from between 1975 and 1986 are acknowledged. Robert Burn; Elizabeth (Liz) Turner; Dr. Richard Dell; Janet Waterhouse; Karen Gowlett-Holmes and Suzanne Boyd. My deepest appreciation and gratitude is extended to Margaret Noonan and her sons Damian and Brendan, who had entrusted the collection to me for safe keeping.

Eddie Beulke

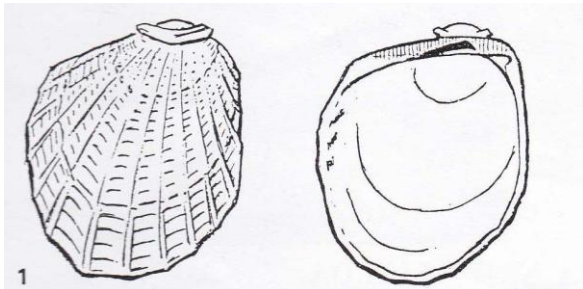


Fig 1: RV ext, LV int. Size: 2.0 x 1.7mm. Many from Venus Bay. Radials 14+, ligament pit broadly curved, prodissoconch rimmed with + angulated concentrics. Identified tentatively as *Philobrya fimbriata* Tate, 1898.

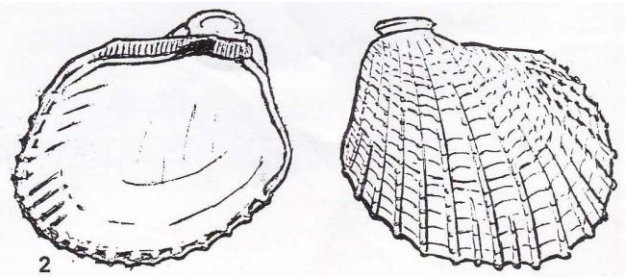


Fig 2: LV int, RV ext. Size: 2.1 x 2.2mm. Rare, dredged off Lakes Entrance. Wider than high, radials 20+, ligament pit broadly triangular, inner ventral margin notched, prodissoconch rimmed with radials crossed by fine concentrics. Identified tentatively as *Philobrya pectinata* Hedley, 1902.

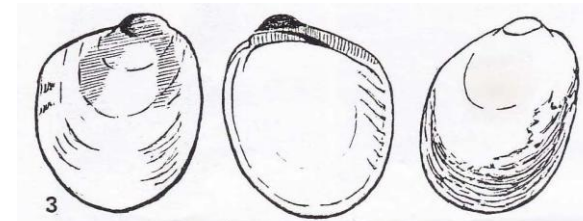


Fig 3: RV ext, RV int, RV ext. (opaque white specimens from Westernport Bay). Size: 2.1 x 2.0mm. Many from Andersons Inlet. Solid, often purple umbonally, hinge wide with distinct crenulations, prodissoconch pitted. Identified as *Micromytilus crenatuliferus* Tate, 1892. *Philobrya subpurpurea* May, 1923 is regarded as a synonym.

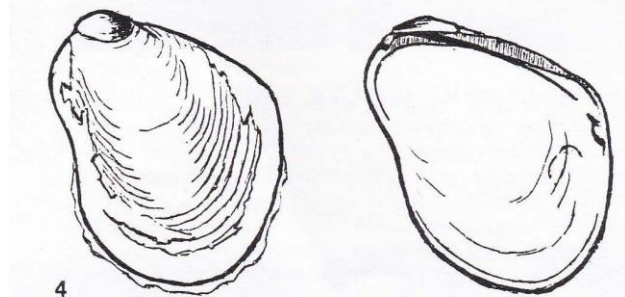


Fig 4: LV ext, RV int. Size: 2.1 x 1.7mm. Many from Andersons Inlet. Brittle, brown, often anteriorly concave with wide evenly spaced concentrics, hinge components very fine, prodissoconch pitted. Identified as *Micromytilus francisensis* Cotton, 1931.

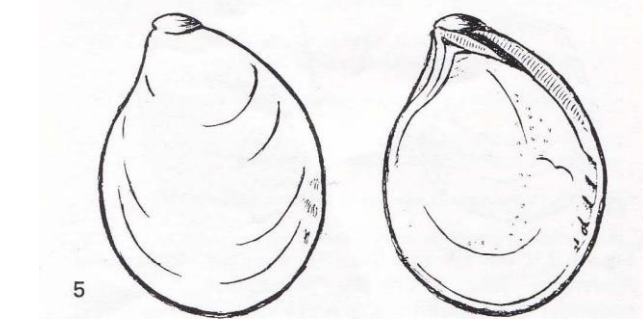


Fig 5: LV ext, RV int. Size 3.3 x 2.5mm. Many from Westernport Bay. Solid, ovoid but hooked umbonally, hinge curved, ligament pit elongate, prodissoconch oval and pitted. Identified as *Notomytilus ruber* Hedley, 1902.

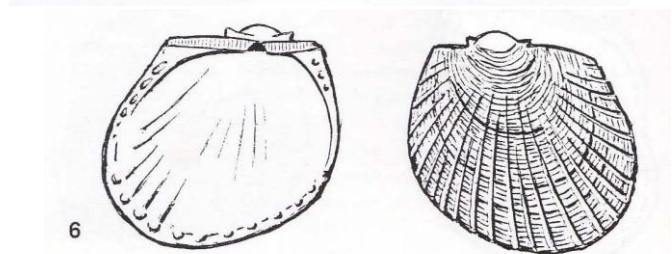


Fig 6: LV int, LV ext. Size 1.7 x 1.8mm. Rare, dredged off Lakes Entrance. Shining white, umbones subcentral, radials 30+, ligament pit an inverted U-shape, margins notched, 3 tubercles antero-dorsally, prodissoconch circular with 2 distinct flanges. Identified as *Philobrya phareta* (Iredale, 1931). Very similar valves in the Museum of Victoria are marked *Philobrya tatei*.

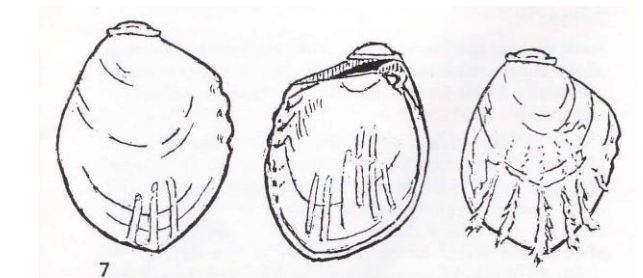


Fig 7: LV ext, LV int, LV ext (periostracum attached). Size: 1.9 x 1.4mm. Many from Andersons Inlet. Translucent, often with opaque white rays, vertically oval but tending to a point postero-ventrally, prodissoconch elevated with c.12 fine concentrics. Identified possibly as *Philobrya tardiradiata* Cotton, 1931 because of the peculiar periostracum pattern.

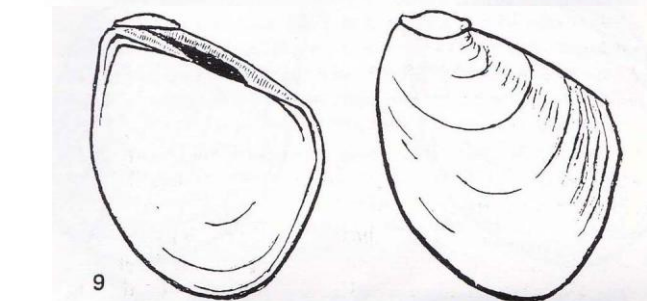
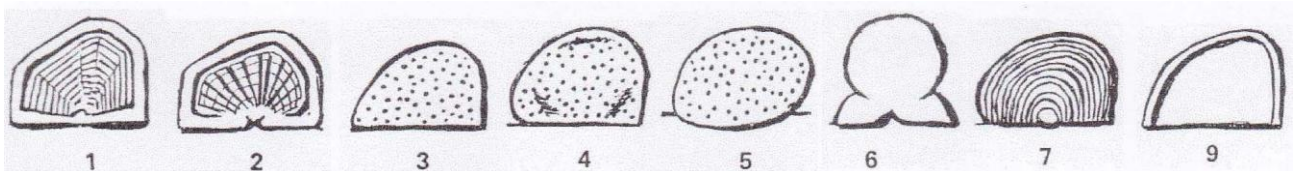


Fig 9: RV int, LV ext. Size: 2.1 x 1.9mm. Some from Venus Bay. Broadly trigonal, white, with wide flat concentrics, convex anteriorly, flexed posteriorly, crenulations very fine, margins smooth, prodissoconch narrowly rimmed. Identified tentatively as *Notomytilus robensis* Cotton, 1931.



***Diloma*: an answer to a dilemma.**

Once upon a time, our common intertidal top shells were all known to us by the name *Austrocochlea* (Macpherson & Gabriel, 1962), unless you followed Cotton (1959) in South Australia where as many as three genera were used for the species. More recently, the New Zealanders (Donald, Kennedy & Spencer, 2005) have looked at their and our species from a molecular view point and have arrived at a phylogenetic classification for southern Australian species. They use three genera (*Chlorodiloma*, *Austrocochlea* and *Diloma*) for eight species (*C. adelaidae*, *C. crinita* [W.A], *C. odontis*; *A. brevis* [Tas], *A. constricta*, *A. porcata*, *A. rudis* [SA & WA]; *D. concamerata*).

I have long contemplated the etymology of *Diloma* Philippi, 1845. The first two letters – di – were no problem, meaning twice or double. The last four letters – loma - meaning border, margin, edge or fringe, was also not a problem, except that I could not see what Philippi meant by a double border. Perhaps it was the tentacular fringe each side of the head that helps prevent sand grains from entering the mantle cavity. But Philippi had only dry shells, so it had to be something about the shell, something that I could not see.

An answer has come at last, no doubt visible to all from Philippi's 1845 original description. Philippi (1853) published an admirable *Handbuch* on Mollusca, and in very many instances gave the etymology of genus names, especially those he himself had described. On page 209 is listed *Diloma* and its etymology in both Greek and German – zweimal saum – and a descriptive explanation that the species of this genus have a double border or margin along the columellar side of the aperture. One problem solved.

What nobody has realized however is that – loma is neuter in gender, hence adjectival species names in *Chlorodiloma* and *Diloma* need to be amended to suit. Thus we should write *C. crinitum*, *C. odonte* and *D. concameratum*. Second problem solved. Some of the New Zealand species names need to be amended too, but I will not venture there.

References:

Cotton, B.C., 1959. *South Australian Mollusca. Archaeogastropoda.*

Donald, K.M., Kennedy, M. & Spencer, H.G. 2005. Cladogenesis as the result of long-distance rafting events in South Pacific top shells (Gastropoda, Trochidae). *Evolution* 59 (8): 1701-1711.

Macpherson, J.H. & Gabriel, C.J. 1962. *Marine Molluscs of Victoria.*

Philippi, R.A. 1853. *Handbuch der Conchyliologie und Malacozoologie.*

Robert Burn

Sea slug range and extensions.

About 20 species of sea slugs are known to occur in both south-eastern Australia and New Zealand. Sometimes the southward flowing East Australian Current brings New Zealand species to our shores, but equally it can bring our species to New Zealand shores.

Reports and images of an additional three south- eastern Australian species have been noted from New Zealand in the last three or four years. These are :-

1. *Pleurobranchus hilli* Hedley. 1894) – common subtidally in southern Port Phillip and Westernport Bays, otherwise wide-ranging southern Australia.
2. *Crimora multidigitalis* (Burn, 1957) – wide-ranging southern Australia but not a common species. Records from NSW and Qld. and WA need to be verified as other tropical species extend into these areas.
3. *Eubbranchus* sp 6 (Burn, 2006) - body white with red bands along body sides and mid-line cerata grey, long, twisted and studded with small nodules. Neville Coleman first found this species in South Australia the early 1970's. In the mid 2000's, it occurred twice at Popes Eye, southern Port Phillip Bay. More recently it has been photographed in New Zealand.

Robert Burn

March meeting report

Geoff Macaulay showed some shells collected whilst diving at night at the Warnambool breakwater. Shells included a large *Conus anemone*, *Clanculus*, and a large dead collected *Opalia granosa*.

Geoff also showed some recent additions to his collection including rare shells such as *Ziba cernoherski*, from the Kermadec Islands; *Pagodula obtusilirata* from NSW and *Dentalium yokoyoma* from the Rowley Shoals.

Geoff also had a selection of marine shells from Oman, land snails from around the world and freshwater shells from European lakes.

Michael Lyons showed shells collected over the summer months including *Marita bella* from San Remo, *Sunetta vaginalis* from San Remo and a large *Codakia rugifera* from Tathra NSW.

Simon Wilson showed a specimen of *Cypraea carneola* collected by ROV from approximately 130 metres of water off Dirk Hartog Island. The shell was pale coloured and much heavier than a typical specimen from shallow water.

Lynton Stevens showed recent additions to his collection including a stunning yellow tinged specimen of the 'howelli' form of *Umbilia hesitata* from 150 metres 80-90km off Lakes Entrance and a spectacular specimen of *Amalda coccinata* collected by ROV from 136 metres of water off Augusta, WA.

Platon Vafiadis showed images from his recent trip to Japan. Platon also showed images of *Cornirostra pellucida*, *Cupidoliva nympha* and also a *Turella* found on recent Marine Research group field trips.

Michael Lyons

M.S.A Victorian Branch Financial Statement 31/01/2015

Balance as at 31/01/14		\$1656.96
<u>Receipts</u>		
Raffles	\$91.15	
Subscriptions received	\$500.00	
Craft shell sales	\$10.00	
Society rebate	\$625.00	
Bank Interest	\$19.20	
	<u>\$1245.35</u>	
		<u>\$1245.35</u>
		\$2902.31
<u>Expenses</u>		
Postage	\$173.30	
Subscriptions out	\$430.00	
Room Rental	\$360.00	
Secretary's expenses (raffle books)	\$8.00	
Subscriptions to other clubs	\$51.16	
	<u>\$1022.46</u>	
		<u>\$1022.46</u>
Balance as at 31/01/2015		<u>\$1879.85</u>

Michael Lyons (Hon.Sec/Treasurer)