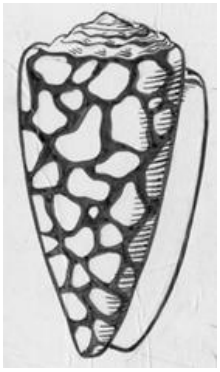

Conus marmoreus Linne

THE MALACOLOGICAL SOCIETY
OF AUSTRALASIA Inc.
VICTORIAN BRANCH BULLETIN

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VIC. BR. BULL. NO. 299 OCTOBER/NOVEMBER 2019

NOTICE OF MEETING

The October meeting of the Branch was held on Tuesday the 22nd October at the Melbourne Camera Club Building, cnr. Dorcas & Ferrars Sts South Melbourne at 8pm.

Members night meeting notes included in this issue.

Our Annual Meeting was held on Tuesday the 19th of November. Meeting notes also included in this issue

Upcoming milestone

VBB.300 will be issued before the next meeting on February 18th 2020, just 18 months, after the 50th anniversary bulletin (VBB.294).

We invite anyone who can contribute an article to send it in by the first week in February 2020.

It would be nice to have a wide variety of authors for this very special milestone.

Bulletins No's 1- 299 have been digitized, stored and are available to anyone who would need them. An updated index will be available after VBB.300

All VVB issues from No 1 are stored in the sectional library of Natural History Museum ; London (NHMUK) and continually added to.

Currently Branch Bulletin issues from VBB169- 288 can be accessed via the Society's website which includes an index 1-276 . http://www.malsocaus.org/?page_id=91

Bulletins mentioned in this issue prior to 169 can be obtained from the editors in PDF form on request.

Secretary / Treasurer Michael Lyons Tel. No. 0428 600 615

Marine Molluscs of Victoria: E & O E: Postscript

The inclusion of *Strombus* (*Canarium*) *floridus* and *Cypraea annulus* in the first list of the marine molluscs of Victoria (Gatliff, 1887), was considered unlikely by the compiler. In 1882, Brazier had published a list of the cowries of the Victorian coast, collected and sent to him by "Our new and energetic fellow, Mr. J.F. Bailey." This collection of nine species included *Cypraea annulus* from Portland about which Brazier commented "Some of Mr. Bailey's examples are in splendid condition, others again are very poor and beach-worn. It is very strange that we should get so many of the Indo-Pacific species in southern waters. He also found a large quantity of *Strombus floridus*, Lam., at the same time and place."

Portland at that time was a sea-port with a long north-south pier, serviced by both intra- and interstate coastal shipping. Undoubtedly, an unwanted or discarded collection of the above shells was thrown or swept overboard during routine cleaning or while in port, only to be found washed ashore by our energetic Mr. Bailey. See *Vic.Br.Bull* 227 for further information on Bailey.

Brazier (1882) included *Trivia oryza* among Bailey's cowries, Localized as from "Jan Jue [=Jan Juc, Torquay], Victoria, not common," but made no comment whatsoever about the material before him. He does however comment in detail about the confusion arising from use of Reeve's (1846) *Conchologica Iconica* Plate 24. The descriptive text accompanying Plate 24 identifies figure 136 as *Cypraea nivea*, yet the figure itself is *Trivia oryza*, and figure 140 as *Cypraea oryza* when it actually represents *Cypraea scabriuscula*. Had Forbes (1852) used Reeve's Plate 24 to identify John Macgillivray's Rattlesnake mollusc, his use of *Cypraea oryza* for an unspotted micromorph of *Ellatrivia merces* from Port Phillip, 5 fathoms is perfectly understandable.

References:

See previous article VBB 298 with this title.

Robert Burn

Species 136. (Mus. Cuming.)

CYPRÆA NIVEA. *Cypr. testâ globosâ, extremitatibus valdè obtusis, transversim undique costatâ, costis angustis, corrugatis, subprominentibus, dorso sulco lineari impresso; pellucido-albâ.*

THE SNOW-WHITE COWREY. Shell globose, extremities very obtuse, transversely ribbed throughout, ribs narrow, wrinkled, rather prominent, back impressed with a linear groove; transparent white.

GRAY; Zool. Journal. vol. iii. p. 369.

Hab. —— ?

This species has a peculiar globose form, very like that of a coffee-berry. M. Kiener has figured a *C. nivea* for the *C. scabriuscula* of Gray, which is Lamarck's *C. oryza*.

Species 138. (Mus. Saul.)

CYPRÆA AUSTRALIS. *Cypr. testâ oblongo-ovatâ, tenuiculâ, paululum inflatâ, apice subconspicuo, latere dextro marginato; transversim undique tenuissimè costatâ, costis supra lævibus, subobsoletis, impressione dorsali nullâ, aperturâ subamplâ; albidâ, dorso maculis fuscescentibus grandibus duabus vel tribus subirregulariter picto, extremitatibus roseis.*

THE SOUTHERN COWREY. Shell oblong-ovate, rather thin, a little inflated, apex rather conspicuous, right side marginated; transversely very finely ribbed throughout, ribs smooth above, rather obsolete, with no dorsal impression, aperture rather wide; whitish, somewhat irregularly painted with two or three light brown blotches, extremities tinged with rose.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. x. p. 545.
Trivia australis, Gray.

Hab. New Holland.

Distinguished by its colouring and light inflated growth.

Species 140. (Mus. Gaskoin.)

CYPRÆA ORYZA. *Cypr. testâ ovatâ, latere dextro vix marginato, transversim undique tenuissimè costatâ, costarum interstitiis peculiariter scabris, impressione lineari dorsali; niveâ.*

THE RICE-GRAIN COWREY. Shell ovate, right side scarcely margined, transversely very finely ribbed throughout, interstices between the ribs peculiarly rough, with a linear dorsal impression; snowy white.

LAMARCK, Anim. sans vert. (Deshayes' edit.), vol. x. p. 543.
Cypræa scabriuscula, Gray.
Varietates?
Cypræa hordacea and *intermedia*, Kiener.

Hab. Isle of Ticao, Philippines; Cuming.

Of a rounded oblong oval form, the ribs being very fine, and the interstices of a peculiarly roughish character.

Taken from Reeve's (1846) *Conchologica Iconica* Plate 24.

Figure 138 with the name "*Cypraea australis* = *Ellitrivia merces*" shows how much closer it is to Figure 140- the misnumbered *oryza* of Reeve and possibly Forbes, than to figure 136 which is the real *oryza*

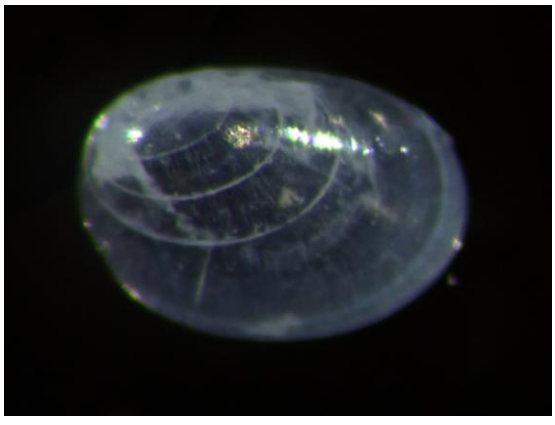
***Puyseguria chapmani* (Gatliff & Gabriel, 1912) of the Family NEOLEPTONIDAE – One of Victoria's smallest Bivalves.**

In 1912 Gatliff & Gabriel named and illustrated a minute, transparent to white, smooth, shiny bivalve from various Victorian localities including Port Phillip and Torquay, as *Condylocardia chapmani.* The dimensions were recorded as 1.4mm for the anterior-posterior diameter and 1mm for the dorso-ventral diameter. There were 3 growth lines evident in this equivalve shell. It is currently accepted as *Puyseguria chapmani* being in the family Neoleptonidae.

The Codes for Australian Aquatic Biota (CAAB) website lists 4 species of *Puyseguria* with 3 being from New Zealand and *P. chapmani* the only Australian member of the genus. The World Register of Marine Species (WoRMS) lists 5 species, all except *P. chapmani* having been named by Powell, *P. cuneata* and *P. prognata* in 1927, *P. wanganuica* in 1931 and *P. tani* in 1939.

Huber in his mammoth work, on bivalves of the world, agrees that the genus belongs in Neoleptonidae but does not discuss the issue further.

At this point, no live specimens have been located during surveys. Many single valves and occasional conjoined valves have been found in shell sand from Inverloch, west to Phillip Island. It is not uncommon although as usual, the condition is very variable. The transparent valves are usually in better condition than those that have aged to an opaque white colour. The 3 growth lines are more easily seen in the fresher valves. Due its small size and oval shape it is unlikely to be confused with any other Victorian bivalve.



Inverloch, Vic. 12July

References:
Gatliff & Gabriel, 1912, Proc. Roy. Soc. Vic. 25:167, Pl. IX., Figs. 5-8

Huber, M. 2010, Compendium of Bivalves Vol. 1 p. 663-664.

MolluscaBase (2019). MolluscaBase. *Puyseguria chapmani* (Gatlliff & Gabriel, 1912). Accessed through: World Register of Marine Species at: http://www.marinespecies.org/aphia.php?p= &id=847981 on 2019-11-

CAAB - www.cmar.csiro.au/data/caab/
The CAAB web site has recently changed. This taxon report is available at www.cmar.csiro.au/data/caab/taxon_report.cfm?caab_code=23321011

T. Joan Hales

October meeting notes:

Michael lyons showed images of molluscs photographed on recent night dives.

Platon Vafiadis spoke on a paper on brooding behaviour in Tricolia as well as more images from his trip to New Zealand

Don Cram showed images taken from slides from a trip to Vanuatu.

Geoff Macaulay showed additions to his collection, including self-collected shells from Croatia.

November meeting notes:

Don Cram: Don Cram recalled the first meeting of the Malacological Society that he and Val attended back in 1968, how there were around 70 present, Faye Murray was president and how they won the door prize (he suspects that the draw may have been rigged to encourage the 'new members'!) of a *Spondylus tenellus*, which still resides in his collection today.
Don also presented on a collecting trip to the Solomon Islands in 1989. The trip was organised by the noted collectors Alan Hinton and Alan Jarrett. Don combined World War II history and malacology in his presentation. He described travelling by air to the Island of Ghizo and from there, the groups exploration of

nearby islands including "Plum Pudding", now known as Kennedy Island - as this was where John F Kennedy landed on after his patrol boat was sunk by the Japanese navy. Don described how primitive the tourist facilities were at this time and that the local inhabitants had not had much experience with 'westerners. Don brought in a selection of shells obtained by collecting and buying at local markets. Don illustrated his presentation with digitised photographs taken at the time on film.

Platon Vafiadis: In his third presentation of his 2018 New Zealand trip. Platon concentrated on the Parapaumu Beach to Foxton Beach area on the west coast of the north Island near Wellington. Platon showed images of bivalves and gastropods washed up on the very gently shelving beach at Paraparaumu. He was interested in Foxton Beach because Don Cram had told him of good collecting to be had there; unfortunately, the beach was bare of shells at the time of Platon's visit.

Michael Lyons: Michael showed a selection of images of fish, shells and assorted invertebrates photographed whilst diving at Edithburgh, Port Lincoln in South Australia and Portsea, Stony Point and Smiths Beach in Victoria.

Michael Lyons

Name changes for Victorian sea slugs and bubble shells

Three papers published in the middle of the year (2019) have brought about changes to names within the Victorian "opisthobranch" fauna.

A lengthy paper authored by 15 contributors (most only supplied misidentified specimens from the Mediterranean (Golestani et al ., 2019) reviewed the little sea-hare *Aplysia parvula* Mörch, 1863. Since 1960, this species had been considered to have a world-wide distribution with many local synonyms (Eales, 1960. The review, based upon morphological and molecular systematics but entirely lacking any input from Australian and New Zealand specimens, indicates world-wide four major clades and 10 species, with the species name *parvula* restricted to the "North-eastern Atlantic, from the Virgin Islands to northern Brazil."

Aplysia norfolkensis Sowerby ("II"), 1869 was the name long used in southern Australia for local specimens of this species. Upon publication of Eales' revision (1960), the change to *A. parvula* was immediate. The species name *norfolkensis* suggests its origin at Norfolk Island, but Hedley (19) undoubtedly from conversations with his Australian Museum predecessor John Brazier that he, Brazier, had supplied Sowerby with the type specimens and that he had collected them in Sydney Harbour. Perhaps *A. norfolkensis* will gain grace our local lists, but until proven, this little sea-hare is best referred to as *A. parvula* s l., these letters meaning *sensu lato* – in a broad sense.

A generic revision of the bubble – shell family Haminoeidae, accompanied by excellent images of type specimens of the genera, based upon molecular studies (Oskars et al., 2019) brings a number of changes to the names of Victorian haminoeids. *Haminoea* iself is now restricted to Atlantic and Mediterranean species. In general, Indo-Pacific species formerly assigned to *Haminoea* are now placed in *Haloa* Pilsbry, 1921 (but see below for further changes from this genus name.) The following changes apply to species reported from Victoria: this paper introduced a number of other changes for Australian tropical species.

Limulatys reliquus Iredale, 1936 from eastern Victoria is now *Weinkauffia reliqua* (Iredale, 1936) and *Limulatys* Iredale, 1936 synonymized with *Weinkauffia* Weinkauff, 1873.

Austrocylichna exigua (A. Adams, 1850) ranging westward from Bass Strait is now transferred to *Roxaniella* Monterosato, 1884, with *Austrocylichna* Burn, 1974 reduced to synonymy of *Roxaniella*.

Nipponatys tumida Burn, 1978 is now tentatively placed in *Aliculastrum* Pilsbry, 1896, where the species name must be spelled *tumidum*. This genus assignment is subject to change, as the syntype of the type species *Bulla* (*Atys*) *volvulina* A. Adams, 1862 in the Museums Victoria collection suggests both a different family and genus.

Both *Liloa* Pilsbry, 1921 and *Cyclichnatys* Habe, 1952 are accepted as good genera, together with their respective Victoria representatives.

Two other unnamed haminoeids are known from Victoria. A little *Haloa* species, shell to about 5mm length and very fragile, is common across southern Australia, and often regarded as young specimens of *Haminoea maugeansis* Burn, 1966. The former has the eyes close together, the latter far apart. An even smaller

species with an extremely fragile shell less than 2mm long and an up to 5mm long very slender tail trailing behind, has been taken a few times in northern Westernport Bay. Otherwise, the latter species is known from north-central New South Wales and the tropical western Pacific.

Thirdly, the newly resurrected genus *Haloa* Pilsbry 1921, and its off-shoots is further revised (Oskars & Malaquais, 2019). These authors separate off *Lamprohaminoea* Lin, 1997 for those tropical species with brightly pigmented animals of which there are a number of known but unnamed species. Two new genera are proposed, *Bakawan* is created for the few species restricted to mangrove habitats such as *B. fusca* (A. Adams, 1850) widespread along the tropical northern coastline of Australia. *Papawera* is proposed for two temperate species, *Zelandiae* (Gray, 1843) from New Zealand, and *maugeansis* (Burn, 1966) wide-spread across southern Australia. This latter new genus name is a combination of "papa" meaning 'to set fire' in the language of the indigenous peoples of Port MacDonnell (the type locality of *maugeansis*) and the Maori 'wera' meaning 'burn', thus honouring myself.

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Robert Burn

Lost radula: Where did it go ? revisited.

In VBB 274; 8, (June /July 2014), I wrote an article on the methods I have used for the extraction of radulae from molluscan animals over a period of about 47 years. The simple procedure of macerating or dissolving the tissue from the whole animal or just the bucal bulb in a 10% solution of sodium hydroxide in a petri dish, ensuring that the radula could not be lost, was described in detail.
The article also noted the puzzling absence of any trace of a radula from one animal in particular that was extracted intact from the shell of a specimen of *Notocypraea angustata* and also one important unidentified *Nototocypraea* specimen on loan from a museum that was dredged from deep water off the southern tip of Tasmania. This specimen was vital to my ongoing review of the genus with Nerida Wilson, who is conducting the DNA studies.
I recently received the animals of two more vitally important specimens from Simon Wilson, a diver who has provided much material for the study and to my dismay no radula could be found in either specimen, although all the external appendages were intact.

Over many years of collecting, my method of preserving cowries has been; after any photographing of the live animal crawling, to place them in 70% ethanol if required for DNA study or 70% methylated spirits if the radula only is needed. After years of preservation the animal hardens and it can be very difficult to remove it, particularly through a narrow aperture, which can result in many broken pieces. The residue can then be flushed out with a fine water jet. After all this, a full or broken radula can usually be found after macerating in a sodium hydroxide solution.

When Simon collected these latest specimens, he did not have any available ethanol and they were not preserved, but were kept frozen. It now became clear to me that specimens I had previously found with no radula were collected by dredging and were not preserved alive, but allowed to expire or suffocate out of water. The only possible explanation is, that during that process the radula is ejected or spat out and lost.
Although it is well documented that radular morphology is an important diagnostic tool in the study of *Notocypraea*, the good news is that DNA has been successfully extracted from Simon's very important specimens.

Don Cram

Consider the cartoon "BLOODY CARAVANS' in August / September bulletin (VBB 298):

1. The snail and slugs are all moving along the left-hand side of the road.

2. Australia is one of the few countries that drive on the left-hand side. We call our vehicles right –hand drive.

3. Carefully observe the snail.

4. "BLOODY FOREIGNERS" would be more appropriate.

With apologies to "Bestie" False Limpet