



Conus marmoreus Linne

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NOTICE OF MEETING

The next meeting of the Branch will be held on the 16th October at the Melbourne Camera Club Building, cnr. Dorcas & Ferrars Sts South Melbourne at 8pm. This will be a Member's Night.

The November meeting will be on the 20th which will be our Annual Meeting for the election of office bearers for the coming year. This will also be a Member's night.

Raffles and supper as usual.

The September meeting was to be a Member's night but Simon Wilson & Michael Lyons gave us a visual presentation of their findings while diving out from Portsea Pier. A full account of their diving experiences plus a list of species found will be included in the next Bulletin.

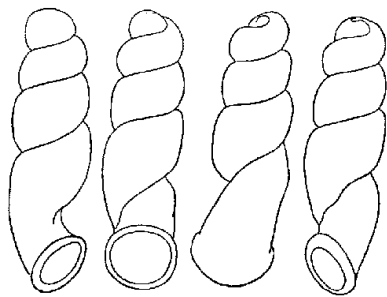
A reminder of the New Zealand Shell Show hosted by the Wellington Shell Club will be held from 27-28th January 2007 at the Lower Hutt Town Hall in Wellington.

Secretary Michael Lyons Tel. No. 9894 1526
Chairman Fred Bunyard Tel. No. 9439 2147

Dancing Lady Found At Eden

After attending the recent Sydney shell show I was able to do a little collecting at Eden as a nice way of breaking the drive home. A small amount of grit was taken from the north end of Asling's Beach, at its corner with North Head, which proved to be extraordinarily rich in micro molluscs. Amongst the most interesting finds were 4 specimens of a shell described by Hedley in 1904 as *Epigrus protractus*. The figures below are taken from Hedley's original description.

At 1.2mm few species can boast a common name but according to Laseron *protractus* has been known amongst collectors as 'The Dancing Lady'. Laseron himself described an extremely similar shell from Queensland as *Saltatricula ballerina*. The species is striking for its shape in which the whorls become discoidal towards the aperture. Whilst many marine gastropods are completely discoidal (e.g. *Trigonostoma milleri*) it is very unusual for one to be partially discoidal. Such a shape seems to be more common in land snails, examples being certain *Rhiostoma*, *Xenopoma* and *Urocoptidae*. Most spectacular are the urocopt *Brachypodella brooksiana* and diplomat snails of the genus *Opisthostoma*.



Epigrus contractus

Hedley's *protractus* has an interesting and rather convoluted taxonomic history. It was figured in 1950 by Laseron who erected the genus *Saltatrix* for it, although he noted its relationship to another species *Epigrus badius*. Laseron (1956) subsequently realised that *Saltatrix* was preoccupied by King, 1834 and provided *Saltatricula* as a replacement. However *Saltatricula* itself was preoccupied by Burmeister, 1861 and in 1959 Whiteley ventured *Laseronula* as a second replacement.

In 1983 Ponder reviewed the family Barleeidae and included both *badius* and *protractus* in the genus *Badepigrus* which had been described by Iredale in 1955. Later Ponder erected a new family, Epigridae, for shells of the genus *Epigrus*, the type species (*cylindraceus*) being shown to have very distinctive radular morphology. However the resemblance of *badius* to line drawings of certain *Epigridae* is shown to be misleading when the shells are compared side by side, making Iredale's choice of name quite appropriate.

Finding *B. protractus* as far south as Eden was quite a surprise to me. Previously it has been recorded in the literature from several locations around Sydney and also from Noosa Heads in Queensland. It is not known from Victoria to my knowledge. *B. badius*, an attractive elongate species, is generally scarce except at Eden and Flinders where I have found it to be quite common in shellgrit. The living animal is apparently unknown for both shells. Originally included in the Rissoidae (by Laseron) they were transferred to the Barleeidae, subfamily Anabathrinae by Ponder (1983). According to Jansen (1995) and *The Southern Synthesis* Ponder later (1988) elevated this to family status – the Anabathridae. Wilson's AMS volume 1 (1992) follows Ponder (1983) in having the Anabathrinae as a subfamily of Barleeidae.

Selected references:

1. Abbott, R. T. (1989). *Compendium of Landshells*, American Malacologists Inc, Melbourne, Florida, USA
2. Hedley, C. (1904). Studies on Australian Mollusca Part VIII. *Proceedings of the Linnean Society of NSW*. v24: p182-212
3. Laseron, C. F. (1950). Review of the Rissoidae of New South Wales. *Records of the Australian Museum*. v22: p257-287
4. Laseron, C. F. (1956). The families Rissoinae and Rissoidae from the Solanderian and Damperian provinces. *Australian Journal of Marine and Freshwater Research*. v7: p384-484
5. Ponder, W. F. (1983). A review of the genera of the Barleeidae. *Records of the Australian Museum*. v35: p231-281
6. Ponder, W. F. (1985). A review of the genera of the Rissoidae. *Records of the Australian Museum*, supplement 4: p.1-221

Lynton Stephens

Some small limpets in Victoria

In a recent paper on some molluscs from the seagrass fauna of southern Australia, Carole Hickman (2005, *The Marine Flora and Fauna of Esperance, Western Australia*) discussed the small limpets *Naccula parva* (Patellidae) and *Asteracmea stowae* (Lottiidae). As both species are also part of the Victorian molluscan fauna, though at the eastern limit of their range, the following notes may be of interest. Notes on two other small limpets are included. All four species were first described from South Australia.

Naccula parva (Angas, 1867) is about 5-6mm long, narrowly oval with the apex level with or overhanging the anterior edge of the smooth shell. Its most distinguishing feature is the row of blue dots along the mid-line. The closest allied *N. punctata*, originally described from SWA, has red spots scattered about the shell rather than in a single line. Hickman found live *N. parva* on four different species of seagrass, *Posidonia australis*, *P. kirkmani*, *P. coriacea* and *Amphibolis antarctica*. *N. parva*, listed in MMV from Portland, is by no means a common species in Victoria. Despite much searching of *Amphibolis* beds, I have yet to find a specimen, dead or alive.

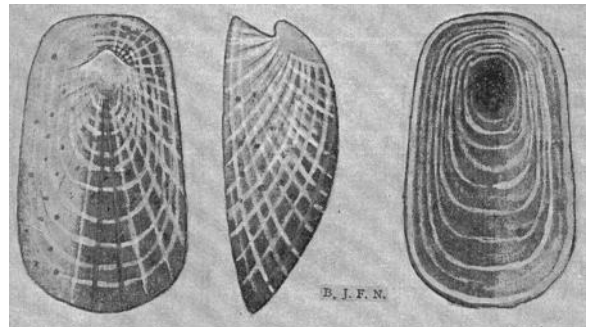


Figure 209.—*Naccula punctata* (Quoy and Gaimard).

Asteracmea stowae (Verco, 1906) is also only 5-6mm long, but is rather flat, broadly oval with the apex at about the first quarter of the shell length, the whole shell is finely radially ribbed and is patterned with pink or reddish radial bands. Hickman found live *A. stowae* on the same seagrass as *N. parva*. *A. stowae* is an abundant species on *Amphibolis antarctica* along the Victorian coastline. A half bucket of *Amphibolis antarctica* left standing overnight in a full bucket of seawater often produces up to 20 *A. stowae*.

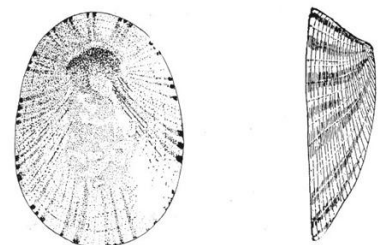


Figure 206.—*Asteracmea stowae* (Verco).

Asteracmea crebristriata (Verco, 1905) is an even smaller species at 3-4mm length. It too has the apex at about the first quarter of the shell length and the shell is very finely radially ribbed. But unlike *A. stowae*, this species is laterally compressed with nearly parallel sides and is very high. The few live specimens that I have collected have always been found crawling on the tips of brown or red algae in pools. From the pinkish coralline encrustation that partly or wholly invests the exterior of the shell, I suspect that its habitat is among red algae.

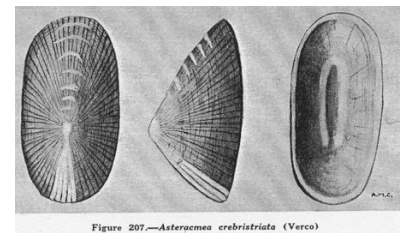


Figure 207.—*Asteracmea crebristriata* (Verco)

Three above illustrations taken from *South Australian Mollusca Archaeogastropoda* Cotton 1959

Lastly, a limpet shape but an air-breather of the family Siphonariidae MMV(p.264) lists *Pugillaria stowae* (Verco, 1906) from specimens collected at Portland. *P. stowae* is a peculiar little limpet in that the apex, pointing away from the anterior of the shell, is turned towards the posterior left and may even project beyond the margin. Four lots bear this name in the Museum Victoria collections — re-examination showed two only to be correctly identified, the other two were juveniles of *Siphonaria tasmanica*. Lynton Stephens commented that he had found dead shells on the beach at San Remo and subsequently kindly donated some to the MV collection. I too was able to donate a very nice dead shell from Merimbula, southern NSW. To date no live material is known from Victoria, nor is the habitat of the species known.

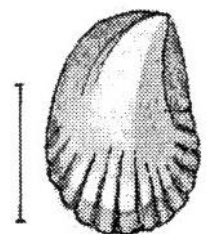


Illustration taken from *Tasmanian Shells* W.L. May 1923

For many years, this last species was known as *Kerguelenia stowae*. On very poor grounds Iredale (1924) separated the Australian species *stowae* from the New Zealand species attributed to *Kerguelenia*, setting up a new genus *Pugillaria* with *stowae* as the type species. *Kerguelenia* proved to be pre-occupied so Powell (1946)

provided a new name *Kerguelenella* by which the NZ species are known. However *Pugillaria* has more than 20 years priority and should come into use for this group of siphonariid limpets.

Robert Burn

Architectonicidae in south-eastern Australia

The sundials are an obscure family in Victorian waters, seldom encountered by collectors. Only one species is listed in *Marine Molluscs of Victoria*, the beautiful *Philippia lutea* which seems to be quite rare along our coastline. In contrast, New South Wales has a moderately rich Architectonicidae fauna. During a limited amount of collecting in southern and central NSW over the last few years I have been surprised to find 6 or 7 different species including *P. lutea* which occurs frequently and can be locally abundant. Sundials are well known to have long larval stages (up to 9 months) and many tropical and sub-tropical species penetrate deep into NSW via the East Australia Current.

Hedley (1903), Iredale (1931) and Iredale (1936) all described Architectonicidae species from the region. Jansen (1995) provides a useful coverage including illustrations of 6 species. The 2 most important references, however, are a revision by Garrard (1977) in 'Records of the Australian Museum' and Bieler's 1993 monograph on Architectonicidae of the Indo-Pacific. I was surprised to learn from these last 2 sources that the waters off Victoria are home to at least 2 species but possibly others. In addition to *P. lutea* *Solatisonax injussa* may be found, also another species which Garrard records as *Architectonica atkinsoni*, but which Bieler regards as dubious (see below).

Due to their long veliger stages most sundial species have broad geographic distributions. Combined with the complexity and variability of the shells this has resulted in a rather confused taxonomy. There are many discrepancies between Garrard (1977) and Bieler (1993) in terms of generic classification, species-level classification and distributions. Included below are brief notes on some taxa of the south-east region. I have also constructed a table comparing species recorded from NSW by the two respective authors.

Solatisonax atkinsoni

This was described by E. A. Smith in 1891 based on a specimen from the Challenger expedition. Garrard cites additional material from between Esperance in WA and central NSW, including a specimen illustrated from off Lakes Entrance. However both Iredale (1931) and Bieler note that Challenger Station 164B from which the holotype of *S. atkinsoni* originated is known to be contaminated with Atlantic material, which throws the identity of the specimens into question. Bieler suggests that some of them may be *S. supraradiata* and that the holotype of *S. atkinsoni* may be the same as the Atlantic species *S. certesi*. Garrard compared *S. atkinsoni* to juvenile *S. injussa*. At present the status of any Victorian specimens is unknown.

Adelphitectonica reevei

Garrard states that it can 'probably live on (the) Gippsland coast' but I have not seen specimens. Only 2 shells seem to have been collected in Tasmania, both from Marion Bay. Wide range including Japan, New Zealand and northern/eastern Australia.

Psilaxis oxytropis and *Heliacus implexus*

Both are widespread in the Indian and Pacific Oceans. I collected one specimen of each at Bermagui in March 2002. Garrard records *H. implexus* as far south as Port Jackson and *P. oxytropis* to 19km south of Montague Island (approx off Bermagui).

Solatisonax injussa

A deep water species described by Iredale (1931) from between Gabo and Flinders Islands. Bieler records it from further west in Bass Strait, also from Kermadec Island.

Heliacus ponderi Originally regarded by Garrard to be a subspecies of *Heliacus cedaleus* however Bieler gives it species status. Found at least as far south as Twofold Bay. A wonderful picture of two living specimens appeared in an edition of the Sydney Sheller some time ago. I found a single dead shell at Huskisson in March of this year.

Pseudotorinia delectabilis, *P. laseronorum* and '*Torinia*' *foveolata*

A confusing group of taxa which will be reported on separately in a later bulletin.

Philippia lutea

As mentioned above this is a species of rare occurrence in Victoria. In the last 12 years I have found only 2 well-preserved specimens, one at Walkerville in January 1994 and the other at San Remo in December 2003. In central Victoria the species seems to be least scarce at Cat Bay, where Jack Austin and Platon Vafiadis have collected it. It was also collected on the recent MRG trip to Cape Conran. MacPherson and Gabriel cite other localities.

NEW SOUTH WALES ARCHITECTONICIDAE

BIELER (1993)		GARRARD (1977)
<i>Adelphitectonica reevei</i>		<i>Architectonica reevei</i>
<i>Architectonica grandiosa</i>		syn of <i>Architectonica maxima</i>
<i>Architectonica perspectiva</i>		<i>Architectonica perspectiva</i>
<i>Discotectonica acutissima</i>		not from NSW
<i>Granosolarium aspersum</i>		<i>Heliacus (Claraxis) asperus</i>
<i>Heliacus hyperionis</i>		not included (described by Bieler, 1993)
<i>Heliacus implexus</i>		<i>Heliacus (Torinista) cf. implexus</i>
<i>Heliacus infundibuliformis</i>		not from NSW
<i>Heliacus variegatus</i>		<i>Heliacus variegatus</i>
<i>Philippia lutea</i>		<i>Philippia lutea</i>
<i>Pseudomalaxis zanclaeus meridionalis</i>		<i>P. nobilis meridionalis</i>
<i>Pseudotorinia laseronorum</i>		syn of <i>Heliacus (Claraxis) foveolatus</i>
<i>Psilaxis oxytropis</i>		<i>Philippia (Psilaxis) oxytropis</i>
<i>Psilaxis radiatus</i>		<i>Philippia (Psilaxis) radiatus</i>
<i>Solatisationax injussa</i>		<i>Architectonica (Solatisationax) injussa</i>
<i>Spirolaxis rotulacatherinea</i>		<i>Pseudomalaxis thetidis</i> = syn
not from NSW	←	<i>Architectonica maxima</i>
dubious / <i>S. supraradiata</i> (see notes)	←	<i>Architectonica (Solatisationax) atkinsoni</i>
nomen dubium, illus = <i>implexus</i>	←	<i>Heliacus (Torinista) dorsuosus</i>
dubious	←	<i>Heliacus (Torinista) costatus</i>
not from NSW, illus = <i>hyperionis</i>	←	<i>Heliacus (Torinista) delectabilis</i>
syn. of <i>delectabilis</i> , illus = <i>laseronorum</i>	←	<i>Heliacus (Claraxis) foveolatus</i>

According to Bieler (1993) *P. lutea* has its centre of distribution in south-eastern Australia, ranging westwards and north to the Broome area and north along the east coast as far as southern Queensland. It is also found in northern New Zealand and offshore islands, with doubtful records from the Philippines and Howland Island in the central Pacific. Bieler regards *P. japonica* from Japan as probably a subspecies or isolated population of *P. lutea*. It is also very closely related to *P. hybrida* from the mediterranean and Atlantic.

Bieler and Jansen both note that shells from WA tend to be darker and flatter than those from the south-east, although dark brown shells can also be found in NSW also. Michael Lyons reported finding the species alive on cunjevoi at Merimbula. At Bermagui I found dead shells to be quite abundant and one specimen was collected in possession of the animal which is orange to red in colour. Hazpruznar (1985) reviewed the anatomy of the species in detail, but unfortunately not in English.

Lynton Stephens

Endangered Snails

The State-owned New Zealand coal mining company Solid Energy will spend NZ\$2.0 million dollars relocating around 250 giant *Powelliphanta augustus* snails from Mount Augustus on the South Island's West Coast, to clear the way for \$285 million dollars of coal to be extracted.

The company has been granted a permit to move these snails from the only place they are known to live to a new and suitable location as close as possible to their old habitat. The snails will be collected by hand, not by mechanical scooping as at first proposed and transported each in their own sterile container. The new area will be fenced off as a protection from predators and will require ongoing monitoring.

Conservation Minister Chris Carter, has approved the move despite advice from his department and conservation groups, that moving the snails could lead to their extinction.

Taken from New Zealand news sources.

Don Cram

Maoricolpus roseus in Australia

Maoricolpus roseus is a relatively large species of turritellid native to New Zealand but developing a reputation as an introduced species of some concern in Australia. I recall being very surprised during a family holiday to NSW in 1994 to find a specimen alive on the rockshelf at Bittangabee Bay, south-east of Eden. At that time I was aware of the species occurring in Tasmania but not on the mainland. Coralie Griffiths of Lakes Entrance was later able to show me specimens trawled off Lake Tyers in eastern Victoria and kept alive in a marine aquarium. Consulting Wilson's AMS I was surprised yet again to see the species range in Australia listed as southern Queensland to Tasmania.

Biologist Tim Low has written a book on exotic species in Australia which cites many examples of molluscs as exotic pests. On page 156 of 'Feral Future' he provides the explanation that *M. roseus* reached Tasmania in the 1920's via shipments of live oysters from New Zealand. The species is not included in the otherwise comprehensive 'Tasmanian Seashells' published by May in 1923. Certain other organisms including starfish also arrived in these shipments. Graham Edgar in 'Australian Marine Life' (1997) illustrates *M. roseus* and provides the same explanation for its introduction. He goes on to add that it 'now occurs in massive aggregations. The species poses a threat to local species because living and dead shells have carpeted the seabed in places such as the D'Entrecasteaux Channel, greatly altering the habitat.' A similar case of an aquaculture-associated introduction is the disease which caused the pilchard die-offs of 1995, thought to have spread into wild fish populations from food imported for caged bluefin tuna.

Collecting at Boydtown in NSW during 1994 and 1995 I failed to see any *M. roseus* however by 1999 they had become quite common there. On a brief stopover in March 2002 it was almost the only species on the beach. Fishing boats working out of Lakes Entrance now report dredging them in high densities, however, I have not yet seen any on eastern Victorian beaches. Interestingly for a shell from New Zealand the species has now been collected as far north as Gladstone in Queensland. Wilson notes that species of the genus *Maoricolpus* exist as tertiary fossils in south-eastern Australia.

Lynton Stephens

August Meeting Report

Dr. Bruce Livett reported that clinical trials had begun on a pain killing drug derived from the marine cone shell *Conus victoriae*. It is hoped that the drug developed by Dr. Livett and his team will be more effective than morphine for cases of severe pain. Bruce also told us of plans for a holiday to NW Australia including a four-wheel drive trip through the Kimberley region.

Dr John Down spoke of his trip to the Cook Islands but was unable to find many shells due to a recent cyclone.

Several members brought in shells for display.