

VIC. BR. BULL. NO. 307

FEBRUARY/MARCH 2022

NOTICE OF MEETING

The next meeting will be held on Tuesday 15th of February at the Melbourne Camera Club Building, cnr. Dorcas & Ferrars Sts South Melbourne at 8pm. This will be a members night

Proposed meeting dates for the rest of 2022.

April 19th Meeting June 21st Meeting August 16th Meeting October 18th Meeting November 15th Meeting

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

Bulletins prior to 169 and after 289 can be obtained from the editors in PDF form on request.

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

Ken Bell

Ken and I go back to October 1969. He was into microscopic Marine animals called Foraminifera, forams for short, especially those of the fossil beds near Geelong. I was into little marine snails less than 5 mm long called bubble-shells, which, it just so happened, loved to eat forams. Our interests immediately combined: I could take care of the eaters and Ken the eaten. Carefully crushing my bubble shells, Ken examined their gut content under his microscope, identified the ingested forams and compared these to the foram fauna of the sediment in which my little shells lived. Turned out the little shells were very selective in their diet, choosing not to eat everything available on the menu. Results – two joint publications describing two previously unnamed shells and their dietary requirements.



Upon leaving the Museum in Melbourne and teaching at

Queenscliff and then relocating to South Gippsland (1), Ken set about looking at the forams of Shallow Inlet and Corner Inlet. At Yanakie, he discovered a population of another little bubble-shell, one that was unknown, unnamed and did not eat forams. This I had the great pleasure of describing, naming it in honour of his discovery - not *belli* but *campanula* – a little bell more appropriate to its small size. It has since proved to occur right around Australia and is even present in subfossil beds in southern Western Australia.

Together we published a little note correcting the identification of minute snail egg-capsules that had been described as forams. With John Neil, a school-teacher friend of Ken's from Horsham days, we examined and published on the faunal content of sediment samples taken at Foster Beach in Corner Inlet. Manuscripts were prepared for other joint projects, but little more was completed to publication.

We went fossiling together from around Geelong to Casterton in the west. We went marine intertidal collecting – despite sustained complaints about cold weather and cold water. Always I was a sounding board for forams, Ken a sounding board for my beloved bubble- shells and sea slugs. Ken greatly enjoyed his annual visits to John (2) and Ruth (2) in Sydney and successfully attained his doctorate on obsure fossil forams that I little understood.

Other highlights of life enjoyed by Ken in later years included fossiling trips to outback Queensland with Ross (3) fossil symposia attended in Iran and England, sightseeing in Britain and France with Joyce (4) and Syd (4), a marine workshop in tropical Western Australia, long term membership of many scientific bodies, appointment as honorary associate of Museums Victoria, membership of the Field Naturalists Club of Victoria for 42 years and compiler of the annual index of the Victorian Naturalist for 40 years.

After damaging his knee in the rotted floor of the dairy the cows soon learned that Ken could no longer hurry them along for milking. In time, the move from Stoney Creek to Inverleigh became necessary, just as did the move to Barton Street (5). Each time microscope, books and specimens accompanied him- always more, never less.

But age and infirmity caught up in differing ways to each of us. I knew of a nine page letter on English sea-slugs dated 29 May 1847, pasted into the front cover of an old book in the library of the Museum in Melbourne Ken accepted an invitation to join me in transcribing and analyzing the letter, to try to place its content into a modern context. Over the last two years, we spent many pleasurable hours arguing over our transcription, the finer points of what the new scientific classification here being proposed really meant, the names of marine animals then being used and what they are today and the people then involved and their claims to fame. We also learned that the letter writer was housebound with toothache at the end of May 1847. The work will be published under our joint names.

Vale Ken.Sleep well.It's been a good long friendship greatly appreciated by myself. My kids Julie,
David and Anne, all now in their 50's, loved their "Mr. Bell".Thank You.Bob Burn 5th October 2021.

- (1) Stony Creek, as a dairy farmer.
- (2) Professor John Talent & Associate Professor Ruth Mawson. School of Earth Sciences, Macquarie University, NSW.
- (3) Ross Drury, husband of Ken's cousin June, Leongatha.
- (4) Joyce & Syd Linnell, Ken's sister & brother-inlaw, Geelong.
- (5) Bell Post Hill, Geelong.

Thanks to Melanie Mackenzie and the staff of Museum Victoria for the photo of Ken.

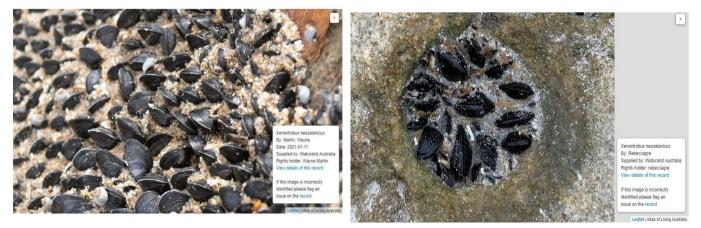
The Downside of iNaturalist.

While the idea behind iNaturalist sounds like a great idea, in practice, it has a various problems which degrade the information being uploaded to the Atlas of Living Australia website.

Joining iNaturalist allows you to upload your photos, videos or sound recordings. Most contributions are images. You can add an identification which can be at any level of the tree but preferably at least to the phylum level so that those who search have more chance of finding your contribution. If you know what the animal/plant etc., is you can name it yourself. The system will actually give you some suggestions as to what the image may be. From that point, your contribution is available for others to peruse and either agree or disagree with your identification if they so wish. Once the image has had another person agree with your determination, the image is classed as "Research Grade" as the community is in agreement and is uploaded to the Atlas of Living Australia as an authenticated record.

Sounds good! However in many cases that is not how it operates. As an illustration, the member may upload a picture that they think is probably *Bedeva baileyana* and name it as such. A second person sees the image and disagrees, naming it as *Dicathais orbita*. The author then withdraws the original name and agrees with the second person which creates a new record. That makes 2 people in agreement. The image is then classed as an authenticated record. It may be correct. If it is not, another incorrectly identified image makes its way onto the Atlas of Living Australia.

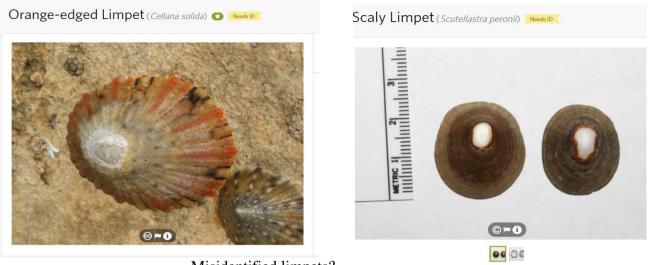
Many images of *Xenostrobus pulex* have been transferred with the name *X. neozelanicus* attached. As the species is not currently known from Australia (CAAB website) the ALA has the images placed in the *X. pulex* file. Some of the images are not *Xenostrobus* species at all but rather *Brachidontes*.



Two examples are illustrated, both named as Xenostrobus neozelanicus.

23 220089 Xenostrobus neozelanicus (Iredale, 1915) [a mussel] Mytilidae - in Aust. region (not on AFZ list)

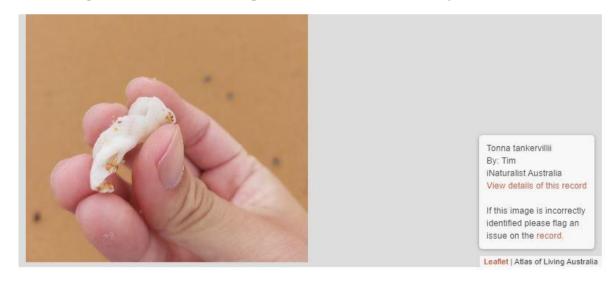
The opposite can also happen. Someone uploads something unusual which may then remain awaiting some knowledgeable person to identify the species. If the species is named and no one disagrees, it seems that despite no community support, the image is transferred to the ALA anyway. Another species that seems to be commonly misidentified is *Cellana tramoserica* being identified as *Cellana solida*. If the specimen has any orange colouring, it may be taken to be the "Orange-edged Limpet".



Misidentified limpets?

Then there are the identifications that help no one for a number of reasons, the image is too blurred, the subject is far to small in the frame, the defining characteristic is not clear or perhaps it is just a fragment. All these types of images have been named by the community and/or agreed to by the community.

The example below is stated to be *Tonna tankervillii*. If the author found a Tonna shell on the beach, the reaction previously would have been to check out the Tonna species pictures on the ALA website, looking for a match. Would the picture below, have been of any assistance?



Unfortunately, these types of images and identifications are all too common on the CSIRO sponsored Atlas of Living Australia. They are clogging up the site with unworthy images as well as misidentifications. If people wish to have a name added to their finds, there are plenty of persons willing to oblige. If the image remained on iNaturalist, it would not be such a problem but adding them to ALA automatically is not wise as it is helping to perpetuate misidentifications. The images and identifications need to be vetted by an authorative person who then decides if the image is transferred or not. Hopefully this is already underway as some images have changed in the past few weeks.

References:

<u>Observations · iNaturalist</u> www.inaturalist.org/observations <u>Atlas of Living Australia – Open access to Australia's biodiversity data (ala.org.au)</u> CAAB website <u>https://www.cmar.csiro.au/data/caab</u>

Ascorhis tasmanica: an inconspicuous species in detail

Among the extensive Australian tateid fauna, *Ascorhis tasmanica* (Martens, 1858) is one of the few species with a wide salinity tolerance. Often abundant, this tiny species inhabits submerged substrata in coastal lagoons, sheltered bays and coastal creeks across the eastern half of Australia (Ponder & Clark, 1988).

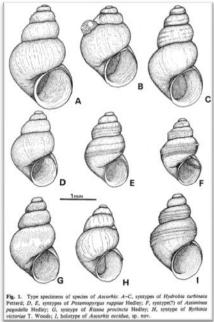


In estuaries, Zostera muelleri (above) often provides habitat to great densities of Ascorhis tasmanica Photo: Julian Finn, Museum Victoria

A curious feature of *A. tasmanica* is its intrapopulative variation in shell morphology. Individuals within the same area can intergrade between completely smooth to lirate with up to 6 spiral grooves. Ponder & Clark (1988) found that different populations show varying proportions of smooth to ribbed specimens, with lirate examples more consistent towards the north. Individuals also exhibit variation in colouration, with some being spirally banded while others mono-coloured (Ponder & Clark, 1988). Additionally, spire height appears to be highly variable (personal observation), varying between turriform to relatively compressed.



A lirate, banded example of *Ascorhis tasmanica* from Mallacoota Inlet Photo: Leon Altoff, MRG of FNCV



Illustrations depicting some of the many syntypes of *Ascorhis tasmanica* Illustrations: Winston Ponder, Australian Museum

Such variation has caused much taxonomic confusion since the original description by Martens (1858) under the name '*Hydrobia tasmanica*'. Due to the species' variability, many now-defunct names have been used, with Ponder & Clark (1988) listing nine. Following the works by Ponder & Clark (1988; 1997), all subsequent names came into synonymy with, initially, the introduction of '*Ascorhis victoriae*'. Later, Ponder (1997) found that Martens' earlier name '*Hydrobia tasmanica*' was the same species as Tenison Woods' '*Bythinia victoriae*', the latter name of which Ponder & Clark (1988) had used. Thus, Ponder (1997) considered *Ascorhis tasmanica* to be more correct, and this name remains the most widely accepted.

Despite being a direct developer, *Ascorhis tasmanica* shows a remarkably wide distribution, being found from Port Lincoln, South Australia, to north of Gladstone, Queensland (Ponder & Clark, 1988) as well as Tasmania (Beechey, 2014). Ponder & Clark (1988) theorises that the animals and their eggs are dispersed by birds moving between suitable habitats.

This theory can explain the anomalous, but confirmed, population of *A. tasmanica* in a former brackish waterhole in remote South Australia (Ponder & Clark, 1988). Despite this broad distribution, gene flow between populations appears to be very low as is demonstrated by two populations near Sydney, New South Wales, examined by Ponder & Clark (1988). They remark, however, that this could be an artefact of localised selective factors.



A specimen of Ascorhis tasmanica covered with the solitary egg capsules of its own species Photo: Photo: Leon Altoff, MRG of FNCV

On close examination, even the humblest of snails can reveal a range of quirks. From unexpected dispersity to intrapopulative diversity, *Ascorhis tasmanica* surely proves that looks, but mostly size, can be deceiving in the wider world of nature, and even our niche world of malacology.

References:

Beechey, D. (2014). Ascorhis tasmanica. Retrieved January 14, 2022, from Seashells of New South Wales: <u>https://seashellsofnsw.org.au/Hydrobiidae/Pages/Ascorhis_tasmanica.htm</u>

Marine Research Group of the Field Naturalists Club of Victoria (2014). Retrieved January 14, 2022, from Facebook: <u>https://www.facebook.com/groups/294926707198638/permalink/2495256297165657</u> Martens, E. von. (1858). Ueber einige Brackwasserberwohner aus den Umgebungen Venedigs. *Archiv für Naturgeschichte*. 24: 152-208., *available online*

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MolluscaBase - Ascorhis tasmanica (Martens, 1858). (2018). Retrieved January 14, 2022, from MolluscaBase: <u>https://www.molluscabase.org/aphia.php?p=taxdetails&id=1296980</u>

Pocklington, Jacqui, 2011, Seagrass, *Zostera muelleri*, in Taxonomic Toolkit for marine life of Port Phillip Bay, Museum Victoria, accessed 14 Jan 2022, <u>http://136.154.202.208:8098/species/12323</u> Ponder, W. (1997). Nomenclatural Rectifications in Australian Hydrobiidae. Retrieved January 14,

2022, from ResearchGate website: https://www.researchgate.net/publication/261682394_Nomenclatural_Rectifications_in_Australian_Hyd

<u>robiidae</u>

Ponder, W., & Clark, G. (1988). A Morphological and Electrophoretic Examination of Hydrobia Buccinoides, a Variable Brackish-Water Gastropod From Temperate Australia (Mollusca, Hydrobiidae). *Australian Journal of Zoology*, *36*(6), 661. <u>https://doi.org/10.1071/zo9880661</u> Tenison Woods, J. E. (1878). On some new marine Mollusca. *Transactions and Proceedings of the Royal Society of Victoria*. 14: 55-65., *available online at* <u>https://www.biodiversitylibrary.org/page/34012081</u>

Ben Travaglini

Dive report – Rye Scallop grounds – January 2022 Michael Lyons

Buddy: Simon Wilson Duration: 76 minutes Max depth: 18.9 metres (average 15.7 metres.) Conditions: 20^{0} water temperature; 5-8 metre visibility The low tide slack was scheduled for 15:09 so Simon and I planned a dive on the scallop grounds off Rye. We tried to find where we had dived before but ended up motoring around until we were in 17-18 metres of water. It was lucky we did as we descended onto fantastic looking ground that seemed to be a lot of flat sandstone overlaid with patches of *Pyura*, sponges and bryozoans.

Once we settled on the spot we waited for the ebb to reduce intensity, agreeing not to get in until after 14:10. Simon had a 300 bar tank so I let him head off before clambering off the back of the boat into a still reasonable current. I made my way

to the anchor line, which took quite a bit of effort, catching my breath before heading down the line. As I descended Simon's bubbles drifted past me and it was not until I was about 5 metres off the bottom that I could vaguely see the seafloor. When I arrived I could see Simon not far away. I adjusted my guideline, attached it to the anchor chain and headed off.

I saw the first of many octopus and spent time photographing it before continuing on the hunt. The ground was great, although, initially, I did not see many shells. The first shell I saw was a heavily eroded *Pterochelus triformis* followed by a *Prototyphis angasi*, which was preying upon a small bivalve. The murex was covered in purple coralline algae so was left. I also encountered an *Amoria undulata* out crawling.

There were many interesting sponges including one species that usually has *Ataxocerithiums* on it, but not today. I found the "*Calliostoma* bearing" sponge, the first and largest example had no shells on it but a bit later a small example had a *Calliostoma hedleyi* on it. I saw a number of large *Cabestana spengleri*, usually in pairs and most were attending nests of eggs (none were collected).

I examined the underside of sponges and began to find *Notocypraea piperita* under some. One sponge was a mustard yellow 'ratty- looking' finger sponge that had a few cowries under it.

I was mindful of my air and ensuring I was free of my guideline as I progressed. Swimming along I disturbed a large blue ringed octopus, which I managed to get some photos of. I also saw in the distance what appeared to be a giant sponge, maybe a metre high and a couple of metres in diameter. As I approached it appeared to be seething with movement and it wasn't until I got close that I realised it was an aggregation of spider crabs.

I was surprised by the lack of scallops. As the dive began to draw to a close, I lifted a sponge to reveal 4 cowries and traversed another pair of *spengleris* then came across a decent sized *Fusinus pyrulatus*, which

was amongst a clump of *pyura*, which I collected. Nearby was another example that appeared to be feeding on a *pyura*; it had a very long thin grey-coloured "tube" that appeared to have penetrated the wall of the *pyura*.

I looked at my gauge and saw that I was on 50 bar (translation: Very Low Air!) so reeled my way back to the anchor line and began my ascent. I was shocked to see that I had to do 2 minutes at 6 metres and even more shocked when I had to do 10 minutes at 3 metres. I had pretty much sucked the tank dry by the time I surfaced!











Fusinus pyrulatus feeding on Pyura (note grey "tube" extending from centre of the orange foot)

Mrs Irvine, a little bit more!

Shortly after visiting her son in south-western Western Australia in 1888, Jemima Frances Irvine, née Burn, submitted a cowrie she had from Cape Naturaliste to her long-time correspondent and mentor Dr. James Cox of Sydney. He considered it to be sufficiently different from "*Cypraea stolida*, Linn., with its variety *C. brevidentata*, Sowb., and *C. coffea* Sowb, with which this species would group, are found at the same locality [Cape Naturaliste], but it has such distinctive differences as to justify it being made a new species." Thus the birth of *Cypraea irvineanae* Cox, 1890 named "after Mrs J.F. Irvine, an enthusiastic conchological collector."

Cox listed the new species as "Habitat, North-West coast of Australia," but a few lines later stated that it had been obtained at Cape Naturaliste on the south-western tip of Western Australia. Iredale (1935:128) restricted the type locality to "Cape Naturaliste, South West Australia," at the same time transferring *C. irvineanae* to the genus *Blasicrura* Iredale, 1930.

Wilson (1993: 176) synonymises *C. irvineanae* with the tropical *C. brevidentata* Sowerby, 1870, restricting the former name to the Western Australian population. Moreover, Wilson placed these species in the subgenus *Bistolida* Cossmann, 1920. More information about Mrs Irvine can be found in Burn (1992, 2016) and references therein.

R. Burn

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Iredale, T. 1935 Australian cowries Australian Zoologist 8 (2): 96-135.

Wilson, B.R. 1993. Australian Marine Shells. Prosobranch Gastropods Part 1. Pp 408. Odyssey Publishing: Kallaroo, Western Australia.