

NEWSLETTER

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Finding *Elysia australis* (Quoy & Gaimard, 1832)

Robert Burn

3 Nantes Street, Newtown, Geelong, Victoria, 3220.

Honorary Associate, Marine Invertebrates,

Museums Victoria, PO Box 666, Melbourne, Victoria, 3001.

Elysia australis is a common but rarely observed sacoglossan sea slug species of estuarine habitats of the central to southern New South Wales coastline. Possibly because both species were described from Sydney Harbour, *E. australis* has long been (Basedow and Hedley, 1905; Burn, 1965) and continues to be (Nimbs, 2017), erroneously synonymised with *Elysia coodgeneensis* Angas, 1964. Burn (1998) directed attention to the external morphological differences separating the two species as well as their differing habitats.

E. australis was the first *Elysia* to be described from

the Indo-Pacific, and the fourth for the whole world. In December 1826, Quoy and Gaimard collected a single, small, 12 mm long specimen in the protected waters of Sydney Harbour. Their type figures (Fig. 1), three views of the specimen, are, in some aspects, rather fanciful, but decisive for identification are the long, slender, tapering rhinophores, the wide neck and prominent eyes, the angular foot corners, and the wavy parapodial margins. The dark colouration of the original figures is very similar to that of some Botany Bay specimens to be mentioned below.

(continued on page 3)

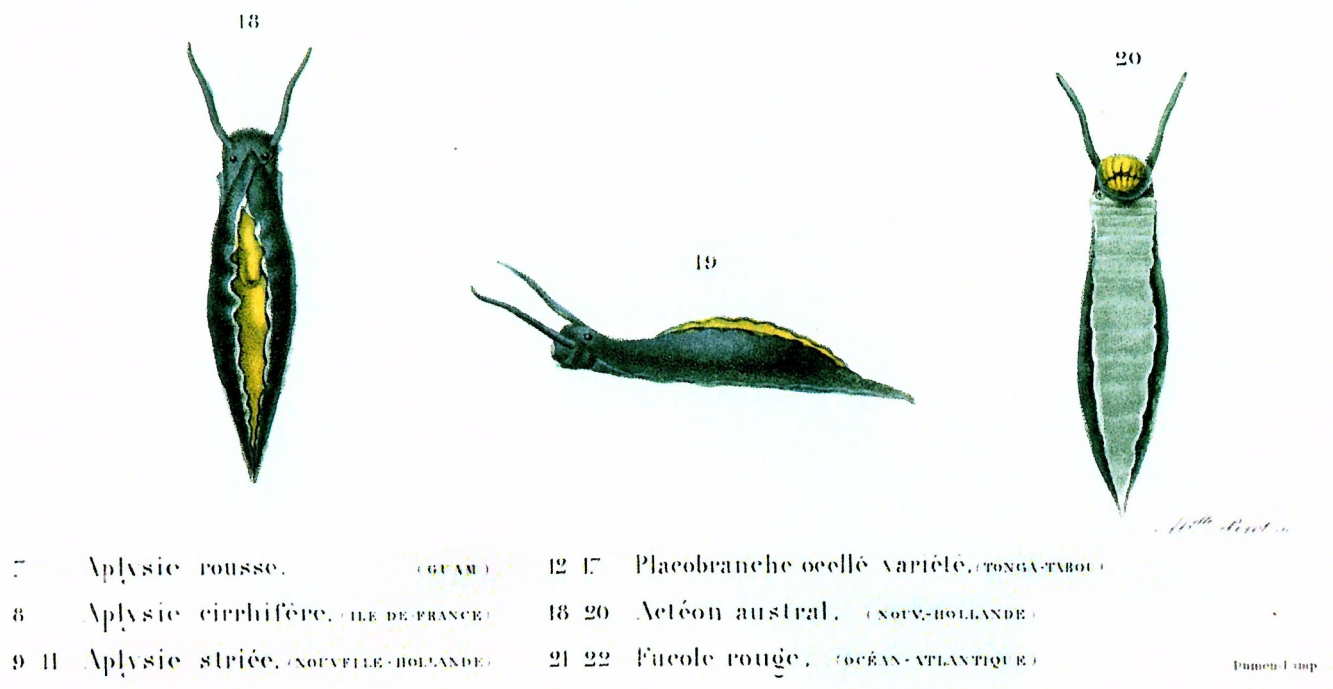


Figure 1: Type figures of *Elysia australis* (Quoy & Gaimard, 1832)



The MSA's sister society is The Society for the Study of Molluscan Diversity (SSMD). Further information about SSMD can be found at: <http://marine1.bio.sci.toho-u.ac.jp/md/index-e.html>

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Membership fees can be paid (preferably) via the Society's website. Otherwise, send subscriptions via mail to: Malacological Society of Australasia, c/o Matt Nimbs, National Marine Science Centre, PO Box 4321, Coff's Harbour, NSW, Australia, 2456.

Newsletter

Editor: Platon Vafiadis.

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The deadline for articles for the next issue of the Newsletter is Friday 27 July, 2018.

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Note: This publication is not deemed to be valid for taxonomic purposes — see article 8.2 in the International Code of Zoological Nomenclature, 4th Edition. Also, opinions expressed within articles in this newsletter belong to the author(s) and are neither necessarily shared nor endorsed by the MSA.



Hapalochlaena maculosa (Point Lonsdale, Victoria, 29 December, 1997), estimated length < 20 mm. Bright blue rings are present within the darker macules. In the background is a sand trail made by the buccinid snail *Cominella lineolata*. Photograph: P. Vafiadis.

Small but dangerous

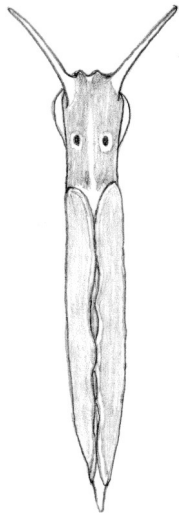
A chance encounter with a very juvenile blue-ringed octopus *Hapalochlaena maculosa* (Hoyle, 1883) as it swam across a sandy littoral pool at Point Lonsdale was the first time I had seen this species alive. The effects and lethality of tetrodotoxin (the venom that it carries) have been well studied. Produced by symbiotic bacteria, it is not only present in the salivary secretions but also in the ovaries and other body tissues, as well as in developing embryos (Reid, 2016). The message is thus clear that direct handling of any blue-ringed octopus is dangerous and must not occur (Reid, 2016). This very small specimen was admired but any contact was very carefully avoided!

Reference: Reid A (2016). *Cephalopods of Australia and sub-Antarctic territories*. CSIRO Publishing, Clayton South, Victoria (xxvi, Pp.1-446).

P. Vafiadis

Finding *Elysia australis* (Quoy & Gaimard, 1832) - continued from page 1:

In late 1973, the writer collected a number of *E. australis* specimens (but did not realise the identity at that time), together with a single specimen of what proves to be its predator, *Gymnodoris* sp., from among *Halophila* and *Zostera* growing on the sandy-mud flats at Sans Souci, Botany Bay (Fig. 2).



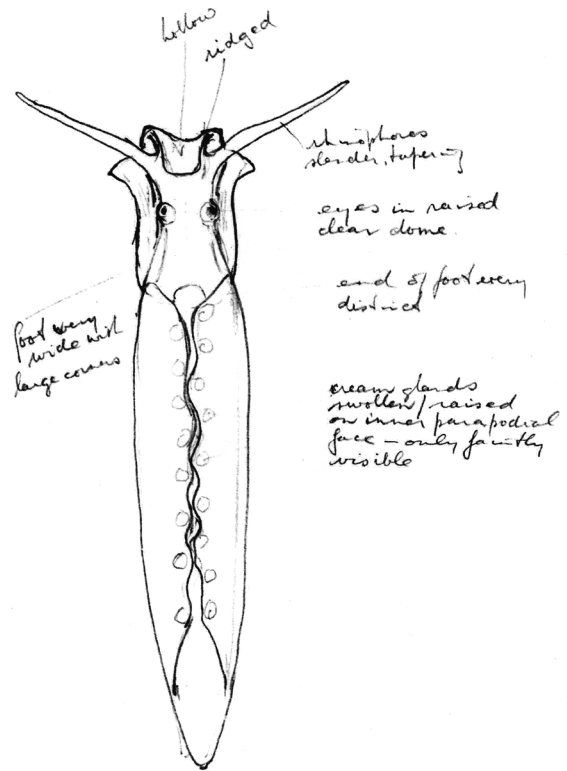
Elysia australis figures

Figure 2 (at left):
Field sketch of a
7 mm long, live specimen,
Sans Souci, Botany Bay,
18 November, 1973.

Figure 3 (at right):
20 mm long, live specimen,
Top Lake, Merimbula,
25 November, 1990.

(Drawings: R. Burn)

neck. Rhinophores long, 1/4 to 1/3 of body length, slender, tapering to a fine rounded tip, without lateral fold, groove or basal flattening. Pair of strong, sharp ridges curve forward to enclose deep hollow in front of rhinophores, then back and down to angular corners of head. Foot broader than body, laterally demarcated from parapodia, anterior edge with prominent angular corners. Parapodia folded over flattened body, edges wavy and mostly meeting in mid-line, each edge with about 10 submarginal cream spherical glands projecting inwardly and hardly visible dorsally (Fig. 3).



These small specimens were dark green externally with paler parapodial margins, inner parapodia and pericardium cream, head blackish with large, clear pericardial patches enclosing large eyes, and unpigmented, long, slender, tapering rhinophores. Placing both the *Elysia* and *Gymnodoris* specimens in the one collecting jar, the *Elysia* specimens hurtled around, madly flicking their rhinophores while attempting to evade the ever-close *Gymnodoris*. Result: very few *Elysia* to examine and preserve, and one rather fat *Gymnodoris*.

Twelve years later these *Elysia* specimens were identified as *E. chilensis* Eliot, 1916, which species had just been recorded and figured from Hong Kong (Jensen, 1985). Acquisition of Quoy and Gaimard's (1832) description and figures of *E. australis* (some ten years later again) led to the realisation that their species and the Botany Bay *E. chilensis* were the one species. Hence the writer's continued usage of the earlier name for this species since that time.

In 1990, many larger specimens were discovered along the northern shore of Top Lake, Merimbula, near the pumping station. The following notes are from observations made at that time: Body rather flattened, length 12-25 mm. Colour lighter or darker with more or less sandy patches and spots all over parapodial outer surfaces, pericardium, head, rhinophores and tail; rhinophoral tips, foot margins and tail tip translucent. Eyes black, each housed within a clear pericardial dome projecting dorso—laterally from upper edge of wide

At Merimbula, *E. australis* lives in the many shallow runnels that drain across the sandy-mud flats from the lower mangrove line, at times numbering 5-10 specimens per square metre. Here it crawls through the uppermost 1-2mm, making a very shallow furrow. As the tide recedes, animals puddle-down into the exposing substrate and, with the colouration matching the habitat, are virtually invisible to the human eye. Animals start to emerge about 5 metres behind the leading edge of the incoming tide and tend to follow the rising water, presumably in search of small green algae such as *Derbesia*. The rhinophores constantly flick fore and aft, not in unison, when crawling. At rest, the rhinophores lie rearwards against the body sides. The aggressive predator mentioned above, an undescribed, yellow-spotted, greyish *Gymnodoris*, also emerges from the sandy-mud substrate, but because of its larger and deeper body size needing greater water depth, is usually some few metres behind its favoured food *E. australis*.

Specimens of *E. australis* have also been observed in the inlets at Bermagui and Narooma. No photographic images of *E. australis* are known.

E. australis is the earliest named in a small group of Indo-Pacific *Elysia* species united by their long, slender, tapering rhinophores and the sandy-mud habitat that they occupy. Other species with these characteristics are: *E. chilkeensis* Eliot, 1916 from the north-east coast of India and Hong Kong (Jensen, 1985), *E. siamensis* Swennen, 1998 from the western shore of the Gulf of Thailand, and *Elysia* sp. from Singapore (Jensen, 2015). Some or all may be identical with *E. australis*, but this remains to be proved.

Elysia coodgeensis should never have been considered as identical with *E. australis*. It has a smaller, more slender body with the parapodia usually held upright. The rhinophores are shorter than drawn in Angas' (1864) type figure (shown in Fig. 4), cylindrical and laterally grooved, and they never flick about. The body colour is green (Fig. 4), varying from pale lettuce green to blackish green, but always with a short black stripe on the head, black rhinophoral tips, and a thin black line along the parapodial margins. *E. coodgeensis* appears to be endemic to and to encircle Australia. It occurs commonly in intertidal rock pools and often alongside *E. australis* on estuarine sandy-mud flats. It crawls over

and does not puddle-down into the substrate, preferring to climb various algae and seagrasses.

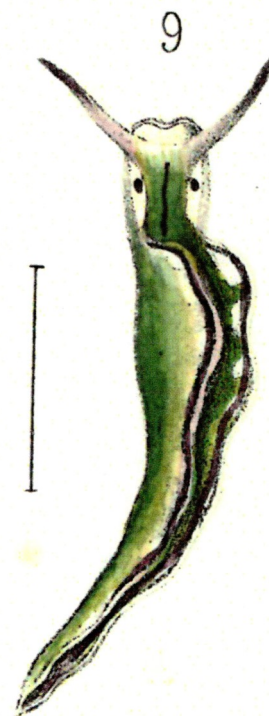


Figure 4: Type figure of *Elysia coodgeensis* Angas, 1864. Length 14 mm.

References:

- Angas GF (1864). Description d'espèces nouvelles appartenant à plusieurs genres de Mollusques Nudibranches des environs de Port-Jackson (Nouvelle-Galles du Sud), accompagnée de dessins faits d'après nature. *Journal de Conchyliologie* 12: 43-70.
- Basedow H, Hedley C (1905). South Australian nudibranchs and an enumeration of the known Australian species. *Transactions of the Royal Society of South Australia* 29: 134-160
- Burn R (1965). A centennial commentary—Angas' Sydney nudibranchs. *Journal de Conchyliologie* 104: 85-93.
- Burn R (1998). Orders Acochlidea, Rhodopemorpha, Sacoglossa. Pp. 959-974, in: Beesley PL, Ross GJB, and Wells A (eds). *Mollusca: the Southern Synthesis*. Fauna of Australia Volume 5. CSIRO Publishing, Melbourne.
- Eliot CNE (1916). Fauna of Chilka Lake. Mollusca: Nudibranchia. *Memoirs of the Indian Museum* 5: 376-376.
- Jensen KR (1985). Annotated checklist of Hong Kong Ascoglossa (Mollusca: Opisthobranchia), with descriptions of four new species. *Proceedings of the Second International Workshop on the Malacofauna of Hong Kong and Southern China 1983* (Ed. B. Morton & D. Dudgeon): 77-107.
- Jensen KR (2015). Sacoglossa (Mollusca: Gastropoda: Heterobranchia) from the north coast of Singapore. *Raffles Bulletin of Zoology*, Supplement 31: 226-249.
- Nimbs M (2017). Sacoglossa from Cape Peron, Western Australia. *Malacological Society of Australasia Newsletter* 162: 5-8.
- Quoy JRC, Gaimard JP (1832). Voyage de découvertes de l'Astrolabe, exécuté par ordre du Roi, pendant les années 1826, 1827, 1828, 1829, sous le commandement De M. J. Dumont D'Urville. *Zoologie* 2: 1-320.
- Swennen C (1998). Two new gastropods, *Elysia bangwaensis* and *E. siamensis* from southern Thailand. *Bulletin Zoölogisch Museum, University of Amsterdam* 16(6): 33-39.

Upcoming MSA conference

The MSA triennial conference will be held in New Zealand from Sunday 2nd to Wednesday 5th December 2018 at the Museum of New Zealand Te Papa Tongarewa Wellington.

Details on the programme, call for abstracts, application and accommodation details will be posted in the near future on the MSA website. **Please block off this time period in your diaries!**

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As a token of their appreciation to the MSA, our journal publisher Taylor and Francis has kindly offered a 30% discount on purchases of their books to all current MSA Members.

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J. Hope Macpherson (Mrs. Ian K. Black)

7 February 1919 — 25 January 2018

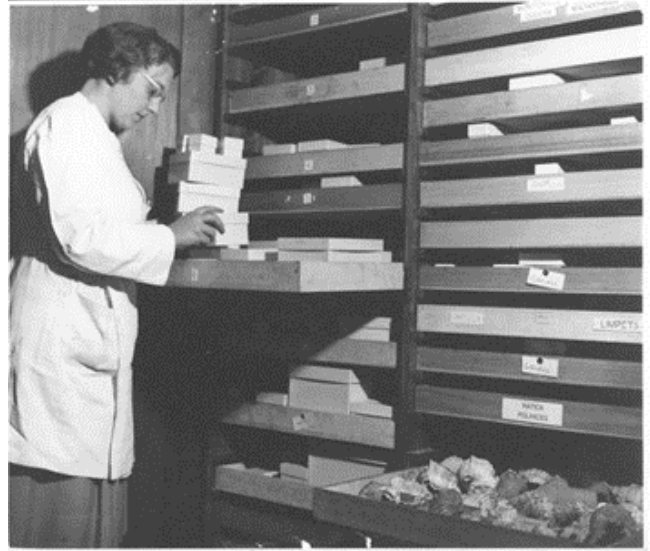
Robert Burn, Honorary Associate, Museums Victoria, PO Box 666, Melbourne, Victoria, 3001 and
Platon Vafiadis, Malacological Society of Australasia Email newsletter@malsocaus.org

It is with sadness that we farewell possibly* the last of the founding members of the MSA, the late J. (Jessica) Hope Black (nee Macpherson) who passed away in Melbourne, Victoria on Thursday 25 January 2018, just a few weeks short of her ninety-ninth birthday. Hers was an extraordinary life which broke new ground in forging the active participation of women in a scientific career. She was appointed by the National Museum of Victoria (NMV) as Museum Assistant in 1937 and became a permanent staff member in 1939. After graduating in Science from The University of Melbourne, she was then appointed Curator of Conchology at the NMOV from 1946 until 1965, when she had to relinquish her position after marrying, in accordance with the public service laws of the time (Carland, 2011). During her appointment she also earned a Masters degree in Science. Her appointment brought scientific rigour to the museum collections and was instrumental in encouraging the late Charles Gabriel to donate his important collection to the museum, thus securing key Victorian molluscan types, valuable documents and literature for posterity (see Smith & Black, 1969).

Hope was a founding member of the Malacological Club of Victoria, later to become the Malacological Society of Australia (see Vafiadis, 2016). She published a number of scientific papers (see her bibliographic list, pages 6 & 8) and described at least 19 species of molluscs, not all of which are currently recognised (see Table on page 7). Hope also revised W.L. May's *Illustrated Index of Tasmanian Shells* in 1958 and, with Gabriel, compiled the outstanding *Marine Molluscs of Victoria*, published in 1962. She took part in several scientific surveys, including the Port Phillip Bay surveys from 1957 to 1963 and two Australian National Antarctic Research Expeditions to Macquarie Island in 1959 and 1960 (Bennett, 1971), where she was one of only four participating women (Carland, 2011). Her enthusiasm made her a great advocate for amateur science, and the museum became a welcoming place of collaboration and great benefit to all involved. This tradition was continued by her successor, the late Dr. Brian Smith, and remains strong to this day.

After resigning from the Malacological Society of Australia on 1 December, 1955 (see Vafiadis, 2016), she re-joined the group in the early 1970s, being elected

(* we do not know whether Barbara Nielsen and Myrtle Dedman, other founding members, are still alive).



Hope Macpherson working in museum (undated*).
Source: Museums Victoria. Public Domain
(Licensed as Public Domain Mark).

(* Note that when R. Burn began attending the museum in 1953, all wooden storage cabinets had been replaced by steel cabinets. Thus, this photo can be dated as pre-1953).

President on 14 December 1972, together with an all-Victorian council, when the central administration of the Society was transferred back to Melbourne (see *Australian Shell News* No. 1, 31 January, 1973). Her last few decades, however, saw relatively little official involvement in the Society.

Hope's post-museum working years were spent as a science teacher in Victorian rural secondary schools (Carland, 2011). She had also undertaken a personal project to compile a brief biography of each contributor to Australian malacology, entitled, "*Encyclopaedia of Malacologists*". Although this work was never completed to publication stage, an electronic copy was given to Museums Victoria by Hope and from this a few printed manuscripts exist. On the entry pertaining to herself under the name "Black" she states "see Macpherson, Jessica Hope." Under "Macpherson, Jessica Hope (Mrs. Ian Black)" she writes, "1919. Born Hamilton, Victoria. Curator of Molluscs, Museum of Victoria 1946-1965. Foundation member, Malacological Society of Victoria and of Marine Study Group. President, Malacological Society of Australia, 1973. Author of a number of papers and '*Marine Molluscs of Victoria*'. Editor of Port Phillip Survey 1957-1963, No. 27, 1966; No. 32, 1971".

This hints that in her scientific work Hope preferred to be known by her maiden name, but exceptions to this are her contribution to a chapter on molluscan egg masses in *Marine Invertebrates of Southern Australia, Volume 2* (1989), and her account entitled 'History of discovery' in *The Southern Synthesis* (1998), where she used her married name.

Three molluscan species have been named in her honour: *Mitromorpha macphersonae* (Gabriel, 1956), family Mitromorphidae; *Phyllodesmium macphersonae* (Burn, 1962), family Facelinidae; and *Laevilitorina macphersonae* (Dell, 1964), family Littorinidae. Also named after her are the holothuroid *Trachythyone macphersonae* Pawson, 1962, family Cucumariidae and the bryozoan *Parasmittina macphersonae* Powell, 1967, family Smitinidae.

On 6th March, 2012 Hope was also honoured by being inducted into the Victorian Women's Honour Roll at a ceremony in Parliament House (Carland, in Cram 2012).



**J. Hope Macpherson signing a copy of *Marine Molluscs of Victoria*, 5th February, 2012.
Photograph: Don Cram.**

Even into her late 80s and early 90s, Hope often attended the annual Christmas lunch of the Marine Invertebrate Lab at Museum Victoria, her quiet presence inspiring all. Let us carry on her productive legacy.

List of new taxa (on page 7, opposite):

Valid species are marked with the symbol (+), invalid species are marked with the symbol (-), and species whose status is uncertain are marked with the symbol (?).

Publications list (arranged chronologically):

Keble RA, Macpherson JH (1941). The Lower Ordovician graptolites in New South Wales. *Records of the Australian Museum* 21 (1): 57–58.
Keble RA, Macpherson JH (1946). The contemporaneity of the river terraces of the Maribyrnong River,

Victoria, with those of the Upper Pleistocene in Europe. *Memoirs of the National Museum of Victoria* 14: 52-68, Pl. XV.

Gabriel CJ, Macpherson, JH (1947). Mollusca. Pp.158-167, Pl. XIII in: Whincup SG, Brazenor CW, Gabriel CJ, Macpherson JH & Burns AN. A preliminary report on the biology and ecology of the Snowy River area in north-east Victoria. *Memoirs of the National Museum of Victoria* 15: 146-171.

Macpherson JH (1947). Records of Onchidiidae (Mollusca, Gastropoda) from Victoria. *Memoirs of the National Museum of Victoria* 15: 172-173, Pl. XIV.

Macpherson JH (1951). The Russell Grimwade Expedition to South and Western Australia, August–September, 1947 - Land Molluscs. *Memoirs of the National Museum of Victoria* 17: 29-31, Pl. II-IV.

Macpherson JH (1951). A new species of *Myadora* from Victoria. *Memoirs of the National Museum of Victoria* 17: 81-82.

Macpherson JH, Chapple EH (1951). A systematic list of the marine and estuarine Mollusca of Victoria. *Memoirs of the National Museum of Victoria* 17: 107-185.

Macpherson JH (1953). Record of a South African mollusc, *Haliotis sanguinea* Handley, from Australia. *Memoirs of the National Museum of Victoria* 18: 169, Pl. I

Macpherson JH (1954). Part 7. Molluscs (sea shells and snails), Pp 55-63, in: Willis JH (ed). The Archipelago of the Recherche. *Australian Geographical Society Report, No. 1* (pp 1-64).

Macpherson JH (1957). A review of the genus *Coxiella* Smith, 1894, sensu lato. *Western Australian Naturalist* 5(7): 191-204.

Gliddon JW, Macpherson JH (1958) Chapter 5: Treasure between tide marks (Pp. 31-38), in: Gliddon JW (compiler). *Phillip Island in picture and story*. Issued by the Committee of Trust, "Warley" Bush Nursing Hospital, Phillip Island. Wilke & Co. Ltd., Melbourne. (Has subsequently appeared in several revised editions).

May WL, Macpherson JH (1958). *An illustrated index of Tasmanian shells* (with 50 plates and 1086 species). Government Printer, Tasmania (pp. 1-54, followed by an 18 page index to genera and species). (This has been reprinted at least once).

Macpherson JH (1959). New name for *Myadora gabrieli* Macp. *Memoirs of the National Museum of Victoria* 24: 55.

Macpherson JH (1959). New gasteropods from north Australia. *Memoirs of the National Museum of Victoria* 24: 51-57.

Macpherson JH (1962). *Trochus obtusa* confusion. *Memoirs of the National Museum of Victoria* 25: 173-176.

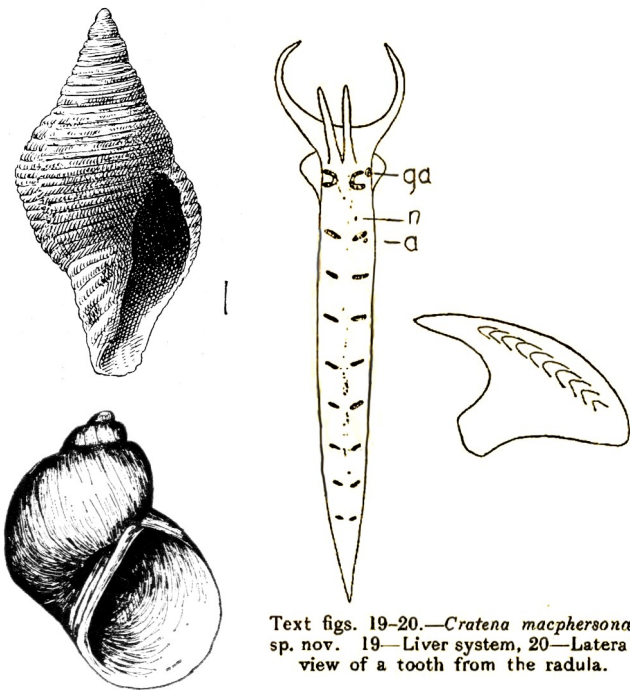
Macpherson JH (1962). New name for *Murex espinosus* Macpherson. *Memoirs of the National Museum of Victoria* 25: 176.

(cont'd on p.8)

List of new taxa described by J. Hope Macpherson

Original description (arranged alphabetically according to species)	Current status (according to WoRMS and/or MolluscaBase)
<i>Peristernia aethiops</i> Macpherson, 1959 (+)	Accepted. FASCIOLARIIDAE.
<i>Dipnelix alychnopis</i> Macpherson, 1954 (+)	Not listed in these databases. Accepted by Smith (1992). CHAROPIDAE.
<i>Chiazacmaea ater</i> Macpherson 1955 (-)	Not listed in these databases. Not accepted by Ponder & Creese (1980) who synonymised it to <i>Patelloida cryptalirata</i> (Macpherson, 1955) LOTTIIDAE.
<i>Charopa brazenori</i> Gabriel & Macpherson, 1947 (-)	Not listed in these databases. Not accepted by Smith & Kershaw (1979) and Smith (1992), who list it as a synonym of <i>Pillomena danonongensis</i> (Petterd, 1879) CHAROPIDAE.
<i>Chiazacmaea cryptalirata</i> Macpherson, 1955 (+)	Accepted as <i>Patelloida cryptalirata</i> (Macpherson, 1955). LOTTIIDAE.
<i>Murex espinosus</i> Macpherson 1959 (-)	Not accepted. This name was pre-occupied. See below under <i>Murex tweedianum</i> Macpherson, 1962.
<i>Myodora gabrieli</i> Macpherson 1951 (-)	Not accepted. This name was pre-occupied. See below under <i>Myodora latilirata</i> Macpherson, 1959.
<i>Coxiella glabra</i> Macpherson, 1957 (+)	Accepted. Current family placement is in TOMICHIIDAE.
<i>Coxiella glauerti</i> Macpherson 1957 (+)	Not listed in these databases. Accepted by Smith (1992). Current family placement is in TOMICHIDAE.
<i>Notoacmaea granulosa</i> Macpherson, 1955 (-)	Not listed in these databases. Not accepted by Ponder & Creese (1980) who synonymised it to <i>Collisella mixta</i> (Reeve, 1855), which is now accepted as <i>Lottia mixta</i> (Reeve, 1855). LOTTIIDAE.
<i>Pugilina griggiana</i> Macpherson, 1959 (?)	Not listed in these databases. Not mentioned in Wilson, 1994. <i>Pugilina</i> itself belongs to MELONGENIDAE.
<i>Tudicula kurtzi</i> Macpherson, 1964 (+)	Accepted as <i>Tudivasum kurtzi</i> (Macpherson, 1964). TURBINELLIDAE.
<i>Myodora latilirata</i> Macpherson, 1959 (-)	Not accepted. Named after Macpherson realised that <i>Myodora gabrieli</i> Macpherson, 1951 was pre-occupied. However, <i>Myodora latilirata</i> Macpherson, 1959 is now synonymised to <i>Myadora rotundata</i> Sowerby, 1875. MYOCHAMIDAE. (Note: <i>Myodora</i> is now accepted as <i>Myadora</i> .)
<i>Coxiella minima</i> Macpherson, 1954 (+)	Not listed in these databases. Accepted by Smith (1992). Current family placement is in TOMICHIDAE.
<i>Bothriembryon multispirus</i> Macpherson, 1951 (-)	Not listed in these databases. Not accepted by Smith (1992) who lists it as synonym of <i>Bothriembryon barretti</i> Iredale, 1930. Current family placement is in BOTHRIEMBRYONTIDAE.
<i>Alocospira rosea</i> Macpherson, 1959 (+)	Accepted. ANCILLARIIDAE.
<i>Conus rufimaculosus</i> Macpherson, 1959 (+)	Accepted. CONIDAE.
<i>Charopa snoweyensis</i> Gabriel & Macpherson, 1947 (-)	Not listed in these databases. Not accepted by Smith & Kershaw (1979), who list it as a synonym of <i>Dentberona saturni</i> (Cox, 1864). Subsequently Smith (1992) lists <i>Charopa snoweyensis</i> as a synonym of <i>Dentberona altior</i> (Iredale, 1941). CHAROPIDAE.
<i>Murex tweedianus</i> Macpherson, 1962 (+)	Accepted as <i>Haustellum tweedianum</i> (Macpherson, 1962). Named after Macpherson realised that <i>Murex espinosus</i> Macpherson, 1959 was preoccupied. MURICIDAE.

Other: *Tudicula rasilistoma* was a manuscript name by Macpherson who sent her work to Tucker-Abbott to assist in his revision of the group; Abbott published the name before Macpherson and so priority is attributed to him. The accepted name is now *Tudivasum rasilistoma* (Abbott, 1959). TURBINELLIDAE.



Text figs. 19-20.—*Cratena macphersonae* sp. nov. 19—Liver system, 20—Lateral view of a tooth from the radula.

UPPER LEFT: *Mitromorpha macphersonae* (Gabriel, 1956: 3; fig. 1; type length 5.02 mm).

LOWER LEFT: *Laevilitorina macphersonae* (Dell, 1964: 282-3, fig. 35 p.284; type length 3.3 mm)

RIGHT: *Phyllodesmium macphersonae* (Burn, 1962: 119; figs. 19-20) showing arrangement of cerata, position of orifices and radula tooth.



Sketch of Hope Macpherson by G.J. Browning, 1940. Photographer: Hope Macpherson. Source: Museums Victoria. Public Domain (Licensed as Public Domain Mark).

(Note that G.J. Browning also produced the unparalleled shell illustrations in *Marine Molluscs of Victoria*).

Publications list (continued from page 6):

- Macpherson JH, Gabriel CJ (1962). *Marine molluscs of Victoria*. Melbourne University Press, Parkville (pp. i-xv, 1-475, 486 text figures).
- Macpherson JH (1964). A new species of *Tudicula* from north Australia. *Memoirs of the National Museum of Victoria* 26: 209-210.
- Macpherson JH, Lynch DD (1966). Port Phillip Bay Survey 1957-1963. Introduction. *Memoirs of the National Museum of Victoria* 27: 1-5.
- Macpherson JH (1966). Port Phillip Bay Survey 1957-1963. Brachiopoda. *Memoirs of the National Museum of Victoria* 27: 199.
- Macpherson JH (1966). Port Phillip Bay Survey 1957-1963. Mollusca. *Memoirs of the National Museum of Victoria* 27: 201-263 (including Pl. I-V)
- Black Mrs. IK (1968). Molluscs of Victoria. Pp. 1-21, 8pls, in: Arnold VH (ed). *Victorian Year Book 1968, No. 82, Part 1, Physical Environment*. Commonwealth Bureau of Census and Statistics, Victorian Office: Melbourne. X+840 pp.
- Smith BJ, Black JH (1969). Biographies, combined bibliography and new names list of John Henry Gatliff (1848-1935) and Charles John Gabriel (1879-1963). *Journal of the Malacological Society of Australia* 1 (12): 32-47.
- Smith BJ, Black JH, Shepherd SA (1989). Chapter 15: Molluscan egg masses and capsules (Pp. 841-891),

in: Shepherd SA & Thomas IM (eds). *Marine invertebrates of southern Australia, Part II*. South Australian Government Printing Division, Adelaide.

Black JH (1998). History of discovery (Pp. 6-11), in: Beesley PL, Ross GJB, Wells A (eds). *Mollusca: The Southern Synthesis. Fauna of Australia Volume 5*. CSIRO Publishing, Melbourne, Part A xvi 563 pp.

Concluding comments:

Although every attempt has been made to be comprehensive in compiling this information, completeness of the bibliographic and taxonomic lists is not guaranteed. Communication of any potential omissions or errors would be greatly appreciated.

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Further reading and references:

- Australian Shell News* (Newsletter of the Malacological Society of Australia, previously called 'Australian Newsletter'), Number 1, 31 January, 1973.
- Bennett I (1971). *Shores of Macquarie Island*. Rigby Limited, Adelaide.
- Carland, R. (2011). Hope Black nee Macpherson, Curator of Molluscs (1919–2018) in Museums Victoria Collections: <https://collections.museumvictoria.com.au/articles/8027> Accessed 30 January 2018. (This on-line archival record contains many interesting biographical details, documents and photographs).
- Burn R (1962). Descriptions of Victorian nudibranchiate mollusca, with a comprehensive review of the Eolidacea. *Memoirs of the National Museum of Victoria* 22(4): 95-128.
- Cram, D. (2012). Hope Black honoured. *Victorian Branch Bulletin of the Malacological Society of Australasia* 263 (April/May), 2012: 2-3.
- Dell RK (1964). Marine Mollusca from Macquarie and Heard Islands. *Records of the Dominion Museum* 4(20): 267-301.
- Gabriel CJ (1956). Mollusca from south east of King Island, Bass Strait. *Memoirs of the National Museum of Victoria* 22(4): 1-16
- MolluscaBase (2018). Available at <http://www.molluscabase.org>
- Ponder WF, Creese, RG (1980). A revision of the Australian species of *Notoacmea*, *Collisella* and *Patelloida* (Mollusca: Gastropoda: Acmaeidea). *Journal of the Malacological Society of Australia* 4(4): 167-208.
- Smith BJ (1992). Non-marine Mollusca. In: Houston WWK (ed). *Zoological Catalogue of Australia. Volume 8*, AGPS Press Publications, Australian Government Printing Service, Canberra. xii, 405 pp.
- Smith BJ, Kershaw RC (1979). *Field guide to the non-marine molluscs of south-eastern Australia*. Australian National University Press, Canberra (Pp. i-x, 1-285)
- Vafiadis P (2016). Impending 60th anniversary celebration for the Malacological Society of Australasia. *Newsletter of the Malacological Society of Australasia*. 159: 1, 9-10
- Wilson BR (1994) *Australian marine shells. Prosobranch gastropods. Part 2*. Odyssey Publishing, Kallaroo, Western Australia.
- World Registry of Marine Species (WoRMS) Editorial Board (2018). World Register of Marine Species. Available at <http://www.marinespecies.org> at VLIZ.

A look back at the 'MSA turns 60' initiative

Platon Vafiadis, Malacological Society of Australasia

Email newsletter@malsocaus.org

To celebrate the recent 60th anniversary of the Malacological Society of Australasia, the 'MSA turns 60' initiative was a project to showcase the many achievements and progress of Australasian malacology. It consisted of sixty on-line posts (summarised in the Appendix), at approximately weekly intervals, each highlighting a topic pertaining to molluscs. Beginning in late 2016 at around the time of the MSA's 60th anniversary, posts continued until 21 February, 2018, when post 60, the final one, appeared. This article aims to overview the content of this initiative.

By assigning a single 'best-fit' topic to each post (a subjective and challenging task as many posts cover multiple topics), 24 topics emerged (10 containing a single post, 7 containing two posts, 2 containing three posts, 2 containing four posts, 1 containing five posts, 1 containing 7 posts, and 1 containing 10 posts). The topic breakdown is provided below (# refers to 'post'):

Behaviour of molluscs—3 posts (#3 on *Amphioctopus marginatus*, #7 on *Loligo pealeii*, #30 on *Sepia apama*).

Biochemistry of molluscs—2 posts (#11, #50).

Bivalve research—1 post (#53).

Citizen science—1 post (#46).

Climate change—2 posts (#16, #17).

Conferences—2 posts (#47, #60).

Conservation—3 posts (#6 on *Ostrea angasi*, #23, #35, on habitat restoration).

Dispersal of molluscs—1 post (#59).

Education—2 posts (#41, #55).

Evolution of molluscs—1 post (#34).

Fisheries & fisheries research—2 posts (#32, #49).

History—4 posts (#1 & #36 on the Malacological Society of Australasia, #4 & #10 on the Malacological Society of South Australia).

Invasive molluscan species—1 post (#20).

Literature, malacological—7 posts (#2 on *Mollusca-The Southern Synthesis*, #8 on the *Victorian Branch Bulletin*, #13 on *Marine Molluscs of Victoria*, #15 on *The Journal of the Malacological Society of Australi*, #21 on *Australian Land Snails Vol 1*, #40 on the Australian Museum malacology library, #44 on *Cephalopods of Australia and Sub-Antarctic Territories*).

Materials science and molluscs—2 posts (#39, #43).

Museum Reference Collections—1 post (#24).

Online malacological resources—2 posts (#9 on the Sea slug forum, #18 on Tasmanian molluscs).

Palaeontology—1 post (#31).

Prominent malacologists—past—10 posts (#12 on Joyce Allan, #19 on Carl Laseron, #27 on Barry Wilson, #33 on Neville Coleman, #37 on Ralph Tate, #45 on Donald McMichael, #48 on Julian Tenison-Woods, #52 on William May, #54 on Elizabeth Coxen, #57 on J. Hope Macpherson).

Prominent malacologists—present—5 posts (#14 on Winston Ponder, #28 on Kirsten Benkendorff, #29 on Bruce Marshall, #38 on Rachel Przeslawski, #42 on Nerida Wilson).

Remarkable molluscs—4 posts (#5 on bivalved gastropods, #25 on giant clams, #51 on specialised bivalves, #56 on micromollusca).

Shell pigment pattern—1 post (#22).

Student perspectives—1 post (#58).

Taxonomy—1 post (#26).

It is seen that these topics cover the breadth of malacology from origins, structure, function and diversity, through to behaviour. Whilst respecting our history, they also look at modern research techniques, current researchers and research topics, conservation challenges in an age of increasing population and climate change, and public policy and education.

Particular thanks must go to Lisa Kirkendale, Rachel Przeslawski and Carmel McDougall. Lisa proposed the initiative and together with Rachel and Carmel administered the project, editing and posting submissions, as well as contributing a good number of them. Thanks also to all contributors. The result is a valuable picture of local malacology and a fitting tribute to the MSA's 60th anniversary.

Appendix: Summary of 'The MSA turns 60' posts. (Contributor(s) are listed in brackets after the title. Topic classification appears after each entry. Note that the complete posts are available through the MSA website at http://www.malsocaus.org/?page_id=933).

Week 1: Happy 60th birthday to the MSA! (Rachel Przeslawski). Celebrates the MSA's 60th birthday. **History.**

Week 2: The Southern Synthesis. (Caitlin Woods, Lisa Kirkendale). Overviews the landmark publication, *Mollusca—The Southern Synthesis*. **Literature, malacological.**



The two volumes of *Mollusca—The Southern Synthesis*.
Photograph: Caitlin Woods.

Week 3: Invertebrates Use Tools. (Rachel Przeslawski). *Amphioctopus marginatus* carries and uses coconut shell halves as impromptu protection – the first note of tool use in invertebrates. **Behaviour of molluscs.**

Week 4: First Australian Malacology Meeting. (Peter Hunt). Reports on the first malacological meeting in Australia convened by Dr. (to become in the future, Sir) Joseph Verco on 20 September 1894. Other prominent persons were also present. **History.**

Week 5: When a Bivalve is a Gastropod. (Caitlin Woods). Discusses the discovery of live bivalved gastropods in Australia and their implications for molluscan evolutionary theories. **Remarkable molluscs.**



Berthelinia limax (Kawaguti & Baba, 1959) as captured in a rockpool by Matt Nimbs in January 2016.

Week 6: Overfishing of *Ostrea angasi*. (Rachel Przeslawski, Peter Hunt). Reports on how overfishing threatened populations of the oyster *O. angasi*, and how this may have triggered the first Australian fisheries legislation to protect species. **Conservation.**

Week 7: Squid Rage. (Carmel McDougall). Summarises discovery of the pheromone β -MSP in *Loligo pealeii* squid. Females line their eggs with it and it causes extreme aggression in males, ensuring only the strongest can mate with females. **Behaviour of molluscs.**

Week 8: First Issue of the Victorian Branch Bulletin. (Platon Vafiadis). The Victorian Branch Bulletin of the MSA appeared on 19th August 1968 and continues to the present time. **Literature, malacological.**

Week 9: Sea Slug Forum. (Matt Nimbs). Discusses the Australian Museum's online Sea Slug Forum, active from 1998 – 2010. It is still accessible and remains relevant and useful. **Online malacological resources.**

Week 10: Malacological Society of South Australia (MSSA) Centenary. (Peter Hunt). The MSSA centenary was in 1994, the same year that it hosted the first Australian national shell show (in Adelaide). **History.**

Week 11: Seeing Purple. (Kirsten Benkendorff, Carmel McDougall). 'Tyrian purple' from muricid molluscs has a well understood chemistry. It displays antibacterial and possible anticancer properties. **Biochemistry of molluscs.**

Week 12: Joyce Allan, an Inspiring and Enduring Female Malacologist. (Carmel McDougall, Lisa Kirkendale). A brief biography of the malacologist Joyce Allan (1896-1966) of the Australian Museum. **Prominent malacologists—past.**

Week 13: Publication of *Marine Molluscs of Victoria*. (Platon Vafiadis). Published in 1962 by J.H. Macpherson and C.J. Gabriel, and illustrated by G.J. Browning, this book remains a valuable reference work. **Literature, malacological.**

Week 14: A Titan of Micromolluscs in Australia. (Lisa Kirkendale). Summarises the enormous malacological contributions of Winston Ponder, now retired Curator of Molluscs, Australian Museum. **Prominent malacologists—present.**

Week 15: A Malacology Journal for Australasia. (Platon Vafiadis). *The Journal of the Malacological Society of Australia* appeared in 1957. Becoming *Molluscan Research* in 1993, it remains a highly-respected and influential journal. **Literature, malacological.**

Week 16: Giant Clams, Sunlight and Ocean Acidification. (Rachel Przeslawski). Giant clams *Tridacna squasoma* can survive elevated CO₂ levels and high light intensity, the latter possibly assisting their photosynthetic symbionts to ameliorate negative effects of water acidification. **Climate change.**

Week 17: Octopus Genetics and the Impacts of Climate Change. (Jan Strugnell, Carmel McDougall). Genetic analyses indicate that deep-sea octopods diverged from other southern-ocean species at a time of significant regional climactic change, possibly due to altered dispersal trends. **Climate change.**

Week 18: An Online Guide to Tasmanian Molluscs. (Rachel Przeslawski). Previews the detailed on-line database of Tasmanian molluscs set up by Simon Grove (Curator of Invertebrates, Tasmanian Museum and Art Gallery) and assisted by Rob de Little. (See: <http://www.molluscsoftasmania.net>). **Online malacological resources.**

Week 19: Carl Laseron – Veteran, Explorer, Malacologist. (Carmel McDougall). Charles (Carl) Francis Laseron, a geologist, took part in the Australian Antarctic Expedition under Sir Douglas Mawson, and was a Gallipoli veteran. In later life he studied micromollusca, with valuable contributions and many new species descriptions. (See also photo above right). **Prominent malacologists—past.**

Week 20: Outbreak and Eradication of *Mytilopsis sallei*. (Richard Willan, Carmel McDougall). Outlines the eradication of the highly invasive mussel *Mytilopsis sallei* from Darwin in 1999 – the world's first example of successful eradication of an established marine pest population. See Willan et al, 2000. *Molluscan Research* 20(2): 25-30. **Invasive molluscan species.**

Week 21: Australian Land Snails, Vol. 1. (Rachel

Przeslawski). A comprehensive guide to the eastern Australian land molluscs by Staniscic et al (2010), lavishly illustrated and describing many new species and genera. **Literature, malacological.**



Charles Laseron, above right, with Percy Correll, during an Antarctic expedition. Photograph: Frank Hurley (sourced from Wikipedia at https://en.wikipedia.org/wiki/Charles_Francis_Laseron).

Week 22: How do Molluscs Build their Shells? (Carmel McDougall). The shapes, patterns and colours of shells are ultimately controlled by macromolecules secreted by the mantle. Summarises work looking at the genetic control of this process. **Shell pigment pattern.**



Outstanding beauty—the pigment pattern of a juvenile *Haliotis asinina*. Photograph: Carmel McDougall.

Week 23: International Day for Biodiversity. (Lisa Kirkendale). Understanding molluscan diversity and distribution is needed to develop appropriate conservation measures. The MSA is at the heart of this initiative in Australasia with members dedicated to the appreciation, study and sustainable use of molluscs. **Conservation.**

Week 24: Museum Reference Collections Prove Invaluable. (P. G. Beninger, Rachel Przeslawski).

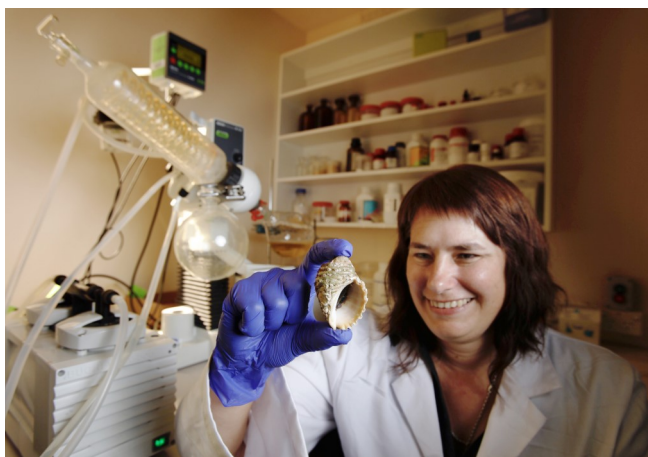
Museum collections can answer unanticipated future questions. In 2004 an unexpected gill structure noted in the scallop *Hemipecten forbesianus* enabled gill type to be established as a soft-tissue taxonomic character in Pectinidae. **Museum Reference Collections.**

Week 25: Giant Clam Research in Australia. (Lisa Kirkendale). The mantle of giant clams (Tridacninae) hosts photosymbionts which contribute to their nutrition. The group is well studied due to its vulnerability to illegal harvest and its importance in aquaculture and as a food source. *Tridacna ningaloo*, described in 2014, is currently considered a junior synonym of *Tridacna noae*. **Remarkable molluscs.**

Week 26: Chromodoris nudibranchs in the Indo-Pacific. (Kara Layton). Molecular work has uncovered several new species in the nudibranch genus *Chromodoris*, and the first evidence for mimicry in this group with some species mimicking other locally abundant congeners. All members of this genus have black pigmentation, lay flat egg masses (the only chromodorid genus to do so), and can sequester toxins from sponges in their mantle glands. **Taxonomy.**

Week 27: Pioneer of Australian Malacology. (Rachel Przeslawski) A brief biography of the late Barry Wilson, malacologist, conservationist, longstanding MSA member and author of multiple works including the *Australian Marine Shells* books. **Prominent malacologists–past.**

Week 28: Malacologist Wins Young Australian of the Year (Science And Technology) in 2000. (Rachel Przeslawski). Highlights the award-winning work of the MSA's Kirsten Benkendorff. Her doctoral and post-doctoral work both focus on bioactive molluscan compounds and their potential uses, bridging the disciplines of biology and chemistry. **Prominent malacologists–present.**



Dr. Kirsten Benkendorff in the laboratory with a *Dicathais orbita* specimen, source of Tyrian purple. Photograph: Craig Sillitoe.

Week 29: A Stalwart of New Zealand Malacology. (Simon F. Hills). Highlights the enormous malacological contributions of Bruce Marshall, Collection Manager of Molluscs, Museum of New Zealand Te Papa Tongarewa Wellington. **Prominent malacologists–present.**

Week 30: Not-So-Secret-Spawning of Giant Cuttlefish. (Rachel Przeslawski). The stunning giant cuttlefish *Sepia apama* congregates densely off the South Australian coastline to breed, allowing detailed studies of its biology and mating behaviour. **Behaviour of molluscs.**

Week 31: Kimberella—the Oldest Mollusc? (Carmel McDougall). Precambrian fossils of this genus from South Australia and northern Russia seem to have a ‘foot’, ‘mantle’ and nearby scrape marks (‘radular marks?’), suggesting that this is an ancestral mollusc. It lacked a calcified shell but may have had a hard dorsal plate. **Palaeontology.**

Week 32: A Successful Selective Breeding Program for Oysters. (Wayne O’Connor). Selective molluscan breeding programs in Australia began 1990 with the Sydney rock oyster *Saccostrea glomerata*, producing faster-growing and disease-resistant oysters. Today the program includes selection for new traits including growth, shell shape, meat condition, disease and ocean acidification resistance. (Image below courtesy of N.S.W Department of Primary Industries). **Fisheries & fisheries research.**



A comparison of disease resistant (front) and wild non-selected oysters following on-farm exposure to QX disease. Both trays were initially stocked with the same number of similar sized oysters

Week 33: Nudibranchs Encyclopaedia: the Work of the late Neville Coleman. (Matt Nimbs, Steve Smith, Jorina van der Westhuizen). The late naturalist Neville Coleman was a prolific underwater explorer and book author (including many on molluscs). Many species are named in his honour. **Prominent malacologists–past.**

Week 34: Camaenid Land Snails Exhibit Morphological Convergence. (Lisa Kirkendale, Corey

Whisson, Frank Köhler). The land snail fauna of NW and central Australia is dominated by the Camaenidae, a family well adapted to desert conditions. More than 300 species in 41 genera are now known. Molecular sampling suggests widespread convergence of shell and anatomical characters and thus these alone are poor guides for their higher-level classification. **Evolution of molluscs.**

Week 35: The Humble Oyster: an Ecosystem Saviour. (Carmel McDougall). ‘Shell-fish’ reefs formed by oysters or mussels provide habitat and spawning grounds for other species, protect coastlines from erosion, and maintain water quality by filtering. Today, only a small fraction remain (re: overfishing, nutrient runoff, susceptibility to disease) but their re-establishment is an area of increased attention and shows great promise. **Conservation.**

Week 36: First MSA President. (Platon Vafiadis). A short article on Denzil Hartley, first MSA President, serving from 1956 to 1964. **History.**

Week 37: Professor Ralph Tate. (Carmel McDougall). A biography of an eminent naturalist who contributed significantly to Australian malacology (both recent and fossil species). **Prominent malacologists–past.**

Week 38: Molluscan Climate Change Research of Rachel Przeslawski. (Kirsten Benkendorff). Summarises work by the MSA’s Rachel Przeslawski, which incorporates study of the effects of multiple climate change stressors on the development of intertidal molluscs, and the complex interactions between them. **Prominent malacologists–present.**

Week 39: Radula, the Strongest Known Biologically-Produced Material. (Carmel McDougall). Summarises research showing impregnation of the chiton radula with iron and calcium biominerals for strength, and highly intercalated interfaces between different material layers for fracture resistance – with lessons for materials scientists. **Materials science and molluscs.**

Week 40: Malacological Library of the Australian Museum. (Peter Middelfart). A personal reflection of the joys of using a first-class malacological library and the impacts of modern technology upon it. **Literature, malacological.**

Week 41: Taking Malacology to the Masses. (Peter Hunt). Summarises the outstanding public education activities of the Malacological Society of South Australia, focussing on marine environmental issues and highlighting the beauty and diversity of molluscs. **Education.**

Week 42: Antarctic molluscs and Nerida Wilson.

(Lisa Kirkendale, Kara Layton). Summarises the impressive work of Nerida Wilson of the WA Museum, which currently focuses on Antarctic molluscan phylogeography. **Prominent malacologists–present.**

Week 43: Perfecting Pearls. (Carmel McDougall). Looks at research aiming to improve pearl culturing techniques, including advanced genomic and transcriptomic techniques to understand pearl formation at the molecular level. **Materials science and molluscs.**

Week 44: Cephalopods of Australia. (Rachel Przeslawski). Overviews *Cephalopods of Australia and Sub-Antarctic Territories* by the MSA’s Mandy Reid. Published in 2016, it covers over 25% of world cephalopoda and discusses biology, behaviour and related fisheries. **Literature, malacological.**

Week 45: Dr Donald Fred McMichael, CBE. (Winston Ponder). A brief biography of the late malacologist Don McMichael (1932-2017). **Prominent malacologists–past.**

Week 46: Sea Slug Census. (Steve Smith). Southern Cross University’s ‘Sea Slug Census Program’ monitors and documents species distribution through volunteer citizen scientists using underwater cameras. Running at several locations, it has documented new regional records, at least 30 poleward range extensions, and contributed to peer-reviewed literature. **Citizen science.**

Week 47: MSA Conferences. (Rachel Przeslawski). Reflects on the MSA triennial conferences where scientists, students, and enthusiasts collaborate and share the latest malacological research in an inclusive and enjoyable atmosphere. **Conferences.**

Week 48: Reverend Julian Tenison-Woods (Carmel McDougall). Father Julian Tenison-Woods (1832-1889), missionary Roman Catholic priest and scientist, made significant contributions to Australian geology, palaeontology, botany and zoology including malacology. **Prominent malacologists–past.**

Week 49: Australian Molluscan Fisheries, a Resource worth Protecting. (Carmel McDougall). Major Australian fisheries exist for abalone, scallops and squid, but lesser-known species are also harvested, with status assessments made every 2 years. There are also resources available to assist us in making sustainable seafood choices. **Fisheries & fisheries research.**

Week 50: Molluscs as Models for Chemical Mapping Techniques. (David Rudd). The unique structures of molluscan dyes and compounds, often made in specialised tissues, can now be mapped directly from the tissues themselves. Mapping is also extended to disease models using molluscan compounds as therapeutic

agents, and in tracking environmental pollutants in invertebrates. **Biochemistry of molluscs.**

Week 51: Malacological Cabinet of Curiosity and Wonder. (Lisa Kirkendale, Peter Middelfart). Highlights amazing molluscan diversity, unique adaptations and conservation opportunities using bivalve examples. **Remarkable molluscs.**

Week 52: William Lewis May and the MSA. (Platon Vafiadis). Outlines the work of the late Tasmanian conchologist William Lewis May and his connection to the MSA. **Prominent malacologists–past.**

Week 53: Freshwater Australian Mussel Research. (Michael Klunzinger). Outlines progress in the field, and challenges, such as shell morphological plasticity from varying habitats, and wear of key shell features, both posing identification challenges. **Bivalve research.**

Week 54: Celebrating Women in Collections. (Nerida Wilson). Elizabeth Coxen (1825-1906), conchologist, meteorologist and horticulturalist, was the first woman to be curator of any Australian natural history museum (at the Queensland Museum) and also to be elected member of the Royal Society of Queensland). **Prominent malacologists–past.**

Week 55: Molluscs, Kids and Education. (Rachel Przeslawski). Children's fascination with molluscs needs to be encouraged so that their appreciation for the natural world strengthens as they grow. Strategies and resources are presented to facilitate this and foster the next generation of malacologists and environmentalists. **Education.**



Let's never lose our fascination for molluscs.
Photograph: Rachel Przeslawski.

Week 56: Horton Hears A Who (Lisa Kirkendale, Peter Middelfart). A first-hand description of the challenges and joys of studying micromolluscs. (See also image at top right). **Remarkable molluscs.**



Images of Kimberley micromolluscs by Peter Middelfart.
Top: Scissurellidae, Middle: Cysticidae, Bottom: Condylocardiidae
(see also Middelfart et al 2016 at <http://www.mdpi.com/1424-2818/8/3/17/html>).

Week 57: Farewell Jessica Hope Macpherson – 1919-2018 (Mrs. Ian Black). (Platon Vafiadis). Records the passing, work and legacy of J. Hope Macpherson, ex museum Curator of Molluscs and founding member of the MSA. **Prominent malacologists–past.**

Week 58: Malacology-a student perspective. (Josh Mason). Josh, currently studying morphological and genetic diversity of *Angaria* along the Western Australian coastline, explains his journey to malacology and enthusiasm for bringing the discipline to the broader public. **Student perspectives.**

Week 59: MSA celebrates Darwin Day (11th February) 2018! (Carmel McDougall). Molluscs attracted Darwin's attention, notably the paradox of the wide distribution of particular land and freshwater snails across land masses. He hypothesised that hibernating land snails sealed to drift timber could traverse oceans. **Dispersal of molluscs.**

Week 60: MSA Triennial Conference in New Zealand, early December 2018: Save the Date & Meet the Squid! (Simon F. Hills). Discusses the upcoming triennial MSA conference to be held 2-5 Dec. 2018 at the Museum of New Zealand Te Papa Tongarewa in Wellington. **Conferences.**