

NEWSLETTER

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***Codium platyclados* as a habitat for heterobranch sea slugs in northern New South Wales**

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Over the past few months, seemingly unprecedented proliferation of the green algae *Codium platyclados* Jones and Craft in the Corindi River, northern New South Wales, has provided important habitat for a range of heterobranch sea slugs. Populations of sea slugs are notorious for undergoing “boom and bust” cycles driven by factors such as availability of food, as well as vagaries associated with larval supply, dispersal and settlement. Nevertheless, it was with considerable

surprise that a snorkelling trip in early January 2018 revealed huge recruitment of the limapontiid sacoglossan *Stiliger aureomarginatus* Jensen 1993 (Fig. 1) amongst bushy growths of *C. platyclados*. A subsequent scuba dive (100 minutes in duration) estimated a population of more than 300 individuals in a 20 metre length of the estuary between depths of 1-4.5 metres. Crawl lengths ranged from approximately 2-12 millimetres.

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Figure 1. *Stiliger aureomarginatus* on its host *Codium platyclados*, Corindi River, northern New South Wales (approximate crawl length 10mm). (Photograph: S. Smith).



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>

Society information

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Enquiries

All enquiries and orders should be sent to the Secretary, Kara Layton. Email: kara.layton@museum.wa.gov.au

Victorian branch

Secretary: Michael Lyons, 19 Banksia Street, Blackburn, VIC 3130. Phone (03) 9894 1526 or Email: Michael_lyons1@bigpond.com

Meetings are held at the Melbourne Camera Club, corner of Dorcas and Ferrars Streets, South Melbourne, on the third Monday of each month. No meeting in January, July or December.

Membership fees 2018

Includes *Molluscan Research* (published four times per year), the MSA Newsletter (electronic-only publication since Number 158), and discounted registration at the MSA *Molluscs 2018* conference.

Ordinary members (worldwide)	\$AU 70
Institutional membership	\$AU 100
Student member/concession	\$AU 45

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, Coffs Harbour, NSW, Australia, 2456.

Newsletter

Editor: Platon Vafiadis.

Email: newsletter@malsocaus.org

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

MSA website: <http://www.malsocaus.org>

Facebook: <http://www.facebook.com/groups/Malsocaus>

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.



Pterochelus triformis exposed on mid-littoral rocks, early evening, Waratah Bay, Victoria, Thursday 30 September, 2004. Estimated shell length 50 mm. (Photograph: P. Vafiadis).

Pterochelus triformis - a magnificent muricid!

The temperate Australian snail *Pterochelus triformis* (Reeve, 1845) (Muricidae) is found in sand and rocks among seagrass, grows to a shell length of 60 mm and ranges from southern New South Wales to Esperance, Western Australia (Wilson, 1994), including Tasmania (Grove, 2011). It is uncommon on Victorian beaches and so sightings here are very pleasing. The animal is pale cream in colour with brownish spots and a texturing of crowded, fine white lines. It has a brown chitinous operculum and the cephalic tentacles are brownish-red mottled with white, with the eyes on their outer aspect, three-quarters of the way down their length.

References: Grove, S (2011). *The seashells of Tasmania: a comprehensive guide*. Taroona Publications, Taroona, Tasmania.
Wilson, B (1994). *Australian marine shells. Prosobranch gastropods. Part 2*. Odyssey Publishing, Kallaroo, Western Australia.

P. Vafiadis

President's Report, Annual General Meeting, 30 November, 2017

Over the past year this council has continued to support early career researchers, honoured pillars of the malacological community, trialled links with sister society (SSMD) and launched a major social media initiative. Details of key notable achievements include:

- Two research grants of \$1,500 AUD awarded to Kara Layton and Endurance Ewere. The research we are sponsoring with these awards is featured in our most recent Newsletter, No. 163 (November).
- Two honorary memberships were appointed in 2017: Fred Wells and Richard Willan.
- Transition to a new Editorial Management system for our journal, *Molluscan Research* (MR).
- As of 28 November 2017, 572 members on our Facebook page (up from 464 in 2016, 380 in 2015, 263 in 2014 and 116 in 2013).
- Developing a relationship with our sister society, the Society for the Study of Molluscan Diversity (SSMD). A link to their website is now available on page 2 of our MSA newsletter.
- Reaching 50 posts to celebrate 60 years of MSA.

The main challenges this year were settling-in a largely new executive, keeping up with our lofty goals of a weekly post for MSAturns60, transitioning to a new management system for MR and as always navigating into those Skype meetings. We had fewer applicants for grants and awards this year, so will need to ensure our call for our societal opportunities are well advertised.

The upcoming year will see the MSA focus on our main priority, which is preparation for *Molluscs 2018* in New Zealand and supporting the local organizing committee led by MSA Vice President Simon Hills. We will also distil and evaluate our recent social media campaign and formally begin the process of updating our Constitution, more easily achieved with our stable and settled executive.

I am especially grateful for the commitment, support and enthusiasm of the MSA Council members, all of whom volunteer their time to ensure the Society shines. We could not have a Society without your dedication and the tasks that you collectively perform are critical to the continued existence of the MSA. I'd like to thank our Newsletter Editor, Platon Vafiadis for his work in teasing out stories for the MSA, ensuring a pleasing format and to the wider society for contributions to the newsletter. Thank you to Don Colgan, our tireless journal editor for working through our transition to a new

editorial system with Taylor and Francis and identifying key issues that require discussion. Rachel Przeslawski, our Website Administrator, has kept our online presence current and organized, and the indefatigable Carmel McDougall, our Treasurer, has streamlined our accounting and balanced the books. A thank you to Matt Nimbs for ensuring our members are happy and Kara Layton for her organizational acumen (and the ability to make meetings from anywhere in the world!).

An extra that we trialled, and are continuing to trial this year, has been a targeted social media campaign, realised through the MSA homepage and via our MSA Facebook page. This initiative was formulated to celebrate 60 years of MSA through short posts featuring work, people and achievements that weave molluscs, the region and the society together. Thank you to all contributors and the team that has managed the program - Rachel and Carmel.

Although there were many highlights in 2017, there were some low lights this year. We lost two significant figures in malacology and conservation, Barry Wilson and Don McMichael, and their passing was noted in our publications and media. Thank you to all who contributed to their recognition and memory- it is so important to remember we stand on the shoulders of giants and that it is the people working together that further our understanding of our molluscan world.

I appreciate all council, especially those that have stepped down into different roles but have not stepped out - you have been absolutely critical to a seamless transition to a largely new executive this year. While I do appreciate that so many very busy people make time for the MSA, I would like to see attendance at council meetings in 2018 improved. This is most important as we gear up for our triennial MSA conference- we will need all hands on deck to ensure a focussed, organized and fun experience. With that, I look forward to seeing all of you in the New Year in New Zealand!

Thank you all



Lisa Kirkendale, MSA President

(Editor's note: The Treasurer's Report for 2017 will be accessible to members through the MSA website).

(Continued from page 1) The majority of animals were found aggregating, in groups of up to 8-10 individuals, at the base of the fronds (Fig. 2A), with evidence of mating

and egg laying. Other sea slugs which were encountered, but in much lower abundance, included an undescribed species of *Gymnodoris* (Fig. 2B), *Elysia*



Figure 2 (opposite page). A. Aggregation of *S. aureomarginatus* at the base of a *Codium* frond; B. An undescribed species of *Gymnodoris* nudibranch, searching for sea slug prey (approximate crawl length 50 mm); C. *Elysia maoria* (approximate crawl length 15mm); D. *Placida cremoniana* (approximate crawl length 15mm); E. *Stiliger ornatus* (approximate crawl length 12mm). Photographs: S. Smith.

maoria Powell, 1937 (Fig. 2C), and single specimens of *Placida cremoniana* (Trinchese, 1892) (Fig. 2D) and *Stiliger ornatus* Ehrenberg, 1828 (Fig. 2E).

These observations are interesting because they: i) document a population explosion in a species that is usually uncommon locally; ii) provide only the second observation of the tropical *Stiliger ornatus* within the region (Nimbs and Smith 2017); and iii) anecdotally identify the likely food-source of an uncommon, and undescribed, species of *Gymnodoris*. Ongoing observations are attempting to describe distribution patterns and monitor population abundance to quantify various aspects of the “boom” event.

Acknowledgements:

Thanks to Dr Alan Millar for identifying the *Codium* host to species level and to my dive buddies Ian Shaw and Bob Edgar.

Reference:

Nimbs, M.J. and Smith, S.D.A. (2017). An illustrated inventory of the seas slugs (Gastropoda: Heterobranchia) of New South Wales, Australia. *Proceedings of the Royal Society of Victoria*. 128(2) 44-113 (open access at <http://www.publish.csiro.au/rs/pdf/rs16011>).

2016 MSA Molluscan Research Achievement Award

Carmel McDougall

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The Molluscan Research achievement award is given annually to the best paper published in our journal by early-career or amateur malacologists. Congratulations to Omar Hernando Avila-Poveda who won the 2016 award for his contribution to the paper 'Reproductive traits of *Octopus maya* (Cephalopoda: Octopoda) with implications for fisheries management', based on his Honors PhD (Honorific Mention, PhD, Universidad del Mar, Oaxaca, Mexico. 2014). The full reference to this paper is:

Avila-Poveda OH, Koueta N, Benítez-Villalobos F, Santos-Valencia J, Rosas C (2016) Reproductive traits of *Octopus maya* (Cephalopoda: Octopoda) with implications for fisheries management. *Molluscan Research*, 36: 29-44. (Available at: <http://dx.doi.org/10.1080/13235818.2015.1072912>)

COMMENTS FROM OMAR HERNANDO AVILA-POVEDA:

Where was the study undertaken?

This study was part of my PhD and was carried out in two institutions and two beautiful places: First in the National Autonomous University of Mexico (UNAM) with facilities located in Sisal, Yucatan, Mexico, where field and laboratory activities were conducted, and the second in Universidad del Mar (UMAR) at Puerto Angel, Oaxaca, Mexico, where the writing and laboratory activities took place.



A working day in the octopus group, 2006. (Photo courtesy of Omar Hernando Avila-Poveda)

Was it part of a higher research degree?

I entered the ‘octopus culture working group’ as a PhD student doing research on different aspects of reproductive and ecological biology of various species of molluscs and fish. The work in the octopus culture group and in particular in the project "Development of biotechnology and transfer for the commercial production of the *Octopus maya* from Yucatan Peninsula, CONACYT No. 24743", allowed me to open a line of research in the area of octopus reproduction that is ongoing and has led to research of other octopus species.

What did you enjoy about the work?

I greatly enjoy expanding the frontiers of knowledge and multidisciplinary work. This knowledge I currently apply now as a researcher. I enjoyed sharing research topics with friends and now colleagues. I currently enjoy returning to Sisal and Puerto Angel to share my research with these colleagues and to catch up with old friends.

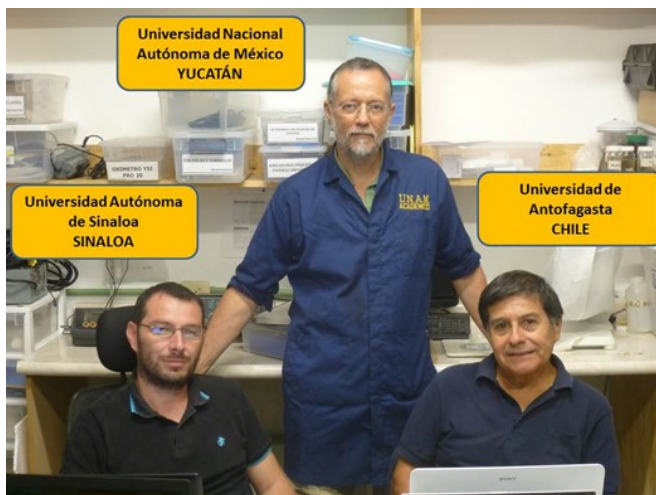
What was the most challenging part?

Well, according to Winston Churchill, I can say that I am always an optimist: "The pessimist sees difficulty in every opportunity. The optimist sees the opportunity in every difficulty". The most challenging part was administrative. Our research team found that reproductive processes and their assessment in cephalopods were very different to those known from other organisms (for example, vertebrates). However, these findings were questioned by university academics from other departments, leading towards the loss of my fellowship just before my thesis was completed. Consequently, I had to look for other sources of funding to be able to conclude the studies. For that reason, I think I'm a survivor of the "biological discrepancies" in cephalopod research in Mexico.

What are you doing now and what do you hope to do in the future?

I am currently (from 2014) a Research Professor, CATEDRÁTICO of CONACyT, commissioned to the Faculty of Marine Sciences (FACIMAR) of the Autonomous University of Sinaloa (UAS). I am a member of the National System of Researchers (SNI) as a National Researcher Level I, and a member of the Sinaloan System of Researchers and Technologists (INAPI).

My research line is focused on the reproductive biology and ecology of marine invertebrates, especially molluscs



Recently (2016), we have continuous collaboration: Dr. Alberto Olivares (right), Dr. Carlos Rosas (middle), Omar (left). (Photograph courtesy of Omar Hernando Avila-Povenda).

and echinoderms, and its interactions with environmental factors at various scales. Research questions are addressed using various approaches, from ecological, biological and fisheries standpoints.

Currently, as CATEDRÁTICO-CONACYT in FACIMAR-UAS, I lead the project "Quitón del Pacífico tropical mexicano -- *Chiton articulatus* -(Mollusca: Polyplacophora)" a endemic resource with an artisanal fishery, to evaluate at various scales and provide biological, ecological, reproductive, genetic, anatomical and geometric morphometrics data that provide information to broader conservation issues.

Additionally, I maintain the link and collaboration in research and publications with my two directors, Dr. Carlos Rosas and Dr. Francisco Benitez Villalobos.

Relevant internet links:

<https://www.scopus.com/authid/detail.uri?authorId=15071523200>

<https://orcid.org/0000-0002-4411-0602>

<https://www.researchgate.net/project/Quiton-del-Pacifico-tropical-mexicano--Chiton-articulatus--Mollusca-Polyplacophora>



Recently in laboratory and field work (2015), we have continuous collaboration: Dr. Francisco Benitez (right), Omar (left). (Photograph courtesy of Omar Hernando Avila-Povenda).