SDFSA Newsletter – August 2021

SCUBA DIVERS FEDERATION OF SA, Inc.

Email: <u>info@sdfsa.net</u> or Web: <u>https://sdfsa.net</u> Facebook: https://www.facebook.com/scubadivesa/

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Tragedy at Shelly Beach, Manly.

Photo downloaded from https://hellomanly.com.au/listing/shelly-beach/

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OUR LEAD STORY: Tragedy at Shelly Beach, Manly

We have learned that on Thursday 5 August, Stephen Ho, a well regarded and experienced technical diving instructor was found unconscious in his dive gear in the waters just off Shelly Beach. According to one newspaper report, a free diver spotted Stephen and raised the alarm. The response from people onshore and paramedics was swift and every effort was made to resuscitate him but sadly, Stephen was declared dead at the scene. Cause of death is still to be determined.

Stephen was well known to a number of divers in South Australia who have worked or trained with him in Sydney. Considered to be one of the top instructors in Sydney (with both PADI and GUE instructor certification), he was much loved by all who worked with him. According to Andrew Hunter, "Stephen was one of the most diligent divers I know in the country, and a role-model instructor".

He will be sorely missed by his colleagues at Dive Centre Manly and all who have had the pleasure of diving with him.

IMPORTANT NOTICES

PORT STANVAC BEACH AND COASTLINE CAMPAIGN: SDFSA has been invited to have input into the campaign, being led by Amanda Rishworth MP, to convince the State Government to purchase the land at Port Stanvac from ExxonMobil, to ensure it can be repurposed to provide access to the beach and connection of the coastal trail from Hallett Cove to O'Sullivan Beach. Tony Leggatt, SDFSA President, will represent the SDFSA at meetings. Further information can be found at: https://rishworth.com.au/campaigns/future-of-port-stanvac/.

AIR FILLS AT EDITHBURGH: SDFSA has been in touch with the Edithburgh BP station after hearing a number of concerns raised about the quality of their air fills. We were informed recently that the compressor equipment has been examined by a technician and any problems have been fixed. The owner has requested that people should report problems to the station as soon as possible after a dive so that issues can be addressed quickly.

SDFSA would like to remind divers of the value of encouraging and supporting these local businesses so that they can continue to be of service to all of us.

BOATING SAFETY REMINDER: According to a recent SA Infrastructure & Transport Tweet, "Every boater worth their salt knows it's important to keep on top of the latest boating safety info. Find safety info, a handy lifejacket checker tool, boating tips, regulation updates and more on the Marine Safety SA website. Visit http://marinesafety.sa.gov.au."

ADELAIDE CAMPAIGN TO BECOME A NATIONAL PARK CITY. Dr Sheryn Pitman from Inspiring South Australia has been appointed to the National Parks City Foundation team. She will lead Adelaide's bid to become just the second National Park City in the world, after London. A National Park City is a "large urban area that is managed and semi-protected to enhance the natural capital of its living landscape". Let's all follow this campaign to ensure that the beauty of Adelaide's coastal communities and marine protected areas are considered in the nomination and international promotion of Adelaide.

SDESA COMMITTEE BUSINESS

We are holding another **Bunnings Sausage Sizzle Fundraiser this Saturday 14 August** at the Edwardstown Bunnings. Drop by to say hello and grab a snag. The sausage sizzles have been a great way for the SDFSA to raise funds so we can continue to support the SA diving community. Hope to see you there! And many thanks to Bunnings for their support!

The SDFSA AGM has been rescheduled to Wednesday, 25 August, 7pm at the Arab Steed Hotel (first floor meeting room – enter via the stairs at the back of the bistro), 241 Hutt Street (corner of Hutt & Gilles Streets), Adelaide. All members are welcome to attend. Due to COVID restrictions please RSVP if you will be attending, by emailing Helena Wescombe-Down at info@sdfsa.net.

To nominate yourself or another member to join the governing committee, please send in the form at the end of this newsletter. If you or your dive buddies have not yet joined the SDFSA, it is free and only takes a minute: Sign up at https://sdfsa.net/membership-2/membership-form/.

Alex Suslin has joined Steve Reynolds as a regular contributor to the SDFSA Newsletter. He will be writing a column on dive equipment and SA diving history. His first column on the humble purge button appears on page 5, below. Many thanks to Steve and Alex for their creative writing and the occasional bad pun!

CONGRATULATIONS TO ...

Dr Peri Coleman of Delta Environmental Consulting on being awarded the Conservation Council of SA's 2021 Jill Hudson Award for her battle to save the St Kilda mangroves.

Alan Noble from AusOcean on recently being awarded a certificate of achievement for his contribution to technology and education by His Excellency the Governor and Mrs Le at the UNESCO Clubs Adelaide Chapter Awards at Government House.

Experiencing Marine Sanctuaries' Chloe Williams, on her new role at ABC Radio Adelaide as "Resident diver guest", following her on-air talk with Peter Goers about diving, marine life, fishing, shark and ray abuse, leafy seadragons and more. Chloe says that she will be "talking about all things in the Big Blue".

Allan Bartlett on being awarded his second consecutive PADI Frequent Trainer Silver award. Allan has opened a WhatsApp page for people with professional questions about diving or diving education. It is called the IDC Information Page.

Downunderpix's Paul Macdonald & Elizabeth Solich on having their little rod-less anglerfishes that they have been finding at Edithburgh confirmed as being a new species that has been given the name Narungga Frogfish, *Histiophryne narungga*. See http://mlssa.org.au/2021/07/13/rod-less-anglerfish-from-edithburgh-confirmed-as-being-a-new-species/ for details. Paul and Elizabeth have an exhibition of their work on display at the Adelaide Aquatic Centre as part of SALA — the South Australian Living Artists Festival.

Flinders University Maritime Archaeology, which has acquired a new boat for scientific diving and marine geophysical surveys. The new boat is called "Bungaree" in honour of the man who was a key part of Matthew Flinders' exploration party that circumnavigated Australia from 1802 to 1803.

Marine Life Society of South Australia founder and life member, Tony Isaacson on making the finals in the Eco-Hero Category of the 2021 Underwater Tour awards. The complete list of winners can be found at https://underwatertourawards.com.au/2021-guru-award-winners/.)

The 2021 AMSA (Australian Marine Sciences Association) Award Winners:

- 2021 Jubilee Award Professor Mike Kingsford, College of Science and Engineering and the ARC Centre of Excellence for Coral Reef Studies, James Cook University, for his significant and novel contributions to larval fish ecology, biogeography, and connectivity in Australian and New Zealand waters.
- 2021 Emerging Leader in Marine Science Dr Jennifer Donelson from James Cook University for her transformative research on transgenerational plasticity in fishes combined with her service and leadership to the marine science community.
- 2021 Technical Award Joshua Aldridge from the University of Technology Sydney (UTS) for his years of service leading and supporting a range of projects related to the maintenance and repair of seawater systems and field equipment at UTS, Macquarie University and the Sydney Institute of Marine Science (SIMS).

2021 EVENTS

South Australia

14 August 2021: SDFSA Bunnings Sausage Sizzle! Edwardstown. Come and support your Committee, and have a tasty snag at the same time.

25 August 2021: SDFSA AGM, 7pm, Arab Steed Hotel. RSVP info@sdfsa.net.

27 August, 2021: Scuba in the Pub, Rob Roy Hotel. The event will be catered, thanks to a grant from National Science Week. Tickets available on Eventbrite.

20-24 September 2021: World Fisheries Congress, to be held in Adelaide – https://wfc2020.com.au/. This is the largest gathering of the global fisheries community.

19, 20, 21 November: Science Alive at the Adelaide Showgrounds! SDFSA will be there, in partnership with Experiencing Marine Sanctuaries.

Interstate/International

Australian International Dive Expo - AIDE 2021—postponed to 2022. See www.australiadiveexpo.com .

OZTECK Conference and OZDIVE Expo 21 – Postponed to 1-2 Oct, 2022. Visit https://OZTek.com.au and https://OZDive.net.au for more details.

NEW: DIVE GEAR REPORT ... and a bit of SA diving history

By Alex Suslin

SPARE A THOUGHT FOR THE HUMBLE PURGE BUTTON

Most of us take the purge button for granted. Press it a couple of times before diving to blow out any resident redbacks or cockroaches & to reassure ourselves that there's air & everything works. Then press it again after turning the cylinder valve off after the dive, so we can remove our regs from the tank. Some – the vast minority - use it when diving to clear the water from their occy when giving that a try to make sure it still works. And in a serious out-of-air situation, when a diver hasn't enough air to clear the water from his life-saving buddy's occy, it's reassuring to know, that pressing that purge button will do it, instantaneously & effortlessly.

It was not always so. The double hose regulators that "brought scuba diving to the masses" had no need for one & so the second stages on the early single hose sets didn't have one either.

Enter three South Australian scuba pioneers, Felice & Don Cooper & their dive buddy, Bruce Thompson. On a dive back in '59 – yes, 62 years ago – Felice's Porpoise 2nd stage fell apart when she was 10 meters under. No occies then – nor bcds, for that matter, so it was buddy breathing to the surface, then off to the shed to come up with a better designed clamp.



While the intrepid trio were at it, they decided on punching a hole through the front cover plate, big enough to put a finger through & operate the diaphragm/fulcrum lever to get a free-flow, when needed. The obvious more elegant solution came next. A rubber knob, glued to the diaphragm & protruding through the cover plate. History does not record, whether that was inspired by someone's pinkie getting stuck!

At some later stage, when diving with their modified regs at Port Noarlunga, the three of them were confronted by some "Australian Divers" aquanauts, who pointed to the 2nd stages & demanded, "what the..." Australian Divers happened to be the mob who sold Porpoise regulators.

The purge button was introduced to all 2nd stages in 1964 but it was three South Australian divers who came up with it in 1959.

Thanks to Historical Diving Society President & SDF founding member, Christopher Deane for this information.

STEVE'S SCIENCE STORIES for the month

By Steve Reynolds

SCIENTIFIC NAME CHANGED AFTER 205 YEARS

by Steve Reynolds

Are you like me in that you wonder why the scientific name of a species may suddenly change? I found one explanation at https://www.reef2rainforest.com/2021/05/15/rip-premnas-1816-2021/. The (tropical) Maroon Clownfish has now changed from *Premnas biaculeatus* to *Amphiprion biaculeatus*. (Note at this point that only the first part of the name has changed, just the genus name and not the species name.) It seems that the Maroon Clownfish has had the original name since 1816 (205 years). So why the sudden change? It is all due to "A recent, expansive phylogenetic analysis of the damselfishes". According to the study, https://www.reef2rainforest.com/2021/05/15/rip-premnas-1816-2021/.

Because genera (genus names) are either male or female, if a genus changes from say female to male, the species name must also follow suit, and be male. In the case of *Amphiprion biaculeatus*, however, "Both genera (*Premnas* and *Amphiprion*) are masculine in gender, so the species name remains unchanged in the new combination as *Amphiprion biaculeatus*".

Zoologist Dr. Ben Titus explained that "The most recent phylogenies show that biaculeatus, ocellaris, and percula form a small clade sister to the rest of the clownfishes. With the old taxonomy that makes Amphiprion a paraphyletic genus. If one of the primary goals of taxonomy and systematics is to circumscribe groups, then this is an important change."

Further research could result in further changes, or even see the name resorting back to the original.

I also read recently that the common names for two invasive pests in the US, *Lymantria dispar* (a moth) and *Aphaenogaster araneoides* (an ant), are being changed now because their previous common names have been claimed to be offensive and inappropriate.

'BOTTOM TIME' COULD HAVE A NEW MEANING FOR TOMORROW'S DIVERS by Steve Reynolds

Scuba diving as we know it today could change dramatically in the future if scientists are able to progress work on getting mammals to breathe via the anus. The Sunday Mail of 16th May 2021 reported that Japanese scientists have shown that mammals may be able to 'absorb' oxygen through their anus. They may have been inspired by sea cucumbers, which can use their intestines for respiration.

According to "Mammals Can Breathe Through Their Intestines, Unsettling Experiment Finds" at https://gizmodo.com/mammals-can-breathe-through-their-intestines-unsettlin-1846895252, "mammals are also capable of respirating through their rectal cavity, at least in a lab setting".

The team's research was published in the journal Med on 14th May 2021. The paper is titled "Mammalian enteral ventilation ameliorates respiratory failure" (Takebe, T., Okabe, R., et al).

It describes the capacity for mammals such as mice and pigs to survive in low-oxygen circumstances when given oxygen (or an oxygen-rich liquid) through their rectums. Mice were given both the gas and liquid oxygen delivery methods, while rats and pigs only received a liquid treatment. Whilst some fish are able to use a similar method, there is no evidence of such an evolutionary adaptation

for mammals. Mammalian bodies are unable to do this naturally, but it becomes possible with the assistance of modern science.

Although previous research has been carried out with oxygen being injected directly into the bloodstreams of mammals, prolonging their lives, this rectal approach is novel. The experiment was initially "designed to find new ways to save the lives of people whose lungs are failing". Takanori Takebe, lead author of the paper said in a press release, "Artificial respiratory support plays a vital role in the clinical management of respiratory failure due to severe illnesses such as pneumonia or acute respiratory distress syndrome. Although the side effects and safety need to be thoroughly evaluated in humans, our approach may offer a new paradigm to support critically ill patients with respiratory failure."

Because the researchers don't expect the gas ventilation method to be clinically feasible in humans, they used "an oxygenated perfluorochemical that is safe in humans and can similarly transport oxygen into the bloodstream".

COVID-19 has reminded us of the limits of current respiratory technologies. It has been suggested that enteral ventilation via the anus is a "promising therapy deserving scientific and medical interest". There was a shortage of ventilators for COVID-19 patients during the pandemic. It is thought that "An alternate mode of delivering oxygen to critically ill patients could be live-saving if it gives doctors enough time to address the cause of a person's respiratory failure".

ABOUT THE SDFSA...

SDFSA is a non-profit, incorporated membership association dedicated to the preservation and enjoyment of our unique underwater world.

JOIN US FOR FREE:

https://sdfsa.net/membership-categories/

The more members we have, the stronger our influence. We serve as a peak body representing the interests of South Australian recreational scuba divers and the related sports of freediving and snorkelling, including the provision of information to government and the general public.

Together we can have real impact on the issues affecting the South Australian diving community.

If you wish to be added to the mailing list for this Newsletter, join the SDFSA!

SCUBA DIVERS FEDERATION OF SA Inc.

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Disclaimer

The opinions expressed by authors of material in this newsletter are not necessarily those of the Federation

Scuba Divers Federation of SA Inc.

2021-22 SDFSA Committee Nomination Form ABN 68 760 819 404

Email: info@sdfsa.net



Nomination for the Scuba Divers Federation of SA (SDFSA) Committee – 2021-2022

Nominations are now open for the following SDFSA Committee positions to be appointed at the upcoming Annual General Meeting (AGM) to be held on Wednesday 28th July 2021:

- President
- Vice President
- Secretary
- Treasurer
- Committee Position (several positions available)

One form is required for each nomination.

I,	_
affiliated club member, namely	(Club – if
applicable), do hereby nominate the following person formonth period:	or a position on the SDFSA Committee for a 12
Name	
for the position of	
Signed	Date / 2021
My nomination is seconded by: Name current SDFSA individual or club member), namely	
Signed	Date / 2021
I,, nominated a position on the SDFSA Committee for a 12 month perio	
Signed	Date / 2021

Completed nomination forms can be returned via email to <u>info@sdfsa.net</u> and will also be accepted at the AGM.

Dedicated to the preservation of our underwater world