SDFSA Newsletter – July/August 2023

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SCUBA DIVERS FEDERATION OF SA, Inc.

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SDFSA Patron: Dr. Richard Harris



The Rodney Fox in dry dock for some refurbishing. Photo courtesy of H.Petty/A.Suslin

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REVIVING COFFIN BAY'S LOST OYSTER REEFS

Coffin Bay Scuba reports a new Citizen Project to engage community members and divers to assist with reviving the oyster reefs along their stretch of South Australia's coastline. According to CBS, "This project has received the [Department of Environment and Water] DEW's "Environmental Citizen Science Small Grant", and will be taking place over the next 3 years".

The project will begin with a community information and consultation event on Monday, 11 September. "For anyone in the Coffin Bay area, we are hosting a free event available to anyone who would like to get involved. Space is limited, online registration is required! For those not able to attend, we will post a recording of the event on our website. The event consists of presentations from Lower Eyre Coastcare, Coffin Bay Scuba Co., and SA's leading oyster reef researcher Dr. Dominic Mcafee." Dr. Mcafee and



colleagues are finalists for the SA Science Excellence and Innovation Awards for their science to revive lost oyster reefs [the winners to be announced in November]. See under Steve's Science Stories below for more on their work! The inaugural event for the project will be held at the Coffin Bay Yacht Club, starting at 7pm, with refreshments available.

Online registration can be found here: Eventbrite

Photo: The Nature Conservancy, https://www.nature.org/en-us/about-us/where-we-work/asia-pacific/australia/stories-in-australia/restoring-australias-lost-shellfish-reefs/

GLOBAL PLASTICS TREATY

We've all seen it: plastic bags and containers floating on the ocean surface, snagged on jetties and washed up on shore. And we've seen photos of turtles and other marine creatures with their heads caught in plastic drink can holders. While we can't see it, we are also learning more and more about micro plastics now showing up in the food chain, including in the seafood we consume. We were all saddened by the news story last year about Flinders University researchers finding evidence of microplastics in our own South Australian seafood: https://www.9news.com.au/national/plastic-pollution-microplastics-found-in-popular-seafood-across-south-australia/edb1a9e1-40ca-4c79-8e1c-69d2155ff622.

But there is work underway to stop this environmental degradation. In 2022, 180 nations agreed to begin work on an international convention to address plastics pollution, including plastics in the marine environment. This will be a legally binding instrument to address "the full life cycle of plastic, including its production, design and disposal". The third session of the International Negotiating Committee (INC-3) will be held 13 to 19 November 2023 at the United Nations Environment Programme (UNEP) Headquarters in Nairobi, Kenya. UNEP hosts the official website for the Treaty:

https://www.unep.org/inc-plastic-

pollution#:~:text=The%20first%20session%20of%20the,UNEP%20Headquarters%20in%20Nairobi%2C%2 <u>OKenya</u>. For progress on the negotiations, including roadblocks and compromises, consult IISD's Earth Negotiations Bulletin coverage at https://enb.iisd.org/negotiations/international-legally-binding-instrument-plastics-pollution-including-marine. Petitions to encourage governments to come to agreement can be signed at Greenpeace: https://www.greenpeace.org.au/what-we-do/end-plastic/.

IMPORTANT NOTICES

SOUTH AUSTRALIAN ANNUAL ROCK LOBSTER SEASON CLOSURE: PIRSA advises that the South Australian annual Rock Lobster season closure in the Northern Zone continues until 12noon on 1st November. You must not take Rock Lobster from the northern zone (west from longitude 139°0'4.80" to the Western Australian border) during this period. The Southern zone seasonal closure reopens on 1st October. The southern zone extends east from longitude 139°0'4.80" to the Victorian border.

PICCANINNIE PONDS IS STILL CLOSED UNTIL FURTHER NOTICE: Piccaninnie Ponds is closed to the public for water-based activities until further notice. It is best that you check the current situation before making any plans to visit the ponds.

JETTY UPDATES

- Port Noarlunga jetty middle steps are (at the time of writing) still closed for repairs. The Department
 of Infrastructure & Transport advised that the broken steps, ladder & platform on the middle steps
 were taken away for repairs.
- The Second Valley jetty is reportedly open again following recent storm damage.
- Port Victoria jetty ramp has been fixed and reopened.
- Rapid Bay jetty: We will keep you updated via our SA Dive Sites Viz & Conditions Facebook group as more information becomes available.

SDFSA COMMITTEE BUSINESS

Thanks to everyone who attended the 2022-23 Annual General Meeting. The 2022-23 report on progress on the Federation's Strategic Plan 2020-2025 is now available on the website at https://sdfsa.net/wp-content/uploads/2023/08/sdfsa-strategic-plan-annual-report-2022-23.pdf. We are pleased to announce the 2023-24 SDFSA governing Committee:

President: Tony Leggatt

Vice President: Alex Suslin

Secretary: Helena Wescombe-Down

Treasurer: Farzad Atefi

Committee members: Sue Booth; Andy Burnell; Merv Brash; Lauren Cameo; Kerry Cook; Peter Corrigan; Heather Creech (Communications); Max Jansen; Sara Leggatt (Membership); Heather Petty; Nelson van Westrienen.

Our next meeting is Wednesday 23 August at the Arab Steed Hotel, 7pm in the upstairs meeting room.

NEWS FROM SHOPS AND CLUBS

DownunderPix is running an Introduction to Underwater Photography session at the **Rodney Fox Shark Museum and Learning Centre**, Wednesday 23 August at 6pm. \$20 cover charge. The event is being held as part of The Underwater World SALA Art and Underwater Photography Exhibition. For details, see https://facebook.com/events/s/introduction-to-underwater-pho/2296344447236029/

CONGRATULATIONS TO ...

- Chelsea Haebich (32° South) for her front cover and 9 page story in ScubaDiver ANZ on South Australia's spectacular underwater world. She hopes to post the full article soon; see www.32south.com.au for more of her work.
- Diana Fernie on the publication of her article in Nature TTL on the best diving in South Australia for underwater photographers. Her story is published at https://www.naturettl.com/diving-south-australia/.
- Chloe Williams on being made a Scubapro ambassador, joining other ambassadors-such as Dr Sylvia Earl and Dr Richard Harris.
- Brad Martin, Flinders University researcher, on finding the Hercules club mud welk in the Port River, a species that had disappeared from these waters 10,000 years ago. According to Mr. Martin, the welk represents a new species in the Port River, most likely introduced through shipping ballast water. For the full story, see https://www.abc.net.au/news/2023-07-24/hercules-welk-discovered-in-adelaide-port-river/102616322.
- iNaturalist on reaching 500,000 "verifiable observations uploaded in South Australia" on the 15th of June 2023.
- Dr Lisa-ann Gershwin on the publication of her latest jellyfish book titled "Shapeshifters The Wonderous World of Jellyfish".
- Nina Wootton (Dr Nina Marina) on being made a Science & Technology Australia STEM ambassador.
- Professor Sean Connell, Ms Sandy Carruthers, Dr Dominic McAfee, Ms Anita Nedoskyo and Mr Alan Noble (The University of Adelaide) on being a finalist for the SA Science Excellence and Innovation Awards by the Department for Industry, Innovation and Science for their science to revive lost oyster reefs. The award winners will be announced on 17thNovember 2023. See details in our Science Stories below.

SHIPPING NEWS

By Alex Suslin

Looks like there's a new wreck dive in SA!

Port Lincoln Dive Shop owner, Leo Stewart, has advised that the "Almonta", a wooden fishing vessel built in Queensland in 1966, will almost certainly not be salvaged. The boat, which was not operational, sank a year ago at its mooring at Snooks Landing. It's an easy shore dive, with its mast out of the water. Leo adds that it's already become home to a variety of fish & he hopes to have a clean up to make it safe for divers. Googling "Almonta" will take you to an ABC article of 14 Feb 23, with several pictures to give you an idea of her size.

If you do plan to dive it before it's "official", contact the Dive Shop first to ensure there are no restrictions & get the latest advice on local conditions.

Taking time off from shark cage diving expeditions, the "Rodney Fox" is on the slipway in Port Adelaide for a paint job, new desal plant & according to owner Mark Tozer, several more pages of "things to do," which will keep her there the whole month. If you can't get to the Port, check Mark's Facebook posts for the latest.

Meanwhile, the real Rodney Fox was at the opening of Elizabeth Solich's SALA exhibition, 72 Works, at the Shark Museum.

STEVE'S SCIENCE STORIES for the month

By Steve Reynolds

THE USE OF RED ALGAE FOR DAIRY FARMS

One year or so ago, I wrote a few articles about the farming of red algae for agricultural use. Those articles can be found listed at http://mlssa.org.au/category/algae/. The original main focus of my articles concerned the production of red algae for feeding to cattle in order to reduce their methane levels. I now see that some people are tackling the issue from the opposite direction. They are adding a red alga to dairy cow faeces in order to "reduce the greenhouse gas emissions from their manure". International researchers are referring to a tropical red alga as "red sea plume". They found that the alga mixed with cow manure reduced methane production by 44%. They suggest that this method may be better than adding the alga to cow feed because it can increase iodine levels in cow's milk. The cow manure itself is estimated to create about 12% of the total of methane emissions from the dairy system in 'cool-climate Europe'.

Meanwhile, I receive occasional newsletters from Brad and Chloe Darkson, the founders and operators of Moonrise Seaweed Co. It is a family business with a mission to regeneratively farm native seaweeds. They have a website with a blog. The website address is https://moonriseseaweed.farm/. I wrote an article about them at https://mlssa.org.au/2022/02/02/more-seaweed-farming/.

MIXED SQUID/CUTTLEFISH INTERACTION

Australian Ocean Laboratories (AusOcean) recently reported details of squid apparently trying to mate with cuttlefish at Stony Point, Whyalla. "Has anyone seen an interaction with squid/cuttlefish like this before?" they asked. "Is the squid trying to mate with the cuttlefish?". The full YouTube footage can be seen at

 $\frac{https://www.youtube.com/clip/Ugkxemtbhd6Jt7gxhUjklZVBXio3kngnnQPi?fbclid=lwAR3Buz30oI3GTdd}{WQiiNrU17sqx2fhedUnkfmDMk3c8qpXGOwgcNWr2KJLI}.$

SA SCIENCE EXCELLENCE AND INNOVATION AWARDS: OYSTER REEF RESEARCH FINALISTS

As reported above, the research team of Professor Sean Connell, Ms Sandy Carruthers, Dr Dominic McAfee, Ms Anita Nedoskyo and Mr Alan Noble (The University of Adelaide) are finalists for the SA Science Excellence and Innovation Awards by the Department for Industry, Innovation and Science for their research to revive lost oyster reefs.

"Oyster reefs once carpeted our gulfs to provide food and shelter for fish and clean the coastal waters with their filter feeding but had been dredged to extinction. Drawing on knowledge from marine biologists and marine engineers that baby oysters can hear underwater sounds and use them to navigate, the team played underwater music that is attractive to baby oysters and provided them with highways of sound to navigate to reefs being built for them. Part of this work involved building homemade speakers to play the most attractive sounds for oysters, so that the oysters can rebuild their reefs far quicker than nature would normally allow. This journey created a eureka moment in science with the discovery that marine life can be so fundamentally influenced by sound that their entire life cycles can depend on the natural production of healthy soundscapes."

According to https://www.scienceawards.sa.gov.au/, "This collaboration between The University of Adelaide, conservation organisations and the government has revived an extinct ecosystem to restore fish production and water quality for the enjoyment of people, and to provide economic opportunities. The SA Science Excellence and Innovation Awards showcases the critical importance of science, research and innovation to the development of industry and society as a whole. The Awards provide a remarkable opportunity to recognise the work of inspiring Science, Technology, Engineering, Mathematics and Medicine (STEMM) leaders and teams working in research and education institutions, schools, industry and the community.

"The Awards are a significant occasion in South Australia's science calendar and are recognised as the premier science showcase event highlighting the diversity of scientific endeavour and research in this State. The South Australian Scientist of the Year and the South Australian Innovator of the year will receive a prize to the value of \$25,000. The winners of the remaining categories will receive a prize to the value of \$10,000 to use towards their career development. All winners receive a trophy designed and produced by the Jam Factory and recognised as ambassadors of science at the state level."

The winners of the awards will be announced on 17th November 2023.

LIZARD ISLAND REEF RESEARCH FOUNDATION

LIRRF supports scientific research and education at the Australian Museum's Lizard Island Research Station. The Station is celebrating 50 years of operation on the northern Great Barrier Reef.

The Foundation recently announced a number of post doctoral fellowship awards for coral research to take place at the Station. These include: Dr Michelle Achlatis (University of Amsterdam, Netherlands) working on Nutrient sharing between photosynthetic symbionts and their sponge host: implications for coral reef productivity across oceans; Dr Amanda Pettersen (The University of Sydney), Investigating the metabolic ecology of CoTS (crown-of-thorns seastar) larvae; Nina Schiettekatte (University of Hawaii at Manoa), Linking structural complexity with biodiversity and ecosystem functions, and Alexandre Siqueira (James Cook University), studying The evolution of a critical ecosystem function for the future of coral reefs. Doctoral fellowships also awarded include: Casey Bowden (James Cook University), studying Water flow ecology: How reef structure and water flow shape the world of fishes; Abigail Shaughnessy (University of Queensland), studying Colour vision plasticity of coral reef fish in a changing world; Juan Carlos Azofeifa Solano (Curtin University, WA), Decoding coral reef soundscapes of Lizard Island; and Devynn Wulstein (University of Hawaii at Manoa) exploring Self-thinning in coral assemblages as they recover from disturbance. For details on their research, go to https://lirrf.org/fellowships-awarded-2023/.

FOR YOUR CALENDAR: FORTHCOMING EVENTS

South Australia

23 August 2023: Underwater Photography session at the Rodney Fox Shark Museum and Learning Centre, Wednesday 23 August at 6pm. \$20 cover charge.

Until 27th August: The Rodney Fox Shark Museum and Learning Centre is participating in the South Australian Living Artists Festival. This year, the exhibition "Underwater World" by Elizabeth Solich and Paul Macdonald will be on display at the Learning Centre. The museum will be open Monday to Friday, 9am-5pm during the month of August (exc. 3/8). There will be guided tours every Tuesday and Thursday (10am-2pm). (The museum is closed to the public on the 3rd August.)

2 September 2023: The Women's Adventure Film Tour event is being held on Saturday 2nd September at 7pm at The Regal Theatre. This 7th season of the Women's Adventure Film Tour features "7 new short films celebrating the awe-inspiring women who fearlessly push boundaries in the world of adventure. You won't want to miss "Making It," an Australian film following the journeys of pro surfer India Robinson [and others] as they chase their dreams with unyielding determination. Ticket link https://www.eventbrite.com.au/e/womens-adventure-film-tour-2324-presented-by-mountain-designs-adelaide-tickets-663373737707

2nd to 10th September: Royal Adelaide Show 2023

11 September 2023: Reviving Coffin Bay's Lost Oyster Reefs: Community consultation and information session. Coffin Bay Yacht Club, 7pm. Tickets on Eventbrite.

- **28 September 2023:** The Mountainfilm on Tour event is being held on Thursday 28th September at 7pm at The Regal Theatre | Ticket link https://www.eventbrite.com.au/e/mountainfilm-on-tour-2023-presented-by-osprey-adelaide-tickets-675634369587?aff=oddtdtcreator
- **7-8 October 2023: The Edithburgh Jetty's 150th Anniversary** will be celebrated. There will be multiple events, including a period costume ball at the Edithburgh Institute on the Saturday night, historic vehicles, presentations on the history of the Edithburgh jetty, a historical diving display and possibly demonstrations and much, much more.
- **7-14 October 2023:** The <u>Australian Masters Games</u> are being held in Adelaide. There will be <u>finswimming</u> events at the Games at the SA Aquatic Centre on 9th October.
- **12 17 November 2023:** Port Lincoln. White Sharks Global White Sharks Global is an international scientific conference aiming to provide an in-person forum for the white shark community to meet, share ideas, update information and report on the progress of recent scientific studies.

Interstate/International

Continuing to 21st August: National Science Week – see www.scienceweek.net.au .

- **13-15th September:** 2023 Joint Conference of the Australasian Institute for Maritime Archaeology (AIMA) and the ICOMOS International Committee on the Underwater Cultural Heritage (ICUCH). The Conference theme is 'Connected by Water' and will be held on in Canberra.
- **1 15th of October**: This year's Nature Festival will be slightly longer, running during the full Spring school holidays.
- **11th October**: The Underwater Tour 2023 is being held at the Bondi Pavilion in Sydney, with guest speakers and the announcement of The Underwater Tour Awards winners for 2023.
- 7-13th November: National Recycling Week www.recyclingweek.planetark.org.
- **18th 25th November:** Deep Week Taiwan is being held on Xiaoliuqiu Island, a small island paradise off the southwestern coast of Taiwan. The island is known for its clear water, amazing coral reefs. For all the details visit https://freedivingfamily.com/deep-week-

taiwan?ss source=sscampaigns&ss campaign id=643e354f6de4ca72918017aa&ss email id=643e5c645 4dfcc67f77f586a&ss campaign name=New+Deep+Weeks+are+here%21&ss campaign sent date=2023 -04-18T09%3A01%3A39Z

18th - 19th November: The First Freediving and Finswimming World Championship for Disabled are being held 18th - 19th Nov 2023 at Lignano Sabbiadoro (Ud) in Italy - https://www.cmas.org/apnoea/1st-freediving-and-finswimming-world-championship-for-disabled. Confédération Mondiale des Activités Subaquatiques (CMAS)* freediving events for the rest of this year can be found at https://www.cmas.org/events.

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!

You can also read about the Federation's work in monthly issues of DiveLog Australasia, Scubadiver ANZ and on our website at https://sdfsa.net. Stay up to date with the latest news through our Facebook page, https://www.facebook.com/scubadivesa/. And follow our FB group, SA Dive Sites VIz and Conditions for current

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