



## SDF News Sheet – September 2017

Monthly newsletter of the  
SCUBA DIVERS FEDERATION OF SA

Contact us via:

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### Sponsored by Mile End Office Furniture

The SDF is the peak body in South Australia,  
We represent all recreational divers in SA.  
We have helped to protect the ocean environment.  
We have been instrumental in preserving jetties, sharks, etc..  
We need your support to continue to serve all divers.

This monthly electronic news sheet is provided as a service to our members. Our monthly newsletters (and any bulletins) can be downloaded from <http://www.sdfsa.net/newsletters.htm>.

**Winter is finally over! Sunday 3<sup>rd</sup> September is Father's Day. Happy Father's Day to all fathers. Monday 2<sup>nd</sup> October is a public holiday for Labour Day, making the end of September a holiday long weekend. The holiday marks the start of the new diving season. Many other events are happening in SA during September – see below: -**

#### THIS MONTH'S EVENTS:

##### NEXT MEETING

Our next meeting is being held at 7pm on Tuesday 26<sup>th</sup> September in Room JS6-13 at Uni SA.

##### FATHER'S DAY

Sunday 3<sup>rd</sup> September is Father's Day. Happy Father's Day to all fathers.

##### BIRD WORKSHOP

BirdLife Australia and Adelaide and Mount Lofty Ranges NRM Board are holding a workshop on Oystercatchers at Largs North on Saturday 2<sup>nd</sup> September – with a field trip along the local beaches. A second event will be held in Goolwa on Sunday 17<sup>th</sup> September – with a field trip along the beach at the Mouth of the Murray. They are also holding a Hooded Plover workshop at Sellicks Beach on Sunday 10<sup>th</sup> September.

##### ROYAL ADELAIDE SHOW

This year's Royal Adelaide Show is from 1<sup>st</sup> to 10<sup>th</sup> September at the Adelaide Showgrounds, Wayville. Visit [www.theshow.com.au](http://www.theshow.com.au) for more details.

##### ROYAL ADELAIDE HOSPITAL

Meanwhile, the Emergency Department at the new Royal Adelaide Hospital will open to the public from 7am on Tuesday 5<sup>th</sup> September. The old hospital will close at the same time.

Visit [www.newrah.sa.gov.au](http://www.newrah.sa.gov.au) for more information, or call 08 7129 0092.

##### NEXT SCUBAR

Our next ScuBAR will be held on Friday 8th September with speakers Dr Richard Harris (Hyperbaric Medicine) and Danny Brock (Marine Parks). The next one after that is being held on Friday 10th November. Andrew Fox (Life in the shark lane) and Simon Bryars (Blue

Devils and Harlequins) will be our two speakers then. All ScuBARs are held at the Rob Roy Hotel.

#### **BIRD WORKSHOPS**

BirdLife Australia and Adelaide and Mount Lofty Ranges NRM Board are holding a Hooded Plover workshop at Sellicks Beach on Sunday 10<sup>th</sup> September. They are also holding a workshop on Oystercatchers in Goolwa on Sunday 17<sup>th</sup> September – with a field trip along the beach at the Mouth of the Murray.

#### **COMMUNITY OPEN WEEKEND ON BOARD EX-HMAS TOBRUK**

On Saturday 16<sup>th</sup> and Sunday 17<sup>th</sup> September, the Queensland Government is hosting a community open weekend on board ex-HMAS Tobruk.

#### **REEF WATCH QUIZ NIGHT**

The next Reef Watch Quiz Night is being held at The Joinery, 111 Franklin St, Adelaide at 7pm on Friday 22<sup>nd</sup> September. Admission is \$15 per person, \$10 concession. Bookings are essential. Contact Steve Leske at [reefwatch@conservationsa.org.au](mailto:reefwatch@conservationsa.org.au).

#### **“CLAIMED BY THE SEA” 2017 AIMA CONFERENCE**

The 2017 Australian Institute for Maritime Archaeology’s conference will be held in Adelaide from 22<sup>nd</sup> to 23<sup>rd</sup> September - see <http://www.aima-underwater.org.au/conference2017/> for more details.

#### **AUSTRALIAN GEOGRAPHIC NATURE PHOTOGRAPHER OF THE YEAR**

An exhibition of the Australian Geographic Nature Photographer of the Year (ANZANG bio-region – Australia, New Zealand, Antarctica and New Guinea) competition finalists will be held at the SA Museum until 24<sup>th</sup> September. Visit

<https://naturephotographeroftheyear.com.au/> for more details.

#### **YORKE PENINSULA FIELD DAYS**

This year’s Yorke Peninsula Field Days are being held at Paskeville 26-28<sup>th</sup> September. The field days are said to be a “Multi-million dollar showcase of the latest innovations in agricultural machinery, products, rural services and technology”. Just be wary of heavy traffic in the Paskeville area over those three days (26-28<sup>th</sup>) in September.

#### **LABOUR DAY HOLIDAY**

Monday 2<sup>nd</sup> October is a public holiday for Labour Day, making the end of September a holiday long weekend. The holiday marks the start of the new diving season.

#### **BIODIVERSITY MONTH**

September is “Biodiversity Month”. According to the web page found at <https://environment.gov.au/biodiversity/biodiversity-month>, Biodiversity Month is held in September each year and aims to promote the importance of protecting, conserving and improving biodiversity both within Australia and across the world. The Australian Government through the Department (of Environment) is committed to protecting Australia’s unique biodiversity. Most of our broad range of programs and initiatives aim to ensure our important environments and habitats are preserved for future generations of Australians to appreciate and enjoy.

#### **2017 CALENDAR DATES FOR SDF EVENTS:**

Further to the above-mentioned meeting (26/9), future meetings for 2017 (usually the fourth Tuesday of each month unless indicated otherwise) 7-9pm in Room JS6-13) are being held:

24/10/17

28/11/17

19/12/17 (3<sup>rd</sup> Tues in December as 4<sup>th</sup> Tues is Boxing Day) – We will probably hold this meeting at the Rob Roy Hotel.

Future ScuBARs (at the Rob Roy Hotel): Friday 8th September – Dr Richard Harris (Hyperbaric Medicine) / Danny Brock (Marine Parks), Friday 10th November – Andrew Fox (Life in the shark lane) / Simon Bryars (Blue Devils and Harlequins).

### **GET ON BOARD EX-HMAS TOBRUK**

On Saturday 16th and Sunday 17th September, the Queensland Government is hosting a community open weekend on board ex-HMAS Tobruk, allowing registered guests to take a guided tour of the main decks and through the bridge of the ship. Minister for National Parks and the Great Barrier Reef, Steven Miles said the open weekend was an opportunity for the community to walk the decks of ship before she is transformed into a world-class dive site and reef. “There has been tremendous public support for the ex-HMAS Tobruk project and demand from members of the public to access the ship before it is scuttled as a dive site,” Mr Miles said. “We are extremely happy to announce that we can open part of ex-HMAS Tobruk to the community.” Member for Bundaberg Leanne Donaldson said the community open weekend would also allow ex-service personnel to be reunited with their ship before she is scuttled in Wide Bay. “It is important that the community and ex-service personnel are part of the journey as we transform this iconic ship into a tourism drawcard,” Ms Donaldson said. “Ensuring safe community access to the ship before it is declared a construction zone is a significant milestone that we have achieved for the project. “This will be a significant piece of tourism infrastructure and important to the region’s tourism industry. Local jobs have been a key consideration at all stages of the transformation works and will continue to be once the wreck is a dive site.” Tourism Minister Kate Jones said the open days will help to attract tourists to the region, fulfilling the project’s promise to boost the local economy. “We always knew securing the ex-HMAS Tobruk would bring dividends to both the Fraser Coast and Bundaberg regions, and since it arrived here last December there has been a stream of visitors coming to the Port to view the vessel,” Ms Jones said. “I am sure this will turn into a flood of visitors over the weekend. “We are expecting the first divers to be on the site in early 2019 when it will become a unique tourism attraction in Queensland, generating significant spending and flow-on economic benefits including jobs to the Fraser Coast and Bundaberg regions, and also the wider Queensland economy. “The transformation of this historic vessel will be a great legacy for the state and those who served on her. “Her first home port was in Brisbane in 1981 and we have always said it is fitting that her last will also be in Queensland.” Register to attend the event at <https://ex-hmastobruk.eventbrite.com.au> .

### **BOATING NEWS**

DPTI have a commenced a consultation process to gauge community opinion on the rules that apply to wearing life jackets when boating – see below. Be wary of seagrass blocking the boat ramps at West Beach at present – see below. The new shellfish reef at Rogues Point, near Ardrossan is now open to boat fishers – see below.

### **SEAGRASS BLOCKING WEST BEACH BOAT RAMP**

Dead seagrass is blocking the boat ramps at West Beach. The facility will remain closed until at least Wednesday 6th September. Strong winds forecast for the coming weekend may even prolong the clean-up. The O'Sullivan Beach and North Haven boat ramps both remain open.

### **PROPOSED CHANGES TO LIFE JACKET RULES - HAVE YOUR SAY!**

DPTI have a commenced a consultation process to gauge community opinion on the rules that apply to wearing life jackets when boating. The changes are being proposed to "..... better align with the requirements for boaters in other states such as NSW and Victoria."

The main changes to the rules are described as follows: -

Power driven vessels:

Lifejackets must be worn by all persons on vessels less than 4.8 metres in length and underway.

Lifejackets must be worn at all times by children under 12 years of age when in an open area of a vessel 4.8 – 12 metres in length and underway.

Lifejackets must be worn by persons over 12 years of age when in an open area of a vessel 4.8 – 12 metres in length and underway at times of heightened risk or as directed by the skipper.

Particular note should be made about the use of the term "underway" which means; any time that the boat is on the water even if the motor is not running. This means that when anchored up on your favourite whiting spot or drift fishing for snapper, you'll have to wear a lifejacket. This issue will be of great interest to the tens of thousands of recreational fishers that own or use a boat on a regular basis and is sure to attract a broad range of opinion.

You can respond to the proposal by taking the on-line survey at

<https://yoursay.sa.gov.au/.../proposed-lifejacket-regul.../about> . Consultation is open until 5.00 pm, Friday 22 September 2017. The SDF needs the support of every diver in South Australia with this issue. If every diver responded to this survey, that would go a long way to getting sense into any possible change.

### **‘SOUTH AUSTRALIAN’ CONTENT IN SEPT DIVE LOG**

‘South Australian’ content in the September issue of Dive Log Australasia magazine includes a photo by Steve Jones, articles by Heather Creech and Steve Reynolds, Christopher Deane’s South Aussie Snippets and our own SDSF news.

### **RECSA NEWS**

Nick Takos recently resigned as Executive Officer of Recreation SA to take time to finish his PhD.

### **GRANTS**

Round 44 for grant applications through the Active Club Program close on 25th September 2017. Visit <http://www.ors.sa.gov.au/funding> or <http://ors.sa.gov.au/funding?a=144983> for details.

### **AUSTRALASIAN FISHES, A CITIZEN SCIENCE PROJECT**

The Australian Museum launched a citizen science project called Australasian Fishes in October 2016. The project is fuelled by interested individuals “who share a passion for nature and a willingness to contribute to the global knowledge of our marine environment and its sustainability”. The Australasian Fishes site at

<https://www.inaturalist.org/projects/australasian-fishes> now contains more than 15,000 images of fishes, all photographed, geo-located and classified, from around the region. Due to the dedicated work of nearly 550 citizen scientists, Australasian Fishes currently records almost 1600 species. These volunteers not only capture images, but assist the project in the classification and identification of unusual species and unique events. The site’s journal contains stories about range extensions of Australian fishes, unusual mass congregations and requests from international scientists for specific images.

### **DIVING KILSBY SINKHOLE**

For those wanting to visit Kilsby Sinkhole, contact one of the licensees at

[www.kilsbysinkhole.com/operators](http://www.kilsbysinkhole.com/operators) . FAQs about diving Kilsby's Sinkhole are included in the September issue of our SDFSA Bulletin.

### **SHELLFISH REEF AT ROGUES POINT NOW OPEN TO FISHERS**

The new 4ha shellfish reef at Rogues Point, near Ardrossan is now open to boat fishers. Now named Windara, the reef was officially opened in August and recreational boat fishers are now able to fish on it. The reef will be expanded to 20ha over the next 12 months.

### **PORT HUGHES JETTY STEPS UPDATE**

The steps at Port Hughes jetty are still closed following recent storm damage. There are a couple of steps missing at the bottom and a piece of the handrail is gone. I also believe that there is a damaged pile. They are all due to be repaired following the completion of work at Wallaroo and Moonta.

### **SECOND VALLEY JETTY UPDATE**

The new toilet block at Second Valley jetty was due to be completed last month.

### **LITTLE BLUE LAKE CLEANUP**

Many thanks to the ladies who cleaned up Little Blue Lake in August. They did a great job removing rubbish from the lake. You cannot dive in any CDAA sites such as Little Blue Lake without the appropriate certificate. The Little Blue Lake requires Deep Cavern certification.

### **UNDERWATER SEAWEED FOREST RECOVERY**

We should all be paying attention to Mr Turnbull. No, not PM Malcolm Turnbull, John Turnbull, a marine photographer and member of the Underwater Research Group who helped out with the following project in New South Wales: -

#### **“SYDNEY'S UNDERWATER CRAYWEED FOREST MAKES RECOVERY IN EUREKA MOMENT FOR SCIENTISTS**

Underwater seaweed forests that disappeared off a 70-kilometre stretch of Sydney's coastline in the 1980s have made a remarkable recovery through a project that has reached the final of the Eureka Prize for environmental research. Scientists believe the same transplant technology could help other coastlines that are in peril across Australia. Dr Ezequiel 'Ziggy' Marzinelli, a senior research fellow at the University of New South Wales (UNSW) said vast forests of crayweed vanished from urban areas of Sydney in the 1980s. He said scientists believe pollution, including sewage that was pumped into the ocean off areas including Bondi Beach, was to blame. When the forests disappeared, biodiversity off some of Sydney's most popular beaches was devastated. Crayweed supports lobster and abalone, two of Australia's most valuable seafoods. But Dr Marzinelli said the project's success was a refreshing change when it came to tackling environmental degradation. "This is a very good news story in that we can actually do something about it, fix it. And it seems to work," he said. Scientists launched Operation Crayweed, to replant the species in affected areas, from Palm Beach to Botany Bay. The crayweed is transplanted onto specially designed mats to support the species on rocky reefs and as it reproduces, it spreads along the reef and the sub-tidal zone, which is mostly submerged, but exposed at low tide.

(Source: <http://www.abc.net.au/news/2017-08-13/eureka-moment-as-scientists-restore-sydneys-underwater-forest/8798190> ) Further details are included in the September issue of our SDFSA Bulletin.

### **NEW SPECIES RECORD FOR SYDNEY HARBOUR**

(The same?) John Turnbull was also in the news regarding a new species record for Sydney Harbour: -

“Another new species record for Sydney Harbour!

John Turnbull has done it again! Nine months ago, John's photograph of a Clown Toby enabled us to add the species to the Sydney Harbour fish list. Just a few days ago John did it again. This time John has photographed a Whitespotted Dragonet, *Orbonymus rameus* at Clifton Gardens, Sydney Harbour. We first saw this species earlier in the year when Dave Harasti's observation documented a major range extension for the species. John's observation has extended the southern distribution south again by more than 140 km from Nelson Bay. In Australia, the Whitespotted Dragonet occurs in marine waters from the Houtman Abrolhos Islands in Western Australia, around the tropical north of the country, and on the east coast south now to Sydney Harbour. It usually occurs on sandy or rubble seabeds. The species was named in 1926 by Australian Museum Ichthyologist Allan McCulloch." Well done, John. (Source: <http://www.inaturalist.org/projects/australasian-fishes/journal/11179-another-new-species-record-for-sydney-harbour> )

### **BIODIVERSITY OF SYDNEY HARBOUR**

Meanwhile, a paper titled "Sydney Harbour: its diverse biodiversity" and written by Pat A. Hutchings, Shane T. Ahyong, Michael B. Ashcroft, Mark A. McGrouther and Amanda L. Reid for the Australian Museum and published in "Australian Zoologist", volume 36 (3) – 2013, can be found at <http://publications.rzsnsw.org.au/doi/pdf/10.7882/AZ.2012.031?code=rzsw-site> .

### **SHIPWRECK TOPICS**

As part of a new section, brief reports by Steve Reynolds on the following shipwreck topics are included at the end of this news sheet: -

Wreck Diving in the Great Lakes 2017

Ternate Fleet Expedition

Underwater Archaeology at the HMS *Erebus* Wreck

Australian Shipwreck Postage Stamps

*Star of Greece* Wreck Exhibition

Wreckage from USS *Indianapolis* Located

Wreck of HMS *Roebuck*

"No More Mary Rose-Style Excavation as Ships Will Be Explored Using VR Instead"

HMAS *Canberra*

More Shipwreck Anniversaries

Sydney's Worst Maritime Disaster: The *Dunbar*

Ex-HMAS Tobruk to Become a Dive Site

### **SEASONAL REGISTRATION OF CARAVANS & LIGHT TRAILERS**

Caravan and light trailer owners can now register their items seasonally, six months per year instead of twelve, just like boats. This means that owners can save \$35 per year (per item) if they only need to use their items say during winter or summer.

### **MONTHLY DIRECT DEBIT PAYMENTS NOW AVAILABLE FOR SA VEHICLES**

Monthly direct debit payments are now available for 3 & 12-month registration of SA vehicles.

### **SCUBAR**

A special ScuBAR night was held in August. They are usually held bi-monthly and during each 'odd' month. Dan Monceaux posted the following report following the event: -

"Last night's session detailed the environmental benefits of restoring oyster reefs in temperate waters, with a focus on the recent (and ongoing) construction of an artificial reef 1 km

offshore from Ardrossan in Gulf St Vincent. The second talk explored shark conservation globally, with consideration given to historic and contemporary shark fishing practices and effort.” The above details formed part of more details reported by Dan, as follows: - “The Scuba Divers Federation (SDF) has been running a series of very informative public talks called Scuba in the Pub or "ScuBar". Each event features one or two guest speakers, drawing from a pool of local experts: marine scientists, tour operators and bureaucrats. Entry is open to all, and a gold coin donation is invited. Ample time is always given for questions and answers, and attendance and the high level of audience engagement has been consistently impressive.” Thanks Dan.

Our next ScuBAR will be held on Friday 8th September with speakers Dr Richard Harris (Hyperbaric Medicine) and Danny Brock (Marine Parks). The next one after that is being held on Friday 10th November. Andrew Fox (Life in the shark lane) and Simon Bryars (Blue Devils and Harlequins) will be our two speakers then. All ScuBARs are held at the Rob Roy Hotel.

### **SPECIAL CELEBRATION AT SCUBAR**

There will be a special celebration at our ScuBAR on 10<sup>th</sup> November. Come along and join in.

### **FRIENDS OF YANKALILLA BAY**

The newly-formed Friends of Yankalilla Bay group wants to prevent ongoing degradation and serious damage to the beaches and Gulf waters. They are concerned about catchment care and revegetation and rehabilitation of the Yankalilla area. There is a focus on marine life and seagrass. They aim to educate the community about how valuable the landscapes are, what’s needed for long-term protection and the threats facing the coast and marine environment.

### **REFORMS DESIGNED TO CUT DEATHS ON GREAT BARRIER REEF**

The Queensland tourism industry and work safety experts have recommended a stronger code of practice for snorkelers and divers on the Great Barrier Reef. This follows the deaths of ten tourists on the reef in just six months. The Queensland Government has already gone ahead and launched a stronger code for recreational snorkelling. Tourists will be forced to disclose health issues. Older visitors and those with health or mobility issues will be identified through this disclosure. “At risk” snorkelers will then be made to wear colour-coded equipment to identify them whilst they are in the water. New dive safety guidelines are expected to be announced shortly.

### **SCAVENGING CRUSTACEAN IDENTIFIED**

Museums Victoria identified the creatures that injured Sam Kanizay on Brighton Beach as a type of scavenging crustacean called lysianassid amphipods. Amphipods are sometimes referred to as “sea fleas”. These amphipods have no venomous properties and will not cause lasting damage. Media reports have described the attackers as “sea lice” but that term is usually used to refer to isopods, a different group of crustaceans. The museum’s marine biologist examined a sample collected by the family and said the creatures are naturally-occurring scavengers, which commonly bite but do not usually cause these kinds of injuries. The Advertiser of 9<sup>th</sup> August stated that these creatures did not usually cause such injuries and they are generally not out there waiting to attack like piranhas. The victim was simply unlucky. See <https://www.timeshighereducation.com/blog/australian-sea-bug-attack-scientists-getting-our-facts-right-and-why-it-matters#survey-answer> .

## **“NORWEGIAN BILLIONAIRE FUNDS WORLD’S LARGEST YACHT TO SCOOP UP PLASTIC**

Norwegian billionaire Kjell Inge Røkke has profited from offshore drilling. But now the businessman, who started as a fisherman, wants to give back with a colossal yacht for marine research. The vessel will be able to scoop up around five tons of plastic every day, and then melt it down – all in yet another private effort to help clean up the ocean.

(Source: <https://superhv.com/science-tech/norwegian-billionaire-funds-worlds-largest-yacht-scoop-plastic/> ) Further details are included in the September issue of our SDFSAs Bulletin.

## **GREEK WARRIOR STATUES FOUND UNDERWATER**

In 1972, Stefano Mariottini, then a chemist from Rome, discovered two bronze statues of male Greek warriors. According to Wikipedia at [https://en.wikipedia.org/wiki/Riace\\_bronzes](https://en.wikipedia.org/wiki/Riace_bronzes), Stefano Mariottini “chanced upon the bronzes while snorkelling near the end of a vacation at Monasterace. While diving some 200 metres from the coast of Riace, at a depth of six to eight metres, Mariottini noticed the left arm of statue A emerging from the sand. At first, he thought he had found a dead human body, but on touching the arm he realized it was a bronze arm. Mariottini began to push the sand away from the rest of statue A. Later, he noticed the presence of another bronze nearby and decided to call the police. One week later, on August 21, statue B was taken out of the water, and two days after that it was the turn of statue A. No associated wreck site has been identified, but in the immediate locality, which is a subsiding coast, architectural remains have also been found.” Further details are included in the September issue of our SDFSAs Bulletin.

## **PLANE WRECK IN SPENCER GULF**

A Tiger Moth plane crashed in Spencer Gulf between Port Broughton and Whyalla in 1943. The plane’s pilot, Edward Gage, was a member of the Spencer Gulf Aero Club. He had been a club member for three years prior to his fatal crash. He worked for BHP and he sometimes flew senior BHP personnel around. In 1943, he made a trip to Adelaide with a mercantile marine officer as a passenger. He left Parafield Airport alone that evening, after his mother declined to accompany him back to Whyalla. His plane was last seen heading towards a dust storm over Spencer Gulf, near Port Broughton. It is possible that the plane went down in the dust storm, crashing in to Spencer Gulf. Further details are included in the September issue of our SDFSAs Bulletin.

## **SHARK POSTAGE STAMPS**

In July, the US Postal Service released a series of shark postage stamps. The Sharks Forever stamps feature five species that inhabit American waters — the mako, thresher, great white, hammerhead and whale shark. Visit [https://about.usps.com/news/national-releases/2017/pr17\\_039.htm](https://about.usps.com/news/national-releases/2017/pr17_039.htm) for further details.

## **NEW LONG-RANGE SHARK DETERRENT**

Shark Shield has announced a new long-range Shark Deterrent: -

“Shark Shield Announces Breakthrough Long Range Shark Deterrent

Media Release - 1 May 2017 - Following their presentation at the Senate inquiry into shark mitigation and deterrent measures last week, Shark Shield, manufacturers of the world’s only scientifically proven and independently tested electrical shark deterrent, has today announced the pre-production release of a long-range version of its technology. The new Shark Shield Ocean Guardian is based on 20 years of research and utilizes a patented Metamaterial Electromagnetic Transducer, with expectations of repelling sharks within a 100-meter

diameter of each unit installed. Further details are included in the September issue of our SDFS Bulletin.

### **MAGAZINE ANNIVERSARIES**

47 YEARS AGO, "SportDIVING" MAGAZINE was first published in 1970. Barry Andrewartha, Publisher/Editor of "Dive Log Australasia, incorporating Sport DIVING magazine", (and "International Freediving and Spearfishing News") says that September 1970 was the birth date of "Sport DIVING" magazine. The magazine began as "Skindiving in Australia" (or SIA). It was a 36-page black & white publication and sold for just 50cents. 2000 copies of the first issue were printed. "Skindiving in Australia" (SIA) later became "Skindiving in Australia and New Zealand", then "Skindiving in Australia & The South Pacific". The Oct/Nov 1982 issue of "Skindiving in Australia & The South Pacific" was 96 pages (40 of them in full colour) and had a print run of some 25,000. That's an increase of 23,000 pages over some 12 years.

It seems that "Dive Log Australasia" magazine started in 1988. In August each year, the current "Dive Log Australasia, incorporating Sport DIVING magazine" adds one year to its 'anniversary'. The August 2017 issue claimed to now be "Celebrating 30 years". Its number of No.349 suggests that the magazine has just entered its 30<sup>th</sup> year (assuming that there have been 12 issues each and every year since the first issue.  $30 \times 12 = 360$ .  $29 \times 12 = 348$ . If No.1 was in, say, August 1987, then July 1988 would have been No.12, July 1989 No.24, 1990 No.36, etc., so add on 12 every July, making July 2017 No.360 (actually No.348). That is a difference of 12 issues by my calculations. That is therefore a difference of one year. It appears that Dive Log started in 1988 and will be 30 years old next July (2018). If the start date of September 1970 for "Skindiving in Australia" is taken into account, the combined "Dive Log Australasia, incorporating Sport DIVING magazine" would be turning 47 years this month (September 2017).

### **MORE ANNIVERSARIES**

30 YEARS AGO, we held a diving expo on 26<sup>th</sup> September 1987. The "Discover Diving" expo was held at the Adelaide Aquatic Centre in North Adelaide.

75 YEARS AGO, the wooden hull boat *Archie Badenoch* was built and launched in 1942. According to the web page found at

<http://www.abc.net.au/local/photos/2012/11/23/3639198.htm> , the wooden hull boat *Archie Badenoch* was built by Holden and she was launched in 1942. She was an auxiliary work boat for the Royal Australian Navy and served in the RAN until the end of World War II. She mainly worked around Port Adelaide as a general-purpose work boat carrying supplies, personnel and undertaking patrols. The SA Police took her over in 1946 and they named her *Archie Badenoch* after Mounted Constable Archie Badenoch. He served with the 2/43rd Infantry Battalion during World War II and, on 1st November 1942, he was the first South Australian police officer killed in action at El Alamein. His tragic death ironically, occurred at almost the same time as the *Archie Badenoch* was being launched at Birkenhead. She served the South Australian Police from 1946 to 1978. She was then taken over by the Department of Further Education and spent some time at Wardang Island in Spencer Gulf. Donna Newton says that her father in law, Constable Ronald Newton used the *Archie Badenoch* in many (police?) sea rescues. She also says that he took it to Wardang Island where it was used as a ferry between Wardang and Port Victoria. The *Archie Badenoch* was left to rot when Wardang Island was deserted. As a retired police officer, and former *Archie Badenoch* skipper, Ron Newton returned it to Port Adelaide and he enlisted the support of the Police Historical Society. She was restored over the next two years and was then equipped with wheel chair access. Ron then spent his weekends taking disabled children on a cruise

down the Port River. He handed her over to the SA Maritime Museum in 1987. She is still plying the waters of the Port River as a working exhibit of the South Australian Maritime Museum.

### **SHOP NEWS**

The Scuba Clinic will now resume being open on Fridays this month (September). The cooler months are a better time to get your equipment serviced ready for the next diving season.

### **SWIM WITH TUNA**

Oceanic Victor's Swim with Tuna has commenced operating in Encounter Bay, near Granite Island. Visit [www.oceanicvictor.com.au](http://www.oceanicvictor.com.au) for more details.

### **AUSTRALIAN GEOGRAPHIC NATURE PHOTOGRAPHER OF THE YEAR**

An exhibition of the Australian Geographic Nature Photographer of the Year (ANZANG bio-region – Australia, New Zealand, Antarctica and New Guinea) competition finalists will be held at the SA Museum until 24<sup>th</sup> September. Visit <https://naturephotographeroftheyear.com.au/> for more details.

### **“SCIENTISTS IDENTIFY PRE-HISTORIC SEA WORM**

Long before dinosaurs roamed the Earth, a bizarre creature with a Venus flytrap- like head swam the seas. Scientists have uncovered fossils of a tiny, faceless prehistoric sea worm with 50 spines jutting out of its head. When some unsuspecting critter came too close, its jaw-like spines snapped together and dinner was served. The discovery, reported in the journal Current Biology, offers a glimpse into the Cambrian explosion of life on Earth about 541 million years ago. Further details are included in the September issue of our SDFSFA Bulletin.

### **PLAN TO TAG WHITE POINTER SHARKS WITH ACOUSTIC SENSORS DUMPED**

A plan to tag white pointer sharks with acoustic sensors that warn divers is being dumped due to no federal funding. The technology would have improved the safety of recreational scuba divers. According to The Advertiser of 7<sup>th</sup> August, “A proposed program to tag 60 white pointer sharks in SA waters with acoustic sensors that warn divers of their presence has been dumped because federal authorities will not fund it. The decision — made despite the success of a pilot program in which the sensors detected sharks at distances of up to 23 times a diver could achieve by sight — has concerned commercial divers coping with sharply increasing shark numbers. Further details are included in the September issue of our SDFSFA Bulletin.

### **NEW FEEDING RESTRICTIONS FOR SHARK CAGE DIVING**

The Advertiser of 7<sup>th</sup> August also reported that strict new limits on the amount of berley that shark cage diving operators at Port Lincoln can use to attract sharks have been reduced. The two operators using berley are now restricted to 120kg of berley and teaser baits per trip. The amount of berley that they can use will be further reduced next year, when they can only use 100kg per day (or trip?). A further restriction placed on the operators concerns when a shark either grabs a teaser bait or crashes into the cage while trying to eat the bait, all berleying activity must cease for 15 minutes. Further details are included in the September issue of our SDFSFA Bulletin.

### **NATIONAL PARK FEES**

The State Government charges each person visiting the Neptune Islands to see sharks \$36 per day. This fee is for entry to the Neptune Islands National Park. The fee has just increased by \$1 (from \$35 to \$36) and it will rise further again next year.

### **NEW GUIDELINES FOR WHALE AND DOLPHIN WATCHING**

The new Australian National Guidelines for Whale and Dolphin Watching describe how people can observe and interact with whales and dolphins in a way that ensures animals are not harmed or disturbed. Whales and dolphins may be disturbed by the presence of people, whether they are on the land, in a boat or aircraft as well as activities such as swimming and diving, feeding, touching, and making noise. The potential problems from disturbance may include disruption of behaviour, displacement from important habitat areas, and reduced breeding success. The new guidelines build upon and replace the Australian National Guidelines for Whale and Dolphin Watching 2005. They were developed in consultation with the state and territory governments, scientists, industry representatives and non-government organisations. They provide a consistent national policy for the management of whale and dolphin watching. The guidelines provide advice for all governments in the development, updating and implementation of laws regulating whale and dolphin watching. The Australian National Guidelines for Whale and Dolphin Watching 2017 can be found at <http://www.environment.gov.au/marine/publications/australian-national-guidelines-whale-and-dolphin-watching-2017> .

### **PLANS TO CUT BACK ON COMMONWEALTH MARINE RESERVES**

The Federal Government proposes to rename Commonwealth Marine Reserves “Australian Marine Parks”. Commonwealth Marine Reserves, as they are currently known, are in Commonwealth waters, more than 3 nautical miles from the coast. They are managed by Parks Australia for the Australian Government. They were proclaimed under the “Environment Protection and Biodiversity Conservation Act 1999”. Parks Australia hopes that renaming the reserves “will help build public awareness”. The Director of National Parks is inviting public comments regarding the proposal. These must be submitted by 20<sup>th</sup> September 2017. Further information is available at [www.parksaustralia.gov.au/marine](http://www.parksaustralia.gov.au/marine) . Enquiries can be directed to [marinereserves@environment.gov.au](mailto:marinereserves@environment.gov.au) or call 1800 069 352. Further details are included in the September issue of our SDFS Bulletin.

### **CALENDAR DATES FOR OTHER EVENTS:**

22nd to 23rd September 2017 - The AIMA 2017 conference is being held in Adelaide.

Until 15<sup>th</sup> October 2017 – A touring exhibition by the Australian National Maritime Museum is being held at the SA Maritime Museum in Lipson St, Port Adelaide. It features the photographic work of the late Harold Cazneaux.

Sunday 25<sup>th</sup> February 2018 - Next year’s Dive for Cancer event is being held at 9.30am at Port Noarlunga – see <https://www.facebook.com/diveforcancer/> or <http://www.diveforcancer.com.au/buy-ticket/> .

New Dates For International Conference On Shellfish Restoration - The 19th International Conference on Shellfish Restoration in Adelaide will now be held from 19<sup>th</sup> – 21<sup>st</sup> February 2018. Plan on joining shellfish restoration experts, resource managers, shellfish growers, community groups, NGOs and others for a joint conference between International Conference on Shellfish Restoration and the Australian Shellfish Reef Restoration Network at Adelaide University from the 19<sup>th</sup> – 21<sup>st</sup> February 2018. This three-day conference will provide a forum that fosters partnerships, initiatives and exchanges of information necessary to further the science and practice of shellfish restoration efforts around the world. Attendees include representatives from the shellfish aquaculture industry, government, academia, NGO,

community groups, practitioners and other restoration supporters. The conference will feature invited speakers, panel sessions, contributed oral and poster sessions and interactive workshops. The schedule will allow for social interactions and collaborations in a relaxed atmosphere.

## **OVERSEAS DIVING**

Following a recent request for information about diving overseas, we received a few responses. Tracey Jennings says, “Singapore has great macro, though poor viz. . . .Singapore has great nudis, shrimp and even mimic octopus. . . . it's not amazing but the Macro is really good - seahorses, nudis, shrimps, octopus, Shaun the sheep, etc .. just the viz isn't great. The people are really nice and very relaxed, so if stuck for a weekend it's great. Lots of long 90 min dives, you need to be ok with viz that can range from 3-10m - but the diving isn't deep.” Pasi Lattula says, “Singapore is at a very good position from many good diving destinations, one of the best in the world. Welcome to our liveboards to Thailand or Burma about 2 - 3 hours inexpensive flight - <https://www.andamandivetours.com/> . In response to Pasi, Tracey says, “Ok, so you can dive in SG, and it's ok. Otherwise you can dive in Malaysia, Indonesia, and Philippines. Even Maldives is only 4 hours flight away.” Lee Morris says, “Great diving in the Philippines. Dauin is the best for muck diving and whale sharks 45 minutes away.” Ismayudi Dodent says, “If you would like to go diving, better you visit Indonesia because a lot of the marine life includes coral reefs too. Better you visit the Pulau Weh. You can take a flight from Singapore - Medan via international flight and continue with domestic flight from Medan - Banda Aceh or Medan - Pulau Weh. To get more details about dive site on Pulau Weh, please look at our dive school website: [www.rubiahdivers.com](http://www.rubiahdivers.com) . All the dive sites by Rubiah Tirta Divers on Pulau Weh are Iboih beach - Pulau Weh, Aceh – Indonesia. The domestic flight will arrive at Pulau Weh (Sabang airport) from Medan is Garuda Airlines & Wings-Airlines (branch of lion-airlines company): this flight come to Pulau Weh airport 3 times a week. Indonesia has a lot of the dive site for everyone, start from Pulau Weh - Aceh region until to Raja Ampat - Papua region.” Will Lee Yum says, “Singapore is very urban. Go south to Indonesia or north to Malaysia.” Thanks everyone for their input. We recommend making enquiries through your local dive shop if you are thinking about an overseas dive trip any time soon.

## **CLOSED SEASON FOR ROCK LOBSTER**

According to the web page found at

[http://www.pir.sa.gov.au/fishing/closures\\_and\\_aquatic\\_reserves/fishing\\_closures](http://www.pir.sa.gov.au/fishing/closures_and_aquatic_reserves/fishing_closures), the closed season for Southern rock lobster is currently in place until:

Northern zone - closure time: 12pm 1st November 2017

Southern zone - closure time: 6am 1st October 2017.

All Rock Lobster taken by recreational fishers must have the middle tail fan clipped in half to a recognisable straight line before landing.

## **LOCAL EVENTS**

### **THROUGH A DIFFERENT LENS – CAZNEAUX BY THE WATER**

A touring exhibition by the Australian National Maritime Museum is being held at the SA Maritime Museum in Lipson St, Port Adelaide until 15<sup>th</sup> October 2017. It features the photographic work of the late Harold Cazneaux.

### **INTERNATIONAL CONFERENCE ON SHELLFISH RESTORATION**

NEW DATES - The 19th International Conference on Shellfish Restoration will be held at Adelaide University 19th – 21st February 2018.

### **“CLAIMED BY THE SEA” 2017 AIMA CONFERENCE**

The 2017 Australian Institute for Maritime Archaeology's conference will be held in Adelaide from 22nd to 23rd September - see <http://www.aima-underwater.org.au/conference2017/> for more details.

#### CitSciOz18

CitSciOz18 will be held from February 7-9<sup>th</sup> 2018 in Adelaide.

Details for many forthcoming events can be found at <http://www.divelog.net.au/news-events/>. Visit the web page found at <http://www.tourism.sa.com/events/event-news-edition-two.aspx> to see the latest from Events South Australia.

#### **SDFS A BULLETIN**

Attached along with this SDF News Sheet is a copy of the latest issue of our SDFS A Bulletin (an electronic bulletin separate from our normal monthly News Sheet). Our September 2017 issue includes the following items: -

Diving Kilsby Sinkhole

Sydney's Underwater Crayweed Forest Makes Recovery in Eureka Moment for Scientists

Norwegian Billionaire Funds World's Largest Yacht to Scoop Up Plastic

Greek Warrior Statues Found Underwater

Plane Wreck in Spencer Gulf

New Long-Range Shark Deterrent

Scientists Identify Pre-Historic Sea Worm

Plan to Tag White Pointer Sharks with Acoustic Sensors Dumped

Plans to Cut Back on Commonwealth Marine Reserves

Future issues of our "SDFS A Bulletin" will include lengthy articles about matters of interest to recreational divers. We welcome contributions from our readers.

#### **SHIPWRECK TOPICS**

(Brief reports on shipwreck topics by Steve Reynolds)

#### **"CLAIMED BY THE SEA" 2017 AIMA CONFERENCE**

The 2017 Australian Institute for Maritime Archaeology's conference will be held in Adelaide from 22nd to 23rd September - see <http://www.aima-underwater.org.au/conference2017/> for more details.

#### **WRECK DIVING IN THE GREAT LAKES 2017**

Becky Schott's video clip of some of her recent expedition to the Great Lakes can be found at <https://vimeo.com/228237610>. "Becky and her team dived and explored deep water sunken ships, many at depths exceeding 200 ft." "Here's a teaser from some of the most spectacular shipwreck diving in the world. It's a mix of shipwrecks from the freighter *Daniel J. Morrell* sitting in 210ft of water in 2 pieces, the side wheel steamer *Detroit* that sank in 1854, schooner *Typo*, SS *Florida* and the wreck of the *City of Detroit*. Diving on these wrecks is like taking a step back in time since they are so well preserved in the cold, freshwater in the Great Lakes. All of the divers were using rebreathers and trimix along with good drysuits for thermal protection." All of the above-mentioned wrecks are in Lake Huron. As stated above, the freighter *Daniel J. Morrell* is in 2 pieces in over 200ft of water. She sank in November 1966. The bow half is said to be in 205' and the stern in 218'. The side wheel steamer *Detroit* (that sank in May 1854) sits at 180'. The schooner *Typo* sank in October 1899. She sits in 180' of water. The wooden steamer SS *Florida* sank in May 1897. She sits in 195' of water. The *City of Detroit* sank in December 1873. She sits in 176' of water.

## **TERNATE FLEET EXPEDITION**

In 1650, all five ships of the Ternate fleet were lost. An expedition was made in 2016 with the aim of certifying the location of the fleet's flagship, *Tijger* and to find some other possible shipwrecks from the fleet. Seven (new?) shipwrecks were found altogether (only four were initially hoped for). Many artefacts were found and these are now being conserved in Makassar. Another expedition is planned in November 2017. It will focus mostly on a possible trail-excavation of the *Tijger* wreckage and on the seven new shipwrecks inspection. According to the web page found at

<http://cryptoanthropologist.blogspot.com.au/2016/06/fleet-of-sunken-ships-discovered-in-indonesia.html> , "The Ternate Fleet was lost . . . while sailing from Batavia (now Jakarta, capital city of Indonesia) to the fabled Spice Islands of Ternate in Maluku. The fleet belonged to the Dutch East India Company which held monopoly on the Spice Trade in Indonesia. On March 4th, 1650, all five ships of the Ternate Fleet were shipwrecked on an uncharted coral atoll, a few miles off the coast of Sulawesi. Unable to re-float the ships on the rocky islands, all 5 of the vessels were lost at sea. In the following months, 581 survivors of the shipwreck managed to construct a new ship from the remains of the wreck and sail to safety."

## **UNDERWATER ARCHAEOLOGY AT THE HMS *EREBUS* WRECK**

Details regarding underwater archaeology at the John Franklin wreck HMS *Erebus* in arctic waters can be found at <http://www.pc.gc.ca/en/culture/franklin/recherche-search/subaquatique-underwater> i.e. "During August and September, the ocean water in the Arctic hovers a little above 0°C." and "Underwater archaeologists need to consider many challenges when planning their research. Ice and weather conditions in Nunavut only permit a few weeks of diving a year. Individual dives are usually limited to one hour. The wrecks are exposed to currents and extreme ice conditions." Further details regarding underwater archaeology in Canada can be found at <http://www.pc.gc.ca/en/culture/arch/mar-sea> .

## **HMS *PORPOISE* AND *CATO* WRECKS**

214 YEARS AGO, the 12-gun sloop HMS *Porpoise* and the British armed cargo ship *Cato* were both wrecked 450 miles off of the Queensland coast on a remote coral reef on 17th August 1803. Matthew Flinders was a passenger on the HMS *Porpoise* at the time. According to Wikipedia, Ben Cropp found the wreck sites of the *Cato* and *Porpoise* at Wreck Reefs In 1965. The site has been a protected area since April 1992. An expedition which included people from the Australian National Maritime Museum visited the remains of the *Cato* in 2009.

## **HMS *PANDORA* WRECK**

226 YEARS AGO, the HMS *Pandora* sank on the Great Barrier Reef on 29th August 1791. Prisoners from the *Bounty* mutineers were on board the *Pandora*. According to Wikipedia, Ben Cropp (concurrently with John Heyer and Steven Domm) discovered the wreck of *Pandora* in 1977.

## **AUSTRALIAN SHIPWRECK POSTAGE STAMPS**

A new postage stamp issue featuring Australian shipwrecks was released on 29th August (the anniversary for the sinking of the *Pandora* on the Great Barrier Reef in 1791). The 3-stamp collection (all \$1 stamps) presents the three historically and archaeologically significant shipwrecks *Zuytdorp*, *Pandora* and *Clonmel*. The stamps feature paintings of each wreck event, together with a recovered relic, to show the context of each voyage. 29th August was the 226th anniversary of the sinking of the HMS *Pandora* on the Great Barrier Reef in 1791 (see above).

## **STAR OF GREECE WRECK EXHIBITION**

The *Star of Greece* wreck exhibition is permanently on display at the Willunga Courthouse Museum. The exhibition displays some relics from the *Star of Greece* wreck that are not normally seen. The *Star of Greece* sank off of Port Willunga 129 years ago on 13th July 1888. Entry to the display is \$5 each.

## **WRECKAGE FROM USS INDIANAPOLIS LOCATED**

According to the web page found at

[http://www.navy.mil/submit/display.asp?story\\_id=102031#.WZjQsIM456Q.facebook](http://www.navy.mil/submit/display.asp?story_id=102031#.WZjQsIM456Q.facebook) , a team of civilian researchers have found the wreck of the World War II cruiser USS *Indianapolis* (CA 35), which was lost on 30<sup>th</sup> July 1945. She was struck by two Japanese torpedoes just after midnight (29/7/45?). Almost 900 crew were killed and just 316 survived. The wreck was located by the expedition crew of the RV *Petrel*, which is owned by entrepreneur and philanthropist Paul G. Allen. The ship was found resting on the floor of the North Pacific Ocean, 5500 metres below the surface.

## **WRECK OF HMS ROEBUCK**

According to the web page found at <http://www.the-islander.org.ac/oldsite/1528.htm> , The wreck of HMS *Roebuck* was found in Clarence Bay, Ascension Island by a team of divers from the Western Australia Museum. The team, assisted by local divers, started exploring the sea floor of Clarence Bay in the morning of Friday 16<sup>th</sup> March 2001. They discovered the wreck site within an hour. According to Wikipedia, “HMS *Roebuck* was a fifth-rate warship in the Royal Navy which, under the command of William Dampier, carried the first English scientific expedition to Australia in 1699.” “The *Roebuck* sank on the 25th February 1701 after putting into Clarence Bay for repairs on her hull after she sustained damage during the return leg of a voyage of discovery.” “Conducting a search from the beach out to the 3.5 fathoms of water described by Dampier, divers soon located an exposed bell. They then located a large clam shell in a cleft in the reef on the seabed south of the bell, and a heavily concreted grapnel anchor in shallower water about 328 ft (100 m) south of the bell and 26 ft (8 m) from shore. In a very turbulent location, two slightly tapering iron objects very similar to the remains of heavily eroded cannon were seen. These lay in the wave line, and were firmly wedged amongst the rocks.”

## **“NO MORE MARY ROSE-STYLE EXCAVATION AS SHIPS WILL BE EXPLORED USING VR INSTEAD”**

According to the web page found at <http://www.telegraph.co.uk/news/2017/08/19/no-mary-rose-style-excavation-ships-will-explored-using-vr-instead/> , “The Mary Rose will be the last great ship salvaged from British waters, Historic England has said, as visitors will explore shipwrecks using virtual reality instead. Mark Dunkley, chief maritime archaeologist at Historic England, said the agency was working on allowing visitors to explore shipwrecks using VR headsets because it was too expensive and labour-intensive to bring them up from the deep.”

## **HMAS CANBERRA**

75 YEARS AGO, the 10,000-ton cruiser HMAS *Canberra* sank in the Battle of the Solomons in August 1942. She was the flagship of the Royal Australian Navy. 193 crew died, including three South Australians. 109 crew were wounded, nine of them South Australians.

## **MORE SHIPWRECK ANNIVERSARIES**

112 YEARS AGO, 26 lives were lost when the barque *Loch Vennachar* sank off West Bay, Kangaroo Island in September 1905.

158 YEARS AGO, the steamer *Admella* sank at Carpeneter Rocks on 6<sup>th</sup> August 1859.

### **SYDNEY'S WORST MARITIME DISASTER: THE DUNBAR**

160 years ago, the 1321-ton sailing ship *Dunbar* was wrecked on Sydney's South Head at midnight on Thursday 20th August 1857. The *Dunbar* was close to the end of an 81-day voyage from Plymouth. She missed the Gap (entrance) to Port Jackson and crashed into the cliffs just south of the heads. Heavy seas quickly pounded the ship and only one of at least 122 people on board survived. Seaman James Johnson was the sole survivor. A helmet diver recovered an anchor from the wreck in 1910. A team of divers recovered some relics from the wreck in 1955. Ben Cropp recovered some items in 1963.

(Sources: The web page found at <https://anmm.blog/2015/08/20/death-destruction-and-the-dunbar-sydneys-worst-maritime-disaster/> and "Australian Skindivers Handbook" by Ben Cropp.)

### **EX-HMAS TOBRUK TO BECOME A DIVE SITE**

The ex-HMAS Tobruk will be transformed into a world-class dive site and reef when she is scuttled in Wide Bay, Queensland. Tourism Minister Kate Jones said, "We always knew securing the ex-HMAS Tobruk would bring dividends to both the Fraser Coast and Bundaberg regions, and since it arrived here last December there has been a stream of visitors coming to the Port to view the vessel. We are expecting the first divers to be on the site in early 2019 when it will become a unique tourism attraction in Queensland, generating significant spending and flow-on economic benefits including jobs to the Fraser Coast and Bundaberg regions, and also the wider Queensland economy. The transformation of this historic vessel will be a great legacy for the state and those who served on her. Her first home port was in Brisbane in 1981 and we have always said it is fitting that her last will also be in Queensland."

The Scuba Divers Federation of SA ([www.sdfsa.net](http://www.sdfsa.net)) is a member of the following: -

RecFishSA (SA Recreational Fishing Advisory Council) <https://recfishsa.org.au/>

SA Trails Coordinating Committee\* <http://www.southaustraliantrails.com/>

\* (Office of Recreation & Sport) <http://www.ors.sa.gov.au/>

Recreation SA <http://recreationsa.org/>

If you wish to be included on the mailing list for this electronic news sheet, contact Steve Reynolds, the Federation's Secretary, on [info@sdfsa.net](mailto:info@sdfsa.net) for more details.

The SDF supports both Reef Watch & DragonSearch

[http://www.conservation.sa.gov.au/reef\\_watch](http://www.conservation.sa.gov.au/reef_watch)

Disclaimer – The opinions expressed by authors of material in this news sheet are not necessarily those of the Federation.