



Issue 8.1 - March 2005

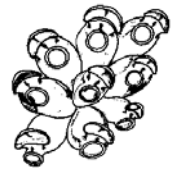
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Introduction

This is the biggest month of the Reef Watch calendar, with both the Marathon Dive on the 13th and a Reef Monitoring seminar featuring *Australian Marine Life* author Graham Edgar. Read on!

Marathon Dive

Reef Watch is planning to bring Sea Week to an exciting conclusion with its annual "marathon" reef monitoring day on Sunday, 13th March, at Noarlunga Reef, with the first dive briefing commencing at 8.30am. The word "marathon" refers to the total number of hours spent by divers and snorkellers in the water, not the length of time that any individual will stay down!



With the support of a number of volunteer PADI divemasters and instructors, Reef Watch will provide appropriate supervision and/or training at the event for both divers and snorkellers. Those who have already completed the Reef Watch training course will be able to get stuck into some survey work, while for the others there will be opportunities to progress their "Reef Watch" qualifications while collecting useful data.

This year's event will build on the festive tradition from previous years, with a BBQ being provided for divers, snorkellers and helpers as well several displays.

Marathon Dive 2005



Divers and snorkellers wanted!
Join the “marine community” to do fish
and benthic surveys

Port Noarlunga Reef Sunday 13th March

Dive/snorkel briefings commence at
8.30am, 11.30am and/or 2pm

BBQ (free for participants/helpers, gold coin
for others)

To take part register on-line:

<http://www.reefwatch.asn.au/marathon.html>



or contact Reef Watch:

8223 5155

info@reefwatch.asn.au

Note: if you currently receive this newsletter in the post and would prefer to receive it by email then let us know at info@reefwatch.asn.au. If you do not have access to the internet and need help obtaining any on-line reports or other information we refer to in this newsletter, call us on 8223 5155 and we'll mail you a hard copy.



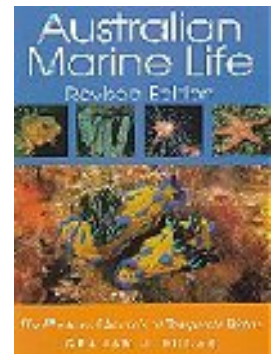
Forthcoming event: Reef Monitoring Seminar featuring Graham Edgar, author of *Australian Marine Life*

Graham Edgar, supported by a number of leading South Australian ecologists with international reputations, will be leading a reef monitoring seminar on Friday, 18th March.

Most if not all Reef Watch divers would be familiar with Graham's book, *Australian Marine Life*. This book, arguably the most useful guide for divers in temperate waters, was awarded a Whitley Award by the Royal Zoological Society of NSW as the Best General Zoology Book of 1997. Graham's companion volume on ecology, *Australian Marine Habitats*, also received a Whitley Award for Best Marine Zoology Book in 2001. Both books are used extensively by Australian marine biologists and the wider public.

Graham has also written chapters in numerous other marine biology books.

Graham has a leading international reputation in the field of marine ecology. He has served as Director of Marine Research and Conservation at the Charles Darwin Research Station in the Galapagos Islands, has been invited to address numerous international gatherings (including in New Zealand, Chile, South Africa, Italy and USA), and has served on several advisory boards both in Australia and internationally.





Reef Monitoring Seminar
featuring
Graham Edgar
author of
Australian Marine Life

Supported by a panel of experts including Anthony Cheshire, Sean Connell, Peter Fairweather, Hugh Kirkman, Scoresby Shepherd & David Turner

Friday, 18th March, 7 for 7.30pm

Location: Flinders University Theatre N4 (Adjacent to Car Park 4)

Cost: \$10 (\$5 unwaged) payable on the night

Catering: Light supper included in price, drinks available (gold coin donation welcomed)

To register on-line: <http://www.reefwatch.asn.au/seminar.html>

or phone Reef Watch on 8223 5155

Report on the Southern Eyre Peninsula Blue Groper Survey

Summary by Dr. Scoresby Shepherd, Senior Research Fellow at SARDI

The fourth blue groper survey was successfully completed in December 2004 by a team of six divers/snorkellers: Ali Bloomfield, James Brook, Ben Parkhurst, Janet Scott, Kevin Smith and myself. The survey started on Coffin Bay Peninsula, where we surveyed Point Avoid, and then we drove to Pt Drummond, and surveyed several sites around the projecting promontory. Then south again to Redbanks, just north of Cape Wiles, then Wanna and Memory Cove near Cape Catastrophe, and then several spots in Thorny Passage up to Pt Donnington. In all we completed 91 transects at 19 sites in just 6 days, and counted 551 blue groper. Notable among the sites were two recruitment hotspots for blue groper. One was in Memory Cove and the other on the sheltered side of the reef between Pt Avoid and Golden Island in Avoid Bay. The surveys show unequivocally that small groper settle in sheltered inshore waters in bays, and with increasing size gradually move into more exposed places. Our surveys were mostly inshore where we could estimate the abundance of juvenile and sub-adult groper. It was only at a few sites where deeper water was close to shore (Wanna and Redbanks) where we dived and recorded adults. Our next (and probably last) survey is planned for the shores of Spencer Gulf, upon which Reef Watch divers will have covered all coasts of the state from the far west to the south-east. This is really a remarkable performance and a great credit to Reef Watch.

Some expedition anecdotes from Janet Scott, Reef Watch diver.

Sunday: We drove into the Coffin Bay National Park and found a sheltered entry point at Almonte Beach. I could hardly believe we were going to jump in and swim without apparently knowing what we were getting into. I shouldn't have worried. Scoresby knew what he was doing and none of the spots he picked were too hard. We swam out to the reef and Scoresby started laying out 100m of line and timing how long that took to swim it - around 10 minutes. Meanwhile, Kevin and I counted fish – my first time - and this spot turned out to have more fish than any other we visited. We saw quite a few juvenile blue groper which is what we had come to see, so we were very pleased. They were quite a bit shyer than the wrasse and sweep that followed us around for most swims or dives. And I've never seen so many big fat zebra fish. On the way back in we were buzzed several times by a playful seal.



Illustration: from *Sea Fishes of Southern Australia* by Hutchins, B and Swainston, R.

The rest of the party arrived from Adelaide and met us at the Coffin Bay Yacht Club for dinner, after which we returned to the park for an after-dinner swim.

Monday: After we split the group into cliff climbers and boat rampers, I joined the latter group in the 4WD trip down the ramp at Pt Drummond. Ali experimented with the snorkling shark pod and successfully zapped herself. There was a large variety of fish but not a huge quantity. Even so, I saw some Australian salmon and some whiting - about as far away from the guy who was fishing as they could get. Smart fish.

Tuesday: We set up camp in Pt Lincoln National Park, then Scoresby and I went to Cape Donnington, and found a shallow granite outcrop with a deep hole on the inside, filled with zillions of sweep, zebra fish, and blue-throated wrasse. It was hard not to recount the ones that follow you over and over. According to a nearby family of fishos, we'd been buzzed by a dolphin, but I didn't see it (I had wondered about the clicking noise).

Wednesday: It was now Kevin, Scoresby and my turn to go to Memory Cove – it would be hard to imagine a bay prettier or more friendly. It was a tight U shaped bay and completely sheltered from most wind directions - perfect for diving. I buddied with Kevin, and we ran the reel out and counted fish. Here the fish were much smaller than the other places we surveyed, but there seemed to be plenty of them, and they were very friendly. We saw Scoresby on the way back, followed by 20 or more blue-throated wrasse, like an old man emu and his chicks. We saw lots of actual emus and chicks on the drive in and out. There was a new fish for some of us; small, pink with yellow eye. Turned out to be barber perch.

Thursday: Of the many cliffs that we climbed down to dive or snorkel, the one at Wanna was the biggest of all. We found a path down to the bottom, and while I didn't do much here myself, the others had a good dive or snorkel and did lots of transects.

Friday: After a night spent by half the group on Fishery Beach under the stars, we went to Redbanks at 6.00am where the wind was blowing so much sand that I put my hood and mask on for protection at the top of the cliff -but it was perfectly sheltered below. Ali and I buddied up for snorkling and found a couple of hot spots for fish. Ali followed a ray with the video, at the same time I spotted the one and only shark for the whole trip - it was a small and very cute catshark, waiting in the queue with a dusky morwong and some wrasse for an underwater cleaning station complete with an old wife. Unfortunately when the catshark saw me, it decided it had urgent business elsewhere - so we finished the dive and returned to Adelaide.

Feral or In Peril News

As mentioned last newsletter, the Feral slates are being revised to include a new *Caulerpa* species and to clarify some of the identification features and procedures to follow in the event of a suspected sighting.

At this stage, the fish species on the *In Peril* slates will remain unchanged. In this edition we focus on two of these species, the Harlequin Fish and Western Blue Devil, with extracts from a report currently in preparation:

Baker, J. (2005). *Marine and Estuarine Fishes and Elasmobranchs of Conservation Concern in South Australia*. Report and CD prepared under contract to Coast and Marine Branch, SA Department for Environment and Heritage (DEH), and Marine and Coastal Community Network of S.A. (MCCN), for the South Australian Working Group for Marine Species of Conservation Concern. 870pp.

Apart from the rationale included here for listing as a marine species of conservation concern, the report will list current conservation status, distribution, notes on biology and behaviour, fisheries and trade information, vulnerable characteristics of the species, threatening processes, management recommendations, research notes / recommendations, other information and support for SA listing.

Western Blue Devil

Family Name:	Plesiopidae
Scientific Name:	<i>Paraplesiops meleagris</i> Peters, 1869
Recommended Status in South Australia:	Near Threatened
Rationale:	<i>The species is included here [in the report] due to its strong site association with reefs, its territoriality, and its solitary and inquisitive nature, which makes near-shore populations vulnerable to capture. As with the related Eastern Blue Devil, the secretive habits of the species makes its conservation status difficult to assess. Despite its widespread distribution in southern Australian states (including South Australia), there is little information available on the biology or population dynamics, and little knowledge of population sizes / relative abundance. The species is taken, as a food fish, by recreational anglers and spear-fishers across its range, including South Australia. Western Blue Devil fish are also used in the specialist aquarium trade. The species was first recommended for formal protection in 1967, and in 1980, a complete ban on fishing this species was recommended, as discussed below [in the report].</i>

Harlequin Fish

Family Name:	Serranidae
Scientific Name:	<i>Othos dentex</i> Cuvier, 1828
Recommended Status in South Australia:	Near Threatened
Rationale:	<i>The species is included here because (i) Harlequin Fish is a southern Australian endemic with a limited geographic distribution (S.A. and W.A.), and a limited known depth range; (ii) it is a site-associated coastal reef fish with vulnerable population characteristics, similar to other species in the Serranidae family; (iii) there is a paucity of information about population sizes, biology, and population dynamics; (iv) it is possible that the relative abundance of this species in S.A. is much lower than in W.A.; and (v) Harlequin Fish is caught recreationally and (to a lesser extent) commercially across its range by a number of methods, with few controls on the capture, particularly in S.A., and no investigation of the potential impacts of fishing has been undertaken.</i>

Seaweed Shark Night

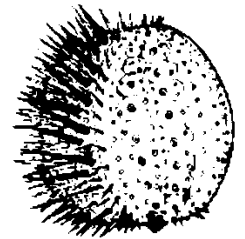
From the Marine Education Society of Australia Sea Week activities website:

Marine Discovery Centre Seaview Road Henley Beach SA 5022 Phone : 0418 921 849 Alex Gaut (octopus@chariot.net.au)	Shark Night! (10 March) A very special Shark Night with guest speakers including Rodney Fox and Tim Hoile. Rodney Fox was once the victim of a terrible shark attack and is now one of Australia's strongest shark ambassadors. Tim Hoile is the Director of the well-known Marine Discovery Centre at Henley Beach. A presentation will also be given by Alex Gaut, Vice President of MESA and may include some exercises from the MESA Seaweed 2005 Activities Booklet. 4.30 - 6.30 pm, certificates available \$30 per person, \$25 MESA members & student teachers, bookings essential
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Report on the October 2004 Identification Workshop

The Reef Watch Identification Workshop was held at SARDI Aquatic Sciences, West Beach, on a Sunday in October last year. It commenced with an entertaining talk by Professor Anthony Cheshire (Chief Scientist of SARDI Aquatic Sciences) about the importance and significance of South Australia's reefs. Following the talk there was some general discussion over morning tea, then the kids headed off to the creche and the workshop part of the day began. This involved a number of different stations covering different aspects of identification of fish, algae and invertebrates, including invasive species. After lunch there was a demonstration of the Reef Watch website.

Janet Scott, who has been involved in Reef Watch activities for the best part of a year, and who helped collect some specimens the day before, describes her workshop experience:



My first station was with Sue [Murray-Jones] and Scoresby [Shepherd], outside with the touch tank. This was a large tub filled with salt water, and containing different kinds of things you find around a reef, except fish – we're just not that quick when collecting. I kept handing things to Scoresby and asking "what's this? I think I was being very brave because some things in the sea sting - although I doubt Reef Watch would have left any there. My favourite was a blob anemone – which is a ball with lots of plump brown finger things in all directions and under Scoresby's direction, we could find an orifice in the middle, which is where the food goes.



The next station displayed the museum specimens. It was bizarre to see essentially the same things that we saw in the tank, but all dried out or pickled in bottles. Ali Eaton explained the relationships between sea stars, sea urchins and sea cucumbers – that we'd all seen in the touch tank and now in desiccated form.

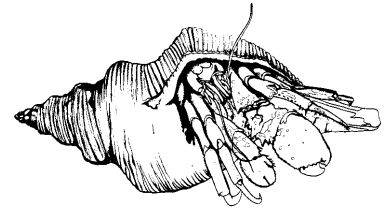
Then on to the fish lecture – with lots of slides of fish that you might find on the reefs around South Australia. I learned a few new ones, and got the names straight on a few that I'd seen and not known, and was a general smart arse about the ones I did know.

After this was lunch, with divine sandwiches with creative and yummy fillings.

After lunch we had seagrasses. I had been the bag lady for Hugh [Kirkman]'s collection, the previous day, so it was very interesting to have what we had collected explained so passionately. I was especially surprised to find out that seagrasses are an important carbon sink (absorber of carbon dioxide) and do much more than equivalent areas of land plants to reduce greenhouse gasses.

Then it was on to the algae station. This area was closely resembling Noah's flood as at least one of the tubs seemed to be leaking copiously all over the floor. I got a spray when I identified a non-algae – the hydroid in one of the tanks; tricky creatures in the sea, things that look like algae/plants and are in fact animals. I didn't see any leafy sea dragons in the tub, though there were some algae that look like them.

Last of all was the microscope station, though I think we spent more time looking at things like the hydraulic systems and tentacles of sea stars through a large magnifying glass with a camera attached. We spent some time futilely looking for some active hydroids but didn't find any – maybe next time. I keep a look out now when I'm diving for peek-a-boo animals that look like plants. I also got distracted by the SARDI fish tanks which contained some of the local reef fish. Nothing like swimming fish to keep me entertained for hours.



At the end I stayed around for a drink and chat with the demonstrators and many of the other attendees. All in all a very exciting and educational day. I look forward to the next one.

The next identification workshop will be held in late Autumn or early Winter.



Sea Wisdom

*Let friends
be to you,
as the ocean
is to the shore...*



Want to get involved in Reef Watch?

For diving or snorkling activities, visit our website, follow the quick link to "Next dive".

If you want to get involved as a volunteer in our committee, administration or development work, contact Reef Watch at the Conservation Council, 8223 5155, info@reefwatch.asn.au.

Particular thanks this month to Janet Scott for her contributions to this newsletter, to Scoresby Shepherd for his general support of Reef Watch and to Pamela Newland for her ongoing and invaluable assistance to the program (and the bits of trivia she contributes to the newsletter).



Thought for the day

'Whatever the difficulties, a girl guide always smiles and whistles.'



Leafy Seadragon Festival

You may have heard that there will be a Leafy Sea Dragon Festival in the Yankalilla District in from the 13th to the 28th April, 2005. As part of this festival Second Valley is holding a photographic and Art competition. The subject matter is Second Valley and the categories are: Holiday, History, Underwater and Land/Seascape. We would like to bring this competition to your members attention. Judging will be carried out by Russell Millard, Pictorial editor of the Sunday Mail and there will be a first prize in each category of \$100 cash. There will also be a junior encouragement award in each category. This comp is open to both digital and film amateur photographers. There is also a category for artworks. Entry to this event is \$1 per entry and entry forms and further information is available from event co-ordinator Lyndell: Phone 8598 4187 or email lyndell@granite.net.au, and for more information about the Festival, visit:

www.yankalilla.sa.gov.au/site/page.cfm?u=199

Did you know...

In 1498 the explorer Vasco da Gama dropped anchor in Malindi, Kenya. A cross of Lisbon stone at the entrance to the bay marks da Gama's landing.

Reef Watch currently receives most of its funding from the Mt Lofty Ranges and Greater Adelaide Integrated Natural Resource Management Group through the Natural Heritage Trust



Mount Lofty Ranges
& Greater Adelaide
INRM Group



Natural Heritage Trust
Wikipia Co-ordinator
Brisling Institute
117-119 North Adelaide Rd
Adelaide SA 5000

A number of other organisations have provided some funding or in-kind support, including:

DEH



PADI Project Aware



PIRSA



PRIMARY INDUSTRIES
AND RESOURCES SA

SARDI

SARDI



SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE

City of Onkaparinga



The diving industry has also given support to Reef Watchers for the annual Marathon Dive and in some cases for dives throughout the year. Details are currently being finalised but are listed on the website.

The Reef Watch website is www.reefwatch.asn.au

If undeliverable return to:

Reef Watch

Conservation Council of SA Inc.

120 Wakefield St

Adelaide 5000



Conservation Council
of South Australia Inc

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