

Marathon Dive

Were you there?

During March, more than 75 divers and snorkellers took to the water to try to monitor the entire circumference of Port Naurlunga reef over a 12 hour period. The first divers hit the water at 7:30am, recording the presence and abundance of fish within a 100 metre transect. More than 3000 fish were counted during the day. The five most visually dominant species can be viewed in table one.

Table one: Comparison of the 5 most visually dominant species recorded by recreational divers as part of the Marathon Dive and as data collected by scientific divers as part of a report to the EPA (1998)

Marathon Dive Data (2000) Fish Species	Max. abundance (per 50m transect)	Scientific Data (1996) Fish species	Max. abundance (per 50m transect)
Hula	11.9	Hula fish	19.8
Leather Jacket	7.9	Leather Jacket	6.9
Talna	2.4	Silver Drummer	3.4
Old Wife	1.8	Talna	1.5
Magpie Perch	1.5	Wrasse	1.2

*scientific data can be viewed as part of a report to the EPA: Cheshire *et al.* (1998) *Assessing the status of temperate reefs in Gulf St Vincent II: Survey results.*

In most cases, fish per transect were lower during the 2000 marathon fish count compared to 1996, however this could be related to the period of time over which the count was completed and that the marathon data was collated from the entire reef system. Several transects were replicated during the marathon dive which could also explain the lower readings. Since 1996 there has been a significant decline in the presence and abundance of large brown kelp (the presence of large brown algae are believed to signify a health reef) at Port Naurlunga reef (Cheshire *et al.* 1998). This could be correlated to the decline in abundance of several species (listed above). However as some species have increased over time, this is unlikely. The variability is likely to be related to the variable recruitment levels of juveniles from the pelagic larval phase to the reef system (Lincoln Smith *et al.* 1991, Cheshire *et al.* 1998).

Similarity in visually dominant species observed during 1996 and 2000 indicate that fish populations at Port Naurlunga reef are fairly stable. Each of these fish species are believed to be resident species of reef and thus the stability of populations suggests that fish presence and abundance could become a good indicator of reef health, if data is continued to be collected over a period of time. Subsequently, the similarity in data collected by recreational and scientific divers implies that community collected data is becoming and should become a significant tool to monitor populations.

Reefwatcher

The marathon dive could not have been possible without the support, assistance and enthusiasm of many people. A big thank you especially to Daryl Metters and family, Russell and Sue, Tony Lewis, Mary-Anne Stacey, Patsy Merdum, Brydie Hill, Alastair Hirst and Steve Gally. These people filled the invaluable role of administrator, lockouts, boat drivers, video cameraman and kit makers. Thank you also to all the Dive shops and Clubs who provided free and half priced air fills, reduced priced gear hire, promoted it through their shop and Clubs, and encouraged divers to participate on the day. Due to its success a bigger and better event is already being planned for next year.

Make sure you're warm and comfortable before the dive – a carbohydrate meal such as pasta an hour or two beforehand is a good idea. If you're doing a boat dive, wear a windproof jacket on the boat, both before and after the dive. 25% of the body's heat loss is via the head, so a hood or beanie is a must. During the dive, monitor your buddy and yourself for signs of cold. If you're feeling it, they are too, so don't be embarrassed about terminating the dive before finishing that survey. The danger sign, when the body core temperature starts to drop, include loss of co-ordination – not being able to write

Marine Invertebrate Workshop

October 22nd 2000
9am – 4pm

Can you tell the difference between a sponge and a sea squirt? Are you an avid Reef Watch diver or snorkeller, or are you just interested in learning about our unique marine environment? Interested? Well, this workshop is just for you! The workshop is being hosted by Reef Watch, with the support of instructors from: SARDI Aquatic Sciences, Flinders and Adelaide Universities, and Reef Watch. The workshop will encompass both theory and practical, with slides, videos, touch tanks, informative instructors and much more. The workshop is being designed for those new to marine identification. Places are limited, so register your interest now!

Contact: Sheralee Cox, Reef Watch Project Officer, on 8223 5155 or info@reefwatch.asn.au

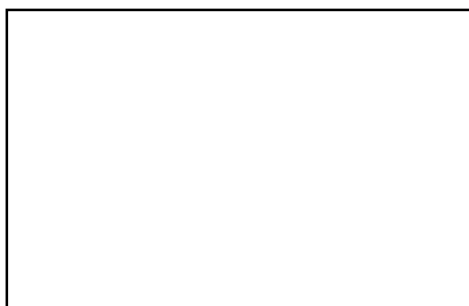
Chilling out?

by Alex Suslin

The worst of Winter is over. The days are getting longer and the water clearer. Flat seas on windless mornings, blue skies. But unless you wear a dry suit, your bottom time will be governed more by the cold than by the dive tables. As you'll recall, water draws body heat away 25 times faster than air. What can we do to reduce the chill as we do our Reef Watch surveys?

A snug fitting wetsuit of appropriate thickness is a good start. Such a suit traps the initial layer of water that gets between it and you. The water is warmed by body heat. A sagging suit allows water circulation – cold water! Wetsuits tend to wear out over time, so that after several years, your favourite 7mm may end up with the thermal qualities of a 5mm. Loose stitching, worn out velcro and any cuts should be repaired or replaced.

A good hood, gloves and booties help. A wimpy vest over the top of the suit or an undersuit make life more bearable under water. Pop into your favourite dive shop for advice – Winter is a quiet time and you tend to get gear at bargain prices.



or difficulty with the reel and line; and loss of interest – performing the motions, because that's what's expected, but the brain is elsewhere.

After the dive, get warm. Pouring warm water down your wetsuit works wonders. Warm drinks or soup are great and with a packet of Tim Tams, you'll discover friends you never knew you had! If you've planned to do another dive but haven't warmed up sufficiently, the simple answer is, forget it.

For those, who are convinced that Winter diving is not for them, pick a sunny day to go for a walk along one of our northern metropolitan beaches with a bucket or plastic bag and gather some of the marine flora and fauna that has been washed up by the tide. Then test your identification skills. Great fun for the whole family and an activity which non-divers can enjoy.

Happy Reefwatching!

T-shirts for Sale!

For those of you who have not bought a Reef Watch t-shirt – here's your chance. Sizes range from small to 4XL and are priced at \$20 each. Long sleeve t-shirts are \$25 (both GST inclusive) T-shirts are available in navy blue with white lettering. There is an enlarged logo of Reef Watch on the back. On the front is a small Reef Watch logo, with 'Diver' written underneath. Orders can be placed by contacting: Sheralee on 8223 5155 or reefwtch@tne.net.au

PIRSA ~ Marine Habitat Program

The role of the Marine Habitat Program is to ensure that marine ecosystems are managed so that they may be utilised in a sustainable manner. The program is currently undertaking work in a number of key areas.

These include

- *Marine protected areas
- *Introduced marine pests
- *The Fisheries Action Program
- *Developing an inventory of key fisheries habitats and threats to those habitats
- *Working to ensure that fisheries issues are considered in regional planning and local development decisions.

For more information on the Marine Habitat Program contact the Program Manager: John Gilliland, on 8463 3012 or gilliland.john@sa.gov.sa

Stayed tuned for further information on the program in future editions of *Reef Watcher*.

KI cheap diving!

If anyone is interested in, or is about to head over to Kangaroo Island to do some diving here's a cheap way to do it.

John Lavers from the Australian Marine Conservation Society on Kangaroo Island is offering the use of free dive gear, boat dives and cheap accommodation in exchange for assisting in completing Reef Watch surveys. Divers would preferably be experienced Reef Watchers, with the ability to identify invertebrates. The aim is to establish and increase the database of information on the flora and fauna in Backstairs Passage. John and his team are trying to establish this area as a marine protected area. For further information contact: John Lavers - 85531072

Lasseter's Reef- (*"There's Gold in them thar Waves...."*)

by John Cooper

Myself and dive buddy Pauline are hoping to map and survey Lasseter's Reef over the next 12 months. No, we're not talking about starting a gold mine, we are referring to the small reef located about 300 metres off the beach at Second Valley. (Maybe its called Lasseter's because it's so hard to locate.) Its only about 50 metres by 30 metres or so (we haven't measured it properly yet) with the top about 2-3 metres under the surface, and the base at about 6 metres depth. Getting to it involves a 300 metre swim (if you don't have a boat), which is why I suspect it isn't visited too often. We always take a float and dive flag, as the reef is occasionally visited by fishermen. We've only dived the reef twice so far (once in lousy visibility), so we don't know a lot about it. However, from first impressions it appears to be steep on the western aspect, sloping gently down to the east. It has a good covering of kelp, and includes plenty of sponges and fairly abundant fish life. We've seen one weedy, and are hoping to find leafies. Fish include Old Wives, Blue Devils, and plenty of Leatherjackets.

We'll have a better report once we've had a chance to do a proper survey. There is a risk of this reef succumbing to the pollution brought in by ignorant fishermen. We have already seen a collection of beer cans, a screwdriver, and a deck chair (!) on the reef. However, to my inexperienced eye, it seems reasonably intact and could be a good marker for the health of the general area. One advantage Paully and I have is that I've been able to take aerial photos of the reef. This makes locating it easier as we can get an accurate bearing on it during the swim out. I've included a copy of the photo with some bearing lines marked on it in case others want to know where to look. We would be grateful for any help in learning how

do the surveys properly. Our fish/weed identification skills need a lot of honing, and if anyone had a small inflatable we could know occasionally.....

View the aerial photos of Lasseter's at www.reefwatch.asn.au or for further information contact John.austerj1@ozemail.com.au

Code of Conduct for diving with dragons

Dragon Search, in conjunction with the South Australian Dept. for Environment & Heritage and Primary Industries & Resources SA - Fisheries, is producing a SCUBA diving 'Code of Conduct for the Observation of Seadragons in the Wild'. With the increased profile of seadragons, there is a concern that without a diving protocol, overly enthusiastic divers may have an adverse effect on particular seadragon populations. Seadragons at dive sites that have a high diver visitation rate are particularly susceptible. The Code of Conduct will be printed in the very near future and information about obtaining a copy included in the next edition of Reef Watcher. A copy of the Code will also be published on the Dragon Search website www.dragonsearch.asn.au.

On-line seadragon sighting form

An on-line version of the Dragon Search seadragon sighting form is now available on the Dragon Search website www.dragonsearch.asn.au. The convenience of electronically submitting sightings will hopefully encourage lots more seadragon sightings to be reported to Dragon Search. If you have access to the internet please give it a go!

