LOOKING FORWARD TO A SUMMER IN THE SEA!

It’s been a busy two months, with lots to report on in this edition. With the weather warming up, it’s about to get even busier!

Oceans and Human Health

We all know about the intrinsic value of marine environments - they’re valuable in their own right. But their value goes far beyond what most people imagine. Healthy marine environments are vital for healthy people worldwide.

Some of Australia’s (and the world’s) most significant tourism drawcards depend on healthy marine life. The most obvious example is the Great Barrier Reef. However, in WA, Ningaloo Whale Sharks contribute around $10 million each year to the region’s economy, and in SA, White Shark tourism contributes significantly to the local economy in Port Lincoln. Without healthy marine life, these coastal towns would likely follow the same demise as many small, isolated country towns. In addition to tourism dollars, there’s also income from fisheries.

Yet the impact of polluted marine environments on people’s health and well-being is also extraordinary. Many identified marine species have proven important to medicine. Moreover, billions of people across the globe are solely dependent on seafood for protein intake. Oceans are more important to everyday life than most of us realise.
Innovative Marine Education

Engaging students in real marine research is proving to be a popular alternative to simulated data analysis. Whilst meeting curriculum requirements, these projects have a multitude of benefits.

Scientifically, involving school students in marine research allows for more quantitative data to be collected, collated and analysed on a given environment or species. Adding to the limited pool of research available on marine life is invaluable.

Possibly even more important are the benefits to school students from being involved in such projects. Not only do students become equipped with a range of skills and knowledge, but the satisfaction gained from their involvement in such research no doubt exceeds the classroom alternatives.

“a wonderfully practical way to learn about science, biology, and the environment.” Principal, Kangaroo Island Community Education. May 2008.

Dolphin Watch

The Whale and Dolphin Conservation Society launched Kangaroo Island Dolphin Watch in 2006. Proven successful, and has since been replicated at two other South Australian locations. Dolphin Watch engages high school students to conduct photo identification surveys on board a local charter boat. The surveys include taking photos of each dolphin’s dorsal fin (for identification) and recording their location and behavior at the time of sighting. Students then enter their scientific data into an online database. Over time, a picture of the local dolphin population becomes apparent.

Since its launch, Dolphin Watch has won awards and accolades for its scientific, educational, and community-based outcomes. WDCS are currently awaiting funding to replicate Dolphin Watch in Sydney.
**Handy Hints for Marine Education**

**Part One - Positivity**

**BE GONE WITH DOOM & GLOOM!**

How many times have we heard the shocking statistics of where we’ll all be if we continue our environmentally degrading ways? How does this make you feel? And how would it make you feel if you didn’t know how to help the situation? Slightly helpless or deflated?

Turns out, hopelessness is something environmental educators need to be quite wary of. Back in 2005, I read a paper that has never been far from my thoughts since. It was published by Nagal in the Australian Journal of Environmental Education (Vol.21), and suggests that “while attempting to educate future generations about environmental issues, environmentalism may have also assisted in developing a generation of children who have not only become apathetic to environmental issues but also lost in a confusing muddle of learned hopelessness” (p.71).

Need further convincing? Here are some of the quotes given to the researcher by young children:

- “Because the ozone layer might grow bigger and the ice caps might melt and anything could happen and I think that it’s just wrong that we hurt our children and their children and they did nothing. I think well that’s just like what we’re doing killing innocent people that we don’t even know yet and they haven’t done anything to hurt the environment.”
  (Jake - Australia)
- “...it will just keep getting worse. It won’t get better. It can’t get better. It’s just getting worse.”
  (Camille - Australia)

**Island Hopping in Sydney Harbour**

A number of MESA members were recently involved in the Sydney Harbour Island Hopping event. The event was part of the Grive Sydney International Food Festival, but with involvement from the NSW National Parks and Wildlife Service, one of the Islands was hijacked to showcase Sydney Harbour’s wildlife rather than its cuisine.

With 18 volunteer divers over 3 weekends collecting sea creatures to captivate the crowds, it was an exciting event. And with more biodiversity in Sydney Harbour than any other harbour in the world, we had quite a lot to showcase!

Seahorses, a sea hare, urchins, sea stars, anemones, pigmy leatherjackets, cuttlefish, and the biggest triton snail I’ve ever seen in Sydney were just some of the main attractions.

It was so satisfying to be able to tell people that there are more seahorses in Sydney now than I’ve seen ever before. Seahorses are some of many critters who don’t like polluted water, so any increase in their abundance is incredibly important, and a credit to Sydney-siders.
UNDERCURRENTS

Integrated Marine Observing System

The epitome of ‘high-tech’, the Integrated Marine Observing System (IMOS) is an Australia-wide project which is providing researchers with invaluable information. Funded by the Australian Government, it uses satellites and other instruments in the ocean to observe physical and biological properties.

Historically, researchers are very protective of their data, hiding it away from any prying eyes that may be nearby. This is where IMOS is different. The secretive, lab-coat donning scientists have realised that sharing data is a great way to overcome tight budgets and work together for better outcomes. All IMOS data is available to researchers (and sticky-beakers) free of charge at the IMOS Ocean Portal (www.mimos.org.au). Ocean gliders, profiling floats, satellite tags, and huge moorings are used in observation of the open ocean.

Sydney Institute of Marine Science

Formed as a research institution for four (now six) universities in NSW, SIMS is a world class development for marine science research and education.

Also world class is SIMs location! The institute is in Chowder Bay on Middle Head, Sydney Harbour. It’s close proximity to the water means researchers can study Sydney’s marine life using thousands of litres of water which is pumped through the facility each day.

There are always intriguing research projects being run through SIMS, one of which being the Integrated Marine Observing System (NSW node). For more info, visit www.sims.org.au.

Contributions

I’d love to hear about the programs you’re involved with. Please send contributions, story suggestions, or photos to kate@greynurseguardians.com.au

“\textit{We cannot build a future we cannot imagine. A first requirement, then, is to create for ourselves a realistic, compelling and engaging vision of the future that can simply be told.}” David Elgin, 1991.

UPCOMING

Shark Nets
Managing shark populations, or managing people’s perceptions?

Handy Hint #2 - Permanent
The role of evaluation in assessing ‘durability’ of Marine Education.

Pre-Seaweek Info
Some handy hints and information for Seaweek 2011 in March!