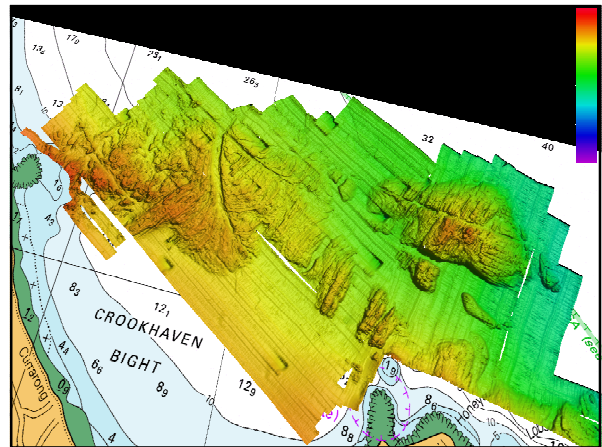
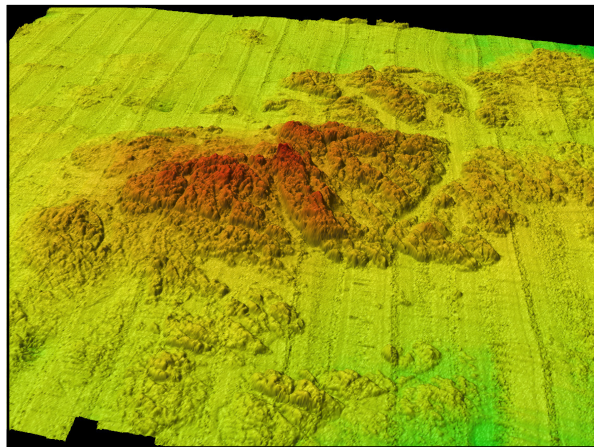
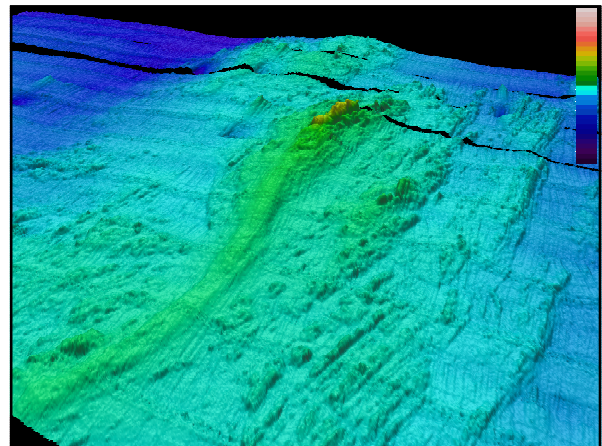
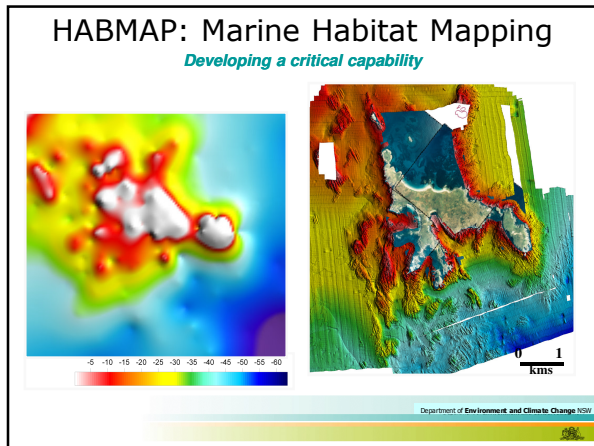


CMAs getting some action "on-ground" & "in-water"

- Australian & NSW Govt \$\$
- Baseline research, monitoring, assessment
- NSW Marine Habitat Mapping Project
- *In-water* works: seagrass friendly moorings
- Marine Education

The Spectacular Murray Canyons
South Australia







Science meets Community

- Changing human behaviour = on-ground
- Marine Discovery Series
- Project Aware On the Rocks
- URGs and UGs
- Integrated projects and corporate \$\$

What will you find in your blue backyard?

Marine Discovery Series



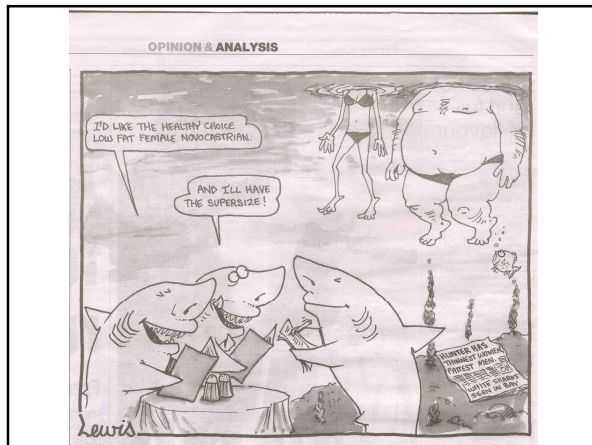
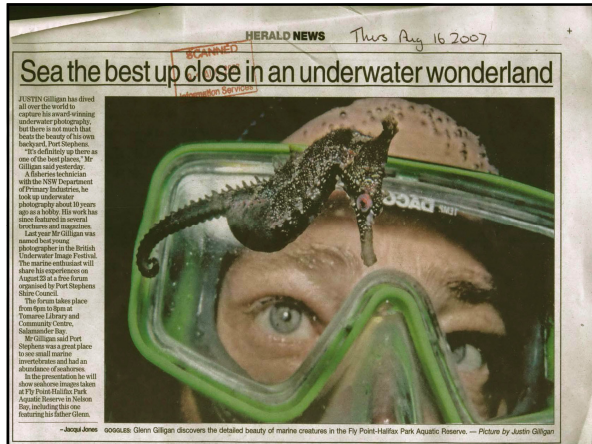
Why do it?

- Transform perception of the marine world
- Use wow factor to start people thinking
- Bring balance to public debate on MPAs
- Try and get people actively involved

HERALD NEWS

Seahorses 'under threat'

Seahorses are under threat from overfishing and habitat loss, according to a new report. The report, published by the Department of Conservation, says that the number of seahorses in the world has declined by 90 per cent since 1980. The report also says that seahorses are being caught in fishing gear and are being sold as pets. The report calls for a ban on the trade in seahorses and for the protection of their habitats.



Marine Discovery Series

- Media coverage
- Thousands of people attended
- Corporate sponsorship
- Greater involvement of local govt
- New underwater volunteer groups



Intertidal Animals of New South Wales

Intertidal Zonation
The wet zone is the zone of species which occur across a rocky shore. This is called intertidal zonation. The rocky zone is divided into three zones: the splash zone, the upper and lower littoral zones. The splash zone is the zone of the splash zone, and the upper and lower littoral zones are the zone of the splash zone.

Saunderian Shores
Between Newcastle and Kiama, NSW, intertidal seaweed plants from large that surface that provide more habitats for intertidal animals and algae. The waves do their best of their energy, as they roll across the wide exposure of platform. Cliffs, cracks and cavities on steep across the platform. Rock pools and water in shallow, deep pools, which are important in their own right as habitats for many species of marine life.

Tidal Levels
On rocky coast, intertidal animals and algae may be found in various zones. Whether they are found upon the sides, or live deep in crevices is dependent on the nature of the site, usually once each day, a NSW shore.

Splash Fringe Level
This zone is the highest, dryest, and most exposed. It may be visited by many animals. This zone is the highest, dryest, and most exposed. It may be visited by many animals. This zone is the highest, dryest, and most exposed. It may be visited by many animals.

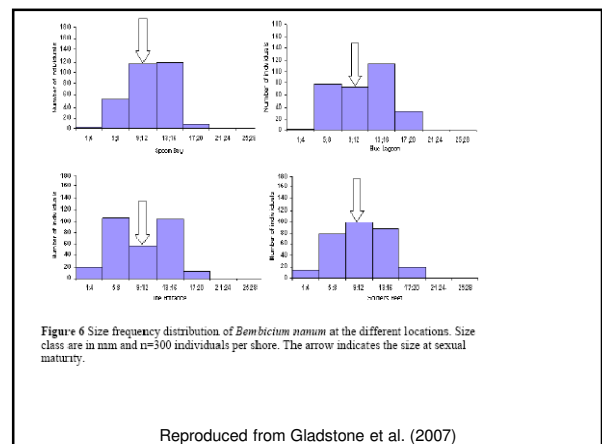
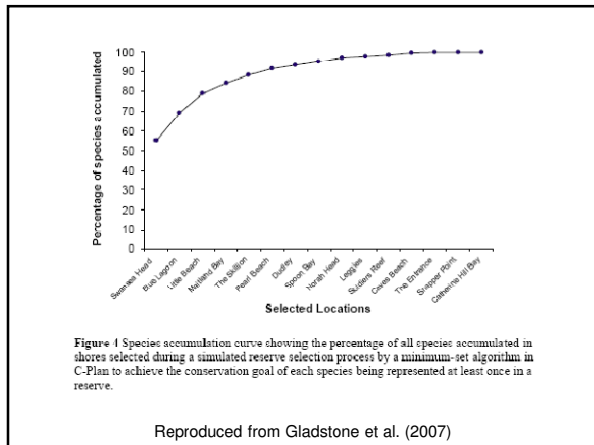
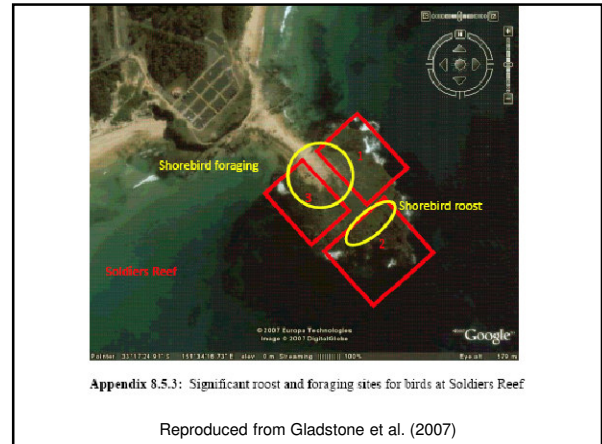
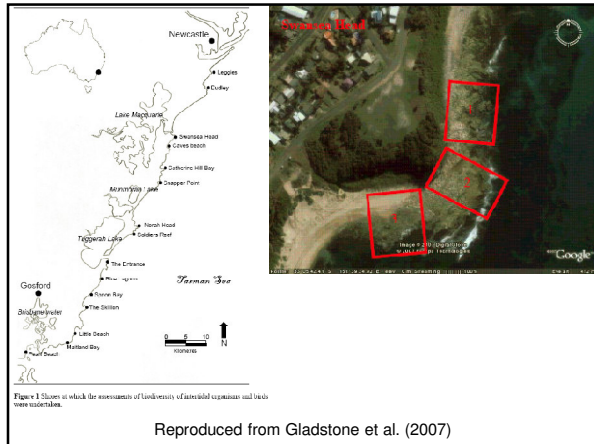
High Tide Level
This zone is the zone of the splash zone, and the upper and lower littoral zones. The splash zone is the zone of the splash zone, and the upper and lower littoral zones are the zone of the splash zone.

Low Tide Level
This zone is the zone of the splash zone, and the upper and lower littoral zones. The splash zone is the zone of the splash zone, and the upper and lower littoral zones are the zone of the splash zone.

Low Fringe Level
This zone is the zone of the splash zone, and the upper and lower littoral zones. The splash zone is the zone of the splash zone, and the upper and lower littoral zones are the zone of the splash zone.

Marine or Sub-tidal level
This zone is the zone of the splash zone, and the upper and lower littoral zones. The splash zone is the zone of the splash zone, and the upper and lower littoral zones are the zone of the splash zone.

http://www.hcr.cma.nsw.gov.au/ep_resources.php3





Havens for biodiversity

Demand for headlands' protection

By DAMON CHIDSHAW
Swansea local reporter

Environment Australia studied 15 sites, examining a range of species, including shellfish, molluscs, sponges and algae on rock platforms, crevices and rock pools. The study found Swansea Head had 127 species, the highest number recorded among the 15 sites.

A list of 140 rock-pool-dwelling invertebrates and 100 species of seaweed were collected at Swansea Head during the study.

SWANSEA Head has been named as one of the most important headlands in the region and needs to be protected from development. A report from the research team, headed by Swansea University's Professor William Chidshaw, concludes that the study has found that the rocky shores in Lake Burghley and the Central Headlands should be encouraged to underfund the importance of the rocky shore environment as a source of food, shelter and breeding for birds. The report also says the report recommended that the Central Coast's Blue Lagoon and South Head be protected as potential sites for aquatic reserves.

The committee has asked the state authorities to fund more research into Swansea Head's rocky platforms, water quality, climate, water, habitats, and to establish a potential protected area or aquatic reserve.

DR BURG, Swansea's local biologist, is seen at left. Photo by **DAVID MOORE**

Solitary Islands Underwater Research Group

SURG

www.surg.org.au

Who are SURG?

- Local community members - all walks of life who are passionate about the marine environment
- Tertiary trained biologists
- Talented underwater photographers
- All are keen naturalists

NEWS | Byron Shire News

Divers tackle reef rubbish problem

Discarded fishing tackle and rubbish on underwater reefs of the Cape Byron Marine Park were cleared recently by a group of community volunteer divers.

Refuse collected included fishing rods, tackle and line, ropes, wire and an anchor.

But the upside for the 11 divers from Byron Underwater Research Group (BURG) was the amount of sea life they encountered including a green turtle, a very large stingray and a wobbegong shark. In a first for the area, the clean-up dive was funded by the Looking After Byron Project which identifies and supports community groups that are making a contribution to keeping Byron beautiful.

BURG formed last year and is dedicated to the study and conservation of marine life.

To date their projects have included fish counts around Julian Rocks and creating an underwater guide for visiting divers.

Group spokesperson Zan Hammerton said that raising the awareness of divers and the community about our natural environment and performing practical works like clean-ups all contributed to the preservation of the underwater world.

Simon Hartley and Zan Hammerton from Southern Cross University with some of the rubbish collected.

"For years fishing line that has accidentally snagged and broken has accumulated on the reefs of the area and this great project by

BURG Fish species of Julian Rocks Boulder field habitat (1)

BURG Fish species of Julian Rocks Sand gutters and trenches (2)

New underwater volunteers

- **Port Macquarie Underwater Research Group (PURG)**
- **Great Lakes Underwater Group (GLUG)**
- **Terrigal Underwater Group (TUG)**
- **Charlestown Dive Social Club**
- **Research, monitoring, education, Clean-ups**



divers research

Just one of the species identified at Latitude Rock.

Many of us already know the Great Lakes is home to an incredible diversity of fish, including some endangered species, but now a special group of underwater volunteers has formed to develop a much more comprehensive record of what's out there.

People have been mapping the Australian landscape for decades, but when it comes to the underwater world there are huge gaps in our knowledge. To put it bluntly -- if we don't know what's out there, how will we be able to manage and ultimately conserve this vital resource?

So local divers have banded together to form Great Lakes Underwater Group (GLUG) and have already listed an impressive 120 fish species at eight different sites to date. Since May the group has conducted research dives at locations including Latitude Rock, off Cape Hawke, and Skeleton Rocks, including wobbegongs, grey nurse sharks, eagle rays, and also at Seal Rocks there was a tremendous diversity of fish," group co-ordinator and Forster local, Suzanne Feibig said.

There have also been dives at Snowflake Reef, off Blackhead, and at the Red Head Gutters.

"Snowflake at Blackhead was very different, with fewer fish species on the day but lots of large plate corals, sea fans, brain corals, nudibranchs and starfish. The highlight of the dive at Red Head Gutters was the presence of two curious giant rattfish."

Suzanne Feibig has dived across the world conducting various forms of marine research, and now she's pleased to be working in her very own "blue backyard".

"We're so lucky to have the Port Stephens-Great Lakes Marine Park on our doorstep, and I'm excited GLUG can contribute to the scientific research being completed in our area."

Heritage Trust, through the Hunter-Central Rivers Catchment Management Authority (CMA), and Great Lakes Council.

"We are proud to be providing funding and technical assistance for this project, which involves local people with a passion for the sea contributing to our scientific understanding of the underwater world," Hunter-Central Rivers CMA Chairman Dr WEI Paradise said.

There are also plans for GLUG members to undergo specialist training from the University of Newcastle's Dr Bill Gladstone.


"This project is not only aimed at gathering data, it's also aimed at engaging and training volunteers to monitor marine biodiversity using rigorous scientific methodology," Great Lakes Council's Coastcare Community Support Officer Isabelle Strachan said.

For more information on the project or even if you're a qualified and experienced diver interested in volunteering, contact Isabelle from Monday to Thursday 9:00am to 5:00pm on 08 4922 7777.


NSW Marine Habitat Mapping Project

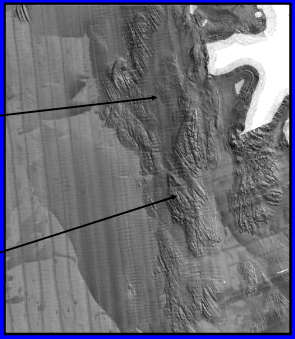
Review of Underwater Volunteer Groups / Development of Methods

Reef + sand



Reef







Look, but don't take

Undersea shots to monitor fish

CENTRAL COAST NEWS

CROWNE PLAZA HOTELS & RESORTS

TERRIGAL UNDERWATER GROUP Scuba Diving Club (02) 4341 0763



Thanks!

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