



Points of Interest

- *Recent Activities*
- *Snorkel surveys*
- *Coming soon: Guided sea-kayak tour of Durras Lake*
- *Whale photo comp*

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Credits

Photos: Rosaleen Williams, Carolyn Morey, Robyn Miller, Jenny Edwards

Articles: Jenny Edwards, Suzanne Gray, Bill Barker

Newsletter: Melanie White

Web: Jock Howe

PRESIDENT'S PIECE.....

So far we haven't had the greatest summer conditions for doing watery things but we still managed to have several activities over the school holidays. More are planned for coming months.

Unfortunately our activities have also been limited by lack of volunteers to co-ordinate them. Bill Barker has done more than his fair share. You might like to have others join you at safe locations for a beach walk, canoeing, snorkeling or swimming. Only a couple of days notice is required for activities that could be affected by weather or sea conditions.

It is not difficult to co-ordinate an activity, all you have to do is get an idea for one; let me know what, when and where so I can tell the other members to contact you; get phone/mobile numbers from those interested in taking part so you can contact them if the activity has to be cancelled; and get people to sign on when they arrive. We will provide the sign on form and a list of the financial members' names, as only they are covered by our insurance and permitted to take part.

Anyone wanting more information please email Jenny ; info@ncmg.org.au

Jenny Edwards, President



Orange Sea Cucumber—see page 4 for more info (Photo: Jenny Edwards)

Mystery Jelly

Last newsletter we included a photo by Robyn Miller of an unidentified jellyfish.

It was Robyn who finally found out what it was and we featured it in one of our regular newspaper columns. Many of you may not get the local papers so check out our website for other stories www.ncmg.org.au/stories

Crystal Jelly in Wagonga Inlet (Photo: Robyn Miller)



The Crystal Jelly by Jenny Edwards

Among the beautiful and unusual jellies that visited Wagonga Inlet and offshore waters in October were many Umbrella or Crystal Jellies (*Aequorea* sp.).

Crystal Jellies (Class Hydrozoa) grow up to 20cm in diameter but are virtually transparent except for a band of blue vertical stripes around the edge of the “umbrella”. They are only very distantly related to most of the large jellies we see (Class Scyphozoa) because their internal structure and lifecycle are so different.

The blue stripes are radial canals that are connected to a central cavity or “stomach” and a ring canal around the edge of the umbrella which in turn connects to hollow tentacles that hang below the rim. All these hollow spaces make up the digestive system of the jelly.

Their food mainly consists of other gelatinous animals such as other jellies, although they do feed on such things as tiny fish and fish eggs. Like all the animals in their Phylum they have stinging cells to help capture and immobilise their prey.

In Crystal Jellies reproductive cells are attached to the edge of the radial canals. The eggs or sperm are released into the sea where they fuse and develop into tiny multicellular larvae that creep along the bottom until they find a suitable place to attach. The animal then develops into a polyp – imagine a small anemone-like creature on a stem. When this reaches maturity it develops little vase-shaped buds which break off and swim away to grow into Crystal Jellies.

The Crystal Jelly differs from many of the animals in its own Class by having such a large free-swimming stage. Most others are either very small or remain attached to the polyp as little buds.

Many species of *Aequorea* produce green fluorescent proteins around the margin of the bell. For many years the animals were commercially harvested in the northern hemisphere to extract the minute quantities of these proteins so that they could be used as markers in biomedical research.

WHALE PHOTO COMPETITION

Remember to save any good photos of whales in our local seas that you take this year (or took last year). We will be running a competition this season. Details later by separate email.

MYSTERY PHOTO

This one will test you out!

Even in real life it was hard to make out and, since the photo is not the best, your task is that much more difficult. Contact Jenny if you know what it is; info@ncmg.org.au.



SEAWEED/SEAGRASS BROCHURES

These free brochures, that we helped produce, have information and photos of 18 of the most common species found on the South Coast. You can get them from town libraries, tourist information centres, the Eurobodalla Regional Botanic Gardens and Council offices.

Photos Please!

Your contributions are always gratefully received. How about some more for our Mystery Photo segment?

If you photograph something new and can't identify it we will have a go even if the photo does not turn out as good as you hoped.

Send your photos to us : info@ncmg.org.au



Eagle ray at Narooma by Rosaleen Williams

Exploring near Australia Rock, Narooma

Bill Barker led the group as we searched the rockpools at what was for us a new location (photo next page).

Most of the usual suspects were found but, for the first time on one of our rambles, we found bright orange sea cucumbers (front page) and an acorn worm.

Rock Ramble, Broulee

The weather was cool and grey but that seemed to encourage the intertidal life into the open. Eleven people helped explore the pools and were lucky to find a beautiful Striped Bubbleshell (*Hydatina physis*) (photo next page) as well as many other creatures.

Art on the Path, Broulee

NCMG had a stall at both of these events over summer. Many people stopped to look at the displays, take a seaweed-seagrass identification brochure and/or a membership brochure. We invited children to draw some of their favourite marine creatures and these were assembled in a display at the Mossy Pt gallery (photo below). The artwork also served the purpose of publicizing NCMG.

Snorkel at Narooma Net

This was supposed to be a social snorkel at Mystery Bay but the seas were so huge and dangerous that we adjourned to the netted enclosure and rock wall at Wagonga entrance. There were lots of fish of many different species, including rays, and quite a few octopuses. Several different types of sea hares gathered on the rocks all intent on mating and laying their egg strings.

Right: Kids draw marine life at Art on the Path.

L-R Charlise and Laila Cleary, Jack and Alicia Carter.

(Photos: Jenny Edwards)



RECENT ACTIVITIES



Left: Bill Barker explains finds at Narooma

Below: Striped Bubbleshell: Hydatina physis

(Photos: Jenny Edwards)



Art on the Path, Broulee, Sunday, April 17, 8am to 12pm

After the success of the summer series of Art on the Path, it's on again in Broulee on Sunday April 17. For more information, visit www.brouleecommunityassn.com

Snorkeling with the Seals

We had a big turn-out of 27 members on Sunday, 30 January, for the always-popular ‘snorkel with the seals’ outing to Montague Island.

It was a beautiful sunny day, and while the sea conditions were not quite as good as we had hoped, most snorkelers were able to get into the water with the main group of seals and had some great close encounters.

We then moved into one of the sheltered bays, where many of the group had even better experiences with the small group of seals that seemed to prefer that spot.

As usual, the seals were swimming close to the snorkelers and putting on a great show of acrobatics. There was also good fish life on display, with rays, a Port Jackson shark, a moray eel and many of the resident reef and pelagic fish. A feature was the large number of planktonic animals cruising by, even though one or two of them made their presence felt in an unwelcome way.

It was great to have so many new members and children on the trip. The opportunity to see such impressive wildlife at close hand undoubtedly makes a deep impression.

We always welcome children on our outings.

UNDERWATER ROBOT—MPA Media Release

In a new and important collaborative project between the Department of Environment, Climate Change and Water (DECCW) and Sydney Institute of Marine Science, state of the art technology is being deployed to provide high resolution images of life on the seafloor of Batemans Marine Park.

The Autonomous Underwater Vehicle (AUV), a type of high tech robot, developed by the Australian Centre for Field Robotics at Sydney University and jointly funded by the Integrated Marine Observation System (IMOS), provides high quality images that significantly improves the capacity to identify species of marine life on the sea floor.

DECCW spokesman, Tim Ingleton said that this technology will offer new insights into the diversity of different habitats in Batemans Marine Park. “It will allow us to track changes that may occur over time within the Batemans Marine Park because the introduction of new conservation management regimes such as sanctuary zones where no fishing of any sort is allowed. We routinely use a special towed video to monitor the underwater environment within the Batemans Marine Park. This is great for broad surveys in which we can identify the underwater communities that exist and this allows us to cover larger areas in a cost effective way.”

“The AUV offers the advantages of precise navigation and fine control which enables it to ‘fly’ very close to the seafloor even in complex terrain. It is untethered and therefore decoupled from ship motions. This results in ideal conditions to acquire images with its stereo camera system. These capabilities combined with advanced mapping and visualization tools allows us to create 3D photomosaics of 1000s of individual images of the seafloor. The AUV was used for a week and a half to survey areas of the park.

The technology will allow us the ability to return again at a later date to exactly the same locations and repeat the survey so we can compare any changes in the seafloor communities to assess the effectiveness of zoning arrangements within the marine park in protecting biodiversity.”

All participants on excursions must be financial members (including visitors) school age children and younger are free and the responsibility of the parent/s who must be NCMG members.

Because the weather has been so unpredictable we will advertise other activities by email closer to the actual dates.

Rock Ramble at Congo, Saturday February 19, 3pm

Meet at the far end of the camp ground.

We haven't been here before as a group so we'll make the most of the very low tide and you never know what we will find. If you would like to take part phone Jenny 4471 5032 and leave a message with your name, how many in your group and mobile or phone number.

Guided tour sea-kayaking on Durras Lake, Saturday, March 12

Bay and Beyond are offering NCMG members a discounted guided tour in their sea-kayaks (singles or doubles) with morning tea for \$45 per person.

We will also be having a short walk through the forest so wear shoes/reef sandals that can get wet.

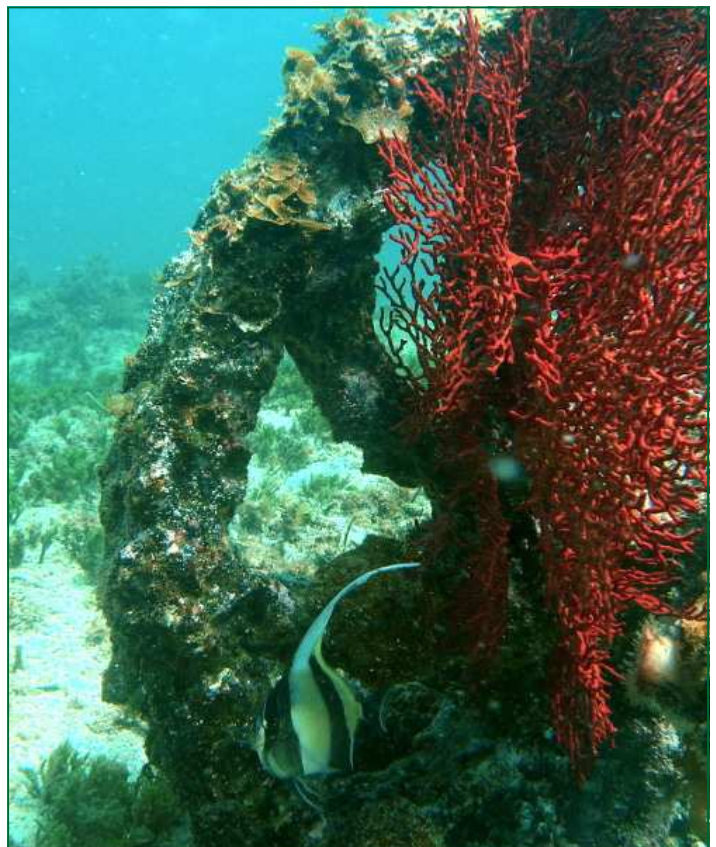
You'll will need a hat, water bottle, sunscreen, and possibly insect repellent for the bush walk.

Meet at the Durras Lake boat ramp at 9am.

For any enquiries and to confirm your spots (places are limited) call Carolyn or Phil 4478 7777.



Kayaks on Durras Lake (Photo: Carolyn Morey)



Wreck (Photo: Bill Barker)

Snorkel Surveys

The surveys are underway again.

Even if you have not done the training you are welcome to learn on the job by being the person to roll out the transect tape, count one of the easily recognized invertebrates and find out what has to be done.

Contact Jenny if you want to take part but have not been getting the emails about the surveys.

Website

Thanks again to Jock Howe for his work keeping our website up to date.

Last year he added information and photos of common estuarine animals and plants (intertidal species from the rock platforms were already there). See www.ncmg.org.au/EurobodallaMarineSpecies

We have some pages of activities for children to download and use. It would be great to have some new ones. If you would like to contribute please see what we have (www.ncmg.org.au/ExploreandDiscover/KidsActivities) and email your page to info@ncmg.org.au

Wreck Spotters Wanted!

One of our members, Jasmin Brett, has just signed up for this interesting volunteer work. Anybody with an interest in shipwrecks and underwater heritage is invited to join the successful *Wreck Spotters* program on its 10th anniversary.

The program allows volunteers to work alongside marine archaeologists in the identifying, mapping and promotion of shipwreck sites in their local community. The Department of Planning's Heritage Branch will be offering training and resources to those interested in getting involved.

The program will naturally increase the number of wrecks located and recorded. People of all expertise and interest levels are welcome, with no limit on the number of willing volunteers able to participate.

Shipwrecks tell us so many stories of our rich maritime history and provide a fascinating insight into our past but they need proper identification and handling (see photo on left page).

While many wrecks are found by scuba divers, you don't have to get wet to be a Wreck Spotter. Heritage items may be onshore. Last year the stemson from a 120-year old wreck was moved from a beach at Hastings Point in the Tweed, and remains unlocated.

Some 1800 historic wrecks are known to lie in NSW coastal and inland waters, but to date only around 175 have been located and recorded. That's a lot of shipwrecks out there waiting to be discovered.

All volunteers are being offered a 2-day internationally-recognised *Introduction to Maritime Archaeology Training Course*, accredited by the Australasian Institute for Maritime Archaeology and the Nautical Archaeology Society.

Anyone interested in joining the Wreck Spotters program should contact Heritage Branch Maritime Archaeologist, Sarah Ward on 02 9873 8533 or via email: sarah.ward@planning.nsw.gov.au.

Further information can also be found at www.maritime.heritage.nsw.gov.au

ESTUARY HEALTH & CLIMATE CHANGE PROJECT

By Suzanne Gray

The Climate Change Forum on December 16th, at Bermagui was a huge success. The Boardroom was filled to capacity with 25 people in attendance, to learn about climate change, how it will affect our estuaries and oceans and to participate in an informal discussion about things we can do to help reduce our carbon footprint.

Candlagan-Tomaga Waterwatch had a great showing of members present, as did Baragoot Cuttagee Waterwatch. Jenny Edwards gave a fabulous powerpoint presentation on our marine life.

Yours truly provided a synopsis on the scientific research into carbon levels and greenhouse gases. Yvette Berteaux inspired us with the Wapengo group's activities over the last decade, Luke Brown captivated us with his research into the distribution fish species on Australia's East coast and Doug Rechord wowed us with a presentation about how we can use Google earth to store our photos and data in tables behind points on Google Earth satellite maps.

Lunch was a delicious selection of seafood and other culinary delights from the Sundek cafe.

The folks from our end of the region and most of the other groups' attendees, stayed on after lunch to view the variety of fish caught in our oceans by the Bermagui Fishermen. It was a very interesting, informative and, enjoyable day. Thanks go to everyone for their enthusiasm and participation.



Top left: Luke Brown's presentation Dec 16th at the Bermagui Fishermen's Coop Boardroom

Top right: Lunch Dec 16th with John Carter, Allan Broadhurst, Panny Beaver, Suzanne and Doug Reckord on one side of foreground table, Yvette Berteaux, Trevor Daly and Luke Brown on the other side; members of Candlagan-Tomaga Waterwatch at back table: Jenny and Rob Edwards, Jill Gutteridge, Chris Nimmo, with Lynette Timmis, Kate Ebor, David Newell, Robyn Miller, Bill Barker and other keen Waterwatch / NCMG members.

Bottom left: Jenny Edwards at Candlagan Creek estuary site 2, during the rain event run in December.

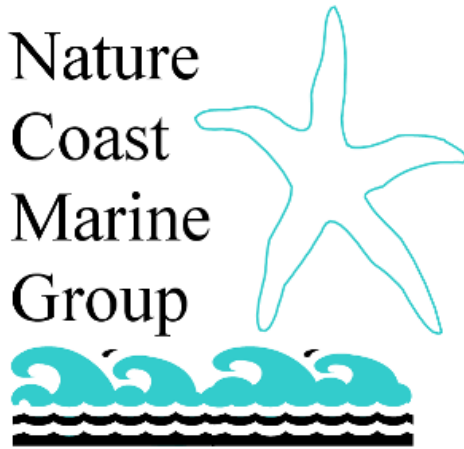
(Photos: Suzanne Gray)

NCMG

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MEMBERSHIP

Are you still a member?

Memberships fall due on the 1st July each year. If you are in doubt as to your current membership status, please contact Memberships Officer Rachel McInnes on 0419-863-966 or rachelemcinnnes@gmail.com.

We would like to keep you up to date with our activities and newsletters but we need to have you as a financial member! You can renew your membership by either:

- posting a cheque to: Memberships, Nature Coast Marine Group Inc, PO Box 1010, Moruya, NSW 2537
- or
- **electronic transfer to our Bank Account: BSB 062650 and Account number 10189250, Account name is Nature Coast Marine Group Inc**, and please write your **name in the reference section** so we know who has paid;
- also please send us a quick email to let us know you paid - thanks!

Memberships are: \$10 per person per year (1 July to 30 June), school kids or younger free, \$100 Life Membership.

Consider paying a few years in advance to take the worry out of remembering to renew every year. We will inform you when your membership will fall due again and in the meantime you will continue to receive our Newsletters and notifications of events by email.

Remember to visit our website www.ncmg.org.au regularly to keep up with our activities, news and read stories of the creatures that live in our local marine environment.

Regards and thanks for your support!

Rachel McInnes

rachelemcinnnes@gmail.com

Memberships, Nature Coast Marine Group

YOUR EXECUTIVE COMMITTEE 2010—2011

PRESIDENT	Jenny Edwards (& Public Officer)
VICE PRESIDENT	Bill Barker
SECRETARY	Nick Blackman
TREASURER	Adrienne Waterman
COMMITTEE	Andrew Green, Suzzanne Gray, Rachel McInnes (Memberships), Jock Howe (Webmaster), Melanie White (Newsletters)