

NEWSLETTER OF THE SAPPHIRE COAST MARINE DISCOVERY CENTRE

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January 2014

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National Science Week 2013

The Discovery Centre's National Science Week 2013 celebrations went off with a bang at a huge *Science by the Sea* Open Day last Saturday, with literally hundreds of budding new scientists attending. It was clear from the beginning that our staff members and volunteers know just how to make science fun, with children creating tornadoes in coke bottles, making slime or fossils, and even detecting their own DNA.

As if that wasn't enough, people of all ages took part in a citizen science workshop with EarthWatch Institute Australia using a new smartphone app. Marine Scientist Sheree Epe gave a comprehensive overview of what makes sharks special (before dissecting a small cat shark!) and then Education Officer Jillian Riethmuller finished the day with a bang when she created a small explosion from Mentos and diet coke.



Marine Education officer, Jillian Riethmuller with a mentos diet coke fountain



Chris Gilles from Earthwatch discussing survey methods for the rock pools



Marine scientist, Sheree Epe, dissecting a cat shark for a captive audience

Younger children clamoured around the touch tank all day and parents tried to tire them out on the *Finding Nemo* jumping castle, in between munching on Rotoract's barbecue or RSPCA's cupcakes, whilst Fishcare Volunteers manned an informative display about sustainable recreational fishing practices. SCMDC was also thrilled to host a group of university student ambassadors from The Australian National University who supported the Centre's own trained volunteers throughout the day.

Face-painter Veronica White had a steady stream of little faces to decorate and adults were able to find out about visiting exhibits such as the Love our Lakes project, Potoroo Palace, Atlas of Life in the Coastal Wilderness and even Montreal Goldfields from the north of the Shire.

The Open Day completed a very busy National Science Week for the Discovery Centre, which began with a Brain-Break trivia event at Sprout Eden on Monday and a fantastic Trivia Night on Friday. The Centre wishes to thank the many local businesses who supported the events with a wide range of great prizes.



Visitors making fireworks in a jar at the Brain Break morning tea



Trivia night host, Broderick Matthews, using liquid nitrogen as part of the questions



Trivia night host, Broderick Matthews

SCMDC's National Science Week events were proudly supported by the Australian Government, as well as partners CSIRO, Australian Science Teachers Association and the ABC.

Marine Discovery Centre Conference

A weekend filled with clown fish and marine adventures is what you can expect at the annual conference for the Marine Discovery Centres Australia network.

The weekend brings together over 10 marine discovery centres from around Australia to share ideas and insights into the

world of marine education.



Clown fish breeding tank at the Port Macquarie Marine Discovery Centre

This year the conference was held at the <u>Port Macquarie Marine</u> Discovery

<u>Centre</u> and all participants were impressed with their wonderful set-up including their own clown fish and coral breeding operations.



Coral breeding tank at the Port Macquarie Marine Discovery Centre

The weekend includes presentations from a variety of experts, we were lucky enough to hear from:

- Lloyd Godson aka Bio Sub man View details of Lloyd's exciting next project re underwater habitats and marine education
 - at http://startsomegood.com/Venture/tik and bubbles foundation/Campaigns/Show/underwater superhero he adquarters
- **Brian Hughes** Brian is the CMA Coast & Marine Officer and he spoke about the "Bag It" shopping bag campaign and recent research findings on soft corals, turtles, black cod and white sharks check them out at http://www.youtube.com/user/HCRCMA
- **Dr Norman Duke** Norm is a mangrove ecologist with James Cook University. He introduced the group to a new citizen science project aimed at monitoring mangrove habitats around Australia called <u>MangroveWatch</u>.

The group also workshops on activity ideas for open ended investigations, exhibit design and school education programs.



Staff from Woodbridge Marine
Discovery Centre exploring the rock
pools in Port Macquarie

It's not all hard work though, we also get to get out and experience the local marine environment through kayak trips on the river, snorkels in the bay and a boat trip on the XLCR owned and operated by the Port Macquarie Marine Discovery Centre.



XLCR, a restored boat run by the Port Macquarie Marine Discovery Centre



Beautiful sunset from the XLCR

Discovery Centre turned 5

Over 60 of our supporters turned out in October to help us celebrate 5 years since moving into the Discovery Centre and what a great night of catch ups it was. Some of our former Board members attended along with our current Directors, one being Kerry Pfeiffer who was Chairman of our Board when we opened in 2008.

Some scrumptious finger food kept everyone happy and our current Chair Stan Soroka gave a great speech, summing up the rapid development of the Centre and showcasing some of our achievements. Stan then invited original Committee members Syd Donaldson, John Aveyard and Fay Davidson (on behalf of her late husband Rene) to cut the amazing cake which was made and decorated by local cake artiste Sandy Huff.



From left to right Syd Donaldson, Faye Davidson and John Aveyard cutting the beautiful 5th Birthday cake made by Sandy Huff.

Glowtastic in schools

Glowing bacteria created from jellyfish seems like part of a strange science fiction movie but that is what students have been doing as part of an ANU funded education program.



were lucky enough to participate in this program where they had the chance to conduct Nobel Prize winning science experiments.

The students had a hands-on look at genetic engineering techniques when they

Throughout November students from Bega, Cooma, Narooma, Batemans Bay, Ulladulla and Moruya

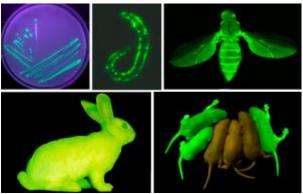
The students had a hands-on look at genetic engineering techniques when they transformed bacteria by introducing a gene from the bioluminescent jellyfish, *Aequorea Victoria* as part of the Sapphire Coast Marine Discovery education program, Glowtastic.

Jellyfish, Aequorea Victoria

Students saw how they can introduce proteins into bacteria to alter its DNA. In this case adding in a green fluorescent protein and making the bacteria glow under UV light. This sort of experimentation won the 2008 Nobel Prize in Chemistry.



Glowing ice cream



Top left to right: Bacteria, worm, fruit fly
Bottom leftto right: Glowing rabbit, Alba, and glowing mice

This type of genetic transformation has numerous medical implications as a genetic tag but also some fun uses such as the creation of <u>GloFish</u>, glowing pigs and rabbits and the new glow ice-cream. All created using jellyfish DNA.

The program was very well received with all students have a great time and loving the hands on approach to science.

Marine Education Officer, Jillian Riethmuller says "The program aims to inspire students to develop a better understanding of science beyond school and its many practical uses in society".



 $Students\ at\ Bega\ High\ School\ participating\ in\ the\ Glowtastic$ program



Students at Monaro High School in Cooma are ready to get the glowing started.

Farewell from Sheree!

Thank you for the opportunity to be part of such an amazing organization. I am grateful for being given the chance to work in my 'dream job'. Not many people have the fortune of going to a job everyday that is fun and enjoyable, but I have been lucky enough to have such an experience.



Sheree Epe on her first day

I've had a number of wonderful opportunities whilst working at the SCMDC. Each year I've had the chance to go whale watching with eminent whale researchers. I've met the likes of Tony Rathburn and Ashley Burkett who have travelled to the vast depths of the world's oceans. I've also met a variety of other successful marine scientists through our Marine Science Forums.



Sheree Epe with Tony Rathburn and forum quest

I've had the pleasure of visiting a couple of other Marine Discovery Centres around Australia through our Marine Discovery Centres Australia network and met some other fun and passionate marine educators. Our annual conferences are a great opportunity to share ideas and resources.

One of the most enjoyable aspects of my job has been sharing my passion and knowledge of the marine environment with the general public and visiting school groups. I have loved answering the tricky questions that young visitors have put to me and have enjoyed showing visitors and students the amazing diversity of life on rock platforms through our Rocky Shore Rambles and in our oceans through our Snorkel Safaris. I've even had the chance to dissect a dolphin with a senior biology class.



Sheree Epe on her entertaining a pre-school group with the anemone dance



Sheree Epe showing off her critter craft from the school holiday programs

I've also had the pleasure of working with some wonderful volunteers and meeting some very interesting locals that have shared their knowledge and experiences with me. It has been a great way to get to know people within the local community

and I thank all the volunteers and locals that have taken the time to get to know me and help me with my work.

By far the most enjoyable aspect of working at the SCMDC has been the wonderful staff! I have thoroughly enjoyed working with the girls. We have had lots of fun together and I have many funny memories that I will remember fondly. One of the standout memories is Jill's mentos and diet coke explosions! It has been so inspiring and motivating to work with such intelligent, driven women and I will miss the intelligent, in-depth science conversations we have in the office. I will also miss our epic morning teas!



Sheree Epe celebrating on her last day before going on maternity leave

So it is with a heavy heart that I farewell my 'dream job' to embark on a new chapter in my life. I wish the staff and Board of the SCMDC all the best for the future and I can't wait to see what development occurs in the next few years.

Sheree welcomes her new baby boy

Aydan Liam Epe arrived into this world on Saturday November 30 at 9.45am, weighing 3.8kg. Aydan is a beautiful addition to the Epe family with Mum, Sheree, Dad, Kym and big sister, Anya, all delighted to meet him.



Aydan Epe only a few hours old



Big sister, Anya, feeding new baby brother, Aydan

ANU Climate art exhibition

During the Eden Whale Festival the ANU *Now and When: Contemplating Climates on the South East Coast* exhibition was on display in the Discovery Centre. It was an exhibition of visual art by participants in the ANU School of Art Field Study that took place in and around Eden, NSW in 2013.

Visual images in various media express ideas and feelings about anticipated environmental changes to the inspirational coastal landscapes of South East NSW. Creative art production was informed by the report, *South East Coastal Adaptation (SECA): Coastal urban climate futures in SE Australia from Wollongong to Lakes Entrance*, published by the National Climate Change Adaptation Research Facility; by consultations with scientists involved in the SECA Research Project; and by observational fieldwork and community consultations.



Students from Eden Primary getting hands-on with the artwork

The exhibition was a massive success with numerous school groups coming through and participating in workshops with the artists.

irecoastdiscovery.com.au

Farewell from our CEO - Jenny Robb

I would like to thank all the many wonderful people I have worked with over the last 11 years during my time with SCMDC. I am very proud to have been involved with this organisation, which was founded in the late 1990s by a group of passionate locals who decided to explore the potential for a marine tourism, research and education centre in Eden.



Jenny Robb in the early days of the centre

It took a huge team of volunteers many years of lobbying and fundraising to build the profile of the Centre and see it come to fruition in the Wharf Building at Snug Cove and we recently celebrated five years since opening in 2008. Since then well over 2,500 students from the local region and beyond have benefited from our education programs and even more have enjoyed school holiday programs such as rocky shore rambles and more.

SCMDC has forged strong relationships with key universities, research institutes and tourism bodies and will continue to strive to showcase our amazing temperate marine environment into the future. I am lucky enough to have met people from all over the world and all manner of expertise during my time with the Centre and have never stopped learning from them, and it is abundantly clear that we all need to learn more about

managing the precious resources our oceans produce.

It is with mixed emotions that I now leave my role as C.E.O. to explore new opportunities. The Centre has consumed my life (and that of my family!) for many years so it is a little like leaving your baby but I know that it will continue to grow and thrive with a new direction and its wonderfully talented staff members and dedicated Associate Members and Volunteers.

Thank you Eden and surrounds for embracing the vision of this place. I am convinced it will reach great heights and be the Centre of Excellence in Marine Research and Education that

those who have been involved envisage. Our unique marine environment is what makes this region special. SCMDC will continue to showcase it and teach visitors about it for many years to come.



Jenny Robb and Faye Davidson at the 5th birthday celebration for the Discovery Centre

Thank you - to Board members past and present, Volunteers past and present, staff members past and present - for your support and encouragement through my time here. I hope our paths will cross again in the not-too-distant future.

Jen





Jenny Robb holding a pelican during the Seabird Rescue workshop

Discovery Centre Display at the RSL

The Discovery centre has a display set up at the RSL Club in Merimbula. Together with the Merimbula-Imlay Historical Society who oversees such projects, Kerryn Wood (SCMDC Operations Assistant) worked with Shirley Bazley and Angela George of the Merimbula-Imlay Historical Society's Old School Museum", to design and arrange the display that will run throughout December and January.

With pictures of some of our volunteering stars, be sure to stop in and have a look if you are in the area.



 $Operations\ Manager,\ Kerryn\ Wood,\ with\ the\ SCMDC\ display\ at\ the\ Merimbula\ RSL\ club$





From the Volunteer desk

Early December 2013 the SCMDC hosted an intimate little Christmas get together celebrate the year and to thank the Volunteers for their dedication, hard work and shared passion and time put into the centre.

Volunteers offer an invaluable service to the centre in offering their assistance as centre tour guides, snorkel guides and helping out on the front reception area to washing the dishes and vacuuming the floors. Services we appreciate the help for in more ways than you can imagine!

So again, on behalf of the staff and Board of the SCDMC, thank you VOLUNTEERS for all that you do and the help that you give.



A happy time at the Volunteers Christmas Party





In November 2013 we were lucky to employ a young local named Jacob Bradbury.

Jacob has been employed to run and maintain our aquaria. Jacob is an avid diver and has had many marine aquaria at home. Jacob has fit into the centre extremely well with all the tanks brimming with marine life.

Summer Holidays



Swmmer holiday activities - Dec 2013 Jan 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
22 December Closed	23 Closed	24 Christmas Eve Open	25 Christmas Day Closed	26 Boxing day Closed	Rocky Shore Ramble 10:00am	28
원9 Closed	30 Closed	NYE - Open Rocky Shore Ramble 1:30pm	1 January Closed	Rocky Shore Ramble 2:30pm	S Fish Feeding 12:00pm	Snorkel 9:00am
5 Closed	6 Closed	7	8 Fish Feeding 12:00pm	Rocky Shore Ramble 9:30am	Rocky Shore Ramble 10:30am Fish Feeding 12:00pm	Snorkel 9:00am
12 Closed	13 Closed	Rock Othore	Fish Feeling 1800m Rocky Shore Famble 3:00pm	16 Snorkel 9:00am Snorkel 3:30pm	Fish Feeding 12:00pm Rocky Shore Ramble 4:00pm	18 Snorkel 9:00am
19 Closed	20 Closed	21	Fish Feeding 12:00pm	23	Fish Feeding 12:00pm Rocky Shore Ramble 8:30am	Snorkel 9:00am

Centre open Tues - Sat 10am to 3pm during school holidays (excluding public holidays)

SNORKEL & ROCKY SHORE RAMBLES Bookings Essential as places are limited!

Phone: 6496 1699///Mobile: 0439 066 125

Email admin@sapphirecoastdiscovery.com.au 253 Imlay St Eden (Snug Cove Wharf) www.sapphirecoastdiscovery.com.au

These summer holidays have been our busiest ever with all our Rocky Shore Rambles booking out. We have even had to add in additional rambles and snorkels to fill the demand.

All our visitors have had a wonderful marine adventure within the centre and on our outdoor activities.



One of the many Gloomy Octopus spotted during a snorkel at Shelly's Beach, Eden



A happy rock pool rambler holding an eleven arm sea star that was found at Shelly's Beach, Eden



Visitors enjoying a lovely snorkel at Shelly's Beach, Eden



Snorkeling the clear waters at Shelly's Beach, Eden



Finding sea stars and snails galore while rock pooling



Kerryn Wood showing visitors around the rock pools

Seabird Workshop Coming up

Save the date for our upcoming seabird workshop on the 6th and 7th of March 2014.

The workshop will be held in conjunction with Birdlife Australia and will have information sessions and outdoor field components. Stay tuned for more details on the website and Facebook. Email us on admin@sapphirecoastdiscovery.com.au to register your interest in attending.

Become an Associate Member

Why not become an Associate Member of the Discovery Centre? There are loads of benefits: free entry to our many community information sessions, E-Newsletter direct to your inbox, FREE entry for 12 months into the Discovery Centre, 10% discount on our wide range of retail stock and the knowledge that you are helping us to grow.

At only \$40 per year per adult, it's a great way to keep up with the latest news and support the Centre at the same time. Contact the office on members@sapphirecoastdiscovery.com.au or phone 6496 1699 for more information.

Recommended websites to visit

http://www.dragonmouse.com.au/diving/nudibase.php http://www.sciencealert.com.au/ http://www.coml.org.au/ http://au.earthwatch.org/



VOLUNTEERS...volunteers...VOLUNTEERS...volunteers...VOLUNTEERS....

Volunteers are a special and integral part of any community based not-for-profit organisation, not least the SCMDC. We provide training in a variety of volunteering roles so why not give us a call and consider joining our dynamic team? Commitment times are very flexible and will be honed to suit your needs.

For further information, please contact Kerryn Wood on 02 6496 1699 or email at kerryn.wood@sapphirecoastdiscovery.com.au

SCMDC ANNUAL PASSES

AVAILABLE NOW!!

FEES:

Family (2adults + 3 children) \$45
Extra child \$5 each
Adult (16+) \$25
Pensioners/students \$20

WHAT DO YOU GET? Unlimited Entry for 12 months to the Discovery Centre + 10% off retail stock + Buy 1 coffee & get the 2nd coffee FREE from Great White Bite Cafe

CONTACT THE CENTRE TO PURCHASE YOUR PASS!