

In this newsletter

- World Science Festival
- Ecomarines
- New CoralWatch Virtual Reality footage to be launched!
- More data collection at Barolin Rocks and Fitzroy Island



CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS



World Science Festival

21-24 March 2019, QLD museum Brisbane

Like last year, CW had a display at the museum for WSF. This is a fantastic outreach opportunity to reach out to schools (especially on Thursday / Friday lots of schoolgroups visiting) and individuals at any day. Especially the weekend was very busy, we had a team volunteers on at all times (including many of the Marshall lab), one looking after VR, one after our clay corals and skeletons and one at the CW table. Whenever we had extra people we ran the turtle love corals quiz in the turtle line outside in the whale mall.

Lots of teachers came for materials and more info. We made lots of people happy with our some of our left over books from the first edition. We distributed 70 books (old edition) 200 DVD's and >600 colouring-in pages.

VR was a great success especially since we now have footage of people snorkelling/diving using the coral health charts. Lots of children but also parents enjoyed the VR experience.

Justin - together with dr Emma Kennedy (UQ scientists) and David Wachenfield (GBRMPA) - joined the panel of reef specialists to show how 'people power' is working alongside science to defend and preserve this amazing ecosystem for future generations.

Outreach: >2300 people. About 60 people attended the reef needs us event.

Diana, Karen, Heather, Hong, Julie, Lily, Peta, Maria, Alejandra, Justin, Emma, Amy, Connor, Bryce, Gabe

Teacher PD Workshop

7-10 March, Lady Elliot Island Eco Resort

Participants from Queensland and New South Wales schools, and from schools as far away as the USA and Canada, joined us for 4 days on beautiful Lady Elliot Island in the Southern GBR.

Adam, one of our original Ambassadors, who has also attended one or two of these workshops previously, was very happy to share his experiences of including CoralWatch surveying and data into his Marine Science classes. With CoralWatch embedded into the senior curriculum, Adam shared course content and his data test with the group. It was great to see CoralWatch in action in the classroom. Nice work Adam!

Workshop participants also experienced the beauty of the island with daily reef walks and snorkels conducting CoralWatch surveys in different ways. Some of the group even managed to re-identify most of the permanent transect corals in the lagoon. Sessions on coral ID were held with the opportunity to put this into practice using coral skeletons, photographs of live corals and photos taken by the teachers in the field and later identified back in the classroom.

These workshops continue to remind us how valuable field work is for the practical application of what is learnt in the classroom; especially for their students back at school!

Outreach: 16 teachers from QLD, NSW and overseas (US and Canada)

Adam, Karen, Diana



NEW MATERIALS - CORALWATCH VR AND VIDEO



“Isn’t that fantastic, I feel like I am really there – Like being a scientist in the water”

Last year we were able to purchase our Virtual Reality headsets which has proven to be a great success. We brought the ‘reef’ to the outback and we used the VR during many festivals, school visits and events. Many of us have heard the music of Chasing Coral many times! Good news, with funding for National Science Week we now developed our own CoralWatch VR content. Reefwalkers, snorkelers and divers are swimming around exploring the reef and monitoring corals using the Coral Health Chart.

Thanks to photographer Mark Steven who has collated the footage during a Great Barrier Reef Legacy trip in November last year and during our teacher PD on Lady Elliot in March this year. The VR includes options to save reefs from home and will be launched during our many upcoming Science week events. On Lady Elliot we also produced a new video promoting participation in teacher professional development and education. <https://coralwatch.org/index.php/news/videos/>



STEM CLUB

various dates in March, Brisbane Boys College

The CoralWatch presentation and Workshop activities were organised for the Junior STEM Club. The Coralwatch event was run over 2 days - Monday lunchtime (Grades 1-3) and Wednesday lunchtime (Grade 4-6).

The students had experienced CoralWatch previously and were especially excited to be able to try out the virtual reality headsets and explore the world beneath waves. They loved the coral specimens and were fully engaged with using the Coral Health Charts to monitor the health of the coral reef.

Outreach: 19 children total and 2 staff members

Maria



School Holiday program - The Reef on Dry Land

18 April, Cubberla-Witton Catchment Network, Chapel Hill

This was a fun and educational morning for our budding young citizen scientists where they learned all about the magic world of coral reefs, the threats they encounter and how we can protect our reefs for the future.

This workshop was full of hands-on learning and interactive experiences, where the children learned how they could become citizen scientists and help protect coral reefs from home. They created their own colourful coral reef drawings and assessed the health of their reefs using our Coral Health Chart. The children even took a ‘dive’ beneath the waves using our virtual reef headsets

What worked well: I love to make the presentations fun and interactive asking the children questions and I was very impressed how many had actually been snorkelling and knew that corals were animals. They also had some great suggestions how they could help the reef from home including walking to school, switching off lights and picking up rubbish.

What didn’t work so well: Had to really watch the children with the virtual reef headsets and check that they were holding onto them at all times and not throwing their heads back suddenly.

Outreach: 118 children, 2 parents, 21 Cubberla-Witton staff

Maria





Community Event Coral Cove CoralWatch

26 May, Barolin Rocks

The Coral Cove Community came together to discover their beautiful coral coast through snorkelling, rockpooling and coralwatching

What worked well: A good turn-out of community members who actively participated in collecting CoralWatch data.

What didn't work so well: During the briefing, I told people to come out around 10am to learn how to enter data and talk more about what they'd done. Unfortunately most people (except one) just brought back and left the charts with me, so I still had to enter all the data!

The weather was nice but conditions still rough for elderly and little people. I organised the event and then no one was free to help me run it!

Outreach: 27 Adults and 3 Students

Natalie



Tangalooma EcoMarines

26 April (High School) & 3 May (Primary School)

Maria attended the High School EcoMarines training Day which included 32 enthusiastic students. Diana hosted the 180 Primary School training day.

Through interactive presentations and activities, the students were introduced to the world of corals reefs learning about their importance to the marine ecosystem and the threats, in particular climate change and plastic pollution, which can impact their health globally and locally. The CoralWatch Challenge was an exciting addition to add to the CoralWatch Experience –The mission for each EcoMarine Ambassador high school team is to set up a CoralWatch display at their school library to raise awareness and encourage and motivate their fellow students to 'Get Involved' and help protect the reef. We look forward to hearing more about their exciting displays in the future.

Although Maria and Diana both enjoyed the experience, they both found it difficult to engage with the students as there were so many. With the rotating activities on the go it was hard to connect with the students. Next time we'll ensure more helpers are present and perhaps even less students at once, particularly for the primary group.

Outreach: 32 secondary ambassadors, 155 primary ambassadors, and 48 teachers from 47 schools.

Maria and Diana



School visit

30 May, St Peters Lutheran College, Brisbane

Peta took coral reefs and marine ecosystems into a St Peters Lutheran classroom and in her words "got to do one of the coolest things ever" and teach young children about the world of oceans, the Great Barrier Reef through the lens of CoralWatch.

What worked well for Peta: In this line of work it can become incredibly depressing to continuously hear about new data that shows the horrors that we may face in our future without intense and rapid change. Speaking to these young people fills me with hope because they know what is happening, they are eager to learn about their surroundings, and they are so ready to stand up for themselves and their future.

As well as this it is incredible the amount of knowledge they retain! They remembered terms like "dinoflagellate" and "symbiotic" which honestly is so impressive.

They had so many questions and I hope that I was able to bring some hope to these young minds in these troubled times.

Outreach: 25 students and 1 teacher

Peta



Ecofest

2 June, Toondoon Botanic Gardens, Gladstone

Ecofest is a huge event that attracts people from all over QLD with the purpose of bringing likeminded people and groups together to share ideas on sustainable living. This year's theme was 'Slim your bin with a low waste diet'. With over 80 stalls/exhibits and guest speakers the day was a great success.

What worked well: Coral skeletons and magnifying glasses. The banner/virtual reef is a great talking point, and the coral quiz was fantastic for kids and also a good conversation starter.

What didn't work so well: People liked the idea of 'doing' CoralWatch but disappointed they couldn't be directly involved unless they went out to the reef

Outreach 240: 140 students/children, 100 Adults

Somone/David



Small World Journeys

18 June, Fitzroy Island

We welcomed Appalachian State University's return visit to Fitzroy Island. The university came in 2017 (a new student group, same teaching staff) and were able to compare 2017 results with their latest 2019 Coral Watch surveys. Corals surveyed in 2019 looked healthier (yay!).

What worked well: Capable student group and they were all able to survey plenty of corals.

Outreach: 11 students plus teaching staff

29 June, Fitzroy Island

At the end of June, we took out a group from St. Sabina and surveyed twenty-five corals. There was poor visibility and strong winds.

Outreach 19: 15 students, 2 teachers and 2 marine biologists

Laurie

Welcome to the Whales

15 & 16 June, Clontarf Beach, Redcliffe

CoralWatch had a wonderful weekend at the Welcome to the Whales festival, which was part of the Redcliffe Kite Festival annual event. Our friends at the Australian Coastal and Marine Ecology/ Coastal Protection Care had invited us to be a part of the 2-day event celebrating the arrival of the Whales to our shores. The Redcliffe Kitefest is a huge event with an estimated 45,000 people attending over the course of the weekend. There was entertainment galore, market stalls, heaps of kite flying fun and of course plenty of opportunity for visitors to the Welcome to the Whales Festival to learn all about the fascinating marine life of Moreton Bay through presentations and interactive marine displays.

Our CoralWatch stall had incredible ocean views and over the weekend we greeted a wide array of visitors to our display and talked to them about the beauty of and threats to coral reefs. Maria gave two presentations through the weekend talking to festival visitors about 'Coral Reefs and Citizen Science' and how visitors can also help 'The Reef on our Doorstep'. As ever our virtual reality headsets proved a hit with the visitors, old and young. On Saturday we also had the assistance of Darryl Potter from the Queensland Museum who brought with him a wonderful display of coral reef shells.

What worked well: The virtual reality was a great hit with visitors to the Welcome to the Whales Festival. We even went for a walkabout around the Kite Festival festival giving people the opportunity to take a virtual dive on the reef and telling them about all the exciting activities at the Welcome to the Whales.

Outreach: 500+ Families, teachers, students and other environmental organisations.

Maria, Phebe Rowland, Amy and Darryl Potter (Qld Museum)





Reef Guardians for Generations - Train the Trainers & Product Development Workshop

28 June, Burnett Heads

This workshop was organised by Natalie to:

- Equip LME staff and Gidarjil Rangers with skills and knowledge to be able to independently complete and lead other in EOTR and CoralWatch Surveys
- Deliver information and increase awareness on Reef Health, Threats and Impacts (how to identify, report and manage them) and support participants to communicate and share; and
- Workshop development of a product to be marketed and implemented in local schools/Bundaberg community and on-board the Musgrave boat.

Diana introduced CoralWatch to workshop participants by starting with a 'guest' briefing of how to use the coral health chart pretending we are on the boat at Musgrave about to jump in the water. This was followed by a presentation with background to the CoralWatch program, coral bleaching, monitoring and data available for Musgrave Island. The session ended with a permanent transect activity describing corals, regular colonies that could be monitored over time.

The group was very engaged. It felt like everyone was on-board with the ideas and participated well in activities and brain storming sessions.

What didn't work so well: The next day on the boat. Cold water and quite rough conditions and too much material to get through on one day. Participants did do Eye on the Reef in the morning but most of them were too cold in the afternoon to do CoralWatch, also the boat ride back was too rough to enter data.

Outreach 16: 8 LME Staff, and 8 Gidarjil Rangers

Diana and Natalie



In addition to all this ...

- Diana attended the Australian Coral Reef Society conference and gave a talk 'CoralWatch - From Reef to Outback' about the importance of science communication and community outback highlighting the Corals in the Outback tour and the fantastic work that our Ambassadors achieve.
- Justin and Karen have been part of various discussion panels at movies such as Chasing Coral, The Map to Paradise and 'Murder on the Reef'.

GRANTS - CoralWatch has been successful with 4 grants:

- **Community Reef Protection Grants** funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation. This funding will allow us to conduct a series of 'Act and Protect' workshops and presentations collaborating with Boyne Island Environment Education Centre, North Keppel Environment Education Centre, Jina Gunduy Sustainability Hub, Palm Island and Marine Teachers Association Queensland. [See more](#)
- CoralWatch was also successful in the **National Science Week** grant round funded by Australian Government. We will organise 12 events between 13-25 August to promote science to the public. Activities include: Street Science festival (Brisbane), Oceanfest (Bundaberg), community STEM and school event (Maryborough), Moreton Bay cruise (Manly), school visit and community event (Palm Island) and data collection (Barolin Rocks/ Orpheus island).
- **Port of Brisbane.** This grant will contribute to the Ambassador program and reprinting the Moreton Bay education package. **Please note: this cannot be officially announced yet!**
- **QLD, Department of Environment & Science, Office of Chief Scientist.** *Get Involved - Colours of the Reef.* CoralWatch will launch a social media campaign during 2020 to increase numbers of CoralWatch citizen scientists. **Please note: this cannot be officially announced yet!**

NEW application

QLD government, Community Sustainability Grant mainly to apply for salary, a number of permanent transects and a 'What can I do' booklet to promote saving reefs from home.

Staff update - Welcome to Erin and Karen

With all the grant success and extra work that comes with it, we were able to recruit some casual staff until the end of the year; Erin Watson (1 day p/w) and Karen Johnson (2 day p/w). Apart from daily office tasks, Erin will focus on social media, advertising and marketing while Karen will be focusing on the organisation of many events especially for National Science week. Karen Hofman will still be replacing Monique until the end of October.

Upcoming events/opportunities will be posted on facebook and in the ambassador forum. Please check regular, we appreciate your assistance and input!