



In this newsletter

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CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS

UQ MBRS Open Day – 56th Anniversary Celebration

24 November, Moreton Bay Research Station, N.Stradbroke

Brisbane train track closures likely contributed to the low attendance number. Overall, the event was fun, many families were engaged in the booth and the location made set up easy, the booth very visible and easy to get to. So much so, we all forgot to take photos. Oops! Possibly a poster or two saying something like 'CoralWatch this way' to put elsewhere to help guide visitors and let them know we're there.

Suggestion for next time: More interactive coral data collection, possibly using the ceramic coral. Instead of the coral quiz being passive (quizzes are turned in, no answers given, nothing learned unless prompted by volunteers) have a more interactive quiz where the answers are revealed right away.

Activities on the day: MBRS open house, meet-n-greet, with free bay cruises with MB Environmental Education Centre, Indigenous knowledge sharing Goompi trail, Geckoes Wildlife live animal show, reverse garbage art workshop, research talks, scientists, touch tank and fish display, ROV demonstrations with underseaROV, CoralWatch booth, sponsor and support displays-CoralWatch, Dolphin Research Australia, Dunwich State School, Education Queensland, Humpbacks and High-rises, Minjerribah and Moorgumpin Elders in Council, NSI Historical Museum, QYAK, ReefCheck, Saltwater Murriss, Yulu Burri Ba Medical Centre, Centre for Marine Science, underseaROV.

Outreach: 90 people attended, I engaged with about 30 students, 15 adults, 10 teachers and 10 other.

Quinn, Linn, Patrick



International Workshops in Taiwan

November, National Museum of Marine Science & Technology (Keelung), National Museum of Marine Biology and Aquarium (Pingtung), National Taichung University of Education (Taipei).

Normally David is undertaking CoralWatch in Gladstone but this time he has been promoting CoralWatch in Taiwan. A highlight was that David got to meet Dr. Lishu Chen of the National Museum of Marine Science & Technology in Keelung. Dr. Chen has been an active supporter of CoralWatch for some time and it is hoped that she will be able to join us in Australia in 2019 for the next CoralWatch Ambassador workshop. David travelled the length of the country delivering one workshop at the National Museum of Marine Science & Technology in Keelung at the northern tip of the country while a second was held at the National Museum of Marine Biology and Aquarium in Pingtung. The third workshop was conducted at the National Taichung University of Education in Taipei.

Participants got to use the Coral Health Chart with the virtual reef banner as well as exploring the Great Barrier Reef using VR goggles. These were extremely popular activities. Augmented reality activities included fish on the reef. The range of educational materials produced by CoralWatch was displayed even if in English. A 3D model of a coral polyp was also a popular display item. CoralWatch supplied a range of resources that were given out to participants as well as to the two museums. Over 30 people registered to undertake fieldwork for CoralWatch.

David was also able to show recent CoralWatch resources that he, and Taiwanese interns at the Boyne Island Environmental Education Centre, developed based on materials developed by CoralWatch. Lishu believes these resources will be valuable in her work promoting CoralWatch in Taiwan. Recently, Lishu obtained a further 300 CoralWatch kits for people in Taiwan.

Outreach: 150 over 3 events

David



Protecting our Coral Reefs through Citizen Science

27 November, Cubberla Witton Catchments Network General Meeting, Brisbane

The Cubberla-Witton Catchments Network (CWCN) is a volunteer organization which encourages community engagement and connection with the environment.

Maria's talk included background on the CoralWatch coral health monitoring program, information on the biology and health of the corals of the Great Barrier Reef and Moreton Bay and addressed the threats and impacts of climate change. Using interactive reef activities everyone had the opportunity to learn how they can help make a difference.

The group were interested and very engaged during the talk and the question answer session at the end of the talk proved very popular promoting lively discussion. The VR goggles and coral specimens were also a big hit with attendees

Outreach: 40-50 people attended

Maria



BIIEC Teacher PD Workshop: Marine & Fieldwork 5 December, STEM Central, CQU Gladstone & Rat Island, Gladstone Harbour

The workshop showcased the citizen science projects of Harbour Watch, CoralWatch by explaining how they align to the Australian Curriculum to provide real-world learning experiences for their students. All local high schools were represented, and even a couple of Rockhampton teachers made the trip down to Gladstone to participate.

All teachers were able to gain hands-on induction to water quality monitoring equipment, lesson resources, CoralWatch health charts, data entry and analysis at the workshop. Professor Emma Jackson also provided insight in how CQU can assist the students wanting to examine the seagrass ecosystem. The afternoon saw us, despite the windy weather, heading out to Rat Island to perform water quality monitoring and assessing the coral health by reef walking at Rat Island. All data collected on the day has been entered into the relevant databases and is publicly available. Despite a windswept, soggy and bedraggled ending to the day, a great day out was had by all. We are looking forward to working with all these passionate teachers again in 2019.

All relevant material presented was given as a resource to teachers, so even though teachers were not able to have explicit instruction to manipulate data, they are able to do so with the information provided in their own time. It was much more beneficial to have teachers experience fieldwork and so we had to meet the tides regardless of what we got through in the workshop. I have provided many electronic links to access further information if needed.

Outreach: 15 teachers attended

Somone, David



School visits United Kingdom

14 December 2018, Brookland Junior School, Waltham Cross

This was a fun day of presentations and CoralWatch workshop at my friend's school in the UK. I started off the day with a general Coralwatch presentation to the whole school (grades 1 – 6). This was followed up by 3 activity-packed workshops for the year 5's, where the students dived into the world of the coral reefs through reef drawing, quizzes, VR headsets (very popular) and learned how to monitor coral health using the CoralWatch Health Chart.

Outreach: 359 students/children and 15+ teachers



17 December 2018, Priestmead Primary School, Kenton, Harrow, UK

This was a particularly exciting event for me as this was the primary school that I had attended when I was growing up and it was so special to give back to the school that had provided the foundation for my love of science and learning.

The day was certainly action-packed with 2 assembly presentations the first to the grade 1's and the second to the rest of the school (grade 2 – 5). All the children loved the interactive talks and were interested and engaged through the talk asking plenty of questions about coral reefs. Following the presentations I then gave workshops to 4 grade 1 classes – they loved colouring in their reef drawings and were quick to identify how healthy their corals were. They were also extremely keen to try out the Virtual Reef goggles and excited to see manta rays, turtles and corals surrounding them. The coral that I had brought along with me was a big hit and the children were excited to learn that corals were animals.

Outreach: 450 students/children and 20 teachers

Maria



Ambassador return workshop

2-3 February, Moreton Bay Research Station, N.Stradbroke Island

In the first weekend of February, eleven of our Ambassadors came back together to re-connect, reminisce and re-inspire. It was a very successful workshop, where each ambassador presented their activities over the last 8 months and upcoming plans. Everyone included their highlights and challenges that they might have faced as an ambassador.

Ambassador activities ranged from presentations at schools and conferences, organising teacher and stem workshops, movie night, creating art and a game to raise reef awareness, beach clean-ups, snorkeltours, stalls during festivals and markets. After all the presentations we looked at our challenges closely and came up with some solutions.

On Saturday afternoon we went for a snorkel and collected Coral Health Chart data at Amity Point rock wall. It was nice and calm and very relaxing. In the evening we went for dinner and announced our ambassador awards. Easy to give everyone an award but some people do need a special mention. The EDUCATION award was given to Somone Boston for organising a teacher PD and STEM girls workshop in collaboration with HarbourWatch and Boyne Island Environmental Education Centre. Natalie Lobartolo received the MONITORING award for all her surveys and outreach activities at Lady Musgrave and Bundaberg in collaboration with Dive for Change and Lady Musgrave Experience. David Kopelke received the OUTREACH award for all his activities including international presentations in Taiwan. And last but not least Natalie Meiklejohn received the ART award for her plastic art creations that were used during our Corals in the Outback tour and the plastic reef art award activity during the ReefBlitz event.

AWARDS - International Year of the Reef IYOR 2018

With appreciation of International Year of the Reef IYOR 2018, CoralWatch is assigning a monthly award during 2018. This is a great opportunity to thank an organisation, dive centre or individual for all their CoralWatch efforts. In the last months some of our CoralWatch Ambassadors were the lucky winners.

November - World's most surveyed reef (in 2018 so far)

This turns out to be Fitzroy Island with 18 surveys and 996 corals uploaded Small World Journeys! Congratulations to Ambassador Laurie and her team for all their fantastic effort to get many schools involved in CoralWatch monitoring.

December - Community engagement and most corals surveyed during ReefBlitz

Congratulations to Ambassador Natalie who entered data from 309 corals, during October ReefBlitz month alone. Data was collected during community shorebased events organised by Dive for Change and on-board Lady Musgrave Experience.



Experience Science Workshop

18, 25 and January University of QLD, Brisbane

To give senior high school students an insight into studying science at UQ, UQ offers twice a year 'Experience Science' events, demonstrating how science is applied in industry and everyday life through hands-on, interactive workshops. Around 45 high school students attended our workshops and were very interested to learn more about the reef. After a presentation, students participated in our reef quiz, reef monitoring and virtual reality.

Outreach: around 45 students attended

Karen, Natalie, Diana





With the help of our fantastic team of Ambassadors, CoralWatch managed to organised 98 events in 2018 with direct outreach to 9408 people. We would like to thank all our ambassadors for their amazing input! CoralWatch aims to organise another Ambassador workshop in the second half of 2019. Stayed tuned for details!

In addition to all this

Monique had a baby boy at the end of January and will be on maternity leave until August 2019. Karen Hofman (CoralWatch ambassador, UQ lecturer in tourism and PhD student) has kindly taken her position and started with writing grants and helping with the ambassador return workshop.

GRANTS

- Congratulations to David who has been succesfull with his grant submission to Fitzroy Basin Association to create a 'Corals at your Doorstep' education package for Gladstone area. This will include CoralWatch materials.
- CoralWatch submitted a citizen science grant for the Great Barrier Reef Foundation 'Educating communities to help Act and Protect our GBR'.
- CoralWatch also applied for a National Science Week grant for various events along the QLD coast and funding to develop our own VR content. Fingers crossed ...

Favourites	Challenges	Solutions
<ul style="list-style-type: none"> • The Children! • So many inspiring young people. • Passionate teachers. • ReefBlitz. • Making learning fun and relevant to non-scientists. • Plastic art. • Working with other ambassadors. 	Other displays stealing the limelight	<ul style="list-style-type: none"> • Presentation wall with height to be able to see from far away • Spyder displays (google)
	Plastic on stickers	<ul style="list-style-type: none"> • Fillable sculpture • Stamps / bracelets • Badges (Peta & Amalya to look into to)
	Time to create quality content	<ul style="list-style-type: none"> • Just start! Action creates motivation • Schedule a dedicated time to do CoralWatch • Schedule posts on social media • Send Valerio (or dedicated person) content for Instagram (eg)
	Engaging people who have no reef context	<ul style="list-style-type: none"> • Identify your audience • Find the link • Play to their interest • Financial incentives • Better marketing / advertising of event
	Making it relevant	<ul style="list-style-type: none"> • Internal FAQ sheet with best approaches for different groups eg mining, agriculture • Talk in 'their' language • Ask them questions to create the connection



Kids engaged in self-directed CoralWatch learning at the sports carnival!

What I love about being an ambassador

Working with an incredible team who are passionate about protecting the reef; Giving me the opportunity to indulge my love of coral reefs; Sharing this passion with other people and inspiring our young people to become citizen scientists and protect our reefs.



This man gets the most dedicated Citizen Scientist on the day award for doing coral surveys all afternoon while his 2 friends relaxed in the shade. Another CoralWatch devotee!