







OCTOBER 2017



CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS



efs and









Biodiversity Road Show Centre for Marine Science 14 October, Suttons Beach, RedCliffe Brisbane

A CoralWatch stall was set up in conjunction with ReefCheck as a citizen science stall at the UQ Biodiversity Roadshow. People could go on a guided coastal habitat walk, feel a sea creature in a touch tank, check out the microscopic undersea world with the microscope display, listen to fish sing and shrimp snap, test your knowledge with the marine trivia quiz and so much more. Despite the terribe weather, still about 100 people attended the event, of which 30 were interested to hear more including teachers, divers, parents. Several people signed up for more information. Great to work as well with the Centre for Marine science at UQ, nice and very interesting group of people to be associated with!

Adam



Citizen Science Talk - Schoolvisit

25 October, St Teresa's Catholic College

Maddie visited a school to talk to 15 marine science students in year 11 about citizen science and CoralWatch. Students already had presentations from 6 other citizen science organisations over the course of their module, including Reef Check and CoastCare. Below are a few interesting questions that the students had, with answers provided by Maddie and Diana.

Are there any negative impacts on the organisms/areas caused by the citizens?

- Yes, there is some negative impact because sometimes people can be careless and damage the reef, however it is smaller than the positive outcome
- We need people to visit the reef to be able to save the reef because people will only protect what they have seen and what they love.

What are some challenges you have faced whilst gathering data through citizen involvement?

- Data return but the app makes it easier
- Citizen science is not "valid data" or "scientific enough"
- There will be errors in our data people may measure a sponge or a rock – as long as you get enough data it will outweigh those little errors
- Most essential element of citizen science is to keep it simple
- Because our method is so simple (just comparing colour) people overthink the method
- Funding ongoing challenge for many conservation projects Currently great support from QLD Gov and UQ.

Maddie G



Creative Lab Teacher workshop 17 October, QLD museum, Brisbane

The Creative Lab is an all-day Professional Development program for teachers around Queensland, which is run by the Queensland Museum 3x a year. It is designed to enhance STEM teaching in the classroom, through workshops and lectures, which assist teachers in developing creative teaching methodologies to enhance student learning experiences.

Maria organised to be a part of this event and provided a CoralWatch display, virtual reef and curriculum-based teaching materials and packs. There was a lot of interest from the teachers attending the workshops and we interacted and talked with most of the teachers at the event and handed out about 42 teacher packs. We were also able to arrange for a display of real corals, courtesy of the Queensland Museum.

We had 2 large tressle tables, just inside the theatre next to the entrance /exit. There was plenty of space for our CoralWatch display, banner and a coral display, which was provided courtesy of the Queensland Museum.

The Queensland Museum Creative Lab staff introduced CoralWatch at the beginning of the day and directed them to our display. The positioning of our display also meant that we were visible to teachers and we were able to talk to teachers between Creative Lab events.

51 teachers from 36 schools around Brisbane and Queensland attended the event. We would be able to participate in future Creative lab events and other Queensland Museum events. There may be the possiblility of incorporating a CoralWatch workshop in a future QM Creative Lab. event





In collaboration with the Reef Citizen Science Alliance and other citizen science groups such as ReefCheck and Tangaroa Blue we managed to deliver a total of 30 events across Queensland. CoralWatch ambassadors participated in 12 events in 9 locations collecting data for 862 corals and interacted with over 400 people.



ReefBlitz - CoralWatch Reef Walk STEM Club KSHS 15 October, Geoffrey Bay, Magnetic Island, Australia Students of Kirwan State High School travelled to Magnetic Island and conducted a reef walk on Geoffrey Bay to monitor the reef. Students participated in a discussion on the health of the Great Barrier Reef and practised monitoring with the virtual reef on the beach. Students then used Coral Watch cards to check the health of the reef during the reef walk and subsequently uploaded the data on the CoralWatch website. A total of 14 surveys with 216 datapoints was submitted fantastic effort! 24 Students and 4 teachers attended this event





ReefBlitz - Chasing coral screening 16 October Bundaberg

Maria and Hannah organised a screening of the thoughtprovoking documentary 'Chasing Coral'. This event was unfortunately our second option as we had to postpone to CoralWatch dive and snorkel at Barolin Rocks owing to bad weather. However, we were able to find free venue hire at The Spotted Dog Tavern. Arriving early with excitement, two excellent helpers, Josh and Chris, help set up the room with information on CoralWatch, ReefCheck, and Reefblitz. Owing to a very last-minute change of plan, we had to advertise the event through Facebook and at the venue, only about 10 people attended but we talked to many people beforehand. We were then able to give a short presentation on CoralWatch, and listen to one from Meg Vassie, the ReefCheck ambassador of the region. The documentary was fantastic. I believe we really did help to inspire those who watched it - inspiration to help the reef and the environment. Looking forward to the next one! Hannah, Maria



ReefBlitz - City Corals & Citizen Science cruise 4 November, Manly Brisbane

Members of the local community joined Coralwatch, Reef Check Australia and Moreton Bay Environmental Education Centre aboard the MV Inspiration, for a cruise to explore reef areas around Green Island and St Helena Island. There were two cruises on the day, 20 people were on the first cruise and 35 on the second. We were able to explore the reef beneath with the aid of a dropdown camera. There was plenty of opportunity for people to learn more about the reef on their doorstep and participate in citizen science activities, through on-board talks, reef quizes, water quality data collection and also try out CoralWatch virtual reef and Coral Health Chart. Overall, the weather was perfect, the sea was calm and an enjoyable trip was experienced by all!





ReefBlitz - CoralWatch on board Cruise Whitsundays 21 October, Hardy Reef

On Board cruise whitsundays, Monique and Diana offered guest from all over the world the option to participate in coral monitoring. The monitoring at this site was a little bit challenging for the mostly unexperienced guest on board. Corals were fairly deep and visibility not too good. There was a teacher with 6 students on board who were already planning to do CoralWatch. They did a great job and together with them we completed 9 slates with close to 180 corals.

We also had a reef quiz and display on the reef platform and talked to many people. A total of 22 people participated in the quiz with a lucky price winner on the way home. The staff very interested and we have been talking with the company to organise more CoralWatch trips, but will need an Ambassador in the area to make it happen.



ReefBlitz - CoralWatch on board ZigZag Whitsundays 22 October, Chalkys Reef

Together with Gemma from ReefCheck, Monique and Diana went on Board ZigZag adventures and visited the inshore areas of the Whitsundays. This trip was on a small boat with only 22 guest and 3 staff. ReefCheck and CoralWatch explained guest how to participate in CoralWatch and ReefCheck. A few guest collected data but we had similar challenges as the day before, with visibility even less. However, we still completed 6 slates at Catherine Bay, (Border Island) and Chalkeys beach. Very sad to see the state of the corals around Whitsundays, lots of broken pieces because of the cyclone earlier in the year. Lunch was provided at beautiful Whiteheaven beach.



ReefBlitz - School visit

20 October, St. Catherines Catholic College, Proserpine Diana presented *'Citizen Science, everyone can help save the reef'* at a school in Proserpine. There were 20 students from year 11 and 12 Biology and we included a virtual reef activity. Student will participate in a reeftrip in the coming month and will hopefully collect some CoralWatch data. The school does not currently offer marine science but is very keen to do so in the near future.



ReefBlitz School visit - year 1 Colours on the reef 27 October Yarrabah School QLD

Monique presented the 'Colours on the Reef' presentation to year 1, followed by April who presented to the year 2 class. A 20 min. presentation was followed by using the Coral Health Chart on the children's drawings that they coloured in the day before. After this two large virtual reefs were spread out on the ground with the kids around it, summarizing what they have learned, i.e. healthy vs. unhealthy corals, bleaching, colour of corals and coral types. The activity took 60 min. each class and a total of 50 kids got involved. The 5 teachers were very supportive. It was a bit challenging to keep kids attention during the presentation. Kids had a lot of blue, pink and yellow in their drawings which didn't match chart. Makes it hard for them and quickly concentration is lost. To solve this, we changed to the virtual reefs which they enjoy! The Yarrabah school was keen to have us, and indicated we are always welcome. April and Monique







ReefBlitz - Collecting data 29 October Reefmagic Cairns

Back on board with Reefmagic and their great team we went to the Marine World pontoon. Together with ReefCheck Australia we set up a booth and quiz and several people passed by with questions or the interest to do a CoralWatch survey. Alan Finkel, Australian Chief Scientist was also on board and was very interested in our activities and was very positive about the Reef Alliance and ReefBlitz initiative. There were 175 passenger on the boat, we probably interacted with 50. It was nice day out. 6 surveys with 125 corals were completed.

Monique



ReefBlitz - Data collection and Clean up day 29 October, Fitzroy Island

Stunning weather, and a day full of activities together with Reef Check team, Tangaroa Blue and Conservation Volunteers Australia. Many people participated in the beach clean up. We joined the Glass bottom boat with a short 2 min. CoralWatch and ReefSearch talk before going snorkelling on the other side island. Unfortunately the visibility was not very good and it was a bit choppy, difficult conditions for first time CoralWatchers. Nevertheless we talked to people and had a information stall on the beach.Big thanks to Fitzroy Island Resort, Queensland, Cairns Dive Centre, Sunlover Reef Cruises and Small World Journeys for their amazing support to make this possible.

Student group collecting data - ReefBlitz

28-29 October Fitzroy Island, Small World Journeys, Cairns Students and teachers were introduced to the CoralWatch citizen science project the night before the fieldtrip in an evening presentation. The CoralWatch banner and ID slates were used to explain the date collection process, and how the samples we collect are added to a global data base and aid the scientists monitoring reef systems globally. Due to the Northerly winds and high level of private boats moored in the main bay the conditions were not ideal for the students. Another student trip offered by staff from Small world Journeys. Laurie with her (inter)national students collected data of >1500 corals in 2017 and with this Small World Journey ranks # 5 in Australia and # 16 in the world.

In addition to all this

- Hong and Maria have been painting the new coral base and are finding display options.
- CoralWatch got accepted for a long talk and 2 hour workshop for the <u>Australian Citizen Science Conference</u> in Adelaide in February 2019.
- A primary school in Hertfordshire, UK are holding a themed day Planet Day on 24th November this year and they are going to incorporate the CoralWatch Daily Life aspect of global warming, climate change and also show a youtube Coralwatch video at an assembly. The teacher is a contact from Maria.
- Wildmob organisation started to offer CoralWatch as part of their activities on their Great Barrier Reef student trips. <u>Read more</u>
- Maddie D is trying to obtain an education licence for CoralWatch for the Plastic Ocean movie. Once purchased we can organise some screenings and linked activities, similar as we did with Chasing Coral.
- We will submit an expresssion of interest for the World science festival, Street Science activity on 24-25 March, at the SouthBank Cultural Forecourt.

GRANTS

- Maddie G. submitted a travel grant. Women in Stem to organise a CoralWatch workshop in the Philippines.
- CoralWatch submitted a grant application for National Science week 2018 to conduct a 'Corals in the Outback -Sustainability trip' with community events in the area of Mount Isa and Longreach. Something new and exciting to approach a different audience. Chasing coral screenings with Q&A sessions will be part of the tour.
- CoralWatch submitted a grant application for Australia-Indonesia Institute to invite 4 Indonesian community members to our next CoralWatch Ambassador workshop.
- CoralWatch submitted an engaging science grant. 'Help Save Reefs from Home' - Ambassadors in Action through science, art and education. Funding will support part of our Ambassador return workshop including a science communication and marketing workshop, materials to develop displays and newly printed lesson materials. It also includes 'Clay a coral reef' school projects.

And I am sure there was more ...



UPCOMING OPPORTUNITIES

UPCOMING EVENTS NOVEMBER AND BEYOND

CoralWatch data collection

19 Nov, Barolin Rocks, Bundaberg

Fingers crossed the weather is good this time! Unfortunately had Hannah had to postpone 2 previous trips. She is advertising her event on facebook: Monitor the health of the local reef - found right at our feet, Barolin Rocks. Using colour as in indicator for coral health, the scientists of Bundaberg can help save the reef. Snorkel or dive. To register and more info.

Moreton Bay Research Station MBRS Open Day

25 November, 10 - 3 – N. Stradbroke Island

MBRS is celebrating its 55th aniversary, with many activities from boat cruises, displays to talks. CoralWatch will be part of this day, with a display and art activity. Together with Maria, Hong will offer children to 'Clay a Coral'. We have been looking for a good opportunity to implement her ideas and it's happening! Very exciting, looking forward to the photos.



Search for Supercorals - Great Barrier Reef Legacy 15 nov - 8 Dec 2017, Great Barrier Reef

Monique is part of the research team on board of the Flying fish organised by the <u>GBR Legacy</u>, an amazing trip to be part of! Monique will be colllecting data for the Remote Sensing Research Centre at UQ (Chris Roelfsema) for the <u>habitat mapping project</u> of 3000 shallow reefs. In addition to phototransects she will be collecting Coral Health Chart data for every possible reef. You can <u>follow</u> them the trip and for those who are in the area there is a Free Public Symposium (registration essential) on Friday December 8th, 7 - 9pm at Hemingway's Brewery, Port Douglas.

CoralWatch on board Paul Gauguin Cruiseship 18 nov - 2 Dec 2017, French Polynesia

Together with <u>Chris Roelfsema</u>, Diana will be on board as <u>guest</u><u>lecturer</u> on board the French ship Paul Gauguin. This is a yearly event where we provide lecturs on coral reefs and citizen science and talk to guest. There will also be a CoralWatch workshop on one of the islands and during some of the dives guests can collect data. We will be sailing from Tahiti to the Marquesas Islands.

Please note with both of us away the **CoralWatch office will be unattended for 2 weeks**. and response to emails might be slow.

Eat Drink and be Giving - Charity Event

2 Dec, 6-10 pm Charity Event benefiting Australian Coral Reefs ACME, Australian coastal & marine ecology, Brisbane

ACME is hosting a Christmas Charity Event – a cruise on the Brisbane River on Saturday 2nd December (6-10pm). Through the Coastal Protection Core they will be donating all ticket purchases to CoralWatch through the projects that Monique identified in the application to them. In the case of this cruise 'each ticket purchased will provide 6 coral health charts for year 1 to 7 students across Australian Schools'. Thanks Maria for getting us in touch with ACME! Hong, Maddy D and Maria will be on the trip.

Caring for Corals Teacher PD

9-10 March 2018 - N.Stradbroke Island

Two day workshop for secondary teachers to learn more about reef science and marine conservation. Includes lectures, handson field- and classroom activities and take-home materials. Please forward the <u>registration form</u> to your contacts.



Ambassador Return Workshop

10-11 March 2018 - MBRS, N.Stradbroke Island

Please keep this date available we hope you can all attend. Some of you will have to travel from far, but CoralWatch will be able to provide some travel support. Will get in touch with you in January to make further planning and arrangements.

As you might have noticed, the dates overlaps with the teachers workshop. On Saturday there will be activities, fun for both parties (teachers and ambassadors) such as; a 'reefwalk' with coral ID at Polka Point, Moreton Bay and Ambassador presentations, and celebration of the succes of our program. TBC, On Sunday we organise a science communication, and planning workshop for our new program 'Save Reefs from Home', with a snorkel in the afternoon to show you the corals in the Moreton Bay.

Second CoralWatch Ambassador Workshop

23-27 May 2018 - Heron Island

CoralWatch will recruit more Ambassadors next year. This does not mean your activities cannot continue! We love to keep you all and have even more heroes onboard! Feel free to start advertising this within your networks.

Please let us know if we missed your story or if you know of any other opportunities.