





NOVEMBER 2020 - JUNE 2021



CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS









EVENTS End 2020

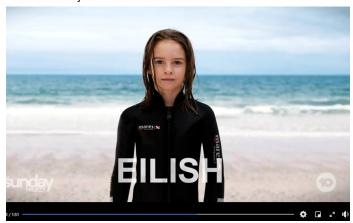


15 November, The Project

Little Eco-Warrior With A Big Dream

Elijah is one of our amazing stars in our 'Come Join our Watch' campaign. This amazing 7-year-old Queensland eco warrior devotes all his spare time to saving the Great Barrier Reef. He is helping us to get in touch with Billie Eilish asking her to lend her voice and song 'Ocean Eyes' for our 'Come join our Watch' campaign helping to save the reef.

Elijah, his parents and Justin were interviewed by the project, https://www.facebook.com/Elijahs-World-102592494841591 Well-done Elijah!



CoralWatch is still aiming for the stars. We are not only asking Billie Eilish for her song, but also Robert de Niro and Kit Harrington to support our campaign and help the reef. Keep a close-look at our facebook page, things might have been a bit 'quite' but new posts will pop us soon. Please keep on sharing all the 'Come Join our Watch' posts to get many people involved and understanding why we need to protect our Great Barrier Reef.





Do it Yourself Kit making - working bee

8 December, meeting room UQ

We received a big order from Taiwan to create 200 DIY Kits in Taiwanese. The DIY Kits take quite a bit of time to assemble, we discovered it takes about one hour to create around 30 sets of slates and charts. That's already 7 hours just to get the slates ready so we were extremely happy with the help provided by some Ambassadors. We managed to get it done in a few hours and had a nice lunch afterwards.

Thanks Haley, Take, Amber, Yohana, Karen, Diana, Monique



Experience Science Workshops

21 and 22 January, UQ

This event was for high school students, aiming to expose students to the world of tertiary education, as well as inspiring a passion for science and learning.

CoralWatch jumped at the opportunity to interact with these students and have them learn about reef health, reef ecosystems and the issues that they face in light of anthropogenic disturbance.

The virtual reef, reef scorecard, quizzes and pledges were the CoralWatch activities employed to engage students, along with an educational presentation delivered by Haley and Karen. Go CoralWatch team.

Number of participants at event: 3 groups of 10-20 students, along with 2-4 supervisors = $^{\sim}60$ people



EVENTS Start 2021



Mooloolaba Ecological Assessment and Mapping (MEAM) project

4 February, online presentation, UQ 4 and 18 March, pool session, UQ

The University of Queensland Underwater Club, Unidive is active with reef conservation and citizen science and CoralWatch is involved in the current MEAM project. The aim of the MEAM project is to conduct an ecological assessment and mapping of the marine environment surrounding Mooloolaba (Sunshine Coast, Queensland) using a community-based, cost effective, scientifically sound survey program. This survey program is based on citizen science and will assess the flora and fauna at Mooloolaba reefs using globally recognised mapping methods from Reef Check, CoralWatch and award-winning previous UniDive projects (e.g. FREA, PLEA).

Project findings will be made publicly accessible through a report, maps and data sets. It will provide a basis to understand and track changes supporting management plans for waterway and coastal health on the Sunshine Coast. Additionally, it will support the local dive industry with maps and raise public awareness of the local reef environment.

Monique presented online about CoralWatch and during pool sessions all volunteers practiced their buoyancy and data recording with the Coral Health Chart.

Number of participants at event: 40 volunteers

Ambassadors involved in this project: Amber, Devin, Take and Maddy plus CoralWatch staff Diana, Karen and Monique





Education STEM EXPO - Educational Resources & Citizen Science Information

11 March, Central Queensland University (CQ), Gladstone

This is the second STEM Expo held at CQ University. This year Professor Possingham, Qld. Chief Scientist presented a key note presentation. Educators & community members with an interest in citizen science attended. Exhibitors included local citizen science programmes as well as industries. Educators came away with resources and contacts invaluable for use in the classroom, program writing and mentoring around citizen science. It also provided an opportunity to renew contacts with other local citizen science people. Over 100 mostly educators came through the doors and the feedback was overwhelmingly positive, with many coming away with resources and contacts.

Number of participants at event: >100 educators

David

Other 'citizen science' groups involved in the event:
CQUniversity/STEM Central, Future-Makers, Gidarjil
Development Corp. Ltd, Yalga Binbi Institute (Indigenous
training organizing catering to all sections of the community)
Gladstone Healthy Harbour Partnership, Gladstone Ports
Corporation, Gladstone Region Air Quality, Gladstone Regional
Library, Port Curtis Harbour Watch, Tangaroa Blue, AUSMEPA
(microplastics), Mangrove Watch, Tech Girls, Wonder of
Science



Capricorn Coast - Corals at Your Doorstep- Education Package includes: Year 7 Science booklet, Coral identification sheet, virtual reef and a community leaflet. All downloadable from https://coralwatch.org/index.php/ambassadors/capricorn-coast-corals-at-your-doorstep/



EVENTS March/April 2021



World Science Festival

25-28 March, Queensland Museum, Brisbane

Just in time, before Brisbane went back into lockdown we managed to talk to lots of people at the World Science Festival about CoralWatch, coral reefs, GBR, Moreton Bay, citizen science and how to save reefs from home.

Around 110 people participated in the turtles love corals quiz, 4 lucky winners received a book, dvd, DIY kit and some festival goodies.

As always, kids loved the colouring-in pages (600 prints, all gone by the end of the festival), 100 DVD's and 11 books were given away, around 60 educators received a free Moreton Bay education pack and numerous pledges were posted on

Thanks Haley, Take, Phebe, Emma, Jason, Erin, Melinda, Maria for your enthusiasm and assistance, much appreciated!

Number of participants at event: 1200

Haley, Take, Phebe, Emma, Jason, Erin, Melinda, Maria





CoralWatch Data collection - Small World Journeys

28 April, Fitzroy Island

We were pleased to take out our first group to the reef since COVID began! The CoralWatch data collection was not as long as it could have been because we had to squeeze in a lot of activities that we had planned for our two days on the island. However, due to flooding at the campground we could only spend one day there. This group was from Sydney and was a mix of geography students and biology students and still found it enjoyable to snorkel.

Number of participants at event: 31 students and 3 teachers

Other events and media outreach

National Youth Science Forum by Australian National University Online

On 14th January, Diana presented CoralWatch to 70 students online from all over the country. To make the presentation a bit more exciting and interactive we had a live-connection with Heron Island Research Station. The staff provided a fantastic demonstration of the Coral Health Chart at the touchtank and talked about the various corals in the tank. Students loved it and asked lots of questions about Heron reef.

Justin presented 'CoralWatch what can I do?' to researchers and students at the Queensland Brain Institute (QBI). As you know CoralWatch is part of QBI where actually very little marine research is conducted, the focus is more on unravelling the mysteries of the human brain. Something different to listen too, it was well attended.

Monique was interviewed by Ellie McBain about training and recruitment of volunteers in citizen science. Ellie is completing a honours research project at QUT about the utilisation of citizen led data collection and implementation on the Great Barrier Reef.

Diana was interviewed for a story on the CoralWatch Citizen Science Program in the next issue of Australian Teacher Magazine. They are aiming to publish this in July, if anyone has access to this magazine and views it, please share.

The Great Barrier Reef Foundation have featured a blog story on their home page about community champions, This includes showcasing the videos that CoralWatch created last year through the digital storytellers training. The story can be found here: Community champions helping save our Reef - Great Barrier Reef Foundation

The National Museum of Marine Science & Technology in Taiwan is offering regular CoralWatch workshops, organised by Lishu Chen. Check out their facebook page The most recent CoralWatch workshop was organised for Water Sports Association of ROC in NKTU in KAOHSIUNG, 16 participants. The timing was just before the outbreak of COV-19 in Taiwan. All the CoralWatch workshops were cancelled the day after.

Black Turtle Dive on Koh Tao is a very active CoralWatch Dive Centre featured in The weather channel, June 9, 2021. How Thailand is Addressing Coral Crisis as New Bleaching Event Looms. See video

The Allen Coral Atlas invites citizen scientists to join coral reef monitoring and advocacy for marine areas. CoralWatch is highlighted in their recent video: the Allen Coral Atlas and Citizen Science (Bleaching Highlight) video.



EVENTS May 2021



Corals at your Doorstep - Library Display

4 May - 8 June, Bundaberg Library

To bring Bundaberg local reefs to the attention of the community, CoralWatch organised a semi-permanent display in the library. Apart from the usual CoralWatch materials, we created a new 'Corals at Your Doorstep' banner and added some marine-themed books from the library to the display. People could also participate in our 'Turtle love Corals' quiz, (see Elijah in the photo below). About 15 people participated and the winner received a Coral Reefs and Climate Change book. Some feedback from the library: in the first week there was a lot of interest in the display but less after.

Number of library visitors: unknown





Coral Coast - Corals at Your Doorstep- Education Package includes: Year 7 Science booklet, Coral identification sheet, big cloth virtual reef and a community leaflet. All downloadable from https://coralwatch.org/index.php/ambassadors/coral-coast/



Coral Coast Education Pack Launch

4 May, Kellys Beach Resort, Bagara

Together with our 3 local Ambassadors Natalie, Rebecca and Jess, CoralWatch produced an education package and materials to raise awareness about the beauty of Bundy's reefs. On 4th May we officially launched the materials. Kellys Beach Resort generously provided a suitable space and even included tea and coffee which was much appreciated.

We organised 2 presentations. Diana talked about coral biology, coral bleaching and CoralWatch monitoring. Natalie presented the beautiful reefs at the Coral Coast and how you can help protect them. Natalie also offers a direct opportunity for locals to get involved with **Dive for Change**, an organisation she started a few years ago. Dive for Change Australia offers environmental education school holiday programs, school talks and mentoring programs/workshops. They also provide support to schools for Reef Guardian activities and implementation of Coralwatch educational materials in either the classroom or field for the local area.

Unfortunately the event was a bit of a challenge due to issues with technology, after the first slide the presentation would randomly shut down, not just once but several times, very annoying. Luckily, there were several young students within the audience with lots of questions so we started answering those while Monique managed to get it all working again!

Number of participants at event: 35 (Event brite tickets ordered: 50 plus people waitlisted)

Contact details Dive for Change Facebook "Dive for Change Australia" Instagram @diveforchange_australia on phone 0478116558 email info@diveforchange.org







EVENTS EVENTS May 2021



Act to Protect Teacher and Community Workshop

7-10 May, Heron Island Research Station

A mix of teachers, tourism operators and community members participated in our four-day practical workshop on Heron Island. The focus was on coral biology, reef health and threats, coral bleaching, citizen science and the importance of reef conservation. Participants learned how to collect and interpret CoralWatch data and identify trends using the CoralWatch global database, investigate zooxanthellae under the microscope and identify coral genus.

Each day we tried to spend as much time on the reef as possible with a snorkel and a reefwalk, collecting data and exploring the reef. In addition, several of the group would include a snorkel before breakfast in the harbour to see all the big stuff: sharks, rays and lots of turtles! We were very lucky as weather conditions were amazing.

CoralWatch 'Act to Protect' workshop series are funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation. Additional support for this workshop was provided by The University of Queensland.

Number of participants at event: 12



Act to Protect the GBR presentation

7 May, Heron Island Resort

On Friday evening we went to the resort for a presentation. Apart from our own group and a teacher from Agnes Water with her students, not many guest attended the presentation, too tired maybe from all-day snorkeling?

Number of participants at event: 30 students and 3 teachers



Virtual Excursion for distance education

Melinda: "The Heron Island PD was the opportunity for me to bring my digital media colleagues to compile some footage for a Virtual Excursion. We will look to producing 5 episodes on the history and formation of Heron Island, Coral Biology, Defining Reef Communities and Zonations, current Research and Citizen Science on the reef".

This is the first time a Virtual Excursion on the GBR has been made and will be a cross curricula resource for Marine Science/Science and HSIE subjects.

The team was able to incorporate filming whilst participating in the workshop and also network with researchers that were undertaking their studies whilst they were there and give insight to their preliminary results and hypotheses. The team also filmed **Amber** who was on the island assisting a Phd student with her research - see next page.

MEDIA OUTREACH

Teachers, citizen science program create Great Barrier Reef virtual excursion

ABC Capricomia

Posted Thursday 13 May 2021 at 6:33am



CoralWatch is a citizen science program which operates across more than 200 Australian reefs. (Supplied: CoralWatch)

Online news 13 May ABC Capricornia Read whole article

Radio interviews

Melinda Ingram, Diana Kleine Thursday 13 May - Breakfast program Friday 14 May - ABC Capricornia https://www.abc.net.au/radio/capricornia/ programs/breakfast/breakfast/13333272 [starts at 2 hrs 32 mins until 2 hrs 39]



EVENTS May / June 2021



Assisting PhD research

May - June, Heron Island

Amber is currently assisting on a coral physiology research project at the Heron Island Research Station. The research project is part of a three-year PhD study for UQ's CRE lab with Vanessa Clark. Vanessa is investigating the relationship between zooxanthellae and coral polyp feeding.

As part of her project, Vanessa and Amber have collected *Galaxea fascicularis* and *Acropora intermedia* from various locations around Heron Island for the 8-week tank based experiment monitoring coral feeding. While scuba diving, they used a basket to collect the coral, which had a gps attached via a float and pulley system so they could record where each coral colony was collected.

They also used the CoralWatch Coral Health Chart as a tool for recording pigmentation of colonies during collection so they could compare between the colonies being collected, as well as the fragments used throughout the experiment. It was important to measure the zooxanthellae concentration - for example corals from the slope are darker and have a higher concentration of zooxanthellae for increased light capture, than coral from the reef crest which is found in much shallower waters. By using the CW chart and a ruler (as pictured), they have a baseline for the coral colony at the point of collection.

The experiment will run for another two months and aims to provide an increased understanding between the coral host, its zooxanthellae and how they feed. This research may provide a greater understanding of what future reefs may look like. Amber and Vanessa explained their research to the workshop participants.

Amber





Social Media - CoralWatch / ReefCheck

Amber is now also Reef Check surveyor and was interviewed on her trip last year to the Whitsundays where she provided CoralWatch training as part of the training weekend.

Facebook link

(https://fb.watch/5GKT1ThDbY/)



World Environment Day Sustainability workshops

3 June, Southern Cross School of Distance Education, Ballina NSW

The sustainability workshops were an opportunity for students and teachers to do some practical activities to make a difference for the environment. Activities included beeswax wrap making, no sew bags, solar buddy lights waste swaps, repair and mend and pledge tree. Screening of movie 2040. We also had the CoralWatch videos playing and the students loved watching them. The students had a really good knowledge and understanding of the challenges that face the reef.

Melinda

Number of participants at event: 20 students, 60 teachers





Centre for Marine Studies Biodiversity Roadshow 20 June 2021, QLD Museum, Suttons Beach, Redclife 10-1 PM. More info

Inspire U Stem - 29 June, UQ Stem Girlpower Camp - 14 July, UQ

This is a yearly UQ event where we organise 45 minute sessions that include a presentation, and interactive activities. If you are interested and available to help, please contact Karen (k.johnson5@uq.edu.au)

Schools 4 CoralWatch



Phoebe has started advertising the 'Schools4CoralWatch' project to schools in Moreton Bay and on the Sunshine Coast. The aim of this project is to develop a network of secondary schools that are actively involved in the monitoring and management of their local coral reefs. A group of students from each participating school will visit one reef of their choosing at regular intervals to measure coral bleaching using the Coral Health Chart. Student participation could be linked to curricular activities in Geography/Science or could be associated with a club/society.

Free information packs are available for interested schools. Please let me know if you would be interested in implementing the project in your region. I would love to expand the network up into the Coral and Cassowary coasts!

Phoebe

Citizen Science Festival 2021

16-18 August 2021, Boyne Island Environmental Education Centre, Boyne Island. More info will follow.

Other upcoming events will be posted on the Ambassador facebook page and details will be emailed.

Other big news to share



CoralWatch staff

Monique is chasing a new adventure and unfortunately leaving CoralWatch in Brisbane. She will be moving to Bonaire, Caribbean, at the end of June. She found a job with the local marine and national parks, STINAPA. She will take up the role of Educator and Volunteer Coordinator teaching at primary/secondary schools, developing new education materials, involved in running after school and junior ranger programs and engage with the community. Of course Monique will take CoralWatch with her and use this as much as she can in her new job and environment!

Monique's input in CoralWatch since 2016 has been amazing. Thanks Monique for all the teamwork, let's keep CoralWatching together.