CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS

In this newsletter
- World Science Festival
- Ambassador return workshop

Upcoming events
- Conferences, World Environment Day and many other events
Ambassador Return Workshop
10-11 March 2018 – MBRS, N.Stradbroke Island

A bunch of intrepid CORALWATCH Ambassadors braved the inclement Stradbroke Island weather to attend the Ambassador Return workshop. I arrived already on Friday and attended the teacher professional development workshop as well as the Ambassador return workshop.

Indoors we got the opportunity to meet with a number of teachers from around QLD who were attending a professional development session. Before they departed, we spoke about how CoralWatch fits within the teaching space.

Once the teachers departed we shared with each other the year that was for each Ambassador. The successes, the challenges and the opportunities. See a summary below. It was inspiring for all to hear the work being done and wonderful to recognise the efforts of our star performers with the inaugural Ambassador Awards presentation.

On the last day, Karen Hofman (Tourism & Marketing) spent the afternoon with us showing how best to deliver messages to the public to ensure we convert their “good intentions” into “changes in behaviour.” Not an easy subject but one that is becoming increasingly important for the scientific community. So before wrapping up, we spent a few hours applying this new knowledge to upcoming CoralWatch events and initiatives such as “World Science Fare” and “Outback Outreach.”

As always, even in the face of Moreton Island’s worst weather, we had a rewarding and inspiring time together. Let’s hope the next Ambassador Return workshop will be even bigger and better as well as a bit dryer.

Paddy

During the Ambassador presentations, we made notes on everyone’s favourites, challenges and upcoming plans. We did receive several presentations from Ambassadors that were not able to attend, which were presented on their behalf and included in the summary below.

Ambassador Favourites
- Heron workshop
- Personal education
- QLD museum events
- Creating reef awareness
- Ambassador team
- Inspiring people
- Support from CoralWatch
- ‘Art meets Science’ project
- Students group returning, collecting data on same reefs (Laurie)
- Donations received for stalls
- Meeting others
- Collaboration with ReefCheck
- Explore coral reefs overseas (Kirwan SHS)
- CoralWatch open doors
- Corals at your Doorstep event
- Student involvement
- Diversity of outreach

Ambassador Challenges
- Time
- Weather
- Climate change deniers
- Cost (field and materials)
- Global poverty
- Supporting environmental aware communities worldwide
- Donations
- Attendance - How to get people to an event
- Safety
- Being too ambitious
- Lack of adequate corals samples - too much dead coral
- Data entry - group name
- Unsuccessful grant applications
- Impatient high school students
- Google drive / facebook did not work
- No Reefblitz events in the Keppels
- Extra curricula time for teachers and students
- Not enough good photos from each event

Ambassador Upcoming plans
- More curriculum materials
- Promoting a healthy ocean
- Sponsor opportunities
- 604 Coral Health Charts to be distributed to schools
- Coastal Protection Core Science festival
- Promoting CoralWatch in schools in the UK (Maria)
- CoralWatch calendar - to sell
- Ambassador login for website
- MBECC further collaboration (Maddie G)
- Coral restoration Fitzroy Island (Laurie)
- CoralWatch moving to Cairns - request by Laurie
- Maldives
- More data collection
- Movie screenings
- Citizen Science conference Brisbane (Maddie D)
- Conference Malaysia (Maddie D)
- School camps
- Surpass Utila - become no1 surveyor (Laurie)
- More CoralWatch merchandise
- Laminated materials on a table for outdoor events
- Save reefs from home factsheet
- More reefguardian trips (Phill)
- CW data for senior biology assessment
- Small CoralWatch packages to coastal schools and NGO’s
- Teacher PD at Keppels
- Paper Coral Health Charts for give aways and year 1 program

All Ambassador presentations are uploaded on the google drive https://drive.google.com/drive folders/1PC4mlD0tb2jwT2C2xYC6w6RSVg42F13K?usp=sharing
CoralWatch Favourites, Challenges, Outcomes
As favourites we like to mention the diversity of Ambassador personalities and locations with different ideas and circles of influence. We really admire your passion and ongoing willingness to help. One of our biggest challenges is finding the time and money to support all your fantastic ideas.

Direct outcomes - Ambassador return workshop
- Turtles love Corals Quiz - used during World Science Festival
- Save Money and the Reef - factsheet. First draft will be developed for the Corals in the Outback trip plus general info
- First ideas for Corals in the Outback Sustainability display
- Great opportunity to reconnect, evaluate and plan.

Overall outcomes - Ambassador project
In the first 7 months (1 June 2017 - 31 December 2017) of the Ambassador program, 2 CoralWatch staff organised together with 15 Ambassadors in Queensland >70 workshops, events and lectures, raising awareness face to face with >3300 people about coral bleaching and the Great Barrier Reef. As a comparison, in the 13 months prior (1 July 2016 - 31 July 2017) CoralWatch participated in about 44 events raising awareness to >2555 people.

Apart from an increase in number of events and people outreach, events are more widespread over QLD due to various home locations of our Ambassador. As an example, during the October ReefBlitz 2017 event, we participated in 11 community events and data collection trips, as well as 2 school visits in 8 locations (Moreton Bay, Fitzroy Island, Magnetic Island, Proserpine, Whitsundays, Yarrabah, Bundaberg, GBR).

CoralWatch Awards Ceremony
On Saturday night we went out for dinner at the Little Ships Club and we announced the CoralWatch Ambassador Awards. Since CoralWatch focuses on Monitoring, Education, Outreach we decided to hand out 3 awards for the people who did most or something outstanding. Since everyone of you has done so much it was really hard to make a decision.

The Monitoring Award went to Laurie, surveying 3 different reefs (Heron Island, Moore Reef and Fitzroy Island), 1649 corals in total over 36 surveys. The Education Award was awarded to Adam for presenting and organising a field workshop at the Marine Teachers Conference on Orpheus Island and for his continuous push to get CoralWatch in the Marine Science Curriculum.

Maria received the Outreach Award, she has participated in over 17 events, organised a charity cruise where 604 coral health charts got donated, baked the most amazing cake and organised an event and established great contacts with the QLD museum. We did break the rules though and added one other special award, the Art Award. Hong received this award, because her complete new initiative to raise reef awareness through a virtual clay coral reef, build with 6 Ambassadors and part of the Art meets Science exhibition last August in Ecosciences Precinct, Dutton Park.

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. The following awards have been assigned:

January - First coral survey of the year 2018!
On January 3, Utila Dive Center, Honduras surveyed Radar Reef. Utila has been our biggest data contributor for years now so this was a great opportunity to award them for their continuing efforts.

February - The individual who surveyed most coral colonies in 2018! Abby Seymour, also working for ReefTeach Cairns surveyed 239 corals in the first 2 months of this year.

March - Largest International CoralWatch workshop in 2018!
Organised by individual Wen-Sung Chung and hosted by the National Museum of Marine Science & Technology in Taiwan. Wen-Sung organised a workshop for 53 participants and the museum is keen to start a monitoring project. They also ordered 100 DIY kits in Taiwanese.

Upcoming awards
• Apr award: To be decided - any ideas welcome
• May award: Creativity award, example cake and clay- photos via FB or Twitter or email
• June award: Best CoralWatch in action photo
• July award: Person and/or Organisation most data uploaded first half 2018
• Aug award: School uploaded most data in 2018
• Sept award: 5000st member! (currently 4899)
• Oct award: Something ReefBlitz
• Nov award: To be decided - any ideas welcome
• Dec award: Add a new country to the list - currently 78!
World Science Festival - CoralWatch display  
21-25 March 2018 – QLD museum Brisbane

A few weeks ago we were fortunate enough to engage in the renowned World Science Festival in Brisbane, as CoralWatch Ambassadors. Throughout the few days that we were there we were running a CoralWatch stall, which promoted the organisation and their strong motives to recover and maintain the health of coral reefs. We reunited with numerous ambassadors and also met other passionate people who were determined to be ambassadors and help the coral reefs in any way they can. Being there was incredible. Seeing everyone working together and expressing their passion for science, especially CoralWatch gave us goose bumps. All the people who came up and visited our stall were friendly and interested in CoralWatch and we were gobsmacked by the knowledge of others and their genuine concern for coral reefs. Listening to young children, and their dreams to be a marine biologist/scientist or just snorkel for the first time was amazing and we were ecstatic to be able to bring some of those dreams to life through our virtual reality goggles. We believe the CoralWatch stall was a great success, as we had an item for everyone. We had quizzes for both the young and old, pamphlets, a beautiful clay coral display, the virtual reality goggles and the friendly volunteers and Ambassadors. Overall it was an incredible few days and we believe that the passion for our coral reefs has significantly expanded throughout the globe. As well as being a part of it all and interacting with all types of people really pushed both of us to think about a career path in marine, especially with the end of school knocking on our door. Thank you to everyone that was involved we can’t wait for the next event!!  

Emily and Lucy

In addition to Lucy and Emily’s great report, some info about our outreach numbers. We calculated that on average 50 people came to look at the display per hour (x 8 hours = 400 visitors per day x 4 days) = 1600 total!! Of those 1600 people, about 960 participated in the VR and 290 people participated in the Turtles love Corals quiz!

Overall, our clay coral reef was a real attraction, however the challenge was that everyone wanted to touch it. The combination of art corals together with the coral skeletons (that could be touched) and the photos of corals on the virtual reef banner worked well to educate the public about corals.

Thanks, this all would have never happened without our 30! volunteers. Apart from Ambassadors (Lucy, Emily, Maria, Maddie G and Hong) we had people helping from the Marshall group UQ and festival volunteers.

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EVENTS March

1. There are 7 species of turtles worldwide, how many species are in Moreton Bay?  
   a. 0  
   b. 3  
   c. 6  
   d. 7

2. The Great Barrier Reef has >425 hard coral species, how many are in Moreton Bay?  
   a. 0  
   b. 5  
   c. 49  
   d. >120

3. We go to the dentist for a clean-up, where do turtles get their shell cleaned?  
   a. Seaworld  
   b. The reef  
   c. Mangroves  
   d. Sandy beach

4. Which of the following are threats to sea turtles? (circle all that apply)  
   a. Boat traffic  
   b. Fishing lines and nets  
   c. Plastic bags  
   d. Clown fish

5. How does climate change affect turtles?  
   a. More turtles are born as boys  
   b. More turtles are born as girls  
   c. No change  
   d. The eggs shells are thicker

6. How does climate change affect reefs? (circle all that apply)  
   a. No change  
   b. Coral bleaching  
   c. Ocean acidification  
   d. More frequent and violent storms

7. What is a sea turtle natural diet? (circle all that apply)  
   a. Seagrass  
   b. Plastic  
   c. Algae  
   d. Jellyfish

8. Why do turtles love corals? (circle all that apply)  
   a. Turtles use corals to build their shells  
   b. Turtles use the reef for shelter  
   c. Turtles think the reef is pretty  
   d. Turtles eat soft corals

9. What is an important habitat for turtles? (circle all that apply)  
   a. The reef  
   b. QLD Museum  
   c. The beach  
   d. Seagrass

10. What did you do today to protect our ocean environment?  

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Caring for Corals Teacher PD
9-10 March 2018 – MBRS, North Stradbroke Island

On Friday morning, 17 teachers arrived at the station to participate in the teacher PD including Adam, Maria and myself. We started with the research station induction, followed by coral biology and CoralWatch presentations. In the afternoon we snorkelled the murky waters off Amity rock wall and were cheered by the sight of a range of corals, some small reef fish and a number of Wobbegong sharks. Back in the classroom we successfully trialled a number of mandatory practicals from the new Marine Science curriculum such as Zooxanthellae extractions and Coral identification using Russell Kelley’s Coral Finder. These will be ideal for students undertaking the new Marine Science curriculum.

The following day we started with a analysing data talk by Monique followed by a ‘tropical reef walk’ in the horizontal rain, but the water was too murky to see the corals for all but Diana. To prove it she took some remarkably clear photos.

After lunch, Adam and myself presented as Ambassadors to the teachers how CoralWatch fits within the teaching space. We included:

- CoralWatch curriculum plans and activities
- CoralWatch resources supporting the implementation of mandatory practicals within the new QCAA senior curriculum
- How CoralWatch engages the citizen scientist in all our students
- The value of CoralWatch as a STEM initiative that empowers students to enact change within their communities

In addition, Hong did a great talk about waste and Maddy G talked about her work at Moreton Bay Environmental Education Centre and opportunities for teachers to make use of the centre and boat facilities.

Big thanks to Maria to assist with the catering!

Reef Guardians Trip - data collection
25 March 2018 – Rockhampton State High School

First Reef Guardian Trip for 2018 – Boarded the ’Freedom Flyer’ (an upgrade from FFC’s Wild Duck) and motored through 20 knot wind to Great Keppel Island. Battling reasonably low visibility we conducted a CoralWatch survey at Monkey Reef (data to be uploaded before end of term in Marine Operations class). We also completed some Eye on the Reef and CoralWatch training for new Biology teachers and had a snorkel at Shelving Reef.

At Long Beach (and sand dunes) we got our largest haul of marine debris ever. Weather wasn’t perfect but all goals were achieved making it a good day out.

40 Students, 2 Freedom Fast Cats employee and three school employees attended this trip. Trips are going very smoothly these days!

Chasing Coral Screening / CoralWatch presentation
29 March 2018 – Unidive (University of Queensland Dive Club)

Unidive held a Chasing Corals screening for its new club members (mostly first year students), to teach them about coral bleaching and show them with what we are facing on the GBR and worldwide.

The pizza beforehand was a great ice-breaker for everyone making it a good social event and gave us a chance to mingle and chat to the Unidive members. Those attending (about 30) could look at our CoralWatch display and test out the Coral Health Charts on our virtual reef. Monique and I chatted to quite a few people about how they could contribute to coral reef monitoring by using the Coral Health Chart and add on their next diving trip. There were long tressle tables in the room which made it easy to set up the virtual display and information.

Monique’s presentation was well received and set the scene for the evening’s main viewing event. The seminar room was a great size for hosting a screening and everyone had an excellent view of the screen.

Paddy

Phill

Maria
Please let us know if you are able to help with any of our upcoming events:

**Tangalooma EcoMarines Ambassador School event**
**20 and 27 April 2018 – Moreton Island**
Tangalooma EcoMarines works with many schools in the Brisbane region to train EcoMarines Ambassadors. Each school appoints a support crew teacher and four student EcoMarines to lead various environmental activities or ‘challenges.’ One of the new challenges will be the CoralWatch challenge where the higher grade students teach the younger students about the reef. Maddie D offered to help for this event.

**CMS Biodiversity Roadshow**
**28 April 2018 – 12 to 3 pm Wellington Point**
Setup will start at 10 am. Possible we will share a table with ReefCheck, great opportunity to talk to people about corals in the Moreton Bay area and show them our new coral skeletons! Adam did this last year, who is keen to help this year?

**Whales Festival, inaugural Coastal Protection Core Science Festival**
**27 May 2018 – 3-8 pm Scarborough**
There is an opportunity to present at this festival and have a display. CoralWatch staff will be on Heron for the 2nd Ambassador workshop, but Maria has kindly offered to organise this, however an extra hand would be appreciated! Who is available?

**Australian Coral Reef Society Conference**
**15-17 April 2018 – Exmouth**
Anyone planning to attend the upcoming ACRS conference? If so, perhaps you can promote CoralWatch?

**Second CoralWatch Ambassador Workshop**
**23-27 May 2018 – Heron Island**
CoralWatch has selected 15 participants (out of 33 applicants) to attend the next workshop. Selected Ambassadors are students, teachers, dive instructor and indigenous people coming from Brisbane, Gladstone, Bundaberg, Sydney, Palm Island and Indonesia. Karen Hofman - who some of you have met during the Ambassador return workshop - will assist, present ‘Persuasive messaging’ talk and organise some of the activities.

**World Environment Day**
**3 June 2018 – Maroochydore Memorial Park, Cotton Tree**
Last year Sharon organised a display together with her students. She can’t commit to it this year, is anyone else keen? Applications are due by Friday 20th April, so let us know soon!

**5th International Marine Conservation Congress**
**24-29 June 2018 – Kota Kinabalu, Malaysia**
Maddie D will be attending this conference and present her research. In addition, she submitted an abstract for CoralWatch for the poster session.

**CoralWatch workshop, Conasta Teacher Conference**
**11 July 2018 – 11:45am - 12:45pm, Sydney**
A CoralWatch workshop has been accepted and Adam will attend and present on CoralWatch’s behalf.

**Experience Science , UQ**
**17, 18, and 19 July 2018 – Brisbane**
CoralWatch is invited by UQ to organise three daily workshops of 50 min each to a group of 60-70 high school students. We will organise a short presentation, followed by rotating activities such as virtual reef monitoring, VR and Quizes. We can recruit tutors for this event but this might be limited to Ambassadors that are enrolled at UQ.

**Open Day, UQ**
**6 August 2018 – St Lucia campus**
More info in the next newsletter but CoralWatch will organise a display either as part of QBI or as a separate stall.

**Corals in the Outback, Sustainability tour**
**10-20 August 2018 – Longreach to Mount Isa**
The office of the chief scientist has approached us to be part of some of their activities (drone related) with schools and community during National Science Week in Longreach. This will be a great opportunity to connect with them and a good start of our trip. After Longreach, we will organise school visits offering VR in Mount Isa, library displays in Julia Creek and Cloncurry and a Chasing Coral movie night on the way back in Winton.

**Citizen Science Forum**
**11 August 2018 – Brisbane**
CoralWatch is keen to present at this forum. Maddy D has submitted an abstract for the Community Engagement theme and will hopefully be accepted to present.

**STEM Education Conference**
**21-23 November 2018 – Brisbane**
CoralWatch is keen to present at this conference, abstract submissions close on May 1.

**New grants opportunities**
- Anyone keen to organise a CoralWatch workshop overseas? [WWF Conservation Workshop Grants](#) cover travel expenses, meals and accommodations, room rentals, materials, and other related costs. Applicants may request up to $7,500 for the proposed training. Next closing date May 1, 2018.
- Port of Brisbane, perhaps to organise more Corals at Your Doorstep events. Closing May / June