





# APRIL/MAY 2018



# **CITIZEN SCIENCE FOR THE FUTURE OF OUR REEFS**







Queensland Brain Institute



# **EVENTS** March /April / May



# **CMS Biodiversity Roadshow**

#### 30 April 2018, 12-3 pm Wellington Point

A wonderful afternoon was spent with our CoralWatch display as part of the UQ Biodiversity Roadshow. We were located along the foreshore at the beautiful Wellington Point recreation reserve looking out over Moreton Bay. The event included interactive displays, talks and marine life walks from UQ research staff and students from The University of Queensland, Moreton Bay Research Station and included a joint CoralWatch and ReefCheck display. We had plenty of interest in our CoralWatch display and virtual coral reef, and our marine life quiz was very popular with students and families. Everyone enjoyed discovering more about the marine life of Moreton Bay and learning more about the Corals on our Doorstep.

The location was excellent. We were next to a children's playground and had lots of interest from families visiting Wellington Point and the Recreation Reserve. We had plenty of room to lay out the virtual reef. The brochure stand was a great idea, especially as it was quite breezy.

### Some suggestions for next time:

This was an outdoor event and the weather was looking a bit unpredictable that day. If it had rained we may have had to move to another spot or reschedule the event. We were relying on other organisations – UQ supplying the table, tablecloth and ReefCheck supplying a marquee which meant that I was not able to set up until the marquee had arrived.

I would like to suggest that CoralWatch consider buying a folding display table and an easy-to-put up marquee. Having our own table would mean that we could make the most of our display and we would not be reliant on other organisations. The marquee would also protect us and the CoralWatch materials from inclement weather.

Bring our coral skeletons to the event next time – they generate a lot of interest and also help to stop the display materials blowing off the table.

There will be another UQ Biodiversity Roadshow in October which we would be able to be a part of.

Maria Bavins

# **Small World Journeys - various trips**

It is fantastic to see that Laurie and staff from Small World Journeys offer CoralWatch on a regular base now as part of school programs. A returning challenge seems to be the weather and the level of snorkeling experience of students, as a result the amount of data collected varies per event. All schools will return which provides the opportunity to compare data. See some stats from latest trips below:

# Firbank Girls' Grammar School – VIC

6,7,8, March 2018, Fitzroy Island
Educational goals: Reef and Rainforest
127 students, 10 teachers and 2 marine biologists
Data: 232 coral samples collected
Conditions: Bad sight, bad weather, students were too young

# **Dulwich HS of Visual Arts and Design – NSW**

#### 17 April 2018, Fitzroy Island

Educational goals: Ecosystems at risk, functioning of the environment, management strategies, threats & stakeholder issues 18 students, 2 teachers and 2 marine biologists Data: 30 coral samples collected Conditions: No good weather conditions

# **Ouray School District R-1 – USA**

23 April 2018, Fitzroy Island
 Educational goals: Biodiversity and sustainability techniques –
 Rainforest Ecology and Marine Science
 12 students, 2 teachers and 1 marine biologist
 Data: 32 coral samples collected
 Small group, some students not familiar with ocean and swimming
 Laurie Pritchard, Amber Vallance, Silvia Saggiomo



# INTERNATIONAL YEAR OF THE REEF

# **April and May Award**

Our April IYOR-CoralWatch award has been assigned to Maggi Brisbin and Okki CoralWatchers for the project 'Promoting Sustainable Tourism through Citizen Science' and very engaging media outreach in <u>The Japan Times.</u> Maggi and Okki CoralWatchers received a Raising Awareness Pack to help spread the message in their area.

Our May IYOR-CoralWatch award has been assigned to our 5.000<sup>st</sup> member! Did you know we have members in 137 countries (out of 195) and data from 79 countries (out of only 101 with coral reefs, that is almost 80%!)



# **EVENTS April / May**

# **10** Marine Operations and **11/12** Aquatic Practices Field Excursion

# 21 May 2018, Great Keppel Island - Shelving and Monkey Reefs

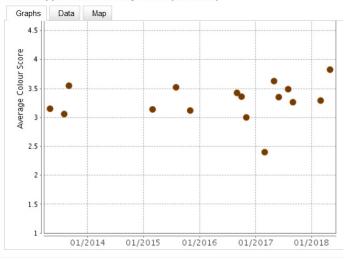
The 10 Marine Operations class participated in Marine Debris Removal and Classification (using Tangaroa Blue surveys) at Long Beach and conducted various citizen science surveys (CoralWatch/Eye on the Reef) at both reefs. The data will be uploaded this week and used in the completion of a Reef Report Card and Field Study Booklet. The initial results seem to indicate that Monkey Reef (not Shelving Reef) has currently a higher percentage of coral cover, healthier CoralWatch surveys and greater levels of marine biodiversity. Monkey Reef is still holding large cod and coral trout and live coral rock (reef) being colonised by new growth, anemones and soft corals (minimal macro algae). The reefs are spatial close, however Monkey Reef is a Green Zone and Shelving Reef a Yellow Zone – the difference is remarkable.

While 10 Marine Operations were completing CoralWatch and GBRMPA Eye on the Reef surveys at both reefs (for field study and Reef Comparison – School Assessment) – the senior students (11/12 Aquatic Practices) were running the field excursion, performing briefings prior to the snorkel surveys and helping the younger students with in-water activities.

Many of the students on this trip are also completing a "South Passage" sailing trip this excursion – so may be adding to our surveys on the voyage between Gladstone and Rosslyn Bay.

Cool temperatures meant 40 minutes snorkels at the absolute maximum.

Phill Bessel



#### Great Keppel Island monkey beach (Australia)

Since May 2012 Rockhampton Grammar School has completed 49 surveys surveys, see above for average colour score over time. Apart from the beginning of 2017, colour scores are ranging between 3 and 4 indicating a healthy reef.

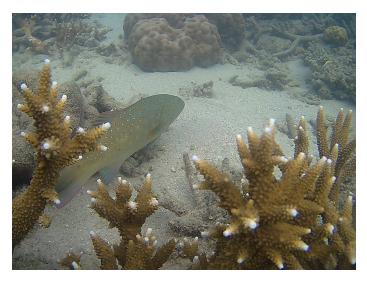


# Kirwan SHS Marine Science Camp 2 May 2018, Orpheus Island

We travelled to Orpheus Island that morning with the JCU Research Boat, the water was absolutely beautiful, very clear and full of bright and colourful fish. We set up camp and got ready for our first snorkel of the trip to get an idea of the data we wished to collect for our report. I talked to the group about CoralWatch, the current health of the Great Barrier Reef, what they can do themselves to prevent climate change and how to use the health charts. A lot were interested, however most of them were snorkelling for the first time and had never seen the reef in person before so a few didn't participate in collecting data.

A lot of the groups of staghorn coral were very bleached and often completely covered in algae. However interestingly, the soft corals, which I previously thought are the least durable to heat changes quite densely populated the area, as well as a few blue boulder corals which were very pretty. Our group saw a lot of the beautiful giant clams, although not quite giant yet. There was one huge one probably about a metre in length that closed quite abruptly as we swam over to take a look. As well as the clams we saw many colourful fish including parrot fish, coral trout and even a clownfish in one lone anemone. It was an amazing experience that I got to share with my classmates and to spread the awareness of the health of the reef.

Lucy Gardner





# **EVENTS April / May**



# Tangalooma EcoMarines Ambassador Training 20 April (High School)

### 2 May 2018 (Primary School), Moreton Island

Tangalooma EcoMarines offers a FREE primary school program for schools based in southeast Queensland, where each school appoints a support crew teacher and four student EcoMarines ambassadors to lead various environmental activities or 'challenges' within the school and community.

Ecomarines invited CoralWatch to be part of this program and offer the CoralWatch Challenge to primary and high school students. The challenge is: '*Educate year 1 students about coral and how they can help protect the corals in Moreton Bay*'.

Participating schools will receive a CoralWatch Challenge pack, which includes free Coral Health Charts donated by Australian Coastal and Marine Ecology / Coastal Protection Core (ACME / CPC). Other materials included are colouring in pages, data sheets, year 1 lesson plan, Moreton Bay virtual reef poster, CoralWatch stickers and some give away brochures. The Ambassadors will design posters about Coral Reefs, Colours and Shapes on the Reef, CoralWatch, and How can you help reefs? These posters will be presented in class and the ambassadors will lead the year 1 colouring in activity including in class data collection with the Coral Health Chart.

On April 20 we organised the first workshop with 5 highschools; of which 20 ambassadors and 5 teachers. Our second workshop on May 2nd was quite overwhelming, 33 schools attended with 132 ambassadors and 33 teachers.

Since the event at Tangalooma, 4 schools have already requested the CoralWatch Challenge pack. The numbers of schools willing to participate at this stage might not be that many, however rather than just teaching one class, most schools want to run the challenge across all year 1 classes in the school! We have now posted colouring in pages, data sheets, stickers, postcards for >500 primary school students. Due to the cost we provided one set of 30 Coral Health Charts per school (donated by ACME / CPC).

Some feedback from one of the students:

"What did you like the most about the day?" "Everything was enjoyable but the CoralWatch training really stood out in my opinion. I was fascinated by the bahaviours of coral and the algae that creates the colour in it"

Monique, Diana, Valerio

# **Watching Coral**

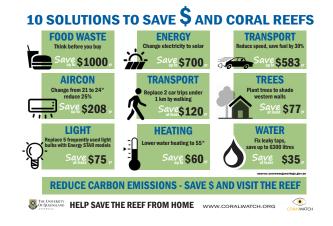
# 31 May 2018, Peregian Springs State School

The Prep classes are studying life in the sea and invited me to show them videos/photos of the animals I have dived with. I started with whales, sharks and rays and then showed healthy corals and then sick corals and discussed what was contributing and what's one thing they could do when they went home to help. Volunteers played with the slates and the virtual reef and have kept this in the classroom for now. 50 students participated.

Gwen

# In addition

- Maria and Hong organised a display table at the Whale Festival on 27 May in Scarborough. Festival gift bags included our reef colouring in and activity sheets as well as CoralWatch stickers. A report will be included in the next newsletter.
- We have purchased our virtual reality Google Expedition kits and are hoping to receive them anytime soon.
- The factsheet "Save Money and the Reef" which was drafted during the Ambassador return workshop in March is attached as PDF. If you have any suggestions, please let us know as soon as possible so we can finalise it for our outback tour and other upcoming events.



## Grants

- Submitted Port of Brisbane grant: Corals at Your
   Doorstep a virtual experience. If succesfull, the grant
   would cover a 360 degree camera, development of VR
   content and a number of outreach events.
- Submitted Engaging Science grant: CoralWatch and Environmental Education Centres Reef Future Collaboration. If succesfull, we will organise 4 workshops at environmental education centres to customise our Moreton Bay Education Pack to local areas.
- Planned WWF workshop grant due August 1 to organise a local workshop in Bali together with our new Indonesian Ambassador Kezia at the time of the Ocean Conference late October.
- If you know of any grants that will help to organise your Ambassador activities or are ideal for CoralWatch, please inform us.



# **EVENTS** May

# Second CoralWatch Ambassador Workshop

#### 23-27 May 2018, Heron Island

We just got back from Heron running another very succesfull CoralWatch Ambassador workshop. Unfortunately the weather on Heron was not the best, but that did not stop us to go snorkeling at 6 in the morning and having 'sunset' drinks in the rain at the jetty. The water and overal temperatures were a bit colder than last year which resulted in shorter time on the reef.

We were very impressed with all the enthousiasm and input from participants. Like last year, everyone came with an idea and went home with a plan! Plans range from developing a reef game, outreach on markets, snorkel and data collection, movie nights with raffles to plastic reef art to raise reef awareness.

At the airport in Gladstone, Justin, Diana and Monique briefly met with David, citizen science group HarbourWatch and principal Boyne Island Environmental Education Centre (BIEEC), to further discuss his Ambassador plan. Before arrival in Brisbane a first draft for a grant was finished: working together and adapt the Corals at your Doorstep Moreton Bay education pack to the Gladstone area and beyond.



On Monday, Justin was interviewed by a news reporter from Gladstone that picked up on the Ambassador workshop. She wrote an <u>article</u> and published the aticle in 19 different newspapers between Mackay and Lismore, e.g. QLD times, Rockhampton Morning Bulletin, Lismore Echo and Sunshine Coast Daily. You are already famous!

Best part of the workshop: "Meeting likeminded people from vastly different backgrounds has restored a lot of faith in reef conservation." "The resort activity was really great, to practice interacting with 'real' people with real questions." "Talking and doing things together. Expert staff liasons" "Being inspired by the enthousiasm, ideas and encouragement of other Ambassadors and leaders" Suggestions for next workshop:

"More time in the water and more time with 'real' people and 'perhaps a little more downtime'"

Thanks for your feedback. We will keep your suggestions in mind and will try to continue the best parts!



**Touchtank presentation and display for resort guests** About 20 resort guest attended the research station tour and were welcomed by a team of Ambassadors, keen to tell them all about CoralWatch. The touchtank forms a great opportunity to explain the Coral Health Chart - it even had some bleached corals! Unfortunately, the display did not really work out, due to rain it had to be moved in a rush to an area that was out of sight by most guests.



**Resort presentation, display and virtual reef** We had a good turnout on Friday night at the resort with 26 grade 12 students from Burnside State High School, 12 resort guests and a few resort and research station staff. Ambassadors Somone and Amalya gave a fantastic short presentation and handled the many interesting questions afterwards really well! Other Ambassadors organised the display and virtual reef activity which was well received. All guests and students participated and many more discussions followed during the practical part.



# Resort reefwalk

The next day, 5 Ambassadors attended the resort reefwalk, showcasing CoralWatch and getting about 20 tourists involved in collecting data. Another great opportunity to talk to 'real' people and practice CoralWatch skills.



# Let us introduce ...

We like to introduce all Ambassadors to each other. Hopefully you can connect at some stage through your activities, profession, interest and location.

### Ambassador Team 2017

**Students**: Emily and Lucy, Kirwan State High School, Townsville. Maddy G, Maddy D, Hong and John, University of Queensland, Brisbane.

**Teachers:** Adam, Clontarf Beach State High School, Brisbane. Paddy, Kirwan State High School, Townsville.

Phill, Rockhampton Grammar School, Rockhampton.

Sharon, Caloundra State High School, Caloundra.

Environmental consultant: Maria, Brisbane.

Farming industry: Hannah, Bundaberg Sugar, Bundaberg. Citizen Science Project Officer: Jodi, ReefCheck, Sunshine Coast.

**Educational tourism:** Laurie, Small World Journeys, Cairns. **Indigenous rangers:** Leroy Noble and April Thomas, Gunggandji land and sea rangers, Yarrabah.

# Ambassador Team 2018

Students: Sophia and Alydia, Whites Hills College, Brisbane.
Valerio and Peta, University of Queensland, Brisbane.
Amalya, Sunshine Coast University, Beachmere.
Luca, Sunshine Coast University, Coolum.
Kezia, Udyana University, Bali, Indonesia.
Teachers: Patrick, Whites Hills College, Brisbane.
Suzanne, Western Sydney University, Sydney.
Karen, University of Queensland, Brisbane.
Principals: Gwen, Peregian Primary School, Sunrise Beach.
Dave, Boyne Island Environmental Education Centre, Boyne Isl.
Research Assistant: Nat, University of Queensland, Brisbane.
Citizen Science Project Officer: Somone, HarbourWatch, Boyne Island.

**Dive and tourism industry:** Natalie, Lady Musgrave Experience, Bundaberg.

**Indigenous leader:** Valentine, chairperson of the Djiru Warrangburra Aboriginal Corporation, Palm Island.





# **UPCOMING OPPORTUNITIES**

Please let us know if you are keen to help with any of our upcoming activities:

# **5th International Marine Conservation Congress**

### 24-29 June 2018, Kota Kinabalu, Malaysia

Maddie D will be attending this conference and present her research. Her abstract for CoralWatch for the poster session has been accepted.

# **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. Maddy D and Karen will be assisting as tutor for this event.



### **Call to Action Event**

#### 26 July 2018, Peregian State School

Ambassador and principal of Peregian State School Gwen is supporting Cameron - a young boy with a big dream - aiming to have the whole school plastic free by 2020! Follow Cameron on Instagram and see how you can support.

# **UQ Open Day**

#### 5 August 2018, St Lucia campus, Brisbane

CoralWatch will organise a display either as part of QBI or as a seperate stall.

# School field excursion, St Peters Lutheran College 7 August 2018, N.Stradbroke Island To be confirmed.

# **Citizen Science Forum - THECA**

#### 11 August 2018, Brisbane

Maddy D her abstract for the Community Engagement theme has been accepted! In addition, she can setup a display table.

# 4th Australian Marine Turtle Symposium

#### 8-10 September 2018, Bundaberg

Hannah & Natalie are keen to go and organise a display and possible CoralWatch presentation and/or poster at this conference.

### Corals in the Outback, Sustainability tour

#### 12-21 August 2018, Mount Isa to Longreach

A series of outreach events organised by Monique and Diana

- 13 August: Longreach 3 school workshops during the day and a community event in the evening with CoralWatch display at the Qantas museum (in collaboration with The office of the chief scientist)
- 14 August: Longreach Library display setup and Chasing Coral screening
- 16 August: Mount Isa Library display setup, 2 school workshops and Chasing Coral screening
- 17 August: Mount Isa Visit to School of the Air
- 18 August: Cloncurry Library display setup and opening
- 19 August: Winton Community event

# Seaweek 2018

1-9 September 2018

http://www.aaee.org.au/events/seaweek/

# Marine Teachers Association of Queensland (MTAQ) Conference

#### 24-27 September 2018, Tangalooma, Moreton Island

CoralWatch will attend and will hopefully be able to display lessonplans linked to the new marine science curriculum.

# ReefBlitz 2018

October 2018, various QLD locations, TBC

### **Bali Ocean Conference**

# 29-30 October 2018, Bali, Indonesia

Kezia, our first International CoralWatch Ambassador, lives in Bali and hopefully she can attend this conference. CoralWatch will apply for a WWF workshop grant and if succesfull a workshop in Bali will be organised at the time of the conference.

### **STEM Education Conference**

#### 21-23 November 2018, Brisbane

Together with Paddy, CoralWatch has submitted an abstract to conduct a workshop. Hope this gets accepted.