

Coral Sea News - Mid-Year 2020



Dear members, supporters, and friends of the Coral Sea Foundation,

Welcome to our 2020 mid-year newsletter! On behalf of our Directors, I wish to extend our hopes that all of you are navigating the altered circumstances of this year with the minimum of stress and disruption.

With half the year already gone, I thought it was high time to send everyone a Coral Sea Foundation update and let you know what we have been up to and our plans for the remainder of the year.

Status of operations – Australia and Melanesia

The first expedition of our [PNG Marine Conservation Initiative 2020](#) was only 10 days away from its late February start date when the difficult decision was made to postpone the trip due to the building covid-19 pandemic. In hindsight this was the correct decision, however it was not without a certain degree of disappointment, as our whole team had been working very hard to get the vessel ready and all the necessary equipment shipped up to Port Moresby, and we were all very excited to kick off the 2020 marine conservation work in PNG.

As soon as it is legal and safe to do so, we plan to resume the PNG-MCI operations on Golden Dawn in Melanesia with our Australian and PNG personnel, however this may not be until 2021 at this stage.

Our Australian marine science directors have been in lockdown on Magnetic Island on the Great Barrier Reef, so we have been able to keep local diving operations going. Our Sea Women of Melanesia (SWoM) teams are in place at several locations around PNG and Solomon Islands and they have also been able to stay active, so we have been keeping the show going as best we can, as I'll explain below.



Recent actions – Kimbe, Papua New Guinea



Naomi Longa, our Director of the [Sea Women of Melanesia](#) program, is on location in her hometown of Kimbe in West New Britain province. Naomi's family are landowners at the beautiful Tolongavu Point which overlooks the Bismarck Sea, and in late March Naomi completed the first set of monitoring surveys for the reefs adjacent to her family land, using the geotagging digital camera and GPS equipment provided by the Foundation. As expected, there was a strong gradient in reef quality with the best coral cover found on the isolated pinnacles 10km offshore. On this basis, Naomi and her team are planning their next survey at the Pelelua reef complex to the east of Mowen reef, and they are also working to bring more women into the Kimbe SWoM group for marine science training.

Recent Actions – Milne Bay, Papua New Guinea



Our Alotau SWoM team led by Martha Eimba and Daisy Parascos have been working hard on community engagement at several locations in the Milne Bay Province, including the beautiful Sewa Bay on Normanby Island where the women collaborated with [local land owners at Sibonai](#) to survey three reefs earmarked by the community for marine reserves. Once again, the digital camera technology proved its worth, with a great set of geotagged imagery obtained by Martha and Daisy to support the community LMMA submission.

Recent Actions – Great Barrier Reef and Coral Sea



As all of you in Australia will be aware, we had another record-breaking hot summer with bushfires ravaging the south-east of the country and another widespread coral bleaching event seen on the Great Barrier Reef and out into the Coral Sea. This year, the reefs around our base at Magnetic Island showed bleaching stress and we were on site to document the situation, with our video sequences (below) picked up by the Great Barrier Reef Marine park Authority and also shown on channel 7 nationally. Thankfully, the weather conditions began cooling within a week of the bleaching event while there has certainly been some coral mortality, it seems the majority of corals around the island and out into the central section of the GBR will recover and live to fight another summer.

Links to the temporal sequence of survey videos are as follows:

February 26th 2020 - <https://youtu.be/6edtV-opRrk>

March 3rd 2020 - <https://youtu.be/MufLRASiKU4>

March 16th 2020 - <https://youtu.be/xJchWp-ZWYU>

April 22nd 2020 - <https://youtu.be/r7pogliHfz4>

Studying reef recovery at Lizard Island via our Citizens science project



We have been visiting the reefs around Lizard Island for several decades and have been closely following the recovery of the coral assemblage after the cyclone and bleaching damage of 2014-16. Our citizen science

volunteers have been doing a great job combing through our image library and identifying the repeated photos of the giant clams at our Watson's Bay clam study site, along with the juvenile corals growing on the clam shells. This allows us to extract some great data on the rates of coral regrowth at this site, and the results have been quite amazing as you can see in the image!

We now have 85 clams matched across 2017-2019 and the team will shortly begin analysing the coral growth rate data from this study. Big thanks to all the people that have been involved!

Participation in Coral Sea Surveys

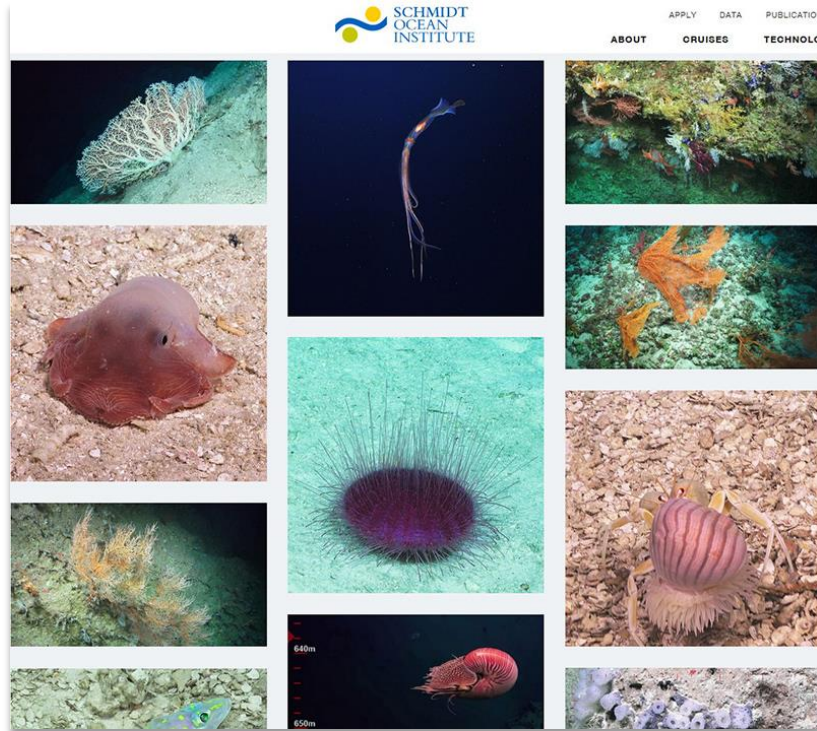


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In February and March, two of our Directors, Dr Dave Williamson and Dr Dani Ceccarelli, participated in the third year of reef monitoring surveys in the Coral Sea for Parks Australia, as part of a collaborative project with JCU and the Centre of Excellence for Reef Studies. Logging more than 100 dives over 40 days, the team studied reefs in the southern, central and northern Coral Sea over a 1,400km transect, obtaining vital data on the health of these remote marine communities. Dani and Dave enjoyed some incredible diving as you can see from the images, and the full report on the monitoring program is due out soon.



Dani has also been working with the commentary team participating in the deep-water surveys of the Coral Sea Reefs by the Remote Submersibles aboard the Research Vessel Falkor, which is run by the [Schmidt Ocean Institute](#). The ROV returned some incredible imagery from the mesophotic reefs down to 1000m deep and the research has substantially increased our knowledge of the Coral Sea Region. [Video highlights and Dani's commentary here.](#)



2020 - Moving forward

Melanesia: With the easing of stay-at-home orders in PNG and Solomon Islands, our Sea Women of Melanesia teams are gearing up for a resumption of marine operations in both those countries, focussing on training, community engagement and reef surveys to support community marine reserves in the Milne bay and Kimbe regions of PNG, and the Western Province of Solomon Islands. We continue to support this work with funds for marine science equipment and wages for the Sea Women teams, and humanitarian aid for our partner villages, and your donations are directly used for this program.



Our [Donation Portal is here](#), and we are grateful for all support, no matter how small. We also have the capacity to accept tax-deductible donations from both Australian and USA donors, so please [contact us](#) for more information if you would like to support in that way.

Great Barrier Reef: Fortunately our core science team is based on Magnetic Island right on the Great Barrier Reef, and we will continue to make use of that proximity to further our [primary mission objectives](#), which are raising awareness of the ecological, social and economic value of this vitally important marine ecosystem, and working to support pragmatic marine conservation and research endeavours which contribute to a sustainable future for our coral reefs.



There are 16 high continental islands and over 50 mid-shelf platform reefs in the central section of the Great Barrier Reef Marine Park adjacent to our base, and we plan to continue our exploration and monitoring of this area over the coming months. Please let us know if you would like to dive with our team and join an expedition into this area, which currently has some of the best coral cover on the whole GBR!



John Brewer Reef - April 2020 (Greta Sartori image).

For students and citizen scientists, please note the large and growing number of excellent [digital resources](#) on our website, and our informative short videos on our [YouTube Channel](#).



John Brewer Reef - April 2020 (Greta Sartori image).

On behalf of the whole Coral Sea Foundation team, thanks for your support, stay safe, and please message us with any questions or queries you have – we love to hear from you!



Dr Andy Lewis – Executive Director