



# Newsletter

Nov 2017~Issue 3

Cerf Island Conservation Program is a community based organization driven to enhance visitor experience while preserving its marine biodiversity. As we strive to raise awareness about the fragile marine biodiversity and the importance of its conservation, we continue to interact with the visitors of Cerf Island as well as press on with coral reef restoration. This newsletter presents the work carried out from July '16 to Oct '17.

## A Brief Update

- Over 200 people have joined us in discovering the house reefs here at Cerf Island. From novice to expert, we love being able to share our reef critters from tiny nudibranchs to Hawksbill and Green turtles.
- We've created 6 new nurseries using corals of opportunity and manual fragmentation. Two sites now have 4 nurseries each which our team maintain on a weekly basis.
- The team welcomed their very first school visit from the Independent School.
- We were pleased to be a part Blue Economy Internship Program as we welcomed an individual for 2 weeks.
- CICP celebrated its 2<sup>nd</sup> anniversary! Two years of snorkeling, educating, reef monitoring, recycling, beach cleaning and interns have helped us strive to get us to where we are today.
- A new partnership was formed with the Seyvillas marketing team as they have signed on for financial support for a full year.

Volunteers come often to join our team for a period of 1-3 months as a part of their internships, master's certifications or work attachments. The CICP halls this period have seen 2 students from the University

of Seychelles, and 5 volunteers from Europe all completing various internship periods or a change of scenery in their current jobs.

## Reef Restoration

We took quite a few steps forward this last quarter with the coral restoration as we have increased the number of coral nurseries and out planted some of our corals which had been reared for a full year.

6 new rope nurseries were created using both opportunistic and manually fragmented corals. Keeping in mind the importance of coral biodiversity and genetic diversity, we have chosen several species of *Acropora*, and two species of *Pocillopora* (*P. damicornis* and *P. verrucosa*). The *Acroporas* and *P. verrucosa* are some of the fastest branching species which provide the best habitat for reef fishes and generally are the first to colonize empty spaces and denuded reefs. These nurseries continue to be maintained on a weekly basis by snorkeling to remove any competitive fouling organisms.

Though *P. damicornis* is not particularly robust in structure, we chose to use it in our restoration project as it is a brooding coral which fertilizes internally and releases zooxanthellae planulae ready to settle and start feeding. Brooders can spawn a few times a year compared to the once a year broadcast spawners. Though this process does not necessarily enhance genetic diversity, it can create a specialized genotype which is well adapted to local

conditions. This could explain this coral's survival throughout the bleaching events and dominance in the Pocillopora genus on our reefs.



Figure 1 – A newly installed buoy which directs the guests of Cerf Island to the coral reef. We also use these buoys as safety markers during our monitoring.



Figure 2 – Intern Luana snorkels and carefully brushes away the algae so as to give our nursery reared corals the best possible chance of survival.

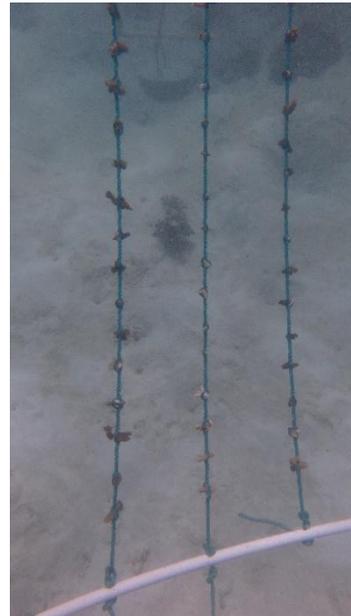


Figure 3 – One of 6 new nurseries. This one propagated with *P. damicornis* fragments.

The surviving 21 *Stylophora subseriata* colonies from last year's nursery were outplanted using X-Tite ResiLoc Epoxy anchor grout as donated by Dr. Jude Bijoux in partnership with the Curieuse National Park Reef Restoration Project. 3m<sup>2</sup> of reef were rehabilitated as we chose two areas of rubble beds and one area of bare rock.

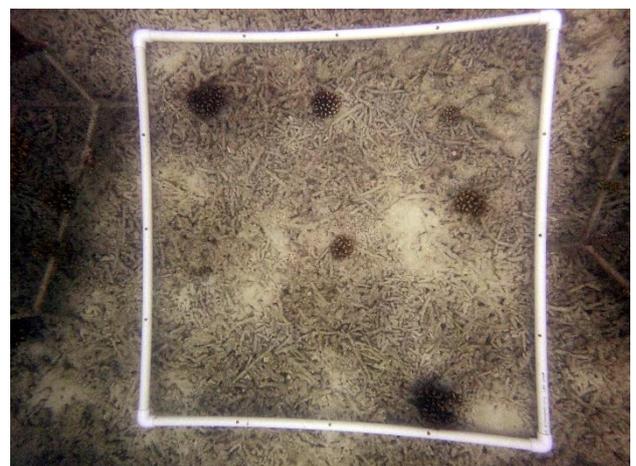


Figure 4 – 1m<sup>2</sup> as outlined by the PVC quadrat showing seven *S. subseriata* colonies cemented to the rubble.



Figure 5 - Chloe Pozas was invited back for the transplanting process. Here, she applies a second coat of epoxy grout to secure the colony into a crevice on the bare rock. .

Our 5 artificial frames have now been in the water for a full year and we have carried out a coral survival assessment; overall, we have a 74% coral survivorship. The corals which didn't survive either detached (much of the porites snapped and landed in the rubble below) or was overgrown by algae (most of the stylophora). The other genus's of coral have done particularly well.

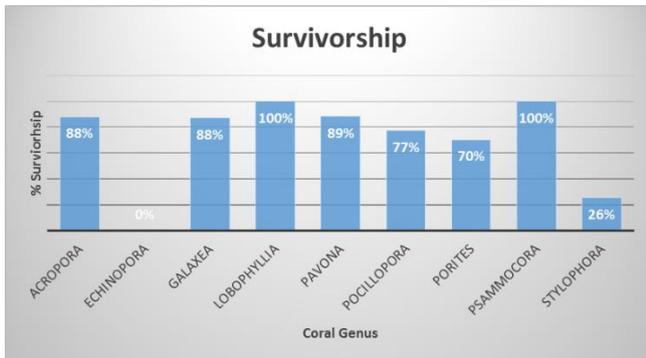


Figure 6 – Bar graph showing all coral genus used in the 5 frames showing the survivorship.

Colony monthly growth monitoring was halted due to a flooded camera issue. Though most of our selected colonies by then had grown larger than our apparatus allowed to capture, we were able to monitor fragment growth from Nov '16 to June '17.

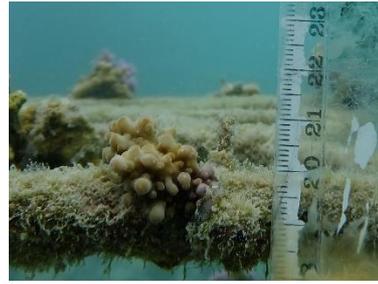


Figure 7 – An *Acropora* sp. fragment in Nov (top) compared to the colony in June (bottom). A surface area growth of 606% was measured!

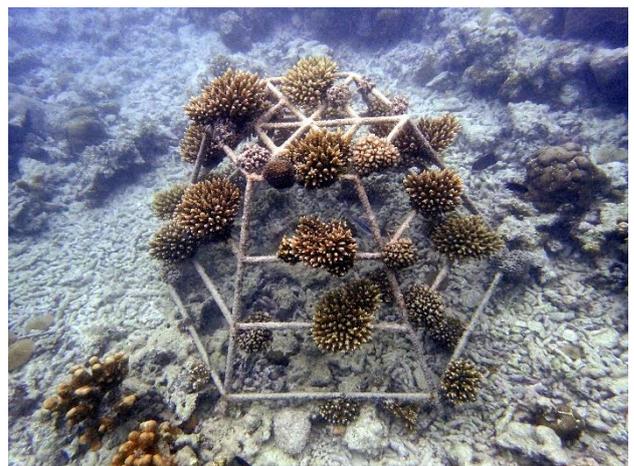
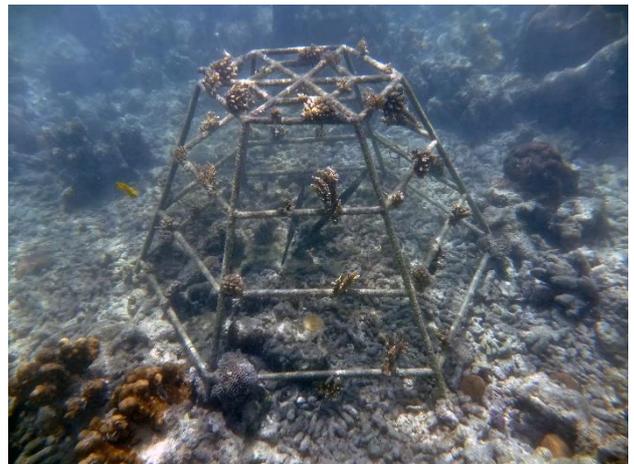


Figure 8 – One of the frames when first placed in Oct '16 (top) compared to the same frame one year later (bottom).



Figure 9 – Two naturally settled *P. damicornis* corals. So far we have over 50 of these corals which have chosen various frames as their new homes.

### Community Outreach

In July we were pleased to welcome our very first school group! A group of A-level students from the Independent School were learning about coastal environments and what better way to learn than to immerse oneself directly into subject matter?! The students were subjected to two presentations upon arrival. One was about the reefs; a bit about the history, why they matter and why they need as many voices as possible speaking for them at this time. The other was for general marine life the students were likely to encounter on their snorkel and to make sure safe and responsible practices were taken so as to avoid any harm to the snorkeler and the reef



Figure 10 – Project leader Savi Leblond tests the student's coral knowledge during one of the presentations.

It was an enthusiastic morning as we broke into 3 groups; snorkeling, charades and cartoon strips. The snorkeling allowed the students to see firsthand some of restoration efforts as well as the natural reef, both degraded and healthy portions. The charades and pictiography group focused on key

terms such as bleaching, herbivory, illegal fishing, and much more. As you can imagine it was quite entertaining with many wild hand gestures and chuckles as the students came upon some hard terms to act out! The 3<sup>rd</sup> group focused again on key terms related to the threats and benefits of the reef. The teams were to come up with some cartoon strips depicting corals and their uses. Creative minds came alive in this portion.



Figure 11 – One of the group's cartoon depiction of coral threats and how they negatively affect the reef compared to undisturbed reef.

We want to thank the teachers Corinne and Samantha for reaching out to us and joining us on a fun and educational Saturday morning. It's such a pleasure to be able to make a lasting impression on students regarding reef awareness. Some of their comments below summarizing their experience with us made us smile:

- “The activities were very educational and fun, the rehabilitation looked great!” - Frances A.
- “The program is a brilliant initiative and I also learned that every little thing that we do can cause a great impact on such a precious ecosystem.” - Nathanielle S.
- “Felt enriched with knowledge about corals and the need for their protection. I will spread the word! All in all, a wonderful experience indeed! 😊” - Thea M.

In August we gladly took part in the Blue Economy Internship program. In 2016, SYAH had launched its “Prosperity and Environment: Promoting Sustainable Development Opportunities for Youth in the Blue Economy Sector” initiative which allowed a dozen individuals to attach themselves to various NGO's and even partake in a trip to Mauritius to learn more about sustainability

initiatives. In their second year, CICIP was able to secure a spot for an intern during the first internship session of Aug. 21<sup>st</sup>-Sept. 8<sup>th</sup>. As an aspiring marine biologist, Caulvyn Bristol joined us for the 2 week period as he learned about the reef ecology, the importance of the ecosystem, helped create a coral nursery as well as take part in the guest enrichment snorkels which we provide to those clients of CICIP partners. Though it was quite short, we hope Caulvyn enjoyed his time and will use the knowledge to his advantage as he completes the rest of his internship.



Figure 12 – Caulvyn’s first day to the program. Cerf Island Resort continues to support us financially and in-kind with intern transportation on a daily basis.

August also brought quite the exciting event; the annual Sea Turtle Festival. For the last 5 years, NGO’s have come together to raise awareness and voices for the turtles here in Seychelles. Specifically their importance to our ecosystem, the illegal exploitation and other anthropogenic threats to turtles, the dangers of eating sea turtle meat as well as the life cycle of the turtle including the slow maturation and low survival rates.

This year, the festival took part in Victoria and was launched with a public march around the capital. Voices were loud and chants were heard far such as “we don’t like the taste of extinction!” and “proteze, pa manze!”



Figure 13 – Sea Turtle Festival committee lead the front of the march. From Left, Chris Mason Parker, Rowana Walton, Geni Fitchew, Vanessa Didon and PS Alain Decomarmond.

CICIP project leader and volunteers joined their Marine Conservation Society Seychelles comrades with our homemade coconut maracas. Freshly opened coconuts were firstly opened and eaten, the casing was sanded, varnished, painted and filled with Seybrew bottle caps. What a fun event it was with quite the turnout! The march ended at the old children’s playground for informational stalls, music, and various activities.



Figure 14 – Interns Rafaela and Sheril shake their new shakers in preparation for the march (left). The shakers preparation (right)

We thank the organizers for all of their hardwork in organizing the festival and we already look forward to next year’s!

We continued to expand our outreach as we joined the Ocean's Project cleanup at Anse Forbans. Their message is simple “#STOP debris entering our oceans and #Switch to eco-friendly alternatives to plastics”. This NGO wants to turn the tide on marine debris and does so with community beach cleans to raise awareness and clean up the coastlines. Plastic pollution has been shown to be ingested by tiny critters such as shrimp, and has been found to be littering even the deepest depths of the oceans. By 2050, it is predicted that plastic in the seas will outweigh the number of fish!

Individuals and groups met at Hilton Double tree and split into two groups to tackle the long stretch of beach. After a good couple of hours, the beaches were removed of cigarette butts, plastic bottles, nappies, glass bottles, straws, juice cartons, aluminium foil and plastic cutlery just to name a few of the usual beach littering plastics. It was a pleasure to join this group and we applaud their efforts. Hopefully we will see them here in the marine park quite soon!



Figure 15 – Volunteers Charles and Fides smiling through the heat and plastic (top). Even guests on holiday from the L'habitation Hotel came to join (bottom left). Vanessa Didon and her kids proudly collecting rubbish on one of the turtle nesting beaches which is monitored by MCSS (bottom right).

Though the Seychelles has now banned plastic bags, there is still so much to do as individuals and groups regarding plastic waste. Carry around with

you a Tupperware box packed with metal cutlery for those meals on the go, skip the straw when going out for those drinks and leave the beach cleaner than when you found it by removing any rubbish. Take your PET and aluminum drink cans/bottles to the proper recycling areas or give them to someone who can. These are only a few possible options to take part in the fight against plastics.

Finally, in the quest to forge new partnerships in order to strengthen CICP's efforts, we have some very exciting news! Seyvillas, a specialized agent for the Seychelles, has heard about quite a few projects which promote responsible tourism. CICP was chosen as one of the lucky three projects to be funded for a full year as our newfound partnership with Seyvillas! Thank you for choosing and supporting us as we aim to restore the reefs and continue with our guided snorkeling services as a way to raise awareness and enrich guest experience.

### Nerdy Nudi

We still love our nudibranchs and flatworms though this quarter we haven't seen many different species. We have however been able to encounter one of our favorites on a daily basis. *Cyerce nigricans* has been around on these reefs year round and recently we have been seeing them in quite a large group!



Figure 16 – Just a tease of what we have been able to encounter. These 6 nudibranchs appear to be having a *Cyerce social* on the turtle weed.



Figure 17 – We can't resist singling them out however for a macro shot. ©Savi Leblond



Figure 18 – Residents managed to collect photos as they witness the scene of their lives right at their doorstep! ©Maria Marzocchi

### Animal Highlights

- Mammal** – This July, something rather unexpected occurred right off the fringing reefs of Cerf Island. One Saturday morning, a humpback whale swam through the channel between Mahe and Cerf and continued off between Eden and the St. Anne's Marine National Park. Though yearly sightings have been seen in Beau Vallon and more so at the atoll of Aldabra, it was the first time for many residents to witness such a magical encounter. The whales use Seychelles during their migratory route from June/July from their feeding areas in Antarctica to the warm waters of the Indian Ocean where mothers give birth to their calves.

### Acknowledgments

A giant thank you to:

- Our CICP partners who continue to support us financially and In-kind which allow us to carry out these studies, restore the reefs, connect with the community and increase our outreach.
  - Marine Conservation Society Seychelles
  - Cerf Island Resort
  - L'Habitation Hotel
  - Fairy Tern Chalets
  - Tropical Sanctuary
  - Seyvillas
  - Seychelles National Parks Authority.
- Our volunteers/interns/students for all of their hard work, dedication, enthusiasm and effort which allow this project to continually progress



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