

Southern Leyte Coral Reef Conservation Project (LRCP)

Monthly Project Update

November 2017

Location: Napantao Dive Resort, Napantao, San Francisco, Southern Leyte

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LRCP Project Aim

The Southern Leyte Coral Reef Conservation Project (LRCP) is a collaborative project to protect the coral reefs of Sogod Bay, providing training and conservation education opportunities for local Filipinos, as part of an integrated programme to develop local capacity and ensure the long-term protection and sustainable use of marine resources throughout the region. Coral Cay Conservation (CCC) is working at the invitation of and in partnership with the Provincial Government of Southern Leyte (PGSL). CCC provides the resources to help sustain livelihoods and alleviate poverty through the protection, restoration and management of coral reefs and tropical forests.

CONTENTS:

- Latest news
- Story of the Month
- Educational & Community Projects
- Survey Update
- Marine Scholarship News
- Marine Creature of the month

Latest News

CCC welcomes our new Science Officer (SO), Maisy Fuller!



November says goodbye to former Science Officer, Nathan Hubot, and thanks him for the work that he has put in over the past 6 months! Whilst we say goodbye to Nathan, CCC gives a warm welcome to Maisy Fuller! Maisy has a Masters in Marine Biology, and after a year studying in Australia decided that the cold climate of the UK wasn't for her! To date she has worked on numerous projects around the world, mainly focusing on sea turtle research and conservation. This has led to work from Panama to her most recent job with the Perhentian Island turtle project in Malaysia. She is passionate about all marine life and really enjoys sharing her knowledge with others and learning from them in return. She is so excited to join the Coral Cay team and share this passion with everyone there.

Stories of the Month

Habagat Season 2017

November said goodbye to the last of Habagat season here in Southern Leyte, which sadly, was a destructive one! The gale force winds and pounding waves truly tested the strength and resilience of the corals within our house reef here in Napantao. Whilst the reef was left fairly unscathed, the most noticeable damage occurred to CCC's coral restoration project; which left structural damage and the complete loss of coral fragments. Whilst back to square one with the project, the team here at CCC are not deterred and are merely using this event to reconsider the original design of the nursery and create a more realistic and flexible coral nursery that will survive many more Habagat seasons to come. Stay tuned for more progress updates on our new and improved coral nursery design that will be coming to you in 2018!

Crown of Thorns Starfish Eradication Week

Habagat not only brought the wind and the waves, but the rain that came was relentless. Water quality and visibility was evidently worsened in the house reef by the event, as the topography of the land meant water run-off had a direct escape into Sogod Bay. The Crown of Thorns Starfish (COTS), whilst native to the Indo-Pacific, are a key example of how changing environmental conditions are increasing their survivorship; which in large numbers can have huge impacts on the reef in which they naturally occur. Due to their large home ranges, and their diet consisting exclusively on live coral tissue, an outbreak of COTS occurs when >1 individual is seen in 20 minutes. Here in the Philippines, the influx of nutrients from the Habagat event is a stimulator for COTS spawning events and supports larvae survivorship, causing an outbreak if not controlled. With this in mind, on November 30th Maisy Fuller (SO), Nathan Hubot (SO), Jesse Tinapay (CLO) and Jose Ydel (DM) went out with tongs and mesh bags in hand to begin controlling COTS numbers. A total of 12 COTS were removed from the Napantao reef that day, giving a total of 40 recorded COTS being removed exclusively from the Napantao reef in 2017. The team are implementing a new COTS monitoring scheme in 2018 to



Top: The final product! CCC's coral nursery which was put in place earlier this year.

Bottom: CCC volunteers obtaining monthly records to track the on-going health of our coral nursery fragments.

- Photos by Jerome (CCC Scholar).



A Crown of Thorns Starfish leaving behind a trail of exposed *Fungia* spp skeletons.

- Photo by Chelsea Waters (PS)

keep a careful eye out for changes in COTS numbers in the months that follow from Habagat.

Education and Community Projects

Youth Forum on Climate Change and Disaster Risk Reduction

On December 7th Maisy Fuller (SO), Chelsea Waters (PS) and Jesse Tinapay (CLO) were invited to take part in the Youth Forum on Climate Change and Disaster Risk Reduction at the Municipal Covered Court in San Francisco. Approximately 200 students attended between the ages of 12-16 from three of the local high schools.

After the initial welcome and opening statements (plus some *Zumba* to energize the room), Sir Bandoy took the stage for the first presentation of the morning. Here, he introduced the concept of climate change to the students, and emphasized that "Climate Change is not our enemy, but in fact it is mankind that threatens Mother Nature". From here the presentations continued, from the effects of Climate Change on increasing the frequency and severity of disasters here in the Philippines, to the increasing likelihood of dengue outbreaks and preventative practices (Mr Honorio Magoncia, Jr.). Our very own Maisy Fuller (SO) presented on the impacts of climate change in marine ecosystems, touching on how our coral reef ecosystems are already being affected by ocean warming and acidification, and what the future looks like for coral reefs here in the Philippines.

Whilst a bleak future is forecasted under the predicted impacts of climate change, this Youth Forum highlighted to students that it is not too late to act and start mitigating the effects of climate change. The open forum allowed speakers to reiterate this message, and offer suggestions on small changes in their everyday behaviour that will offer huge and beneficial results in the long term. The Youth Forum concluded with a commitment signing from each school on the actions they would follow to reduce their carbon footprint. We look forward to staying involved with this project, and follow up on the local schools to follow their commitment progress!



Maisy (SO) presenting at the Youth Forum on the impacts of Climate Change to Marine Ecosystems.

- Photo by Jesse Tinapay



Commitment signing session to conclude the Youth Forum on Climate Change for 2017.

- Photo by Jesse Tinapay

Survey Monthly Update

Survey background: Since January 2013, survey efforts have been focused on assessing potential and existing Marine Protected Areas in Sogod Bay to provide appropriate management recommendations. To do this CCC uses an expanded version of the Reef Check protocol, which has been customised to perfectly fit our work in Sogod Bay. Prior to this a baseline appraisal of marine resources in Sogod Bay was carried out. If you would like more information about our surveying please contact our Project Scientist, Chelsea Waters.

Habagat saw CCC's survey vessel 'Nudi Hunter' brought to shore earlier this month. Due to unfavourable conditions, surveying has come to a conclusion for 2017, with our final surveying sites consisting of Himbangan MPA in Saint Bernard, and Napantao MPA in the San Francisco Municipality. Whilst surveys have come to an end, the team at CCC are using this opportunity to plan the 2018 survey season, which will be dedicated to revisiting established MPA's (implemented by CCC as early as 2012) and building on our relationship with past project partners to assess the effectiveness of the park to both the ecosystem and the municipality, whilst continuing our objective in establishing new MPA sites within Sogod Bay with the support of new project partners. Our vessel 'Nudi Hunter' is also undergoing necessary maintenance and modifications to prepare for a big surveying year in 2018!

Scientific reports from all of CCC's sites around the world are available on our website at <http://www.coralcay.org/science-research/scientific-reports>



Photo provided by Chelsea Waters (Project Scientist) of Napantao Reef

Marine Scholarship News

Each month CCC offers Filipino nationals who display an ambition to study and protect the vital marine ecosystems of the Philippines an opportunity to take part in our Marine Conservation Scholarship. The programme lasts for one month and involves training in SCUBA diving to the level of PADI Advanced Open Water. Scholars then take part in an intensive Skills Development Programme giving them the knowledge and expertise to conduct sub-marine surveys of the coastline.

November said goodbye to the last of our volunteers and CCC Marine Conservation Scholars for 2017. This year saw 18 scholars complete our Skills Development Programme, allowing them to assist us in our surveying efforts throughout Sogod Bay. Now having the tools and motivation to build on their skills to further their expertise in marine conservation, we are looking forward to following their progress and wish them the very best of luck with their future endeavours!



If you would like to apply for the CCC Marine Conservation Scholarship programme or read more about it, please visit: <http://www.coralcay.org/volunteer/scholarship-opportunities/>

Creature of the Month!

CCC's *Creature of the Month* goes to the Hawksbill Sea Turtle (*Eretmochelys imbricata*)! This creature of the month is dedicated to CCC's newest Science Officer (and turtle fanatic), Maisy Fuller.

The Hawksbill Sea Turtle is appropriately named due to the protrusion of the upper jaw, which being both sharp and narrow, allows the hawksbill to use this "beak" to extract invertebrate prey from crevices on the reef. Whilst hawksbills are largely carnivorous and opportunistic predators, sponges do also constitute a major proportion of their diet.

Hawksbill sea turtles have a global distribution, however are predominantly found in tropical reefs within the Indian, Pacific and Atlantic Oceans. Napantao reef frequently receives hawksbill visitors, who use the reef as both a feeding and cleaning station.

Analysis of historic and recent publications indicate extensive decline of the Hawksbill sea turtle population, listing this species as *Critically Endangered* in accord with the IUCN Red List Categories and Criteria. This decline has been largely attributed to overexploitation of adult females and eggs at nesting beaches, degradation of nesting habitats, and the harvesting of tortoiseshell (with the hawksbill being the sole source of all commercial tortoiseshell) for jewellery and other products. Their protection under CITES outlaws the capture and trade of all hawksbill sea turtles and products derived from them.

How can you help?

Check what that souvenir is made from! Don't buy products that have been made from sea turtle parts. Jewellery, guitars, ashtrays and other products made from sea turtles are sold to tourists around the world.



Photo by Project Scientist, Chelsea Waters

Learn More!

To learn more about the CCC Philippines project, to join the expedition, or to find out about local marine scholarships, visit www.coralcay.org