

# Southern Leyte Coral Reef Conservation Project (LRCP)



## Monthly Project Update

August 2018

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.

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## Latest News

### CCC bids farewell to James, Scuba Instructor (SI)



James (SI) giving the OK after entering the water at Barangay Gudan survey site.

Since his arrival in May, James became an integral part of CCC's field team. James undertook much more than PADI dive training to ensure the smooth running of the project. He assisted our Science Officer (SO) with enumerable training dives during the Skills Development Program, collected data in multiple survey sites including Gudan, Bahay, Catig and Pandan, in addition to training several volunteers to the Rescue Diver level, and starting our Project Scientist's (PS) Divemaster training. Furthermore, James was always a favourite at community events due to his incredible dancing skills. To top everything off, he has been our go-to for spotting and identifying new underwater life, and a supportive team member during all our endeavours.

Take care James, you will be missed!

## Stories of the Month

### Curious Whale Shark (#2!) in Catig

On our first day of surveying in the MPA of Catig, Liloan, participants were more than surprised to find a young Whale Shark inquisitively approaching CCC's boat. Those who were diving feared not seeing the creature, although he came back during their surface interval to scope out the situation once more! Those who remained on base that day were down, not having been on site for this amazing opportunity.

However, on the 1<sup>st</sup> of August, in the following week, we were back at Catig to continue surveying the site. Two staff members remained on the boat while the rest were surveying transects. Who would have ever thought to hear the boat captain yell "whale shark"! This time the team had GoPro cameras on board, and were able to capture the larger, nearly 6m individual as it swam gently past the boat. The shark was once again extremely inquisitive, 'eating' the divers' bubbles from the surface. This wasn't close enough, it seemed, as it decided to pay a visit to those surveying at 12m below. Luckily everyone was able to log a sighting this time!

Large Marine Vertebrates Research Institute (LAMAVE) is a Non-profit Organization that works in Pintuyan, nearby CCC's base. They undertake research on marine megafauna, including whale sharks, to identify hotspots, quantify populations and determine key habitat sites. They work to minimise impacts on these animals and develop tools for conservation management. Fortunately, we were able to provide LAMAVE with photos (pictured right; bottom) in order to identify the individual seen. By utilising photos from the right or left flanks, individual whale sharks can be distinguished from their unique spotted pattern. This way, future photographed sightings can be logged and an individual's movements assessed. How interesting!

As it is atypical for whale sharks to be in Sogod Bay during this time of year, we are all hoping for more sightings this season!



Top: Volunteer Sara waving at her first ever Whale Shark! Bottom: Curious creature sniffing out CCC's bubbles.

-Photos by Anik Levac (PS)



## Nesting Hawksbill on Napantao Beach!

Up working late on the night of August 22<sup>nd</sup>, our Project Scientist (PS) and Science Officer (SO) were pleasantly surprised by news from CCC's local boat driver, Bokbok. A sea turtle had come up to nest on Napantao beach!

Due to turtles being vulnerable to sound and light disturbance, the three staff members investigated the beach while being extremely quiet, keeping their lights off, and staying at a safe distance from the turtle. The nesting process is split into seven stages; emergence from the sea, choosing a nesting place, digging of a body pit, digging of the egg chamber, laying the eggs, covering the eggs, and camouflaging the nest. Leaving the sea to lay eggs is energetically demanding, and each stage is pertinent in the nesting process. This highlights the importance to avoid any disturbances which can lead to turtles being spooked and returning to sea without laying.

With the light of the moon, the team were able to see the turtle's sharp beak, indicative of none other than the Hawksbill's (*Eretmochelys imbricata*). Of the seven species of sea turtles worldwide, the Hawksbill is one of the most endangered; listed as critically endangered by the IUCN redlist. Pressures for hunting the turtle for their beautiful shells used in jewellery making, the collection of their eggs for consumption or trade, in addition to turtles being trapped in by-catch in the fishing industry has led to the species' collapse. These turtles are also sometimes hunted for their meat, which is in fact inedible. Since the Hawksbill's favourite food item consists of toxic sponges, the animal's meat is also itself toxic, leading to illness or death in humans when consumed.

Female sea turtles have high site fidelity; returning to the same beaches where they were born in order to lay their own nests. It may be some time before they return, as it takes at least 20 years for sea turtles to become sexually mature. Once male sea turtles go to sea at birth, they are very unlikely to ever return to land. Since Hawksbill turtles (*Eretmochelys imbricata*) nest on a bi-annual basis, we believe this may be a local turtle that Bokbok is certain has nested on our beach before. Furthermore, Hawksbills may lay 3-5 nests per season, on a bi-weekly basis. The eggs' incubation time is approximately 60 days, so we will be on the lookout for the female to return to lay in the coming weeks, in addition to her hatchlings emerging in October!



Female Hawksbill (*Eretmochelys imbricata*) spotted on our house reef in Napantao.

-Photo by Anik Levac (PS)

## Education and Community Projects

### CCC Recommends two new MPAs in Padre Burgos

Since their biophysical assessment in 2016 and 2017, CCC have analysed and interpreted the data collected in Barangays Bunga and Santo Rosario. The aim was to recommend whether the establishment of MPAs would benefit these coastal zones, and if so, where the ideal placements would be. Accompanied by Armando Gaviola of PENRMO, Project Scientist (PS) undertook a presentation of our results and recommendations at the SB Session Hall of Padre Burgos on Friday August 24<sup>th</sup>. 15 interested parties attended the session, including representatives from both Barangays Bunga and Santo Rosario, in addition to Padre Burgos' Vice-Mayor.

Few commercially important fish species (Parrotfish (Molmol) Snapper (Katambak) and Grouper (Lapulapu)) were recorded on both surveys, while the individuals recorded were mostly within a small (<10cm) size class. This indicated that the species have been affected by high fishing pressures in the area. However, the sites both showed high (Bunga) and moderate (Santo Rosario) diversity in coral species and benthic structural complexity. The overall results obtained by CCC suggest that the surveyed reefs in Bunga and Santo Rosario have the capacity to support a greater diversity of reef fish, if assigned MPA status and top-down stressors are removed.

Several recommendations were made to ensure the successful management of the MPAs should they be established. These included:

- An initial site clean-up with an associated marine debris survey, alongside the establishment of the MPA.
- The marked Marine Protected Area boundary to include a NTA (no take area), surrounded by a 50m Marine Reserve buffer with restricted fishing activity.
- High MPA enforcement to prevent illegal fishing or poaching within the site, and to ensure ecological benefits are obtained.
- Fishermen to be involved in the establishing and monitoring process in order to ensure continual success of the MPA.
- Coastal management regimes should be created to control threats originating outside of the MPA.

Electronic and hard copies of the full technical reports are available from our Project Scientist at [lrcp@coralcay.org](mailto:lrcp@coralcay.org).



Top: Attendees to CCC's MPA recommendation presentation.  
Bottom: CCC's PS meeting with Padre Burgos Mayor and Vice-mayor.

-Photos by Armando Gaviola

## Survey Monthly Update

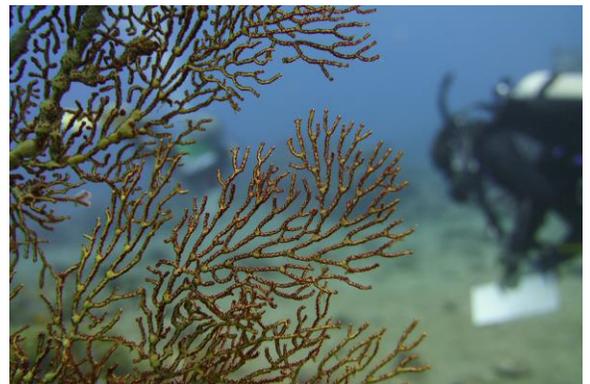
*Survey background: Since January 2013, survey efforts have been focused on assessing potential and existing Marine Protected Areas in Sogod Bay to provide appropriate management recommendations. To do this CCC uses an expanded version of the Reef Check protocol, which has been customised to perfectly fit our work in Sogod Bay. Prior to this a baseline appraisal of marine resources in Sogod Bay was carried out. In 2018, CCC will be using a revised approach to assess the effectiveness of CCC's previous efforts in establishing Marine Protected Area's (MPAs) with the goal of understanding the barriers associated to their establishment in the Southern Leyte Province. If you would like more information about our surveying please contact our Project Scientist, Anik Levac.*

Both established as Marine Protected Areas (MPAs) in 2016, the reefs in Barangays Bahay and Catig served as our first two impact sites following the BACI protocol last month. After completion of the biophysical surveys, CCC returned to undertake Rapid Visual Assessments (RVA) of both sites.

The RVA is a preliminary protocol that is utilized by a survey team to collect anecdotal and qualitative data of the site. The data are used to support subsequent scientific reports, recommendations and future survey efforts.

All data recorded is collected by the Science Officer (SO). The RVA is broad in concept and looks at the site in general with no defined quantitative data being collected (due to varying survey team numbers and the resulting area (m<sup>2</sup>) covered). As a result, it enables a large area to be visually assessed within a short period of time. The RVA in design takes basic logistical elements of a Roving Diver Transect (RDT) without the defined methods and species counts and take reference from exploratory dive procedures. Survey teams are encouraged to explore the area, collecting as many notes as possible to qualify the survey site.

Results obtained from the RVAs in Bahay and Catig will not only assist in future report writing, but will complement community day presentations in the Barangays; allowing locals to get a glimpse of what lies within their MPAs!



An RVA is an unscientific protocol used to collect qualitative data to support scientific reports.

-Photo by Chris Gamlin



A lionfish hides under a coral Bombie in Barangay Bahay's MPA.

-Photo by Chris Gamlin

**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>**

## 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.

The month of August welcomed Rhodolph Nullar of Mandaluyong City, this month's scholar! As an electrical engineer by trade working in Manila, Rhod felt a void with his career life and felt a yearning in protecting our environment. He did all he could to independently study marine ecosystems to undertake this large shift in career paths. After stumbling upon CCC's scholarship, Rhod was the perfect fit to undertake our programme which is suited to just that; assist Filipinos in becoming ambassadors working towards sustaining marine ecosystems in the Philippines. We are pleased to have been able to offer Rhod this training opportunity, in hopes of achieving his future goals of undertaking Master's research in Marine Conservation.



Rhodolph Nullar, our August scholar, joined CCC's programs in aim of undertaking Masters studies abroad in Marine Conservation.

-Photo by Jasmine Corbett (SO)

Best of luck Rhod!

"I wished to be considered in this scholarship scheme because it will be a huge help for me in applying for a Master's degree in Marine Resources Conservation in Europe next school year. I am an electrical engineer by profession, but I experienced a calling in Marine Conservation that is why I applied for scholarship for a Master's degree course (IMBRSea) last year. I had the desire in my heart to protect our marine resources by studying and providing mitigating efforts to come up with a sustainable marine environment. Coral reefs provide a large-scale sanctuary for marine wildlife, but climate change and human activities pose a risk to these indispensable creatures. This challenged me to apply to CCC's scholarship program and volunteer to help in conserving our marine wildlife."

-Rhodolph Nullar, August scholar

**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/>**

## Marine Creature of the Month!

The creature of the month for August goes to the Banded Sea Krait (*Laticauda colubrine*). Over the past few weeks several individuals have been seen while surveying at Barangay Catig, and on our very own house reef in Napantao. One even crawled up to the field base in an attempt to lay her eggs!

Although commonly referred as sea snakes, the Sea Krait has several characteristics that distinguish it from proper sea snakes. Sea *Kraits*, unlike sea snakes, spend about half of their time on

land, drinking fresh water and laying their eggs. Banded Sea Kraits also return to land to shed their skin, digest meals, and rest! Their large lungs allow them to dive for up to two hours before returning to the surface to catch a breath.

The head of a Banded Sea Krait is black, with an upper lip and snout that are characteristically colored yellow. Black rings of a nearly uniform width are present throughout the length of the body, but the rings will either narrow or vanish at the belly. The tail of the krait flattens into a paddle-shape, an adaption that helps our scaly friends move through the water. On average, the length of a male is about 90cm with a 13cm long tail. Females are significantly larger, with an average total length of 140cm and a tail length of 15cm.

Banded Sea Kraits are generally known for their very powerful venom, which can be fatal to humans. Thankfully, the diet of kraits consists primarily of a variety of eels as well as small fish. Unfortunately, incidents with Banded Sea Kraits occur due to their affinity towards land and their attraction to light, causing them to be drawn towards hotels or other coastal buildings where they may not be welcomed. There are fewer recorded bites from this species compared to other venomous species such as cobras and vipers as it is less aggressive and tends to avoid humans. If they do bite, it is usually in self-defense when accidentally grabbed, when fishermen attempt to untangle snakes from their fishing nets.



A Sea Krait swivels through the branching acropora colonies on our house reef in Napantao.

-Photo by Anik Levac (PS)



A friendly visit on land from a female looking to nest.

-Photo by Anik Levac (PS)

## 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](http://www.coralcay.org)