

# Southern Leyte Coral Reef Conservation Project (LRCP)



## Monthly Project Update

March 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.

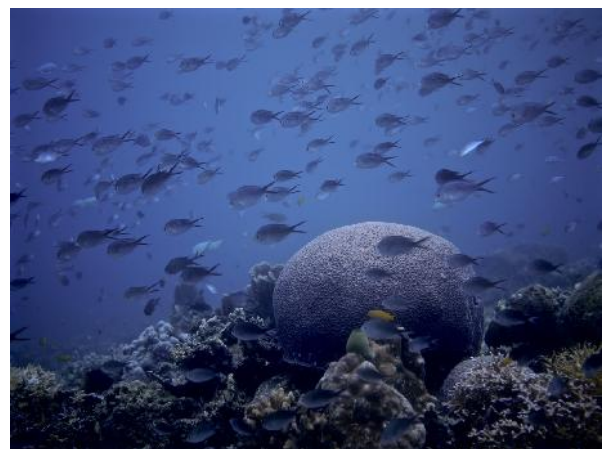
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## Latest News

### CCC Implement New Benchmarking Tool for MPA Management Effectiveness

March saw the completion of CCC's survey efforts within Napantao Fish Sanctuary (MPA). Whilst these survey efforts gain information on the health status and population dynamics of the reef ecosystem, additional surveys related to MPA management and compliance are necessary in understanding these local pressures which are influencing the success of the fish sanctuary. As of 2018, CCC have implemented the Marine Protected Area Management Effectiveness Tool (MPA MEAT), which will play a crucial role in improving functionality of governance and management of MPAs here in Southern Leyte. Chelsea Waters (PS) and Jesse Tinapay (CLO) have begun interviews within the community of Napantao, with an MPA management rating for 2018 soon to be established.



Napantao Fish Sanctuary 2018.  
- Photo by Chelsea Waters (PS).

## Stories of the Month

### Skills Development Programme, March 2018

March has brought us Dom (Volunteer) and Monica (Scholar) to undertake the Skills Development Programme (SDP)! Two weeks of advanced buoyancy, identification, and underwater sizing and survey practice was all it took to get these two in shape to assist CCC in our survey efforts. In addition to this, they have gained valuable knowledge in understanding how the recording of specific marine creatures can act as indicators of change, giving us key information

about the health status of our reef systems if monitored over a long-term period of time. Alongside this training, Silvia (Volunteer) has furthered her survey skills and stepped up to the role of being a survey leader! The team will be heading out at the end of the month to survey the reef of Barangay Anislagon (Municipality San Francisco).

### Meet Our Volunteers – Dom!

Dom has fit in with ease to life here in the Philippines, due to his vast experience of living in countries from

Nigeria to the United Kingdom, Holland to the United States of America. Whilst he will soon be returning to the UK to pursue a Bachelor of Mechanical Engineering, he is taking this time to impress upon his hobby of diving. Not only has his experience and confidence in diving been improved by both CCC's SDP and associated survey training, but has significantly broadened his understanding and knowledge of the marine environment and the creatures that live there. Over the oncoming month, he will continue to develop his species identification and leadership skills underwater, whilst impressing upon CCC's knowledge of soft corals throughout the bay.



Top: Dom (Volunteer), Silvia (Volunteer) and Maisy (SO) with our beach clean supporters at Tuno.

Bottom: Silvia leading Dom in SDP survey practice.

- Photo's by Chelsea Waters (PS)



Dom dressed up and ready for his 100<sup>th</sup> dive!

- Photo by Gareth Turner (FBM)

# Education and Community Projects

Barangay Tuno Beach Clean kicks off International Year of the Reef 2018!

Saturday March 10<sup>th</sup> brought CCC and the community of Barangay Tuno (Municipality San Francisco) together to address the issue of plastic pollution within our marine environment. The community of Tuno are fortunate enough to reside on one the best beaches within the Municipality, which receives frequent visitors and families from the wider community to swim and relax around their coastal waters.

This has resulted in plastic wrappers being left behind, and the Barangay of Tuno trying to come up with effective waste management practices to both encourage and ensure visitors are responsibly disposing their waste items.

More than 60 children and adults came together from the community, with additional attendance from the Philippines National Police (PNP), Army Reserved Command (ARESCOM), and the Bureau of Fire Protection (BFP). Within 2 hours, 5 sacks of non-biodegradable trash were removed from the beach. For some further incentive for the children to assist in our cleaning efforts, a bubble tank was brought for those who wanted to experience breathing underwater for a cost of just 15 items of plastic! A huge thank you to all who participated in the morning's event, and remember: if you are unsure of the waste management practices within a community – take your rubbish with you and dispose of it properly!

LET THE 2018 INTERNATIONAL YEAR OF THE REEF BEGIN!



Barangay Tuno Beach Clean Participants!  
- Photos by Chelsea Waters (PS)

## 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.*

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.

### What is BACI?

Before-After-Control-Impact (BACI) studies are an uncommon approach utilized for assessing the efficacy of small-scale MPAs with varying aims and objectives (e.g. protection of fish assemblages, benthic communities, and commercial biomass for fishery support). The Leyte Reef Conservation Project has, to date, practiced two-phases; Phase I (2002 – 2012) focusing on the collection of bio-physical data to assess the coral reef associated biological community composition within Sogod Bay, Southern Leyte; and Phase II (2012 – 2017) to collect further bio-physical data in spatially restricted locations at greater resolution to provide recommendations to local government units (LGUs) and stakeholders for the establishment of small-scale MPAs ( $n = 29$  independent surveyed sites). Therefore, the outputs of these phases provides CCC with a unique opportunity to utilize baseline data that aimed to provide local stakeholders with recommendations for MPA establishment, to provide resource managers with critical data on the performance of their MPAs. Through a three-tiered approach (collection of scientific data, education and outreach, and capacity building), CCC have expertise in working alongside MPA stakeholders and the local user-group level, and therefore will incorporate the MPA MEAT (MPA Management Effectiveness Assessment Tool), in combination with the BACI approach,



Chelsea Waters (PS) and Rafael Manrique (SI) collecting biophysical data within Sogod Bay.

- Photo by Maisy Fuller (SO)

Anislagon kick-started 2018's BACI study, with bio-physical data on benthic composition, fish biomass and abundance obtained from March 23<sup>rd</sup> to 28<sup>th</sup>. Results from this survey will be used to determine how the reef of Anislagon compares to protected reefs around Southern Leyte.

**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.

CCC welcomed Monica Abanador to the CCC programme this month! Growing up in the coastal community of Anilao; whose economy was influenced greatly by tourists who visit this community to dive their world-class reef, her fascination and appreciation for the ocean grew as she was consistently learning new information about this marine world from the influential dive professionals living within her community. By undertaking CCC's marine conservation programme, Monica has the knowledge and expertise beyond species identification, she has the knowledge to assess the underwater world and gauge its associated pressures, and guide both her community and the next generation towards a more sustainable future.

*"The experience I had with CCC was a rewarding one! It made me understand the importance of self-awareness and consciousness. During my time with CCC, I was able to learn more about myself, and how to live in harmony with everything that surrounds me. For the future scholars, please don't pressure yourself – enjoy every moment, person, and experience that may come along your way. CCC, thank you very much for choosing me to be a part of your programme, you don't know how thankful I am for that one month you gave me!*

- Monica Abanador 2018



Top: Monica and her fan club, after a successful beach clean at Tuno.  
Bottom: Monica teaching the children of Tuno how to breathe from a SCUBA regulator.

- Photo's by Chelsea Waters (PS)

**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!

CCC's *Creature of the Month* goes to the Ornate Ghost Pipefish (*Solenostrius paradoxus*), recently identified during CCC's survey efforts in Tabugon's Marine Protected Area, and ranked as one of the most exotic fish species inhabiting the Earth's shallow seas. Ornate Ghost Pipefish belong to the Syngnathiformes, an order of ray-finned fishes that encompass the pipefish and seahorse. From here the taxonomic group of the Ornate Ghost Pipefish divides from the rest of the pipefish species, now belonging to the family Solenostomidae. Ornate Ghost Pipefish, *Solenostrius paradoxus*, comes from the Latin *soleno* ('tubelike'), and *stoma* ('mouth'). The species name *paradoxus*, meaning 'contrary to expectation', references the separation of the Ornate Ghost Pipefish to the rest of the pipefish family due to its unusual appearance and differences in reproductive strategy.

If there is one thing the Ornate Ghost Pipefish is known for, it's being a master of disguise. Using crinoids, algae, sponges, sea grass, and even soft corals as a backdrop, their body shape and ability to change colour allows them to mimic the canniest of creatures. This transformation, and mimicry is established at a

young age. Shortly after birth, the juvenile Ornate Ghost Pipefish will begin to look for a host. Once found, it will change both its colour and shape to obtain maximum protection. Ornate Ghost Pipefish reach a maximum length of 15cm, with their head (and associated snout) taking up almost one third of their total body length. By hanging almost always upside down, the shape of their mouth allows for the ingestion of prey at a close range via suction.

The inquisitive traits of the Ornate Ghost Pipefish does not stop there. Whilst in many ways the Ghost Pipefish are closely related to the Pipefish and the Seahorse, it is their reproductive strategy that differs quite substantially. Unlike Seahorses and Pipefish – where the male incubates the eggs – the presence of its star shaped pelvic fins in the female act as a brood pouch, with the female carrying the eggs during the entirety of her pregnancy. Why the male Ornate Ghost Pipefish does not become pregnant, unlike his Pipefish and Seahorse relatives, still remains a mystery.



Ornate Ghost Pipefish  
- Photo's by ACCESS

## 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)