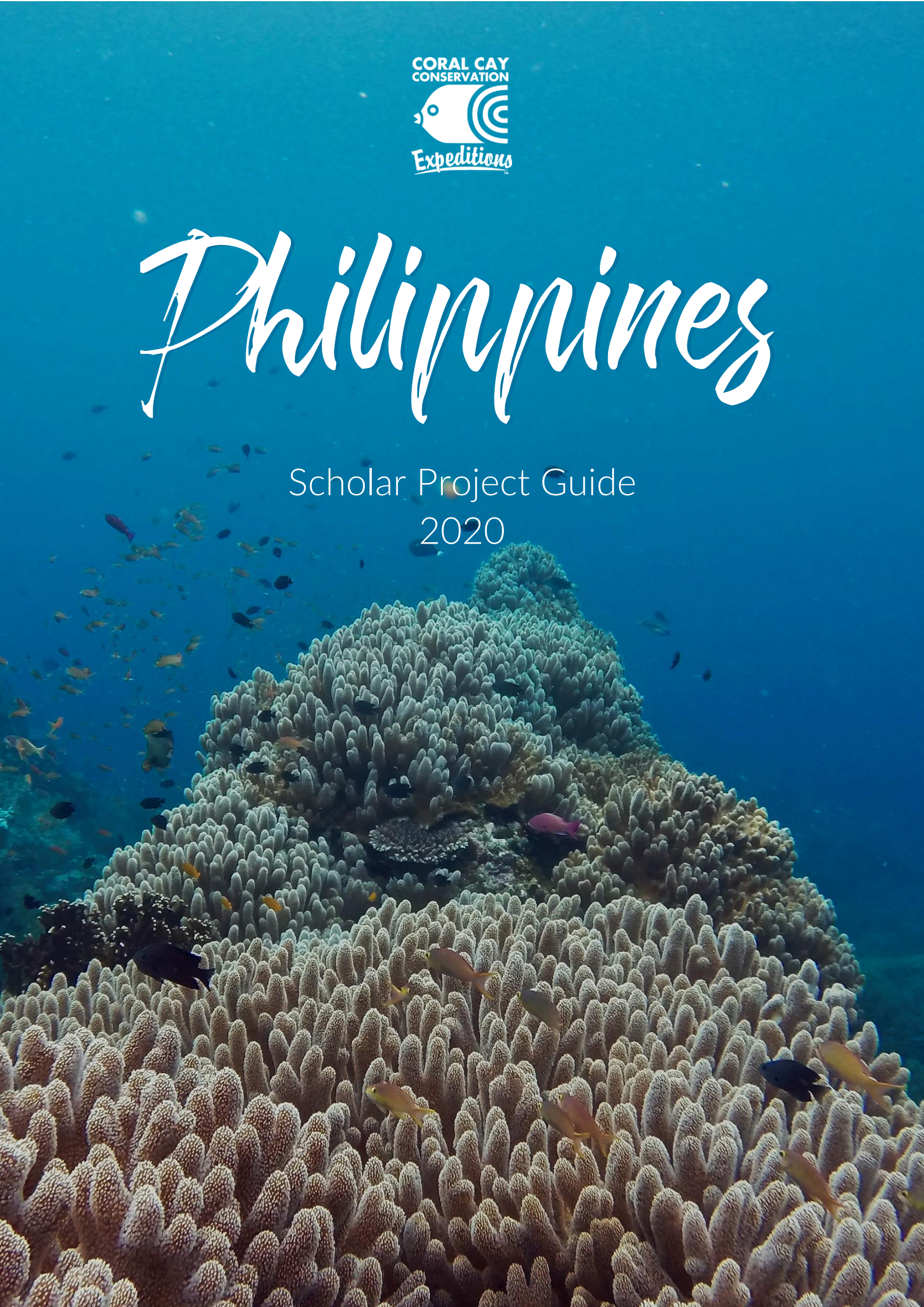





Philippines

Scholar Project Guide
2020





This document is intended to provide guidance to scholars who will be joining Coral Cay Conservation's Philippines project; The Southern Leyte Coral Reef Conservation Project. This document was updated in 2020.

Coral Cay Conservation
Napantao Dive Resort
San Francisco
Southern Leyte
6613
The Philippines

lrcp@coralcay.org

0 947 627 9853

If you have queries regarding the contents of this document, or the expedition package you have booked onto, you are advised to contact Coral Cay Conservation prior to your departure.

All images within this document are copyrighted and credited, where due. Images within this document must not be used without written permission from Coral Cay Conservation or the owner of the image.

Coral Cay Conservation is a division of the Lifesigns Group



© Roisin Maddison

Table of CONTENTS

Welcome to the Philippines	1
The LRCP	2
Before you join us	3
Travel insurance	5
Medical and travel health	5
Equipment	6
Helpful hints	6
Travel	7
Personal Expenditure	7
The Project	9
Staff team	10
Expedition Life	11
Communication	12
Catering	13
Diving with CCC	13
CCC Code of Conduct	14



Welcome to CCC



We are excited for you to join us at Coral Cay Conservation's (CCC) Philippines site, to help us conserve and protect fragile reef environments. It's a great pleasure for us to have you on board and contributing to this critical project. It's solely because of international volunteers and scholars like yourself that we are able to do the work that we do, so welcome to the Southern Leyte Coral Reef Conservation Project (LRCP).

The Philippines is found in the Coral Triangle. This is an area lauded as the 'Amazon of the sea' due to its high level of biodiversity, unmatched by any other marine region on the planet. It is home to over 70% of all known coral species, over 50% of Indo-Pacific reef fishes and six of the seven marine turtle species. The Philippines has it all, from the larger species in the form of whale sharks and turtles, to an incredible array of macrofauna.

The LRCP

The Southern Leyte Coral Reef Conservation Project (LRCP) was founded in 2002 to secure the long-term benefits and services of coral reefs and associated systems; protecting food security and supporting livelihoods of the residents in the province. CCC are currently located in the Barangay (village) of Napantao, in San Francisco Municipality, Southern Leyte.

CCC's work in the Philippines can be divided into three tiers: scientific data collection, community outreach and education, and capacity building. This holistic approach has enabled us to better understand the communities needs and build relationships. This has allowed us to establish a greater comprehension of the importance of coral reefs and the services to local communities as well as working towards successful marine resource management in participation with stakeholders and project partners.

Since the project's inception, CCC have undertaken three phases;

Phase I 2002-2012

During this phase, a total of **2,065** individual baseline surveys were conducted aiming to map and understand the rich marine biodiversity in Southern Leyte. The Phase I teams identified over **250** species of Scleractinian hard coral in the bay, with assistance from renowned Coral Biologist and Taxonomist, Douglas Fenner, whilst highlighting the high numbers of reef fish species, complex reef structures and highly diverse invertebrate communities. By identifying key areas of conservation value, including our House Reef, Napantao, alongside the presence of Whale Sharks, turtles and cetaceans in the bay, CCC were able to construct a strong, ecological foundation for the development of environmental management plans.

Phase II 2012 - 2017

After the successful mapping of high levels of marine biodiversity and the highlighting of spatial impacts to resources, CCC transferred into Phase II; collecting biophysical data to support the establishment of small-scale Marine Protected Areas (MPAs). By undertaking surveys within the coastal waters of local communities, CCC were able to provide high-resolution ecological data directly to local stakeholders to facilitate local conservation efforts. Over the course of 5 years, CCC have provided recommendations for over **20** MPAs, with **10** being officially declared by 2017.

During this phase, great effort was placed into community education and outreach, working directly with local schools, resource managers and village officials to raise awareness of the importance of sustainable practices. A key element of these efforts was the successful introduction of our volunteer-funded [Scholarship Programme](#); which you are about to embark on.



Phase III 2018 - 2020

In 2018 we moved to a Before-After-Control-Impact (BACI) framework. This allows us to evaluate the success of established MPAs by comparing historical data with those collected by our current research teams. These data, which you will be helping to collect, are a vital step in protecting and conserving Southern Leyte's reefs by developing a critical understanding of the processes that ensure MPA effectiveness, enabling us to take appropriate actions to secure livelihoods and protect food security.

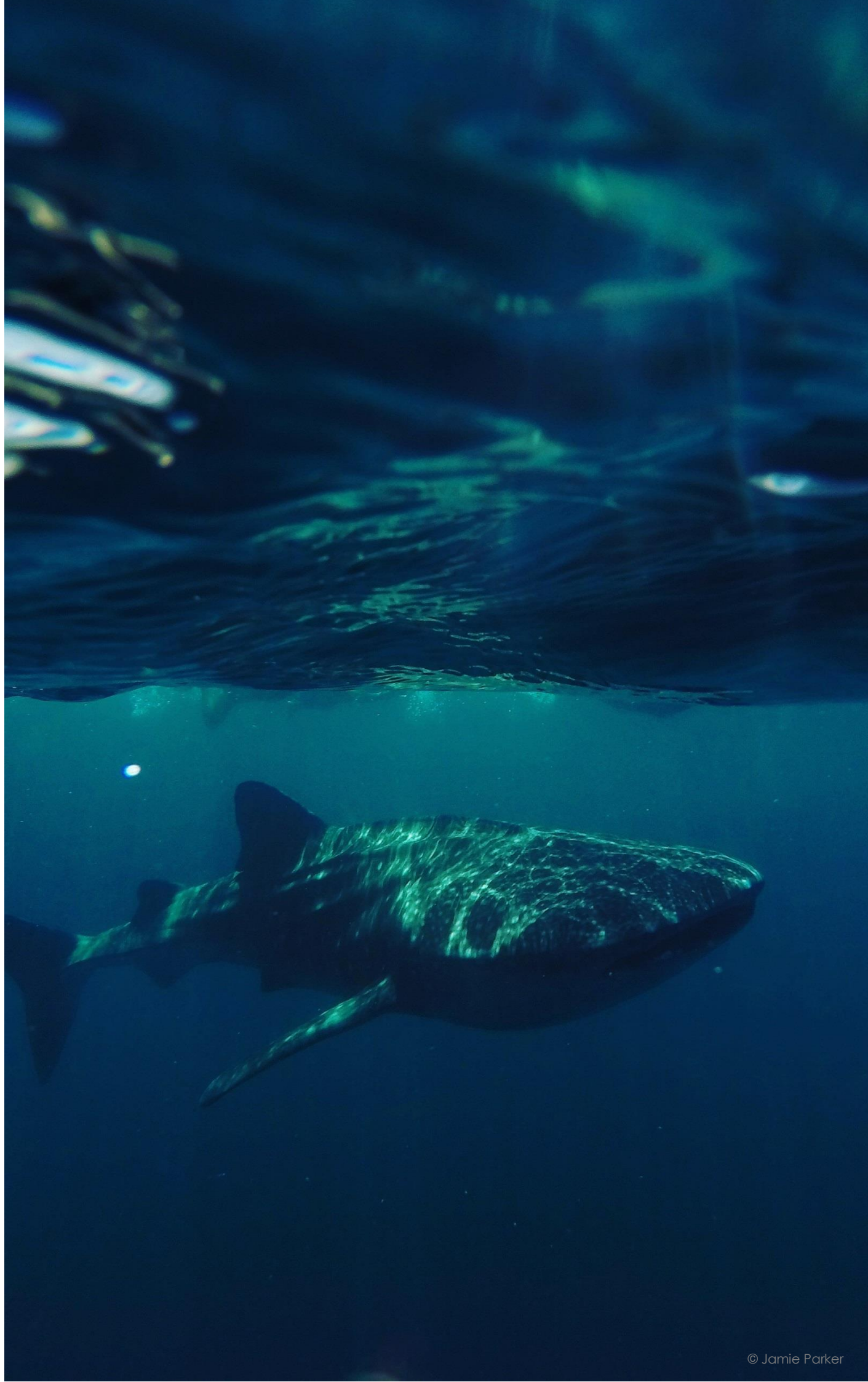
Phase IV 2020 - Now

After a brief break from establishing MPAs in Southern Leyte, during Phase IV of the project, we will aim to increase the area of coral reefs protected by MPAs. However, as protocols advance, so must the project, and therefore, to couple our core approach, we will be developing and trialling new and exciting higher resolution data collection techniques.

Our Mission

Providing resources to help sustain livelihoods and alleviate poverty through the protection of coral reefs and associated ecosystems

Before you join us



Travel insurance

The Scholarship Scheme does **not** cover the cost of insurance. We are happy to organize this for you with 'DiveAssist', or you can organize insurance for yourself. If you organize your own, you must pass on all policy details to the Project scientist (PS) and ensure that the policy covers the following:

- Scuba dive training
- All medical costs associated with scuba diving, including decompression chambers and unlimited diving to a depth of 30 metres.
- Helicopter Rescue.
- Light manual labour.

If you would like to Purchase DiveAssist insurance, you must inform the PS who will email the required application form. This should then be returned promptly to the PS. The coverage will be organised by CCC and you will need to pay in cash on arrival on site. You can choose from annual or monthly cover. Costs are subject to change but are in the region of:

- Scubamedic Annual Cover - 2,500 PHP
- Monthly cover – 1900 PHP

Medical and travel health

All staff members on CCC expeditions are trained as first aiders, and casualty evacuation procedures have been devised specifically for the Philippines site in the event of a serious injury or medical problem.

You must complete the CCC medical forms provided to you by the PS and be subsequently medically cleared to join our project.

Helpful Hints

Dental health

Dental issues may prevent you from diving so visit a dentist before you arrive on site.

Medication

Please ensure that you bring any medications that you require for pre-existing conditions with you. The medical facilities on base consist of basic first aid equipment and medications for common illnesses. Should you need to use these supplies you will be required to pay to replace them.

Mosquitos

Bring a good supply of your preferred repellent to protect yourself from irritating bites and potential health impacts (a max of 50% DEET is recommended). Loose fitting, long sleeved tops and trousers are recommended for the evenings and mosquito nets are provided to help avoid bites.

Sun screen

Bring plenty of high factor sun screen and lip salve, plus a hat and light weight clothing. Please think of the reef and consider bringing a reef safe sun screen.

Dehydration

Bring along a reusable bottle, drink lots and consider bringing a supply of rehydration salts (such as Dioralyte) with you. There is plenty of drinking water available on site.

Personal hygiene

With hot/humid weather comes increased risk of the spread of bacterial infections. Thoroughly wash your hands after using the toilet and be cautious with what you eat and drink whilst travelling. Rinse your ears out with clean fresh water after every dive to prevent ear infections and dry off thoroughly after getting wet to prevent chaffing.

Behaviour

We have guidelines in place on site to keep you safe, in return we trust you to behave sensibly to ensure that you do not put yourself in harm's way.

Medical Facilities

Basic medical care is available on-site, but if further care is needed, the nearest medical facilities are as follows:

Liloan Community Hospital
Sogod District Hospital A&E
Cebu Recompression Chamber

Equipment

We will provide you with all the equipment necessary for diving, including the following:

- Buoyancy Control Device (BCD)
- Regulator fitted with octopus
- Weights
- Digital depth gauge and bottom timer
- Underwater compass
- Diver knife
- Dive slate
- Underwater torch
- Open foot fins
- Diving booties
- Mask and snorkel

If you have your own SCUBA equipment do bring it along.

Whilst we will provide most of the essential equipment necessary for use on an expedition, you are required to provide certain items of equipment for your personal use. Please see below:

- Toiletries (biodegradable wherever possible)
- Swimsuit
- Personal clothing
- Sleeping sheet
- Pillow
- Torch and rechargeable batteries

- Towel
- Sturdy shoes or sandals

Helpful hints

Bedding

We will provide you with a mattress, pillow, 2 sets of bed linen and a mosquito net during your stay.

Toiletries

Basic products such as hair and body wash are available in Southern Leyte but often in single use sachets and/or including skin whitening ingredients. Consider bringing enough to last your whole stay - shampoo/conditioner bars and soap are plastic free, light and last months! Items such as contact lens solution, sanitary wear, razor blades, sun screen etc. can be difficult/expensive to obtain so you should also bring these with you. Wherever possible, please ensure that these items are biodegradable and environmentally friendly, avoiding single-use plastics where possible.

Clothing

You do not need huge amounts of clothing. A few pairs of shorts, underwear, swimwear, t-shirts, hat, sun glasses, a warm top, a cheap lightweight waterproof, plus a sturdy pair of shoes and sandals is all you'll need. Light, long-sleeved shirt and trousers to keep the mosquitoes off in the evening are also a good idea. Please be advised that Gore-Tex is not suitable for tropical climates.

There are basic facilities for hand washing clothes on-site, or one of our local villagers will wash items for a small fee. You should bring a small amount of environmentally friendly washing powder or purchase some whilst in-country.

Travel

You will need to make your own way to CCC's expedition base in Napantao, San Francisco. The cost of travel to and from the site is **not** covered by the Scholarship scheme.

If you are coming from outside of Southern Leyte you will either need to fly to Tacloban airport or get a ferry to one of the many ports on the island. From the airport or ferry terminal, it should be possible to get a bus or V-hire to Liloan (potentially via Sogod). At Liloan, a habel-habel will take you to Napantao via Habay, (most habel-habel drivers will know where the CCC base is).

Personal Expenditure

You should be aware that, while CCC covers most of the expenses for the expedition and training, including food and accommodation, it is recommended that you bring some money for personal expenditure in case you wish to purchase snacks or soda.

The most amazing experience with a group of people and staff whom I miss already! I learnt so much from
“ my stay at coral cay and now feel even more passionate towards saving our oceans

Ellie Hoad
Volunteer, 2018



Eco-Info

Reef-Safe Sun Screen

Sunscreens contain organic (chemical) and/or inorganic (mineral) UV filters that protect us from harmful UV light – a must for working in the tropics! In recent years, there have been a number of studies undertaken that have shown sunscreens and other cosmetic products can contain certain chemical and mineral substances that are adding to the burdens by coral reefs, such as global climate change.

Some sunscreens contain chemical ingredients such as: benzophenone-3 and -4 (BP-3 or Oxybenzone; BP-4); ethylhexyl methoxy cinnamate (EHMC); homosalate (HMS); 4-methylbenzylidene camphor (4-MBC); diethylamino hydroxybenzoyl hexyl benzoate (DHHB). As well as mineral ingredients such as titanium dioxide. These chemical and mineral ingredients have been detected by a small number of studies in coastal environments, in varying concentrations, and have been found to be detrimental to the marine organisms, including corals – not good when we work to conserve coral reefs!

The chemical UV filter oxybenzone has been studied intensively and has been found to cause the following;

- Bleaching of coral fragments and cells in a range of hard coral (Scleractinian) species.
- Damage and deformation of coral larvae.
- Damage to coral DNA and their reproductive success.

Choosing a Reef Safe Sunscreen!

First things first, the word 'Natural' is in no way synonymous with safe (either for you or the reef), and "chemical-free" is impossible, as whether naturally derived or synthetically made all ingredients are made up of chemicals. Similarly, 'mineral' only means the ingredients are naturally occurring, not that it is necessarily reef safe or effective. Now that we've got that bugbear out the way let's move on.

The [Haereticus Environmental Laboratory website](#) is a great first step. The list is updated every 2 years to ensure that changes have not made the chemicals unsafe. Non-nano Zinc Oxide seems to be the most accepted and superior active ingredient for alternative sunscreens, please make sure that this is **non-nano** to ensure that it cannot be ingested by our ocean dwelling friends

You've googled reef safe sunscreens, checked your ingredients list and found one that is safe, suited to your skin, and proven to be effective. Now it's time to accept that reef safe sunscreen will not be as invisible as your usual product, as Zinc Oxide has a whitening effect! We think that this is a small price to pay to save the reefs but if it bothers you there are tinted versions available. Please be aware that Zinc Oxide products marketed as 'clear' are more likely to use nano particles so double check this.

We hope that this has been helpful. Remember the best (and most natural) choice that you can make for your skin and health is covering up! Consider bringing along a rash vest and leggings, or a stinger suit.

Tip

You may be able to find your product listed on [Environmental Working Group's website](#). A helpful extra check to ensure your product is effective.

The Project





Our expedition site is based on Panaon Island on the south eastern tip of Southern Leyte in the rural village (Barangay) of Napantao;

Coral Cay Conservation
Napantao Dive Resort
San Francisco 6613
Southern Leyte
Philippines

Set amongst the jungle covered coastline, just metres from the ocean, this site offers the perfect location for our work. Our house reef, where the majority of your training will take place, is one of the [main drawcards for scuba divers](#) in the region and has a breath-taking array of wildlife with exceptional coral cover. It is the perfect spot to start your conservation training.

Home is a single level building comprised of 9 shared, single sex dormitories with fans and en-suite wet rooms (with a bucket-flushing toilet), a large communal area, a kitchen, medical room and a science room. We are remote so please be aware that although there is "24hr" electricity (240v) we are subject to occasional brown-outs. There is a good supply of fresh water for bathing, either by bucket shower or using the communal screened shower outside, and potable drinking water is shipped in. You will be provided with a single bunk, mattress, pillow, mosquito net and 2 sets of bed linen.

Staff team

During your stay you will be taught and guided by our on-site international and local staff team. More information about the current Philippines staff team can be found [here](#). Our team is diverse and hold a wealth of experience in their fields:

Field Base Manager (FBM)

Holds the overall responsibility for the safety and on-site management of the expedition. They are there to ensure that you are safe, happy and comfortable during your stay.

Project Scientist (PS)

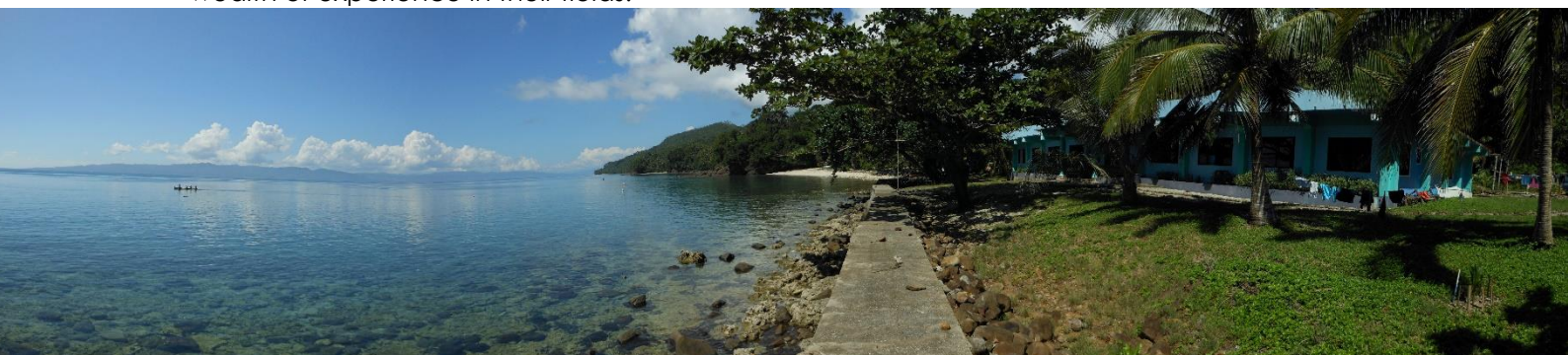
Has responsibility for the planning and co-ordination of the science programme; driving the LRCP in-country, meeting with project partners and developing project outputs. The PS deputises for the FBM should the need arise. You will often see them on the computer analysing data or writing reports, they are a font of knowledge on the 'bigger picture' of our work in-country.

Science Officer (SO)

Is responsible for training you in the skills of marine ecological data collection so that you can join our survey teams, whilst overseeing the data collection elements of the programme, this includes staff and volunteer science and survey training. They are marine biology enthusiasts and can't wait to share their passion with you. They excel in thinking up silly but helpful ways of remembering species' names!

SCUBA Instructor (SI)

Will provide you with your SCUBA diving training. Most importantly, they ensure safe diving practices are adhered to. These mermaid/mermen would spend their whole lives in the ocean if they could. After perfecting your buoyancy, they will have you upside down, inches from the reef, before you know it!



Expedition Life

When you arrive, after you have unpacked and met the team and other volunteers, you will be given a short induction to site that is designed to give you all the information you will need to settle into your new home. The next day you'll receive a tour of the base, be given all the information you need to stay safe whilst you're with us, an introduction into the culture and customs of the Philippines and learn how we operate as an active conservation NGO.

In order to ensure that we continue to conserve the reefs of the Philippines, your time with us will be scheduled to allow you to gain invaluable experience and contribute to the collection of critical data. The training and survey schedule will guide you on a daily, weekly and monthly basis. Expedition life can be challenging but also one of the most rewarding experiences of your life.

The first weeks on site are quite intense as we take you through all the training you need to become an active member of one of our survey teams. Don't worry though this doesn't mean you'll be sat in a classroom all day, after all the best place to learn about the reef is under the waves! Once you have completed induction and first aid training, after most classroom sessions we will take you out onto one of our teaching reefs, which just happen to be some of the best in the region, to put your knowledge to the test and see the incredible marine diversity for yourself.

If you are new to diving or don't yet have your PADI Advanced Open Water (AOW) or equivalent, you will join us as a 'dive trainee' and you will spend the first week training up to PADI AOW. Try to complete as many knowledge reviews as you can in

your manual before arriving on site to get a head start on jumping in the water! For those that are already PADI Open Water (OW) trained this first week will be a little more relaxed for you, and you will have more opportunity to snorkel and familiarise yourself with our beautiful house coral reef.

After this dive training week, AOW divers arrive, and you will spend the next two weeks on our unique Skills Development Programme (SDP), delving into the fascinating subjects of coral reef ecology and marine conservation whilst learning all about, and how to identify, the species found throughout Southern Leyte. During these two weeks you will also be introduced to numerous data collection techniques and develop your newly acquired skills on our house reef. Once you have successfully completed this training phase you will be equipped with the knowledge and skills to join our survey team and start playing an active role in the conservation of this exceptional ecosystem.

Once every four weeks we give you the chance to go on a night dive! This is an amazing experience to see a completely different side to the reef and if you're lucky, witness the awe-inspiring bioluminescence. You will see a host of amazing creatures that only come out at night whilst further honing your dive skills. Make sure you bring a dive torch and light sticks if you want to take part.

Below is a schedule of a typical day and week on our Philippines site. Please be aware that this can, and most likely will, change depending on weather or other factors.

“My time at CCC surpassed my expectations, such a wonderful group of people in an environment I can only describe as paradise

Will Timms
Volunteer, 2018

Monday & Tuesday

This involves dive training, SDP or surveys, depending on what stage of the schedule you are at

Wednesday

Assuming that all survey requirements have been met, today you will enjoy a recreational dive or participate in advanced PADI training courses

Thursday, Friday & Saturday

This involves dive training, SDP or surveys, depending on what stage of the schedule you are at. Saturday night is reserved for a social evening.

Sunday

During the first three weeks this day may be used for additional training. Otherwise this is your chance to sign-off site and visit a local beauty spot, go out on a group planned trip to some waterfalls, or simply relax on site.

Although life on site is busy there will be periods of 'downtime' when you can relax, sign-off site and leave to explore the local villages and surroundings. Please note that CCC will not be responsible for you when you are signed off site or undertaking activities that are not part of the expedition package.

There is the opportunity to socialise over a drink at the end of the day, and Saturday

night is usually reserved for an end of week social evening at the project base. Although beer is available to purchase on-site there are strict rules in place regarding the quantity that can be consumed. Excessive alcohol consumption is not allowed at any time to keep all team members safe. In addition, accidents occurring while 'under the influence of alcohol' may void medical insurance cover and alcohol is a major factor in dehydration related decompression illness – you will be in the tropics after-all!

Six out of seven days are classed as 'working days' and so the bar is open between 6.00 pm and 10.00 pm and the maximum permitted alcohol consumption is two bottles of beer (330 ml) per evening or one large glass of wine (250 ml); the consumption of spirits is strictly not permitted during these days.

On successful completion of SDP, you will also be certified as a [Reef Check Eco Diver](#), allowing you to join Reef Check dives all over the Indo-Pacific.

Communication

The expedition base is fully equipped with satellite and radio-telecommunications to provide 24-hour communications cover.

07:00 Breakfast	A simple breakfast prepared by one - two members of the team. A chance to discuss any final planning details for the day's activities
07:45 Communal duties	Routine base camp duties to be completed each morning on a rotational basis. This could include: washing up, sweeping, mopping, getting survey equipment ready etc. It is a communal site and so everyone, including staff, are expected to take part.
09:00 Training/Surveying	Depending on your stage of training you will undertake an SDP lecture or dive theory followed by a training dive or survey dive. Any data collected will then be transferred onto recording forms.
12:00 Lunch	Usually made by a member of the staff team, either taken on base or as a picnic if away from site.
14:00 Training/Surveying	As the morning, after which all equipment is rinsed and put away
18:00 Dinner	Made by our local cook. A chance to review the day's activities and plan for the next.
19:00 Evening training/lectures	Further in-depth lectures and training may be provided in the evenings to those that wish it.

However, routine use of this facility is limited to project management and operations and is not available for personal use other than in an emergency.

Catering

A simple breakfast is prepared by one of the team on a rota. Don't worry we won't expect you to be a star chef. You'll be paired with a seasoned team member at the beginning who will coach you until you are a dab hand in the kitchen. Lunch is usually prepared by staff, or if you will be away from site you'll help to make up packed lunches. Evening meals are prepared by our excellent local cook, Nan Pedang. Meals are served in the communal area at fixed times in order that the day's survey activities can be effectively managed. They offer the perfect opportunity for the team to come together and chat through the day's events. Vegetarians and vegans are catered for but please let the Project Scientist know in advance. Similarly, if you have any dietary requirements/allergies please let us know as soon as possible so that arrangements can be made. Fresh fruit and vegetables, while mostly available, are seasonal and availability will vary.

All main meals are provided as part of your package but cold beverages and snacks are available, at an additional cost.

Diving with CCC

We are a PADI registered dive centre (3544). All CCC surveyors must be at least AOW or equivalent before starting the Skills Development Programme (SDP). Therefore, if you are not yet at this level you will join as a dive trainee and undertake the OW (if required) and AOW with our on-site Scuba Instructor (SI).

We try to get out on two dives a day, dependant on weather conditions and base logistics. There will be days when this is not possible and so volunteers should be aware that there is **no guaranteed number of dives per day**.

Diving Standards

Our Philippines site is based in a remote area and as such, we enforce conservative dive standards to keep all personnel safe. You will be given a full dive briefing during your induction on-site.

In brief, the maximum depth permitted for any CCC dive is 28 metres and the longest bottom time employed by CCC is 60 minutes, under the condition that this does not exceed the No Decompression Limit set out in the PADI Recreational Dive Planner. However, a typical dive with us will be between 6 and 18 metres, with a bottom time of around 40 minutes.

All personnel **must** have a de-gas day once a week, on which no dives are permitted. The one exception to this is 'dives' of less than 5 metres depth conducted as part of CCC sanctioned training.

One of the best summers ever! Amazing diving, great people, very educational and all for a worthy cause



Chris Gamlin
MSc Thesis, 2018

CCC Code of Conduct

This is a simplified list of our expectations of you. It is natural that you will be viewed as a representative of CCC when you are off-site, so we trust you to support our strong relationships with our local community and behave accordingly. The FBM will happily answer all your queries during your induction.

Discrimination and Behaviour

We have a zero-tolerance approach to discrimination in all its forms. We expect all CCC personnel to treat all others with respect and care regardless of background, beliefs, disability, gender, age, race or sexual orientation.

Cultural Considerations

You will be briefed on arrival on cultural considerations for the Philippines. If you have any cultural or religious needs, please discuss these with HO before arrival on site and we will do everything we can to accommodate you.

Training

You will not be able to take part in activities if you have not achieved minimum requirements in training. We know that every person who joins us has different strengths and weaknesses. Our staff are extremely enthusiastic and will patiently work with you to help you succeed. In return we ask that you apply yourself fully to the training provided.

Policy

The operations manual that we have developed over the years has at its core an ethos of safety, professionalism and common sense. There is a reason for every policy, if you want to know what it is, just ask.

Environmental Considerations

Our expedition site is based meters from one of the most beautiful Marine Protected Areas in the region. Please keep this in mind throughout your stay and take all actions to reduce any negative impacts on the environment. HO and site staff are happy to provide guidance for this.

A Final Note

We are here to support you and have no doubt that you will have a wonderful experience with us. Leaving with a firmer understanding of the beautiful underwater world, with a cohort of lifelong friends from all over, and stories and photos of your adventures to treasure and share with your friends and family on your return.

The HO Team



**CORAL CAY
CONSERVATION**



info@coralcay.org
+44 (0) 2076 201 411
www.coralcay.org