

Expedition Shark 6

Tubbataha Reefs Natural Park

Introduction

The **Tubbataha Reefs Natural Park** is one of the last refuges for **sharks** remaining on the planet. It provides a shelter for a wide variety of threatened and protected marine species, and redistributes life into the surrounding waters. This rare beacon of hope in Southeast Asia represents an oceanic oasis at the heart of an overexploited, overfished desert. It is a vestige of what the oceans once were, and a brilliant model for what they should be again.

Despite all of this, very little is known about the sharks that call this unique **UNESCO World Heritage Site** home and Expedition Shark plays a crucial role in understanding the importance of TRNP for sharks.

LAMAVE and the [Tubbataha Management Office \(TMO\)](#) have been monitoring the sharks and rays of **Tubbataha Reefs Natural Park** (TRNP) since 2015, which marked the first Expedition Shark. The research focused on shark abundance, diversity and movement using a combination of Baited Remote Underwater Visual Surveys (BRUVS), underwater visual census (UVC) and satellite tracking. This research documented [incredibly high numbers of reefs sharks in the park](#) when compared with other marine protected areas (MPAs) around the world, highlighting the importance of large, well-managed marine protected areas like TRNP for their conservation. In 2016 the team tagged the first tiger shark in the coral triangle, while [on-going research focuses on building the country's largest acoustic network to monitor the movements and behaviour of tagged reef mantas, grey reef sharks and tiger sharks](#).

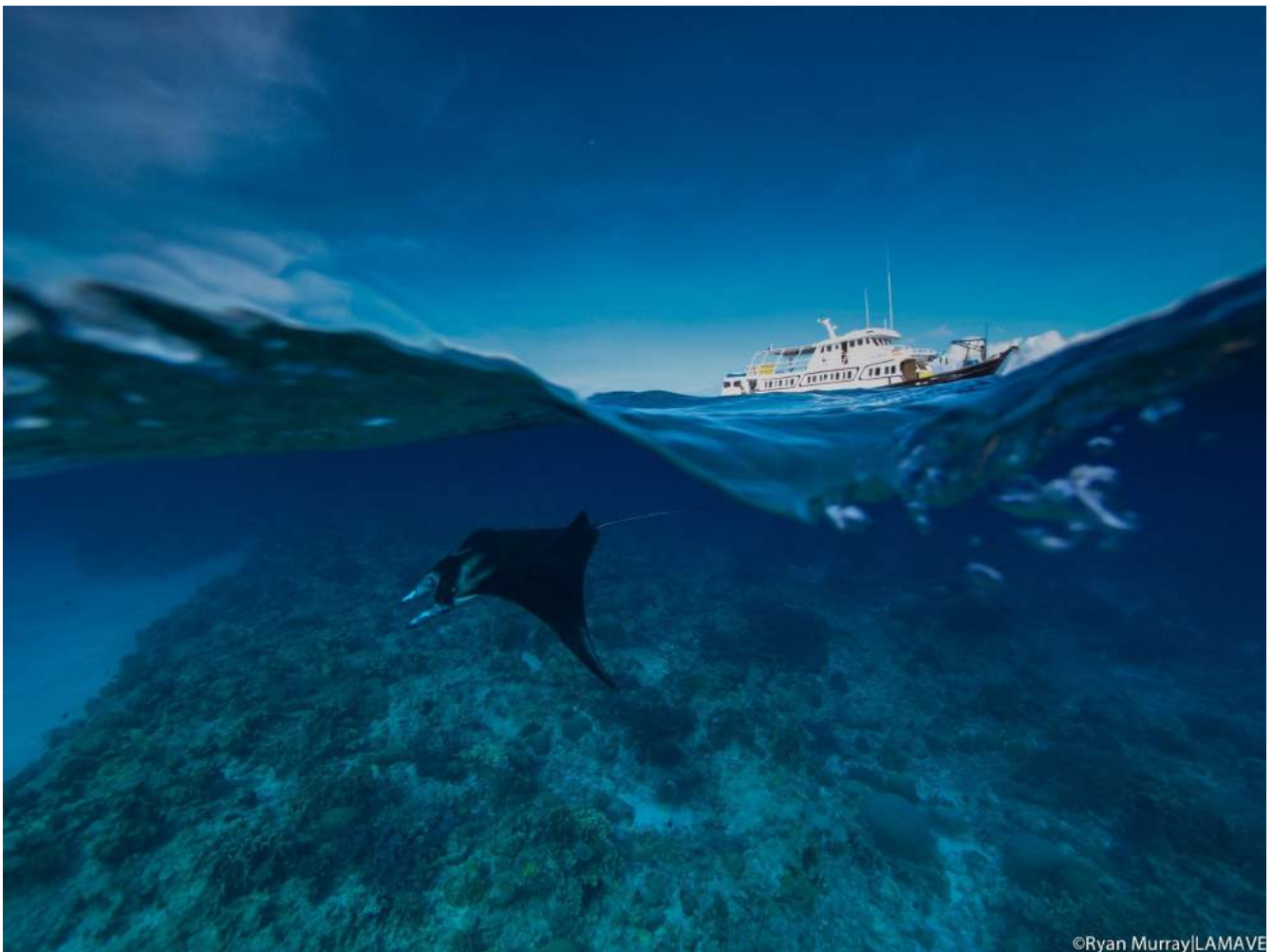
This year's expedition will continue this research between June 7 - 15 and will explore the secrets behind the conservation value of this reef, revealing the key to repopulating sharks in the **Coral Triangle**. How are tiger sharks using marine protected areas like Tubbataha? Is it home to Asia's largest **tiger shark** aggregation? Where do the [whale sharks](#) that frequent this reef travel to, and are they venturing into the dangerous waters of the South China Sea to reproduce? **Join us now to find the answers and be a part of the solution.** You can read more about our research here: www.lamave.org/sharks#tubbataha-reefs



What is Expedition Shark #6?

From June 7 - 15, a team of shark and conservation experts will travel to Tubbataha Reefs Natural Park to continue our assessment of sharks and rays within the park during an 9-day expedition. Tubbataha is a group of remote tropical atolls located in the Sulu Sea, Philippines, approximately 150 km from the nearest port. Lying directly in the heart of the Coral Triangle, Tubbataha is an essential sanctuary for the rapidly disappearing sharks of Southeast Asia. With your help, we will accomplish the following:

- Conduct Underwater Visual Census (UVC) to understand changes in shark abundance over time at the park.
- Photo-identification of marine megafauna including turtles, manta rays, and whale sharks.
- Deploy acoustic tags on tiger and grey reef sharks to understand site fidelity and inter reef movements.
- Retrieve and download data from the acoustic listening stations



Are you up for it?

This is a unique opportunity to join a team of experts on a mission to study and help conserve one of the last shark havens in Southeast Asia. Being an expedition, guest explorers would have to:

- Have excellent diving skills (40+ dives)
- At least an Advanced Open Water PADI or Equivalent Certification
- Be comfortable to work long hours in a busy environment, in the confinement of a boat
- Be happy to work in a team
- Have their own dive equipment (see below for rent)
- Passionate about conservation and the environment
- Excited to see lots of sharks, turtles, and rays!

The cost of the expedition is **\$3000 (USD)**. The trip will include:

- Full board (food, snacks and soft drinks) and accommodation in a shared room on the vessel
- Up to 3 Dives/day
- Training on elasmobranch and turtle research & conservation
- Opportunities to be part of the shark tagging team, working closely with the Tubbataha Management Office Park Rangers
- Exclusive access to learn more about shark and ray research in the coral triangle
- The opportunity to participate in shark and ray research and contribute to conservation efforts in the Philippines.
- Talks on shark and ray ecology, biology, and conservation.

The above price **does not include**:

- Transport to and from Puerto Princesa City, Palawan
- Medical and diver's insurance (mandatory)
- Dive equipment (only weights & tanks provided)
- Alcoholic beverages (can be purchased in Puerto Princesa City)
- Toiletries
- Nitrox (no nitrox is available on our research vessel)

Please note that dates and dive sites are strictly dependent on weather, presence of other divers and conditions for the research at hand.

Embarkation: Afternoon, June 7th 2022 12:00 noon Puerto Princesa City Baywalk Park

Disembarkation: Morning June 15th 2022 9:00 am Puerto Princesa City Baywalk Park

Number of Nights: 9

Number of Expedition Participants: 13 (5 Guests – 8 Researchers)

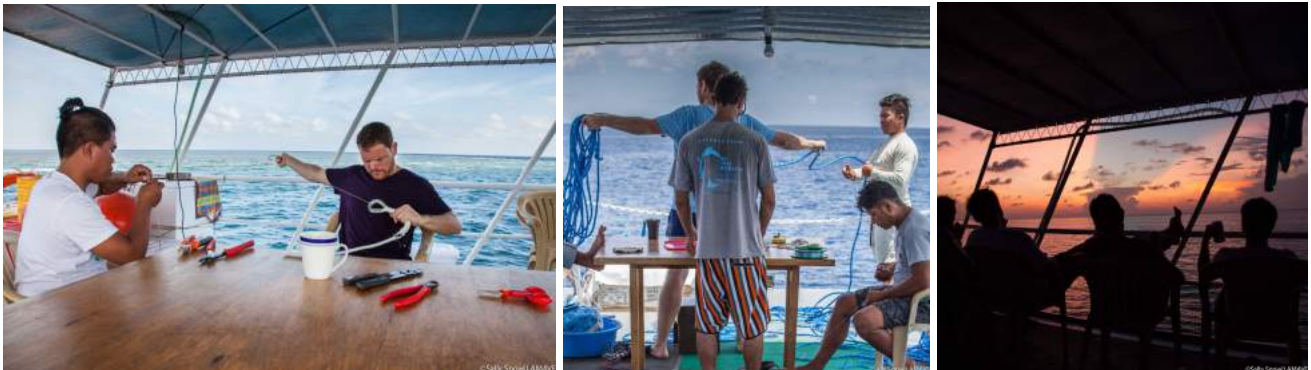
Vessel: RV NAVORCA

RV NAVORCA

RV Navorca is a research vessel owned by WWF-Philippines. Its sturdy wood-and-fiberglass hull spans 80 feet and displaces 70 gross tonnes. Onboard are has two bedrooms with dorm-like bunk beds, two comfort rooms (bathroom) which includes toilet and shower, a dining area and an upper deck common area. The vessel is designed for research rather than luxury, but that's what makes it so charming. The crew are fantastic and a key element to the success of Expedition Shark.



Bunk-beds in one of the shared bedrooms, Members of the team preparing tags and plans in the dining area.



Upper deck - gear prepping in the morning - sunset viewing by the evening.



The outer deck near the dining area, a view of Navorca from the Ranger boat.

The Team of Explorers

Dr Alessandro Ponzo, DVM. - Dr. Ponzo is currently a member of the IUCN/SSC Otter Specialist Group, a Kinship Fellow, and a National Geographic Explorer. He began his career as an ethologist, completing his thesis on dolphin cognition. In 2002, he studied orca whales in Alaska and in 2004, he was part of the first international expedition to search for the critically endangered Western Pacific Gray Whale along the Russian coast of the Bering Sea. In 2010, Dr. Ponzo founded the Large Marine Vertebrates Project in the Philippines, where he has since been working tirelessly to conserve marine vertebrates in the Bohol Sea and throughout the country. One highlight of his work with LAMAVE is the establishment of the first open-access underwater telemetry network in the Philippines, allowing scientists to track movements of tagged animals across the archipelago.

Sally Snow, BSc. - Both a Zoologist and a Filmmaker, Sally is incredibly passionate about science communication. Her career has found her working with the BBC, National Geographic, PTS, and S4C. She is also a two-time grantee of the Conservation Media Group. She oversees LAMAVE's media output including print, online, and film. She is passionate about using conservation filmmaking as a tool for behavioural change by delivering stories that connect people, science, and the environment. She currently finds herself as a grantee of the Save Our Seas Foundation, working to create a documentary that highlights sharks across the Sulu Sea and the communities most reliant on them.

Jessica Labaja, BSc. - Jess grew up in Iligan, Mindanao, before embarking on an IT career in Manila. She eventually left the corporate world, taking her learnings on systems-based project management to pursue her true passion for marine conservation. Today, she is the country's leading shark researcher and represents LAMAVE on several protected management area boards across the Philippines. Jess plays a vital role in LAMAVE's in-country strategy and currently leads LAMAVE's Rapid Bycatch Assessment project - a critical project that seeks to quantify the impact our fisheries have on important marine megafauna.

Ariana Agustines, MSc. - Ariana is a marine scientist, technical cave diver, divemaster, and National Geographic Explorer. Ariana has previously worked with LAMAVE as a Project Leader for both our Southern Leyte and Palawan whale shark projects. Today, she works with the National Geographic Society to study human-whale shark interactions in Honda Bay, Palawan. Through sharing her passion for the ocean, she hopes to help others understand the important role our ocean plays and thus inspire people to protect our marine life and natural resources.

Zachary Riskin, BA - Zach is LAMAVE's Project Leader for manta ray conservation. He leads national efforts to catalog the population of Philippine manta rays, seeking to understand their population dynamics, habitat use, and connectivity to better protect them across their range. He is currently working with the International Conservation Fund of Canada to protect a newly-discovered manta ray cleaning station in Northern Palawan - one of only three such manta ray habitats known in the Philippines. He is also a PADI Scuba Instructor with over 500 dives of experience in Tubbataha as a dive guide.



Conservation Project and Research information

Project Title: Assess the biodiversity of elasmobranch species (including apex predators) at Tubbataha Reefs Natural Park.

The **Large Marine Vertebrates Research Institute Philippines** is a non-stock non-profit Filipino NGO registered in the Philippines in 2014 (formerly LAMAVE Project since 2010) for the conservation of the marine environment through research and education.

The study will be done in collaboration with the Tubbataha Management Office and WWF-Philippines.

Objectives

To assess the status of the population of elasmobranchs in the waters of TRNP, promote their conservation through science-based management, and increase awareness locally and internationally.

Goals:

1. Assess the biodiversity of elasmobranchs in TRNP waters.
2. Assess the abundance and distribution of the most common elasmobranch species.
3. Identify long-range migration patterns of manta and tiger sharks through national and international waters.
4. Identify site fidelity and habitat use within the Park and movements between Atolls.
5. Provide the TMO with a series of tools and materials to promote the reefs on a national and international level.



Research Methods

This study will employ minimally or non-invasive techniques to collect biological and ecological data regarding the elasmobranch populations in Tubbataha.

The following techniques and technologies will be use to maximize effort and output:

- Underwater Visual Surveys (UVS)
- Photo-Identification of sharks, rays and turtles
- Acoustic Tagging of tiger sharks and grey reef sharks
- Deployment of Acoustic receivers throughout TRNP

Underwater Visual Survey

Diver-based Underwater Visual Census (UVC), particularly transect-based surveys, are key tools in the study of fish ecology. These techniques have been used in the past in TRNP (Alava 2010; Walker and Palomar-Abesamis 2005; White et al 2012) and the utilization of the same methodology in the same study site will allow to compare data and be able to assess trends in population presence and distributions.



The team conducting an Underwater Visual Survey

Acoustic Tagging of tiger sharks and grey reef sharks

Tiger sharks are long migratory predators, and nothing is known about their ecology in the Philippines. We are trying to collect anecdotal data from regional reports to identify the range and presence of this species in the archipelago.

We will also deploy acoustic tags on tiger sharks and grey reef sharks. These tags will provide us an understanding of their local habitat use, movement throughout the year, and connectivity within TRNP atolls and to neighboring seamounts as part of a larger study. The tags are small and are implanted one at a time, as we only use a single hook to reduce any stress and risk of injury during shark capture.



Media Policy

Due to the nature of the work *Expedition Shark Media Guidelines* are in place to protect LAMAVE and its team members and to respect permits, partnerships and permissions. The research conducted during the expedition is tied to grants, some of which have media clauses. LAMAVE also has internal media policies that must be respected by all participants. These policies don't mean you cannot take photos and videos, they are simply some restrictions concerning documenting research activities. All participants will receive a copy of these guidelines before we set off. If you have any questions regarding this, please raise them when contacting us.

Tentative Itinerary and Activities

Dates (2022)	Activity
June 7	Boarding in Puerto Princesa in afternoon – Briefing - Overnight Cruise to TRNP
June 8	Arriving at Ranger Station- Equipment Test Dive - Research Briefing and Protocol-Presentation of Results from the Park Team – Morning and Afternoon Fun Dives + Acoustic Receiver Retrieval/Deployment
June 9	North Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive
June 10	North Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive
June 11	North Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive
June 12	South Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive
June 13	South Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive
June 14	South Atoll Team 1: Shark Tagging. Team 2: UVS/Acoustic Receivers Logistics/Photo-Id/Fun Dive Depart for Puerto Princesa City in late afternoon. Travel overnight to PPC.
June 15	Arrive in Puerto Princesa at sunrise. Breakfast onboard, then depart.

Expedition Shark #6: Tubbataha Reefs Natural Park - LAMAVE



TUBBATAHA REEFS NATURAL PARK WORLD HERITAGE SITE

CAGAYANCILLO, PALAWAN, PHILIPPINES



Dive Site Information

NORTH ATOLL

MALAYAN WRECK is a drift dive across a vibrant wall where hammerhead sightings in the blue are possible. Grey sharks and white sharks are abundant, as are nurse sharks lurking in overhangs and caves. The dive ends in the shallows where a massive school of bumphead parrotfish often stay.

WALL STREET is a sharp corner with strong currents frequented by schools of juvenile grey sharks and whitetip sharks.

SHARK AIRPORT is the biggest cleaning station of Tubbataha. The dive finds you zipping by along the wall beneath an extremely rich reef top. Keep your eyes peeled as this is a site where anything can happen including schools of jacks, barracuda, and grey reef sharks, hammerhead sharks, manta rays, and if you're really lucky, even a guitarfish

SEAFAN ALLEY is a great spot to look for pygmy seahorses and longnose hawkfish lurking in massive gorgonian seafans. It's also a good spot for barracudas, tunas, and reef sharks.

SOUTH ATOLL

KO-OK is most famous for its elusive school of hammerhead sharks lurking off the wall in the blue. Whale sharks also often pass by this area.

DELSAN WRECK is where you go when you want action. Huge schools of jacks and barracuda are often accompanied by whale sharks. Manta rays and hammerheads cruising along in the blue are possible, as are large grey reef sharks and marble rays cruising the site's famous deep slope. Expect high currents to bring you cruising past schools of fish and sharks that'll have your adrenaline pumping all day.

TRIGGER FISH CITY has some of the most beautiful coral formations in all of Tubbataha. The wall is packed with action, with megafauna such as whale sharks and grey reef sharks often seen cruising along. Tiger sharks are occasionally spotted here along with marine turtles. Once in the shallow sandy area, watch out for the scariest animal in all of Tubbataha - the triggerfish!

BLACK ROCK is a gigantic cleaning station often frequented by reef manta rays. Located at the northeast corner of Tubbataha's South Atoll, the Black Rock plateau slopes gently from 15 to 25 m in depth. Whitetip sharks are often seen sleeping on the seabed or forming hunting parties with groupers, jacks, and even moray eels. It is very common to see eagle rays, school of grey reef sharks, and black and white tip sharks. Schools of surgeonfish, rainbow runners, sweetlips, nurse sharks can be found resting under huge coral tables.

AMOS ROCK is a nice wall very rich in hard and soft corals frequented by school of barracudas, large stingrays, marble rays and other large pelagic.

JESSIE BEAZLEY has all the wonders of Tubbataha compressed into a tiny outside reef to the north west of the main atolls. Hammerhead sharks, silky sharks, and grey reef sharks are often sighted here. The southern end of the Jessie Beazley Reef is one of the greatest dive spots found in the system with excellent visibility and spectacular marine life.

Reserve your space now!

Places on the research expedition are on a first come, first served basis. To reserve your space and ensure you are part of this amazing research expedition, email info@lamave.org with Expedition Shark 6 in the email subject.

