



Diver with large school of trevally (above); Large marble ray (right)

We came up over a coral ridge and yet another vista of beautiful hard and soft corals met our eyes. It was late in the day and the diminished sunlight was quickly turning the dive into a dusk adventure. After four dives in the day, we were both tired and exhilarated, and it was time to begin our ascent and head to the boat for a well-earned dinner.

Suddenly, a large section of the seafloor appeared to move. In the fading light, we could barely make out what was happening... until we got a bit closer and spotted the largest marble ray we had ever seen lifting off the bottom and flapping away into the darkness of the

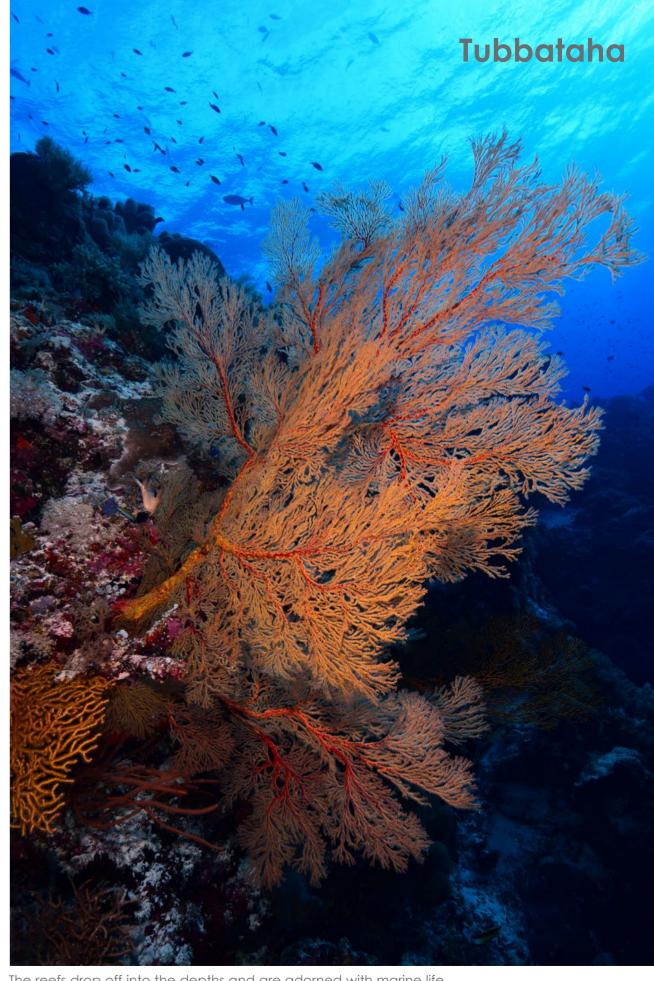
deep. With sandy
"contrails" behind
it, the smart carsized ray lazily swam
beneath us and over
the ridge leading
to the drop-off
before disappearing
completely.
Reluctantly, we
agreed it was time for
the safety stop.

Tubbataha is a reef system lying 177km (110 miles) from the

city of Puerto Princesa on the island of Palawan in the Philippines. Divers come here with the hopes of seeing large animals; whale sharks, tiger sharks, manta rays and marble rays are often encountered, along with massive schools of trevally and striped barracuda. Herds of bumphead parrotfish patrol the reefs,

while tuna and silvertip sharks hunt along the walls. The parade of marine life usually does not disappoint.

What a reef should look like
But the real treasure that is Tubbataha
lies in its pristine reefs and healthy
marine ecosystem. For every encounter



The reefs drop off into the depths and are adorned with marine life (above); The healthy reefs of Tubbataha (previous page)



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Divers with whale shark, the gentle giant of the sea (above); An oyster snaps its shell closed when divers approach (right)

with a whale shark, there are innumerable opportunities to witness life in the sea as nature designed it. Tubbataha is, in fact, a living example of what coral reefs systems around the world should look like.

What enables this system of atolls in the Sulu Sea to thrive is a mix of isolation, weather patterns and aggressive protection from the Philippines government. What continues to threaten it, though, remains beyond their control.

The three atolls of Tubbataha (the North and South Atolls, and the Jessie Beazley Reef— an emergent coral cay) were formed millions of years ago when volcanic eruptions created small islands, which eventually collapsed back into the sea. The fringing coral reefs around these islands are the atolls we see today.

The name "Tubbataha" comes from the Samal language meaning "long reef exposed at low tide."

## Over-fishing

For generations, local fishermen were barely able to reach these reefs because of the distance from land and the capriciousness of the weather. Without motorized boats, fisherman rarely braved the frequent monsoons, typhoons and rough seas to get here. But, as inshore reefs became exhausted and better boats

became available, the reefs at Tubbataha soon became a taraet.

As word began to spread about the productivity of these reefs, dynamite and cyanide fishing began in earnest as well as more traditional forms of fishing. The reefs were under siege.

## Marine protected area

Thankfully, in 1988, President Corazon Aguino, in response to a strong campaign by scuba divers and environmentalists, and with the support of the Provincial Government of Palawan, declared Tubbataha a 97,030-hectare (970 sq km) Marine Protected Area, the first of its kind in the Philippines.



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School of striped barracuda (above); Lionfish (right)

What is unique about Tubbataha is the management and conservation model that was subsequently put in place. In 1999, the Tubbataha Protected Area Management Board (TPAMB) was formed as the policy-making body for the Tubbataha reefs. It is comprised of 20 members of national and local government, academia and the private sector. Some examples of the membership include the Office of the Governor of Palawan, the Philippine Navy, the Philippine Coast Guard, the Philippine Commission on Sports and Scuba Diving, the Bureau of Fisheries and Aquatic Resources, and Palawan State University, among others. All of these members are considered important stakeholders in the future of the reefs at Tubbataha.

This body has implemented strict controls over access to the reefs. In addition, the season to visit Tubbataha is largely dictated by the monsoons and typhoons, with the general window

extending from March through June. This short season gives the marine life and the reefs time to regenerate and refresh during the off season.

Divers are among the most frequent visitors and their actions are very carefully monitored. Indeed, dive guides can be



heavily fined or even prohibited from working in the park if the divers they escort as much as touch the coral or harass any of the marine life. For divers, this is a very strict "no-touch" environment and good buoyancy skills are essential. We personally witnessed dive guides from a neighboring



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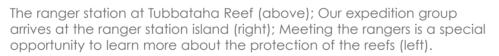
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from working in Tubbataha for a lengthy period of time.

## The ranger station

Besides the diving, one of the highlights of any trip to Tubbataha is a visit to the ranger station located on the North Atoll. A stop here gives a glimpse into what life is like for the dedicated individuals who reside here for two months at a time protecting Tubbataha, Usually, a team of between 10 to 12 men from the Philippine Navy, the Philippine Coast Guard, the Municipality of Cagayancillo and the Tubbataha Management Office is on duty, living in a relatively spartan shelter on a small spit of sand virtually unprotected from severe weather or high seas. They are equipped with radar, motor boats and other equipment and

regularly patrol the park in an attempt to thwart illegal activities.

This is an essential component of the overall management plan for Tubbataha.

Our visit coincided with a visit by Angelique Songco,

known locally as "Mama Ranger." Since 2001, she has been Tubbataha's park manager, and she works tirelessly to protect this very special place.

For visiting scuba divers, a visit to the ranger station gives grateful divers an opportunity to personally thank those who are working so hard to keep these reefs so healthy and protected.



Because of the distance from land, Tubbataha is only accessible by liveaboard dive vessels. While the diving is off-the-charts spectacular, this type of expedition is not for all divers. Indeed, the crossing from Puerto Princesa can take as long as 15 hours and can be rough. If there are typhoons in the region, it is not unusual to experience mountainous

seas and rough diving conditions. In addition, strong currents wash over the drop-offs of the atolls and can be confusingly inconsistent. Divers should be accustomed to open water diving in conditions such as these, while being aware that Tubbataha affords very little protection from the surrounding ocean in bad weather.





boat scolding a diver who came too close to the reefs and the ramifications can be severe: A dive guide whose divers touch the reefs or harass the marine life can be fined and prohibited

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## **Tubbataha**

Bubble anemone are favorite macro subjects (left); The reefs are a healthy mix of hard and soft corals (far left); Barrel sponges dominate the reefs (below); The eggs of a Spanish Dancer nudibranch (bottom center); Sabre squirrelfish often are found in cervices and under ledges (bottom left).





## Diverse reef life

Despite these caveats, diving Tubbataha is an almost ethereal experience. From the moment we peered underwater at the reefs, we were enthralled. Gardens of hard and soft corals stretched from

the shallows to the deep drop-offs. Sheer walls festooned with soft corals in rainbow colors were the domain of the big animals while clouds of anthias and butterflyfish flitted amongst the coral structures.

We watched transfixed as titan triggerfish scoured their nests in broken coral plains while Napoleon wrasse poked around looking for an easy meal. We swam by whitetip reef sharks and loggerhead sea turtles resting in plain

sight, and we even searched for tiny shrimp and gobies amongst the whip corals.

## Diving

We traveled to Tubbataha aboard the

Discovery Adventure liveaboard on an expedition organized by the Marco Vincent Dive Resort located in Puerto Galera. The daily routine was quite



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simple: wake to a very light breakfast, dive, enjoy a heartier breakfast, dive,







A funeral Jorunna nudibranch accompanies a small goby.

There are a few small wrecks in shallow water (above); The Discovery Adventure liveaboard (right)

lunch, dive, snack and then dive

For divers looking for five-star accommodations and gourmet meals, this adventure might disappoint. Nonetheless, the cabins were comfortable and clean, each with their own air conditioning units, and the food was a tasty mix of Filipino cuisine and western-style offerings. Meals were served buffet-style and this was generally a time to find divers excitedly talking about the just-completed dive and the wonders they had encountered!

All of the diving took place from zodiac-style RIBs. Teams of four to five divers would set out from the main ship to the dive sites, usually ten minutes (or less) away. On board, nitrox was available, and all the dives were preceded by a detailed dive briefing in the main cabin. We never went into the water unprepared.

#### Healthy coral reefs and marine life

In the end, our expedition was a resounding success. We counted nine different whale sharks over the course of the journey, along with encounters with manta rays and numerous schools of hunting trevally and barracuda. Tubbataha is a very

special place in the ocean world. It is a real example of how our oceans can be protected and what healthy coral reefs really look like.

For now, the protections are in place with a strong commitment

from the Philippine government. But threats remain. Some, like climate change, rising ocean temperatures and increasing acidification are beyond the ability of the rangers on-site to prevent.

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We left Tubbataha under a full moon, with flashes of lightning from a distant thunderstorm behind us. The water was calm, and our crossing was quiet and serene. Tubbataha had cast a spell on us, and we were now forever in its grasp. Aware of the threats that this special place faces, but equally confident that every effort is being made to keep Tubbataha protected, we retired for the night. Tomorrow, we would begin our trek home, but our hearts would remain here, in the Sulu Sea. ■



#### **Getting there**

The only way to dive Tubbataha is by liveaboard, and most depart from the port city of Puerta Princesa on the island of Palawan. Philippines Air Express flies domestic routes from Manila Airport.

#### Diving and accommodation

The authors dived with the Discovery Adventure liveaboard of Discovery Fleet, on a chartered expedition by Marco Vincent Dive Resort. For more information, visit: marcovincent.com

#### When to go

The dive season at Tubbataha runs from March through June only.

Michael Salvarezza and Christopher P. Weaver are underwater photographers based in New York. For more information about this and other expeditions, visit: ecophotoexplorers.com.





CLOCKWISE FROM TOP LEFT: Giant school of trevally; Barrel sponges grow to very impressive sizes; Divers return from a dive in a RIB; Philippines blenny; The smile of an oyster

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SOURCES: ATLANTISHOTEL.COM, CIA.GOV, CDC. GOV, STATE.TRAVEL.US, WIKIPEDIA.ORG, XE.COM

Text by Walt Stearns

**History** The Philippines have been inhabited for tens of thousands of years but it was not until 1543 that the country was named Las Islas Filipinas in honor of King Phillip II of Spain by the explorer Ruy Lopez de Villalobos. The islands were colonized and remained part of the Spanish empire for more than 300 years. Following the Spanish-American war in 1898, the Philippines were relinquished to the United States and in 1935 became a self-governing commonwealth. During World War II, the islands fell under Japanese control but on 4 July 1946, after the United States helped the Filipino people reclaim control, the Republic

of the Philippines was granted its independence. Numerous presidents and varying degrees of political and economic stability have followed, but the country remains independent to this day. The Philippines are a founding member of the United Nations and the World Trade Organization. Government: presidential republic. Capital: Manila

Geography The Philippines are located east of Vietnam in Southeast Asia, between the Philippine Sea and the South China Sea. The country consists of an archipelago of 7,107 islands, spread out over nearly 300,000



sq km. The terrain consists of volcanic mountains and coastal low-lands, ranging from sea level to the highest peak, Mount Apo, at 2,954m. The Philippines are situated at the northern tip of the coral triangle, the epicenter for global marine biodiversity. Coastline: 36,289km. Terrain consists primarily of mountains with coastal lowlands varying from narrow to extensive. Natural hazards include typhoons, landslides, volcanoes, earthquakes and tsunamis.

**Climate** The climate in the Philippines is tropical, and the heat and humidity is areatly influenced by the Amihan ("dry" northeast monsoon that typically blows mid-November to April) and the Habagat ("wet" southwest monsoon in May to October). The monsoons roughly create three seasons: the hot, dry summer from March to May; the rainy season from June to November; and the cool dry season from December to February. The air temperature averages 80°F (27°C) and ranges between 70-90°F (21-32°C) depending on the season and location. Water temperatures fluctuate between 78-84°F (26-29°C).

## **Environmental issues**

Challenges include air and water pollution in major urban areas,

Mindoro
Palawan
Panay
Negros
Cebu Bohol
Sulu
Sea

MALAYSIA
Celebes

Location of the Philippines on global map and

Luzon

Tubbataha Reef on map of the Philippines (below); Yellowfin surgeonfish (lower left)

Philippine

Sea

deforestation in watershed areas, soil erosion, degradation of coral reefs, and pollution of coastal mangroves, which are important breeding grounds for fish.

INDONESIA

Sea

**Economy** The Philippines boasts an emerging economy, as it transitions from agriculture to the service and manufacturing industries. Primary exports include semiconductors and electronic products, transport equipment, copper, petroleum, coconut oil, fruits and garments. Roughly 47% of the population is employed in the service industry, which accounts for 56% of the country's GDP.

**Currency** Philippine Peso

(PHP) Currency may be exchanged at the Manila airport, local banks and resorts. Credit cards are widely accepted at tourist destinations. Exchange rates: 1USD=52.13PHP; 1EUR =57.04PHP; 1GBP=64.31PHP; 1AUD=35.25PHP; 1SGD=37.73PHP

**Population** 

105,893,381 (July 2018 est), with over 12 million living in the capital city of Manila. Ethnic groups: Tagalog 28.1%, Bisaya/Binisaya 11.4%, Cebuano 9.9%. Ilocano 8.8%, Hiligaynon/ llonggo 8.4%, Bikol/ Bicol 6.8%, Waray 4% (2010 est.). Religions: Roman Catholic 80.6%, Protestant 8.2% (includes Philippine Council of Evangelical Churches 2.7%, National Council of Churches in the Philippines 1.2%, other Protestant 4.3%). Muslim 5.6%, tribal reli-

gions .2% (2010 est.). Internet users: 56,956,436, or 55.5% (July 2016 est.)

**Language** The official language is Filipino, with eight major dialects, but English is widely spoken at most resorts.

**Voltage** The voltage in the Philippines is 220/240 AC at 50 cycles and several socket types are utilized. An international multi-prong adaptor is recommended.

**Cuisine** Philippine cuisine has a mixture of influences from Hispanic, Chinese, American and other Asian cultures. The food tends to have

full-bodied flavors but is not as spicy as that of neighboring countries. Rice, fish, coconut, mangoes and plantains are staple ingredients. Filipinos do not eat with chopsticks but prefer western cutlery or the traditional method of eating with a just-washed right hand.

**Transportation** The gateway into the Philippines is through Ninoy Aquino International Airport (MNL) in Manila. Most international flights into Manila arrive between 9:00 pm and 3:00 am. As part of their services.

**Travel/Visa** A valid passport with at least six months left before its expiration date along return ticket is required for the entry into the Philippines. US and European nationals automatically receive a 21-day tourist visas on arrival. Guests staying longer, or those with passports of another nationality, will need to either contact the resort or see: immigration.gov.ph.

Health & Security Mosquitoborne illnesses are a problem, and there are cases of malaria, dengue and Zika. Avoid mosquito bites by using mosquito repellent and covering up during times when mosquitos are out. Water and food-borne illnesses can also be a problem, so be sure to drink only bottled or filtered water, and only eat food that is cooked thoroughly. Check with your state department for current travel advisories before your trip.

### **Decompression chambers**

Chambers can be found on various islands across the country, in cities such as Manila, Cebu, Batangas City, Cavite, Makati City, Quezon City and Subic.

## Websites

Philippines Tourism experiencephilippines.org

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