

Cuba

Gardens of the Queen

Text and photos by Matthew Meier





Longspine squirrelfish hiding inside a purple tube sponge

RIGHT: Strolling on one of Cuba's picturesque beaches.

PREVIOUS PAGE: Aggregation of blue tangs and doctorfish feeding on the coral reef, Gardens of the Queen, Cuba



As the wheels touched down at Havana's International airport, the plane erupted with cheers and applause. Many of the passengers on board had waited years, if not decades, to return home and visit relatives in Cuba. As part of a small group of Americans visiting for the first time, I knew immediately that we were in for a special treat. Traveling on permits from the U.S. Department of Treasury, we were embarking on a People to People Educational Exchange program, focused on ocean conservation, research and ecotourism—the first of its kind to allow U.S. citizens to legally travel and scuba dive in Cuba.

Our adventure began in Havana with three days of sightseeing, meetings and educational field trips learning about Cuba's history and culture. Afterwards, we spent six days on a liveaboard dive boat at the Gardens of the Queen (also known as Jardines de la Reina) exploring the uninhabited archipelago of small islands 50 miles south of Cuba's main island in the Caribbean Sea.

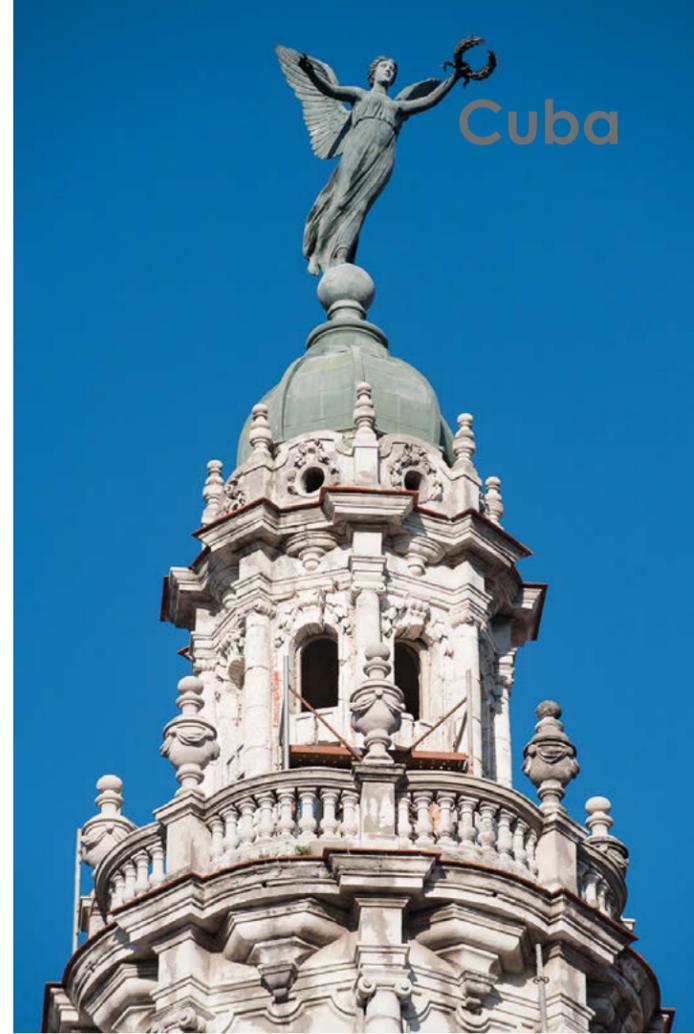
As we walked the streets of Havana, it felt like I had stepped back in time. Classic American cars from the 1950s and early 60's were a constant reminder of a bygone era. Men gathered under large shade trees in city squares

to discuss sports on a lazy afternoon and locals assembled around games of checkers and dominos on marble park benches or an apartment stoop. The newsstand still had *Life* magazine for



American crocodile floating on the surface with its mouth open

A pair of Caribbean reef sharks swimming over the colorful coral reef, Gardens of the Queen



Baroque facade of the Gran Teatro (left), one of the world's largest opera houses; A 1938 Chevy drives down the street in Havana (top)

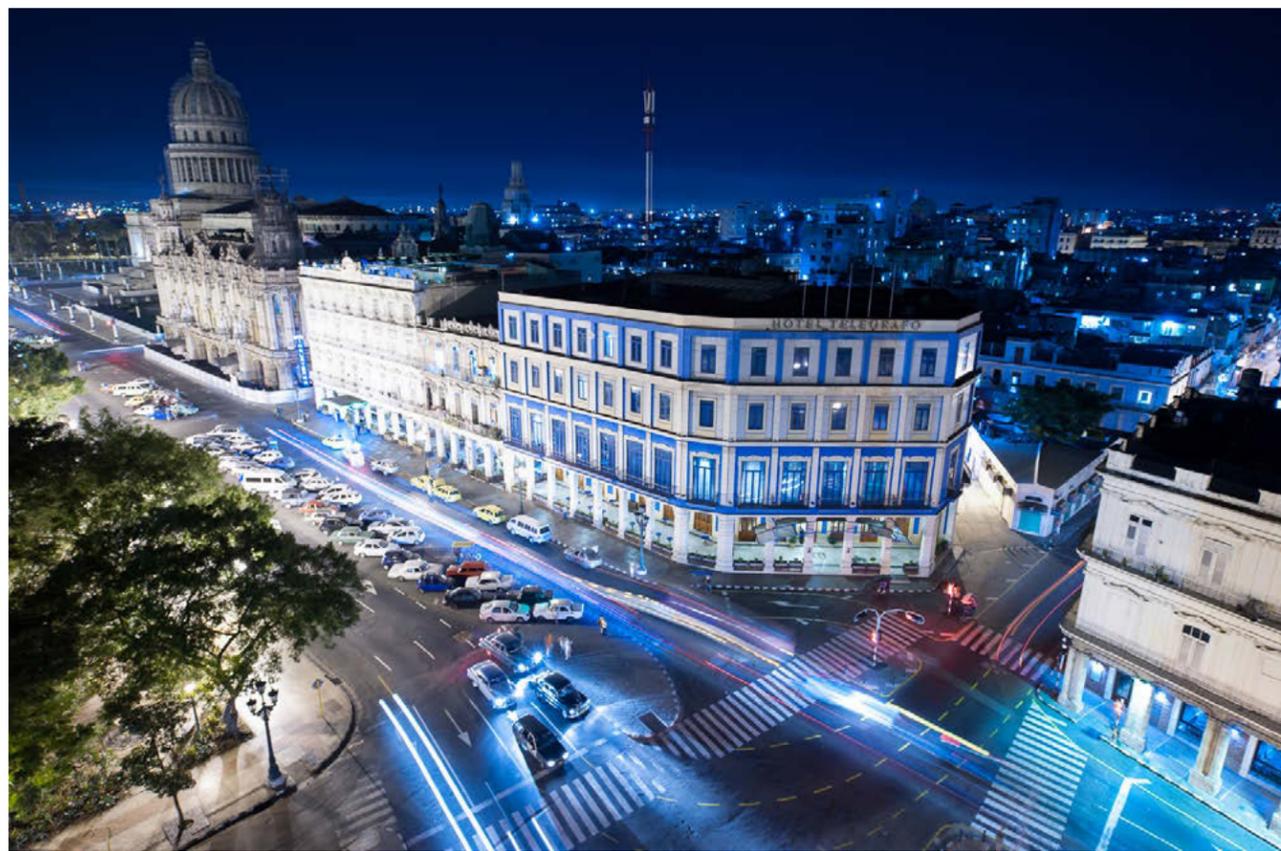
Street vendor's books on display along Calle Obispo (left); Erected in 1995, the seven story mural of Che Guevara adorns the Ministry of the Interior building just off Revolution Plaza (above); Detail of spire on Gran Teatro (right); Chicken fajitas with plantain garnish at Ivan's Restaurant, a private home converted into a local eatery (bottom left)

sale on the bookshelves, and all around the city, building facades were carved in intricate detail. This was life as perhaps my parents remembered it, long before I complicated matters.

Mixed in with the nostalgia were reminders that Cuba is still a socialist country, struggling with their proud revolutionary history and capitalistic desires for a better life. Images of Fidel Castro and Che Guevara dot the landscape and armed soldiers stand constant guard at the Revolutionary Museum. Meanwhile, subtle signage on side

streets, advertise businesses, such as hair salons and restaurants, inside private homes. These slowly opening doors to private capitalism are part of the small reforms put in place by Fidel's brother Raul since he was handed power in 2008.

Havana has a pulse to it that is mesmerizing. I am certain that part of the allure was simply being in a place that we had been told our entire lives was forbidden. However, from the live music coming out of doorways and the Cuban jazz on rooftop bars, to the hustle and bustle of the locals going about their



Night scene of Central Park, the Capitol, Gran Teatro, Hotel Inglaterra and Hotel Telegrafo



daily lives, there is an energy you can feel. There is also a dichotomy that comes from seeing modern art deco structures next to baroque, intricately carved building facades that are hundreds of years old. Add in fortresses with working cannons, Cuban cigars, rum, exceptional food and friendly people, and you have a fantastic melting pot of experiences.

An American and Cuban cultural icon, Ernest Hemingway, lived in Cuba from 1940 to 1960 and is still widely revered. His former home, Finca La Vigia, is now a museum, maintained

as it was left upon his departure. His books



remain required reading for Cuban school children. Novels *For Whom the Bell Tolls* and *The Old Man and the Sea* were written while living in Cuba, the latter earning him a Nobel Prize for Literature in 1954. Hemingway dedicated the award to the citizens of the fishing village of Cojimar, the setting for the story. We toured the village and it

was fascinating to see his inspiration in person and realize that the old man was likely based on a real fisherman and drinking buddy of Hemingway's.

Cuba and Havana are still struggling to rebuild from the economic downturn encountered when the Soviet Union collapsed

es, as the infrastructure was ignored and left to decay in the tropical heat.

Fortunately, signs of rebirth and restoration were prominent during our visit. Scaffolding, providing face-lifts, surrounded many of the iconic buildings in old Havana. Cobblestone streets were torn up for new plumbing lines, and large cranes could be seen from the roof of our hotel. With over 3,000 structures in Old Havana of historical

in the early 1990s. Years of electrical blackouts and limited fuel to run machinery or automobiles brought about food shortages and desperate times for a people accustomed to state provided nourishment and health care. Tractors gave way to ox and plows, and cars were replaced with horse-drawn carriage-



1956 Chevy parked at Hemingway Museum



CLOCKWISE FROM ABOVE: A man rolls Cuban cigars at Ron's Tabaco Cafe, Fortaleza de San Carlos de la Cabana; Built in 1646, this fort sits in Cojimar, the town that inspired Ernest Hemingway's *The Old Man and the Sea*; A 1956 Ford Fairlane driving down the Paseo de Marti; Living room inside the house at the Hemingway Museum, Finca La Vigia, San Francisco de Paula; Farmer on horse-drawn cart brings fresh milk to a local restaurant on the road from Havana to Jucaro





University of Havana research vessel, *Felipe Poey*, anchored off the Gardens of the Queen while on a three-week research trip; Cuban flag (inset) flutters in the wind, while in the background the sun rises over a tropical island in the Gardens of the Queen; Housing (right) built into the hillside in the sustainable community of Las Terrazas



significance—the majority of which date back to the 19th, 18th and even the 16th and 17th centuries—resurrecting them all will be no easy task.

Marine research and educational exchange

While in Havana, we met with a scientist from the University of Havana's Center for Marine Research. Founded in 1970, the center is responsible for training all marine biologists in Cuba. The scientist showed us an impactful ten-part public service announcement campaign created by the center, which highlighted the connection Cubans have with sharks, turtles, eagle rays, marine pollution, etc., in their surrounding ocean. We had discussions regarding some of their ongoing conservation research, including work with sharks, sea turtles and a five-year study on manatees.

As part of the manatee study, researchers were able to verify evidence of a manatee traveling from Florida to

Cuba through photographs and also create a tagging and tracking program to study the local population's migration patterns. Additionally, they found that none of the manatees that were documented had propeller scarring on their backs like their Florida counterparts, perhaps in part due to the limited number of boats allowed to operate off Cuba's coast.

The lack of available watercraft also serves as a hindrance for student research. The University has but one boat and limited funding for sending scientists out to sea. We were able to tour that lone research vessel and talk with some of the researchers on board while out at the Gardens of the Queen. The boat, named after famed Cuban scientist Felipe Poey accommodates 17 passengers and three crew members. There is one shared head on board, and everyone sleeps in lawn chairs on the deck.

As part of the permit that allowed us access to Cuba, these people-to-people

educational exchanges were required but also very enlightening. We learned that conservation and the environment are viewed in a very positive light in Cuba.

The government requires environmental permits for all businesses; they are reviewed annually and may also be revoked. Science directs politics in establishing policy and also aids in the creation of a National Environmental Strategy, which is improved upon every five years, based on analysis of the success and failure of the previous plan. Each new design focuses on reforestation, the reduction of pollution both on land and in the sea, and the protection of biodiversity.

Several of the scientists we spoke with also emphasized the importance of collaboration between the U.S. and Cuba on environmental issues. One even went so far as to declare the environment as a national security issue—especially with regards to marine pollution and species

preservation, as we all share the same ocean.

In order to see some of this environmental conservation in action, we spent a day at Las Terrazas, a sustainable development community and ecotourism settlement situated roughly an hour west of Havana. Las Terrazas is part of the Sierra del Rosario, a nearly 100-square-mile expanse of pristine Cuban wilderness, which has been recognized as a UNESCO world biosphere reserve.

Started in 1967 as a government reforestation project—following years of land clearing for a coffee plantation, and later, charcoal—the roughly 1,200 residents have replanted over eight million trees, encompassing 24 different species. The surrounding hillsides are lush with vegetation once again, and the villagers utilize conservation-minded sustainable practices to ensure they stay that way. Our guide led us on a tour of the grounds where we visited a primary and secondary school, community center,



Peacock on the grounds at Las Terrazas

library, movie theater, restaurants, a hotel and Cuba's only zip line facility. Local musicians entertained us during lunch, as peacocks and chickens wandered around the grounds. Afterwards, we called on a resident artist's studio to see world-class eco-conscious paintings and handicrafts depicting climate change.





Colonies of red mangroves (left) grow in the shallow water between islands; Cuban hutia (above) climbing in the bushes at the edge of a sandy beach, also known as tree rats; Late afternoon cloud formations (right), indicating a pending rain storm, gather over a tropical island in the Gardens of the Queen



Field of sugar cane in the Cuban countryside along the route from Havana to Jucaro; Children play volleyball (right) on a cement playground at a local school in the fishing village of Jucaro; Cuban iguana's resting on a sandy beach (far right)

The Gardens of the Queen

Our journey from Havana to the Gardens of the Queen began at 4:30 in the morning with a five-hour bus ride through the countryside. Along the way we passed mountains, farms, small towns and miles upon miles of sugar cane, which is used to make Cuban rum. In the

Gardens of the Queen. The transit provided time to get settled into our rooms, assemble dive gear and camera housings and perhaps grab a short nap to make up for the early wake up call.

The Gardens of the Queen National Park was established as a marine protected area (MPA) in 1996. Consisting of over 250 coral and mangrove islands stretching across 75 miles of the Caribbean Sea, the park has a total area of over 830 square miles. Catch and release sport fishing is



allowed within the 386-square-mile fishery reserve but otherwise, with the exception of lobsters, the area is a complete no take zone. Additionally, visitation is limited to a mere 1,500 combined fishermen and divers per year. Birds, iguanas, hermit crabs

and hutia occupy the islands, the latter being a medium sized rodent that nests in trees and is affectionately called a tree rat. The park is part of the Cuban National System of Protected Areas and is managed as an area of special care for special use.

Diving

The next day, as I gently slid into the water, I thought of all the technology necessary to allow us humans to survive in the underwater world and how truly out-of-our-element we are beneath the surface. I then warily scanned the sur-





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rounding sea grass for a prehistoric creature that has been living in harmony with water since the days of dinosaurs. The trepidation and excitement of being up close to an American crocodile was palpable. It is not every day that you come face to face with a living fossil.

As I cautiously made my first approach, the crocodile glanced in my direction and then lazily shut its eyes, as if already bored with our meeting. As I drew closer, the eyes opened once again, and it allowed me a few tight portraits before slowly rising to the surface for a breath of air and a scan of its surroundings. Thankfully, I had a few more opportunities to photograph the crocodiles, and those interactions were one of the highlights of my trip, but they were only the first of many big animal encounters while in Cuba.

We were fortunate to have Caribbean reef sharks swimming with us on nearly every dive. Rarely have I been in the water with sharks that did not turn and swim in the other direction in reaction to divers, but here, they ignored us and continued on their path. The same could be said for the large number of groupers found on the reefs. I saw several variations of black grouper, along with tiger



grouper and the endangered Nassau grouper, and for the most part, they were also indifferent to divers. In addition to the reef sharks, we had a couple dives where we hung in blue water beneath the boat as a dozen or more silky sharks

swam circles around us. The sharks were attracted to the scent of a single fish placed in a steel box hung beneath the boat, and they stayed with us for over an hour providing terrific photo opportunities and exciting interactions.



CLOCKWISE FROM TOP LEFT: American crocodile resting on the sandy bottom amongst the sea grass; A dozen or more silky sharks swimming below the dive boat; Black grouper with dark, marbled patterning; Silky shark swimming in the blue water near the water's surface

Healthy reefs

The coral reefs in the Gardens of the Queen were the healthiest I have ever seen in the Caribbean. Everywhere you looked the corals, sea fans and sponges were incredibly robust, in great variety

and thriving with fish life. Larger species such as tarpon, barracuda and snapper were a common sight and accompanied the many schools of grunts, tangs and creole wrasse on the reef.

The icing on the cake for me was at



The sun is visible above this colorful coral reef, which is covered with sea rods, sea fans, sponges and hard corals

a dive site called Paradise Reef where we found huge colonies of beautiful elkhorn coral. These mainly shallow water corals are threatened and endangered throughout their range, and in some areas, their abundance has declined by 95 percent.

The Gardens of the Queen was Cuba's first MPA, and its creation required the establishment of fishing licenses and an enforcement office, as well as the creation of jobs and retraining for the displaced fishermen. Many of those fishermen are now employed as sport fishing guides, boat drivers and dive guides within the MPA. The area has been highly successful, as the ecosystem is abounding with healthy corals, large quantities of fish and marine life and abundant apex predators such as sharks

and grouper. The evolution took time, yet the fishermen who are still fishing outside the reserve are realizing the benefits of an increased fish catch from the spillover effect, and the former fishermen are receiving comparatively higher wages by working in the tourism industry.

The success can be partially attributed to the parks location 50 miles offshore, the lack of commercial fishing, limited access and impact and effective enforcement. The Gardens now serve as an example for Cuba and abroad, touting the benefits of conservation and MPA's. Subsequently, the Cuban government has been creating more marine protected areas, with the ultimate goal of safeguarding 25 percent of their waters—the most of any country in



Nassau grouper swimming amongst several large sea fans on the coral reef; Diver and large pillar coral (right)



the world. To that end, efforts are currently underway to expand the fishery reserve and protect the remainder of the Gardens of the Queen as a no take zone.

Tidal flow

Diving conditions and visibility at the Gardens of the Queen are dependent on tidal flow. The direction the tide is taking the sediment from the mangroves determines which dive sites are best for that time of day. While we were there, we typically had better visibility on our two morning dives and deteriorating visibility in the afternoons. We were also there at the end of the rainy season, which meant late afternoon thunderstorms but made for incredible sunsets. There was the possibility of seeing whale sharks on our trip, as they are found in

Phoenix DIVE SHOW

September 21 & 22, 2013
(Saturday & Sunday)
PhoenixDiveShow.com

St. Louis DIVE SHOW

October 5 & 6, 2013
(Saturday & Sunday)
StLouisDiveShow.com

Carolina DIVE SHOW

October 11 & 12, 2013
(Friday & Saturday)
CarolinaDiveShow.com

Baltimore/D.C. DIVE SHOW

January 25 & 26, 2014
(Saturday & Sunday)
BaltimoreDiveShow.com

TEXAS DIVE SHOW

February 22 & 23, 2014
(Saturday & Sunday)
TexasDiveShow.com

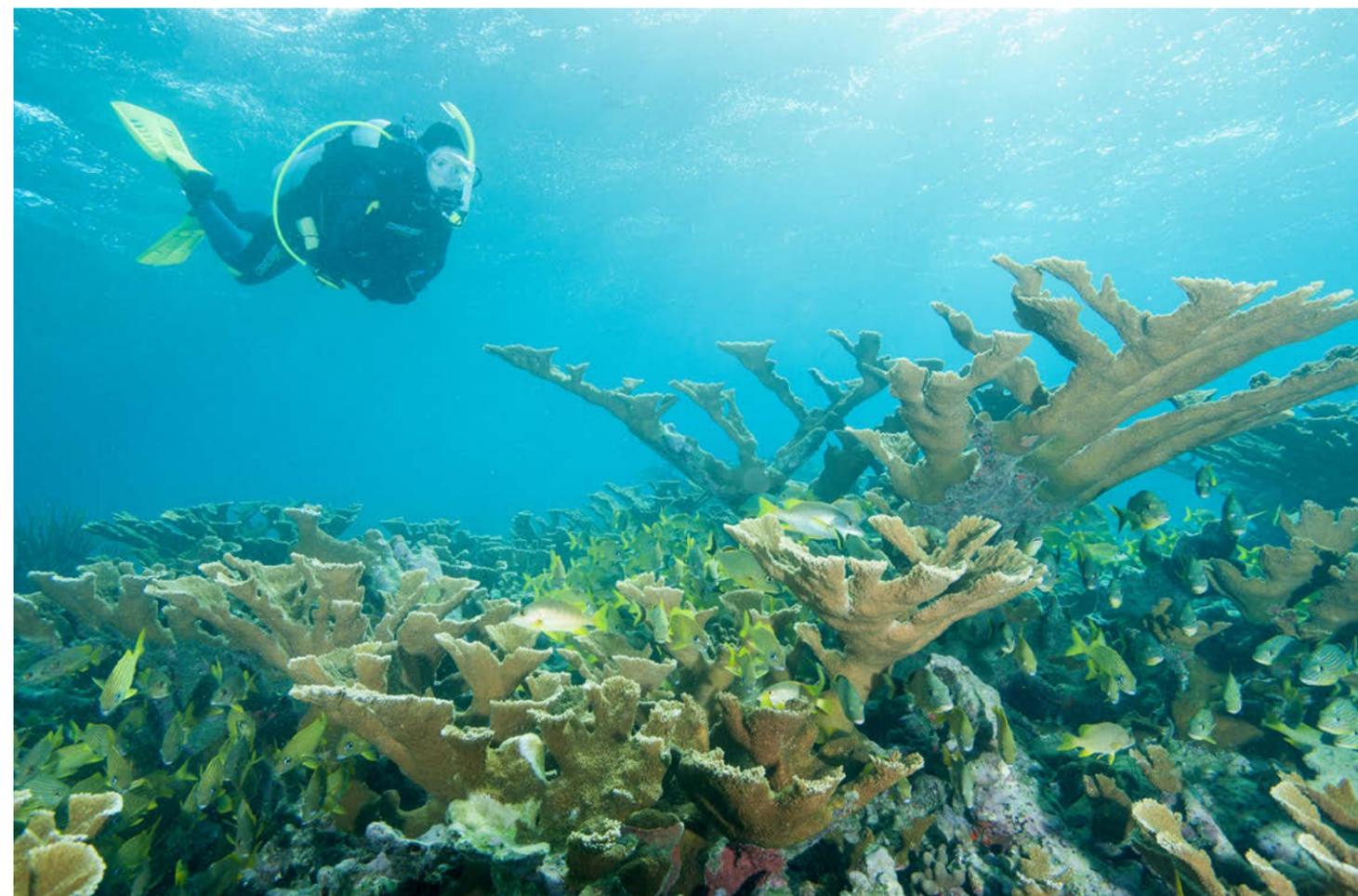


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CLOCKWISE FROM FAR LEFT: Diver and aggregation of French grunts, bluestriped grunts and porkfish; Schoolmaster hiding amongst the roots of mangroves; Diver and colony of elkhorn coral in shallow waters; Southern stingray foraging in sea grass on the sandy bottom



the area around the full moon in October and November but unfortunately we struck out.

Diverse ecosystems

On a few of our surface intervals we had the chance to snorkel amid the mangroves and surrounding sea grass. I found several species of corals and anemones that I had not seen on the outside reef, along with upside down jellyfish, sea stars, sting rays and plenty of juvenile fish seeking protection in the mangroves root structure. At one point, I was staring face to face with a three-inch barracuda, quietly cursing the fact that I did not have a macro lens on the camera.

While the mangroves serve as a nursery for many species of fish, the deserted beaches of these remote islands serve as critical nesting sites for hawksbill sea turtles. Thankfully,



Cuba no longer harvests turtles as a commercial entity and stopped trying to export hawksbill turtle products in 2008. We saw a few turtles on our dives, and hopefully, that means

their population is doing well.

As if the crocodiles, sharks and beautiful reefs were not enough, the Gardens of the Queen also harbors a healthy population of critically



endangered Atlantic goliath grouper. These fish can grow to a length of eight feet and are considered mature at a weight of 400 to 800 pounds. We were treated to a couple of fish in the 400-pound range, along with a smaller youngster that was still intimidating in size.

These impressive fish are very inquisitive and circled us throughout the dive. On several occasions, the larger grouper produced a guttural booming sound to warn the smaller one when it had apparently got out of line. The explo-



sion of force could be felt in the water column, and the concussion sent up a cloud of sand from the grouper's gills.

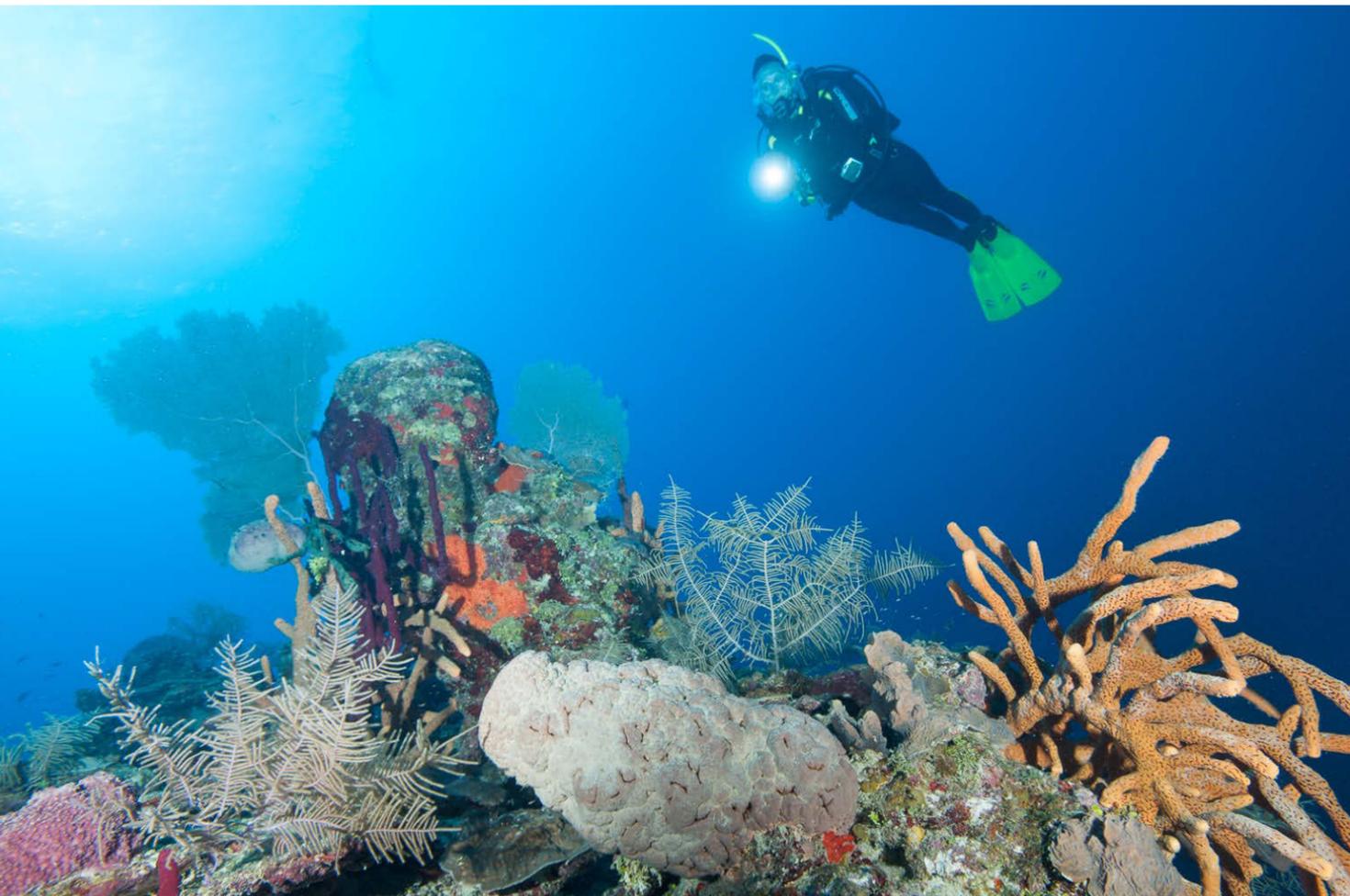
Marine biologists from the University of Havana, along

with scientists from abroad, are studying the Gardens of the Queen in hopes of determining why this ecosystem has remained so healthy while other areas around the world have



Cuba

Goliath grouper swimming above a large purple barrel sponge on coral reef; Red cushion sea star (right) in shallow bed of sea grass



Diver at deep water pinnacle of sponges, sea fans and encrusting corals; Large colony of elkhorn coral (top)

suffered the effects of global warming. With luck the discoveries made here will help restore other areas to the pristine conditions we experienced on this amazing trip.

Afterthoughts

Watching U.S. President Obama shake hands with Raul Castro at the memorial for Nelson Mandela, I am hopeful that the economic embargo will one day be lifted and all Americans may once again travel to Cuba. Until such time, I feel truly fortunate to have experienced Cuba, the city of Havana and the fantastic diving at the Gardens of the Queen.

If you are a U.S. citizen and would like to dive Cuba for yourself, please contact Ocean Doctor (Oceandoctor.org/gardens/)—the only organization with permits

to take Americans to dive the Gardens of the Queen. If you are not a U.S. citizen, please contact the Avalon Cuban Diving Centers (Cubandivingcenters.com), as they are the sole dive operator at the Gardens of the Queen.

The author would very much like to thank Ocean Doctor and Avalon for their incredible hospitality and memories that will last a lifetime, as well as Blue Abyss Photo (www.blueabyssphoto.com) and Scubapro (www.scubapro.com) for their assistance with underwater photo and dive gear.

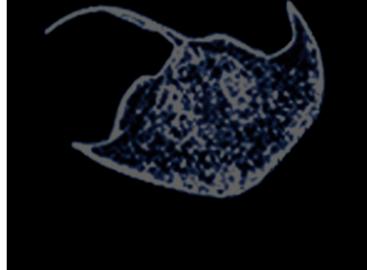
Matthew Meier is a professional underwater photographer and travel writer based in San Diego, California. To see more of his work and to order photo prints, please visit: www.matthewmeierphoto.com



SOURCES:
OCEANDOCTOR.ORG/GARDENS
CUBANDIVINGCENTERS.COM
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 EYEWITNESS TRAVEL CUBA
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fact file



Cuba



SOURCES: U.S. CIA WORLD FACTBOOK, XE.COM

History Cuba was home to native Amerindians before Christopher Columbus discovered it in 1492. When Columbus sailed into the Gardens of the Queen he named it for Queen Isabel. As Cuba developed as a Spanish Colony over the next several centuries the native population declined. During that time, large numbers of African slaves were brought over to work the sugar and coffee plantations. Cubans overthrew Spanish Rule following the Spanish-American War of 1898 and the Treaty of Paris established Cuban independence from the United States in 1902. Several governments ensued before Fidel Castro led a rebel army and took control in 1959. He ruled his socialist regime for nearly five decades before stepping down as president in February 2008 and handing the country over to his younger brother Raul. Government: Communist state. Capital: Havana

Geography Cuba is the largest island in the Caribbean and is located 90 miles (150km) south of Key West, Florida. The island has a total area of 42,802 square miles (110,860 square km), with 2320 miles (3735km) of coastline. Los Jardines de la Reina, or the "Gardens of the Queen", covers more than 837 square miles (2168 square km) and is one of the largest

marine parks in the Caribbean. It is situated 50 miles (80km) south of mainland Cuba and is comprised of islands, reefs and mangroves. Coastline: 3,735km. Lowest point: Caribbean Sea 0m. Highest point: Pico Turquino 2,005m

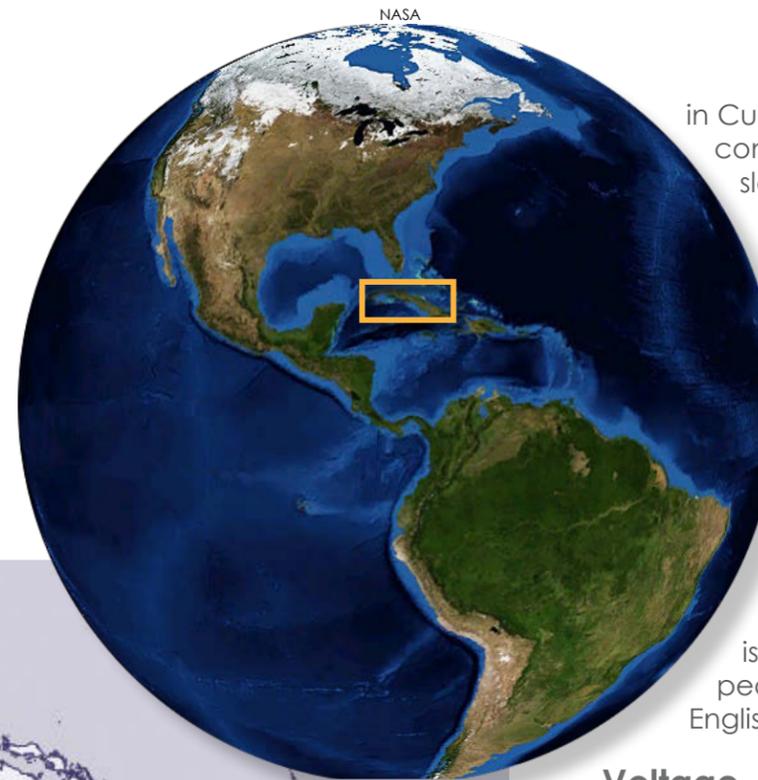
Climate Air temperature can range from 75-80°F (24-27°C) during November to April and 85-90°F (29-32°C) during June to August with nighttime temperature dropping by roughly ten degrees. Afternoon thunderstorms are common during the rainy season, which is from May to October. Water temperature can range from 75-85°F (24-29°C) and a 3mm wetsuit is recommended for diving.

Economy Cuba has a socialist economic system but is slowly introducing limited reforms and expanding opportunities for self-employment. These measures are meant to increase enterprise efficiency and alleviate serious shortages of food, consumer goods, services and housing. The economic downturn in the 1990's, caused by the loss of Soviet aid

and domestic inefficiencies, is still affecting the average Cuban's standard of living.

Currency The official currency is the Cuban Convertible Pesos (CUC), which in slang is pronounced *kook*. One U.S. Dollar is currently equal to one CUC, however when exchanging dollars to CUC, you will only receive .87 CUC back in return due to fees/taxes. Those fees are not imposed on Euros, and therefore, there is a much better exchange rate for Euros when compared to the U.S. Dollar. U.S. based credit and debit cards will not work in Cuba due to the U.S. Embargo, and so travellers must carry enough cash to support themselves while there. Exchange rates: 1EUR=1.37CUC,

RIGHT: Global map with location of Cuba
BELOW: Location of the Queen marine protected park on map of Cuba



in Cuba, but it is tightly controlled, painfully slow and expensive. While at the Gardens of the Queen, Internet access is only available on the Tortuga Floating Hotel.

Language The official language of Cuba is Spanish. Though in tourist areas many people also speak English.

Voltage 110 volts, with U.S. standard 2- and 3-prong plugs are available on the liveaboard dive boats. UK/European two rounded plug sockets (220V) are available at the hotels in Havana. Adaptors are typically available at the higher end establishments.

Cuisine Cuban cuisine is simple and has a mixture of indigenous and European influences, mainly Spanish. Rice and black beans is a staple, along with fried plantains, which is served with pork or chicken. Beef and seafood is available at tourist restaurants but is not common for locals. Empanadas filled with meat are often served as snacks or appetizers. The menu on the liveaboard boat includes a variety of local dishes, fresh fruits and vegetables and American style breakfasts. Fresh fish and local lobster are also readily available.

Tipping A 10-15% tip is customary for shuttle drivers, dive guides and boat crewmembers, as well as wait staff in restaurants.

Health There is an intermediate degree of risk of food or water-borne diseases such as bacterial

diarrhea and hepatitis, as well as vectorborne diseases such as dengue fever (2013).

Driving Vehicles travel on the right side of the road. An International driver's license is accepted for renting a car and you may also be able to use your home county's. The roads are generally paved and in good condition, though not necessarily well marked.

Decompression chamber The nearest hyperbaric chamber is located at Guantanamo Bay Naval Station. There are no chamber facilities in the Gardens of the Queen.

DAN Insurance Coverage Here's what DAN says: "Due to the embargo the US imposed on Cuba, we would not be able to pay/settle any claims for accidents while actually in Cuba. However, we would be able to evacuate a member from Cuba and transport them to a medical facility in which we would be able to pay claims as stipulated by the policy. If you have specific in depth questions, please feel free to contact our claims department. You may reach them at 1-800-292-8381."

Travel/Visa A passport is required for entry into Cuba. U.S. Citizens may not enter Cuba legally without special permits and permissions. Ocean Doctor's license issued by the U.S. Treasury Department provides legal travel for U.S. citizens and residents only while participating in their person-to-person educational trips.

Websites
Cuba Toursim - Canada
www.gocuba.ca
Cuba Toursim - UK
www.travel2cuba.co.uk

Cuba *Photojournal*

Text by Larry Cohen

Photos by Larry Cohen and Olga Torrey





LARRY COHEN



LARRY COHEN



OLGA TORREY



OLGA TORREY



OLGA TORREY

The Cuban government is environmentally minded. In 1996, the 837-square-mile marine area and archipelago of Gardens of the Queen located south of the main island of Cuba became a no-take reserve—the largest in the Caribbean—and in 2010 was designated a national park.

Christopher Columbus named this island chain in honor of Queen Isabel of Spain. The Cousteau crew visited here in 1985. It is also rumored that both Castro and Che fished and might even have dove these islands.

THIS PAGE: Caribbean reef sharks (top right); Diver inspects hard corals that decorate the walls (top left); Trumpetfish on reef (lower far left); Squirrelfish, French grunt and anemones on reef (center left); Christmas tree worms can be spotted on the healthy reefs (above)

PREVIOUS PAGE: Diver photographing sharks on the reef



LARRY COHEN



Cuba

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OLGA TORREY

The reefs of the park host an exceptionally healthy marine ecosystem. When visiting the dive sites you will witness lush coral forest with abundant fish populations. Many of the dive sites are walls that bottom-out at around 60 to 100-feet (18 to 30m). There are many swim-throughs and overhangs to explore. Finding large tarpon and nurse sharks in these enclosed areas is common.

Along the walls the intrusive visitor from the Pacific, lionfish are spotted in large numbers. By keeping a watchful eye in the sand, large southern stingrays can be found. Taking a closer look at the fauna, tiny feather duster and bristle worms can be spotted on the hard corals. Among the sea fans and sponges a variety of crabs and snails can be observed. Queen conch and other mollusk can be found in large numbers.

THIS PAGE: Cuban reefs are rich with soft corals and sponges (top left); School of porkfish (above); Bristle worms crawl over the hard corals (left); Diver observing a lion fish on the wall (far left)



LARRY COHEN



LARRY COHEN



OLGA TORREY

Black grouper, Cubera snapper, mahi-mahi and tarpon are just a few of the reef residents that could be studied in open water. It is estimated there are 200 species of fish. This is due to the lack of human development and the fact that the area is protected. The area's terrain includes islands, reefs and mangroves, which provide habitat allowing marine life to thrive. All of this biodiversity brings in the big boys at the top of the food chain.

THIS PAGE: The walls are covered with soft corals and anemones (far left); Diver and Caribbean reef sharks (above); Cup coral (left)



OLGA TORREY

One of the most fascinating animals to observe was the American crocodile. The American crocodile is one of the few species along with saltwater crocodile that lives in saltwater. One nicknamed Franco was a regular visitor at Tortuga. This crocodile was about 20 feet (6.1m) long.

In the mangroves, it is possible to get in the water with a few young, small crocodiles. They were around six feet (1.8m) long but had plenty of sharp teeth. Most of their diet consists of fish, reptiles, birds and small mammals. They are not normally aggressive. This was a comforting thought, as we slid into the brackish water with our cameras and snorkels.



OLGA TORREY

THIS PAGE: Crab and French grunt on reef (above); American crocodile lunges in (top left); American crocodiles live in the Cuban mangroves (right)



OLGA TORREY

Barrel sponge on reef

Cuba

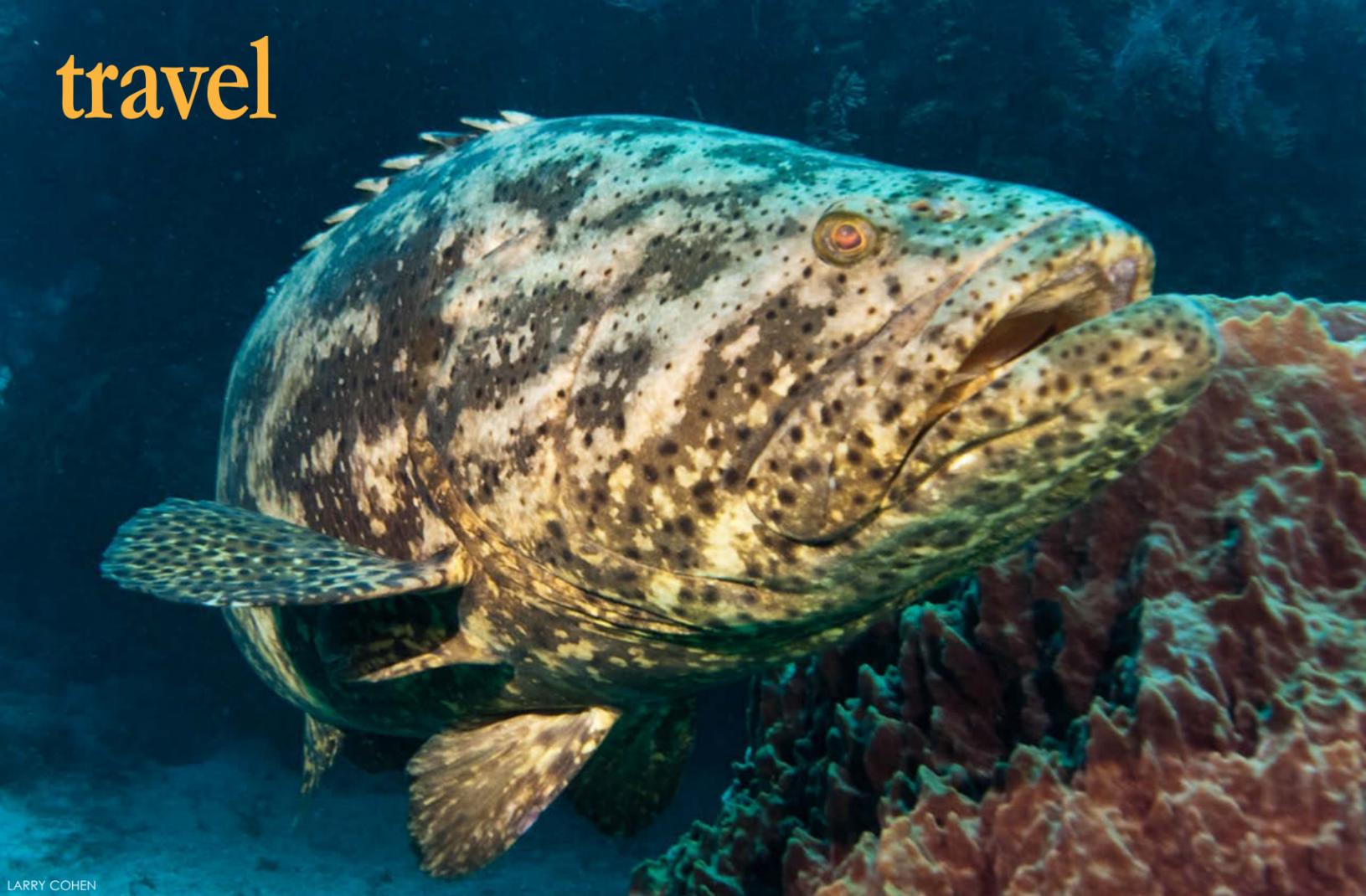
We were in only about 3.3 feet (1m) of water. The crocs were actually shy. They would stand on the bottom with their heads at the surface. Only a small profile of the top of their head and eyes was above the waterline.

It took some thrashing about in the water with our hands to get their attention. Once we did, they would come in quickly with mouths open. They seemed to be interested in their own reflections in our domes. We made sure we wore gloves and kept our hands on our housings' handles behind the domes. Documenting the American crocodile was addicting. Since no gas supply was needed, we spent hours in the water with this intriguing animal.



LARRY COHEN

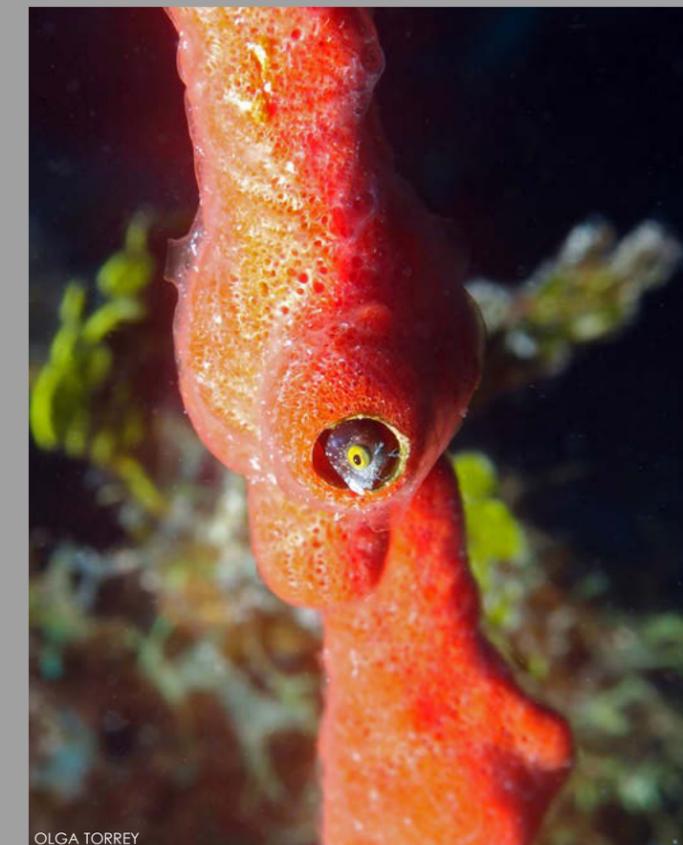




LARRY COHEN



OLGA TORREY



OLGA TORREY



OLGA TORREY

The critically endangered Nassau and goliath grouper are found in large numbers. Many of these fish are the size of a small car. The area also harbors an abundant population of sharks, including Caribbean reef and silky sharks. Some of them are as large as nine feet (2.7m). A metal box filled with fish is taken onto the dive sites. The idea is to get the

sharks in close for study and photographs. The goliath groupers and other marine life also get interested in the metal box. The reef becomes a hub of activity. Sharks, groupers and other fish buzz around the coral in every direction. At the end of the dive, the metal box is opened. The fastest creature takes the prize. The sharks don't always win.

THIS PAGE: Atlantic goliath grouper (top left and above) with Caribbean reef shark; Moray eel (left); Tiny gobies can be spotted by the trained eye (far lower left)



OLGA TORREY



LARRY COHEN



Cuba

LARRY COHEN

CLOCKWISE FROM LEFT: Beautiful secluded beaches; Street musicians liven up the streets; Relaxing with good Cuban cigars; Couple at the Paseo del Prado promenade; Picturesque small village; Jutia and Cuban iguana can be found on the beaches of the marine park



OLGA TORREY



LARRY COHEN



OLGA TORREY



LARRY COHEN

Not all the action takes place underwater. Cuban iguanas and jutia roam the beaches side by side. Jutias are rodents that are about eight to 18 inches (21 to 46cm) long.

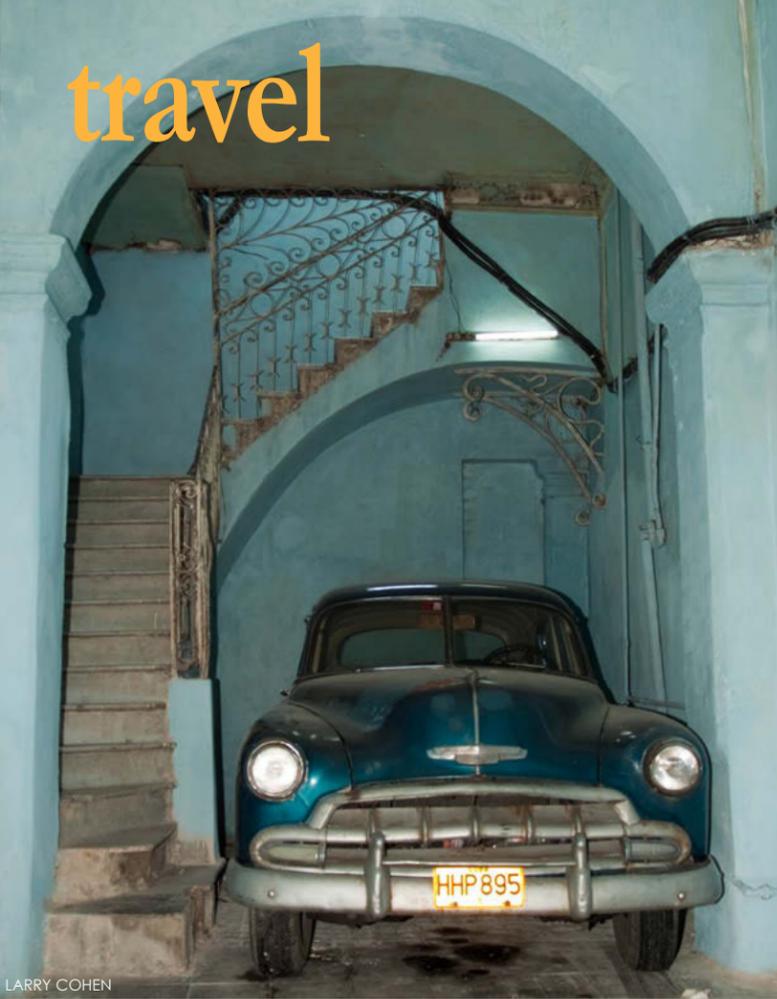
they are safe and have no fear of humans.

The Cuban iguana has an average length of 16 inches (40cm). Their diet consists of leaves, flowers and fruits.

Young iguanas eat insects and shift to vegetation as they age.

Rural towns and urban life
Cuba has many picturesque small villages and farmlands along the country's routes. Music and performance is an important part of Cuban culture. The city streets are filled with musicians and performers.





LARRY COHEN



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American cars in front of National Capital building



OLGA TORREY

José Martí Memorial on Revolution Square



LARRY COHEN



OLGA TORREY



LARRY COHEN

Percussionist Oscar Valdes and his band Diskara perform at the Jazz Café



LARRY COHEN

Wandering the streets of Havana is like entering a time machine. The most noticeable sight is the abundance of American cars from the 1950s. Since the 1962 embargo, new American cars cannot be sold in Cuba. All the American cars in Cuba were acquired and registered before the embargo. Cuban ingenuity adapting household products and Soviet replacement diesel engines keep these vehicles on the road. Known as Yank tanks, or máquina, many of these classic cars are now taxis.

Much of the architecture in Old Havana imitates styles from Madrid, Paris, Vienna and other parts of

Europe. Many of these proud buildings are deteriorating due to the lack of money for maintenance. When walking down the promenade Paseo del Prado, the crumbling structures sitting next to recent renovated buildings can be observed.

Crime rates in Havana are lower than most major cities. This is because the National Revolutionary Police Force acts strongly against any crime. Homes are wide open without locks. As you walk the streets, it is impossible not to peek inside and get a glimpse of these people's lives, and it is common for locals to come up and say hello. ■



Diving New Georgia **Solomon Islands**

Text and photos by Don Silcock



Aerial view of Marovo Lagoon barrier reef; Long-fin bannerfish, Uepi Jetty (right inset)

Like a series of random punctuation marks, the many islands of the Solomons archipelago lay along the southern section of the Pacific Ring of Fire, in between the countries of Papua New Guinea to the north, and Vanuatu to the south.

An independent country since 1976, the Solomon Islands are a quite special blend of Pacific Island Melanesian culture and phenomenal tectonic forces, which have created a chain of mountainous islands that are rich in native rainforest, spectacular volcanoes and incredible lagoons. Underwater, there are rich reef systems and an amazing variety of marine life together with one of the highest concentrations of WWII wrecks in the Pacific.

Somewhat off the beaten track and to a degree tainted by the civil disorder that convulsed the country from 1998 to 2004, the Solomon Islands have long since stabilized and are open for business again, offering a most rewarding destination for divers.

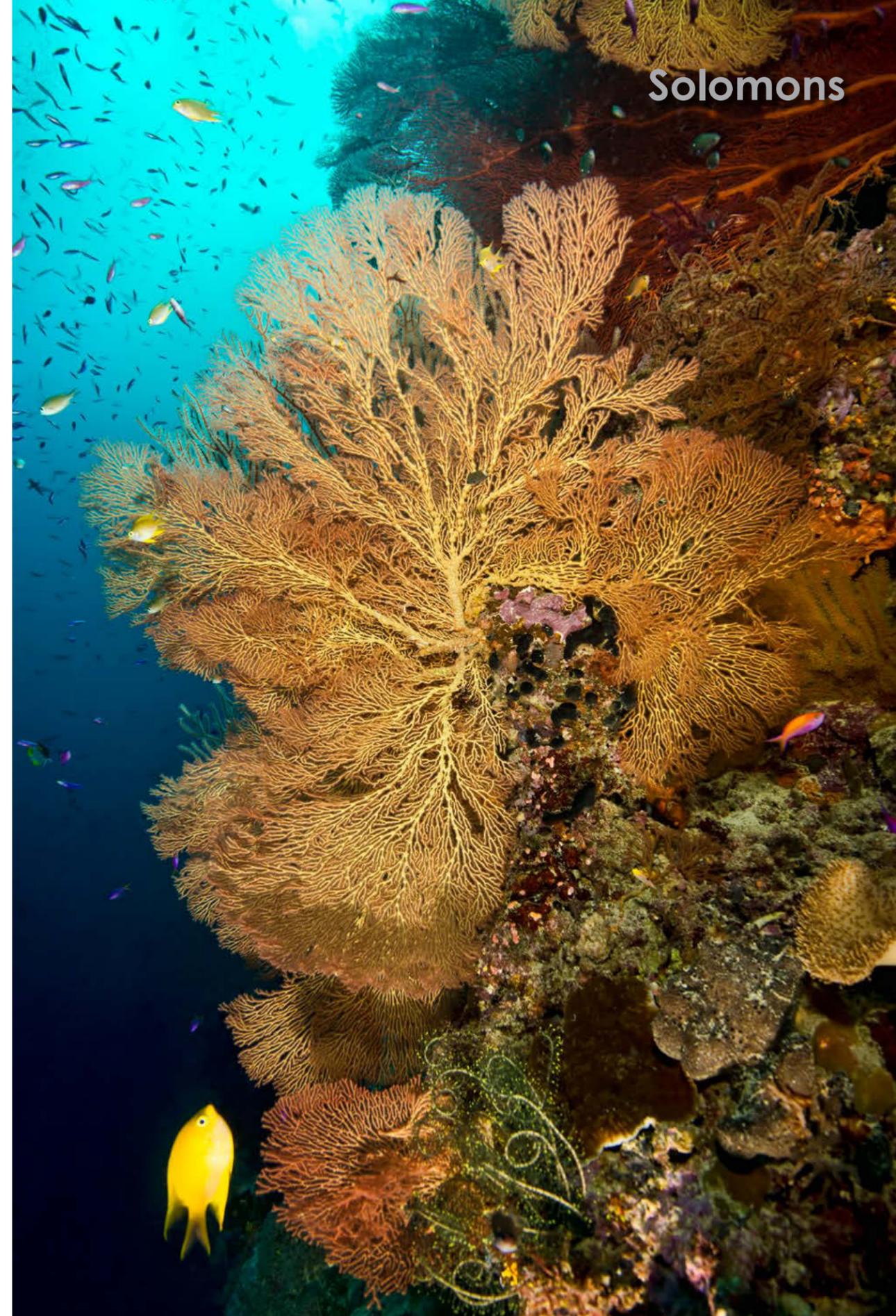
Selectivity... New Georgia

At the beginning of this year, having heard and read much about the country, I decided that it really was time I explored the Solomon Islands first-hand. My first port of call when visiting a new location is always Google Earth, because it really does put everything into perspective, and with the Solomon Islands, I soon realized that I needed to be selective. The country consists of a total of almost 1,000 islands organized into nine provinces, plus the capital territory of Honiara on the northwest coast of the island of

Guadalcanal. All of which means there are a lot of places to dive, and deciding where to go is a bit like the kid in the candy store—where to start?

Working the Internet hard narrowed down the first choice—land-based resort or liveaboard?

Underwater photographer on reef at Langranga. PREVIOUS PAGE: Charapoana Point



Schooling fusilier over hard corals, Langranga; Wary cardinalfish at Eagle's Nest in Munda (left)

in the New Georgia area of the large Western Province of the Solomon Islands: Uepi Island Resort, in the huge Marovo Lagoon at the eastern end of the province, and Munda, in the not quite so large Roviana Lagoon on the southern coast.

Both these locations have excellent reputations, and logistically, they are pretty easy to get to, as Solomon Airlines operates regular domestic flights from Honiara to New Georgia with stops at both Seghe, which is the closest airstrip for Uepi Island, and Munda.

There were another couple of places in New Georgia I would have loved to include: the spectacular Gatokae Island on the southern edge of the Marovo Lagoon and the wrecks of Gizo on the western tip of New Georgia. But my time for travel was limited, so I eventually decided that they would have to wait for next time.

A bad rap?

If certain sections of the Australian media are to be believed, the Solomon Islands is the Afghanistan of the Pacific, and only the intervention under the Regional Assistance Mission to the Solomon Islands (RAMSI) stopped it from actually becoming a failed state.

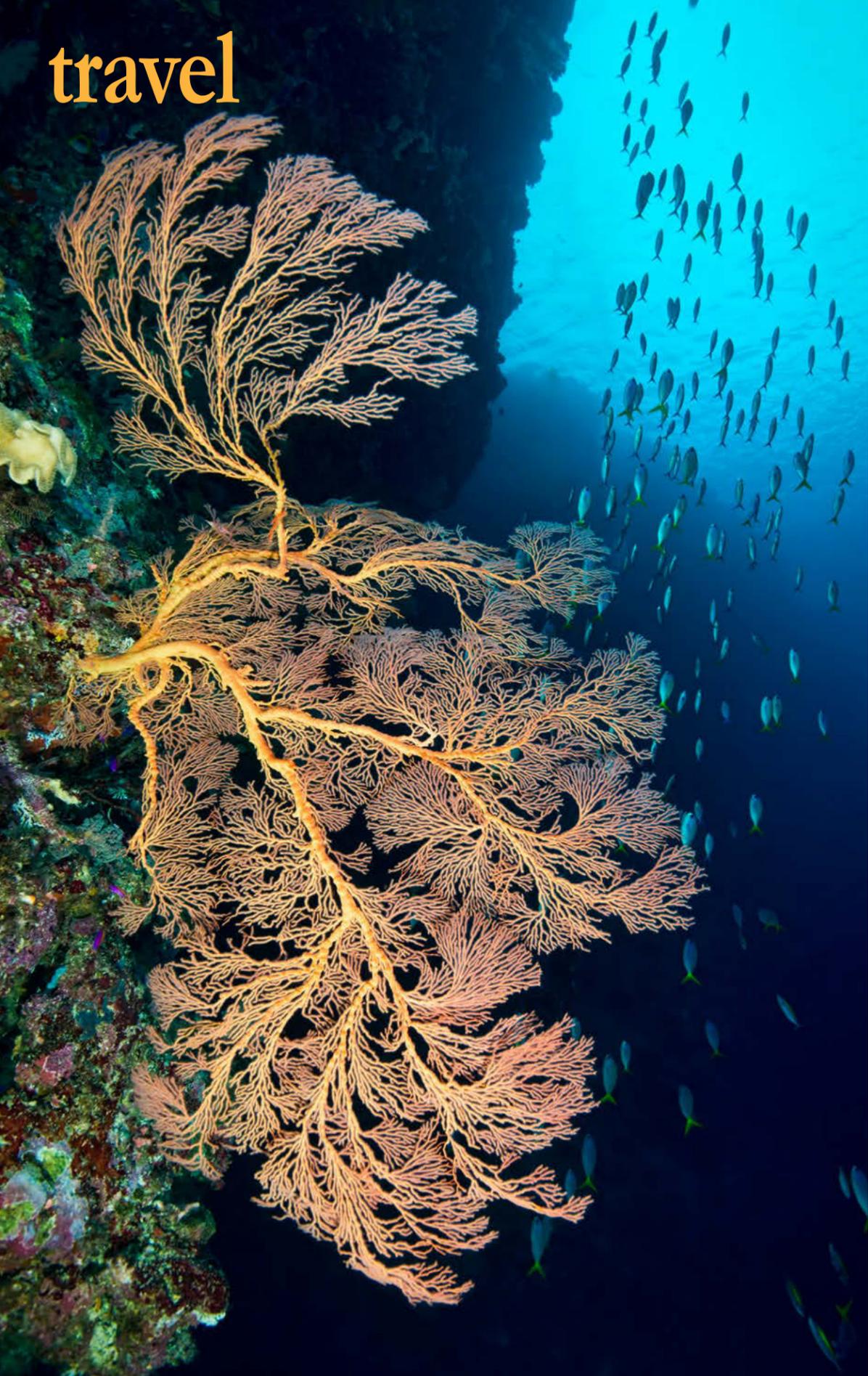
RAMSI was launched in July 2003 at the request of the Solomon Islands government, after the civil disorder had reached a crisis point. It was basically a plea for help to its Pacific Ocean neighbors. Led by Australia, RAMSI consisted of military, police and civilians from a coalition of regional countries that stepped in and quickly stabilized the situation, restoring law and order, and over time, establishing the foundations for the Solomon Islands to grow again.

But perceptions linger, and I had lots of raised eyebrows in Australia when I told friends and colleagues that I was off to the Solomon Islands for three weeks.

Honiara is the base for the respected liveaboard company, Bilikiki Cruises, who operate two boats in the Solomons. While logistically this offered the easiest place to begin as you fly in and go straight onto the boat, I opted for land-based diving so that I could get a deeper sense of the local cultures.

I eventually settled on two locations

Superb sea fans at Charapoana Point near Uepi



Beautiful sea fans at Secret Spot in Munda



My personal acid test for such situations is to take off my watch, leave it and anything else of value in my room, pick up my cheap shirt-pocket camera and go for a walk to see what happens.

I always ask around if it is safe to go walkabout. From the taxi driver who brought me from Honiara Airport to the hotel concierge, I got a general “no worries”. Sure enough there were no worries, and I walked for many miles around Honiara without a single problem, meeting lots of nice people on the way.

Uepi Island

Having “survived” Honiara, the next part of my journey was the flight to Seghe, which is the main airstrip for the Marovo Lagoon and the stopping off point for Uepi (rather amusingly pronounced *you-pee*) Island.

The flight heads northwest from Honiara towards New Georgia, passing over the scenic Russell Islands group on the way. The journey provides the first real indication of the incredible beauty of this country, as you fly over one rainforest covered island after another—all surrounded by the clear blue waters of the Solomon

Sea. Then, as the plane descends over the Marovo Lagoon towards Seghe, you can see how the outer barrier islands form what is in fact the largest saltwater lagoon in the world, and an appreciation forms for its sheer magnitude!

There really is something uniquely exciting about getting off a small plane on a grass airstrip on a remote island and watching your dive gear being extracted from the cargo bay. Feeling a little bit like a cross between Indiana Jones and Jacques Cousteau, I walked over to the arrivals area—which is also the departure area, shop and waiting area, all consolidated into a single small wooden building—and was met by my “driver” from Uepi.

Five minutes later, we were skimming

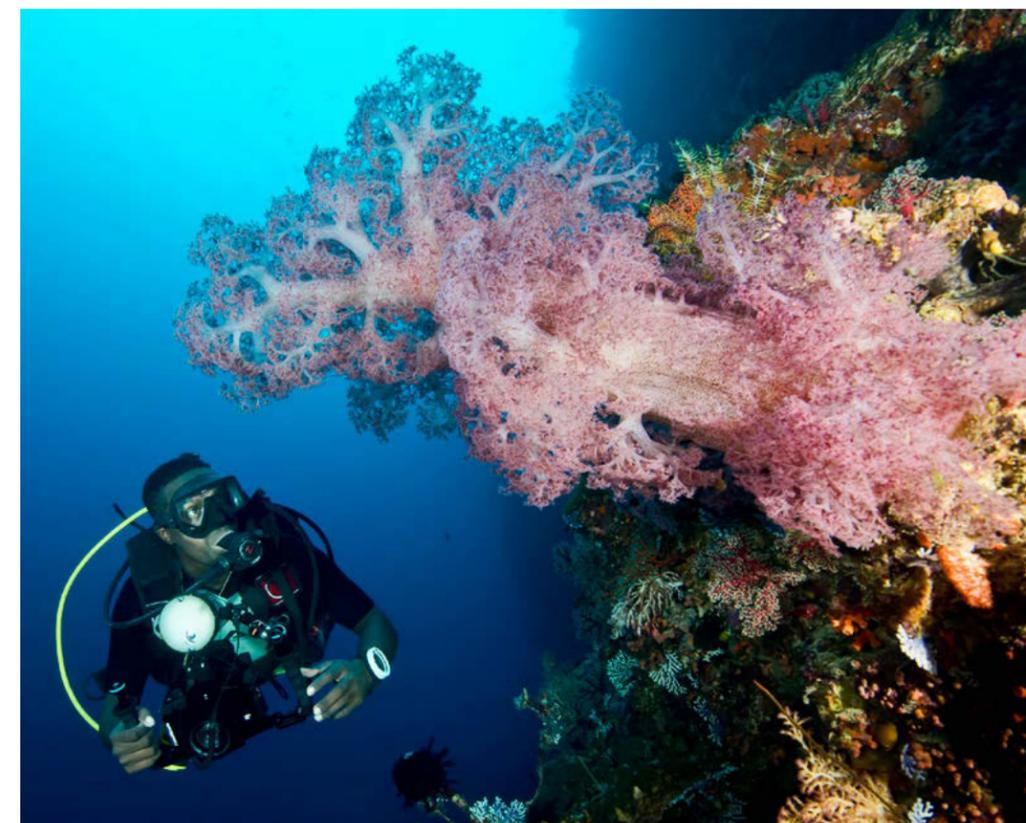


Graeme Sanson models with a large elephant ear sponge

Solomons

across the lagoon on the 25-minute journey to Uepi where the indomitable Jill Kelly was waiting to greet me on the main jetty.

Jill, and her husband Grant, are partners in the small consortium that operates Uepi Island Resort where they are also the resident managers. But most importantly, the island



Soft corals, Mushroom Island, Munda; Seghe Airport, Marovo Lagoon (above)



Beautiful marine life at Haipe; Diver at Haipe near Munda (left)



is their home, and they are fiercely proud of it.

They discovered Uepi by a series of quite special coincidences in the early 1980s and took over the operation of the

small resort on the island in 1987, running it remotely from Australia through resident expatriate managers, while they raised their two children. In 2000, they moved to the island to take over direct control and have been there ever since, developing the operation into an integral part of the lagoon's cultural fabric.

The complete staff of Uepi is drawn from the villages of the lagoon, and the Kelly's have personally developed all of them—from the cooks in the kitchen to the dive staff. Managing a successful tourism-based business in a remote location is inevitably a balancing act between the inescapable perception of wealth being taken from the common property, that is the Marovo Lagoon, and the "Wantok" system that predominates in the Solomon Islands.

Wantoks are basically those who speak the same language or dialect, and in the Solomons where there are about 220 different languages, it can be thought of as a kind of tribal system whereby you look out for and share what you have with your Wantoks. In many ways, it is the glue that holds things together and evolved as a part of the traditional culture for

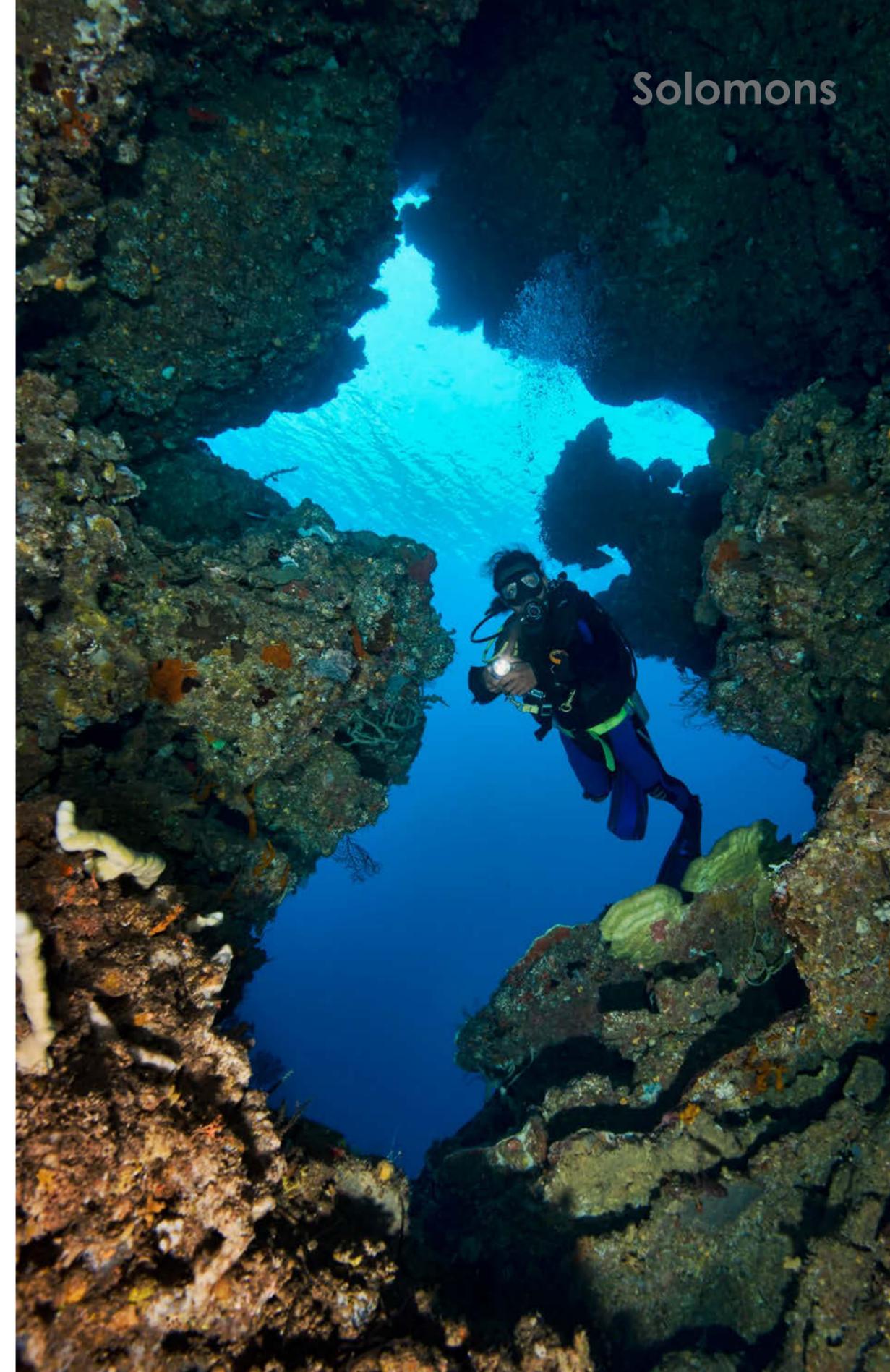
very good reasons, but it is also a major impediment to progress, as it effectively penalizes those who do well by requiring them to provide for those who have not prospered so well.

A successful business like Uepi can end up in a situation where excessive demands are made, and failure to comply can generate significant resentment. The Kelly's have tackled this issue both positively and proactively by starting their own not-for-profit organization, Solutions pa Morovo, and supporting the admirable work of the Marovo Medical Foundation.

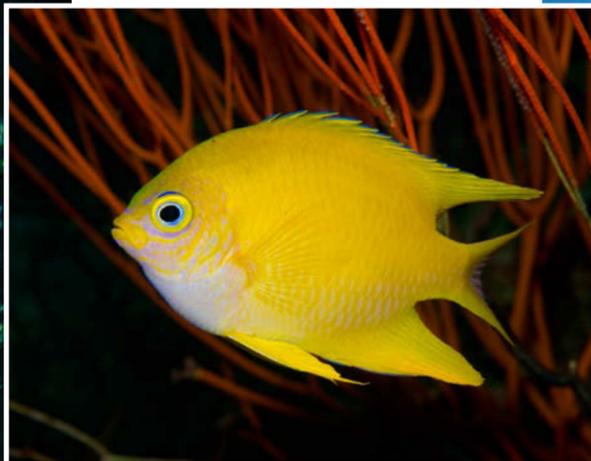
Solutions pa Morovo is focused on improving the quality of life of the people of the Marovo Lagoon and has a specific focus on educational scholarships, while the Marovo Medical Foundation has worked absolute wonders at Seghe's local hospital—including (believe it or not) building and equipping a complete new operating theatre.

Diving the Marovo Lagoon

The majority of the dive sites accessible from Uepi Island are on the New Georgia Sound side of it and the other barrier islands that form the northern rim of the



Exit of Cave of the Kastum Shark, Munda; Curious turtle, Shark Point near Munda (lower left)



Yellow Sergeant fish at Uepi Jetty; Sunset on the Marovo Lagoon (right); Uepi Island main lodge (lower right); Uepi Island and the channel between Uepi and Charapoana Islands—the Welcome Jetty is on the left (below)



Marovo Lagoon. The Sound is the large body of water that runs through the middle of the Solomons, separating the two main island chains that make up the country, which was nicknamed “the Slot” by the Allied forces during WWII.

The Slot was the route chosen by the Japanese for what became known as the “Tokyo Express”—blacked-out destroyers travelling at high speed

through the night to try and avoid Allied attack, while they resupplied their base on the island of Guadalcanal.

In fact, the Slot is actually a series of deep-water basins that are surrounded by the islands of the Solomons, which in turn are bounded on all sides by the incredibly deep trenches and troughs of the region—all of which produce a strong flow of nutrients and bountiful

marine life, including a very healthy shark population. Sharks are so common that after a few dives you start to ignore them.

Diving the sites on the Slot side of the Marovo Lagoon are heady experiences—think sloping walls dropping into the depths



of the abyss with clear blue water and every chance of seeing large passing pelagics.

Then there are the “points” where the geological fault lines have thrown up the islands and left the passages into the lagoon. Here, there are ridges where rich coral gardens have developed along with their ecosystems, all nourished by the mixed nutrients from the depths of the Slot and those that come out of the lagoon.

At the points, such as Uepi Point on the tip of the island and the main channel into the lagoon, you will see the

Superb swim-through at the General Store near Uepi



Titan Trigger Fish at Uepi Island jetty; Diver Anna Moriarty at Uepi Elbow (left)

grey reef sharks—or Her alter-ego at Charapoanna Point on the other side of the channel where the same intensity is concentrated onto the ridge, as the currents sweep round the corner.

Uepi Welcome Jetty

No visit to Uepi would be complete without experiencing the resident school of Marovo Lagoon grey reef sharks at the Welcome Jetty. Located on the edge of the deep-water passage between the island and its neighbour Charapoanna, the jetty and its guardians are literally world-famous and are truly a “must-do” experience. Best dived on an incoming tide, the trick is to position yourself in front of the jetty at about 5m and wait, as the sharks are used to divers and quite curious. So, if you are patient, they will come in and check you out.

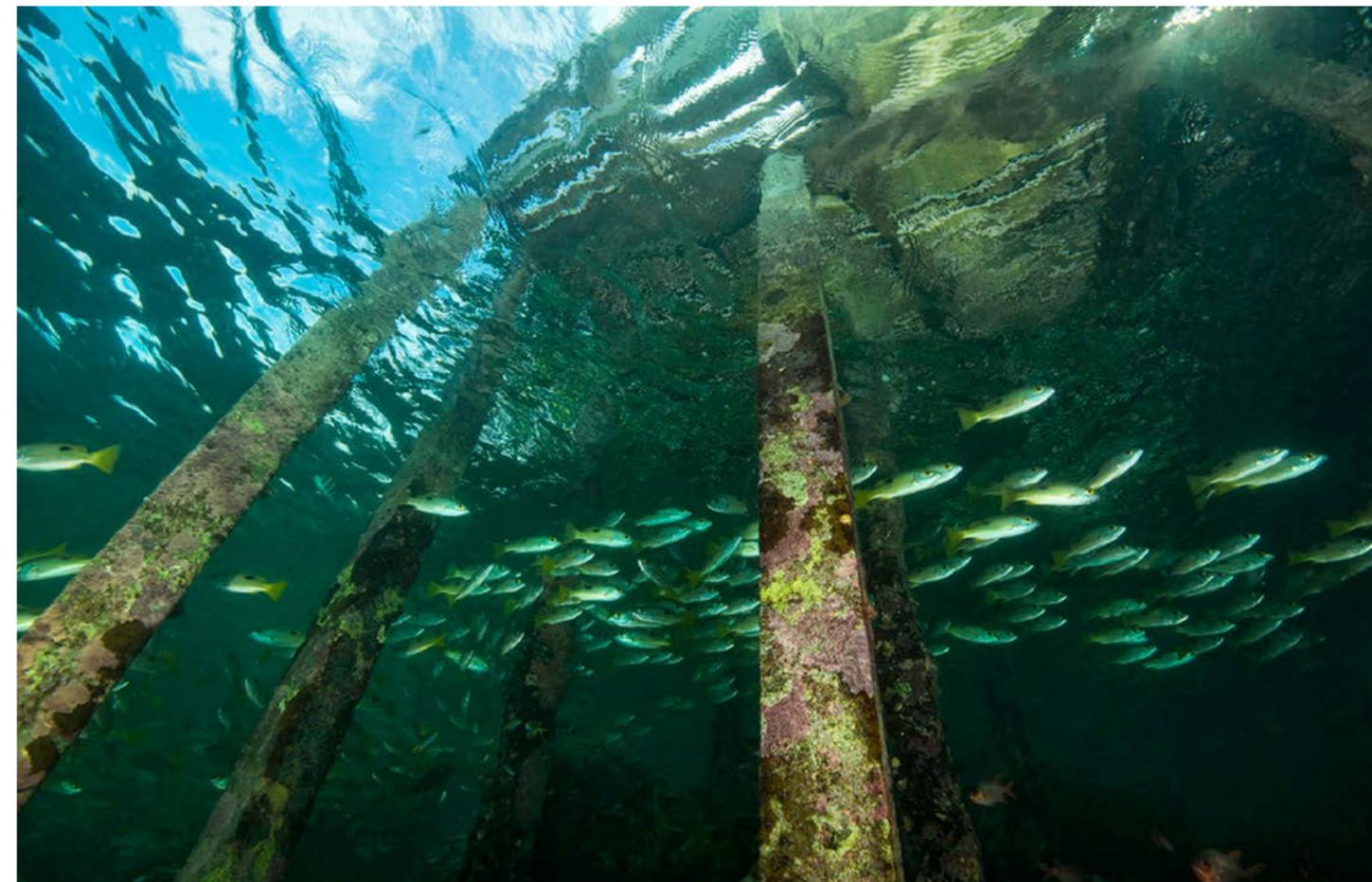
Jill and Grant Kelly have been diving and snorkelling with the sharks

of the Marovo for nearly 30 years and say they have never felt threatened by them. In fact, the way Jill described it, the sharks are comfortable and curious around divers because they have never been threatened by them. Is that not how it should be?

Munda and Roviana Lagoon

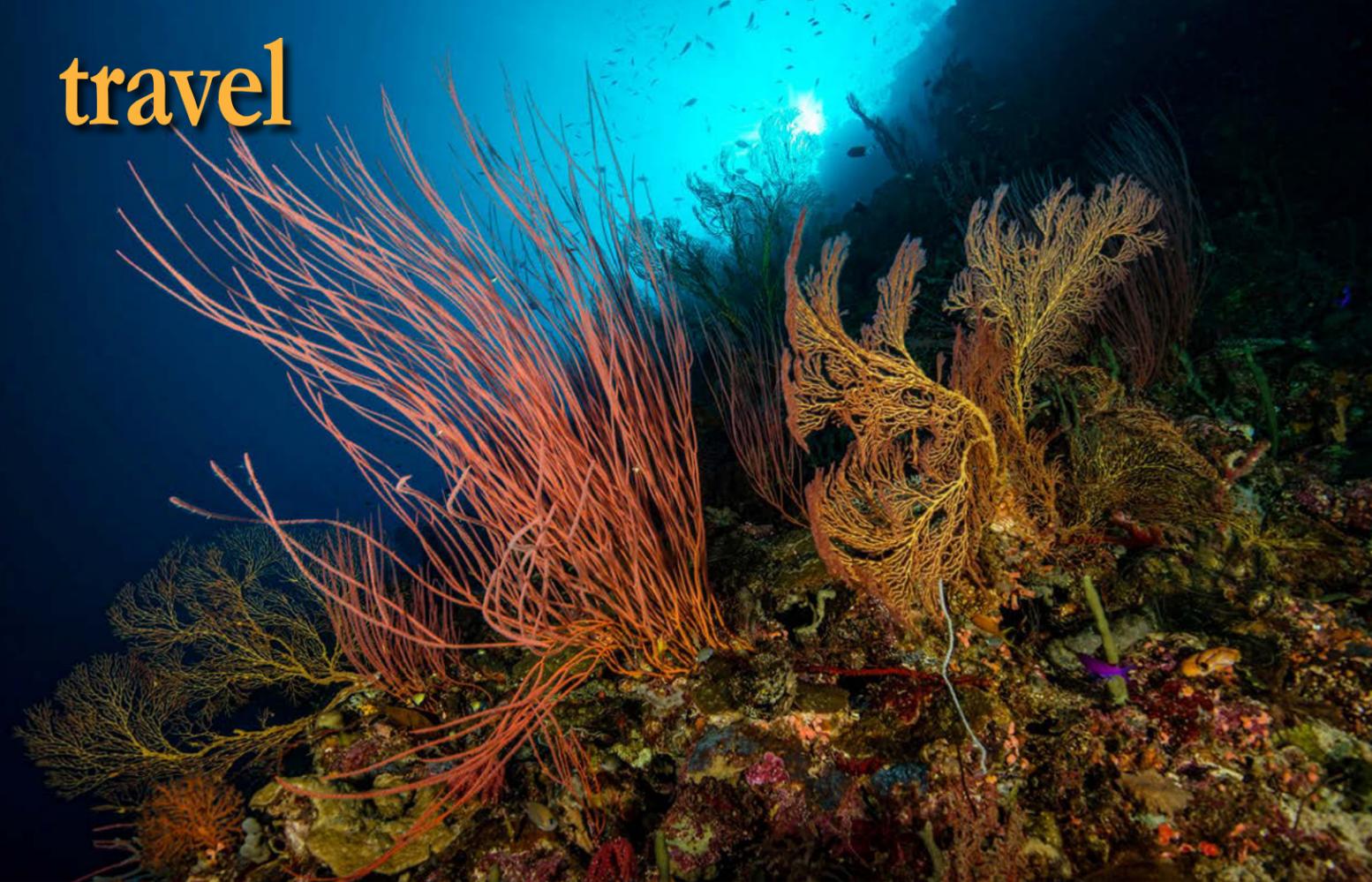
The next step on my journey of exploration in New Georgia was the short flight from Seghe to Munda and the incredibly scenic Roviana Lagoon on the southwest coast of the island. While not as big as the Marovo Lagoon, the Roviana is still a significant body of water that extends for over 50km eastwards from Munda and is bounded by a chain of barrier reefs and islands lying 2-4km offshore.

Within the lagoon, the tectonic gods have created a series of relatively shallow but sheltered environments that are interspersed between



Underneath Uepi's Welcome Jetty; Reef sharks patrol at Uepi's Welcome Jetty (top right)

underwater world as Mother Nature intended it to be—lush soft corals, superb fans filtering the nutrients and the full food chain of creatures all the way up to the cruising



waters produce the perfect conditions for fish to aggregate and then spawn, which means the Roviana Lagoon can be considered as a gigantic nursery and larval trap for the area.

Munda is both the epicenter of the lagoon and the largest town on the island of New Georgia. It consists of a number of small villages that grew around a colonial era coconut plantation at Munda Point.

During WWII, the Japanese built an airstrip at Munda, which they managed to conceal for some time from the

area, resulting in temporary closures of the airstrip while the Japanese made repairs to get it back in operation. It also meant that there is still a lot of unexploded ordinance in the rainforest that surrounds the Munda.

The original airstrip is the site of the current runway, which while I was there was approaching the end of a significant upgrade to allow jets to land. A major part of the project had involved the safe disposal of all those unexploded bombs.

The construction work had created a bit of a bubble in Munda, the downside of which was that the flow of money into the town had produced a lot of young drunks eager to spend their new found riches on Solbrew (the local beer) rather than to disperse it amongst their less fortunate Wantoks.

Fridays in Munda are the highlight of the week, and I have to say that they are worth giving up an afternoon's diving, as the locals come in from all directions across the lagoon to sell their produce at the local market in Lambete, the main village and the location of the very quaint Agnes



CLOCKWISE FROM TOP LEFT: Sea whips at Uepi Elbow; Picturesque Roviana Lagoon; Village kids at Roviana Lagoon; Blacktip reef shark at Uepi's Welcome Jetty

deep channels, which provide unobstructed passage for the waters of the Solomon Sea to enter. Rich with nutrients from deep trenches and basins to the south, these

Allied forces by suspending coconut palms on cables across the runway so that it was not visible from the air. The subsequent discovery led to a lot of bombing runs on the





Solomons



Lodge—the only hotel in town. The Solbrew starts to flow from mid-afternoon, and a distinct party atmosphere develops by sundown when the action moves to the Kava Bar—think Bob Marley meets Somerset Maughan and happy drunks all around!

Dive Munda

One of the great things about traveling to remote locations is that you meet some really interesting people. If Jill and Grant Kelly at Uepi personify Aussies in the South Seas, then Graeme Sanson and Jen Will are the U.K. versions. In their sixth year as residents of the Roviana Lagoon, their British bulldog determination to overcome the odds whilst still enjoying themselves and doing

what they do best, was positively uplifting and at times very amusing. Both keen technical divers and instructors, they have managed to assemble all the “stuff” associated with doing this safely in a remote location in their small dive shop at the side of the Agnes Lodge.

Being a humble air diver, I had to listen stoically to their many stories about deep cleaning stations at 55m where oceanic slivertip sharks come in for a touch up and polish, or the limestone formations and cave systems of the lagoon, together with the numerous WWII ship and plane wrecks of the area that are still to be located; but all that is for another story, and as they say—watch this space.



Lionfish, Shark Point, Munda; Sunrise at Roviana Lagoon (top)

Diver and sea fan, Mbelo, Munda; Schooling jacks at Top Shelf near Munda (top right)



Wreck of the P39 Aeracobra near Munda; Deep water bommie at Nusa Roviana Wall (left)



Diver on the wreck of the P39 Aeracobra near Munda

Diving the Roviana Lagoon

There are many sites to dive in the Roviana Lagoon, both inside the barrier islands and on the outside. The best, and certainly the most adventurous diving, are to be had on the outer sides of the barrier islands where you will find walls and slopes washed by the oceanic currents of the Solomon Sea and the biodiversity associated with those current flows—more hard corals than the softer variety, but very rich none the less, and all bathed in the deep clear blue waters that create stunning photogenic backdrops to the pelagics that patrol in them.

Probably the most iconic dive inside the lagoon is the Cave of the Kastom Shark, which is about one hour's boat ride from Munda and located in the mangroves of one of

the many islands. Entrance to the cave requires a short walk through the mangroves and then dropping into the small freshwater pool that is the start of a vertical shaft that leads into two large connected chambers.

A guide line has been laid all the way through and, although you reach a depth of 35m at one point, the whole experience is pretty laid back and non-threatening to my untrained cave diver perspective. The exit from the cave takes about ten minutes to reach from the entrance in the mangroves and leads you out onto a steep wall where pelagics prowl on a regular basis.

Similarly, no trip to the Roviana Lagoon can be concluded without a pilgrimage to the wreck of the

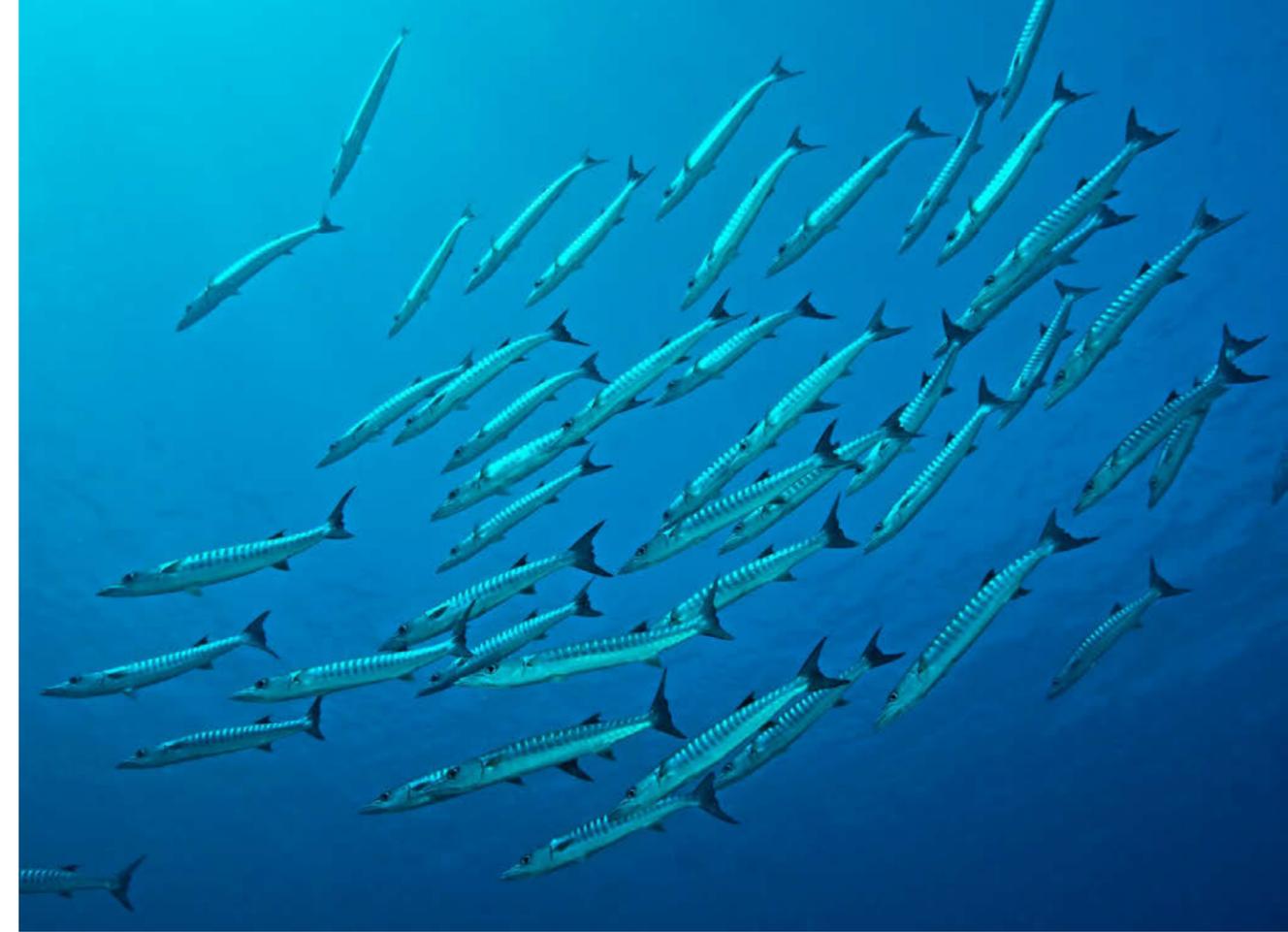
Bell P39 Aeracobra wreck. I think every diver would like to discover their own wreck, but Graeme and Jen have actually done it when they located the WWII fighter sitting serenely upright on the sand in 36m of water inside the lagoon. The wreck is reasonably intact and comes complete with its own school of sweetlips, which appear to have no fear of humans whatsoever. It is also a "must-do" dive.

Graeme Sanson has not been able to identify the plane or its history since he discovered it in April 2011 but believes it was shot down on a combat mission, as the ammunition trays have rounds in them but are not full.

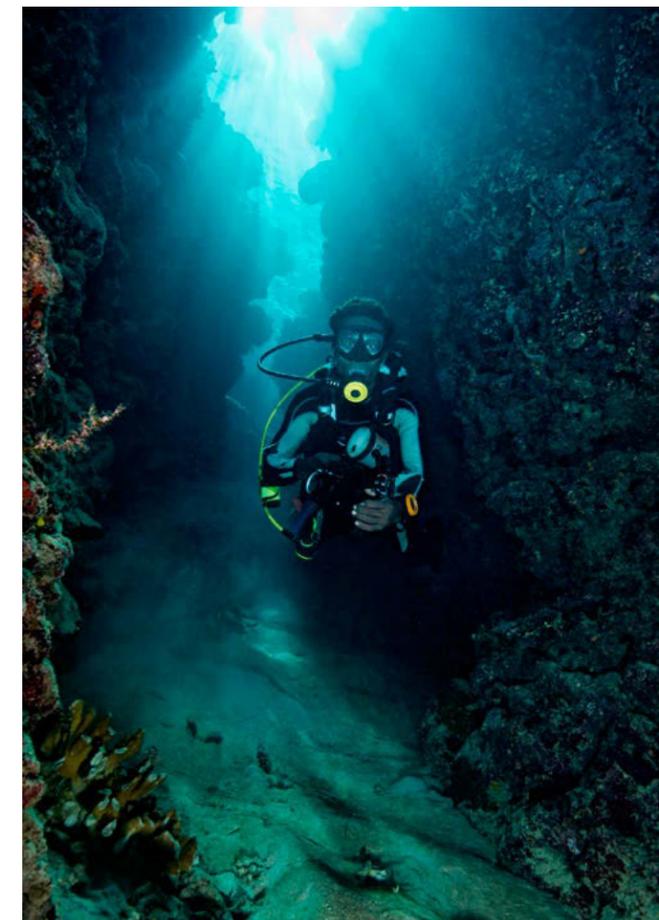
Altogether, I spent 12 days in Munda and had many amazing dives. But if I had to pick a favorite,



Wreck of the Dauntless Bomber near Munda



Clownfish and anemone (above), beautiful elephant ear sponge (lower left) and longnose hawkfish (right) on the deep water bommie at Nusa Roviana Wall; Schooling barracuda (top right), Shark Point, Munda



it would be Nusa Roviana Wall, which we first dived almost as an afterthought one afternoon. Down at 35m was the most amazing deep water reef, flush with both hard and soft corals, black coral trees and teeming with fish, while in the blue, large schools of jacks and barracuda patrolled looking for their next meal.

As we watched a squadron of eagle rays pass overhead and as I pondered whether it could ever be any better, the frantic signaling of Graeme Sanson drew my attention to the great hammerhead that was cruising up the channel just two

meters to my right. If only I had taken the wide-angle camera!

Afterthoughts

Like a fine wine, the Solomon Islands stimulates your taste buds and then draws you in, wanting more. I would have loved to stay longer and explore the things and places I learned about. This fine wine, once opened, has to be finished, and I will go back to the Solomons to finish my journey of exploration. It's just a matter of time. ■

Don Silcock is a Bali based underwater photographer and writer whose principal focus is the diving and cultures of the Indo-Pacific region. His images, articles and extensive location guides can be found online on his website: Indopacificimages.com

Superb swim-through, Eagles Nest near Munda

fact file



Solomon Islands



SOURCES: U.S. CIA WORLD FACTBOOK, XE.COM

History Great Britain established a protectorate over the Solomon Islands in the 1890s and developed a number of coconut plantations. The archipelago was the theatre for some of the bitterest fighting of World War II, including the famous battle of Guadalcanal. Self-government was achieved in 1976 and independence two years later. Government: The Solomon Islands is a parliamentary democracy and a member of the British Commonwealth. Capital: Honiara

Geography The Solomons are an archipelago of almost 1,000 islands located along the southern rim of the Pacific Ring of Fire, in between the independent countries of Papua New Guinea to the north, and Vanuatu to the south. Coastline: 5,313km. Terrain consists mostly of rugged mountains and low coral atolls. Lowest point: Pacific Ocean 0m. Highest point: Mount Popomanaseu 2,310m.

Climate The Solomon Islands archipelago lies within 12 degrees latitude of the equator and more than 1,500km from the nearest continent. It has a tropical climate with average daytime temperatures of 29°C and evening temperatures averaging 19°C, high humidity and abundant rainfall. Natural hazards include typhoons,



but they are rarely destructive. It is a geologically active region, so there can be tremors, frequent earthquakes and volcanic activity as well as tsunamis.

Environmental issues The Solomons Islands are rich in natural resources but faces many environmental problems, which the development of the country's small mining sector may soon exacerbate. The expansion of human settlement, agriculture, and timber harvesting has also led to deforestation.

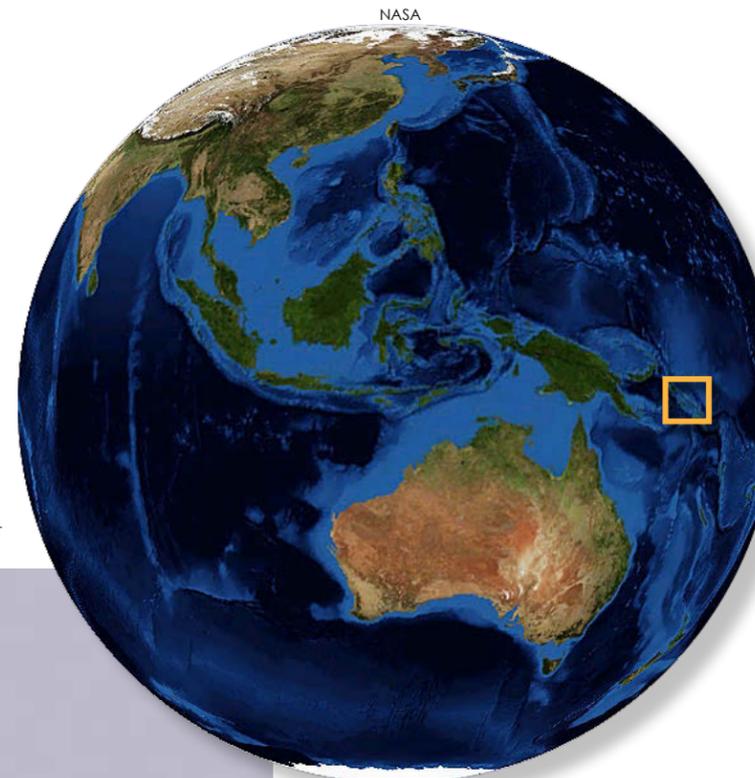
Economy The bulk of the population depends on agriculture, fishing, and forestry for at least part of its livelihood. Most manufactured goods and petroleum products must be imported. The islands are rich in undeveloped mineral resources such as lead, zinc, nickel, and gold. Prior to the arrival of The Regional Assistance Mission to the Solomon Islands (RAMSI), severe ethnic violence, the closing of key businesses, and an empty government treasury culminated in economic collapse. RAMSI's efforts to restore law and order and economic stability

have led to modest growth as the economy rebuilds.

Currency Solomon Islands dollars (SBD). Most major credit cards are accepted at the majority of hotels. Exchange rates: 1EUR=9.78SBD; 1USD=7.15SBD; 1GBP=11.68SBD; 1AUD=6.38SBD; 1SGD=5.65SBD

Population 597,248 (July 2013 est.) Ethnic groups: Melanesian 94.5%, Polynesian 3%, Micronesian 1.2% (1999 census) Religions: Protestant 73.7%, Roman Catholic 19% (1999 census).

RIGHT: Global map with location of Solomon Islands
BELOW: Location of New Georgia on map of Solomon Islands
LOWER RIGHT: Roviana Lagoon at sunset



tors do not need to obtain a visa before arrival.

Security Since 2003, the Regional Assistance Mission to Solomon Islands, consisting of police, military, and civilian advisors drawn from 15 countries, has assisted in re-establishing and maintaining civil and political order while reinforcing regional stability and security.

Electricity 240 volts AC, Plug I (same as Australia). Electricity is not available on all islands though and supply may be erratic.

Health/Vaccinations Dental, doctors and hospital services are available in major centres. Malaria is a problem in the Solomon Islands, and anti malarial precautions are highly recommended.

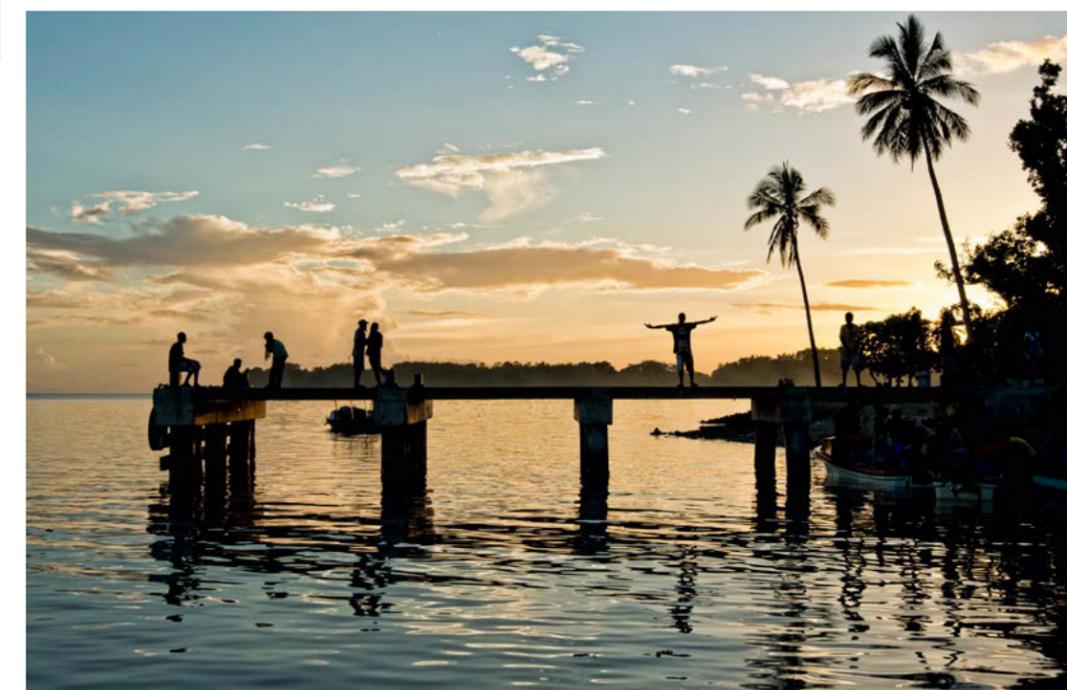
Decompression chamber There is a recompression chamber in Honiara.

Web sites Solomon Islands Tourism www.visitsolomons.com.sb

Internet users: 10,000 (2009)

Language Melanesian pidgin is the lingua franca in much of the country. Although English is the official language, it is only spoken by 1-2% of the population, There are about 220 indigenous languages.

Visas/Permits U.S., British, Commonwealth and E.E.C visi-





Diving Indonesia's
Bunaken

Text by Kelly LaClaire. Photos by Kate Clark



Clingfish in yellow feather star. PREVIOUS PAGE: Large red gorgonian sea fan



Diver and white-mouthed moray eel; Papuan toby (right inset)

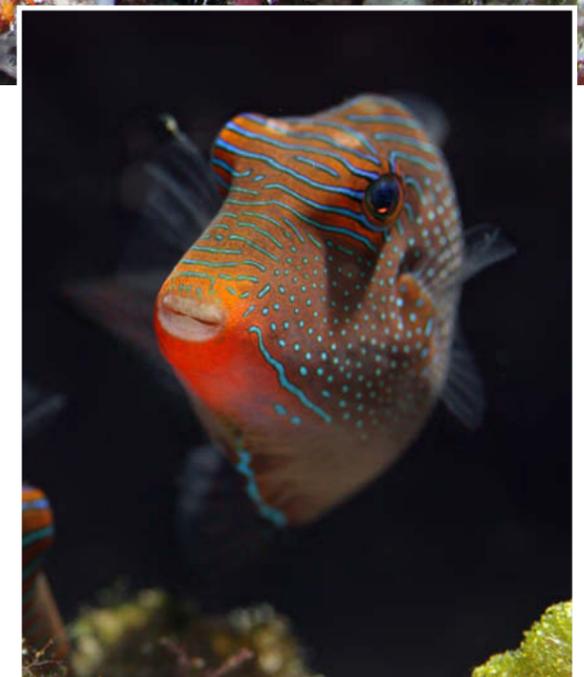
We're swimming fast. Too fast for my liking. I'm taking heaving gulps, and I know my tank won't last very long if we don't slow down soon. Just as I'm about to stop and risk losing my group, we hear a rapid series of bangs coming from our dive boat in the distance. Our guide, a lithe Indonesian with pistons for legs and bottomless iron lungs, points into the blue and somehow quickens his pace.

A few meters ahead to my left, my cousin, Kate Clark, an accomplished diver and tireless swimmer, senses my fatigue and looks back to make sure I haven't quit on her. She slows her speed

a bit, trying to be a good buddy and stick with me. The woman is wearing snorkel fins and carrying a 40-pound camera for Pete's sake, I think to myself. How is she swimming so fast?

Kate has me check my gauge, and I groan silently as I see I've already used a third of my air. We've only been in the water ten minutes. She smiles patiently and points to her own gauge (which, of course, is still full) and then to her octopus—"You can always take a few sips off mine if you need it," her eyes say.

More banging, frantic now and louder than ever; the crew has found what they were looking for. Kate beckons me to push on, and I begin kicking with renewed vigor, knowing our prize is just ahead. After another few minutes of hard swimming, I check my pressure gauge once more—the tank is half empty. My heart is pounding audibly,



and I can no longer hear the banging from the boat. My legs are throbbing, and I consider surfacing and giving up. I look up to signal Kate and see her pointing frantically ahead towards the sheer drop off of the giant wall to our



sands of Bunaken. A tall, slight woman stood at the water's edge and waved us in while two dogs danced at her feet, wagging their tails energetically. Tina Melson, co-owner with Nigel Thomas of Two Fish Dive Resort, served hot tea and cookies while giving us a brief history of the island, as the

anywhere inside the park's boundaries you can see its lush slopes of coconut palms gathering pillows of clouds throughout the day. The dive sites around the inactive volcano feature some of the steepest, most dramatic walls in the area and are absolutely packed with life.

"The underwater landscapes around Bunaken are breathtaking," Tina told us. "There is so much diversity of marine life here—hard and soft corals, reef fish, invertebrates, pelagics, turtles and so on—that each dive offers something new and exciting for any certification level." She paused a moment before smiling, "You're really going to love it here."

She was right. The first two days, as Tina promised, were spectacular. The giant walls of the park's volcanic islands are absolutely monolithic, dropping hundreds of meters, and home to more turtles than any one area I have ever encountered. In the first several dives, we saw over

boat crews and divemasters took our gear to our lodgings.

Bunaken National Marine Park covers nearly 900 square kilometers of ocean ecosystem and was established in 1991. The park is dominated by the rising crest of Manado Tau, a cone shaped peak that reaches 600 meters above sea level. From almost

right.

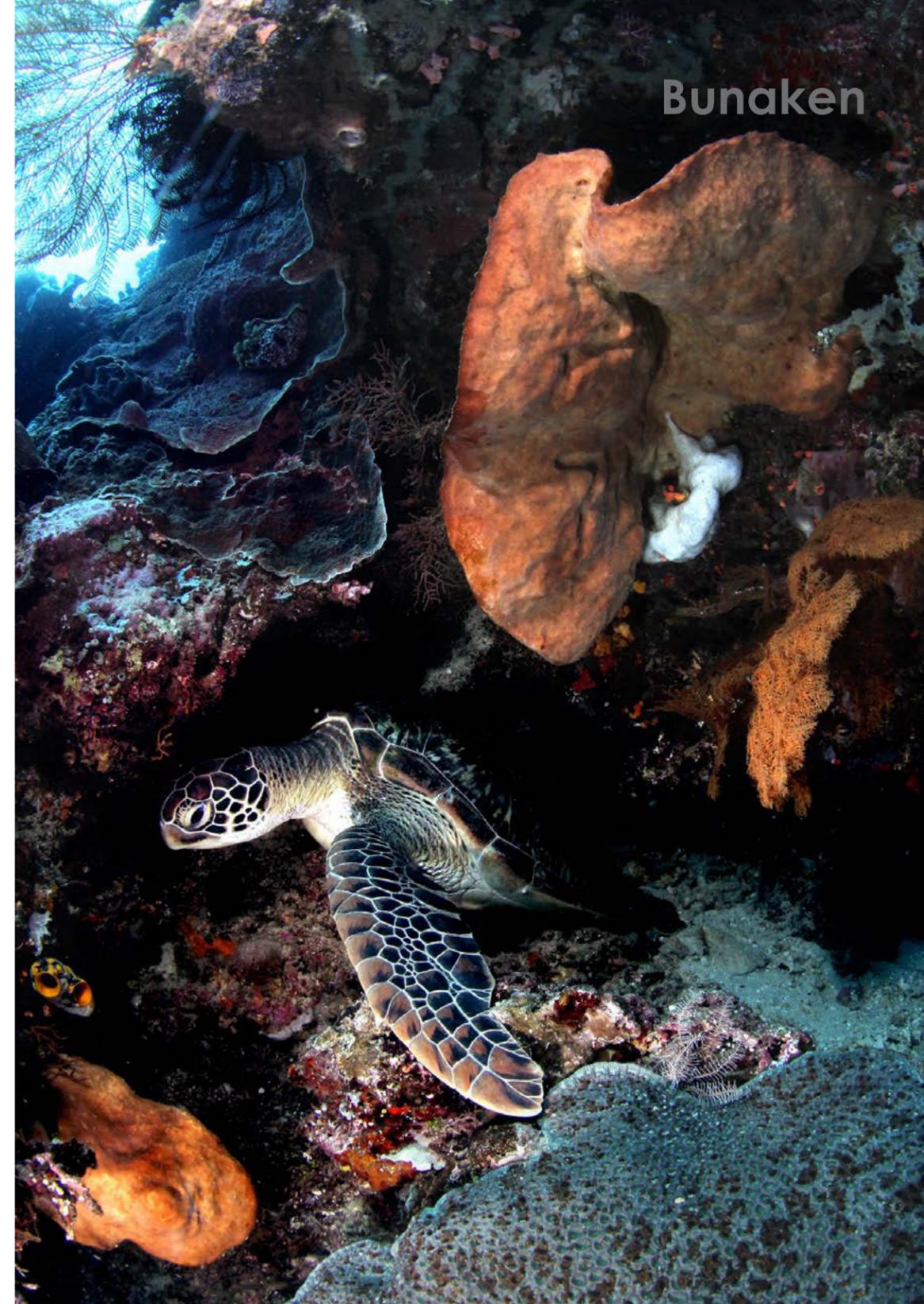
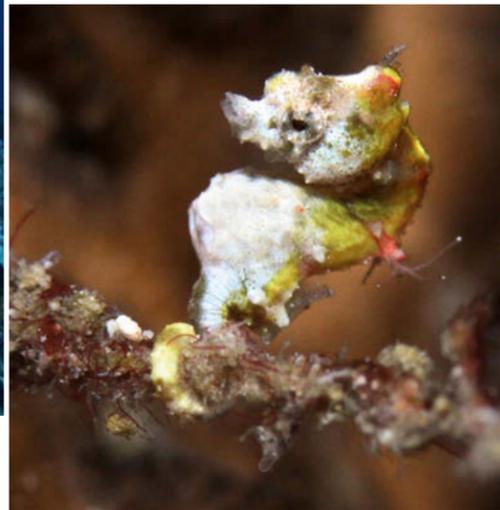
Look! Look!
I shift my gaze and see them.
Everything changes.

Volcanic cliffs

Two days earlier, our little boat drifted into a small inlet surrounded by the lush mangroves and the white

Banded sea snake; Bubble coral shrimp (top left); Detail of eye of blue-spotted stingray (left)





ing interest in Kate's camera and spent several moments following her around, inspecting the domed housing with its mouth agape and its eyes wide with wonder. In some areas,

they were so ubiquitous that soon—and I cringe at having to admit this—I was actually beginning to pass them by without a second glance.

Banded sea snakes and leery morays are also extremely common in the nooks and crannies of the rocky outcroppings—the small caverns and deep cracks in the granite making excellent hunting grounds. Large numbers of blue-spotted stingrays make the sandy coral breaks along the sheer cliffs their home as well, but they are rather shy and divers need to keep their cameras at the ready if they want a chance at capturing a good image.

Each underwater precipice here is literally swarming with pyramid butterflyfish and feisty red-toothed triggerfish that you can actually

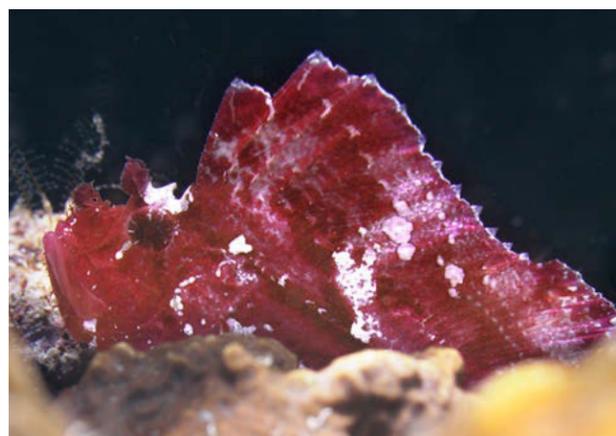
hear chomping their teeth, as they charge your mask and regulator valve. The triggers aren't the only species fierce about protecting their territory, however. Anemonefish can be downright belligerent, rushing your mask and slapping your ears with their tails if you spend too long peering into their habitat.

Large schools of silver jacks also whirl and dance along the sheer drop-offs and whitetip sharks can usually be found cruising the walls as well. Unfortunately, a long, hot Indonesian spring had pushed the water temperatures to nearly 28°C (82°F), and the sharks had sought cooler waters in the depths below. Bunaken also boasts the occasional whale shark sighting.

Unexpected macro

To be sure, most dives in Bunaken are wall dives, and the volcanic crags are absolutely covered with large corals and colorful fish, but that's not all the protected group of islands has to offer.

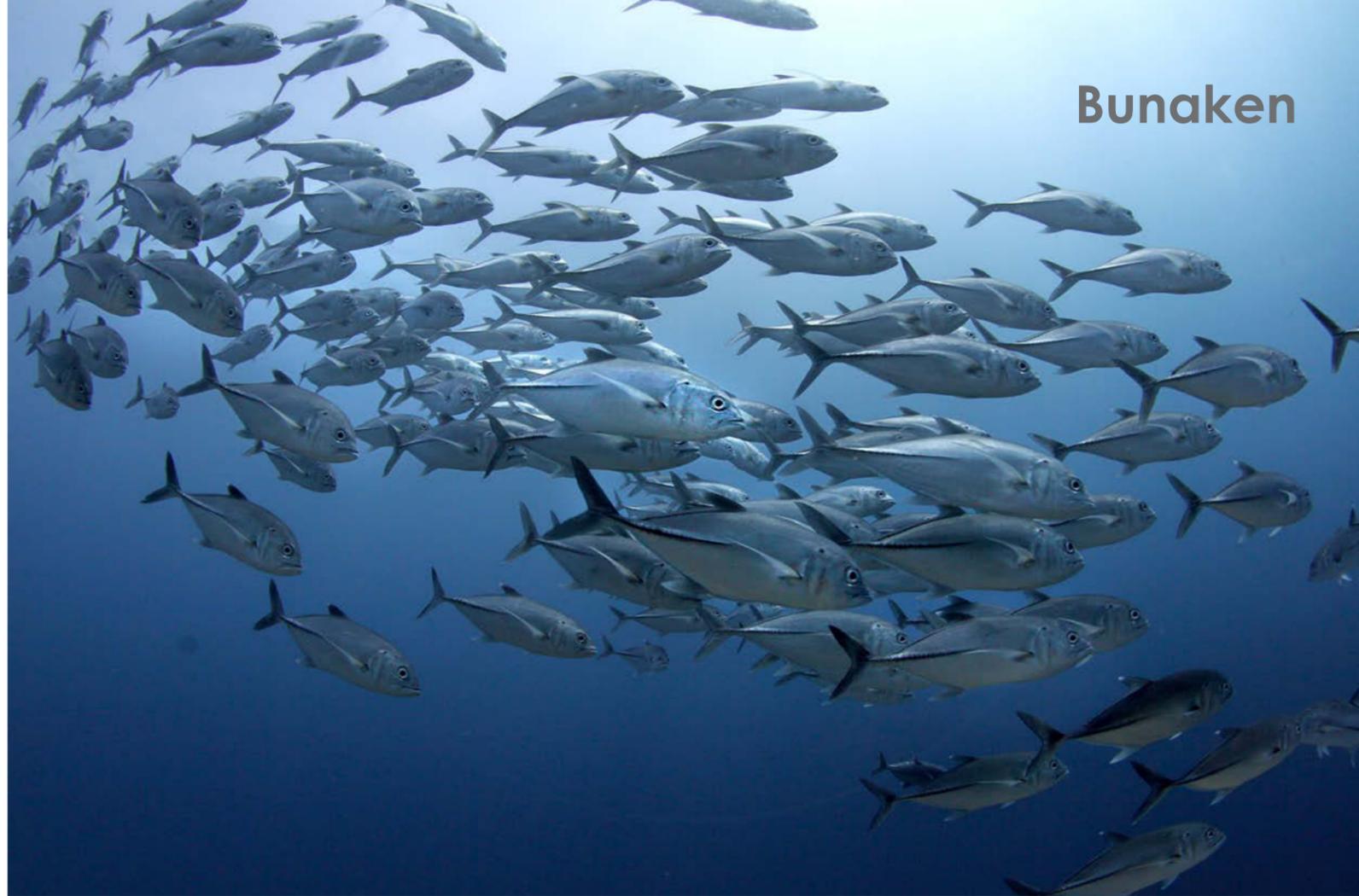
On our third day, Kate asked our guide, John Kanoneng, if there were any good spots for macro. John just smiled and said in his thick accent, "Any dive is good for the small lens. You bring macro, I show you." And he did,



CLOCKWISE FROM ABOVE: Hawksbill sea turtle head-on; Clownfish on anemone; Flatworm on reef; Pygmy seahorse; Green sea turtle in alcove; Leaf scorpionfish

a dozen hawksbill sea turtles and several massive "greens" that were easily six feet long and as big as Smart Cars.

One friendly and curious green sea turtle took more than a pass-



CLOCKWISE FROM LOWER LEFT: Whip coral shrimp; Ornate ghost pipefish pair; Randall's shrimp goby; Coral crab on sponge; School of jacks



in a big way.

As the other divers in our group swiftly drifted along the rock faces in search of more giant sea turtles and rays, we slowly and methodically stopped every few feet, as John searched out ornate ghost pipefish, banded boxers, leaf fish, orangutan and porcelain crabs, pygmy cuttlefish, juvenile puffers, grumpy and stoic scorpionfish

and wire corals hiding the tiniest shrimps imaginable—and all this on a single “average” wall dive.

Bunaken sometimes gets short shrift when it come to its microscopic life—being so close to Lembeh Strait where macro photography is considered by some, the best on Earth, doesn't help—but, as John proved again and again, the hawk-eyed guides here will seek out pygmy seahorses, candy crabs, juvenile sweetlips, leaf scorpionfish and a host of other exotic, tiny creatures that make the sheer cliffs their home. It's enough to convince anyone that Bunaken's macro life is world-class.

My personal favorite find was a blood-red electric clam hiding under a rocky overhang. The

rest of our group had passed by the area rather swiftly, not finding anything special besides a large purple sea fan. But John led us into a small cave and methodically searched the rocks and dark cracks until he spotted the jumping arcs of electricity zipping across the glowing edges of the creature's shell.

Hundreds of species of nudibranchs thrive along these walls as well. “Nudi hunting”, as it commonly referred to, can actually get quite addicting, and each time we spotted a new and bizarre color combination hidden among the corals, we flashed happy hand signals and big smiles.

So, if you happen to hear another diver telling you Bunaken is all wall dives and the macro

life is lacking, please, please, pleaseeeeee don't listen. There is abundant and varied macro life hiding along those volcanic cliffs, and if you slow down just a little and allow the guides to help you, Two Fish will make a believer out of you.

Topside treasures

Monkeys at Manado. A stone's throw from Manado Harbor sits the Tangkoko National Forest, a small rainforest reserve that includes three mountains: Mount Tangkoko (1,109 meters), Mount Dua Saudara (1,109 meters) and Mount Batu Angus (450 meters). It is here, hiding among the dense flora of the island's volcanic peaks, that one can often view the endangered tarsier monkey—



Decorator spider crab





Children of the local village

Bunaken



The majestic Protestant church in Bunaken's village is dwarfed by the volcano, Manado Tau, in the background. Rising 600m above sea level, its lush slopes of coconut palms gathers pillows of clouds



Flowers in Bunaken's village

the world's smallest (and possibly most adorable) primate. Only the size of a tennis ball, these little primates are a nocturnal wonder, foraging for geckos and small insects among the hardwood trees, their enormous, saucer-shaped eyes and soft velvety fur gleaming in the moonlight.

Tarsiers are the only monkeys in the world that are completely carnivorous, eating nothing but small animals and insects. They accomplish this with incredibly acute hearing and unmatched eyesight, as well as strong legs and elongated feet and fingers that allow them to pounce on and hold prey while hunting.

You also may be lucky enough to encounter a small group of Celebes crested macaques—small, jet-black monkeys with long muzzles, high cheek bones and a long tuft of hair on the top

of their heads. These primates, known as *yaki* to the locals, are endangered as well, but conservation efforts are helping.

One group in particular, known as Save the Yakis has made great strides in educating villagers and adding environmental protections. Unfortunately, Celebes can be devastating to local crops, and farmers view them as pests. The interaction has thinned the population significantly, and deforestation has robbed this species of much of its natural habitat.

Village life. Life on a remote island is pretty quiet, so if you're looking for a place to get wild after a day of diving, Bunaken probably isn't the place. But the slow and easy atmosphere is exactly what I liked most about our stay.

Kate and I took a leisurely walk

around the island and visited the main village. Here, you can find friendly locals sipping cold drinks, napping on shaded porches or tending to their land. Children chase small pigs and goats or gather in groups to play tag or kick a soccer ball around the narrow streets.

In the center of the community lies Bunaken village's splendid and majestic Protestant church, its Gothic spires and peaked eaves towering above the palms. It was Easter the day we visited, and the pews were filled with well-dressed villagers singing hymnals, chanting psalms and fanning themselves in an attempt to keep cool.

The island, like much of Indonesia, is a mixture of Christians and Moslems who, unlike many parts of the world, seem to get along just fine. This was somewhat of a shock to me at first. Living

YOU FOUND A WHAT?

In case you haven't heard of the famous coelacanth, let me give you a brief introduction.

This prehistoric fish is truly a living fossil. Its body and behavioral habits have hardly changed in the last 400 million years. The coelacanth, known to the locals as *raja laut* (king of the sea) is one of the most mysterious and enigmatic fish in the ocean and was believed to have gone extinct 80 million years ago.

However, in 1938 a live coelacanth was found off the coast of South Africa. Not surprisingly the scientific community was astounded and suspected that the Comoros Islands were the only area left that was home to these ancient fish. Turns out they were wrong again.

In 1997, a couple honeymooning in Manado (eight miles from Bunaken Island) saw a coelacanth for sale in a local fish market and reported the finding to researchers. Several months later, in 1998, another coelacanth was caught in the Bunaken Marine Park by two local fisherman, and two more were filmed underwater in 1999 by researchers in the same area.

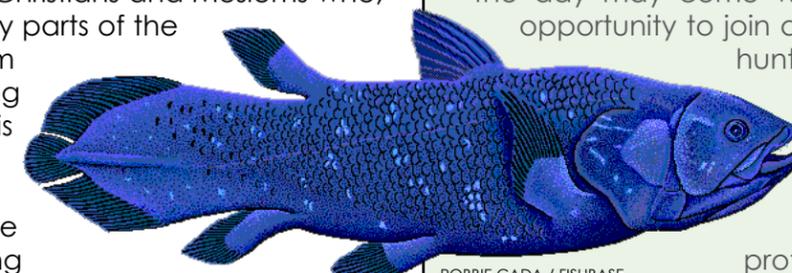
Scientists concluded after examining the second catch, the fish was not one of the South African coelacanths, but a separate species of its own. Since then, four more coelacanths have been caught in the waters around Bunaken, and the Indonesian government seems to be cooperating with research and conservation efforts to study and safeguard the ancient fish.

Currently, very little is known about the coelacanth, other than the fact that they usually hide in deep caves during the day and feed along the coasts at night. But that may be changing.

In October of 2000, a team of experienced trimix tech divers located a small school of the coelacanths at a depth of just over 100 meters off the coast of South Africa.

Now, Two Fish has started their own technical dive operations in the marine reserve. So, the day may come when you have the opportunity to join a special group and hunt for the elusive coelacanth and other

bizarre creatures in the deep and unexplored waters of Bunaken's protected sanctuary. ■

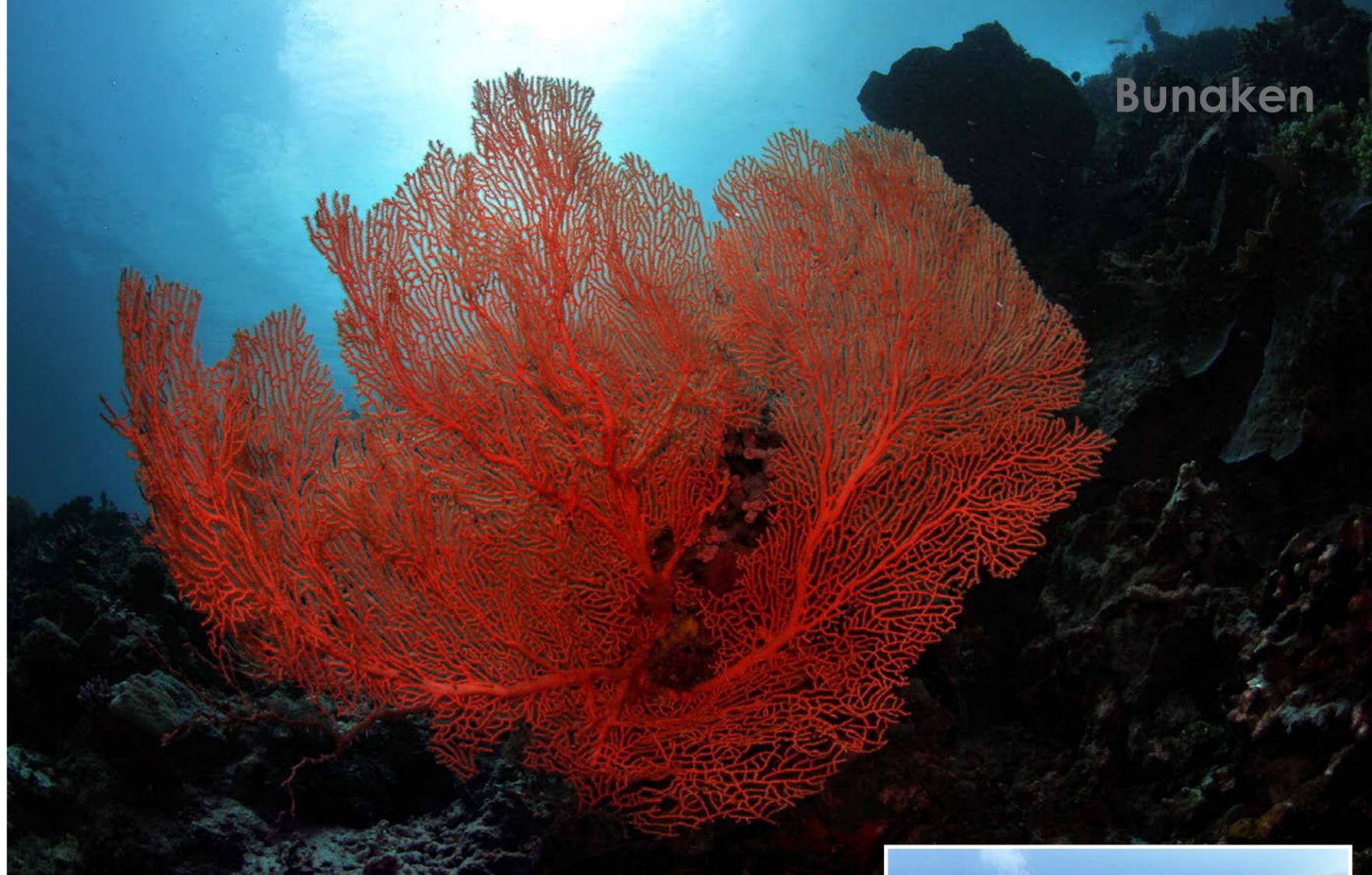


Coelacanth

ROBBIE CADA / FISHBASE



Wall with billowing red soft coral, author Kelly LaClaire hovers in the background, Mantahege Island



Large red gorgonian sea fan and large colony of staghorn coral (right), Mantahege Island

in the United States, I am used to the constant, bitter hostility between these two groups. If more people could come here and see these two sects living alongside one another peacefully, with almost no animosity or resentment, it might just change some thinking back home and around the world.

But perhaps my favorite topside activity was lounging around the Two Fish common area, visiting with friendly folks after a sun filled day of diving. Each night, after enjoying homemade satays, fresh fish selections and spicy noodle dishes, several guests would gather around the softly lit cabana for a cold bottle (or three) of Bintang beer while the divemasters sat nearby playing guitar and singing under the stars.

We made many friends there, sit-

ting under a brilliant moon sharing the day's dive adventures, swapping travel stories, telling one another about the lives we led back home. One couple hailed from New Zealand, another from Spain, and many others from far reaching locals across the planet.

When I sit down to write articles about my experiences, I always smile widest when I look back on these moments. There are few things better than learning about the world from good conversation with fine people.

It was on one such evening that one of the guests asked us if we had visited Barracuda Point. Kate and I looked at each other with wide eyes and simultaneously leaned forward in our chairs, our interest seriously piqued. "What's that?" we asked.



Bunaken



Barracuda Point

The next day we were up early and headed out towards Mantehage Island, several miles north of the resort. Mantehage is just one of many islands in the marine park that, due to their distance from Bunaken, are far less visited than the main islands. Each trip is an all day, three tank affair and a bit more expensive, but the remote waters and relative lack of divers make the surcharge well worth it.

After about an hour, our captain shut off the engine and gave one of the greatest dive briefings I've ever heard.

"This is Barracuda Point," he said. "We only have one shot at this. Everyone is going to get in the water, and the boat will go ahead of us and try and find the school. When they do, we will hear rapid banging, and then we're all going to swim like hell! If we do this right, you are all going to see a huge swarm of giant

barracuda. Sound good?"

Everyone on the boat nodded feverishly.

"Okay, then. Let's go!"

Ten minutes of hard swimming later, I was in agony. My lungs were on fire and my calves were cramping with every kick. I had just decided to give it up and surface when we finally saw the massive school. At least three hundred giant barracuda were swimming in a lazy tornado near the steep drop off.

All the pain disappeared instantly. My lungs no longer burned, my legs didn't seem to be tired at all. My attention, which had previously been focused entirely on my protesting body, had shifted wholly to the sight before me.

I took two deep pulls on my regulator and then my breathing levelled out. I'd never seen anything like this before.

Our guide put out his arms, telling us to stop. He didn't want to spook them. The

Barracuda ball at the surface; Diver Markko doing a technical dive (top left); Diver over coral garden (left)



Bunaken

CLOCKWISE FROM FAR LEFT: Mangroves at Two Fish; The dive guides of Two Fish on deck; *Chromodoris annae* and *Halgerda batangas nudibranchs*; Sunset silhouette of village church; Yellow feather star on barrel sponge

On the surface, a loud chorus of whoops rang out. The whole group was pumped and no one restrained their emotions. Each one of us had just experienced one of

those rare dive encounters we knew may never come again, and we were far too excited for inhibitions.

Kate looked at me, eyes bright and filled with laughter. "You know..." she said, "I really love scuba diving."

Yeah. Me too, Kate. Me too. ■

Assistant editor Kelly LaClaire and underwater photographer Kate Clark are cousins based in Portland, Oregon, USA. They share a passion for worldwide travel, experiencing new cultures, and friendly competitions to see who can last the longest on a single tank of air—so far, Kate is the undisputed champion.

SOURCES: SULAWESI.COM, WIKIPEDIA.ORG

breaking away from one another to sweep the rock face again in wide, deliberate circles. It was one of the most beautiful sights I've ever seen

underwater, and I didn't want the dive to end.

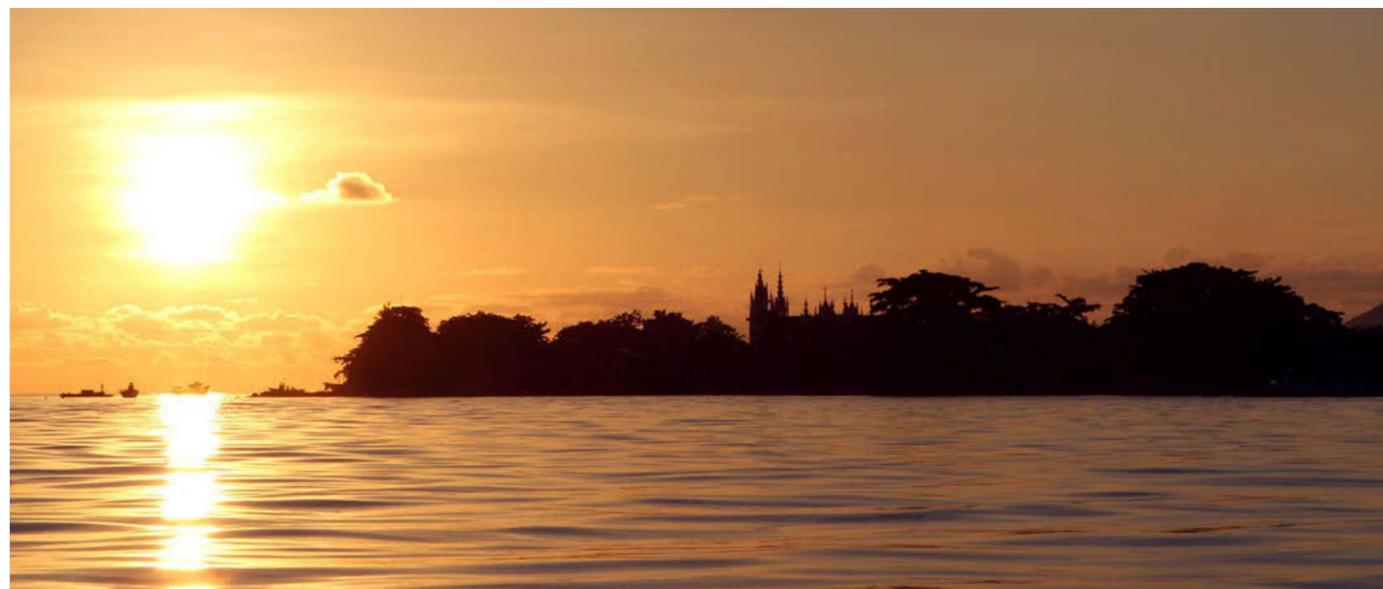
The show lasted 20 minutes before the barracuda decided to head down to deeper waters. Our little group followed them a few meters into the blue, watching as they slipped down into the depths below.

diver, and I have been in similar situations, but still, these were barracuda, and damn big ones. The average fish was around two meters, some even larger, and I knew what these aggressive hunting machines could do if they decided to strike. Most of them eyed us suspiciously as they passed—a few baring their teeth just to let us know that this was their territory—but none broke away from the pack to investigate us further.

A few moments later, Kate pointed to our left and another school, this one bigger than the first, moved in and began circling the area. The two groups moved like slow, underwater cyclones along the rocky walls, coming together for a brief moment in a great double helix and then

school moved out a bit into open water but slowly drifted back towards the coral, getting within touching distance of Kate and I.

I'm not embarrassed to tell you my heart rate quickened considerably. I wasn't too worried; I'm an experienced



fact file



Bunaken, Indonesia



SOURCES: U.S. CIA WORLD FACTBOOK, NORTH-SULAWESI.ORG, D. SILCOCK

History Moslem merchants from Persia began visiting Indonesia in the 13th century and established trade links between this country and India and Persia. Along with trade, they propagated Islam among the Indonesian people, particularly along the coastal areas of Java. In 1511, the Portuguese arrived in search of spices after their conquest of the Islamic Empire of Malacca. They were followed by the Spaniards. Both began to propagate Christianity and were most successful in Minahasa/North Sulawesi and Maluku, also known as the Moluccas. However, it wasn't until the arrival of the Dutch in the early 17th century that Christianity became the predominant religion of North Sulawesi. From 1942 to 1945, Japan occupied Indonesia. Shortly before Japan's surrender in WWII, Indonesia declared its independence. However, it took four years of often brutal fighting, sporadic negotiations, and mediation by the United Nations before the Netherlands finally agreed in 1949 to transfer sovereignty. Strife continued in Indonesia's unstable parliamentary democracy until President Soekarno declared martial law in 1957. Soekarno was removed from power following a fruitless coup in 1965 by alleged Communist sympathizers. President Suharto ruled

Indonesia from 1966 until 1988. Suharto was toppled in 1998 following a round of riots, and in 1999, free and fair legislative elections took place. Indonesia is the world's third most populous democracy, Government: Republic. Capital: Jakarta.

Geography

Located in Southeastern Asia, Indonesia is an archipelago situated between the Indian and Pacific Oceans. Coastline: 54,716km. Terrain consists primarily of coastal lowlands, with interior mountains on larger islands.

Climate Tropical, hot and humid, with more moderate climate in the highlands. The water temperature is normally 28-29°C (84-86°F) year round, with an occasional "chilly" 27°C (82°F) spot. Most divers use 1mm neoprene suits. However, some people prefer 3mm.

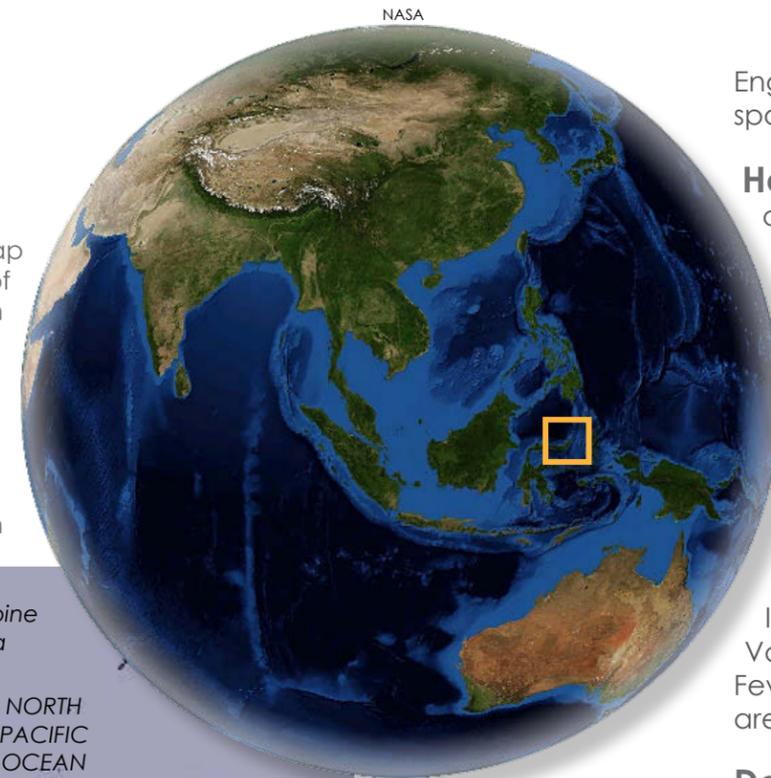
Environmental issues

Challenges include industrial waste water pollution, sewage,

urban air pollution, deforestation, smoke and haze due to forest fires. Logging—the rainforests within the combined West Papua/Papua New Guinea land mass are second in size only to those of the Amazon, making it 'the lungs of Asia'. In 2001, there were 57 forest concession-holders in operation around the country and untold other forest ventures operating illegally. Mining—tailings from copper, nickel, and gold mining are real threats.

Economy A vast polyglot nation, Indonesia has experienced modest economic growth in recent years. Economic

RIGHT: Global map with location of Bunaken
BELOW: Location of Bunaken on map of Indonesia
BOTTOM RIGHT: Porcupinefish with cleaner wrasse, Bunaken



machines in tourist areas offer the best exchange rates, Travellers cheques are becoming quite difficult to use except at banks. Exchange rates: 1EUR=12,723IDR; 1USD= 9,737IDR; 1GBP=15,127IDR; 1AUD= 9,972IDR; 1SGD= 7,908IDR

Population

251,160,124 (July 2013 est.) Ethnic groups: Javanese 40.6%, Sundanese 15%, Madurese 3.3%, Minangkabau 2.7%, Betawi 2.4%, Bugis 2.4%, Banten 2%, Banjar 1.7% (2000 census). Religions: Muslim 86.1%, Protestant 5.7%, Roman Catholic 3%, Hindu 1.8% (2000 census). Note: Indonesia is the largest Muslim country in the world. Visitors are encouraged to respect local traditions and dress modestly. Internet users: 20 million (2009)

Language Bahasa Indonesian is the official language, plus English, Dutch and local dialects are spoken. In tourist areas,

English, Spanish and German are spoken.

Health There is a high degree of risk for food or waterborne diseases such as bacterial diarrhea, hepatitis A and E, and typhoid fever, as well as vectorborne diseases such as chikungunya, dengue fever and malaria. Check with WHO or your dive operator for prophylaxis recommendations. Larium is not effective. Bring insect repellents containing DEET. International Certificate of Vaccination required for Yellow Fever if arriving from infected area within five days.

Decompression chamber

Manado: Malalayang Hospital tel: +62 0811 430913
Makassar: Rumah Sakit Umum Wahidin Sudirohusodo tel: +62 0411 (584677) or 584675

Travel/Visa/Security

Passport valid for six months beyond intended stay is required. There is a Visa-On-Arrival for 35 countries including USA, UK, most European and Asian countries. It is US\$25 for a stay of up to 30 days. Although there is an active independence movement in Papua, tourists have not been impacted.

Web sites

Indonesia Travel
www.indonesia.travel/en

