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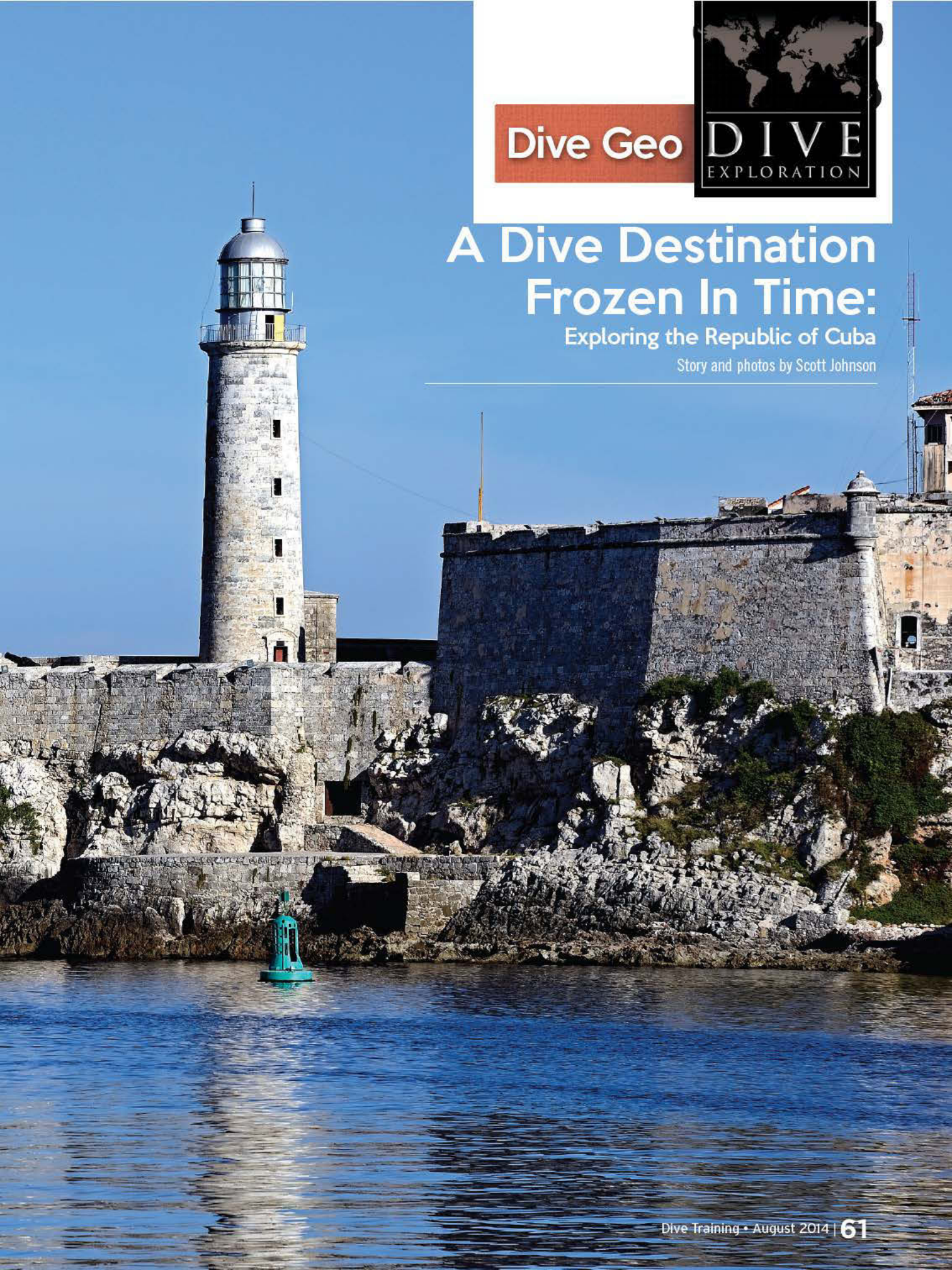
The Fort of Saint Charles
(La Cabaña) guards the harbor
entrance in Havana.

Cuba is tantalizing forbidden fruit for neighboring U.S. citizens and an underwater Garden of Eden for scuba divers around the world. Travel to this Caribbean island nation from the states has been restricted by the U.S. Treasury Department for the past 50 years. Sponsored by the nonprofit organization Ocean Doctor, I recently joined a sanctioned People to People Educational Exchange trip to this isolated communist state. The brief 45-minute flight from Miami to Havana covered a mere 235 miles (376 km), but warped time to an age long past. The city and its inhabitants appeared to live in a bygone era as if an old black-and-white movie had magically been rendered in color and then brought to life. Further explorations revealed uninhabited islands and reefs dating back to a period before overfishing, pollution, commercial development and global warming began tainting the seas.

Over Easy

The Republic of Cuba is an archipelago of more than 4,100 islands, islets and keys. The main island is 745 miles (1,192 km) long and a maximum of 130 miles (208 km) wide. It is the biggest island in the Caribbean, the 17th-largest island in the world and possesses a land area of 42,426 square miles (110,308 sq km), which makes it slightly larger than the U.S. state of Tennessee (42,180 square miles [109,668 sq km]). Cuba lies angled from northwest to southwest and is located only 94 miles (150 km) south of the Florida Keys, 87 miles (139 km) south of the Bahamas, 50 miles (80 km) northwest of Haiti, 90 miles (144 km) north of Jamaica and 130 miles (208 km) northeast of Mexico across the Yucatan Channel.

The tectonic forces that separated North and South America also spawned Cuba. Plate movements continue to affect the island by steadily pushing it to the west and tilting it from north to south. Coral limestone cliffs along the northern coast are the remnants of ancient coral reefs that have gradually been exposed. To the south, the submerging land has produced priceless ecological habitats, such as mangrove forests and wetlands. The main island is rife with uncharted cave systems that likely hold additional clues to the complex geologic history of the region.



Dive Geo

DIVE
EXPLORATION

A Dive Destination Frozen In Time:

Exploring the Republic of Cuba

Story and photos by Scott Johnson



A Cuban works on his prized Studebaker in Havana.

Sugar, Slaves and Sanctions

Spanish explorer Christopher Columbus landed along the north coast of Cuba on October 28, 1492. He was greeted by the indigenous Amerindians, who introduced him to the practice of smoking plant leaves they called cohibas or tobacos. Subsequent Spanish colonization of the island in 1511 decimated the native population. They couldn't fend off imported diseases and violent invaders. Their lasting legacy includes the country's name, which is derived from the Taíno word *cubanacán*, which means, "Where fertile land is abundant."

Spain eventually relocated its primary New World port from Hispaniola to Havana and limited the distribution of tobacco to Spanish colonies. The island's economy exploded when French sugar growers fled the Haiti slave rebellion and arrived in 1793. The proliferation of sugar plantations led to an exponential demand for African slaves and thrust the colony into the sugar exportation limelight as it began producing an estimated one-third of the world's sugar supply. Creoles (Spaniards born in Cuba) and other inhabitants rebelled against excessive taxation and oppression, including slavery, in the latter half of the 19th century. The United States eventually intervened to protect its growing investments on the island and also partially in response to growing anti-Spain sentiments that were driven by a series of

culminated with Batista controlling the political scene indirectly through a series of puppet presidents and then hands-on as president and self-proclaimed dictator through 1958. Labor unions, organized crime and government corruption contributed to the growing gap between the rich Havana elitist and the nonunionized working class.

Fidel Alejandro Castro Ruz, a young lawyer running for a seat in the Cuban parliament, petitioned the courts for a return to the electoral process in 1952. When his legal efforts were ignored, he led a failed attack on the Moncada barracks in Santiago on July 26, 1953. After a two-year stint in prison, he and

A "Yank tank" passes in front of the entrance to Havana's Chinatown.



newspaper articles published during fierce circulation battles. The ensuing Spanish-American War resulted in the two combatants signing the Treaty of Paris on December 10, 1898, and forced Spain to relinquish all rights to Cuba. After three years of U.S. occupation, the Republic of Cuba officially won its independence on May 20, 1902.

Turbulent presidential terms, crime, rebellion, dictatorships and continuing U.S. involvement ultimately doomed the young democracy. Fulgencio Batista, a mulatto sergeant, led a 1933 revolt that

his brother, Raul, were exiled to Mexico. On December 2, 1956, they returned to their homeland, accompanied by a like-minded Argentine doctor named Ernesto "Che" Guevara and other revolutionaries. Two years of intense guerilla-style fighting that was fueled by a groundswell of support by the impoverished populace prompted Batista to flee for the Dominican Republic on January 1, 1959. Instead of reinstating democratic elections once he took control of the country, Castro began eliminating all potential dissidents and controlling almost every

aspect of the society, such as expropriating utilities, factories, land, newspapers, radio stations, television studios and private property. He declared Cuba was adopting communism during a nationally broadcast speech on December 2, 1961, and made good on that pledge when the Communist Party of Cuba was born October 3, 1965.

The charismatic Castro despised the United States for chronically “meddling” in his country’s affairs and vowed to break all ties with the industrial power. In response to his expropriation of U.S. investments and businesses, the United States imposed a trade embargo on Cuba on October 19, 1960, officially severed

at the United States. The Soviet Union recalled their vessels and removed existing missiles in exchange for U.S. commitment not to invade Cuba. Castro ruled with an iron fist until his declining health led him to cede control to Raul in 2006.

The Real MacGyvers

The Soviet Union subsidized the Cuban economy to the tune of \$4 billion to \$5 billion annually throughout the Castro regime, but the subsidies slowed in the late-1980s and then ended January 1, 1991, when the Soviet Union collapsed. The government responded by tightening everyone’s belt during this *Período Especial* (Special Period). The resourceful Cuban people, who have learned to survive on fixed rations and in isolation from the rest of the world, had little choice but to improvise yet again and figure out a way to live on a ragged edge that had become even more precipitous.

A stroll through Old Havana revealed crumbling Spanish-colonial (Gothic and Baroque style) facades that must have been truly magnificent around the time I was born. Some of the structures are surrounded by scaffolding, but the goal appears to be a state of stasis more than actual repairs, as I could not find a single worker. While the infrastructure is obviously in distress, the Cubans radiate life, determination and hope. Their famous Yank tanks or máquinas are bold, ever-present examples of their MacGyver-like resiliency. I am far from a car buff, but I could not resist sitting on a street corner to watch the menagerie of vehicles flow past. A conga line consisting of a Ford Model T, Studebaker, 1950 Chevy and sporty donkey cart is common. When Castro outlawed the purchase of post-revolution automobiles and the U.S. embargo made spare parts scarce, the Cubans somehow figured out how to keep their wheels on the road. They are defined more by their ingenuity than their meager \$20 monthly paychecks.

If you can imagine a world free of mobile phones, texting, iPads, computers and social networking sites, like Facebook, you can grasp the social interactions at play in Cuba. People actually sit



The cigars shown here are authentic, hand-rolled Cubans.

diplomatic ties January 3, 1961, and on February 8, 1963, restricted travel to the island nation. The unsuccessful Bay of Pigs invasion by a CIA-sponsored paramilitary group of Cuban exiles on April 15, 1961, gave Castro enough propaganda material to prop his regime for decades. The world media was focused on the Cuban missile crisis that peaked in October 1962 when the U.S. Navy quarantined the island to prevent Union of Soviet Socialist Republics’ (U.S.S.R.) ships and submarines from delivering missiles that were intended to be pointed

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for hours simply talking, playing board games and reading nondigital books. Children play with one another by kicking cans or balls along the side streets and on baseball fields scattered throughout the country. Live music streams from balconies and out open doors and windows. Dancing, smoking cigars and sipping rum are national pastimes.

Hail to the Queen

Columbus returned to Cuba in 1494 while sailing from Hispaniola to Jamaica. He was so impressed with the coral gardens off the southern coast that he proclaimed them the Gardens of the Queen in honor of Queen Isabella of Spain. Those same coral gardens now offer some of the best diving in the world. An 837-square-mile (2,176 sq km) center cut of the Gardens of Queen or Jardines de la Reina archipelago encompassing more than 250 uninhabited coral and mangrove islands was declared a no-take national marine park in 1996 and the

first marine protected area (MPA) in Cuba's National System of Protected Areas. Located in the Caribbean Sea, 50 miles (80 km) south of the small fishing village of Jucaro and across the Gulf of Ana Maria, the remote park is sheltered from coastal runoff and vigilantly patrolled.

Sometimes even a dictatorship can have a silver lining. In this case, Castro, an avid fisherman and scuba diver, supported the formation and enforcement of the MPA. Local fishermen were transitioned to state ecotourism jobs, such as boat crew, guides and park patrol. It is one thing to merely tell a fisherman he or she can no longer fish; it is all together different when you train them for a new career with higher-paying jobs. Other fishermen who originally complained about their lost fishing privileges within the new park now camp just outside its boundaries because of the spillover effect of burgeoning fish populations literally spilling outside the park. Fish stocks

within the Gardens of the Queen National Park have increased an estimated 35 percent, with 20 percent hikes in the adjoining waters.

Coral reefs, mangrove forests and sea grass beds are vital habitats that contribute to the rich biodiversity and healthy ecosystem of the MPA. The mangroves function as nurseries that shelter offspring; they limit erosion and also filter toxins from the water that might harm the nearby reefs. The seagrass beds oxygenate the water, trap sediment and offer tasty snacks for marine herbivores. The reefs are continuously bathed directly or indirectly by nutrient-rich currents circulating through the Atlantic Ocean, Caribbean Sea and Gulf of Mexico. These currents distribute plankton and larvae throughout the Caribbean, which means the robust productivity within the Gardens of the Queen National Park is likely seeding reefs throughout the range.

The Research Center for Coastal Ecosystems in Ciego de Avila, the Fisheries

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Cuba's marine conservation efforts have paid off. Divers can enjoy seeing massive goliath groupers and healthy populations of silky sharks.



Control Department and Avalon Diving, a joint Italian-Cuban dive operation, support the ongoing management and protection of the area.

Avalon Diving is also the only game in town when it comes to diving and even they are limited to 500-

1,000 divers per year. The five-hour crossing from Jucaro is via a luxury dive yacht and then guests either stay aboard or transfer to a 110-foot (33 m) houseboat called the *Tortuga*. All dives are made from skiffs. Visibility is tidal-dependent, which means in-

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Over the years, we've worked hard to make scuba diving a much safer sport through improved training, education and research. However, dive accidents still occasionally happen and may require costly treatments and emergency transportation. DAN's dive accident insurance protects you against out-of-pocket expenses and is an irreplaceable resource should a dive injury occur. It's the smart way to enjoy the sport you love.

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FACTS AND FIGURES

Location: 94 miles (150 km) south of the tip of the Florida Keys, 87 miles (139 km) south of the Bahamas, 50 miles (80 km) northwest of Haiti, 90 miles (144 km) north of Jamaica and 130 miles (208 km) northeast of Mexico across the Yucatan Channel.

Size: Total area is 42,426 square miles (110,308 sq km).

Population: 11.4 million.

Capital: Havana.

Getting There: José Martí International Airport in Havana is Cuba's main international airport.

Departure Tax/Visa: American citizens can review the most current travel restrictions for Cuba at www.treasury.gov/resource-center/sanctions/Programs/Pages/cuba.aspx. You can learn about the Ocean Doctor's People to People Educational Exchange program at <http://oceandocor.org/gardens>.

Currency: One Cuban Convertible Pesos (CUC), called a kook, is equal to one U.S. dollar. U.S.-backed credit cards are not accepted due to the ongoing trade embargo. It is recommended to carry euros, which have a much better exchange rate.

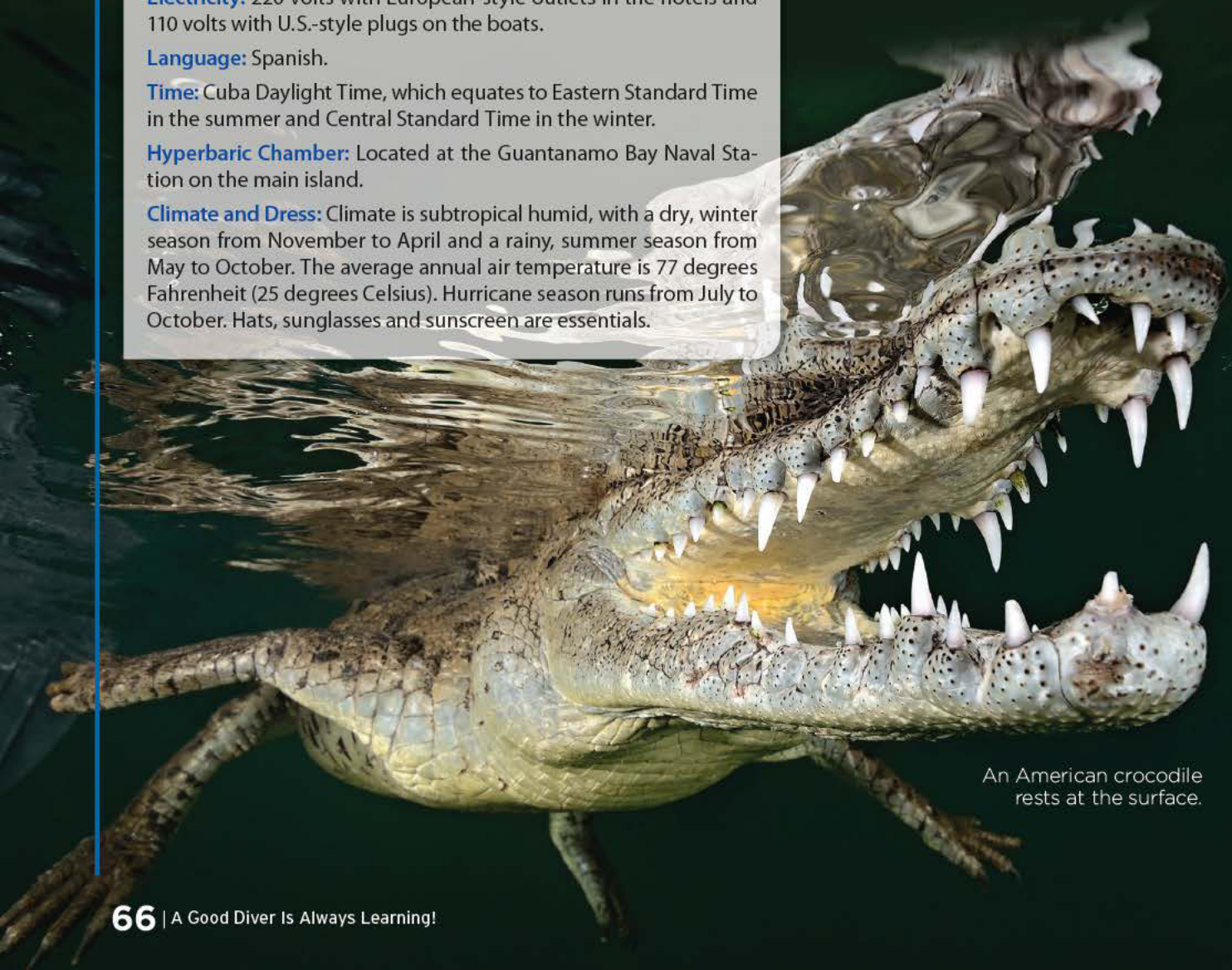
Electricity: 220 volts with European-style outlets in the hotels and 110 volts with U.S.-style plugs on the boats.

Language: Spanish.

Time: Cuba Daylight Time, which equates to Eastern Standard Time in the summer and Central Standard Time in the winter.

Hyperbaric Chamber: Located at the Guantanamo Bay Naval Station on the main island.

Climate and Dress: Climate is subtropical humid, with a dry, winter season from November to April and a rainy, summer season from May to October. The average annual air temperature is 77 degrees Fahrenheit (25 degrees Celsius). Hurricane season runs from July to October. Hats, sunglasses and sunscreen are essentials.



An American crocodile rests at the surface.

coming tides carry clear open-ocean water into the archipelago and outgoing tides can leave you swimming in sediment-laced soup with the clarity of a sand storm. Go with the flow by focusing on macro subjects when the dive guides tell you the tide is heading out. The water temps range from 77 degrees Fahrenheit (25 degrees Celsius) in the winter to a balmy 86 F (30 C) in the summer — that translates to a 5-mm and 3-mm wet suit, respectively, for most divers.

Big and Bigger

The park's reefs are uniformly exquisite. In almost 30 years of diving, I have not observed comparable reefs within the Caribbean. For example, elkhorn coral (*Acropora palmata*) that is almost extinct elsewhere in the Caribbean thrives here. The healthy corals, gorgonians and sponges are as impressive as the plentiful fish and other reef inhabitants. And yet, what really got my attention and left me yearning for the next dive was the abundance of big marine animals, including numerous species of sharks, grouper, rays, tarpon and American crocodiles. Best of all, these animals are generally approachable.

At Finca de Pepe, a 300-pound (135 kg) Atlantic goliath grouper (*Epinephelus itajara*) swam up behind me while I was cruising along the reef and then sucked one of my strobes into its massive maw. When I looked over my left shoulder to see what had halted me in my tracks, the grouper spit the strobe back at me with a resounding pop.

Longline fishing has devastated silky shark (*Carcharhinus falciformis*) populations worldwide over the past 15 years. I was thrilled to spend an hour with 30 or more of these sleek sharks near the surface at Farallon. They swirled around me as if trying to figure out what kind of unusual creature was invading their space. The rest of my group spent most of the dive exploring the submerged coral pinnacle and its tunnels at 90 feet (27 m). They joined me for an extended safety stop to observe and enjoy these endangered animals.

Noel Lopez, a renowned divemaster and underwater photographer, has been diving in Jardines de la Reina for the past 20 years. Lopez said, "We were fortunate to see three or four silkies here before the park was established. Now, we have to make sure we do not jump on one at the start of a dive. Ongoing protection and education have been the keys." Giuseppe "Pepe" Omegna, Avalon's Diving's Italian owner, originally carried his ideal for a marine reserve to Dr. Julio A. Baisre in the Ministry of the Fishing and the seeds for the park were planted. Omegna smiled when I told him how impressed I was by the silkies and the MAP, as a whole. He said, "Things keep getting better and better, but I am worried for the future. As Cuba expands its tourism industry, we must make sure that we focus on sustainable ecotourism and not simply chase the money. The Gardens of the Queen National Park can be, should be, a model for the rest of the Caribbean."

Snorkeling between dives at La Boca de Piedra Chiquita gave me the opportunity to photograph another endangered species, American crocodiles (*Crocodylus acutus*), as they floated at the surface, cut the water with their powerful tails and hide in the seagrass.

Lost In Time

This underwater Garden of Eden is topped with peace, quiet, gentle breezes and dramatic sunrises and sunsets. There is little to do in the park between dives other than napping, sunbathing and snorkeling. Skiff drivers will gladly take you to one of the lonely sand beaches and then scatter a few pieces of fruit to encourage the resident Desmarest's hutias (large tree rodents, *Capromys pilorides*), Cuban iguanas (*Cyclura nubila*) and hermit crabs to properly greet you. Havana will offer plenty of forbidden fruits to sample on your way home. In the meantime, the Gardens of the Queen National Park allows you to get lost in time for a bit, far, far away from the hustle and bustle of the 21st-century life awaiting you at home.



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