

Belize - Coral Reef Splendor and Maya Ruins in the Jungle

March 21-29, 2020 4 credit hours - \$2375. includes tuition, lodging, ground transportation while in Belize and Guatemala. \$2200. without credit. Does not include airfare.

Submerge yourself in the shimmering, colorful world of the Belize coral reefs. Explore coral fish as they change sexes, groom each other, and develop complex relationships of symbiosis. Remember your dream of being an archeologist? Come wander with us into the land of the ancient Mayans, with their extravagant architecture, rituals, and games. Experience Belize, brimming with life and mysteries.

Day 1: Fly into Belize City, Belize. Take a short boat ferry to the nearby coral reef island of Caye Caulker, home of Caye Caulker Forest and Marine Reserve. Snorkel the barrier reef of Caye Caulker and begin our research on biodiversity of this beautiful Caribbean barrier reef. During class time following our first snorkel, we will explore the geology of barrier reefs and their critical contributions to marine ecosystems.

Day 2 Today we will take a guided tour to Swallow Caye, mating grounds and home of the manatees. If luck is with us, we will see their bristling snouts as these mammals come up to breath and their huge shadows in the water. June is also manatee mating season, so the manatees have extended their range to other cayes as well. Following our manatee tour, we will continue to snorkel the sea grass beds right in front of our hotel. Class time this evening will focus on coral reef bleaching and the role of the three species of mangroves in this ecosystem.

Day 3: What an exciting day as we take a boat to the famous Hol Chan Reserve and Shark and Ray Alley. We are very likely to be able to swim with nurse sharks, which are safe sharks around humans. When I was snorkeling these amazing reefs, I also swam with the endangered Loggerhead Turtle, dozens of sting rays and a 5 foot long Black Grouper. We will then snorkel and explore the Coral Garden reefs, home of hundreds of species of coral, fish, and invertebrates. Class time this evening will center on relationships on the reef as we learn about symbiosis, mutualism, and predation.

Day 4: We will have another great day on the coral reefs as we explore the Belize Reef Reserve.

We will continue our database on identification of fish and invertebrate species. During our class times during these days, we will also explore how the coral reef ecosystem has spread throughout the tropics from its birthplace near Malaysia and how coral reefs vary in species. Only the fish species with long lived larvae that can withstand the long ocean journey between island reefs can reach the next distant shores, which is why Caribbean reefs has many different species than Australia's Great Barrier Reef or the reefs of Hawaii. We will also explore the fascinating world of symbiotic relationships as we watch tiny wrasses and shrimp set up "cleaning stations" for the larger fish on the reef. Since night time reef species are very different from day time species, we will have an optional evening snorkeling adventure, amid the dancing ocean bioluminescence. Each evening, during class time, teachers will present their jigsaw research on coral bleaching, fish types on the reef, coral reproduction, local food and cultures, and European settlement in the Caribbean.

Day 5. Heading by water taxi back to the mainland Belize very early this morning will leave us time for some inland adventure. Along the way, we will be treated to the varied and different cultures of the Belize people, who can claim ancestors of Mayas, Creoles, Spanish, British and Mestizo. English is the official language of Belize, although the Creole version of English is fascinating. What an experience to be treated to "Creole as she is spoken." After picking up our rental vans, we will head to the Community Baboon Sanctuary. What the locals call baboons are really Black Howler Monkeys. The World Wildlife Fund has partnered with local Creole landowners to save the declining populations of Howler Monkeys, in one of the most successful conservation and ecotourism projects in Belize. We will be treated to a guided journey into the Baboon Sanctuary, with a very knowledgeable local guide who will include flora and fauna of the rainforest on our tour. We will then journey to Altun Ha', our first Mayan ruin with its two large ceremonial plazas. A fascinating part of our tours of the 4 Maya cities is how very different the architecture and layout of the city is within each one. At Altun Ha', we will have our first chance to climb a Maya temple and buy arts and crafts from local Maya vendors. We will then drive to Orange Walk Town where we will stay this night. Orange Walk Town was originally a rainforest logging camp and has since become an agricultural area focusing on sugar cane. We will see sugar cane stalks waving their feathery tassels in the evening light. Orange Walk Town is off of the usual tourist track and will give us an opportunity to really see how the local Belize population lives. Class time this evening will focus on tropical rainforest ecology, cutting and

burning rainforests, use of hardwoods, and the role of ecotourism in saving precious habitats.

Day 6. The best way to travel to the Maya ruins of Lamanai, is by riverboat along the New River Lagoon. Lamanai was settled over 3000 years ago and has very impressive temples. It is one of the longest occupied sites in the Mayan world. Our river boat tour guides will point out many bird species, iguanas, and crocodiles as well as tell us more about the ecology of this great river. After this tour, we will drive across the interior of Belize to the western side and spend the night in beautiful rainforest cabanas at Clarrissa Falls. This impressive ecotourism “resort” has been created by one woman. Her family owns the nearby cattle ranch, and she is the cook, architect, tour guide, and business owner. We will enjoy sensational meals along the beautiful Mopan River and listen to the rapids from our cabanas each night.

Day 7: Hitting the road by 7 a.m., we will hopefully beat the lines at the Guatemala border. We will drive to Tikal, Guatemala and explore some of the most impressive and famous Maya ruins in the world. Tikal is "one of the great Classic Maya cities" was home to over 100,000 people. However, Tikal was abandoned about 1100 years ago. Many of the local people are descendants of the Maya, with much of the fascinating culture surviving. We will also learn the history of the Spanish conquest of the 1500's and the centuries of struggle for equity among the people. We will hire a local guide to explore Tikal. The great city of Tikal was covered with rainforest when the early explorers discovered it. Although much of it has been excavated, many temples are still shrouded with rainforest. If we are lucky, we will still hear the territorial cry of the Black Howler Monkey and stumble upon peccaries, coatimundi, or agoutis. Parrots and toucans often screech through the sky, so we will be adorned with both binoculars and cameras. After more exploring of Tikal, and a little shopping in the craft stores of the local Mayas, we will drive back to Belize and Clarrissa Falls.

Day 8: More Maya ruins await us back in Belize, as we explore Xunantunich and then float the Mopan River in inner tubes to explore the local flora and fauna of the area. Let's keep our eyes on the lookout for coatimundi, parrots, parakeets, howler monkeys, and iguanas.

Day 9: On our drive back to Belize City, we hopefully will have time for a quick visit to the incredible Belize Zoo, which will give us our best chance to see some of the more elusive and fascinating wildlife, including pumas, scarlet

macaws, toucans, and harpy eagles. The Belize Zoo covers 30 acres and is more a wildlife sanctuary than a typical zoo with enclosures so large and deeply forested that we will feel more like we are on a rainforest safari. Fly back to the U.S. complete with many Creole, Maya, and local treasures, full camera discs and amazing memories.