

Sustainability Guide: Belize

You are about to embark on a unique excursion to the exotic Central American country of Belize, located on the coast of the Caribbean Sea. The country is well known for scuba diving, fishing, hiking and bird watching. You will have many opportunities to explore Belize's natural beauty.

Belize also suffers from environmental problems due to human impact and exploitation of its natural resources. The main environmental issues are as follows:

- deforestation
- over-fishing
- water pollution
- agricultural runoff
- solid and sewage waste disposal.

Deforestation in Belize refers to the disappearing presence of the mangrove trees due to land dredging and land reclamation projects. Mangrove trees are essential to maintaining biodiversity and protecting against soil erosion. Their roots are incredibly strong and can withstand currents and storms. These trees also provide habitats to tree climbing crabs and sea snails and provide food for monkeys that snack on the shoots and small insects that eat the leaves. Fallen leaves contain essential nutrients: when washed out to sea, these nutrients help coral reefs to thrive. The roots prevent mud and sand from being washed away and the roots also regenerate the soil. Rapid residential and commercial development along the Belize coastline has contributed to the deforestation of the mangrove trees.

Over-fishing of certain marine life species, especially in the reefs, has contributed to a decline in marine biodiversity. The fishing industry is expanding along with the tourism industry. Many fishing sites are now extinct and will take years of active conservation efforts before the fish species return to the spawning sites. Water pollution also contributes to the degradation of the marine habitats in Belize. Belize lacks the necessary infrastructure to control and enforce solid and liquid waste management. Inadequate solid waste disposal contaminates the water, introduces toxins to marine life, destroys corals and sea grass, and decreases fish populations. Poor water quality is also a result of agricultural runoff. Large scale agriculture of bananas, citrus, and sugar cane has escalated at the expense of the forests. Therefore, pesticides used in farming find their way into streams and local water sources.

The government of Belize is taking steps to preserve the natural beauty of their country and is seeking to improve the socio-economic conditions. Sustainable solutions to these challenges will require innovative, practical strategies that involve the people of Belize. Statistics indicate that about 45% of the landmass of Belize is under protection and preservation and a push for more is in the works. Although Belize is one of the smallest countries in Central America, it has the largest eco-tourism industry in the region. Major non-governmental environmental organizations and entities include the Belize Audubon

Society (BAS), The Belize Zoo and Tropical Education Center (TEC), Monkey Bay Wildlife Sanctuary and Wildlife Conservation International (WCI).

As a visitor to this spectacular country you can take measures to make sure not to further the environmental degradation affecting Belize. As a guest, be respectful towards the wildlife and the natural habitats that you encounter, either at your hotel or while visiting national parks. Limit your water consumption and be sure to dispose of your waste in the proper way, usually described by your eco-lodge or at the national park. In experiencing the marine wonders of Belize, respect the coral reefs and the species that call the reefs home. Fortunately, the eco-lodges that you will be staying in are committed to sustainability and preservation of Belize's natural beauty.

Guide to Eco-Lodges in Belize

Chan Chich is located on a 130,000 acre private nature reserve in Northwestern Belize. Until the 1960's, the land that Chan Chich is located on was used for logging. When the land was purchased by another company in the 1980s, agricultural crops were planted on the land in hopes to maintain the forests surrounding the farms and to prevent logging. In May of 1987 construction on Chan Chich began and all the trees that were cut down in order to clear land for the eco-lodge were used in the building of the lodge itself. Posts, sticks and thatch harvested from the surrounding jungle were used in construction. All the finished milling was done at Chan Chich, along with the construction of all the windows, doors and beds, keeping the production local and within the community.

Kanatik Reef and Jungle Resort was built with respect for the natural environment surrounding the resort in mind. The resort was built while preserving the pristine setting provided by nature. The resort sits on 300 acres, with the majority of the property in its natural, undisturbed state. Native, tropical plants grow on the property as the construction of the resort was designed around this flora and fauna. The resort does not spray any chemical control for termites or other pests. To protect the wildlife and indigenous species such as iguanas, coatis, foxes, agoutis, opossum, and snakes, no dogs are allowed on the land. The wildlife roams freely about the resort and beaches. The resort also practices composting with organic food leftovers. Kanatik Resort houses the best wastewater treatment system for the seaside environment.

Chaa Creek is located on 365 acres of private nature reserve along the banks of the Macal River in the foothills of the Maya Mountains in Belize. The mission of Chaa Creek in terms of conservation is "to establish a model of low-impact, sustainable development. By stimulating interest in the environment, natural history and local culture we hope to demonstrate the long term benefits of ecotourism over other environmentally damaging options for development" (www.chaacreek.com). Chaa Creek acknowledges that in order to survive as a top eco-lodge, it is necessary to work in harmony with the natural environment and the indigenous local communities. The staff at the lodge--over 100 full time employees--is comprised of Belizeans from local towns and villages. The lodge is affiliated with the Belize Foundation for Conservation. Founded at Chaa Creek, this NGO's mission is to promote environmental education, cultural awareness, and



sustainable conservation practices throughout Belize. The Chaa Creek Nature Center is on the grounds of the lodge and provides visitors a chance to educate themselves on environmental and cultural issues in Belize. Chaa Creek's effort to be more sustainable does not stop at education, as a lodge they are committed to lessening their environmental impact. They have partnered with Green Globe, an environmental certification program for travel and tourism. All solid waste is separated and then reused or recycled. Organic kitchen waste and other organic waste such as grass trimmings are composted and then used as a soil enhancer in their ornamental gardens and vegetable production at their organic farm. Restaurant food waste is given to a local farmer to supplement the feeding of his pigs. Metal cans are crushed in a manual crusher that was designed for Chaa Creek. The crushed cans are then used as fill material in concrete building foundations. In an effort to reduce paper consumption, the administrative staff is encouraged to use paper on both sides when printing or copying and to maximize utilization of electronic media. Cardboard boxes are flattened out and used as ground cover at their organic farm to control the growth of unwanted weeds around the vegetable plants. Remaining waste paper and cardboard are sent to a commercial recycling facility. The electrical energy required by the lodge is produced on-site by well maintained diesel generators. Energy efficient lighting combined with automatic timers and the utilization of natural lighting assists with the reduction of energy consumption. Macal River Camp facility utilizes solar power for all of its electrical needs. Water consumption is decreased by the utilization of low-flush toilets and low flow shower heads. Waste water is treated with biologic enzymes in properly designed septic tanks and soak-aways.

Victoria House Beach Hotel actively supports community efforts to maintain and improve the quality of its environment. As members of the Ambergris Caye Chamber of Commerce and the San Pedro Business Association, Victoria House is active in areas such as: battery clean up and recycling, rubbish drives, collection of rainwater, exclusive use of rainwater and groundwater for irrigation, support of youth activities and reducing impact by investing in the following: composting for in house wastes, recyclable 5 gallon bottles of purified water available for guest use in dining rooms and individual bottles available upon request. The hotel is also involved in conservation organizations such as Green Reef Conservation Program.