



WWF International Corals Initiative

MesoAmerican Reef

Geographic location: Central America
(Belize, Guatemala, Honduras, Mexico)

Background

Shared by the four nations of Mexico, Belize, Guatemala, and Honduras, the Mesoamerican Reef is the largest reef system of the Americas, extending nearly 1000 kilometers from the northern tip of the Yucatan Peninsula in Mexico to the Bay Islands / Cochineros Cays complex off the north coast of Honduras. An important variety of productive ecosystems are found within the region. These include some of the most diverse coral reefs in the western Atlantic in barrier and fringing reefs, atolls and patch corals, lagoons, sea grass beds, and mangrove systems - all providing critical habitats for threatened species and supporting thousands of coastal communities in both food security and livelihoods.

Population

Various ethnic groups live along the coastline of the four countries. This population of great cultural and ethnic diversity depends on economic activities linked to coastal and marine resources, such as fishing and tourism. The region is also marked by population growth and increased consumption of space and resources. The population tripled between 1950 and 1990, with an annual growth rate of 2.9% - one of the highest in the world. Population density has also increased in coastal areas. Recent studies suggest that coastal areas are increasingly receiving immigrants looking for job opportunities and a better quality of life. Coastal areas, especially those where tourism development is more pronounced, become highly dynamic areas where a diverse number of immigrants converge.

Biodiversity

More than 60 reef forming coral species support a number of other forms of marine life. The ecoregion harbors a number of threatened and endangered marine species including the largest population of manatees in the western Caribbean, the salt water crocodile, several species of sea turtles (green, hawksbill and loggerhead), as well as the Nassau and Goliath groupers. The region is also home to one of the most predictable aggregations of whale sharks in the world, as well as many other shark species such as, bull, nurse, reef, and hammerheads. Fish species that are exploited for commercial purposes include spiny lobster, queen conch, shrimp, snapper and grouper. Migratory birds also rely heavily on the richly productive feeding grounds of the reef, which support populations of magnificent frigate bird, red-footed booby, brown pelican, olivaceous cormorant and many others.

Threats

Although the reefs have survived seasonal onslaughts of hurricanes - one of the most important natural disturbances affecting them - they may not be so well prepared to withstand the impact of people. Threats are posed by rapidly growing pressure from coastal development, unregulated tourism growth, and deforestation for agriculture, which results in siltation from soil erosion and pollution from herbicides and fertilizers. Unsustainable fishing practices and offshore oil spills also threaten the integrity of this reef system.

The main industries in the region are tourism, fisheries, agriculture (banana, citrus, oil palm, and sugarcane) and commerce (through major ports in Guatemala and Honduras). All these economic activities have an impact on



the reef system since they tend to lead to the destruction of coastal habitat, water pollution and over-exploitation of marine resources. Another important threat is global warming, both in terms of more frequent coral bleaching events and potentially more frequent and violent storms. In 1995 and 1998 major coral reef bleaching events occurred throughout the Mesoamerican reef, both coinciding with periods of high sea temperatures and calm seas. The 1998 event resulted in greater mortality of corals, a loss of as much as 50% of the live coral. It is not yet known to what extent the reef will recover, and how long this recovery may take.

What WWF is doing

WWF has been working in the region for several decades, promoting and supporting conservation efforts at the local, national and regional levels. The Tulum Declaration, signed in 1997 by the Heads of State of Belize, Mexico, Honduras and Guatemala, established political cooperation at the highest level for the conservation and management of the Mesoamerican Reef. Since then, the four governments developed an Action Plan that reflects their commitment to safeguard, conserve and achieve common development objectives in the region. These outstanding conservation efforts on behalf of the Mesoamerican Reef were recognized by WWF as one of its exclusive Gifts to the Earth, whose global importance includes uniqueness of biodiversity, cultural heritage, international political accords and national political conservation successes.

With assistance from the Global Environment Facility (GEF), the governments have more recently initiated a regional project in the Mesoamerican Reef for the protection of critical transboundary areas and environmental management - another step toward a sustainable future for this jewel in the Caribbean.

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