

# Where the Land and Sea Intertwine: Connecting the Coastal Ecosystems of Belize

Electronic Field Trips from Belize, Central America, 10am and 1pm EDT

May 13, 2003: Mangrove Forests of Belize, Grades 5-9

May 15, 2003: Sea Turtles of Belize, Grades 1-6



Join Smithsonian scientists and explore coastal ecosystems in Central America, along the coast of Belize. Here thousands of small islands, called cays (pronounced “keys”) lie in the lagoon between the mainland and barrier reef. Mangrove forests, which developed here approximately 7,000 years ago, dominate this coastal zone, along with seagrass beds and coral reefs. Discover how these three ecosystems are inextricably linked, and how the distribution of mangroves parallels the distribution of coral reefs worldwide.

Mangroves are diverse communities of trees that grow in the intertidal zone of tropical coasts. These plants have specialized adaptations that allow them to live where other plants can't. “Mangrove” describes an entire assemblage or group of plants, all of which share specific characteristics. During this electronic field trip, investigate these characteristics that define mangroves and the adaptations that allow them to live where land and sea intertwine.

Mangrove swamps are often described as the “rainforests or

nurseries of the sea.” They host diverse communities of plants and animals, including several species of sea turtles, reptiles who live in the sea but must return to land

to reproduce. Female sea turtles lay their eggs on the very same beach from which they emerged as hatchlings, migrating thousands of miles to return to their natal beach. The delicate eggs incubate in nests on the land's edge, where the land and sea intertwine. Explore the migration and life cycle of the sea turtles, including their migratory stop along the coast of Belize.

▲ *Coastal ecosystems, such as mangroves and seagrasses, provide important habitats for many organisms.*



▲ *Sea turtles, like this young loggerhead, use the coastal ecosystems during different stages of their lives.*

Mangroves and sea turtles are threatened worldwide by human factors such as development, exploitation, and pollution. Losing this important habitat and the organisms that depend on it jeopardizes the overall biocomplexity, the way in which biological systems and their parts interact. Scientists at the Smithsonian Environmental Research Center study this, in order to better understand the processes that sustain life on Earth. Join them as they uncover fascinating stories within the coastal ecosystems of Belize, where the land and sea intertwine.

## What is an Electronic Field Trip?

An Electronic Field Trip (EFT) is a live, interactive, satellite broadcast, designed to offer students in K-12 classrooms learning opportunities they would not otherwise experience. In an EFT students interact with scientists through live demonstrations, phone calls, and e-mails. Together with teacher-developed curriculum this interactivity makes EFTs a highly effective educational tool. Where the Land and Sea Intertwine is produced in partnership with Ball State University, Project View, and sponsored by the Best Buy Children's Foundation.

## More Information

Visit [www.serc.si.edu/education/dl](http://www.serc.si.edu/education/dl) or contact Dottie Klugel at [klugeld@si.edu](mailto:klugeld@si.edu) or 443-482-2470.

Join Smithsonian scientists to explore the coastal ecosystems of Belize!



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