

# Teacher's Guide

# Coral Reefs: Ecological Communities The Living Oceans

#### **Grade Levels:**

Junior High High School

### Subject Areas:

Biology Life Sciences Environmental Education

#### Synopsis:

Live-action underwater photography captures the ecological balance established between animals and plants on a Caribbean coral reef. Symbiotic and commensally symbiotic relationships are detailed in the habits of Cassiopeia, groupers, Pederson shrimp, remoras, sharks, manatees, barracudas and several other species. The predator/prey relationship is illustrated with exceptions that demonstrate how coral reef animals have established an ecological community.

## Learning Objectives: Students will:

- Provide examples that show how coral reef animals have established an ecological community.
- Describe the role of cleaner fish.
- Compare and describe symbiotic and commensally symbiotic relationships in the coral reef community.
- Explain why coral are considered to be predatory animals.

#### Vocabulary:

archipelago, sedentary, plankton, predator, tentacles, microscopic algae, sanctuary, symbiosis, Cassiopeia, Nassau grouper, Pederson shrimp, dermatologist, Tiger grouper, gobies, hogfish, Creole fish, barracuda, bar jack, crustaceans, mollusks, camouflage, peacock flounder, Caribbean reef squid, cryptic signals, remoras, benign, carapace

**Pre-Viewing Discussion:** 

What is a coral reef? Where are most coral reefs located?

Are corals plants or animals?

Why are coral reefs so important?

Why are many coral reefs endangered?

**Post-Viewing Discussion:** 

Why are sharks dependent on coral reefs for their survival?

What kind of relationship has been established between barracudas and bar jacks?

How do lobsters know it is time to leave the coral reef?

What endangered marine mammal often inhabits coral reefs?

**Further Activities:** 

Do further research on the life cycles of any of the species mentioned in this program.

Investigate why manatees have become an endangered species.

Investigate the unique relationship between young sea turtles and the coral reef.

Find out why "bleaching" has endangered many coral reefs.

**Related New Dimension Media Titles:** 

**Biological Classification (Series)**