



Teacher's Guide

Marine Predator-Prey Relationships **The Living Oceans**

Grade Levels:

Intermediate
Junior High
High School

Subject Areas:

Biology
Life Sciences
Environmental Education

Synopsis:

Live-action underwater photography captures the lives of predators and prey in the world's oceans. Hunting habits and defenses are explored in sardine populations, marlins, snake eels, scorpion fish, and several other species. The baler snail is chosen as an example of a nocturnal ocean predator. The program also introduces the dolphin's use of echolocation to find fish buried in the sand and the mutualism established between tropical fish and sea turtles resting on coralline beds.

Learning Objectives: Students will:

- Provide examples of ocean predators and their hunting methods.
- Describe the defense systems of prey in ocean environments.
- Explain how mutualism takes place in ocean environments.
- Appreciate the complexity of life in ocean environments.

Vocabulary:

plankton, predator, schooling behavior, machete, striped marlin, decimated, coralline algae, concealment, crustaceans, mollusks, jaw fish, baler snail, nocturnal predator, tun snail, Gulf Stream, echolocation

Pre-Viewing Discussion:

What is meant by the term predator or predation?

Are there predators in the oceans? Can you describe some of them?

Are dolphins predators? What makes you think so?

Would sea turtles also be considered predators? Why?

Post-Viewing Discussion:

How do sardines protect themselves from marlin? Why are marlins often successful in their hunt for sardines?

How do dolphins find their food?

How do sea turtles benefit from mutualism?

Can you name a nocturnal marine predator? How does this animal hunt its prey?

Further Activities:

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

Investigate how dolphins communicate with one another.

Investigate the use of echolocation in the animal world.

Find other examples of mutualism in the animal world.

Related New Dimension Media Titles:

Biological Classification (Series)