



## ***Teacher's Guide***

### **Starfish: Ecological Communities** **The Living Oceans**

#### **Grade Levels:**

Intermediate  
Junior High  
High School

#### **Subject Areas:**

Biology  
Life Sciences  
Environmental Education

#### **Synopsis:**

Live-action film footage captures the lives of sea stars that inhabit sea star gardens on the ocean floor. Remarkable slow-motion photography reveals that predatory sea stars are actually social creatures that respond to one another's touch and prefer to hunt together. Other sequences explore the lives of sea stars that inhabit coral reefs and exist with other sea creatures such as ratfish, wolf eels, and sheep crabs. Animal defenses such as camouflage in the octopus, shows of aggression in the sarcastic fringehead, and the tight grip of crabs are illustrated in this visit to regions of the oceans inhabited by starfish.

#### **Learning Objectives:** Students will:

- Explain why starfish are considered predators.
- Provide examples of animal defenses in starfish gardens.
- Explain how scientists have determined that sea stars are social creatures.

#### **Vocabulary:**

diminutive, appendages, kaleidoscopic, succulent, sedentary, sarcastic fringehead, fronds, kelp, serpentine, anemones, venomous, tentacles, ambush predator, Irish Lord

#### **Pre-Viewing Discussion:**

Where would you go to observe starfish?

Do starfish also live in deeper ocean habitats?

Are starfish predators? What do they eat?

How many species of starfish are there? Can you describe the variations in starfish populations?

**Post-Viewing Discussion:**

What is the purpose of starfish tentacles?

How do octopuses camouflage themselves on the ocean bottom?

Why are female octopuses so defensive of their territory?

What is an ambush predator? What fish is an example of an ambush predator?

**Further Activities:**

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

Find out how species of starfish differ from one another.

Do further research on how marine animals defend themselves from predators.

Find out how kelp forests support the lives of starfish.

**Related New Dimension Media Titles:**

Biological Classification (Series)