

In this exciting Blue World adventure, Jonathan hitches a ride on a submarine down to 1,000 feet at Cocos Island, Costa Rica, where he finds strange fish and even sharks!

Objectives

- 1. Introduces viewers to deep sea exploration.
- 2. Illustrates a few deep sea animals and their adaptations.
- 3. Shows the diversity of life in deep water.

Questions for before watching the program

- 1. What is submarine? How does it allow people to dive deeper than on scuba?
- 2. How far does light penetrate into the ocean?
- 3. How do animals exist in the deep ocean without light?
- 4. Where is Cocos Island? Can you find it on a map? What makes it a good place for deep diving in a sub?
- 5. Are there sharks down deep?

Discussion for after watching the program

- 1. At 300 feet, was there light? How would you describe the light?
- 2. At 1000 feet how would you describe the light?
- 3. If no plants can live at 1,000 feet because there is no light, how do you think animals down there can find food with no primary production? (The web can help here)
- 4. Often deep water animals like the jellynose fish have large eyes. Why?
- 5. What do you think the Prickly shark at 1,000 feet might be feeding on?
- 6. Other than the animals we saw on the dive, what other animals might be found down deep?
- 7. *Internet research*: the atmospheric pressure at sea level is 14.7 psi. What is it at 200 feet, considered the safe limit for scuba divers? What is it at 1,000 feet?