



Jonathan Bird's Blue World

Episode 7 • A Sharkwreck Mystery • Study Guide

Thirty miles off the coast of North Carolina there is a shipwreck on the bottom, 130 feet down. Swarming around the wreck are dozens of Sand Tiger sharks. They look menacing, but they seem to be very docile. What are they all doing there, in one spot? That's what Jonathan wants to find out. Biologists think they are coming to mate, as evidenced by the shark teeth they find scattered on the wreck. But while observing the sharks, Jonathan can't see them doing much of anything except swimming around. He and his crew plant remote cameras on the wreck and leave, hoping the sharks will do something when the divers are not around. Reviewing the remote camera tapes reveals nothing special, so the team heads down to dive with the sharks at night. When that doesn't reveal anything, the team tries the remote cameras at night but must figure out a way to get some light on the wreck. Will the remote cameras at night reveal anything?

Objectives

1. Introduces viewers to the Sand Tiger shark, and its specialized teeth designed for catching fish.
2. Teaches how a hypothesis can be tested by experimentation.
3. Demonstrates just how little we know about some species and how hard it is to learn new things about wildlife.

Questions for before watching the program

1. Why might sharks be attracted to a wreck? What is special about a wreck on the sea floor?
2. Why might a number of sharks be attracted to the same spot?
3. Do all sharks have the same kind of teeth?

Discussion for after watching the program

1. Why do sharks sometimes lose teeth when they mate?
2. What possible reasons might explain why the sharks seemed to be doing nothing when the divers were filming?
3. Why might the sharks have still done nothing when the remote cameras were operating? (hint: think about the senses of a shark, particularly the ampullae of Lorenzini)
4. What might have affected the behavior of the sharks at night?
5. What makes the Sand Tiger shark teeth special?