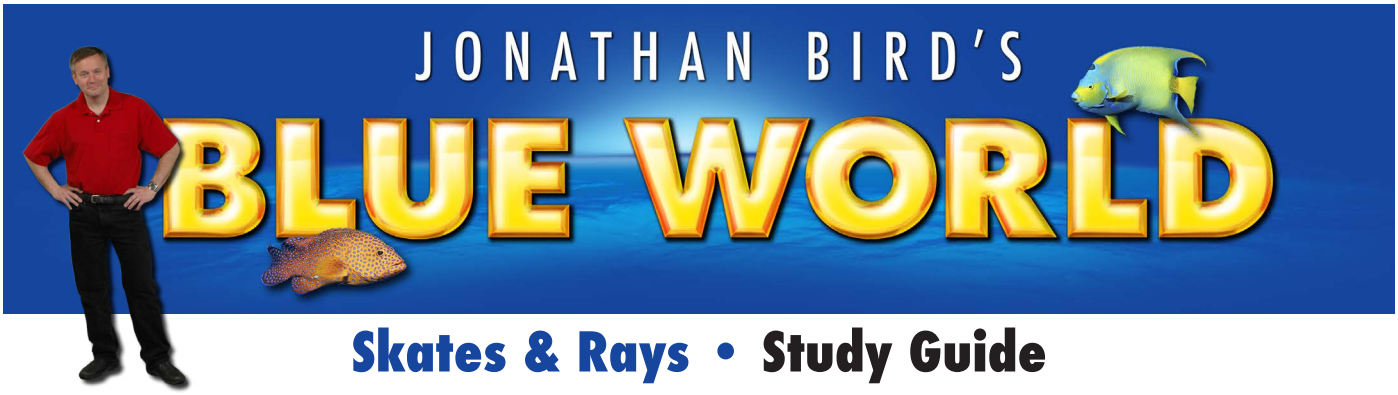

Skates & Rays • Study Guide

In this fascinating biology segment, Jonathan explores the world of skates and rays. From the plankton-eating Manta ray to the electric Torpedo ray, these animals have a variety of surprising adaptations for survival in the ocean.

Objectives

1. Introduces viewers to different kinds of skates and rays and their physiology.
2. Illustrates how rays are similar and different from their relatives the sharks.

Questions for before watching the program

1. What is a ray?
2. How is a ray different from a skate?
3. How are sharks and rays similar? How are they different?
4. Are rays dangerous?

Discussion for after watching the program

1. Why are rays called "batoids?"
2. How do we know that the Sawfish (sometimes called a Sawshark) is actually a type of ray?
3. In what ways are skates and rays similar to sharks? How are they different?
4. What does a skate lack that most rays have?
5. What physical characteristic is shared by both flattened sharks and rays? (Hint: it has to do with how they breathe.)
6. How to skates reproduce? What about rays?
7. What does a stingray have to defend itself?
8. What two main characteristics make Torpedo rays different from most other rays?
9. Where are the gills on a ray? How about on a shark?
10. What is a spiracle?
11. What is "punting?"
12. Why does the Eagle ray have a shovel-shaped head?
13. What does a manta ray eat? How about a stingray?