



Mandarinfish • Study Guide

Jonathan travels to the remote Pacific island of Yap on a quest to witness the rarely-seen spawning behavior of the Mandarinfish. These beautiful but shy fish hide in the reef most of the time. Divers almost never see them except at dusk when they emerge from the reef for just a few minutes to spawn.

Objectives

1. Introduces viewers to a rarely seen fish of the tropical Pacific, and its spawning habits.
2. Illustrates the concept of broadcast spawning in fish.
3. Discusses the transition from diurnal to nocturnal reef fish behavior and associated changes on the reef.

Questions for before watching the program

1. Why would some fish be more active during the day? What are the advantages and disadvantages of being a small fish on the reef during the day? What about at night?
2. What might happen at dusk with diurnal fish? What about nocturnal fish?
3. What is "broadcast spawning?" If you don't know, look it up before watching the video.

Discussion for after watching the program

1. Why do you think Mandarinfish only spawn at dusk instead of during the day or at night?
2. What are the advantages of broadcast spawning for a fish? Disadvantages?
3. Mandarinfish often spawn in greater numbers on the full moon. Why? (Hint--it has to do with broadcast spawning.)
4. Why do most mandarin fish eggs not survive to adulthood?
5. Diurnal fish often feed quite aggressively at dusk. What is special about that time of day?
6. Internet research: if the Mandarinfish hides in the reef most of the time, how does it eat? What does it eat?