

the Water Brothers EPISODE GUIDE QUESTIONS

UNDERWATER HIGHWAYS

1. Why do some marine animals migrate? Give three reasons.
2. What fishing method catches turtles accidentally?
3. Why are not all marine animals well protected by marine protected areas?
4. Why is it important that we protect the migratory routes of marine animals?
5. Why were scientists tagging and tracking sharks and sea turtles on this expedition?
6. In this episode, Dr. Alex Hearn talks about tagging hammerheads. Around how many kilometres did these hammerheads travel?
7. Sea turtles play a vital role in marine ecosystems. What animal do they eat and help regulate?
8. Explain why tagging hammerhead sharks is tricky.
9. How many sea turtles are killed by shrimp trawlers every year?
10. In Cocos Marine Reserve, is fishing for sharks and turtles illegal?
11. Around what percentage of ocean is currently protected?
12. True or False: Poaching rates for sea turtle eggs are almost 100% on beaches that are not protected in Costa Rica.

the Water Brothers EPISODE GUIDE ANSWERS

UNDERWATER HIGHWAYS

- 1. Why do some marine animals migrate? Give three reasons.** Marine animals migrate to special areas to feed, mate, and give birth.
- 2. What fishing method catches turtles accidentally?** The fishing method “long lining” accidentally catches turtles. Long line fisheries targeting sharks and other large fish can accidentally catch turtles.
- 3. Why are not all marine animals well protected by marine protected areas?** Migrating marine animals like hammerhead sharks are not well protected by Marine Protected Areas because they migrate and do not stay within the protected areas.
- 4. Why is it important that we protect the migratory routes of marine animals?** It's important that we protect the migratory routes of marine animals so that they do not get overfished when they are outside of the marine protected areas.
- 5. Why were scientists tagging and tracking sharks and sea turtles on this expedition?** The scientists were tagging and tracking sharks and sea turtles on this expedition to learn about their migratory routes. This helps to better monitor and regulate the routes against fishing pressures.
- 6. In this episode, Dr. Alex Hearn talks about tagging hammerheads. About how many kilometres did these sharks travel?** These hammerheads traveled 600km and almost 700km.
- 7. Sea turtles play a vital role in marine ecosystems. What animal do they eat and help regulate?** Sea turtles eat and help regulate jellyfish populations.
- 8. Explain why tagging hammerhead sharks is tricky.** Tagging hammerhead sharks is tricky because they are extremely shy and are very weary of divers particularly because of the bubbles they make.
- 9. How many sea turtles are killed by shrimp trawlers every year?** It is estimated that over 150,000 sea turtles are killed by shrimp trawlers every year.
- 10. In Cocos Marine Reserve, is fishing for sharks and turtles illegal?** Fishing for sharks and turtles is illegal in Cocos Marine Reserve.
- 11. Around what percentage of ocean is currently protected?** 2% - 3% is currently protected.
- 12. True or False: Poaching rates for sea turtle eggs are almost 100% on beaches that are not protected in Costa Rica.** True.

the Water Brothers EPISODE GUIDE ACTIVITIES

UNDERWATER HIGHWAYS

Marine Protected Areas

- <http://oceanservice.noaa.gov/ecosystems/mpa/>
- <http://www.davidsuzuki.org/issues/oceans/science/marine-planning-and-conservation/marine-protected-areas/>
- http://wwf.panda.org/what_we_do/how_we_work/conservation/marine/solutions/protection/protected_areas/

Migratory Routes of Marine Animals

- <http://education.nationalgeographic.org/activity/marine-migration/>
- <http://www.britannica.com/science/migration-animal>

Sea Turtles

- <http://www.seeturtles.org/sea-turtle-facts/>
- <http://www.conserveturtles.org/seaturtleinformation.php>