



Can Ocean Optimism Save our Seas?

After more than 30 years of studying the diversity and conservation of life in the ocean, Nancy Knowlton sees both the dangers and the reasons for hope.

Conversation Club Discussion Questions

1. Nancy Knowlton, a marine scientist from the Smithsonian's National Museum of Natural History, opens her talk by clarifying that we don't live on "Planet Earth," instead it would be more accurate to say we live on "Planet Ocean." This is because 70% of the globe is covered by ocean water, and 95% of what she describes as "habitable real estate" on the planet is in the water, since the oceans are so deep. What do you make of this idea? Do those percentages surprise you?
2. Knowlton talks about the changes that are happening to our oceans and what this means for the future. She shows headlines regarding overfishing, water pollution, rising water temperatures, etc., and summarizes that while we once thought that the ocean was too big to harm, we now think the problems it faces are "too big to fix." What do you think she means by this? Is this how you think about the ocean? What are other examples of problems that seem overwhelming and daunting – or even too challenging – to fix?
3. Knowlton contrasts an underwater environment that is a "desert" with no fish and dying coral to an underwater paradise, where lots of species are thriving. She explains that all that is needed to keep underwater environments healthy is clean water and plenty of fish, which gives these underwater habitats "resilience." What does resilience mean in this context? What are other examples of resilience, both in nature and in people?
4. Knowlton makes a distinction between "rocket science" solutions for climate change and practical, straightforward solutions for preserving marine environments. What do you think she means by this distinction? Do you agree that protecting against overfishing and against water pollution are achievable solutions? Why do you think Knowlton makes the distinction in the first place?
5. As an example of success in ocean species preservation, Knowlton describes the threat to the world's shark population. She goes on to explain how we're approaching a "tipping point" and the threat is slowly being diminished due to the changing perception of shark hunting and a better understanding of the economics of keeping sharks alive to benefit and sustain tourist economies. What do you think of these examples? Do they make sense to you? Can you think of examples of other species that were hunted to near-extinction and are now bouncing back?
6. Knowlton, in providing other examples of how human intervention saved animal species at risk of extinction, makes the statement that "history matters." What do you



think she means? What examples from the past serve as inspiration today to make positive change?

7. Knowlton talks about how positive changes such as collecting plastic waste from the ocean and replacing plastic in our human economies with biodegradable alternatives is all so important when helping save marine life. However, she doesn't go into much detail regarding why plastic is so dangerous to ocean environments. What do you know about this topic? What are some of the reasons why plastic is harmful to the ocean and ocean species? What are some actions you can take at home or in your local community to reduce the amount of waste produced and better the environment?

8. Knowlton encourages people to participate in "Ocean Optimism," an online social media movement. What do you think of this movement and her position that stories of success motivate people to care more about the ocean than stories of doom would? How do personal stories or experiences contribute to a social movement and encourage positive change? Do you think social media is a powerful or particularly effective tool for a movement like this one?