

Educational Video Series

Ocean Education: Elementary Years

Title: Investigating Environmental DNA

URL: <https://canadac3.ca/en/video/investigating-environmental-dna-coast-coast-coast/>

Overview: This 3-minute video explores a pan-Canadian environmental DNA study that was administered throughout the entire C3 expedition. Discuss with your students the changing biodiversity within Canada's ocean ecosystem and the implications of these changes.

Discussion Questions:

- What is environmental DNA? Have you ever heard of this term before?
- What is DFO and what is their role in Canada? Have you ever heard of DFO?
- What does biodiversity mean? Does biodiversity matter? Why do you think it is important to know about the biodiversity in the ocean?
- What happens when biodiversity decreases? What happens when it increases?
- How can human activity affect biodiversity in Canada's ocean? How do you think you impact biodiversity?
- How can protecting biodiversity help humans?
- Why was the Canada C3 Expedition a unique opportunity for this type of research?

Read Bios and Learn More:

[Kristi Miller-Saunders](#) is a research scientist with the Department of Fisheries and Oceans Canada (DFO). Learn more about Kristi's work [here](#).

Extended Learning Resources:

1. Watch the [Canada C3 Arctic Live Dive](#) from Cambridge Bay, Nunavut in partnership with [Fish Eye Project](#) to learn about the biodiversity of Canada's Arctic waters.
2. Check out Learning for a Sustainable Future's [Biodiversity is Best](#) education resources for classrooms
3. Learn more about Canada's 2020 Biodiversity Goals and Targets at <http://www.biodivcanada.ca>