

Program Resources

Noise Pollution

Overview

The ocean is a world inhabited by an incredible diversity of animals, and provides vital resources to humans for survival and lifestyle. From our oxygen and food, to our leisure and economy, we utilize the ocean every single day. The more than humans use the ocean, the more dangerous it can be for the local inhabitants. As our carbon emissions continue to change the climate, more and more boats are able to access the water and this means a louder underwater ecosystem. Noise travels faster in water, and with it brings many threats. Noise pollution is a direct result of human action, and is going to require cooperation and creativity to create real change.

Key Concepts

- The ocean is connected to our lives, and human action has an impact on the Ocean
- The ocean and humans are inextricably interconnected
- The ocean affects every human life. It supplies freshwater, oxygen, moderates climate, weather, provides medicine, foods, natural resources, security, jobs, tourism, inspiration and discovery
- Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.
- The ocean is the largest unexplored place on Earth—less than 5% of it has been explored. The next generation of explorers and researchers will find great opportunities for discovery, innovation and investigation.
- Understanding the ocean is more than a matter of curiosity. Exploration, experimentation, and discovery are required to better understand ocean systems and processes.
- Ocean exploration is truly interdisciplinary. It requires close collaboration among biologists, chemists, climatologists, computer programmers, engineers, geologists, meteorologists, meteorologists, physicists, animators and illustrators. And these interactions foster new ideas and new perspectives for inquiries.

Discussion Questions:

- How are we connected to the ocean right now, in our daily lives?
- What are the ecological and physical consequence of noise pollution in the ocean?
- Why is research important for informing environmental change?
- What suggestions would you make to reduce noise pollution in the Arctic? Who would you have to bring on board to make this change happen? Who might be opposed to this change?

Videos

Leaning to Speak Whale | Ocean Stories | Ocean Wise
https://www.youtube.com/watch?v=hXbedte2k_U

Beluga Mother and Calf Communication | Notes From The Field | Ocean Wise
<https://www.youtube.com/watch?v=GLINXd1dJkA>

What is Echolocation? | Brain Waves Episode 5 | Ocean Wise
<https://www.youtube.com/watch?v=5GuaNA-5qWw>

Why the ocean is getting louder | Vox
<https://www.youtube.com/watch?v=CrpkZkwTvu0>

How Do Fish Talk To Each Other? | Seeker
<https://www.youtube.com/watch?v=ugXzfNuqbsc>

Why Noise Pollution Is More Dangerous Than We Think | The Backstory | The New Yorker:
https://www.youtube.com/watch?v=Is_5X2z2b0k

Activities

Echo Location: Choose one student to be the beluga, and another to be their calf. Have all the students spread out in the room and choose a spot to stand. Have the “mother beluga” close their eyes or be blindfolded. Have the “baby beluga” choose a spot in the room. Once they have chosen their spot, have the “baby beluga” call out to the “mother beluga” while the mother still as their eyes closed. You may use a word, a clapping, a whistle or any kind of distinctive sound. The “mother beluga” will then point to where their “baby” is. Play again, with the “baby beluga” choosing a new spot, only this time have all of the students make noise. The “mother beluga” should find it hard to locate the “baby beluga” amongst all the noise.

Marco Polo: This game is best played in an open space devoid of obstacles, such as an outside field. Choose one student to be Marco and blindfold them. This person is IT, and will try and “tag” other students whilst blind folded. Each time the person who is IT say “Marco”, this student can take 5 steps in any directions. The other students must respond with “Polo” and can take 3 steps. The game continues until Marco is able to tag another students, and then that person becomes IT.

Extra Links

- Ocean Wise Research: <https://research.ocean.org/>
- Ocean Literacy Course: <http://literacy.ocean.org/>
- Take the Plastic Pledge! <http://ocean.org/plastic-wise/>
- Ocean Wise Plastic Education Kit: <http://plasticedkit.ocean.org/>
- Great Canadian Shoreline Cleanup: <http://shorelinecleanup.ca/>