Noisy Oceans

Grades: Grades 2 - 5, with additional connections to grades 6, 7, 8 STEM concepts
Length: 2 hours
Capacity: 35 persons

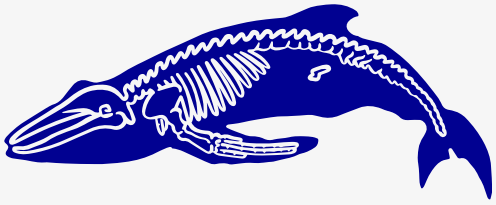
The **Noisy Oceans** program encourages learners to explore the physics of sound in the ocean, to discover the ways whales use sound, and the conservation impacts of noise pollution. The program includes a guided tour of the museum and interactive activities.

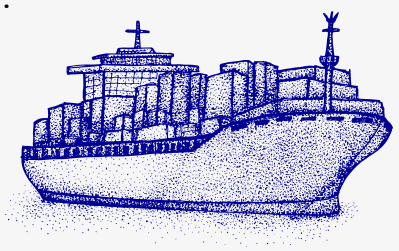
Program Timeline

Welcome / Introductions / Museum Rules	10-15 min
Tour of Museum Gallery	25-35 min
Interactive Discussion & Activity	45-50 min
Free Time to Explore / Conclusion	10-15 min

Tour Breakdown (30 minutes)

Led by a museum staff member, students will be taken on a tour of the museum's exhibit space, touching on key curriculum points and learning objectives. Students will be encouraged to challenge their understanding of nature by asking and answering questions, as well as contributing to the conversation.





Quinte Museum of Natural History

The tour will cover QMNH's three current exhibits:

Fossilized Quinte: The Fossils of the Bay of Quinte Region

Grab a magnifying glass and explore some of the region's most common fossils. From an underwater world to the terrestrial landscape of today, the Quinte region has changed significantly over the last 500 million years. Fortunately, fossils remain that help transport us back to the geological past.

The tour will aim to:

- Encourage students to use critical thinking and identification skills to complete a fossil finding activity
- Inspire a sense of discovery and interest in the natural world
- Explore the ways in which environments change over time and how living things adapt

Lights, Camera, Action: Tyrannosaurs in Film

Take a journey back to the Late Cretaceous period and discover the tyrant king of the dinosaur world. T.rex is the most recognizable dinosaur species, being portrayed in popular media for over 100 years. Take a close look at the unique anatomical features of these impressive creatures to determine how they moved, ate, and behaved.

The tour will aim to:

- Connect anatomical features like the teeth, head, and tail to the needs and characteristics of T.rex
- Explore the similarities between T.rex and birds to highlight locomotion
- Compare T.rex of different ages to explain the growth and development of the animal

Quinte Museum of Natural History

Diving Deep: A Tale of Whales Through Time

The museum's feature exhibit tells the evolutionary story of whales. From ancient land-dwelling ancestors to the modern ocean giants we know today, students can trace the mysterious and fascinating journey of whales through time. Discover life-size specimens to uncover how whales evolved to suit their ocean environments and how they continue to adapt to our changing world.

The tour will aim to:

- Encourage students to make connections between ancient and modern whale specimens
- Inspire thought about how different whales eat, move, and communicate based on physical features
- Engage students in critical conversations about sustainability and how changing ocean environments impact marine life

Activity Breakdown (45 minutes)

Led by a museum staff member, students will explore the physics of sound, and how we measure sound intensity and frequency. Students will get to test sounds using an oscilloscope and spectral analyzer. Additionally, students will explore how whales use sound for hunting and communication, learning how noise pollution from human activities like ship traffic impacts whale conservation around the world.

The activity will aim to:

- Encourage students to make connections between how sound is made, how we measure it, and how it interacts with the ocean environment and its biodiversity
- Inspire creative thought and collaboration through hands-on learning
- Incorporate various elements of STEM in demonstrations

<u>Curriculum Links Below:</u>

Science and Technology Concept Connections by Grade

Grade 2
- Life Systems - Growth & Change in Animals
- Matter & Energy - Properties of Liquids & Solids
- Earth & Space Systems - Air & Water in the Environment

Grade 3
- Matter & Energy - Forces & Motion (Sound waves)

Grade 4
- Life Systems - Habitats & Communities
- Matter & Energy - Light & Sound (Focus on sound)

Grade 5
- Life Systems - Human Health & Body Systems (Hearing & ear structure)
- Matter & Energy - Properties of & Changes in Matter
- Structure & Mechanisms - Forces Acting on Structures (Sound)
- Earth & Space Systems - Conservation of Energy & Resources

Grade 6
- Life Systems - Biodiversity

Grade 7
- Life Systems - Interactions in the Environment

Grade 8
- Matter & Energy - Fluids (How sound interacts with fluids)

Thank you for your interest in our school programs at the Quinte Museum of Natural History. To make a booking, please contact:

Stacey Kerr
Exhibit & Programs Coordinator
stacey@quintemuseum.ca

Our Location

99 Dufferin Ave, Trenton ON K8V 5E2

General Information

Program Details

Cost is $8.00 per student, with free admission for up to 10 accompanying teachers and parent chaperones. Programs are offered Tuesday-Friday from 10:00am-3:00pm. Additional time slots are available for schools bringing multiple classes.

Contact Information

Stacey Kerr
Exhibit & Programs Coordinator
stacey@quintemuseum.ca

Parking

Parking is available in the lot directly in front of the museum. Buses can drop students off at the main entrance.

Museum Rules

- **No food or drink inside the exhibit space**
- **No running**
- **No touching of the specimens on display**