



News Release

For Immediate Release

Government of Canada continues to invest in research to inform protection measures for vulnerable whale populations

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Ottawa, Ontario

Fisheries and Oceans Canada

Whales are as vulnerable as they are majestic. As a Government we are committed to protecting them with methods that are sustainable and grounded in the best-available research and technology.

Today, the Minister of Fisheries, Oceans and the Canadian Coast Guard, the Honourable Bernadette Jordan, announced \$806,759 in funding for marine mammal research. This funding supports five research projects under two Oceans Protection Plan programs dedicated to reducing the threats marine mammals face in our increasingly busy and noisy coastal waters.

Three of the projects are funded under the Whale Detection and Collision Avoidance Initiative which aims to develop and test technologies capable of detecting the presence of North Atlantic right whales and Southern Resident killer whales in near real-time. Through this Initiative, the Woods Hole Oceanographic Institution received \$325,508 over two years to test a ship-based infrared camera whale detection system capable of detecting whale blows in near real-time. eSonar received \$190,300 for a one-year project to develop a pop-up hydrophone system capable of bringing a communication antenna to the surface of the water following a whale detection event and transmitting the information in near real-time. The Netherlands Organisation for Applied Scientific Research was funded \$37,500 over two years to collaborate with international partners to explore innovative techniques for the detection, classification, and localization of the endangered North Atlantic right whales vocalizations in acoustic datasets.

Two more projects are funded through the Marine Environmental Quality Initiative which aims to better understand the impact of shipping-related noise on the North Atlantic right whale, the St. Lawrence Estuary Beluga and the Southern Resident killer whale, and help inform measures aimed at reducing underwater noise levels. The Institut de recherche CHORUS received \$198,826 over two years to develop algorithms that will rapidly process vast amounts of acoustic data. This could help better detect and identify whale feeding areas, distribution, and sensitivity to shipping noise. The Marine Animal Response Society received \$54,625 over two years to develop protocols for the collection of samples, specifically from marine mammals in Canada's Maritime provinces, for research on the stress response that comes from exposure to human-made factors, including underwater noise.

Together, these research projects will help us better understand the factors affecting the health and wellbeing of our most vulnerable whales and support ongoing actions to help address their key threats, including noise pollution, vessel strikes, and fishing gear entanglement. These investments will help Canada continue protecting its whale populations in an evidence-based way while focusing on growing our Blue Economy.

Quotes

"As we grow Canada's blue economy, it's imperative that we protect our marine life. Our 2020 measures to protect whales have shown that when we invest in the best data and science, industry and marine can thrive side by side. Today, Canada is harnessing the latest technology to better detect and protect our whales on both

coasts. Our government will continue to take strong, consistent action to protect this iconic species for generations to come”

The Honourable Bernadette Jordan, Minister of Fisheries, Oceans and the Canadian Coast Guard

“Whales are awe-inspiring animals that play an important role in our marine ecosystems and have great cultural significance. We know that the North Atlantic right whales and the Southern Resident killer whales face an imminent threat to their survival and that immediate action is required to protect this iconic species for generations to come. Innovative and leading edge research projects such as these are helping to ensure the risks to endangered whale species are minimized and our valuable marine environment is protected.”

The Honourable Omar Alghabra, Minister of Transport

“We are testing new prototypes of thermal imaging based automatic whale detection systems in the Gulf of St. Lawrence during the summer of 2021. Our aim is that such systems can be placed on vessels in areas that are frequently used by baleen whales, and help to prevent vessel-strike. With sufficient detection range, such systems can alert mariners within a few seconds after a whale surfaced in the vessel’s path, providing them enough time to take evasive action.”

Daniel Zitterbart, Woods Hole Oceanographic Institution

“Knowing when and where North Atlantic right whales are present is the key to effective protection of this endangered species. This project supports opening up acoustic datasets recorded in Canadian waters on this species to a wider scientific community. This data will be used during the Detection, Classification, Localisation and Density Estimation (DCLDE) workshop, which will allow scientists world-wide to contribute to the development of state-of-the art methods to help identify and localize North Atlantic right whales.”

Dr. Sander von Benda-Beckmann, Netherlands Organisation for Applied Scientific Research (TNO), The Netherlands

“This project supports our continuing development of leading underwater acoustic hardware/software to better identify at-risk marine mammals in our oceans that are important to detect and classify. It supports Canada’s efforts to protect the marine environment. And it advances our ongoing collaboration with Memorial University’s Autonomous Ocean Systems Laboratory, an important research asset for Newfoundland and Labrador’s marine technology community.”

Gary J. Dinn, Managing Director, eSonar

“CHORUS Research Institute is very grateful to Fisheries and Oceans Canada for its financial support for this project. This project aims to develop automatic analysis tools for passive acoustic data in order to detect, classify and locate echolocation clicks emitted by cetaceans within extensive multi-year databases. These tools will retrieve essential information on cetaceans’ behaviour related to life functions. Firstly developed for the St.

Lawrence Estuary beluga whales, these tools will be adapted for killer whales and common beaked whales. These tools will ultimately lead to the assessment of the effects of noise produced by maritime traffic on the biosonar performances of those species, contributing to the protection of endangered cetaceans in Canada.”

Dr. Cédric Gervaise, Director, Institut de recherche CHORUS

“MARS thanks Fisheries and Oceans Canada for acknowledging the importance of this work and supporting us in these early stages towards the development of a comprehensive program to assess and monitor cetacean health. This research is a critical component in building our understanding of the impacts to at risk cetacean populations from human activities and working collaboratively to identify effective solutions. MARS looks forward to continuing with this work over the coming year through the support of DFO and other supporters.”

Tonya Wimmer, Executive Director, Marine Animal Response Society

Quick Facts

- The \$1.5 billion Oceans Protection Plan is the largest investment ever made to protect Canada's oceans and waterways for future generations. This national plan is creating a stronger marine safety system that provides economic opportunities for Canadians today, while protecting our coastlines and clean water for generations to come. This work is being done in close collaboration with Indigenous peoples, local stakeholders and coastal communities.
- In June 2018, the Government of Canada announced the \$167.4 million Whales Initiative to protect and support the recovery of the Southern Resident killer whale, the North Atlantic right whale, and the St. Lawrence Estuary beluga.
- On February 8, the Government of Canada launched the engagement phase in the development of Canada's Blue Economy Strategy to grow our ocean sectors through job creation, inclusion and conservation. The blue economy accounts for about \$31.65 billion annually in gross domestic product and account for close to 300,000 jobs. Canada is in an enviable position to harness its vast ocean resources for even greater, sustainable growth and global leadership in the blue economy.

Associated Links

- [Protecting our Coasts - Oceans Protection Plan](#)
- [Blue Economy Strategy](#)
- [Protecting Canada's endangered whales](#)
- [Whale Detection and Avoidance Initiative](#)
- [Marine Environmental Quality Initiative](#)
- [Mitigating the impacts of ocean noise](#)
- [Woods Hole Oceanographic Institution](#)
- [eSonar](#)
- [Institut de recherche CHORUS](#)
- [Marine Animal Response Society](#)
- [The Netherlands Organisation for Applied Scientific Research \(TNO\)](#)

- 30 -

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