



COASTAL ACOUSTIC MONITORING PROJECT

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Fishermen & Scientists
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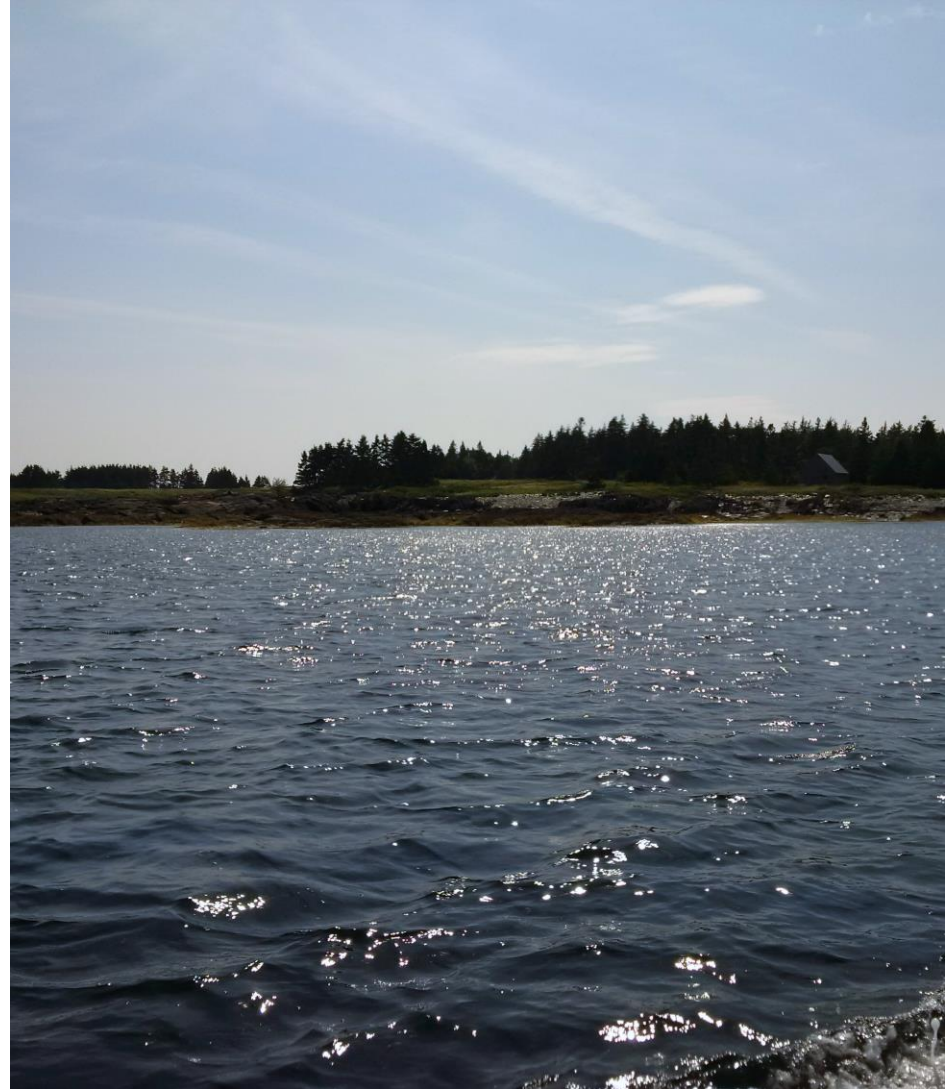


Photo: E. Marotte

Background

- Under the renewed Marine Environmental Quality (MEQ) Program, recent funding has been made available to address key marine environmental issues
- Ocean noise has been identified as a top stressor
- There is little information on existing levels of noise caused by human activities in coastal Nova Scotia
- Noise impacts on marine mammals is a priority research area

Project initiation

- Coastal Acoustic Monitoring Project launched in summer 2018
- **Objectives:**
 1. To better understand levels of anthropogenic sound, particularly shipping, in priority coastal areas of Nova Scotia
 2. To monitor for baleen whale presence in priority coastal areas of Nova Scotia
- Results will help predict whether impacts may be occurring
- Mitigation strategies could eventually be implemented

Project initiation

- Study locations based on anecdotal evidence of whale presence and areas with high vessel traffic
- Complements ongoing acoustic monitoring by DFO Science in offshore Nova Scotia
- Guidance and advice from DFO Science



Project design

- Small, lightweight, passive acoustic monitoring devices contained within modified lobster traps
- Easily handled by fishers and mariners
- Deployed over a matter of months to continuously record sounds made by vessels and vocalizing whales
- Low entanglement risk



Photos: E. Marotte

SoundTrap image: Ocean Instruments

Community partnerships



Photo: H. Breeze



Photo: Guysborough County Inshore Fisherman's Association

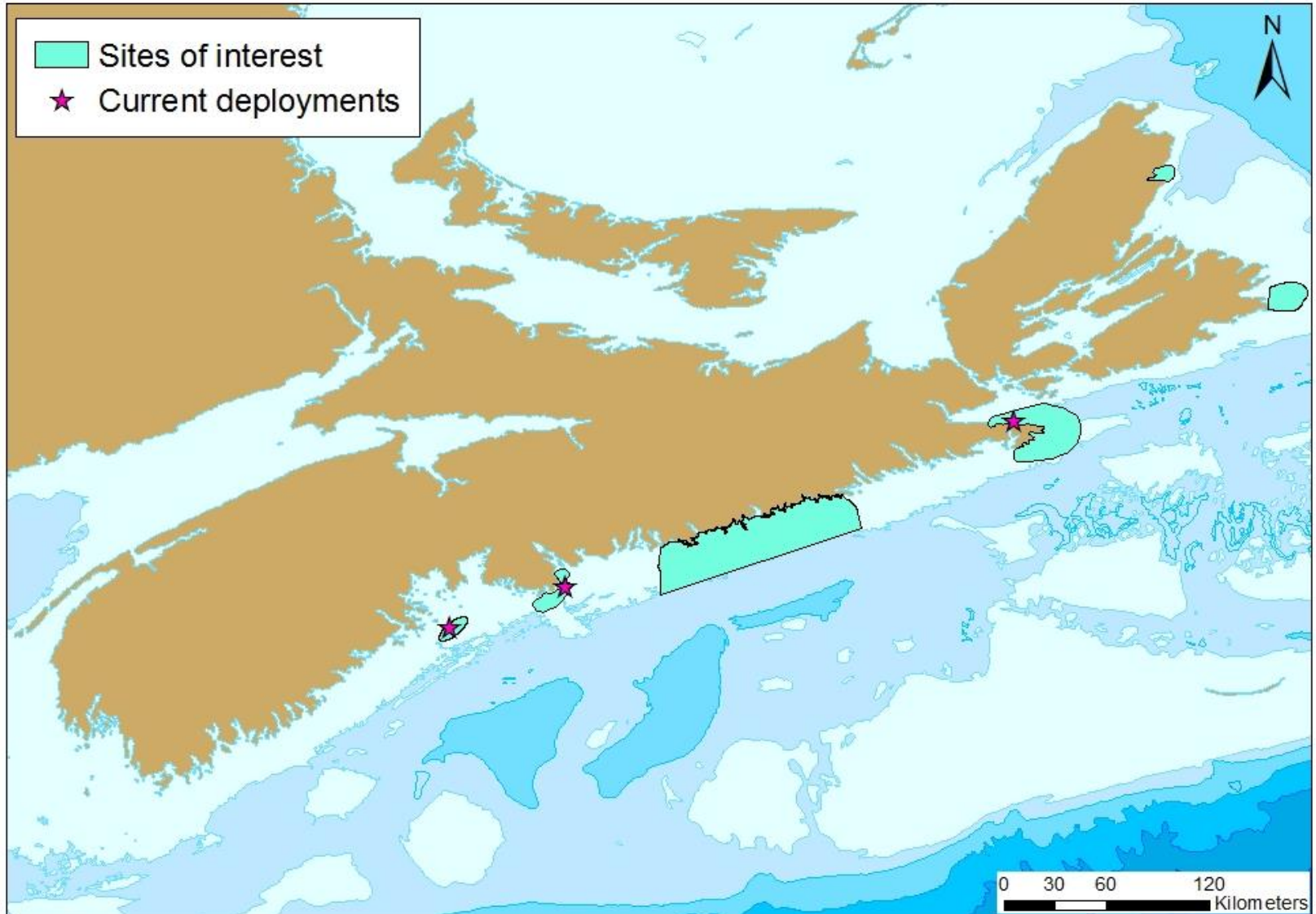
Project implementation

- **July 2018:** Lunenburg Bay
 - Local vessel charter captain
- **December 2018:** Chedabucto Bay
 - Guysborough County Inshore Fisherman's Association
- **January 2019:** Chebucto Head
- **April 2019:** Eastern Shore Islands (planned)



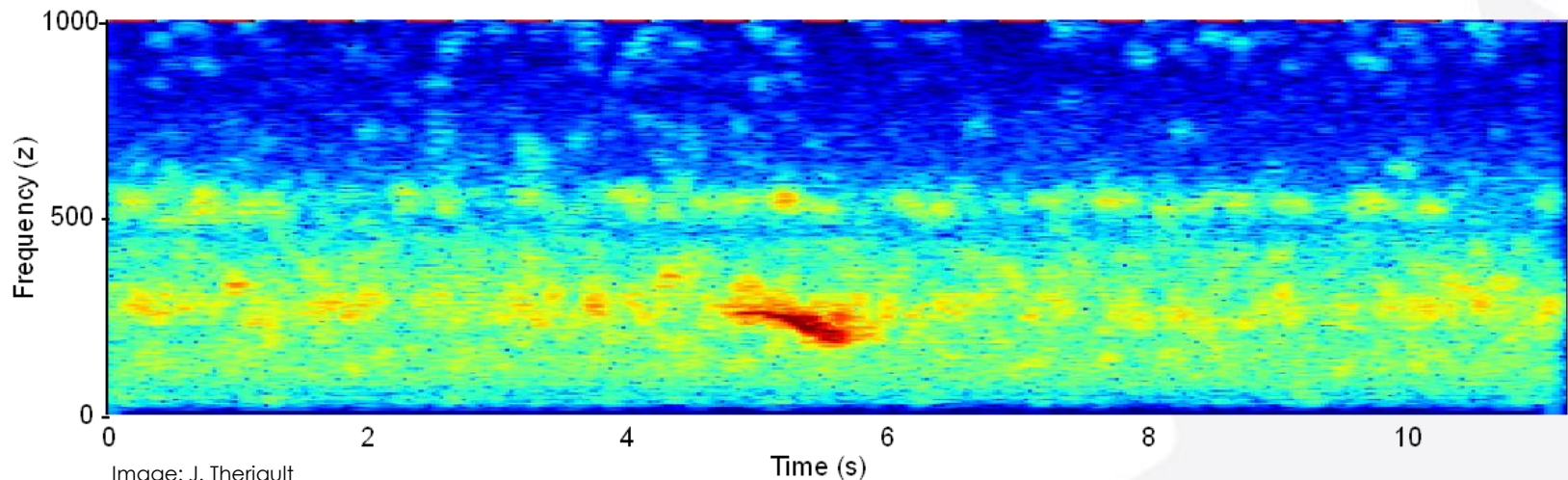
Photo: H. Breeze

Project implementation



Data collection and analysis

- Preliminary data analysis to begin soon
- Direct data download following each system recovery
- Analysis software shows whale calls and ship noise, characterizing local area



Next steps and future sites

- Continue to work with partners to develop a streamlined field program
- Continue collecting data at existing monitoring sites
- Data analysis
- Additional sites of interest
 - Eastern Shore
 - Ingonish Bays
 - Scatarie Island/St. Anns Bank

Questions?

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