



Integrating Indigenous and Local Ecological Knowledge with Western Science to better manage capelin (*Mallotus villosus*) in Canadian North Atlantic waters



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INTRODUCTION

Capelin is an important pelagic forage fish species for piscivorous predators in North Atlantic and Arctic waters. In recent years, there have been observations of inter-annual variability in spawning timing and locations across the Quebec Lower North Shore and Labrador.

RESEARCH QUESTIONS

1. How has capelin spawning demonstrated inter-annual variability since the 1990s?
2. What does genetic and phenotypic data, and Indigenous and Local Ecological Knowledge tell us about stock delineation?
3. What is the socio-cultural importance of capelin?
4. What are current international best-practices surrounding capelin, and how can they be applied to Canadian North Atlantic waters?

CALL TO ACTION

Do you have experience with citizen science initiatives and/or working with Indigenous communities?

I'd like to hear from you!

Please contact Chelsea Boaler, PhD Student
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Mallotus villosus

METHODOLOGY

Multi-methods approach including:

- Semi-structured interviews and participatory mapping;
- Observer network initiation;
- Inclusion of eDNA and acoustic information;
- Log book, genetic, and phenotype data syntheses;
- Case-study and management review.

SIGNIFICANCE

This collaborative research will lead to a greater understanding of capelin and its relationship with fisheries and communities, resulting in improvements in stock management through the integration of multiple data- and knowledge-types.

