

Nature United / UVic Collaborative Postdoctoral Fellowship: Advancing Fisheries Adaptation to Climate Change in Canada



Applications are invited for a 2-year postdoctoral fellowship (PDF) hosted by Nature United and The University of Victoria, collaborating closely with Fisheries and Oceans Canada, to develop a framework and applied survey-based tool that can assess the degree to which the current management systems for Canadian fish stocks are adaptive and responsive to climate variability and change. This project seeks to produce outputs to tangibly support climate adaptation in Canadian fisheries.

Background / Overview:

Working in collaboration with Nature United, UVic, and Fisheries and Oceans (DFO) scientists in the Pacific and Maritimes region, the individual will develop and refine a scientifically rigorous quantitative-qualitative *Fisheries Management Adaptation to Climate Change* (FiMACC) framework to assess how the management of Canada's commercial fish stocks considers climate change and can be adaptive to climate variability. The project will proceed in two phases:

Year 1: Currently, the research team has developed and administered a pilot survey to DFO managers and scientists responsible for ~30 fish stocks in Canada's Maritimes region. This postdoc will use this survey dataset to develop an analytical framework for the FiMACC assessment. This will involve conducting a rigorous analysis of the survey output, generating a quantitative scoring methodology, and interpreting and disseminating the results. The successful candidate will communicate the results to groups within and outside DFO to solicit feedback on the survey design and implementation.

Year 2: Using the methodology developed in year 1, the candidate will lead an expanded assessment that will be carried out Nationally.

These phased project outcomes (Maritimes pilot and Canada-wide scale-up) will serve as a baseline for monitoring progress towards incorporating climate change into Canada's fisheries science and management processes and as a foundation for advancing discussions about climate adaptation actions and solutions in fisheries management.

Position Responsibilities:

- Lead and coordinate the research collaboration between Nature United, the University of Victoria, and DFO scientists from the Pacific and Maritimes Regions.
- Develop a scientifically rigorous adaptive capacity assessment framework that will be used to analyze survey data collected on the monitoring, scientific assessment, and management attributes of individual commercial fish stocks.
- Develop and implement a *new* survey module to assess how social and economic information and assessment within DFO support adaptive fisheries management.
- Analyze and summarize the quantitative and qualitative pilot survey data collected for ~30 fisheries stock units in the Maritimes region and lead report/publication write-up.

- Convene meetings/presentations across DFO departments and geographies to communicate results, seek feedback, and gain support for a Canada-wide FiMACC assessment.
- Lead the administration of a Canada-wide FiMACC assessment, analyze survey outputs, interpret results, and lead report/publication.

Project Team:

Dr. Jenn Burt – Marine Program Director, Nature United

Dr. Natalie Ban – Professor, University of Victoria

Karen Hunter – Climate Response Research Program Lead, Ecosystem Science Division, DFO Pacific

Dr. Blair Greenan – Senior Research Scientist, Head of Oceanography & Climate Section, DFO Maritimes

Dr. Nancy Shackell – Senior Research Scientist, Ocean & Ecosystem Sciences Division, DFO Maritimes

Dr. Dan Boyce – Research Scientist, DFO Maritimes

Desired Qualifications:

- Ph.D. in natural or social science focusing on fisheries, fisheries management, or a field of relevance to this research (completed in the last 5 years)
- Strong skills in quantitative and qualitative data management, analysis, visualization
- Experience synthesizing, interpreting and communicating both quantitative and qualitative information.
- Excellent writing skills and habits; demonstrated publication record
- Proven track record of leading or managing projects, meeting deadlines, communicating within project teams, peer-reviewed publications, and high-quality conference presentations;
- Ability to work independently
- Research experience in Canadian fisheries

Additional Details:

This postdoc position will be paid at a rate of \$70,000 - 75,000 CAD per year (dependant on experience and qualification), inclusive of benefits for a term of one year, with a second year very likely, though contingent on postdoc performance and funding. The position will be administered through a MITACS Elevate grant with Dr. Jenn Burt as a non-profit partner and Dr. Natalie Ban as the academic partner. The postdoc funding will be administered through the University of Victoria combined with direct contract funding from Nature United. This postdoc can work remotely from any location in Canada, noting a location in Vancouver/Victoria will enable greater in-person connections to Dr. Jenn Burt, Karen Hunter, and Dr. Natalie Ban and her lab.

About Nature United:

[Nature United](#) is a science-based Canadian conservation organization. We believe that nature—thriving and full of life—is the foundation of strong communities, a prosperous economy, and a future worth passing on to our grandchildren. We work to advance sustainable resource management by supporting Indigenous leadership and authority and to address the climate crisis by advancing climate solutions. Nature United is an affiliate of the global organization The Nature Conservancy (TNC), which employs over 300 scientists globally and is considered a thought leader in advancing [Climate Resilient Fisheries](#). We are committed to [diversity, equity, inclusion and justice](#) and co-creating a culture that is equitable and a workplace that is diverse, inclusive and safe for all staff, contractors, and partners.

To apply:

Please send a cover letter (2 pages max), CV, and names, emails, and phone numbers for two references to **Dr. Jenn Burt** by email (jenn.burt@tnc.org). Your cover letter should address the skills and experience you bring and your motivation to excel in this project. The deadline for applications is **June 9, 2023** with a preferred start in **July 2023**.