

Postdoctoral fellow position - Ecologically and biologically significant areas for large predators in the Estuary and Gulf of St. Lawrence based on 25 years of survey, biologging and environmental data

The Department of Fisheries and Oceans (DFO) is responsible for the conservation and management of marine mammals in Canadian waters. A post-doctoral candidate is sought to develop species distribution models based on a large dataset of observations obtained from aerial and boat surveys conducted during the last 25 years in eastern Canada, in particular in the estuary and the gulf of the St Lawrence. The candidate will help collate relevant environmental data that could be associated with the occurrence of several species including the endangered blue whale, fin whale, right whale and other large predators. He/She will also benefit from information collected from bio-logging devices that were attached to several whale species. The predictive models will be used to identify important habitats of vulnerable species, estimate potential interactions with fisheries and shipping activities, and evaluate the impacts of coastal or marine development projects. Multispecies/assembly approaches would also be developed to identify ecologically and biologically significant areas and potentially assess their evolution under several climate change scenarios. This project will provide integrated tools for conservation and management decisions.

A suitable candidate should possess an internationally recognised doctoral degree from an accredited institution. He/She should have ecological training and a proven ability in statistical modelling related to species spatial distribution, habitat selection approaches, including the use of generalized linear models (GLM, GLMM) and generalized additive models (GAM, GAMM). The candidate should have excellent statistical programming skills in R, as well as proven abilities in written and verbal communication. He/She should be self motivated, able to work independently but also within a team framework.

This is a 2.5 year position to begin as soon as possible in 2021. This position will be held at the Maurice Lamontagne Institute – Fisheries and Oceans Canada in Mont-Joli (Quebec, Canada). The official working language at the Institute is French, although candidates who speak English only are also eligible. Salary is around \$60,000 CAD/year. The project will be conducted under the supervision of Dr. Arnaud Mosnier (DFO, Research Scientist, spatial analysis and habitat modelling) in collaboration with Jean-François Gosselin (DFO, Biologist, marine mammals survey analysis), Dr. Véronique Lesage (DFO, Research Scientist, marine mammal biology), and Valérie Harvey (DFO, Biologist, marine mammals biology and habitat modelling).

Candidates interested in the position should email Arnaud.mosnier@dfo-mpo.gc.ca and submit a resume including a list of publications and contact information for references.