

Postdoctoral Researcher (Spatial Management of Marine Invasions)
Department of Biological Sciences, University of Alberta

Project description: The Green Lab at the University of Alberta seeks a Postdoctoral Researcher to assist with spatial modelling to inform conservation interventions for marine invasive species. The successful candidate will work with team of scientists and resource managers to develop spatial prioritizations and quantify economic costs for managing Indo-Pacific lionfish in marine protected areas in US Caribbean and Tropical Western Atlantic territories. The goals of this project are to 1) identify optimal method for monitoring impacts from the invasion, 2) characterize the efficacy of removal interventions to control lionfish in the region, and 3) develop a spatially explicit tool for prioritizing intervention efforts based on local environmental, economic, and management conditions. Key project activities include managing and processing existing ecological and socio-economic data sets from the region, developing models of conservation value for coastal habitats invaded by lionfish, conducting spatial prioritization analysis, and working with a team to interpret results for conservation action. Skills required include statistical analysis of ecological data including mixed-model approaches, spatial analysis of environmental data, and experience managing large data sets. An interest and background in conservation planning and marine ecology is an asset. The applicant must be able to: conduct spatial analyses of environmental data, manage a database, write code, perform advanced statistical analyses, develop relationships with managers and scientists, and summarize scientific findings in the form of written manuscripts and oral presentations.

Setting: The position will be based at the University of Alberta in Edmonton, Canada. Periodic travel to the Caribbean region for collaboration is also required.

Qualifications: Ph.D. in Biology, Ecology, Oceanography, Earth Sciences, Environmental Studies, Statistics, or Computer Science; experience working with oceanographic and/or ecological datasets; experience coding in R and/or Python and familiarity with ArcGIS. Demonstrated knowledge of spatial analysis software for conservation planning would be very valuable (e.g. Zonation, C-Plan, Marxan).

Salary: \$45,000-\$50,000 plus benefits; commensurate with qualifications and experience.

Start date: Negotiable but as early as December 2018.

Term of appointment: Initially for six months, with extension for an additional six months depending on performance review.

To apply: Applications must include a cover letter that addresses your interest in the topic and how you meet the qualifications, your CV, one to three writing samples of published material, and contact information for three references. Documents/materials must be submitted in a single PDF file with the position title as the email subject to stephanie.green@ualberta.ca.

Closing date: Application review will begin Oct 15 2018. The position will remain open until filled.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.