

Job Description

Northern Boreal Breeding Bird Cumulative Effects Post-Doctoral Fellow



Official Title: Breeding Bird Cumulative Effects Post-Doctoral Fellow

Program: Northern Boreal Mountains

Position Type: Full time, One Year

Position Location: Whitehorse, Yukon (negotiable)

Salary range: \$55,000/year plus health benefits, travel and research expenses to be determined

Position start date: 4th January 2022

Date written/revised: 19 November 2021

Supervised by: Dr. Chrystal Mantyka-Pringle

Supervises: Not applicable

Application closing date: December 3rd 2021

Position Summary:

The WCS Canada Northern Boreal Mountains (NBM) program is leading a project to investigate the cumulative impacts of road and trail disturbances and other land surface disturbances (mining, forestry, fires) on terrestrial land birds as key focal species. The highly qualified candidate will be funded through a Canada Nature grant administered and supervised by Dr. Chrystal Mantyka-Pringle to statistically relate patterns in bird species richness and individual species at risk to the cumulative effects of surface disturbance, linear density, and total land use disturbances in central Yukon. The successful candidate will also take the lead in writing at least one scientific publication discussing the results and help make recommendations on ecological thresholds for disturbance, important bird habitat, and conservation priorities for the region. These results will then be shared with our partners, including Yukon Government, Environment and Climate Change Canada (ECCC), Tr'ondëk Hwëch'in First Nation Government, and the First Nation of Na-cho Nyäk Dun.

In 2021, the NBM Cumulative Effects Program worked with our partners to conduct surveys on breeding birds and avian species at risk using point counts and acoustic recording technology with emphasis on regions in central Yukon. Historical sites monitored by ECCC informed site selection along a gradient of moderate to high anthropogenic disturbance to supplement the existing dataset. Audio recordings were transcribed and uploaded on to Wildtrax and disturbance buffers around each site were digitized using satellite imagery and organized into a database. The fellow will be responsible for organizing this database and for processing the data to test specific research questions on the cumulative effects of disturbance and song birds.

The fellow must have a strong analytical background with particular focus on breeding birds and ecological modelling. The fellow must also have some combination of the following essential skills: advanced knowledge of boreal systems; cumulative effects modelling; spatial analyses using GIS and other tools such as Google Earth Engine for data management and analysis; statistical analyses of large datasets; bioacoustic analyses of ARU data. The majority of time will be spent analyzing and summarizing data, but there may be possibilities for participation in other NBM projects, including some field work, and proposal writing to extend the PDF position. The following experience will also be considered an asset: relationship building and working with Indigenous communities; working with Government partners; ability to communicate research to a wide array of stakeholders through meetings, speaking engagements, and writing for both scientific and lay audiences.

Position Objectives:

- Position WCS Canada as a key non-governmental organization that provides the best available conservation science and biological knowledge throughout the northern boreal mountain region where fish and wildlife populations and habitats are a conservation concern.
- Lead WCS Canada's development and application of new scientific analyses on cumulative effects that will be influential in achieving conservation across the broader region.
- Engage WCS Canada with the First Nations governments and staff within the Canadian Wildlife Service and the Government of Yukon's Department of Environment that are associated with collaborating on this breeding bird cumulative effects project to help facilitate their issues and interests, and enhance the projects long-term success for land use planning and protected area management.

Principal Responsibilities:

- Take the lead in writing at least one scientific publication discussing results and collaborating accordingly to make recommendations on ecological thresholds for disturbance, important bird habitat, and conservation priorities for the region.
- Organize the database and for processing data to test specific research questions on the cumulative effects of disturbance and song birds.
- Analyze and summarize data.
- Support relationship building and working with Indigenous communities, and with Government partners.
- Communicate research to a wide array of stakeholders through meetings, speaking engagements, and writing for both scientific and lay audiences

Required Qualifications:

- Ph.D. with a strong computational/analytical background transferable to processing large datasets.

- Ability to apply computational skills to acoustics, terrestrial ecology, conservation biology.
- Demonstrated strong working experience with conservation issues.
- Excellent oral and written communication skills for diverse audiences, including the ability to write manuscripts, articulate, synthesize, and present information.
- Strong interpersonal skills and demonstrated ability to work effectively in a cross-cultural and interdisciplinary work environment.
- Self-motivated, but capable of working remotely.
- Positive, flexible, and team-oriented approach, with the willingness and desire to work as a part of a multi-disciplinary team.

The successful candidate must hold a PhD by the start date of this fellowship, and should have a strong record of scholarly publications.

How to Apply:

Please submit all applications through the BambooHR Portal. Interested candidates should submit a cover letter, full CV (including contact information for two references, and two relevant examples of their written work). This application will remain open until the right candidate is found.

WCS Canada is committed to creating an accessible and inclusive organization. We are committed to providing barrier-free and accessible employment practices. Applicants with a disability or any special needs may make a request for accommodation at any stage of the recruitment process, and we will work with you to meet your needs. Such requests should be communicated to Tina Dias (tdias@wcs.org) or by phone 416-850-9038 ext. 30.

Application Inquires:

Tina Dias
Human Resources Manager
tdias@wcs.org

Position Inquires:

Dr. Chrystal Mantyka-Prinle
Conservation Planning Biologist
cmantykapringle@wcs.org

We thank all candidates for their interest, however, only those selected for interview will be contacted.

About WCS Canada

WCS Canada was established as a Canadian conservation organization in July 2004. Our mission is to conserve wildlife and wildlands by improving our understanding of and seeking solutions to

critical problems that threaten key species and large wild ecosystems throughout Canada. We implement and support comprehensive field studies that gather information on wildlife needs and then seek to resolve key conservation problems by working with a broad array of stakeholders. We also provide technical assistance and biological expertise to local groups and agencies that lack the resources to tackle conservation concerns. WCS Canada is independently registered and managed, while retaining a strong collaborative working relationship with sister WCS programs in more than 55 nations, including an integrated North America Program. The Wildlife Conservation Society (www.wcs.org) is a recognized global leader in conservation and for more than a century has worked in North America promoting actions such as bison reintroduction, pioneering field studies, parks creation, and legislation to protect endangered wildlife.

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Diversity and inclusion are core WCS Canada values. We value the diversity of the people we employ and work with and we strive to provide an inclusive and equitable workplace in which we recognize the unique characteristics, skills and experiences of all employees. We are committed to engaging our employees in our diversity, equity and inclusion work and together we aim create a work place where all staff feel they belong and can grow.

WCS Canada's programs occur on the homelands of Indigenous Peoples whose relationships various governments are described in historic (numbered) Treaties, modern land claim agreements, and negotiations around unceded lands. We recognize and support the international ecological and social commitments and responsibilities to Indigenous Peoples that Canada has signed, including the Convention on Biological Diversity, Convention on the Trade in Endangered Species, the United Nations Declaration on the Rights of Indigenous Peoples, and the recommendations of the Truth and Reconciliation Commission. Our commitment to engagement with Indigenous Peoples ranges from notification of research, to the provision of scientific advice, to co-creation of research. We respect Indigenous knowledge systems and include this knowledge in our research and conservation programs where possible. We engage in land use planning and impact assessment processes that affect Indigenous Peoples, seeking ways to advance conservation as well as opportunities to sustain the livelihoods and cultures of Indigenous communities. We seek to motivate positive conservation outcomes by supporting effective governance and decision-making processes by Indigenous communities, particularly by supporting Indigenous and Community Conserved Areas.

WCS Canada is committed to contributing to the field of conservation science and the professional development of its employees. Employees are encouraged to participate in professional societies and present their research at conference and meetings, as well as participate in relevant workshops and training opportunities. Employees are likewise encouraged to mentor graduate students, participate in relevant graduate student committees, and pursue adjunct status with Universities as appropriate.

