

GIS and Remote Sensing Analyst

Title: GIS and Remote Sensing Analyst

Position type: Full time

Location: Whitehorse, Yukon

Supervised by: Northern Boreal Mountains Landscape Leader

Application closing date: 20 January 2016

Position start date: 1 April 2016 (some flexibility)

Salary range: \$60,000 to \$65,000, plus health and retirement benefits

Position Summary:

WCS Canada is committed to enhancing the conservation prospects for wildlife and wildlife habitats in two of its core regions: Northern Boreal Mountains, and Arctic Beringia.

The GIS and Remote Sensing Analyst position is a newly created position that will provide spatial analysis and remote sensing support to the WCS Canada Northern Boreal Mountains (NBM) and Arctic Beringia (AB) Landscape programs. This position will directly support the conservation goals and objective of these conservation programs through the application of geospatial tools and technologies. The position will be responsible for applying remote sensing and spatial analysis skills to a diverse array of conservation research projects, developing and maintaining geospatial data holdings, and providing technical support and training. The position will also contribute to activities and programs within WCS Canada and the WCS North America Program (NAP) as required.

Position Objectives:

- Collaborate with, and provide GIS and remote sensing analyses for, NBM and AB team members on research and conservation projects, initiatives and activities that require such spatial analyses.
- Maintain current spatial data and satellite imagery among NBM and AB staff.
- Provide GIS and/or remote sensing spatial analysis training and technical support to NBM and AB staff where required.

Principal Responsibilities:

Programmatic

- Assist team members with GIS and/or remote sensing components, and potentially non-spatial components, of their research and conservation projects.
- Work with other NBM and AB team members to help design, develop and implement project(s) with a dominant spatial analysis (GIS and/or remote sensing) component.
- Manage central spatial information database(s) with current and relevant GIS and remotely-sensed spatial data layers for the NBM and AB teams, including data sharing agreements and metadata.
- Provide onsite and remote GIS and remote sensing training and technical support to other NBM and AB team members.
- Develop maps and other outputs for reports, publications and presentations for NBM and AB team members and other WCS staff, as required.
- Liaise with other WCS staff as required on GIS and remote sensing analyses, modeling and technology.

- Represent WCS Canada in meetings, conferences or other events, where requested.
- Be active in professional societies relevant to the position and attend meetings, etc., where appropriate.
- Participate in field work, as required.

Operations

- Manage and prepare annual work plan with supervisor, including input, where necessary, from team members to include the spatial analysis contributions required for their projects.
- With NBM and AB teams, develop communications materials within and across WCS family to enhance outreach on landscape projects and the program; including cartographic and written material for blog postings and WCS Canada website.
- Integrate project activities, where spatial analyses and/or data are required, into WCS Canada, WCS NAP and WCS Global Programs, to raise awareness of NBM and AB regions, and to support WCS efforts in conservation, where applicable.

Knowledge, Skills, and Abilities:

- Experience working with and analysing remotely sensed data.
- GIS and spatial data analysis skills.
- Digital cartography skills.
- Spatial and non-spatial data management and analysis skills.
- Ability to work both independently and within a team on multiple projects concurrently.
- Knowledge of satellite and aerial image processing techniques.
- Knowledge of past-, current- and future- satellite imagery platforms and their potential uses for conservation planning.
- Knowledge of theory and principles of geomatics/GIS (Geographic Information Systems) including mapping, GPS, data integration, coordinate systems, etc.

Required Qualifications:

- Relevant graduate degree with acceptable specialization in remote sensing, geomatics, geography, earth sciences, environment, conservation biology, resource management, landscape ecology or related field.
- Graduation from a recognized Institute of Technology, College or University with a minimum of a postgraduate diploma in Remote Sensing or Geographic Information Systems would be an asset.
- 1-2 years of relevant work or project-based experience.
- Experience using at least one professional remote sensing image analysis software system (ENVI, ERDAS IMAGINE, or PCI Geomatica).
- Experience using ArcGIS for Desktop (10.0 or newer) for spatial analyses and cartographic applications to support conservation planning, geographic investigations, and natural resource management.
- Experience in the adaptation and application of remote sensing and GIS methodologies to assess, model, manipulate or adapt geospatial data to create land use information.
- Experience in the use of scripting or programming languages (e.g. EASI/PACE, R, other) for imagery analysis and data processing would be an asset.
- Experience in the use of statistics and/or geomatics software for the creation, management and analysis of small and large spatial and non-spatial data sets.

- Experience collecting, manipulating, analyzing and interpreting scientific and spatial data, in the preparation of maps, spatial and non-spatial statistics, and other outputs for reports, publications, and presentations.
- Experience managing and maintaining up-to-date satellite imagery and other geospatial datasets.
- Experience with imagery classification, imagery manipulation, ortho-rectification and applying radiometric and atmospheric corrections to unprocessed imagery would be an asset.
- Experience providing remote sensing and GIS technical support and training to team members with varying skill levels.
- Experience in applying project management principles to coordinate multiple projects, set realistic deadlines and manage timeframes.
- Demonstrated ability to analyze situations, evaluate alternatives and implement solutions.
- Excellent communication skills, including the ability to write, articulate, and synthesize information for diverse audiences.
- Strong interpersonal skills and demonstrated ability to work independently and work effectively in a cross-cultural and interdisciplinary work environment.
- Self-motivated, but comfortable with team operations and capable of working with remote staff.
- Ability to communicate and work with project staff and personnel in person and remotely.

To Apply:

Please send cover letter, resume and a brief and relevant example of your GIS or remote sensing work to WCS Canada by email to:

[wscanada@wcs.org](mailto:wcsCanada@wcs.org) with the subject line “GIS and Remote Sensing Analyst”

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

Position Inquiries:

Dr. Don Reid, Northern Boreal Mountains Landscape Leader

1-867-456-7556

dreid@wcs.org

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.