SORTIE-ND Postdoctoral Research Associate Position

Bulkley Valley Research Centre, Smithers, BC

We are looking for a postdoctoral research associate for the following project, to be based out of Smithers, BC, starting in early 2019. The length of the position is 1 year with a possible extension to 2 years.

Job description:

The Bulkley Valley Research Centre (in collaboration with the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development) has a research programme to apply knowledge of forest stand dynamics to high priority natural resource management issues in British Columbia. The spatially explicit model of forest dynamics, SORTIE-ND, has been used to integrate forest science knowledge and make future projections of different management and natural disturbance scenarios, such as the mountain pine beetle epidemic (http://bvcentre.ca/sortie-nd/history). To apply SORTIE as a tool in more ecosystems in BC, particularly to ecosystems with caribou habitat (SBPS and ESSF), we need a post-doc to develop methods, using Bayesian statistics and primarily existing data, to efficiently re-parameterize the model. After working with a research team to apply the re-parameterized model to examine long-term effects of silviculture decisions on caribou habitat in year one, the post-doc will develop methods to incorporate climate change effects on stand dynamics into the model in year two.

Qualifications:

- PhD in biology, ecology, forest science or a related field
- Proven ability to work independently and collaboratively, to communicate effectively in a research team and to present scientific findings orally to large audiences
- High capability for scientific writing and a proven publication record
- Background knowledge and field experience with BC tree species and BC's Biogeoclimatic Ecosystem Classification System
- Strong background in statistics including Bayesian or likelihood methods
- Experience with stand or landscape simulation modelling, especially with spatial or process based forest or ecosystem models (past experience with SORTIE-ND preferred)
- Proficient with programming in R (familiarity with Python and C ++ also may be useful)

Supervision of the project: Erica Lilles (BC Ministry of FLNRORD) and Dr. Dave Coates (Adjunct Professor, UBC)

Send a cover letter, complete CV, and an example of your writing skills in the form of a peer-reviewed paper by November 23rd, 2018 to info@bvcentre.ca. References and transcripts may be requested of short-listed candidates.