

## Postdoctoral Fellowship – Maintaining Wildlife Systems with Resource Development

A postdoctoral fellowship is available in January 2013 at the University of Northern British Columbia to assess the potential impacts of resource development in the Muswka-Kechika Management Area (MKMA) in northern British Columbia. The MKMA encompasses 6.4 million hectares and supports some of the largest intact and diverse predator-prey ecosystems in North America. It also has significant potential for non-renewable resource development and renewable energy opportunities, as is common in areas adjacent to the MKMA. The vision for the MKMA, with its land base of protected areas and special management zones, is “a globally significant area of wilderness, wildlife and cultures, to be maintained in perpetuity, where world class integrated resource management and decision making is practiced, ensuring that resource development and other human activities take place in harmony with wilderness quality, wildlife and the dynamic ecosystems on which they depend”.

The goal of the postdoctoral fellowship is to evaluate whether current knowledge is sufficient to determine if development *can* coexist with the integrated MKMA vision of maintaining wildlife and wilderness in perpetuity. Tools that have been compiled for the MKMA include a Conservation Area Design, a Cumulative Effects Assessment Management Framework, and a Muskwa-Kechika Conservation Assessment. Objectives for the research are: (1) to review and synthesize the tools/data that have been developed/collected within the MKMA, (2) to identify one or more study locales to undertake watershed-level scenario planning for resource development, (3) to construct and interpret land-use scenarios that explore the trade-offs between conservation values and current and future resource development activities in the MKMA, (4) to identify gaps or missing tools needed to ensure best practices for sustainable development consistent with the MKMA vision, and (5) to produce a lasting legacy document of findings from this research, with the intent to inform decision-making by the provincial government. The postdoctoral fellowship is a unique opportunity to contribute to a world-class standard for land and resource management.

The postdoctoral fellow will work with a team of UNBC scientists including Drs. Katherine Parker, Chris Johnson, and Michael Gillingham, who have expertise in large-mammal dynamics in the MKMA, animal movement and cumulative effects, modeling and ecological analyses. This is a two-year full-time position with the Natural Resources and Environmental Studies Institute at UNBC. Salary is Cdn \$40,000 per year; some research travel funds also are available.

Applicants must have a PhD in biology, wildlife science, or related discipline. Familiarity with complex analytical techniques to assess wildlife habitat value and connectivity; good working knowledge of cumulative effects assessment; strong GIS, quantitative and statistical abilities; and willingness to work with a diversity of natural resource professionals and First Nations/aboriginal communities are essential. Applicants should have effective written and oral communication skills. Previous experience in scenario planning for resource development and analyses of cumulative effects is highly desirable.

The ideal postdoctoral fellow will have initiative, curiosity and dedication to scientific research, as well as the ability to exercise independent judgment and work in a team environment. He/she will want to make a difference in ensuring that the natural landscape dynamics of the MKMA persist.

### USEFUL WEBSITES

<http://www.muskwa-kechika.com/>

[http://science.natureconservancy.ca/resources/docs/MK\\_CAD\\_V1.pdf](http://science.natureconservancy.ca/resources/docs/MK_CAD_V1.pdf)

[http://science.natureconservancy.ca/resources/docs/MK\\_CAD\\_V2\\_Appendices.pdf](http://science.natureconservancy.ca/resources/docs/MK_CAD_V2_Appendices.pdf)

[http://scek.ca/documents/scek/Final\\_Reports/CEAMF%20Final%20Report1.pdf](http://scek.ca/documents/scek/Final_Reports/CEAMF%20Final%20Report1.pdf)

[http://scek.ca/documents/scek/Final\\_Reports/CEAMF%20Final%20Report2.pdf](http://scek.ca/documents/scek/Final_Reports/CEAMF%20Final%20Report2.pdf)

<http://y2y.net/our-work/ontheground-efforts/greater-muskwa-kechika-collaborative-projects>

[http://www.unbc.ca/nres/institute\\_overview.html](http://www.unbc.ca/nres/institute_overview.html)

To apply, applicants should create a single pdf document containing a cover letter that includes a description of experience and goals, a resume, copies of unofficial transcripts, and the names and contact information (phone and e-mail address) of 3 references. Please send the application to Dr. Katherine L. Parker ([parker@unbc.ca](mailto:parker@unbc.ca)).