

M.Sc. Opportunity in Landscape Ecology and Disturbance Ecology at the University of Northern British Columbia, Prince George, B.C.

Partial funding is in place for a graduate research assistant interested in the natural disturbance regimes of forested landscapes. Funded by British Columbia's Future Forest Ecosystems Science Council (FFESC – www.for.gov.bc.ca/hts/future_forests/council/) and administered through the FORREX Forum for Research and Extension in Natural Resources (www.forrex.org), the proposed research is part of a larger project communicating to forest stakeholders the implications of expected trends in wildfire, insect outbreaks and other forest disturbances in different regions of B.C. A monthly stipend is available from July, 2010, through December, 2011, and possibly longer.

Research will draw heavily on the B.C. Natural Disturbance Database (<http://cfs.nrcan.gc.ca/subsite/disturbance>) compiled by the Canadian Forest Service and the BC Ministry of Forests and Range. Mapped data portraying the annual extent of wildfires, insect outbreaks and (where available) other disturbances such as storm damage and landslides will be analyzed to classify distinctive historical combinations that can be mapped at an appropriate level of resolution. Climatic envelopes of disturbance regime attributes will be defined and projected based on downscaled projections of expected climate change. A number of related questions will be suitable for a Masters of Science thesis in biology or forestry. More information, describing a proof-of-concept for one aspect of the required research, is provided at http://www.forrex.org/JEM/ISS31/vol6_no2_scienceforum.pdf#page=35, with a related paper at http://www.forrex.org/publications/jem/ISS49/vol9_no3_MPBconference.pdf.

The ideal candidate will have an undergraduate degree in any ecological, natural resources or land-based discipline (e.g., biology, environmental studies, forestry, geography), and will have solid experience working with ArcGIS. An interest in maps, climate, and landscape dynamics is essential, while experience with statistical analysis software (e.g., SAS, SPSS, or R) would be an asset. It is expected that the successful candidate will apply for admission to the Natural Resources and Environmental Studies program at the University of Northern British Columbia (www.unbc.ca/nres/grad_overview.html). Although the deadline for September 2010 admission has passed, special arrangements for admission can be made if a complete application is processed before the end of June.

The M.Sc. and associated research will be supervised by Dr. Phil Burton (<http://cfs.nrcan.gc.ca/directory/pburton>), Manager of Northern Projects for the Pacific Forestry Centre of the Canadian Forest Service, and Adjunct Associate Professor in the Ecosystem Science and Management Program at the University of Northern B.C. The successful candidate will be affiliated with the northern node of the Pacific Forestry Centre, based at UNBC, and will have the opportunity to collaborate with other CFS and university researchers based in Victoria, Quebec and elsewhere.

If interested, or if you would like more information, please contact Phil at pburton@NRCan.gc.ca or 1-250-960-6130. Early discussions are encouraged, as there is a greater chance of additional support in the form of scholarships and teaching assistantships for early applicants to the UNBC NRES program.