PhD position: forest ecology and climate change adaptation

A fully-funded Ph.D. position in forest ecology and climate change adaptation is available at the Institute of Forestry and Conservation at the University of Toronto or in the Department of Renewable Resources at the University of Alberta. The Ph.D. candidate will participate in an operational-scale silvicultural experiment that will test various "climate-smart" strategies for promoting the resilience of temperate mixedwood forests in the Petawawa Research Forest in central Ontario. One of the key strategies is within-range assisted migration, whereby southern provenances will be planted after partial harvest operations, with the expectation that they will respond better to global warming than local provenances. The Ph.D. candidate will assess the growth and survival of transplanted seedlings, examine how performance varies among species and provenances, and determine whether southern provenances are maladapted to the current frost regime (despite being adapted to the future climate regime). The Ph.D. candidate may also assess frost hardiness of the transplanted seedlings experimentally, as well the impact of frost on the long-term growth of different provenances, using dendrochronological analyses of historical provenance trials spanning a broad latitudinal gradient from Ontario to the southern US.

Qualifications: 1) sincere interest in forest ecology, 2) strong quantitative skills, 3) excellent oral and written communication skills in English.

Applicants should send a curriculum vitae to John Caspersen, john.caspersen@utoronto.ca, and Charles Nock, nock@ualberta.ca, by November 15th. Competitive applicants will be contacted to schedule an interview (but note that less competitive applicants will not be contacted). The position will remain open until a suitable candidate is selected.

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