PhD OPPORTUNITY:
Impact of spruce budworm outbreaks on woodland caribou populations

The boreal populations of woodland caribou are threatened in Canada. Populations are particularly sensitive to habitat disturbances, such as by logging, fire and pest insects. Although insect outbreaks affect areas larger than those affected by fire and logging combined, their impact on the food web of boreal caribou remains poorly understood. Since 2006, an infestation of spruce budworms (*Choristoneura fumiferana*) is taking place in the Côte-Nord region of Québec, Canada. The PhD project will clarify how the outbreak influences caribou’s food web, particularly how the insect can indirectly influence the distribution and demography of boreal caribou. The successful candidate will likely conduct a field season, in remote parts of the Côte-Nord region, to characterize caribou habitat. However, most of the data has already been acquired, and the student will have access to a database comprised of GPS locations from more than 100 caribou.

**Qualifications:** Hold an MSc in terrestrial ecology or related field. Be familiar with the use of Geographic Information Systems and Remote Sensing data, and have a strong interest for statistics and quantitative ecology. Université Laval is a French university, and the student will be asked to learn French within the first two years.

A scholarship of 20,000$/year is available for 3 years. Small scholarships from U. Laval will be added to this amount. Students admissible for NSERC and FRQNT fellowships will be favored.

**Documents to provide by email:** Applicants for this position should forward a short cover letter indicating their motivation, accompanied by a current CV, unofficial transcripts and contact information of three references to: Daniel Fortin (Daniel.Fortin@bio.ulaval.ca). We will start reviewing the applications on 15 November 2020.

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