

Postdoc opportunity : Tree acclimation to wind after thinning

Duration : 15 months

Scholarship : 40 000\$ (total)

Location : Laval university, Faculty of forestry, geography and geomatics, Quebec, Canada

Application deadline: January 29, 2021

Project description: The risk of windfall is becoming an increasingly important concern in a context of increased use of partial cuts. The ForestGales model, originally designed for UK plantations, has undergone many adaptations. This model calculates the risk of windfall for the average tree within a stand. The introduction of a competition index allows to go to the tree scale and to take into account the application of thinning. On the other hand, it does not allow at the current stage to take into account the critical phase of acclimation which follows thinning. A study was set up where wind speed and strain on individual trees are continuously monitored before and after the application of thinning. The project consists of characterizing the acclimation to the conditions created by partial cutting in terms of growth adjustments, wind load and resistance to overturning.

Desired qualifications :

- Doctorate obtained within the last 4 years
- Programming skills on R
- Experience in field work
- Experience in data acquisition systems would be an asset
- Basic knowledge of windfall risk modeling would be an asset

Informations on postdoc studies : <https://www.fesp.ulaval.ca/stagiaires-postdoctoraux>

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