WSL Institute for Snow and Avalanche Research SLF

Swiss Federal Institute for Forest, Snow and Landscape Research WSL

Master's thesis opportunity

Global Treeline Range Expansion Experiment

The Master's project is embedded in the Global Treeline Expansion Experiment G-TREE initiative, a globally distributed collaborative project aimed at testing the generality of mechanisms driving boundaries of tree distribution at the treeline. The goal of G-TREE is to disentangle substrate and seed limitations on range expansion through field experiments at arctic and alpine treeline sites around the globe. In 2013, we established a G-TREE experiment at the Stillberg research site near Davos using a straight forward experimental design with seeding, substrate-altering and herbivore exclosure treatments at three elevations (1900 m, 2100 m and 2400 m a.s.l.).

The main aims of this Master's opportunity are the assessment and analysis of the seedling establishment of *Picea abies* and *Larix decidua*. You investigate the effects of substrate, elevation, annual variation and herbivores. You are also responsible for the second year's seeding treatment at the three experimental sites. As an applicant you ideally have studied environmental sciences or biology with a focus on ecology or have an equivalent education. Furthermore, you are experienced in statistical data analysis and are fluent in English. The thesis should start in May 2014 depending on the disappearance of the snow cover.

Institution:
WSL Institute for Snow and Avalanche Research SLF, Davos, Research Group Mountain Ecology (http://www.slf.ch/ueber/organisation/oekologie/gebirgsoekosysteme).

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