

PhD position in Agroecology

Targeted grazing of robust livestock for the restoration of green alder-encroached pastures

Objectives of the project

Throughout the last decades, the reduction of agro-pastoral activities in alpine areas has determined profound landscape modifications, with extensive reforestation processes over former pastures. Nowadays, there are about 679 km² of shrub forest in Switzerland, most of them dominated by pure stands of green alder. Vegetation communities dominated by this pioneer and N₂-fixing species show several negative agro-environmental conditions, such as low plant and animal diversity, nitrate and dissolved organic carbon leaching and concentration in streamlet water, soil acidification, and gaseous N losses.



The ROBUSTALPS project aims to investigate ecological dynamics, such as botanical composition evolution and N translocation fluxes, in green alder-encroached pastures under the challenge of targeted grazing.

Background

Agroscope is offering a **4-year fellowship for a PhD**. We are seeking highly motivated applicants interested in agronomy, ecology and botany related to mountain systems. Applicants must hold a Master degree or equivalent in agronomy, ecology or another relevant discipline, with a good background in GIS. Some previous research experience and good statistical knowledge are desirable. Strong oral and written communication skills in English are required.

Aims

- Studying grazing effects of robust livestock (e.g., Highland cattle) on green alder-encroached pastures.
- Vegetation mapping and dynamics, nutrient redistribution fluxes, remote sensing and animal-borne sensors.
- Writing of scientific papers and thesis.

Schedule

- **This fellowship will start in July 2019 or earlier if possible.**
- **Applications will be reviewed from 22nd April 2019 until the position is filled.**

Salary

- About **50'000 CHF per year** (gross salary, including social security contributions)

Supervision and coordination

Dr. **Massimiliano Probo** and Dr **Pierre Mariotte**, Research Group "Grazing Systems", Agroscope, 1260 Nyon

Please send your application by email to massimiliano.probo@agroscope.admin.ch as a single PDF. Applications should include a **CV, names and addresses of two referees** and a **1-page cover letter** outlining your motivation for the position and research interests.



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