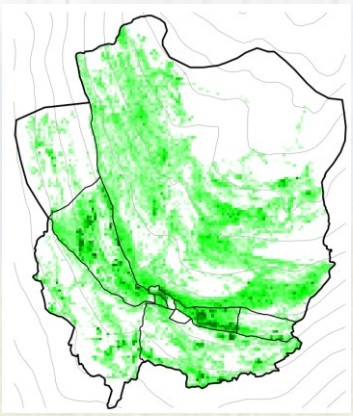
MSc Thesis in Computational Ecology

Modelling livestock distribution


About the project
Globally and in Switzerland, about one third of land surface are grazed by domestic livestock. The intensity of grazing is of primary importance for vegetation structure and ecosystem services. In heterogeneous landscape (as most grazing areas are), grazing intensity varies locally. Only by GPS tracking, it can be quantified reliably, which is laborious and costly.
In this MSc thesis, you use existing GPS tracking data from various grazing experiments in the Alps and analyze the underlying drivers of livestock distribution using spatial models. The aim is to develop a tool to predict fine-scale variation of livestock grazing in heterogenous terrain. Such a tool will support the interpretation and prediction of habitats and vegetation patterns in the Alps.

What we offer
- an excellent opportunity to extend your data analysis skills
- independence to develop your own innovative approaches
- engaged support by a motivated research team

Dates
Starting date: flexible

Your profile
- advanced experience in R statistical programming
- basic knowledge in spatial statistics is an advantage
- self-motivation and interest in agroecological applications

Application
Please send us by email a short dossier, including a half-page motivation letter and your CV

Contact
Manuel Schneider, Senior scientist, manuel.schneider@agroscope.admin.ch
Agroscope, Mountain Grassland Team, Reckenholzstrasse 191, CH-8046 Zürich

Agroscope