

BSc or MSc Thesis: Quantifying the Attractiveness of Mountain Summer Pastures



Starting date: May 2025
Duration: according to your academic institution
Working Place: Agroscope, Zürich, Switzerland and the Swiss Alps
Language: English, German
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About the project

Mountain summer pastures are the most iconic of Swiss landscapes. They are often located above the treeline and harbour a rich variety of colourful flora and fauna. These biodiversity hotspots and their management, are of high cultural importance and a fundamental part of Swiss identity. Although cultural ecosystem services provided by mountain summer pastures are extremely important, they are hard to quantify and assess. Here, we aim to quantify the attractiveness of mountain summer pastures and explore its relationship with botanical composition and environmental setting.

This thesis will be conducted within the Alpine Rangeland Observation Network ([ARON](#)) which aims to quantify the ecosystem services of mountain summer pastures. Since 2022, Agroscope, in collaboration with five cantons (BE, GR, TI, UR, VS), is monitoring forage yields and quality, soil properties and plant species composition of alpine rangelands. To cover the large heterogeneity of rangelands in Switzerland, ARON involves 14 study areas all over the Swiss Alps, covering all major combinations of geology and climate. You will have the opportunity to extend the project towards a cultural ecosystem service, i.e. attractiveness of mountain summer pasture.

Your key tasks

- Take photos of the investigated plots across Switzerland (driving licence required; knowledge of photography of advantage)
- Build a survey to quantify the attractiveness of the plots for different stakeholders and distribute it
- Analyse the survey data to quantify the attractiveness of mountain pastures using R (no advanced programming skills required)
- Combine results with the already available botanical composition and environmental data and investigate for relationship between e.g. colour species composition and pasture attractiveness

What we offer

- Exciting field work in the Swiss mountains
- Opportunity to contribute to meaningful research with positive impact on mountain ecosystems
- Possibility of co-authorship on a published scientific article
- Engaged support by a motivated research team

Application

If you are passionate about flowers, mountain summer pastures, and are eager to contribute to the preservation of ecosystem services in mountainous areas, we encourage you to apply. Please email us a short dossier, including a half-page motivation letter and your CV.

