

Project Metadata Form

When contributing data to ReSurveyEurope, please fill in this form for each resurvey project and send it to Ilona Knollová (ikuzel@sci.muni.cz) together with the database. A resurvey project is understood as repeated sampling of a certain type of vegetation in a certain study area using specific methods.

- PROJECT NAME (identical with the Resurvey Project name given in the database):

Šumava Grassland Experiment

- FULL PROJECT NAME (use if the full project name is longer than used in the database):

Šumava Grassland Experiment

- REFERENCE (publication or URL or DOI of the dataset if published online):

Doi: 10.1016/j.agee.2011.01.010

- DATA OWNER: person(s), institution(s):

Jiri Dolezal, Zuzana Mašková

- CONTACT E-MAIL:

jiridolezal@gmail.com

- METHODS (description of sampling design and methods):

The experimental mountain meadow lies in the Sumava National Park and Biosphere Reserve, Czech Republic, at an altitude of 1160 m, with annual precipitation 1140 mm, and mean temperature 4.8 °C. Climatic conditions and paragneiss parent rock gave rise to nutrient-poor acidic brown soils. The vegetation season lasts from late April to mid-October. The original acidophilous meadow was dominated by *Deschampsia cespitosa*, *Festuca rubra*, *Agrostis capillaris* and *Hypericum maculatum*. Before the establishment of our experiment, the study site had been mown for hay once a year and used as pasture of crossbreed beef cattle for about forty years. During the 13 years of the experiment the meadows surrounding the study area were mown every July and sometimes grazed.

Experimental design

The experimental site is 300 m × 400 m in size located on a SWfacing slope, inclination 2–8°. In the mown treatment, vegetation was cut once a year in July, employing low-impact agricultural mechanization, and the hay was removed from the plot. The mulching treatment, i.e., cutting and crushing of the vegetation and leaving it to decompose on the spot, is new to the highland regions, and was conducted at the same time as the mowing treatment in July. In the fallow treatment, the vegetation was left to its spontaneous development from the start of the experiment, with no management applied. The total cover and cover of individual vascular plant species were estimated in five 1 m × 1 m permanent plots randomly located in each treatment. To make visual estimates more precise, the plant cover was estimated in nine

0.33 m × 0.33 m subplots within each plot, totaling at 1755 relevés recorded during the 1997–2009 period.

- ENVIRONMENTAL DATA (list of environmental data measured):

Soil physicochemical properties (N, P, cations, texture, pH, soil microbial composition, daily precipitation, temperature)

- MANIPULATED PLOTS (description of the treatment if the plots were manipulated, e.g. mowing twice a year, fertilizing by NPK once a year, post-fire succession)

See Methods for description of the experimental setting related to sowing densities and composition.

In Ceske Budejovice, 26.1.2021

Jiri Dolezal