

ReSurveyEurope

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):
 Puini grassland plots
- FULL PROJECT NAME (use if the full project name is longer than used in the database):
- REFERENCE (publication or URL or DOI of the dataset if published online):
 Ruprecht, E., Enyedi, M.Z., Szabó, A., Fenesi, A. (2016). Biomass removal by clipping and raking vs. burning for the restoration of abandoned Stipa-dominated European steppe-like grassland. Applied Vegetation Science 19: 78-88.
- DATA OWNER: person(s), institution(s):
 Eszter Ruprecht, Hungarian Department of Biology and Ecology, Faculty of Biology and Geology, Babeş-Bolyai University from Cluj-Napoca, Romania
- CONTACT E-MAIL:
 eszter.ruprecht@ubbcluj.ro
- METHODS (description of sampling design and methods):

The experiment was established in the spring 2006, in a *Stipetum pulcherrimae* Soó 1942 grassland stand at Puini, Romania. It had been previously used as pasture, but was abandoned about 40 yr ago. Therefore, as a general phenomenon in such abandoned dry grasslands, a relatively large amount of litter had accumulated. We began to apply three different treatments: litter removal by raking, vegetation clipping and clipping combined with litter removal, and had unmanaged plots as a control. Vegetation was clipped at 5-cm height. Treatments were repeated each year from 2006 until 2011 in early spring, at the beginning of the growing season. In early spring of 2012 there was an anthropogenic fire, where the above-ground biomass completely burned (no litter remained in either treated or control experimental plots) and the tussocks of the dominant species were seriously damaged. The fire affected ca. 80% of the grassland area. This unplanned event provided the opportunity to study the effect of burning on the species composition and vegetation structure of this grassland stand for 3 yr. Thus, treatments were not resumed after 2012 in order to follow spontaneous regeneration of vegetation after the fire event.



The experimental design was a completely randomized block design, with each treatment replicated once in each of the eight blocks per site. Each plot was $1 \times 1 \text{ m}$, surrounded by a 0.5-m wide buffer strip subjected to the same treatment. Permanent plots were marked by metal sticks.

ENVIRONMENTAL DATA (list of environmental data measured):

The experimental grassland stand is situated on a steep south-facing slope with eroded carbonated chernozemic soil on clayish or marly substrate.

 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)

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Cluj-Napoca, 8.02.2021

Eszter Ruprecht