

ReSurveyEurope

Project Metadata Form

When contributing data to ReSurveyEurope, please fill in this form for each resurvey project and send it to Ilona Knollová (<u>ikuzel@sci.muni.cz</u>) 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):
 Abava_monitoring
- FULL PROJECT NAME (use if the full project name is longer than used in the database):
 Abava grassland monitoring project.
 Funded by several projects during the monitoring period. Started in the frame of the PIN-MATRA project Grassland conservation in the Abava River Valley (funding AVALON fund, the Netherlands, project implementation by Latvian Fund for Nature) (1998-2003)
- REFERENCE (publication or URL or DOI of the dataset if published online):

Rusina, S., Kiehl, K. (2010) Long-term changes in species diversity in abandoned calcareous grasslands in Latvia. *Tuexenia* 30: 467-486. <u>https://www.zobodat.at/pdf/Tuexenia_NS_30_0467-0486.pdf</u> Kupča, L. (2017) Semi-natural grasslands in the "Abavas senleja"nature Park (Abava River Valley). In: S. Rūsiņa (ed.) *Outstanding semi-natural grassland sites in Latvia: biodiversity, management, restoration*. University of Latvia, Riga, pp. 56–76. <u>https://edgg.org/sites/default/files/page/Grasslands_of_Latvia_14EGC.pdf</u>

- DATA OWNER: person(s), institution(s):
 Solvita Rūsiņa (all years), Latvian Fund for Nature (2001-2003), University of Latvia (2018-2020)
- CONTACT E-MAIL: solvita.rusina@gmail.com
- METHODS (description of sampling design and methods):

Seven permanent transects, each in different plant community, were established in 2000 in three grassland areas of the Abava River Valley (Table 1).

Table 1. Sampling design.

Site	Plant community	Management	Number of
			permanent 1m ²
			plots



Abavnieki	Dry calcareous grassland	Abandoned 1990-1998; Extensive	20
	Filipendula vulgaris-	grazing by horses, and/or mowing after	
	Helictotrichon pratense	1998.	
Drubazas	Dry calcareous fallow	Ancient grassland, ploughing in 1993	8 (11 from 2009)
	grassland Poa angustifolia-	and 1994; mowing 1 x per season after	
	Filipendula vulgaris	1994	
Drubazas	Dry calcareous grassland	Ancient grassland, Abandoned 1990-	10
	Filipendula vulgaris-	1999; shrub cutting in 1999, and	
	Helictotrichon pratense	occasional mulching or haying (2000-	
		2014); Mowing with hay removal 1 x	
		per season (2015 onwards)	
Drubazas	Dry calcareous grassland	Ancient grassland, Abandoned 1990-	5 (7 from 2011)
	with Calamagrostis epigeios	1999; shrub cutting in 1999, and	
		occasional mulching or haying (2000-	
		2014); Mowing with hay removal 1 x	
		per season (2015 onwards)	
Priednieki	Dry calcareous fallow	Abandoned 1990-1998; Sheep grazing	5
	grassland with Trifolium	(1998-2003), abandoned after 2003	
	medium		
Priednieki	Dry calcareous grassland	Abandoned 1990-1998; Sheep grazing	10
	Carex flacca-Helictotrichon	(1998-2003), abandoned after 2003	
	pratense		
Priednieki	Dry calcareous grassland	Abandoned 1990-1998; Sheep grazing	10
	with Aegopodium	(1998-2003), abandoned after 2003	
	podagraria		

Permanent plots (1 m²) were established with 2m distance form each other and marked by metal sticks in one corner and relocated by metal detector. Geographical coordinates taken at the start point (Longitude, Latitude in TB database)and end point (Longitude2, Latitude2 in TB database) of the transect. Vascular plant species counted and cover of each species evaluated in per cent visually. Moss species determined in some of the monitoring years. Monitoring years: 2000-2007, 2009, 2011, 2013, 2016 (Priednieki not digitised), 2018 (not digitized).

• ENVIRONMENTAL DATA (list of environmental data measured):

Chemical properties of soils were determined in 2007 (soil pH, N, P, K, C, Ca, Mg, cation exchange capacity) and in Drubazas also in 2018.

 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)
 Reintroduction of grazing or mowing; natural succession after abandonment.

[Riga, 21 January, 2021]

[Solvita Rūsiņa]