

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

 Apennine semi-natural grasslands on calcareous substrates
- REFERENCE (publication or URL or DOI of the dataset if published online):

The dataset is still not published online.

The data were used for the following publications:

https://onlinelibrary.wiley.com/doi/10.1111/avsc.12288

https://link.springer.com/article/10.1007/s12210-018-0707-6

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

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METHODS (description of sampling design and methods):

We selected seven sites by searching for published and unpublished studies that include vegetation plots associated with fine-scale vegetation maps. To be selected, the historical studies should be composed of: (1) vegetation plots dated at least 20 years ago, and sampled on calcareous substrates; (2) map with a scale range from 1:25000 to 1:10000 and with phytosociological legend at the association level; and (3) community types referred to the Apennine endemic alliance Phleo ambigui-Bromion erecti of the habitat 6210(*).

Since the historical vegetation plots did not have an exact geographic reference, we used locality and map legend to identify a site for each historical plot. Then we applied a stratified random approach using altitude, slope

and aspect of each historical plot, to identify the points where the new sampling should be performed (Giarrizzo et al. 2015). Our approach allowed the new plots to be surveyed in areas originally occupied by the target community type, and in the same topographic conditions.



In the Resurvey database we reported the same coordinates for the new and the historical vegetation plots, and we derived the precision of the historical plots coordinates based on the size of the polygon where the specific vegetation type was mapped.

ENVIRONMENTAL DATA (list of environmental data measured):

Differences in minimum mean temperature of the coldest month between the two samplings (for each sampling date the value was based on the average of the previous 15 years)

Differences in mean rainfall of the three summer months between the two samplings (for each sampling date the value was based on the average of the previous 15 years)

Altitude

Slope

Stones %

Bare soil %

Soil Thickness of soil organic horizon

C/N

рΗ

Salinity

Grazing intensity (derived from number of individuals for species per hectare, number of droppings

within the plot, and measuring the distance from roads and drinking points within a GIS environment)

Polygon shape index – Plot 2.74 (1.2–5.92)

Perimeter shared with forest polygons

 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)

The database does not include manipulated plots.

Rome, February 23rd 2021

Sabina Burrascano