

## Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first make an enquiry to the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data meeting your needs are available. If they are, please fill in the form below and submit it to Milan Chytrý (chytry@sci.muni.cz) or another member of the EVA Coordinating Board.

- Applicant's name:
   Zdeňka Lososová
- Applicant's institutional address:
   Department of Botany and Zoology, Masaryk University, Kotlářská 2, Brno, Czech Republic
- Applicant's e-mail: lososova@sci.muni.cz
- Project title:

Evolutionary determinants of disconnected phylogenetic and functional diversity in European grasslands

• Brief description of aims and methods of the study:

Generally, we focus on deciphering the ecological and evolutionary forces that shape diversity of plant communities. For this purpose, we will focus on European grassland vegetation complemented by the information about species trait spectra from the TRY database. Our aim is to evaluate the effect of climate on functional diversity (FD) and phylogenetic diversity (PD) of grassland vegetation on the European scale. We will determine which climatic conditions are those leading to the clustered PD/FD for European grasslands. It is likely that extreme conditions (either very hot and dry or very cold) would result in extinction of lineages with intolerant species to these conditions. Our hypothesis is that with the future increasing temperature and drought in several regions of Europe, these climatic factors will act as strong environmental filters and so lead to clustered PD and FD of the communities. This work will determine if the future climate change will lead to more phylogenetically and functionally homogenized grassland vegetation. It will also detect which types of grasslands will be more prone to extinction under the climate change.

• Will someone else be involved in data editing or analysis in addition to the applicant? Data analysis, interpretation and paper writing in this project will be led by Zdeňka Lososová, a member of the team of the Czech National Phytosociological Database at Masaryk University, Brno. Further, Irena Axmanová, Milan Chytrý, Jan Divíšek, Lars Götzenberger and Martin Večeřa will be involved in data analyses. Other experts in data analysis at the Vegetation Science Group of Masaryk University may be involved in the analysis if needed. Confidentiality in data use will be guaranteed.



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- Estimated time of delivery of results (e.g. manuscript submission):
   2019-2020 (submission of first manuscript)
- Geographic area needed (e.g. countries or range of geographic coordinates):
   Geographically delimited Europe (excluding Macaronesia, Anatolia and Cyprus).
- Do you need plots to be georeferenced? If so, what is the minimum accuracy of plot location (in metres or kilometres) needed for your project?
   No, we will use all the available data. However, for GIS analyses, data will be filtered.
- Vegetation types needed (syntaxa):

   All grassland types including alpine grasslands but excluding marshes. Together with the plot data I am also asking for the dataset of gap-filled trait data from the database TRY.
- Other data selection criteria: No.
- Envisaged publications:

1-3 publications in international journals that target an audience in ecology, macroecology and/or vegetation science

• Specification of the co-authorship arrangements in publications based on the requested data. Note that the EVA Rules recommend that co-authorship is offered to a representative of each database providing data that are particularly important for the project (e.g. unique vegetation types, under-represented geographic areas) or make up more than 10% of the final dataset (5% threshold can be considered too). These database representatives should be experts in the topic of the project (they do not need to be the custodians or deputy custodians) and they should contribute to the project more than just by providing the existing data, e.g. by intellectual contribution to the concept of the paper, preparation of new data, or helping with data analysis, interpretation of the results or writing parts of the paper (see the IAVS Code of Professional Ethics: http://iavs.org/Governance/Code-of-Professional-Ethics.aspx). The project leader should enable active participation by regularly informing potential co-authors about the progress of the project from its early stage. The project leader should also make final co-authorship arrangements based on the real input of the individual contributors.

Zdeňka Lososová will be the leading author of the planned publications. We will inform the data providers when a major steps in the preparation of the concepts of the projects or in data analyses are achieved. Co-authorship will be offered to a representative of each database that will be represented by at least 5% of relevés included in the final analysis (i.e. after stratified selection from the basic data sets) or fewer for databases from vegetation types or regions with general lack of data. Further, persons with significant contribution to data analysis (see above) or providers or analysts of other data (trait data, phylogenetic tree, geographical data) may be invited as co-authors. Following the EVA rules and established practices, we expect coauthorship to be associated with intellectual contribution to the paper, not merely with data provision.



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• Eligibility of the applicant to receive EVA data. Specify to which EVA database the applicant has contributed; if the applicant is not the custodian or deputy custodian of an EVA database, give a name of a custodian or deputy custodian who supports this data request.

Zdeňka Lososová is a member of the team of the Czech National Phytosociological Database (EU-CZ-001) at Masaryk University, Brno. This application is supported by Milan Chytrý, the Custodian of this database.

We agree with the terms of EVA Data Property and Governance Rules as approved on 26 May 2012 (http://euroveg.org/download/eva-rules.pdf).

Brno, 23 February 2018

Zdeňka Lososová