European Vegetation Archive

Data Request Form

To obtain data from the European Vegetation Archive (EVA), including the ReSurveyEurope Database, please first enquire the EVA database administrator Ilona Knollová (ikuzel@sci.muni.cz) whether the data that meet your needs are available. If they are, please fill in the form below and submit it to Ilona or another member of the EVA Coordinating Board (or ReSurveyEurope Board if you ask for data from the ReSurveyEurope Database).

- Applicant's name:
  Jozef Šibík
- Applicant's institutional address:
  Plant Science & Biodiversity Center SAS, Dúbravska cesta 9, 845 23 Bratislava, Slovakia
- Applicant's e-mail:
  jozef.sibik@savba.sk
- Project title:
  Remote sensing-based monitoring of tundra's grazing capacity in northern Fennoscandia, with a focus on biodiversity conservation
- Are you asking for core EVA data (non-repeated vegetation surveys) or for ReSurveyEurope data (repeated vegetation surveys)?
  Both (if available)
- Brief description of the aims and methods of the study:
  - The Northern Fennoscandian tundra habitats are experiencing a decline in productivity and biodiversity due to climate change and increasing human impact, and this trend is expected to continue. Increasing shrub cover and competition with other forms of land use, such as forestry activities, mining, windmills and road construction limit the availability of high-quality tundra pastures thus posing challenges to reindeer husbandry. Land use conflicts sometimes lead to squeezing reindeer pastures which results in the deterioration of lichen stands and necessitating supplementary feeding for the herds. The amount of pastures inside herding cooperatives and regulations of the reindeer number thus become sensitive questions in local and national debates that involve balancing between indigenous rights of the Sámi people and the interests of other stakeholders. In this situation, maintaining highly productive, rich and resilient to climate change tundra pastures is crucial for the economic stability of indigenous people.
  - The environmental governance of grazing resources includes monitoring of pastures, which presently relies on limited surveys and infrequent visits. Satellite data with high temporal resolution is well suited for monitoring the vast and remote Northern Fennoscandian pastures and suggests the potential for the new innovative method for regional-scale assessments. By combining the approaches from remote sensing and biogeography disciplines, the project aims to develop a methodology for estimating the grazing capacity of the Fennoscandian tundra pastures at the community level for an accurate and cost-effective way to monitor and manage available grazing resources. Specifically, the methodology considers

i) modelling and regional-scale mapping of three key components of grazing capacity: vegetation cover, productivity, and species richness of the pastures, ii) regional spatially explicit estimation of grazing capacity of the pastures, iii) incorporating indigenous knowledge and herders' everyday practice in the reindeer capacity estimation. Additionally, a spatial distribution of the tundra vegetation diversity will be assessed in relation to paleo-climate, ongoing climate change and human disturbance. Finally, a conclusion of the effectiveness of conservational policy will be drawn on the base of vegetation diversity hot-spots location.

The vegetation data will be used for modelling, calibration and training the network for remote identification of habitat types in target region, and computation traits for target habitats and diversity indices

- Will someone else be involved in data editing or analysis in addition to the applicant?

  Anna Terskia- anna.terskaia@nateko.lu.se, Ksenia Ermokhina - diankina@gmail.com, Maria Sibikova – maria.sibikova@savba.sk

- Estimated time of delivery of results (e.g., manuscript submission):

  2028

- Geographic area needed (e.g., countries or range of geographic coordinates):

  Northern part of Sweden, Norway and Finland – attached .kml file

- 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?

  Yes

- Vegetation types needed (syntaxa):

  Yes, or habitat type

- Other data selection criteria:

- Envisaged publications:

  1-2 papers related to the project

- Data deposition. Some journals require data used for the analysis to be stored in a public repository to ensure the repeatability of the analysis. According to EVA Rules, you are not allowed to store the original vegetation-plot data obtained from EVA. However, if you plan to publish in such a journal, you may deposit a reduced EVA-derived dataset that (1) would make it possible to repeat the analysis published in the paper and (2) does not contain any information not used in the analysis. For example, such a dataset can contain only a subset of species (e.g., only angiosperms or only neophytes), or replace species names with codes, or replace species cover values with presences/absences, or remove all the header data, or replace the exact plot coordinates by coarse grid-cell coordinates etc. If you plan to deposit reduced information from vegetation plots, please describe here what might be deposited. If the project developed so that you

needed to deposit more information than specified here, you would need to ask specific permission from the Custodians of the EVA databases used in your analysis before the dataset is deposited.

We do not plan to deposit data online

- Plant trait data from the TRY consortium. If you plan to combine your analysis of vegetation-plot data with plant trait data, you can also request a dataset of 18 gap-filled traits for a large number of plant taxa prepared by the TRY consortium. These traits include Leaf area, Specific leaf area, Leaf fresh mass, Leaf dry matter content, Leaf C, Leaf N, Leaf P, Leaf N per area, Leaf N:P ratio, Leaf delta15N, Seed mass, Seed length, Seed number per reproductive unit, Dispersal unit length, Plant height, Stem specific density, Stem conduit density, and Conduit element length. This dataset can be provided to you by the EVA manager together with the vegetation-plot data. If you use this dataset, you must inform about your project the TRY data contributors who might be potentially interested and invite them as potential co-authors, assuming they will make an intellectual contribution to your paper. The list of the TRY data contributors will be sent to you together with the gap-filled trait dataset.

  Yes

- 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., a relatively large proportion of the final dataset used in the analyses or data from unique vegetation types or under-represented geographic areas). This database representative should be an expert in the topic of the project (not necessarily the custodian or deputy custodian), and this person 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: https://www.iavs.org/page/governance_code-of-proffesional-ethics). 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.

  Custodians or deputy custodians who express interest, complete the online form, and/or actively contribute to the project's outcomes.

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

  Deputy custodian of Slovakia NVD

- I agree with the terms of EVA Data Property and Governance Rules as approved on 26 May 2012 (http://euroveg.org/download/eva-rules.pdf).
- If I ask for ReSurveyEurope data, I agree with the terms of ReSurveyEurope Data Property and Governance Rules as approved on 6 April 2022 (http://euroveg.org/download/resurveyeurope-rules.pdf).
- In any result obtained based on EVA core data (non-repeated vegetation surveys), I will cite the EVA report article (Chytrý et al. 2016; https://doi.org/10.1111/avsc.12191). In any result obtained based on the ReSurveyEurope data (repeated vegetation surveys), I will cite the ReSurveyEurope report article as soon as it is published. In addition, I will cite individual source databases used in my project (if possible, in the list of References; if not possible, at least as a list of databases in the electronic supplementary material).

- If I ask for the plant trait data from TRY, I agree to invite to my project the TRY data contributors following the list received from the EVA database manager.

Bratislava, 28th, November 2025

Jozef Šibík