**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:
  Frederik Van Daele
- Applicant's institutional address:
  K.L. Ledeganckstraat 35 9000 Gent
- Applicant's e-mail:
  Frederik.vandaele@ugent.be
- Project title:
  DUNELIFE (DUNE Living Infrastructure Fostering Evolution)
- Are you asking for core EVA data (non-repeated vegetation surveys) or for ReSurveyEurope data (repeated vegetation surveys)?
  Both
- Brief description of the aims and methods of the study:
  The primary aim of the DUNELIFE project is to investigate geo-evolutionary feedbacks in coastal plant communities under climate change and aeolian disturbance to predict and mitigate ecological, evolutionary, and societal maladaptation. Within this broader framework, the specific aim of this data request is to determine how plant trait distributions in coastal dune ecosystems will shift under future climate change scenarios. To achieve this, we will use the requested European Vegetation Archive data to build trait-based species distribution models (trait-SDMs). These models will be integrated with current and projected high-resolution climate surfaces to project the optimal future trait and species distributions assuming no dispersal limitation. By comparing these projected future distributions against the actual current diversity, we will calculate the ecological offset. This offset will allow us to quantify the anticipated level of ecological maladaptation caused by dispersal limitation, ultimately helping us understand how these vegetation mismatches will impact dune geomorphology and the societal coastal protection services they provide.
- Will someone else be involved in data editing or analysis in addition to the applicant?
  Yes, researchers from the UGent Terrestrial Ecology Group (TEREC).
- Estimated time of delivery of results (e.g., manuscript submission):
  Over the 3-year project period (2026-2028), with the final integrated modelling publication expected in Q4 of 2028.

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

  The European Atlantic coast, spanning a latitudinal climate gradient from Portugal to Sweden. To accurately restrict the data to relevant coastal habitats and avoid inland sand vegetation, we provided a GIS shapefile defining a strict 2 km buffer around the European coastline for spatial extraction.

- 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, exact plot coordinates are preferred. The minimum acceptable accuracy is 1km, as this is required to accurately link the occurrence data with 1-km spatial resolution climate surfaces (e.g., WorldClim 2). However, I am collecting plant and trait data along the range myself and to combine these datasets an accuracy of at least 10 m would be preferred.

- Vegetation types needed (syntaxa):

  We require vegetation plots corresponding to coastal dune systems along our latitudinal gradient from Portugal to Sweden. We request all vegetation plots that fall strictly within our provided 2 km coastal GIS buffer.

- Other data selection criteria:

  To capture the full spectrum of functional trait variation and avoid overly restricting the dataset, we request all species occurrences within the aforementioned 2 km coastal buffer, rather than filtering for a predefined list of specific indicator species.

- Envisaged publications:

  Planned publications include: trait-environment relationships (P1), ecological offsets (P2), phenotypic offsets from transplant experiments (P3), genomic offsets (P4), and integrated modelling results for future dune resilience and ecosystem services (P5).

- 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.

If journal requirements necessitate data deposition, we plan to deposit a reduced EVA-derived dataset that replaces the exact plot coordinates with coarse grid-cell coordinates, ensuring original vegetation-plot data is not stored publicly.

- 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.

  In accordance with the EVA Rules, co-authorship will be offered to a representative of each database providing data that are particularly important for the project. Specifically, we will invite representatives of databases that contribute a minimum of 5% of the final dataset used in our analyses, or those that provide critical data from unique vegetation types or under-represented geographic areas along our latitudinal study gradient. We expect these database representatives to be experts in the topic of the project who will contribute intellectually to the paper beyond merely providing the existing data. This active involvement includes contributing to the concept of the paper, data analysis, interpretation of the results, or writing parts of the manuscript, in line with the IAVS Code of Professional Ethics. To facilitate this, the project leader will regularly inform potential co-authors about the project's progress from its early stages to enable their active participation. Ultimately, the project leader will make final co-authorship arrangements based on the real intellectual input of each individual contributor.

- 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.

  While I have not yet contributed to an EVA or ReSurveyEurope database, a key outcome of the DUNELIFE project will be the generation of a comprehensive, high-quality dataset encompassing full syntaxonomical plot analyses and detailed, in-situ plant trait data

across the European Atlantic latitudinal gradient. Upon completion of the project and publication of our primary findings, I fully intend to offer this complete dataset to the European Vegetation Archive as open data to enrich the consortium's resources and support future coastal research. For the purposes of this current data request, I am seeking the formal support of Robin Pakeman, custodian of the Scottish Coastal Survey, to act as my sponsoring custodian.
Supported by Robin Pakeman (custodian of EU-GB-005 Scottish Coastal Survey).

- 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.

30/03/2026

Frederik Van Daele