



European Vegetation Archive Data Request Form

To obtain data from the European Vegetation Archive (EVA), please first enquire 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 Ilona or another member of the EVA Coordinating Board.

- Applicant's name:

Ojaswi Sumbh

- Applicant's institutional address:

PBL Netherlands Environmental Assessment Agency Bezuidenhoutseweg 30, 2594 AV
Den Haag

- Applicant's e-mail:

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- Project title:

Biodiversity assessments of wetlands using Bioscore3.0

- Brief description of the aims and methods of the study:

This research is part of a EU HORIZON project WET HORIZONS. WET HORIZONS will improve wetland knowledge and develop tools to enhance protection and restoration of Europe's wetlands. The rapid loss of wetlands due to climate change and anthropogenic activities also threatens its biodiversity. Drastic changes in climatic conditions and increasing pressure due to human activities are likely to affect the species distribution ranges of several species occurring in wetlands and other terrestrial regions. Biodiversity assessment models act as an important tool to assess the potential impact of changes in various environmental pressures on biodiversity. Bioscore is such a model which assesses the effect of environmental pressures on the distribution of terrestrial vascular plant species across Europe. Bioscore uses species distribution models to determine the relationship between environmental conditions and the presence and absence of species. The presences and absences are derived from the co-occurrence data of EVA. These fitted relationships are then used to assess the potential impact of changes in environmental conditions, such as climate change, on the European distribution range of the species. The ecological realism of the species response fitted with BioScore are evaluated in Hellegers et al. 2020 (doi: 10.1111/ecog.04291). The main aim of the research is to expand the scope of Bioscore such that 1) the environmental pressures become more representative for wetlands in Europe and 2) also non-vascular plant species characteristic for wetlands and other terrestrial habitats can be assessed. Non-vascular plant species of other terrestrial habitats are also included in order to retain a balanced set of species across all terrestrial habitats. This is achieved through: (a) Recognition of important drivers governing wetlands and their effect on the plant diversity of wetlands and include them in Bioscore; (b) select non-vascular plant species and include them in Bioscore; (c) Assessing potential impact of climate change and wetland restoration measures on species distribution ranges and



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species diversity in wetlands across Europe. An improved and validated model of Biscore obtained from this research will be used to assess the trade-offs of restoration practices regarding biodiversity.

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

Marjon Hellegers, Aafke Schipper, Arjen van Hinsberg (PBL Netherlands Environmental Assessment Agency)

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

August 2025

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

All georeferenced plots located in the whole of Europe (in order to assess the response of species to climate change, we would like to use observations which cover as much of the distribution range of the species as possible)

- 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, plots need to be georeferenced. Any accuracy is fine.

- Vegetation types needed (syntaxa):

All vegetation types

- Other data selection criteria:

Only georeferenced plots. The header data should include cover data, eunis type, location uncertainty, year of observation and coordinates

- Envisaged publications:

One scientific article

- 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.

Permission from the custodians will be ask before the dataset is deposited

- 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 for a dataset of 18 gap-filled traits for a large number of



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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 from 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.

No

- 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: <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.

Custodians who have a significant contribution to the publication, more than just by providing the existing data such 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 can become co-authors.

- 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.

Stephan Hennekens

- 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>).
- In any result obtained based on this data, I will cite the EVA report paper (Chytrý et al. 2016; <https://doi.org/10.1111/avsc.12191>). 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.

The Hague, 02 March 2023

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