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 Ilona or another member of the EVA Coordinating Board.

- Applicant's name:

Stefan Dullinger

- Applicant's institutional address:

University of Vienna

- Applicant's e-mail:

stefan.dullinger@univie.ac.at

- Project title:

European forestry & forest pathogens under climate change.

- Brief description of aims and methods of the study:

Climate change will alter the portfolio of tree species suitable for afforestation at any particular place. So far, research has tackled the problem from a 'static perspective', assessing this portfolio for points in / periods of time in the future. However, climate change is a successive process potentially extending over many decades, and the average rotation period of economically used tree species is about a century. As a consequence, current planting decisions must be based on whether the successively changing site conditions will match species requirements throughout the entire rotation period. This will likely not only alter the identity of available species but also narrow the portfolio down as compared to both the groups of species that are suitable at a site now OR in the future.
In contrast to their tree hosts the life cycle of most forest pest and pathogen species is short. In an extended phase of climate change they may hence use windows of opportunity, i.e. transient periods where conditions match their requirements at a particular site (given dispersal limitations are relaxed or intrinsically low).
In this analysis we will evaluate these double pressures on native European tree species (those useable for forestry) and a set of the five most important native and five potentially invasive alien pest and pathogen species.
Site suitability for tree species will be modelled with SDMs. SDM projections will be done for decadal steps over the next century, based on smoothed time series of climatic predictors. A site will be classified as suitable to a tree species only when all decadal projections agree on suitability. Data for fitting tree models shall come from ICP-level 1, augmented by presence-absence data from the European Vegetation Archive.

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

Yes: Rupert Seidl & Werner Rammer, University of Natural Resources and Life Sciences, Vienna Johannes Wessely, Franz Essl & Wolfgang Willner, University of Vienna

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

Spring 2020

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

Europe (geographical)

- 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, 1 km

- Vegetation types needed (syntaxa):

All forest plots with the presence of at least one target tree species (the list of 94 tree species will be provided as a separate file)

- Other data selection criteria:

No

- Envisaged publications:

1 paper in an international peer-reviewed journal

- 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 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. 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.

Co-authorship will be offered to representatives of databases contributing at least 5% of the final dataset or covering otherwise not represented geographic areas. Potential co-authors will be offered the opportunity to read a draft of the manuscript and decide whether or not they want to contribute.

- 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.

Wolfgang Willner

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 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.

Vienna, Austria, 13.2.2019

Stefan Dullinger