



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:

Martina Sychrová¹, Jan Divíšek^{1,2}, Milan Chytrý²

- Applicant's institutional address:

Masaryk University, Faculty of Science, Department of Geography (1) and Department of Botany and Zoology (2) – Kotlářská 2, 611 37 Brno, Czech Republic

- Applicant's e-mail:

sychrova.martina@mail.muni.cz, divisekjan@sci.muni.cz, chytry@sci.muni.cz

- Project title:

Modelling climatic niche of North American tree species

- Brief description of aims and methods of the study:

The study is planned as a part of the dissertation thesis of Martina Sychrová. The main aim is to model potential distribution of North American tree species in Europe (only those that have already been introduced) and explore which climatic conditions of European continent are most suitable for their successful naturalization. We hypothesise that mesic, non-extreme climatic conditions will support establishment of most species. For each species, we will also explore climatic niche shift between native and introduced range. Maxent will be used as the main software for data analysis and resulting models will be mapped across North America and Europe. We will use only occurrence data of selected species, not co-occurrence data.

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

NO

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

Autumn 2019

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

Europe – 75° N, 50° E, 35° N, 15° W

- 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 - minimum accuracy 5 km

- Vegetation types needed (syntaxa):



Data Request Form

ALL

- Other data selection criteria:

Relevés with occurrence records of 61 North American tree species listed below:

61 species:

Aesculus pavia, *Alnus rubra*, *Amelanchier alnifolia*, *Amelanchier arborea*, *Aralia spinosa*, *Baccharis halimifolia*, *Carya cordiformis*, *Carya ovata*, *Catalpa bignonioides*, *Celtis occidentalis*, *Crataegus douglasii*, *Crataegus succulenta*, *Diospyros virginiana*, *Dodonaea viscosa*, *Fraxinus americana*, *Fraxinus pennsylvanica*, *Gleditsia triacanthos*, *Gymnocladus dioicus*, *Chamaecyparis thyoides*, *Juglans cinerea*, *Juglans nigra*, *Juniperus virginiana*, *Kalmia latifolia*, *Larix laricina*, *Liquidambar styraciflua*, *Liriodendron tulipifera*, *Magnolia grandiflora*, *Morus rubra*, *Myrica pensylvanica*, *Picea engelmannii*, *Picea mariana*, *Pinus banksiana*, *Pinus ponderosa*, *Pinus rigida*, *Platanus occidentalis*, *Populus balsamifera*, *Populus deltoides*, *Populus trichocarpa*, *Prunus pensylvanica*, *Prunus serotina*, *Prunus virginiana*, *Pseudotsuga menziesii*, *Quercus palustris*, *Quercus rubra*, *Quercus velutina*, *Rhododendron maximum*, *Rhus glabra*, *Robinia pseudoacacia*, *Sambucus canadensis*, *Taxodium distichum*, *Tilia americana*, *Tsuga canadensis*, *Tsuga mertensiana*.

- Envisaged publications:

One paper in an international 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. We do not need any trait data.

- 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.

Martina Sychrová will be the lead author of the planned publication. We will inform the data providers when a major steps in the preparation of the concepts of the projects or



Data Request Form

in data analyses are achieved. Co-authorship in papers will be offered to a representative of each database that will be represented by at least 10% of relevés included in the final analysis or fewer for databases regions with general lack of data. We expect that the database custodians will nominate active co-authors who will contribute intellectually to the paper by checking and interpreting the results, providing conceptual ideas or contributing to paper writing.

- 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.

M. Chytrý is a custodian of the Czech National Phytosociological Database.

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>).

Brno, 10 October 2018

Martina Sychrová, Jan Divíšek and Milan Chytrý