EVA Annual report (2020)

Dear EVA friends,

This is the 4th annual report of the European Vegetation Archive (EVA) summarizing the status of our database consortium, related projects and publications. In March 2020, EVA consisted of 89 databases and **1,669,239 vegetation plots**, of which 87% were georeferenced and 62% were assigned to phytosociological syntaxa. Of these plots, 60% may be accessed under semi-restricted-access regime and 27% under restricted-access regime, while the remaining 13% are open access. EVA data have been available for 100 research projects (see the full list of projects here). Nowadays there are 54 on-going EVA projects, from which eight started in the last year.

Until now, EVA data have contributed to **26 journal papers**, one book, nine technical reports, one bachelor thesis and **73 presentations** at conferences or workshops. For an updated list of all publications, visit the EVA webpage.

During the last year, the EVA consortium published nine papers dealing with very different topics. Following the tradition of the European Vegetation Survey, two papers focused on vegetation classification, using oak-hornbeam forests (Novák et al., Preslia) and saline and brackish grasslands (Pätsch et al., Phytocoenologia) as the target systems. Other two studies used species distributional data to address the patterns of refugia in alpine populations in combination with genetic data (Pan et al., Molecular Ecology) and the ecology of an invasive tree in Europe (Vítková et al., Science of the Total Environment). The diversity patterns of European flora have been further investigated by exploring the Holocene history of forests and grasslands (Divíšek et al., Journal of Biogeography) and the alien flora of coastal habitats (Giulio et al., Applied Vegetation Science). Finally, two studies dealt with database issues, evaluating species coverage across large data sets (Sporbert et al., Journal of Vegetation Science) and developing a new database for boreal forests of northern Europe (Jašková et al., Phytocoenologia).

We thank the EVA Council and data contributors to vegetation databases for keeping their interest in our consortium and look forward to seeing new projects in the next year!

Borja Jiménez-Alfaro, Ilona Knollová and the EVA Coordinating Board

March 2020

EVA PROJECTS FINISHED IN THE LAST YEAR

- **Phenotypic and genetic diversity of pedunculate oak (Quercus robur L.) in Europe (FGErobur)** – Daniel Krstonošić
- **Classification and biogeographical analysis of the *Brometalia erecti* and *Festucetalia valesiacae* in Central and Eastern Europe** – Wolfgang Willner

- **Between land and sea – a description and classification of low-growing salt meadow communities along the Baltic Sea coast (including related periodically wettened fresh contact communities)** – Erwin Bergmeier
- **Alien flora of the European sand dunes** – Corrado Marcenò
- **Connecting past landscape diversification with recent diversity patterns** – Jan Divíšek
- **Robinia pseudoacacia stands in southern parts of Europe** – Michaela Vítková

EVA PROJECTS CANCELLED IN THE LAST YEAR

- **Which climatic and edaphic parameters drive the co-existence of different plant functional types in European grasslands?** – Jürgen Dengler
- **Scale dependence of macroclimate as explanatory of species‘ distribution and richness patterns with varying spatial resolution**– Jürgen Dengler

NEW EVA PUBLICATIONS

Divíšek J., Hájek M., Jamrichová E., Petr L., Večeřa M., Tichý L., Willner W. & Horsák M. 2020. **Holocene matters: Landscape history accounts for current species richness of vascular plants in forests and grasslands of eastern Central Europe.** *Journal of Biogeography* 47: 721–735.

Giulio S., Acosta A.T.R., Carboni M., Campos J.A., Chytrý M., Loidi J., Pergl J., Pyšek P., Isermann M., Janssen J.A., Rodwell J.S., Schaminée J.H. & Marcenò C. 2020. **Alien flora across European coastal dunes.** *Applied Vegetation Science*. doi:10.1111/avsc.12490

Jašková A., Braslavskaya T.Yu., Tikhonova E., Paal J., Rūsiņa S., Laiviņš M., Kucherov I.B., Genikova N.V., Knollová I., Chernenkova T.V., Churakova E.Yu., Diekmann M., Halvorsen R., Kirichok E.I., Korotkov V.N., Kryshen A.M., Lugovaya D.L., Morozova O.V., Potapov P.V., Prokazina T.S., Schei, F.H., Semenishchenkov Y.A., Shevchenko N.E., Sidorova O.V., Smirnov N.S., Smirnova O.V., Tsvirko R., Turubanova S.A. & Chytrý, M. 2020. **European Boreal Forest Vegetation Database.** *Phytocoenologia* 50: 79–92.

Novák P., Willner W., Zukal D., Kollár J., Roleček J., Świerkosz K., Ewald J., Wohlgemuth T., Csiky J., Onyshchenko V. & Chytrý M. 2020. **Oak-hornbeam forests of central Europe: a formalized classification and syntaxonomic revision.** *Preslia* 92: 1–34.

Pan D., Hülber K., Willner W., & Schneeweiss G. M. 2020. **An explicit test of Pleistocene survival in peripheral versus nunatak refugia in two high mountain plant species.** *Molecular ecology* 29: 172–183.

Vítková M., Sádlo J., Roleček J., Sitzia T., Müllerová J. & Pyšek P. 2020. **Robinia pseudoacacia-dominated vegetation types of Southern Europe: Species composition, history, distribution and management.** *Science of the Total Environment* 707: 134857.

Pätsch R., Schaminée J.H.J., Janssen J.A.M., Hennekens S.M., Bruchmann I., Jutila H., Meisert A. & Bergmeier E. 2019. **Between land and sea – a classification of saline and brackish grasslands of the Baltic Sea coast.** *Phytocoenologia* 49: 319–348.

Sporbert M., Bruelheide H., Seidler G., Keil P., Jandt U., Austrheim G, Biurrun I., Campos J.A., Čarni A., Chytrý M., Csiky J., De Bie E., Dengler J., Golub V., Grytnes J.-A., Indreica A., Jansen F., Jiroušek M., Lenoir J., Luoto M., Marcenò C., Moeslund J.E., Pérez-Haase A., Rūsiņa S., Vandvik V., Vassilev K. & Welk E. 2019. **Assessing sampling coverage of species distribution in biodiversity databases.** *Journal of Vegetation Science* 30: 620–632.