– GrassPlot Newsletter No. 4 –

13 October 2018

Dear current and potential members of the GrassPlot Consortium,

During and after the summer break several relevant developments took place concerning our database and consortium so that after relatively few months we would like to update you again with a Newsletter.

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Many new datasets are in the pipeline…

After the summer break, Idoia Biurrun resumed work on preparing and adding the many new datasets that we had received since the finalisation of GrassPlot paper #01 in *Phytocoenologia*. Currently we have **136 datasets, including 171,510 plots and 2,880 nested-plot series**, which is already a plus of 10 datasets, 2,513 plots and 83 nested-plot series compared to GrassPlot 1.00 reported in the paper. However, these numbers are increasing nearly by the day. If you still have suitable data not provided yet, which you would like to see included in the forthcoming papers, please submit them to Idoia in the nearest future!

Compositional data in GrassPlot

While originally GrassPlot was focused on collecting richness data together with coordinates, methodological and environmental data, it had become clear already during the first GrassPlot workshop in Bayreuth, that making the compositional data also available would allow many more exciting papers. However, transforming the compositional data from many different datasets in different formats into a single harmonized file ready for analyses in R is a much

bigger effort than preparing the first mentioned data. **Viktoria Wagner** had already developed a workflow and started the data preparation, and we are glad to announce that now we found four volunteers who together with **Itziar Garcia-Mijangos** (who does the initial preparatory steps) resumed work on that topic: **Sabina Burrascano, Salza Palpurina, Vincent Pellissier and Anne Mimet**. Recently we had two Skype meetings to plan the activities, and in consequence of these we are now optimistic that by around end of this year the compositional data of all GrassPlot datasets can be ready for analyses.

On the one hand, this will only allow starting some of the **many paper projects with compositional data** next year (see Newsletter #01), including new ones proposed by Anne and Sabina. On the other hand, it offers us to **join with our extra-European data the release 3.0 of the global vegetation-plot database "sPlot"** (https://www.idiv.de/splot) where the deadline is around 15 December. This would those of our extra-European member datasets who wish this a double benefit without additional work for them. (According to sPlot rules, data from Europe can join only via the European Vegetation Archive EVA).

Poster on the IAVS conference in Bozeman

On the annual symposium of the International Association of Vegetation Science in Bozeman, Montana, USA, we presented a poster in July this year (similar to that at the Macroecology-2018). It was well attended and we could negotiate with several colleagues additional data provisions.

Overview of papers planned for the near future

Currently, we have three concrete paper plans:

(1) The most urgent one is our **comparative study on species-area relationships (SARs; paper #04)**. It has been invited to a Special Issue of *Journal of Biogeography* on studies using "big data". Deadline for submission is 15 January, but we aim to be ready by end of this year. However, we are generally in a good position to produce this paper in rather short time as we did many of the analyses already with an earlier version of GrassPlot on the workshop in Bayreuth. Now **Tom Matthews** has joined the author team who has recently finished "sars", a comprehensive R package for modelling SARs with non-linear regressions and multi-model inference, i.e. exactly what we want. Currently, Idoia is adding datasets of nested-plot data so that in the near future we can stop data compilation for this paper and start with analyses. As this is an opt-in paper according to our Bylaws, all of you have the possibility to opt-in as co-authors – according to the principles outlined below.

(2) In parallel or possibly slightly later we will also start the **paper #02 (benchmarking Palaearctic grassland diversity)**. The target journal for this paper is not yet clear and we welcome plausible suggestions. Since this, according to the GrassPlot Bylaws is an opt-out paper, all co-authors of the Phytocoenologia paper plus the representatives of the newly joined datasets will automatically become co-authors unless they opt out.

(3) The Governing Board is currently considering the option to prepare an **update of our database paper (*Phytocoenologia*) for the EDGG journal *Palaearctic Grasslands*** once the data basis for the two mentioned papers is complete, which would allow to keep Methods sections in these short and on the other hand give credit also to all the contributors of the newly joined databases. Already now it is evident that while the increase in absolute numbers is perhaps not so dramatic, the improvement in spatial coverage will be significant, filling many gaps that still existed in GrassPlot 1.00. Moreover we then probably can announce that the compositional data in GrassPlot are prepared and ready for analyses.

Opt-in procedure for GrassPlot paper #04

The paper proposal #04 (*General patterns of species-area relationship emerging from 3,000 grassland plots*) is attached. In this paper we intend to **use all nested-plot data with at least four grain sizes** that are in GrassPlot by a certain deadline in the near future. According to GrassPlot Bylaws (https://www.bayceer.uni-bayreuth.de/ecoinformatics/en/top/138914/14/140159/GrassPlot_Bylaws_2017-03-19_corrected.pdf), you have now 14 days, i.e. **until 27 October 2018 to respond on the following issues** if you wish:

(1) If you have nested-plot data that are in restricted-access regime you can make them available for this particular paper; otherwise they will not be used. If your nested-plot data are in semi-restricted-access regime you can withdraw them for this particular paper; if we don't hear from you, they will be used.

(2) If you are interested to become active co-author, please explain why you are interested in this paper and what you could contribute (in addition to the data).

Answers on (1) and (2) should be sent to Jürgen Dengler as the chair of the Governing Board. According to the Bylaws, we are obliged to accept one co-authorship request per dataset that contributes at least 2% to the analyses, but we are free to accept additional offers if they promise to make a valuable contribution to the paper. This means that you can offer your co-authorship even when you do not have any or too few nested-plot data in GrassPlot. Being added to the preliminary author list means that you will be informed about results and receive the first draft of the paper. Please note, however, that only those will remain on the author list who made an intellectual contribution until submission.

Forthcoming elections

The term of duty of the current **Governing Board** is going to end in early March 2019. Therefore we will call for candidates in late January and conduct the **election in February**. We invite all members to consider to run for a seat and to contribute to the future governance and development of GrassPlot. Even if all current members should wish to continue, at least one vacant seat would have to be filled. In early 2019 we will provide more information on the nomination and election procedure.

New global grassland book published

Recently, the book **"Grasslands of the world: diversity, management and conservation"** has been published recently. It contains eight chapters on grasslands in the Palaearctic biogeographic realm, whose authors are largely from the GrassPlot Consortium. You find more information on the book at https://www.researchgate.net/publication/321016401. If interested in individual chapters, just ask the corresponding authors for a pdf.

Best regards,

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