



BOTTOMS-UP

PAPER PROJECT

Preliminary title: Benchmarking multi-taxa biodiversity in European forests.

Target journals: Global Change Biology / Biological Conservation / Forest Ecology and Management / Science of the Total Environment/ Journal of Applied Ecology/Diversity and Distributions

Outline

Forests hold most of the biodiversity in terrestrial ecosystems. Within the Biodiversity Strategy 2030 aims at increasing the protected area and improving the conservation status of habitats and species by 30%. Reaching these aims in the most cost-effective way requires the most up to date information on the distribution of species and biodiversity patterns. Up to now, prioritization of conservation areas has considered rough compilations of data with disparate data sources for different taxonomic groups. We aim at improving this by quantifying and characterizing the fine-scale patterns of biodiversity of multiple taxonomic groups across forest types and management systems in Europe.

Aims

- To compare biodiversity at different scales (alfa, gamma and beta)
- To identify species that characterize forest types and management systems
- To compare biodiversity patterns across multiple taxa (deviations from positive correlations among groups)
- To identify biodiversity cold/hot spots

References

First/lead author: Sebastian Kepfer-Rojas , Francesco Chianucci, Sabina Burrascano, Theo Van der Sluis

Core authors from BOTTOMS-UP: Rafael Andrade, Thomas Campagnaro, Giovanni Trentanovi

Core authors outside BOTTOMS-UP: to be confirmed

Please note that if the outline changes substantially (more than 1 aim is revised substantially), or co author(s) are added to the above lists the governing board should re-vote on the project.

Further opt-in authors:

According to the BOTTOMS-UP Bylaws any member of the BOTTOMS-UP Consortium can declare his/her interest to become opt-in author. The first author is required to preliminarily accept one such offer from each dataset that represents at least 2% of the data in the analysis. It is upon the discretion of the first author whether to accept any opt-in offer beyond this requirement. Persons interested in opt-in authorship can be nominated until with e-mail to the first author (and cc: to the BOTTOMS-UP Governing Board), explaining which dataset(s) they represent and preferentially also how they could

contribute. Note however that such a nomination only means the option to become co-author. In the end only those persons will be retained as actual co-authors who have made a significant intellectual contribution to the paper during the course of its preparation (in accordance with BOTTOMS-UP Bylaws and compliance to ethics in academy).

Data to be used:

All the taxonomic information at the species level from all the datasets with sufficient geographic cover in the BOTTOMS-UP platform.

Time line:

Deadline for permission of data usage from custodians: **March 2022**

Extraction of data from BOTTOMS-UP: **March 2022**

Data preparation and analysis: **April 2022**

Raw results to be sent to the wider author team: **July 2022**

Writing up of the paper (including preparation/optimization of figures): **September 2022**

Feedback round of co-authors to MS: **October 2022**

Submission: **November 2022**

Confirmation:

I confirm that I will adhere to the BOTTOMS-UP Bylaws.

Date: 18/1/2022

Sebastian Kepfer Rojas