



BOTTOMS-UP

PAPER PROJECT

Preliminary title:

The Rosetta Stone of forest science: a way forward for research-driven sustainable management

Target journals: Current Forestry Reports; Forest Ecology and Management; European Journal of Forest Research

Outline:

A myriad of forest management terms and definitions are used in scientific literature. In many cases the inconsistencies in their use within biodiversity-oriented investigations lead to difficulties in comparing outcomes, unclear results and misleading conclusions on effects of management. In fact, there have been a number of attempts to standardize silviculture terminology. Based on seminal works (e.g. Matthews 1989, Bell et al. 2008, Pach et al. 2018) coupled with a rigorous analysis of the literature building the Bottoms-up dataset, we suggest a framework for the use of forest management terminology within multi-taxa studies in Europe.

We synthesized data to motivate the need for shared schemes for descriptive variables and discussed and agreed on the best schemes to provide such variables in future studies focusing on the effect of management on forest multi-taxon diversity.

Aim:

Propose common definitions of a set of forest management terms to be used in studies focused on management sustainability for multi-taxon forest biodiversity.

Cited bibliography

Bell, F. W., et al. (2008). Developing a silvicultural framework and definitions for use in forest management planning and practice. *The Forestry Chronicle*, 84 (5): 678-693.
<https://doi.org/10.5558/tfc84678-5>.

Matthews, J.D. (1989). *Silvicultural systems*. Oxford University Press. ISBN: 978-0-198-54670-2

Pach, M., et al. (2018). Silviculture of Mixed Forests: A European Overview of Current Practices and Challenges. In: Bravo-Oviedo A., Pretzsch H., del Río M. (eds) *Dynamics, Silviculture and Management of Mixed Forests*. *Managing Forest Ecosystems*, 31: 185-253. Springer.
https://doi.org/10.1007/978-3-319-91953-9_6

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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:

Please detail which datasets will be used, also reporting specific subsetting procedures if needed.

Time line:

Deadline for permission of data usage from custodians: January 2021

*Extraction of data from *BOTTOMS-UP*: To be concluded - February 2021*

Data preparation and analysis: March 2021

Raw results to be sent to the wider author team: April 2021

Writing up of the paper (including preparation/optimization of figures): May 2021

Feedback round of co-authors to MS: June 2021

Submission: July 2021

Confirmation:

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

Date

22/01/2021

Signature

Thomas & Giovanni & Sabina