PAPER PROJECT

Preliminary title:
Landscape scale mixtures of intensively and unmanaged forests increase biodiversity - Empirical effects of Triad zoning

Target journals:
Nature sustainability, Journal of applied ecology, Forest ecology and environment, European journal of forest research
Secondary choices: Journal of Environmental Management, Biological Conservation, Ecological applications, Conservation Biology, Ambio, Proceeding of the royal society B

Aims

For three decades, the concept of Triad zoning has been proposed to balance the social, ecological, and economic demands at the landscape scale by providing intensively, extensively, and un-managed forests. However, the assumed effect on biodiversity was rarely tested against empirical data.

In this study we aim to use the Europe-wide multi-taxon database compiled by the Bottoms-Up Platform to quantify, for the first time, the effects of Triad landscape composition on regional (multi) biodiversity.

This will be done by applying an adapted data resampling method (see Shall et al. 2020) that allows to explore various Triad zoning composition. Preliminary results showed promising results.

Authors

First/lead author: Rémi Duflot, Peter Schall

Core authors from BOTTOMS-UP: Lorenzo Balducci, Francesco Chianucci, Jeňýk Hofmeister, Yoan Paillet, Sabina Burrascano, Thomas Nagel.

Core authors outside BOTTOMS-UP: Steffi Heinrichs

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:

 - Do you need data for specific regions, forest categories or silvicultural regimes?
> No. All regions are included. We perform our own selection based on the European map of potential vegetation types.

- Will you use both datasets allowing for stand and plot-level aggregation of multi-taxon data or only one of these two?
> We use a selection of plot level-data, occasionally filtering plots from the same stand.

- For which taxonomic group do you need data? Please refer to the attached list of taxonomic groups TAXA.xlsx
> Birds, Deadwood fungi, Deadwood beetles, Lichens, Bryophyte, Vascular plants.

- Do you need data on standing trees (including snags, standing dead trees and stumps)?
> No

- Do you need data on lying deadwood?
> No

Time line:
Deadline for permission of data usage from custodians: end June 2023
Extraction of data from BOTTOMS-UP: done
Data preparation and analysis: June-July 2023
Raw results to be sent to the wider author team: July-August 2023
Workshop with the wider author team: September-October 2023
Writing up of the paper (including preparation/optimization of figures): September-October 2023
Feedback round of co-authors to MS: November 2023
Submission: Late 2023-Early 2024

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

Date August 5th, 2023

Signature Remi Duflot