

# **Sabatini, FM, S Burrascano, WS Keeton, ... F Horváth ... P Ódor ... T Kuemmerle (2018) Where are Europe's last primary forests? Diversity and Distributions 24(10): 1426-1439.**

Reference: Sabatini, FM, S Burrascano, WS Keeton, C Levers, M Lindner, F Pötzschner, PJ Verkerk, J Bauhus, E Buchwald, O Chaskovsky, N Debaive, F Horváth, M Garbarino, N Grigoriadis, F Lombardi, IM Duarte, P Meyer, R Midteng, S Mikac, M Mikolas, R Motta, G Mozgeris, L Nunes, M Panayotov, P Ódor, A Ruete, B Simovski, J Stillhard, M Svoboda, J Szwagrzyk, O-P Tikkanen, R Volosyanchuk, T Vrska, TM Zlatanov, and T Kuemmerle (2018) Where are Europe's last primary forests? Diversity and Distributions 24(10): 1426-1439. doi:10.1111/ddi.12778

Short reference: Sabatini et al. (2018)

First author: Sabatini, Francesco Maria

Research group: [Institute of Ecology and Botany, MTA Centre for Ecological Research](#)

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Abstract

*Aim* - Primary forests have high conservation value but are rare in Europe due to historic land use. Yet many primary forest patches remain unmapped, and it is unclear to what extent they are effectively protected. Our aim was to (1) compile the most comprehensive European-scale map of currently known primary forests, (2) analyse the spatial determinants characterizing their location and (3) locate areas where so far unmapped primary forests likely occur.

*Methods* - We aggregated data from a literature review, online questionnaires and 32 datasets of primary forests. We used boosted regression trees to explore which biophysical, socio-economic and forest-related variables explain the current distribution of primary forests. Finally, we predicted and mapped the relative likelihood of primary forest occurrence at a 1-km resolution across Europe.

*Results* Data on primary forests were frequently incomplete or inconsistent among countries. Known primary forests covered 1.4 Mha in 32 countries (0.7% of Europe's forest area). Most of these forests were protected (89%), but only 46% of them strictly. Primary forests mostly occurred in mountain and boreal areas

and were unevenly distributed across countries, biogeographical regions and forest types. Unmapped primary forests likely occur in the least accessible and populated areas, where forests cover a greater share of land, but wood demand historically has been low.

*Main conclusions* - Despite their outstanding conservation value, primary forests are rare and their current distribution is the result of centuries of land use and forest management. The conservation outlook for primary forests is uncertain as many are not strictly protected and most are small and fragmented, making them prone to extinction debt and human disturbance. Predicting where unmapped primary forests likely occur could guide conservation efforts, especially in Eastern Europe where large areas of primary forest still exist but are being lost at an alarming pace.

Blog post about the paper on FORESTS & CO website.

<https://forestsandco.wordpress.com/2018/05/25/where-are-europes-last-wild-forests/>

[naturalness - degradation](#)

[map: forest management map](#)

[forest ecology](#)

[forest type classification](#)

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Katalógusba vette:

[Kunpeszéri Tilos-erdő Forest Reserve](#)

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