

Sabatini, FM, WS Keeton, M Lindner et al. (2020): Protection gaps and restoration opportunities for primary forests in Europe. Diversity and Distributions

Reference: Sabatini, FM, WS Keeton, M Lindner et al. (2020): Protection gaps and restoration opportunities for primary forests in Europe. Diversity and Distributions 2020, 26.

Short reference: Sabatini et al. 2020

First author: Sabatini, Francesco

Year: 2020

Abstract

Aims: Primary forests are critical for forest biodiversity and provide key ecosystem services. In Europe, these forests are particularly scarce and it is unclear whether they are sufficiently protected. Here we aim to: (a) understand whether extant primary forests are representative of the range of naturally occurring forest types, (b) identify forest types which host enough primary forest under strict protection to meet conservation targets and (c) highlight areas where restoration is needed and feasible.

Location: Europe.

Methods: We combined a unique geodatabase of primary forests with maps of forest cover, potential natural vegetation, biogeographic regions and protected areas to quantify the proportion of extant primary forest across Europe's forest types and to identify gaps in protection. Using spatial predictions of primary forest locations

to account for underreporting of primary forests, we then highlighted areas where restoration could complement protection.

Results: We found a substantial bias in primary forest distribution across forest types. Of the 54 forest types we assessed, six had no primary forest at all, and in two-thirds of forest types, less than 1% of forest was primary. Even if generally protected, only ten forest types had more than half of their primary forests strictly protected. Protecting all documented primary forests requires expanding the protected area networks by 1,132 km² (19,194 km² when including also predicted primary forests). Encouragingly, large areas of non-primary forest existed inside protected areas for most types, thus presenting restoration opportunities.

Main conclusion: Europe's primary forests are in a perilous state, as also acknowledged by EU's "Biodiversity Strategy for 2030." Yet, there are considerable opportunities for ensuring better protection and restoring primary forest structure, composition and functioning, at least partially. We advocate integrated policy reforms that explicitly account for the irreplaceable nature of primary forests and ramp up protection and restoration efforts alike.

[General, other ...](#)

[nature conservation: management, plan](#)

Journal: Diversity and Distributions

Location: ER Archívum - digitális

URL: [Wiley Online Library - Sabatini et al. \(2020\): Protection gaps and restoration opportunities for ...](#)

scientific paper

Katalógusba vette: Horváth Ferenc

Katalógusbavétel időpontja: Thu, 11/16/2023 - 12:00