



What is FOREST BIODIVERSITY?

Biodiversity refers to the diversity of biological life-forms including plants, animals, bacteria and fungi and their interactions in an ecosystem. Forest biodiversity is commonly understood as the variety of species in a forest. However, it entails much more, such as the diversity of functions that species perform at different scales, ranging from genes to landscapes.

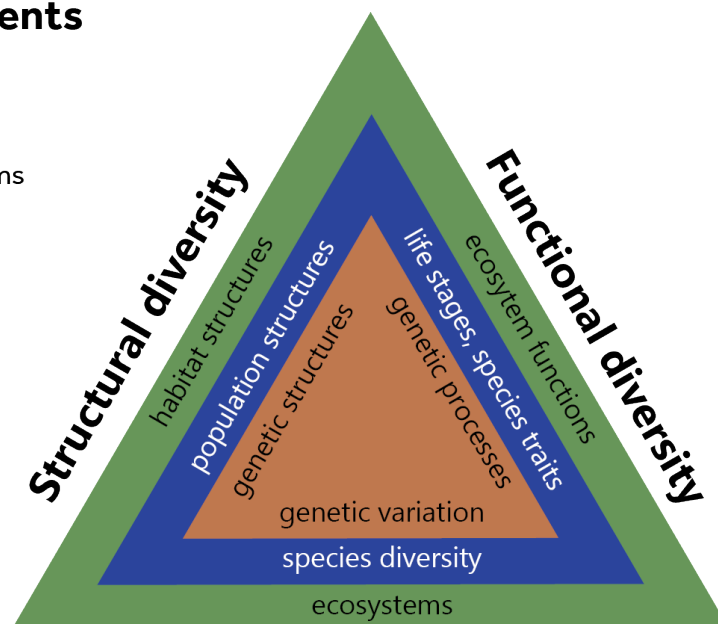
Forest ecosystems in Europe include both natural and managed forests and provide habitat for much of the continent's biodiversity. Mixed forests with different tree ages result in a higher structural variation with a diversity of micro-habitats, which in turn can host a variety of associated species.

Due to the lack of diversity in tree species and age, biodiversity in managed forests is often lower than in natural forests. Smart management practices can increase the biodiversity of such forests. In addition to its cultural and aesthetic values, there is clear evidence that biodiversity contributes to ecosystem productivity, resilience and the ability of forests to be multifunctional.

Biodiversity loss is a major threat to ecological, social and economic stability. It requires broad institutional and financial support at par with climate-goals.

Components

- ▲ genes
- ▲ species
- ▲ ecosystems



Composition

The main elements of forest biodiversity are represented as a triangle with three dimensions (composition, structure and function) that take account of the three hierarchical levels of components (genes, species and ecosystems).

Source: Muys et al. 2022, modified after Noss (1990)

Further reading:

Muys et al. 2022. Forest Biodiversity in Europe. From Science to Policy 13. European Forest Institute.
<https://doi.org/10.36333/fs13>



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