

European Forests and Sustainable Forest Management

When you picture Europe in your head, do you think of forests? You should. **Forests cover more than a third of the total land surface of the European continent.** Compared to other continents, only South America has a higher forest cover.

What is forest?

Everybody usually think of the typical forest with closed canopy of large trees, however, there are also other types of forests as well as their developmental stages and some infrastructure inseparably linked with forest, such as forest roads, cleared dividing lines. Additionally, forests can, but don't have to, be recognised administratively or in land-use planning, which means that some forests are intended to be kept even after clear-cut, while others can be freely converted to different land uses. Useful forest definition should reflect all these aspects.

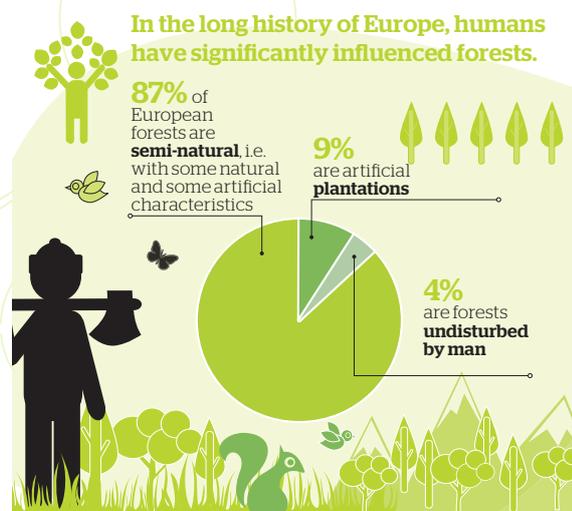
Forest is¹ a piece of land larger than 0.5 hectares with trees higher than 5 meters (or with potential to reach this threshold on the site), crowns of which cover more than 10 percent of the area. It also includes areas temporarily without trees due to clear-cutting as part of a forest management or natural disasters, forest roads, firebreaks and other small open areas, cork oak and Christmas tree plantations. Fruit tree and olive orchards, agroforestry systems or land with trees in urban areas are not included.

General information on European forests

In Europe without Russia and with the entire territory of Turkey, forests cover

215 million hectares.

Forests cover **33%** of Europe's total land area.



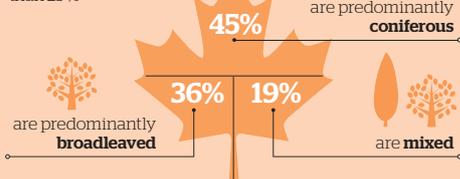
Compared to other continents, vast majority of European forests is intended to be **kept in the long term** and therefore they are somehow **protected by national legislations**. Also unlike other continents, majority of European forests has been **intensively harvested and managed for centuries**. As a side effect, this management shaped the structures of forest ecosystems (species composition, age structure, etc.) and allowed foresters to improve their understanding of forest ecology and its responses to human interventions.

¹ Shortened FRA 2015 definition (Forest Resources Assessment Working Paper 180, FRA 2015 Terms and Definitions, Food and Agriculture Organization of the United Nations, Rome, 2012)



TYPES OF EUROPEAN FOREST

are **mixed**, which means that the proportion of both conifers as well as broadleaves in the particular stand is more than 25%



Forests in Europe are mainly even-aged, between **0** and roughly **100 years old**. The rest is uneven-aged, i.e. with trees of two or more ages at the same plot.

The **area of older** and uneven-aged forests is slowly **increasing**

between three main pillars: ecological, economic and socio-cultural and the sustainable supply of goods and services has to meet the needs of this generation without compromising the needs of future generations.

Sustainable forest management is² the use of forests and forest lands in a way that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels, and that does not damage other ecosystems.

Criteria and indicators of sustainable forest management

Sustainability of forest management can be assessed and reported through pan-european **set of criteria and indicators**. FOREST EUROPE process uses the set of six criteria, each of them assessed via several indicators such as forest area (and its trend), growing stock, forest damage or the area of forests designated for protective functions (soil and water protection) or conservation of biodiversity. These figures and their trends allow people to create their own opinion on the sustainability of forest management and the state of Europe's forests.

² Slightly shortened FOREST EUROPE definition that was adopted also by the Food and Agriculture Organization (FAO)

Sustainable forest management

In Europe mainly in the past, in developing world up to now, unwise use of forests or needs of development can lead to depletion of the forest resources. It resulted in **lack of timber** that used to be a strategic raw material and almost exclusive source of energy. For this reason, governments, centuries before the concept of sustainable development was born, had introduced **the idea of sustained yield**.

Of course, modern sustainable forest management (SFM) means something more than sustained yield of timber. **People now expect from forests more than timber**. Their expectations include many **forest ecosystem services**, such as recreation, maintenance of biodiversity or protection of water resources. Principally, SFM has to keep the **balance**

GROWING



Europe is the only region in the world where forest area is growing during the last 25 years.

In this period **forest area in Europe has increased by 17.5 million hectares** (almost half of the area of Italy).



The growing stock (volume of timber in living trees) is increasing faster than the area. In other words, the average volume of timber in standing trees is increasing.



Over the last 25 years, total **growing stock of forests in Europe has increased by an average of 403 million cubic meters each year**. This corresponds approximately to a daily increase in the total stem volume of living trees in European forests equivalent to twice the volume of the Eiffel Tower.

All this means that European forests today:

- Cover a bigger surface
- Have more and bigger trees