

What Did the Second National Forest Inventory Reveal?

The large lecture hall of the Faculty of Forestry and Wood Technology of the University of Zagreb was filled with a large audience of interested participants on 9 June 2026. The occasion was the presentation of the Second National Forest Resources Inventory of the Republic of Croatia (CRONFI II). The presentation of this important topic was also marked by the attendance the Deputy Prime Minister of the Republic of Croatia and Minister of Agriculture, Forestry and Fisheries, David Vlačić. More detailed information about the national forest inventory itself will be presented in an article dedicated to the inventory in the next issue of *Šumarski list*.

The National Forest Inventory, which is conducted every ten years, is prescribed by the Forest Act and further regulated by the Regulation on the procedure for conducting the national inventory of forest resources of the Republic of Croatia and approving its results. The National Forest Inventory serves multiple purposes, including the collection of information on forest conditions for forestry policy making and operational forest management, ecology, game management, environmental protection, nature conservation, and the wood-processing industry, as well as for national and international institutions to fulfil international reporting obligations. It is based on the standardized Forest Resources Assessment (FRA) methodology established by the FAO, which ensures the comparability of Croatia's results with those of national forest inventories conducted in other countries. Field measurements were carried out on permanent sample plots established during the First National Forest Inventory. The second inventory was conducted during 2024 and 2025.

The First National Forest Inventory in Croatia was carried out between 2005 and 2009. Its results were published in 2010 and generated considerable criticism from the public regarding forest management practices in Croatia. The criticism arose from discrepancies between the inventory results and the data presented in the Forest Management Plan for the Republic of Croatia for the period 2006–2015, which were primarily the consequence of differences in inventory methodology and data collection procedures.

The data obtained through the Second National Forest Inventory enabled direct comparison with the first inventory and confirmed the high quality of its implementation. The principal differences between the two inventories (2010 and 2026) are as follows: the total area of forests and forest land increased by 417 thousand hectares, from 2.581 million ha to 2.997 million ha; forest and forest land cover increased by 7%, from 46% to 53% of Croatia's land area; the area of stocked forest land increased by 53 thousand hectares, from 2.378 million ha to 2.431 million ha; the share of state-owned forests decreased from 77% to 71%, while privately owned forests increased from 23% to 29%; the total growing stock decreased by 4 million m³, from 552 million m³ (232 m³/ha) to 548 million m³ (227 m³/ha); the proportion of European beech (*Fagus sylvatica* L.), the most widespread tree species in terms of growing stock, decreased slightly from 35% to 34%; the ratio of the annual allowable cut to volume increment declined by 13%, from 75% to 62%; the volume of deadwood (standing and lying) increased by 22 million m³, from 33 million m³ to 55 million m³ (partly as a result of methodological changes in measurement and partly due to increased awareness among forest owners of the ecological importance of deadwood); and the amount of carbon stored in forests increased by 4 million tonnes, from 639 million tonnes (269 t/ha) to 643 million tonnes (266 t/ha).

While the increase in Croatia's forest cover is certainly encouraging, it is also a cause for concern because it is largely a result of rural depopulation and the overgrowth of abandoned agricultural land. Forestry, as an economic activity, plays an important role in sustaining and developing rural communities, as well as attracting younger generations to rural areas. Responsible management of the continuously expanding forest area also contributes to numerous forest ecosystem services. Given the growing importance of forests in the context of climate change, greater attention will need to be devoted to monitoring forest conditions and developing new approaches to ensure their long-term survival and adaptation to changing environmental conditions.