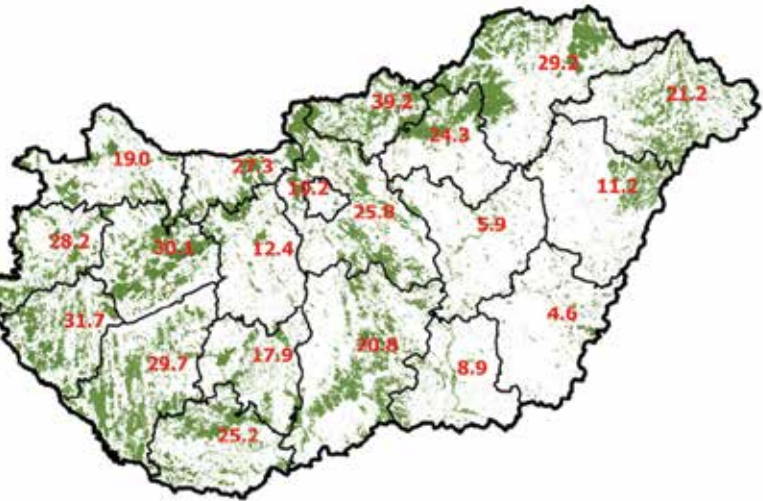


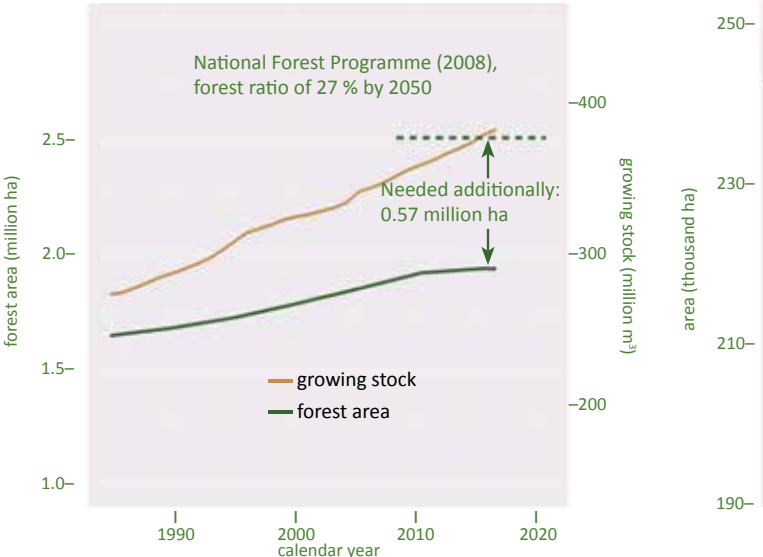
Forest area and growing stock

Forest area ratio by counties in Hungary

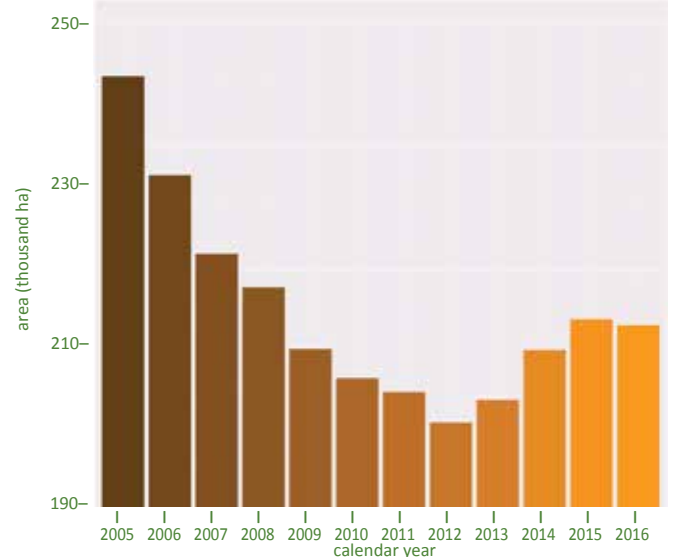


After the World War I, Hungary lost 84% of its forests. Forest cover decreased from 26% to 12%. Due to afforestation activities carried out in the XXth century, forest area ratio exceeds 20 % at present.

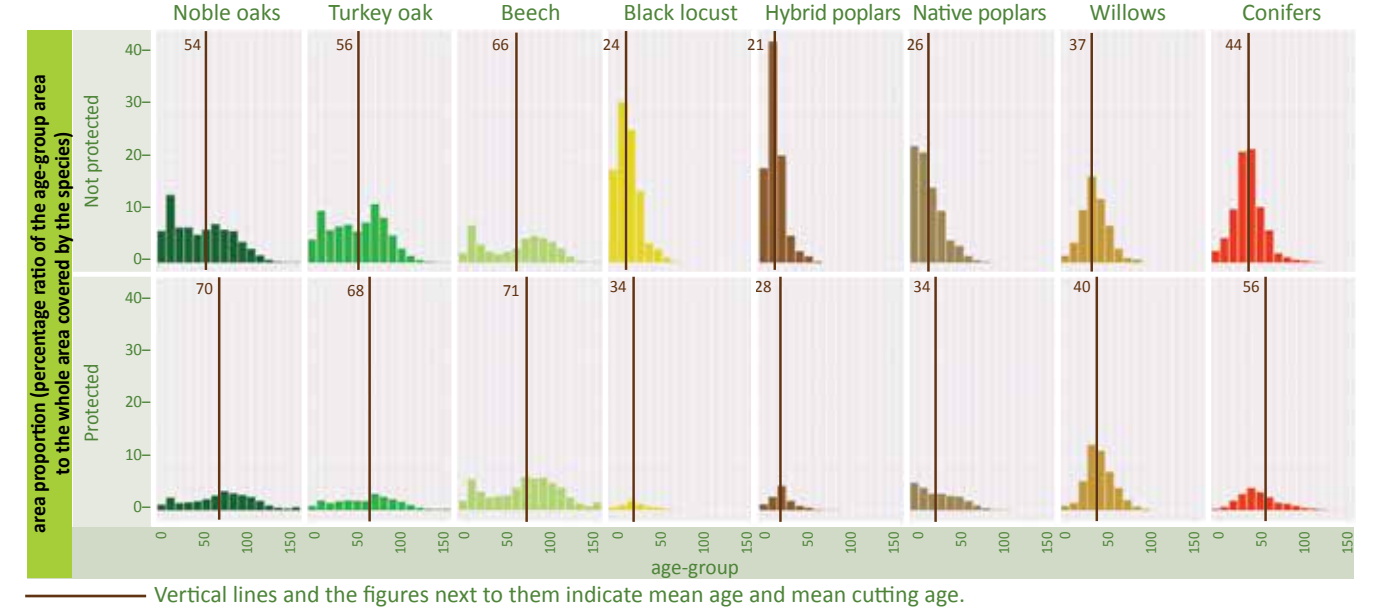
Forest area and growing stock from 1985



Temporarily unmanaged forests

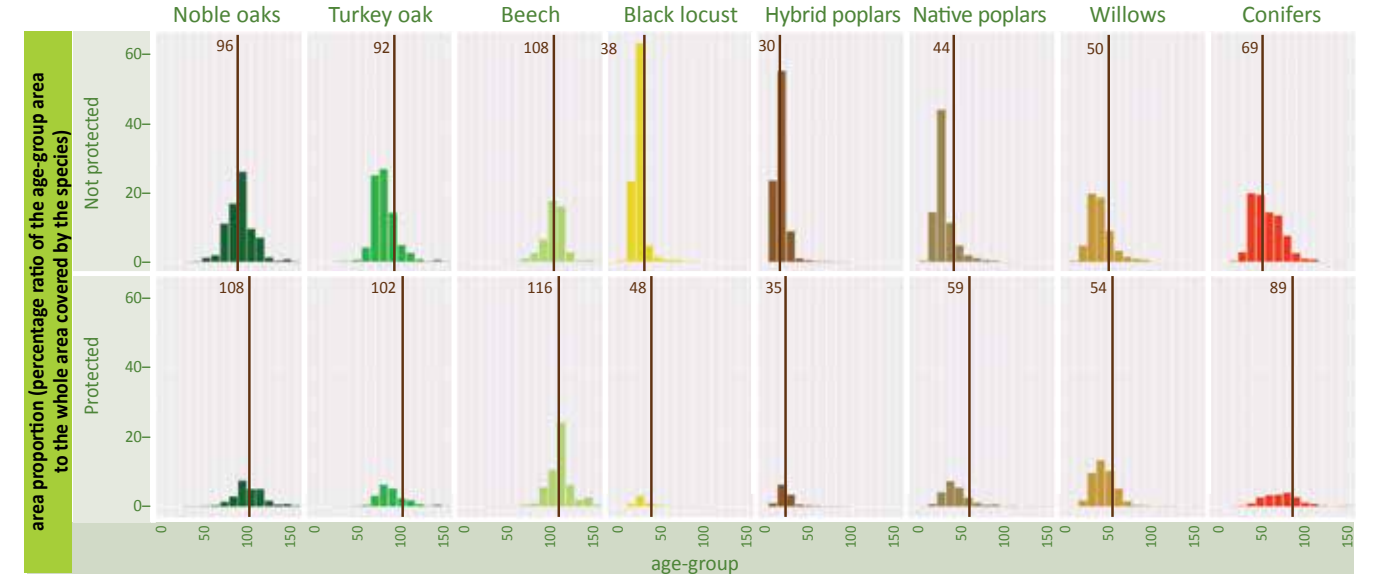


Age distribution



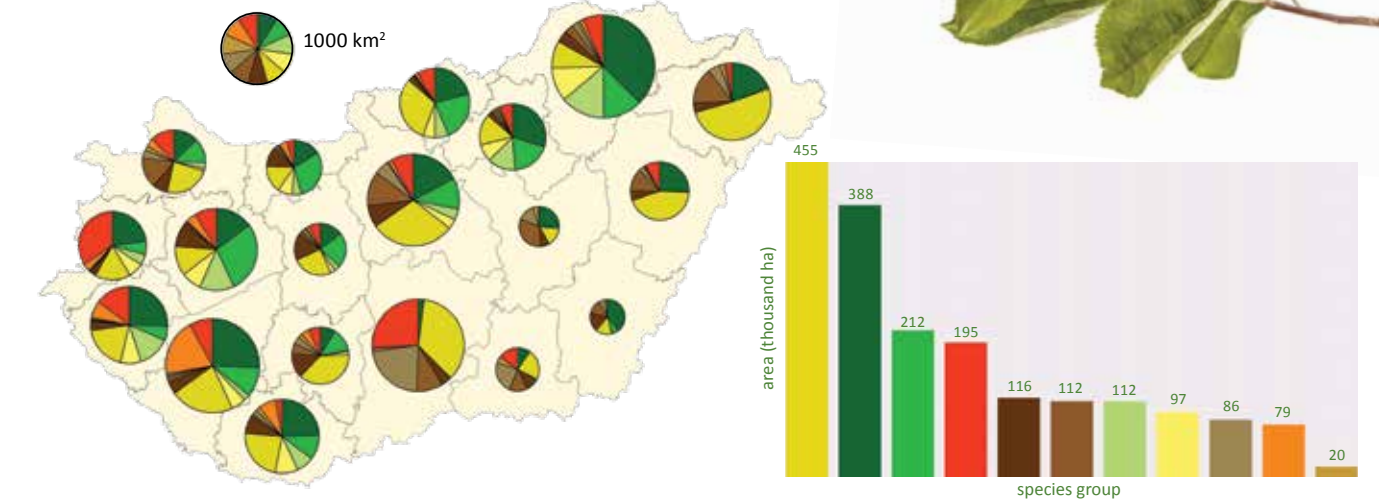
Age and cutting age distributions of the forests are highly important because of yield control. That is, because forest management has to ensure wood supply permanently in accordance with the demand of the society. In protected areas, both mean age and mean cutting age are higher due to ecological reasons.

Cutting age distribution



Species composition

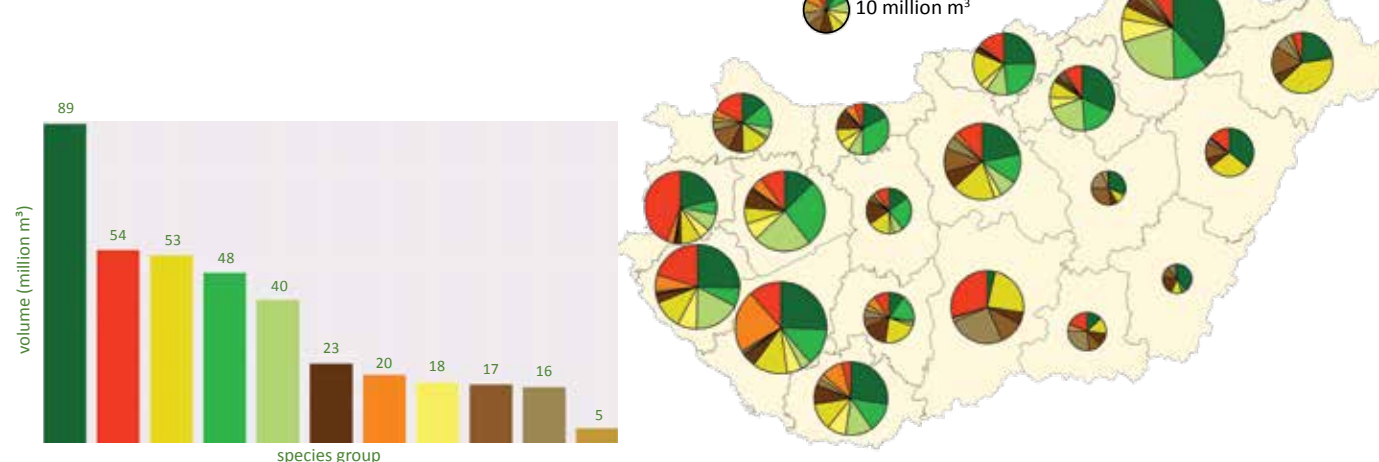
Area by species



- Noble oaks
- Turkey oak
- Beech
- Hornbeam
- Black locust
- Other hardwood species
- Hybrid poplars
- Native poplars
- Willows
- Other softwood species
- Conifers

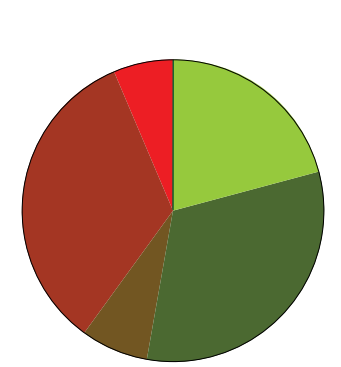
Growing stock by species

The majority of the Hungarian forests consists of deciduous species of which black locust covers the largest area but oaks are the foremost regarding growing stock.



Naturalness, nature conservation

Forest naturalness



Distribution of Natura 2000 and protected areas

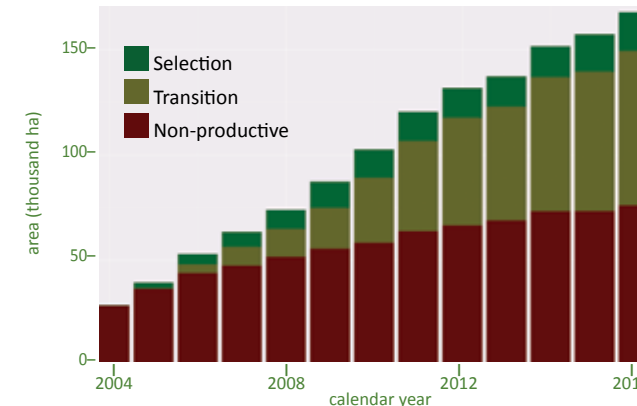
Protected	Part of the Natura 2000 network	Area	
		thousand ha	%
×	✓	418	20
×	×	1183	57
✓	✓	416	20
✓	×	42	3

- Natural forest
- Close-to-nature forest
- Semi-natural forest
- Non-natural forest
- Plantation-like stand
- Plantation

Half of the Hungarian forests dominate by species native in the given forestry region. Non-natural forests, plantation-like stands and plantations are originated from afforestations carried out in the past century (amounting to approximately one million ha). Thus, their large area does not refer to degradation.

In the EU, 25 %, whereas in Hungary, 40 % of the forests belongs to the Natura 2000 network. Out of the forests, 12 % and 23 % is protected in Europe and in Hungary, respectively. Natura 2000 and protected forests significantly contribute to ensure the long-term survival of Europe's and Hungary's most valuable and threatened species and habitats.

Evolution of continuous cover forestry systems



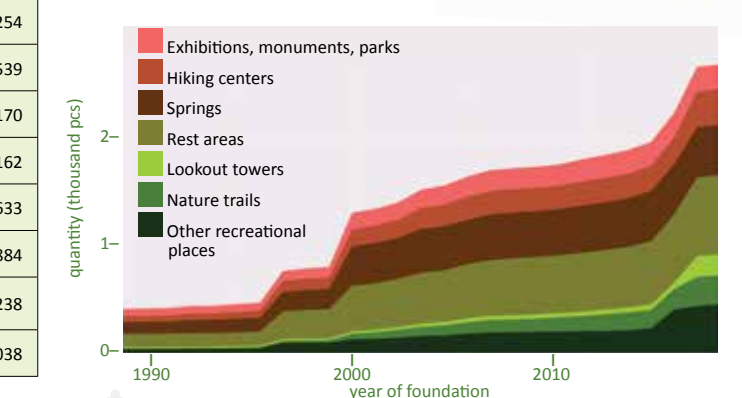
Systems following natural forest dynamics, ensuring continuous forest cover and diverse tree stand structure have been more and more applied in the last years. In Hungary, three kinds of such systems are defined: the selection system (harvests are carried out frequently but only in small patches), the transition system (the main objective of which is to switch from rotation system to selection system) and the 'non-productive' system (with the main aim to let natural processes take their course).

Recreation function of forests

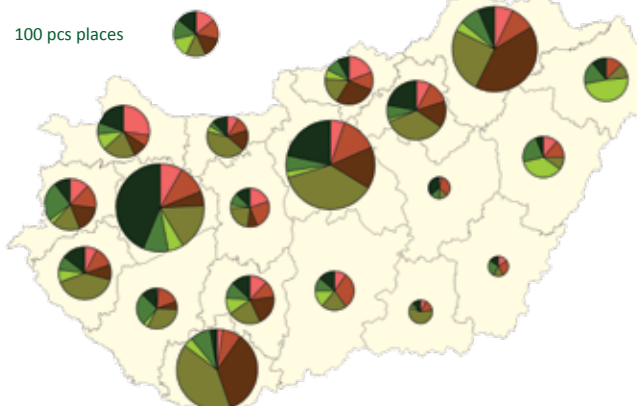
Number of pieces of equipments of recreational places

Benches, furniture	9 254
Fireplaces	1 539
Information boards	5 170
Buildings	1 162
Spring catchments	633
Sport and game tools	884
Objects useful for hiking (e.g., stairs, bridges, tracks)	1 238
Other (e.g., toilets, litter bins, monuments)	4 038

Amount of recreational places in forests



Distribution of recreational places



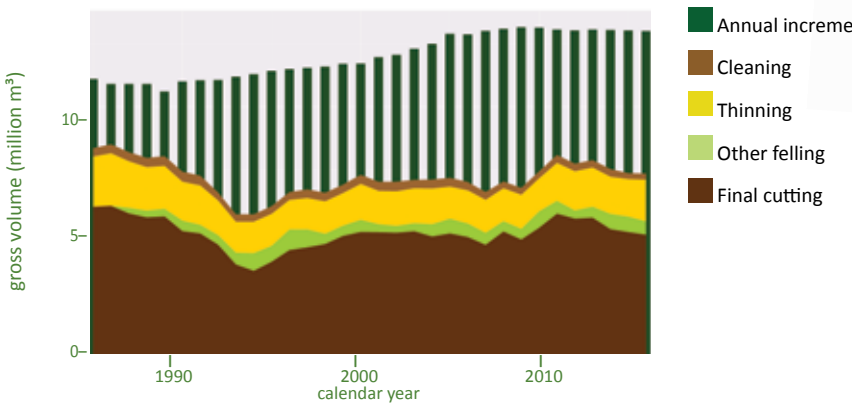
Recreational function of forests is more and more demanded. Moreover, it helps to keep people in the countryside. Thus, recreational function should be extended and its quality should be improved.



Organisational structure – Forest administration			
Prime Minister's Office	First instance authority	County Government Offices (10)	Department of Agriculture
	Second instance authority	Pest County Government Office	Department of Food Chain Safety, Land Registry, Plant Protection and Soil Conservation, Forestry
Ministry of Agriculture	Department of Forestry and Hunting		Section of State Forest Management
	Department of National Park and Landscape Protection		Section of Forest Administration
	National Food Chain Safety Office		Forestry Directorate
			Directorate of Plant Production and Horticulture
		Department of Forestry and Energy Reproduction Materials	

Annual increment and CO₂ removal

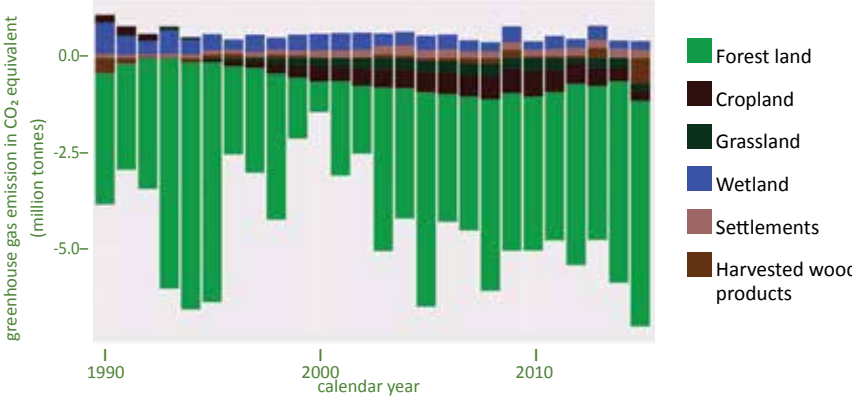
Annual increment and cut volume



Annual increment of the Hungarian forests has been exceeding cut volume for a long time. This means that standing volume and therefore the removed CO₂ in the wood stock have been increasing year-by-year.

Greenhouse gas emission of Hungary has been decreasing substantially since 1990. Regarding the land use categories quantity of the removed CO₂ was far the highest in forestry.

Greenhouse gas emission in the Land use, Land use Change and Forestry sector

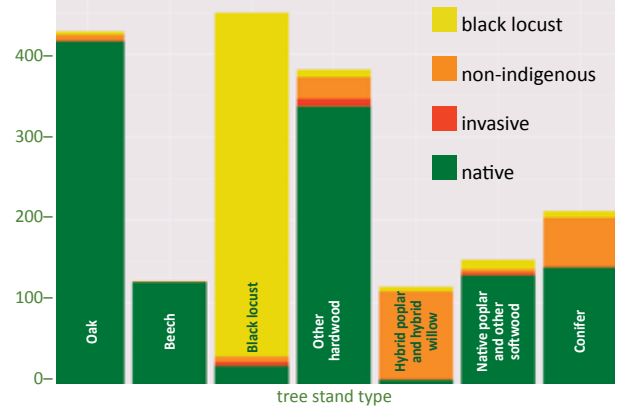


In Hungary, approximately 3-4 million tonnes carbon-dioxide are removed annually through forest management. This amount can be further increased by afforestations. Forests play an important role in mitigation of climate change effects.

Non-indigenous species in the Hungarian forests

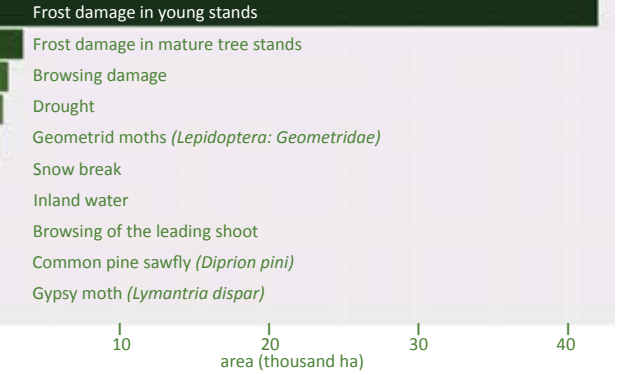
In beech and oak stands occurring in mountainous and hilly areas, cover of non-indigenous species is low. By contrast, dominant species of stands planted in the lowlands are not native.

Non-indigenous and native species by tree stand types



Forest damages

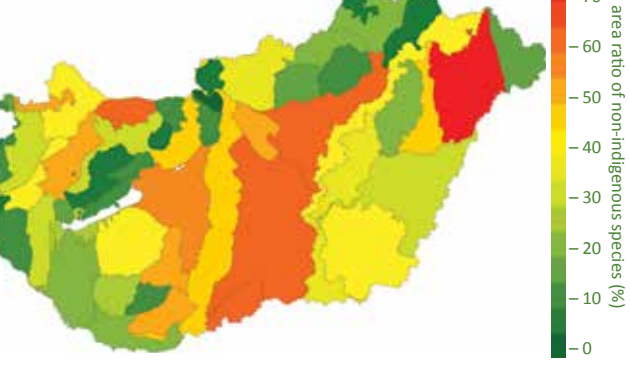
The most severe forest damages



Late frosts during the springtime of 2016 severely damaged many young tree stands. More than 40 thousand hectares of frost damages were registered, mainly in West Hungary.

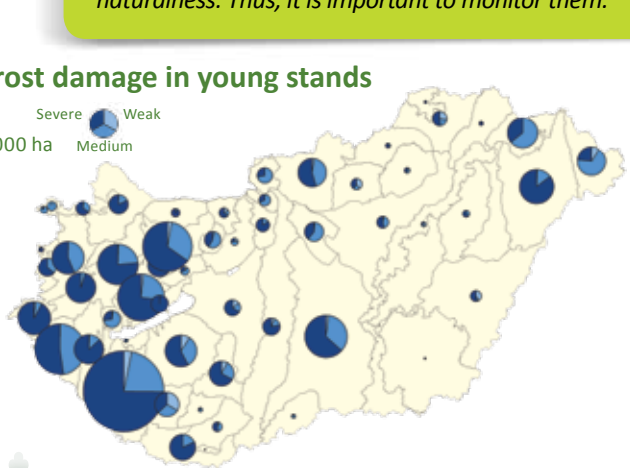
Figures show data recorded by professional foresters.

Cover of non-indigenous species by forestry regions



Invasive species are non-indigenous and capable of spreading fast throughout the forested ecosystem endangering its biological diversity. Among them, black locust is of great economical importance.

Frost damage in young stands



The modern forest protection is preventive and respects ecological processes. It aims to increase forests' resistance.

Wood products from domestic wood

Data on wood products are gathered from forest managers in the frame of National Statistical Data Collection Programme. Country-level statistics are calculated from sample data.

Net harvested volume amounted to 6 million m³ in 2016 which were equally distributed between industrial roundwood and wood fuel. Sawlogs are the most important industrial roundwood products. Black locust is the most widely-used as wood fuel but noble and turkey oaks are also demanded.

Wood fuel production

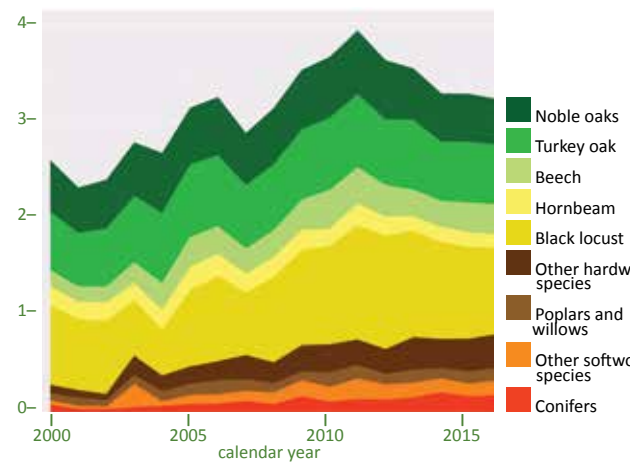
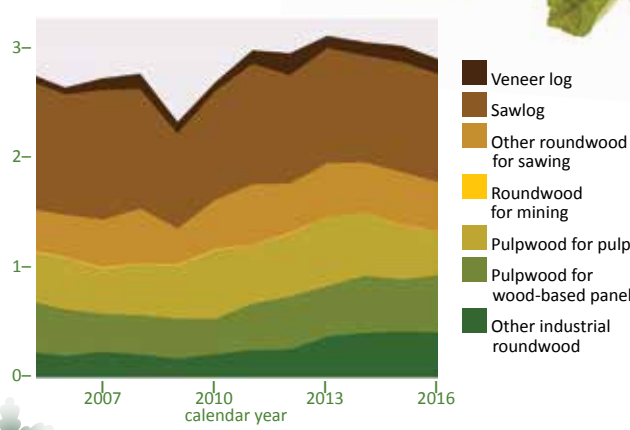


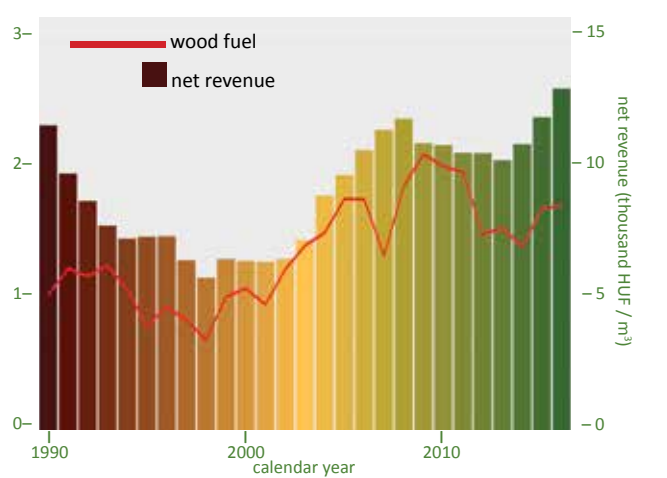
Figure shows net revenues from total wood fuel volume which were corrected for the effects of inflation. It includes fine and thick fuelwood, volume sold to private persons or to companies. It also includes the quantity gathered or cut by the consumers in the forest as well as that logged and split by the forestry companies.

Industrial wood production



Enhancement of utilization of renewable and environmentally friendly wood products is an important national concern both from ecological and economical aspects.

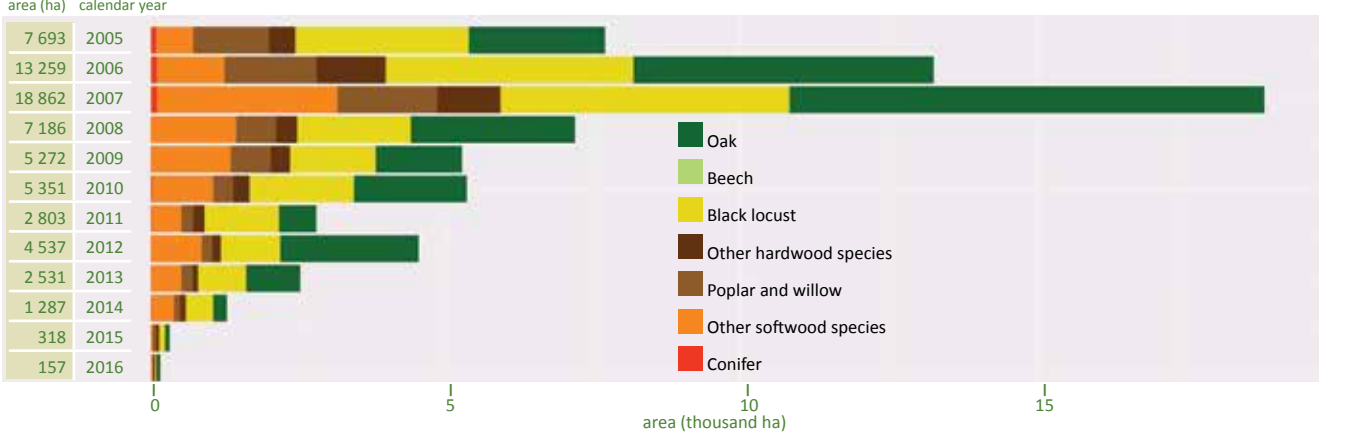
Wood fuel production and net revenue of state forestry companies from wood fuel volume unit



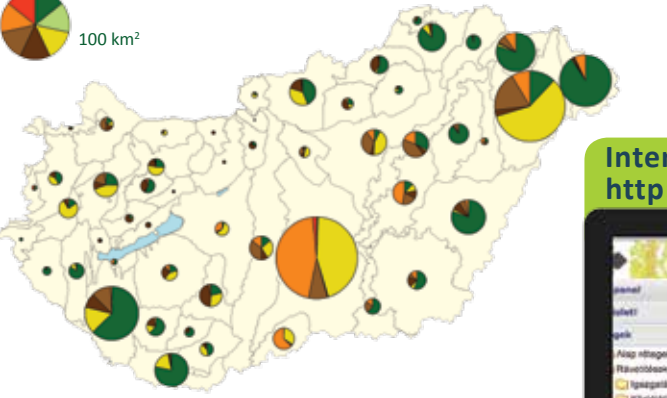
Support of forest product chains and harmonisation of development of industries using forest products is of great importance. Thus, spatial and temporal variability of wood supply is to be forecasted for 10-15 years.

Afforestations

Newly afforested areas between 2005 and 2016



Distribution of afforestations carried out after 2004



The map is daily updated from the National Forestry Database. It shows the border lines of forest subcompartments together with various attributes, such as ownership, primary function of the forest, Natura 2000 forests, flammable forest categories.

Interactive online forest map

<http://erdoterkep.nebih.gov.hu>



One can draw and download polygons. Different map files can be uploaded for conversions or in order to orientate yourself.

New public maps created by forest planners can be visualized in a distinct layer.

Forest resources and forest management in Hungary, 2016

This leaflet was made from data of the National Forestry and Forest Damage Databases of Forestry Authority.

nébih

National Food Chain Safety Office
Forestry Directorate

National
ForestStrategy
2016-2030

