The health condition of the Hungarian forests is considered to be good although the data showed signs of slight regression in view of tree defoliation in 2014. The average defoliation was 18.9% in comparison to 17.9% from the previous year. The poplars, other hard broadleaved and other soft broadleaved showed the best status, where the average defoliation of these groups was under 13%. The oak, beech, conifers and black locust were in the worst condition based on the defoliation. The assessment is based on a sampling representative only on a Europe-wide scale.

Forest fire facts in Hungary

In our country, the two forest fire dangerous period are the spring and the summer. The spring season starts right after the snow melts and lasts till leafing. While the summer season, a warm and dry period, lasts from July to the end of August. Average burnt area: 2-5 ha.

Fire size: less than 1 ha - 50-60%, between 1-10 ha - 30%. Average distance to residential areas is 1.5 km.

Nearly 50% of fires occurs in the spring before the leafing.

Fire causes are mostly carelessness, negligence and rarely arson.

The majority of fires are related to agricultural activity.

More than 50% of fires are generated during fire ban period. 40% of fires happen on weekends and public holidays.

The spring fires rarely affect solid forest blocks, but during the summer season fires often turn into high intensity canopy fires especially in the pine forests of the Great Hungarian Plain.

GHG emissions and removals in the forestry sector in 2013

Forest management activities (afforestation, regeneration and deforestation since 1990) under Article 3.3 of the KP represented a net sink of 1.2 million tonnes CO₂, while the activity under Article 3.4, i.e. forest management (FM), was also a net sink of 1.9 million tonnes CO₂.

The most efficient carbon sequestration can be reached by first afforestation.

Organisational structure - Forest administration

Ministry of Agriculture

Department of Forestry and Hunting

Section of State Forest Management

Section of Forest Administration

NFCSO Forestry Directorate

County Government Offices

Department of Agriculture and Forestry (10)

Other organizations concerned with forestry:

NFCSO, Directorate of Plant Production and Horticulture

Department of Forestry and Energy Reproduction materials

Inspectorate of propagation materials

Ministry of Agriculture

Department of National Park and Landscape Protection

Protection of the natural assets in forests on protected natural areas

Websites related to forestry:

Ministry of Agriculture - www.kormany.hu/hu/foldmuvelesugyi-miniszterium

NFCSO - Forestry Directorate - www.nbih.gov.hu

NARIC - Forest Research Institute (FRI) - www.erti.hu

University of West Hungary (UWH) - www.myme.hu

Hungarian Federation of Forestry and Wood Industries - www.fagosz.hu

Association of Hungarian Private Forest Owners - www.megosz.org

National Forestry Association - www.oee.hu

Forestpress - www.foretress.hu

FIREFLIFE Project - www.erdotuz.hu

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Forestry Directorate

Hungary 2014

Budapest, 2015

National Food Chain Safety Office

Forestry Directorate
Naturalness and nature conservation

<table>
<thead>
<tr>
<th>Naturalness categories of forests</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural and close-to-nature forests</td>
<td>431,882</td>
</tr>
<tr>
<td>Semi-natural forests</td>
<td>592,982</td>
</tr>
<tr>
<td>Transferred forests</td>
<td>134,750</td>
</tr>
<tr>
<td>Semi-plantations</td>
<td>656,607</td>
</tr>
<tr>
<td>Plantations</td>
<td>123,042</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,939,263</strong></td>
</tr>
</tbody>
</table>

Classification of naturalness categories is based mainly on the share of non-indigenous and invasive tree species.

Protected and Natura 2000 forests area (ha)

<table>
<thead>
<tr>
<th>Protected and Natura 2000 forests area (ha)</th>
<th>Forest sub-compartment</th>
<th>Other type of area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protected area</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strictly protected</td>
<td>67,109</td>
<td>6,125</td>
<td>73,234</td>
</tr>
<tr>
<td>Protected</td>
<td>358,876</td>
<td>25,552</td>
<td>384,428</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>425,985</td>
<td>31,677</td>
<td>457,662</td>
</tr>
<tr>
<td><strong>Natura 2000 sites</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protected and strictly protected</td>
<td>386,667</td>
<td>28,768</td>
<td>415,435</td>
</tr>
<tr>
<td>Non-protected</td>
<td>385,154</td>
<td>33,113</td>
<td>418,267</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>771,821</td>
<td>61,881</td>
<td>833,702</td>
</tr>
<tr>
<td><strong>Birds sites and habitats sites</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Protection Area</td>
<td>467,699</td>
<td>31,472</td>
<td>499,171</td>
</tr>
<tr>
<td>Special Area of Conservation</td>
<td>627,881</td>
<td>54,734</td>
<td>682,615</td>
</tr>
</tbody>
</table>

Naturalness of the Natura 2000 forests

- Natural and near-natural forests: 33%
- Semi-natural forests: 14%
- Transferred forests: 6%
- Semi-plantations: 6%
- Plantations: 4%

Source: National Forestry Database (NFD), data of 1st Jan. 2015

Close-to-nature forest management

- Selection system
- Transition system
- Non-wood-productive forest

Source: National Forestry Database, data of 1st Jan. 2015

* Individual trees or groups of trees are harvested periodically and frequently.
** The goal is to reach the selection system.
*** The aim is to let natural processes taking their course. Fellings are possible only for scientific, protection or regeneration purposes.

Forestations (regeneration and afforestation)

Achievements in the growing year 2013-2014 (ha)

- Forestations (regeneration and afforestation)
- Achievements in the growing year 2013-2014
- State forests
- Non-state forests
- Total

Protected and Natura 2000 forests area (ha)

- Forest sub-compartment
- Other type of area
- Total

Source: National Forestry Database, data of 1st Jan. 2015

Forest reproductive material

Total number and area of forest nurseries

- Gross area
- Number of nurseries

Source: National Forestry Database (NFD), data of 1st Jan. 2015

The variability are explained by different natural conditions and partly logistics, transportation reasons, and the differences in local silvicultural practice. South West Hungary has good climatic conditions, that is revealing in the dominance of the region. It is reflected both in the number of nurseries, and in the magnitude of production capacity.

Correlation between afforestation area and most significant forest tree species’ reproductive material production

Source: NFCSO DPPH, Department of Forest and Biomass Reproductive Material - FRM data 2015
General figures on forests

Area by land use categories

### Data on forest land

| Forest land (covered by tree stands or earmarked for regeneration) | 1,939.3 | 20.8 |

| Other land in forestry use (nurseries, rides, permanent clearings, roads) | 120.4 | 1.3 |

### Total area registered in NFD

- **2,059.7 thousand ha**
- **20.8 million gr. m**

### Production forests

- **46.6%**

### Garden, orchard, vineyard

- **36.9%**

### Meadow and pasture

- **1.1%**

### Forest

- **1.1%**

### Reed and fish pond

- **20.8%**

### Other

- **0.8%**


### Distribution of forests by primary function

- **Production forests**: 36.9%
- **Recreation forests**: 62.0%
- **Protection forests**: 1.1%

Source: National Forestry Database (NFD), data of 1st Jan. 2015

Protection forests include protective forests (soil, water, settlement protection, etc.) and protected forests (i.e. in protected natural areas). Their share has been increasing for decades.

### Changes of the forest area (1920-2014)

- **1920**: 1,939.3 thousand ha, 20.8 million gr. m
- **2014**: 2,059.7 thousand ha, 22.1 million gr. m

Source: National Forestry Database (NFD), data of 1st Jan. 2015

Data of 1940 and 1945 are missing. The light green columns show estimated data.

### First afforestation - initial plantings (ha)

<table>
<thead>
<tr>
<th>Growing year</th>
<th>State forests</th>
<th>Non-state forests</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-2007</td>
<td>512</td>
<td>18,436</td>
<td>18,948</td>
</tr>
<tr>
<td>2007-2008</td>
<td>391</td>
<td>6,941</td>
<td>7,332</td>
</tr>
<tr>
<td>2008-2009</td>
<td>791</td>
<td>4,377</td>
<td>5,168</td>
</tr>
<tr>
<td>2009-2010</td>
<td>1,084</td>
<td>4,012</td>
<td>5,096</td>
</tr>
<tr>
<td>2010-2011</td>
<td>143</td>
<td>2,660</td>
<td>2,803</td>
</tr>
<tr>
<td>2011-2012</td>
<td>516</td>
<td>4,021</td>
<td>4,537</td>
</tr>
<tr>
<td>2012-2013</td>
<td>136</td>
<td>2,394</td>
<td>2,530</td>
</tr>
<tr>
<td>2013-2014</td>
<td>201</td>
<td>1,086</td>
<td>1,287</td>
</tr>
</tbody>
</table>

Source: NFCSO Forestry Directorate, 2014
Tree species and age-class distribution

Age-class distribution of the forest area by function

- Forests with wood production function
- Forests with special function

Distribution of the forest area by tree species and age

- Area (%)
- Growing stock (%)

Tree species distribution of the forest area and the growing stock

- Oak
- Turkey oak
- Beech
- Hornbeam
- Black locust
- Other broadleaved

Annual increment, fellings and growing stock

Current increment by species

- Oak
- Turkey oak
- Beech
- Coniferous
- Black locust
- Other hard broadleaved
- Other soft broadleaved

The gross annual increment is 13.1 million m³/year. It is 0.414 m³ per sec, equal to the volume of a cube of 74.5 cm ledge.

Felling and annual increment

- Total industrial wood
- Fuelwood
- Total removals

Growing stock

- Total (1,000 net m³)

Timber products

- Logs for panel products
- Sawlogs
- Other raw material for sawmilling
- Pitwood
- Pulpwood
- Bolt for panels
- Other industrial wood
- Technological chips

Gross felling volume

- By felling types
- By tree species groups

Source: NFCSO Forestry Directorate, 2014

*Calculated on the basis of statistical sampling.