Facts and Figures

Europe and Forests

CEPF

General facts about Forests in Europe:

- **Numbers**
  - 70% is semi-natural;
  - 8% is plantation;
  - 58% is covered by mixed or broadleaved trees;
  - 42% is covered by naturally coniferous forests cover (particularly in Nordic countries and in mountain areas);

- Coniferous trees are mostly spruce or pine trees – beech, maple, ash, oak or birch are typical broadleaf species.
- The total standing volume (over bark) in Europe’s forests is 20 billion cubic meters and just 55% of the net annual increment is harvested. From this it follows that currently Europe’s forests are expanding at an annual net area rate of 510,000 ha.
- Europe’s annual increment is estimated at 2,287 million cubic meters, or almost two truckloads of wood a second.
- In total, nearly 10.8 million ha or 1% of Europe’s forests and other wooded land were reported to be damaged by known causes.

FAO STATE OF THE WORLD’S FORESTS 2007

The net increase in forest area in Europe is a result, in large part, of substantial increases in several countries over 2000–2005, led by Spain (296 000 ha/year average increase) and Italy (106000 ha/year), followed by Bulgaria, France, Portugal and Greece. The largest percentage increases were reported by countries with low forest cover: Iceland (3.9 percent increase in forests per year) and Ireland (1.9 percent)

<table>
<thead>
<tr>
<th>Extent and change of forest area</th>
<th>Area (1 000 ha)</th>
<th>Annual change (1 000 ha)</th>
<th>Annual change rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe excluding Russian Federation</td>
<td>180 370</td>
<td>188 023</td>
<td>192 848</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>806 950</td>
<td>809 286</td>
<td>806 190</td>
</tr>
<tr>
<td>Total Europe</td>
<td>989 320</td>
<td>998 091</td>
<td>1 001 394</td>
</tr>
<tr>
<td>World</td>
<td>4 077 291</td>
<td>3 906 610</td>
<td>3 952 925</td>
</tr>
</tbody>
</table>
Summary of progress towards sustainable forest management

Disturbing trends impairing sustainable forest management:

- Forest health is adversely affected by fire, storms, insect pests and disease, all of which may increase if global warming continues.
- Climate change poses a threat to Europe’s forests, although some areas may well benefit, for example from longer growing seasons.
- Employment in the forest sector continues to decline as the workforce continues to age and labour productivity increases because capital is replacing labour as the most important production factor.

- The European forestry sector outlook study (UNECE/FAO, 2005) concluded that European forests are sustainable in the long term, but with caveats in all areas of sustainable development – economic, social and environmental.

### European Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Area</th>
<th>Population</th>
<th>Forest Cover</th>
<th>Forest Ownership</th>
<th>Industrial roundwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>83 858 km²</td>
<td>8.3 million</td>
<td>4 million ha</td>
<td>81% Private 15% State 4% others</td>
<td>15.8 million m³ o.b.</td>
</tr>
<tr>
<td>Belarus</td>
<td>207 595 km²</td>
<td>9.8 million</td>
<td>7.8 million</td>
<td>100% Public</td>
<td>7.3 million m³ o.b.</td>
</tr>
<tr>
<td>Belgium</td>
<td>30 158 km²</td>
<td>10.5 million</td>
<td>0.67 million ha</td>
<td>10% Private 54% State</td>
<td>3.76 million m³ o.b.</td>
</tr>
<tr>
<td>Country</td>
<td>Area</td>
<td>Population</td>
<td>Forested</td>
<td>Forest Ownership</td>
<td>Annual Volume</td>
</tr>
<tr>
<td>------------------</td>
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<td>-------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>51 129 km²</td>
<td>3.8 million</td>
<td>2.1 million</td>
<td>38% others</td>
<td>2.99 million m³ o.b.</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>111 000 km²</td>
<td>7.7 million</td>
<td>about 3.4 million ha</td>
<td>38% others</td>
<td>3.07 million m³ o.b.</td>
</tr>
<tr>
<td>Croatia</td>
<td>57 000 km²</td>
<td>4.4 million</td>
<td>2.1 million</td>
<td>78.7% Public, 21.3% Private</td>
<td>3.66 million m³ o.b.</td>
</tr>
<tr>
<td>Cyprus</td>
<td>9 000 km²</td>
<td>0.8 million</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>79 000 km²</td>
<td>10.3 million</td>
<td>2.6 million ha</td>
<td>23% Private, 60% State, 17% others</td>
<td>16.3 million m³ o.b.</td>
</tr>
<tr>
<td>Denmark</td>
<td>43 094 km²</td>
<td>5.4 million</td>
<td>0.6 million ha</td>
<td>69% Private, 26% State, 5% others</td>
<td>0.9 million cbm</td>
</tr>
<tr>
<td>Estonia</td>
<td>45 000 km²</td>
<td>1.3 million</td>
<td>2.2 million ha</td>
<td>60% Private, 40% Public</td>
<td>7.5 million m³ o.b.</td>
</tr>
<tr>
<td>Finland</td>
<td>338 000 km²</td>
<td>5.3 million</td>
<td>22.5 million ha</td>
<td>26% Public, 60% Private, 9% Private</td>
<td>59 million m³ o.b.</td>
</tr>
<tr>
<td>France</td>
<td>550 000 km²</td>
<td>60.9 million</td>
<td>15.5 million ha</td>
<td>71% Private, 10% State, 19% Other</td>
<td>33.4 million m³ o.b.</td>
</tr>
<tr>
<td>Germany</td>
<td>356 854 km²</td>
<td>82.5 million</td>
<td>11 million ha</td>
<td>46% private, 20% municipal ent., 30% 16 federal states, 4% Federal Gov.</td>
<td>54.5 million m³ o.b.</td>
</tr>
<tr>
<td>Greece</td>
<td>131 957 km²</td>
<td>11.1 million</td>
<td>3.35 million ha</td>
<td>65.5% State, 15% private, 12% municipal, 4.5% Church, 3% Other</td>
<td>0.4 million m³ o.b.</td>
</tr>
<tr>
<td>Hungary</td>
<td>93 000 km²</td>
<td>10.1 million</td>
<td>1.85 million ha</td>
<td>58% State, 41% Private, 1% Other</td>
<td>3.4 million m³ o.b.</td>
</tr>
<tr>
<td>Ireland</td>
<td>70 000 km²</td>
<td>4.2 million</td>
<td>0.699 million ha</td>
<td>58% State, 40% Private, 2% Other</td>
<td>2.79 million m³ o.b.</td>
</tr>
<tr>
<td>Italy</td>
<td>301 263 km²</td>
<td>58.8 million</td>
<td>9.9 million ha</td>
<td>35% Public, 65% Private</td>
<td>3.8 million m³ o.b.</td>
</tr>
<tr>
<td>Latvia</td>
<td>65 000 km²</td>
<td>2.3 million</td>
<td>2.943 million ha</td>
<td>50% State, 50% Private</td>
<td>10.5 million m³ o.b.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>65 300 km²</td>
<td>3.4 million</td>
<td>1.9 million ha</td>
<td>16% State forests reserved for restitu-</td>
<td>5.88 million m³ o.b.</td>
</tr>
<tr>
<td>Country</td>
<td>Area (km²)</td>
<td>Population</td>
<td>Hectares</td>
<td>State Significance</td>
<td>Private</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>------------</td>
<td>----------</td>
<td>--------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Luxembourg</strong></td>
<td>2 586 km²</td>
<td>0.5 million</td>
<td>89150 ha</td>
<td>50% 50%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Malta</strong></td>
<td>316 km²</td>
<td>0.4 million</td>
<td></td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td>41 864 km²</td>
<td>16.3 million</td>
<td>0.3 million</td>
<td>42% 33% 25%</td>
<td>Other</td>
</tr>
<tr>
<td><strong>Norway</strong></td>
<td>323 758 km²</td>
<td>4.4 million</td>
<td>12 million</td>
<td>80% 10% 10%</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>313 000 km²</td>
<td>38.1 million</td>
<td>3,8 million</td>
<td>83.2% 16.8%</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>92 072 km²</td>
<td>10.6 million</td>
<td>3.35 million</td>
<td>82% 8%</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>238 000 km²</td>
<td>21.6 million</td>
<td>6.4 million</td>
<td>69% 18% 13%</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Russia</strong></td>
<td>17 075 400 km²</td>
<td>142.1 million</td>
<td>808 790 000</td>
<td>100%</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>49 000 km²</td>
<td>5.4 million</td>
<td>1.9 million</td>
<td>42% 14% 11% 10%</td>
<td>State</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>20 000 km²</td>
<td>2 million</td>
<td>1.26 million</td>
<td>27.7% 72.3%</td>
<td>Public</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>504 782 km²</td>
<td>43.8 million</td>
<td>26 million</td>
<td>64.8% 28.8%</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Sweden</strong></td>
<td>450 000 km²</td>
<td>9.0 million</td>
<td>27 million hectares</td>
<td>51% 6% 18% 1%</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>41 284 km²</td>
<td>7.3 million</td>
<td>1.2 million</td>
<td>26% 74%</td>
<td>Private</td>
</tr>
<tr>
<td><strong>Ukraine</strong></td>
<td>603 700 km²</td>
<td>47.1 million</td>
<td>9.6 million</td>
<td>100%</td>
<td>Public</td>
</tr>
</tbody>
</table>
### UK
- **Area:** 242,500 km²
- **Population:** 60.4 million
- **Forest cover:** 2.85 million ha
- **Ownership:** 28% State, 72% Private
- **Wood harvest:** 8.6 million m³ o.b.

### Share of Types of Ownership in Privately Owned Forest Available for Wood Supply in Selected Countries

![Graph showing the share of different types of ownership in privately owned forests in various countries.](http://www.unece.org/trade/timber/fra/pdf/fullrep.pdf)


### Austria

**FAO - Forest harvesting and environment in Austria**

- **Forest ownership:**
  - 53% small private forests (<200 ha)
  - 32% private estates (>200 ha)
  - 15% federal forests

- **Other data:**
  - About 60% of the commercial forest area is small private property dissected in small land parcels.
Belgium
CEPF Report

Belgium has more than 120,000 privately owned forests. The average area of a private forest therefore scarcely exceeds 2.7 hectares.

Bulgaria
WWF Report from March 2007

Potential Perspectives for Small owners
Small forest owners in Bulgaria
- Management of small forests in the country is very difficult and now it is going vulnerably and being done on unsustainable way. A credible forest certification is seen worldwide as a tool for addressing this challenges. This tool is also introduced in Bulgaria and supported by the public and state administration.
- The government commit in February 2006 for FSC certification of 1/3 of state forest in the country during next 5 years. The expectations till the end of 2007 are having 150,000 hectares of state forest.
- There is also interest from the beginning within the private forest cooperative and big owners on implementation of forest management certification. Now several cooperatives with forest areas between 500 ha and 2400 ha and one company owned 1800 ha are in process of certification.
- Even the forest certification process in the country is permanently growing, it is not attractive enough for small owners. They have limited interest to manage on sustainable way their forests and haven't finances to make investments for improvement.

Denmark
Nordic Family Forestry

Forest Ownership in Denmark
Private persons - ordinary Danish citizens - own 46 % of all forest land. The number of private forest holdings is about 25,000. This is the Danish family forestry. Companies and foundations own 26 % of the forests. The rest - 28 % - are publicly owned, mostly by the State.

Profitability of Danish forestry
Danish forestry, and in particular the family forestry, is in a severe crisis. In 2003, after years of similar losses, private forest owners lost almost 100 Euro/hectare. The economy of Danish forestry is thus not sustainable.

Forest Certification
About 10,000 hectares or 2 %, of the Danish forests are certified under the Danish PEFC-Scheme.

Estonia
CEPF Report

- There are about 60,000 family forest owners in Estonia, each owning an average of 12 ha of forestland.
Finland

Lähteet: Ripatti, P. Factors Affecting partitioning of Private Forest Holdings in Finland.

- The average size of forest asset is 31 hectares;
- 440 000 assets sizing over 2 ha
- 295 000 individuals own 1-5 ha of forest land
- 633 000 individuals own more than 5 ha of forest land

Nordic Family Forestry

Forest Ownership in Finland
- Private persons - ordinary Finnish citizens - own 61% of all forest land. The number of private forest holdings of at least one hectare is about 440,000. The number of individual private forest owners is estimated at nearly 900,000, which means that one out of every five Finns is a forest owner.
- Finnish forestry is commonly termed family forestry: small-scale forestry run by ordinary families, and passed on as a legacy from one generation to the next.

Family Forestry in Finland
- The structure of family forest ownership is changing due to the age structure of rural population, urbanisation and inheritance. The proportion of farmer-forest owners has decreased, while the number of wage and salary earners and pensioners has increased. In 1970 farmers were still the biggest group to own private forest (76%) when today they share is only about 22%.
- Nowadays non-farmers own 78% of the family forests and pensioners are the biggest forest-owner group. The number of women among forest owners is also growing. Despite of the changes, most forest owners still live in the countryside. The average age of forest owners is 57 years.

Profitability of family forestry
- Average size of private forest holdings in Finland is 31,5 hectares. In southern Finland the holdings are smaller (27 ha) compared to the sizes in northern Finland (65 ha). For many forest owners forest earnings play an important part (an average forest holding under sustainable management may return an annual timber-sales income of about EUR 3,600).
- The profitability of wood production can be described using either stumpage price or the net income of private forests. Assessed with these indicators, the profitability of private forests varies both regionally and temporally.
- In 2000s the gross stumpage revenues obtained annually from the sales of roundwood in family forests have been about EUR 1.4-1.5 billion. In family forests, the per hectare net earnings in 1970–2000 before direct taxes and external capital costs were an average of EUR 80 (at 2000 prices). In eastern Finland, the net income of wood production was clearly higher than elsewhere. In northern Finland the net income was only one third of the average figure for the whole country.

France

French Forests
Inventaire Forestier National
French forests are mostly privately owned: 71%, or 10.6 million hectares, of the forests are privately owned. State forests represent 10% of the woodland and the other public forests 19%.

France is one of the European countries with the most important percentage of private forest, after Portugal and Finland.

The proportion of public forest area has slightly decreased since the last century, which means that the increase in forest area is bigger in privately owned than in publicly owned ground.

### Private forests

<table>
<thead>
<tr>
<th>Size class (ha)</th>
<th>1979-83</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number of owners (x 1,000)</td>
<td>total area (ha)</td>
</tr>
<tr>
<td>0 - 1</td>
<td>2,360</td>
<td>54.2%</td>
</tr>
<tr>
<td>1 - 10</td>
<td>1,665</td>
<td>31.1%</td>
</tr>
<tr>
<td>10 - 25</td>
<td>100</td>
<td>2.0%</td>
</tr>
<tr>
<td>25 - 100</td>
<td>42</td>
<td>8.3%</td>
</tr>
<tr>
<td>100 and over</td>
<td>9</td>
<td>0.2%</td>
</tr>
<tr>
<td>Total or mean</td>
<td>3,670</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

(Sources: SCEES and land register of the Direction Générale des Impôts; 1979-83: survey on small and medium economic structures (EHESS/SCEES); 1999: survey on private forest property structures for properties of 1 ha and over (SCEES) and based on the land register for properties of less than 1 ha.)

### Norway

#### Nordic Family Forestry

**The ownership structure**
There are a total of 125,000 forest holdings in Norway with more than 2.5 hectares of forest land. The average size is about 50 hectares. About 120,000 of these holdings are family owned. Small forest properties, the steep and varying terrain conditions and the alternating production possibilities have created great variations within the forest landscape.

Approx. 80 percent of the forest is owned by families, mainly farmers that manage their forest in combination with farming. State and community forests amount to 12 percent of the productive forest area, while 4 percent is owned by private companies.

**Family Forestry**

The family forestry in Norway is being managed and operated through typical small-scale forestry operations. The variety of small-scale forestry creates good conditions for environmental biodiversity. The average sized felling area is 1.4 hectare.

The forest owners often combine their forest work with other farming activity. About 15 percent of the forest owners/family members are actively engaged in their forest through felling and/or transport operations, the rest is done by contractors. A larger percentage though carries out reforestation and silvicultural work on their own property.

With few exceptions, all farm and forest holdings are kept within the family. According to the Act of Allodial Rights, the firstborn child has the first option to the holding. Most farms are inherited through generations, establishing a feeling of responsibility and long-term considerations of keeping the value of the farm. This attitude is of great importance to the forestry management, where measures that are implemented to day only be seen after several decades in the future. On average, the rotation between planting and final harvest is between 70-100 years.

**Sweden**

The effectiveness of FSC Group Certification / Nordic Family Forestry

- About half of the Swedish forests are private-owned by individuals and families.
- In all, some 350,000 people own forests, 1/3 are women.
- Today more than one third of forest owners live in a municipality other than the one where their woodland is situated.
- The average size of private forest properties is 50 hectares. 31% of holdings are less than 10 hectares in size and account for less than 2% of the total area, 86% of holdings are less than 100 hectares and account for 24% of the total area.
- Traditionally such ownership is called “private forestry”, but on international level this concept also includes corporate ownership. For that reason the forest owners’ associations in the Nordic countries use the word “family forestry” to denote private ownership on family level.
• About 150 000 forest owners are members of one of Sweden’s four forest owners’ associations. Taken together they own almost 90 000 pieces of afforested land.

References:

FAO
www.fao.org

FAO forestry division

FAO State of the Worlds forests 2007
http://www.fao.org/docrep/009/a0773e/a0773e00.htm

FAO: Problems of Europe's small woodlands
http://www.fao.org/docrep/x5386e/x5386e04.htm

FAO - Forest harvesting and environment in Austria
www.fao.org/docrep/W3646E/w3646e0b.htm

FAO - Forest Resource Assessment

For the representative bodies of private forest owners in the different European countries:
CEPF Family Forest Report
http://www.cepf-eu.org/

The effectiveness of FSC Group Certification
http://assets.panda.org/downloads/fscgroupcerteffectiveness.pdf

European Union
http://europa.eu/abc/european_countries/eu_members/netherlands/index_en.htm

CEPF
http://www.cepf-eu.org/
International Family Forestry Alliance
http://www.familyforestry.net/

Statistical figures on PEFC certification Information updated on 31/05/2007
www.pefc.org

Nordic Forestry
http://www.nordicforestry.org/

Ministerial process, MCPFE
www.mcpfe.org
Reporting on Sustainable Forest management 2007

UNECE

French Forests
Inventaire Forestier National

Swedish Forest Industries Federation