Lithuania

Lithuania has undergone a sharp transition from a political culture based on a centrally planned economy and one-party system to a market economy and a democratic political system.

After the declaration of independence in Lithuania in 1990 there were a number of important developments in the country's forestry: the formation of a free timber market; increasing timber export levels; new modes of ownership (private forests) and enterprise (private logging companies); and the privatisation of the forest industry.

The first description of Latvian forests, in the form of a forest inventory, dates back to the 16th century. The roots of Lithuanian forestry research were established in the 19th century when botanical studies of the forest were undertaken.





Indoor seed orchard with birch in Lithuania. Photo: Vidmantas Verbyla.

However, forest science developed during the period of independence between the first and second World Wars.

The Lithuanian Forest Research Institute (LFRI) is the main forest research organisation in Lithuania.

The Lithuanian Agricultural University (Faculty of Forestry) and the Kaunas College of Forestry and Environmental Engineering are institutions of higher education involved in forestry.

Research on stand stability, stand productivity and integrated forest monitoring is concentrated at the Faculty of Forestry. Undergraduate

Lithuanian forest statistics

Forest land area: 2.0 million hectares

(30.6% of the total area)

million)

Ownership: State: 50% Private: 31%

Growing stock: 380 million m³

Annual harvest: 6.3 million m³

Reserved for restitution: 19%

Read more: www.lvmi.lt

Roundwood exports: 1.4 million m³

Sawnwood exports: 1.4 million m³

Annual increment: 12.0 million m³

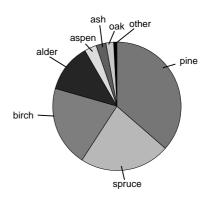
Number of private forest owners: 180.000 (the total population is 3.5

and applied ecology are the major concerns. *The LRFI Head Office in Girionys*

and post-graduate studies in forestry



Tree species by land area:



21

The Lithuanian Forest Research Institute (LFRI)

LFRI was established in 1950. During the following 50 years, the institute's scientific activities have included studies of forest biology and ecology, forest typology, forest hydrology, stand productivity and stability, harvesting, forest regeneration, forest genetics and tree breeding, forest management, forest economics, forest protection and game management.

LFRI is a state institute under the auspices of the Ministry of Education and Science. It is associated with the Lithuanian Academy of Sciences and is a member of IUFRO. Its main scientific research areas have been set by the Government, as follows:

- biological diversity and sustainability of forest ecosystems;
- reforestation, forest productivity, protection and utilization;
- conservation of forest genetic resources, forest tree breeding;
- forest policy, social and economic problems.

The research is divided into six departments:

- Silviculture
- Ecology
- Forest genetics and breeding
- Forest protection and game management
- Forest resources, economics and policy
- Molecular genetics and biotechnology.

The staff numbers 86, about 45 of whom are researchers. More than 20 of these have a scientific degree. Most of the people work at the head office in Girionys, Kaunas district.

There are 20 postgraduate doctoral degree students at LFRI.

The total annual research budget of LFRI is approximately 2 million Lt $(1 \in = 3.45 \text{ Lt})$, half of which is provided by the state. The other half comes from various international programmes and commissions from the forest sector.

Read more: www.mi.lt

Serial publications from LFRI



Baltic Forestry, the Journal of Forest Science in Lithuania, Latvia and Estonia, is an international peer-reviewed scientific journal (in English, with summaries in Russian). It is published twice a year, jointly by several universities and institutes in Latvia, Lithuania and Estonia.



Miðkininkystë (Forestry), the Journal of Forest Science, is published in cooperation with the Lithuanian Agricultural University (in Lithuanian, with summaries in English and Russian).

Examples of ongoing research at LFRI

Contemporary deterioration of forest ecosystems (2003–2008)

The main task of this research is to estimate the influence of drought, soil chemical deterioration, nitrogen pollution and the decline in tropospheric ozone on Lithuanian forest ecosystem components: trees (stem growth, foliage and roots), ground vegetation (diversity) and soil (chemical composition and biological activity).

Contact: Prof. Remigijus Ozolinèius, miskinst@mi.lt



Identification of genetic polymorphism and assessment of the embryogenic culture of forest trees (2001–2005)

The main research is directed towards application of isolated tissue and cell cultures, DNA fingerprints and biochemical– physiological techniques in tree breeding and biotechnology.

Contact: Ass. prof. Sigutë Kuusienë, biotech@mi.lt

Economic regulation of Lithuanian state and private forestry (2000–2004)

The main interests are: strategic planning of forestry, analysis of the problems and needs of private forest owners, the compensation system for restrictions to forest activity in protected areas and cost-benefit analysis of using wood for energy production.

Contact: Dr. Stasys Mizaras, ekonsk@mi.lt