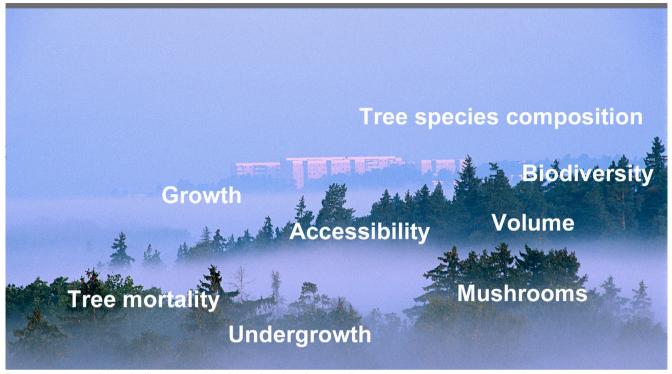
News and Views

from Nordic Forest Research SNS

2 2017



Better data is needed to facilitate proper decisions in urban forest policy and management. Photo: Stefan Örtenblad/SKOGENbild.

Urban forest management needs better data – can national forest inventories provide it?

More than three quarters of the population in northern Europe lives in urban areas. The urban forests account for only a few percent of the forest area, but play a key role in the functioning of urban ecosystems and for the health and wellbeing of urban populations. Data about the urban forest resources is, however, often lacking or fragmentary. As a consequence, urban forests are underrepresented in policy and practice.

A new SNS-supported network will bring together urban forest researchers and the domestic affiliates of the National Forest Inventory (NFI) in the northern European countries. NFI is a powerful source of statistics used for decision-making about forest resources. The network "Urban forests in Nordic Regions – What can the National Forest Inventory tell us (UFNR)" is based on needs identified in the SNS-supported CAR Nordic-Baltic Centre of Advanced Research on Forestry Serving Urbanised Societies II and the EU COST action GreenInUrbs.

The aim is to provide an overview of the possible contributions of data from the NFIs, and investigate how these can help in planning and management of the urban forests. Where data are lacking, new cost-effective measurements will be suggested. These could rely on remote sensing or field surveys, adding data to what is currently collected in the annual, national surveys.

The objectives of the network will be achieved through meetings, workshops and direct collaboration with NFI affiliates in northern Europe. In a second step, Northern European decision makers and representatives from the European Commission DG will be invited to a workshop in Copenhagen in November 2017.

Contact: Anders Busse Nielsen, University of Copenhagen, abn@ign.ku.dk

This network was granted financing in 2017 through the collaboration between SNS and EFINORD. Six more approved networks are described on the next page. Some of them have a history stretching back to the 1960s, others are set up on an ad hoc basis.

New networks in 2017, cont.

Bringing research to practice

A new network (Improving the Effectiveness of Forest Research Results) sees the light of day in 2017. Coordinated by Tapio (Finland), it aims at speeding up the process of transferring research into practical forestry applications. The concept of "evidence-based forestry" is one of the foundations for an improved process. The concept is described as the "conscientious, explicit and judicious use of current best evidence in making decisions to enhance provision of products and services from forest resources". Another useful concept is taken from the healthcare sector, where scientific research information is processed into practical advice by the Guidelines International Network (G-I-N).

The network will be holding a workshop in Warsaw in spring 2017.

Contact: Liisa Käär, Tapio Oy, liisa kaar@tapio.fi

Conference in Norway on growth and yield

Nordic networking among growth and yield researchers has been on-going since the 1960s. There have been periods with less frequent meetings, but for the last ten years meetings have been held regularly, and the Baltic States have also been included. A long-term goal of the Nordic Growth and Yield Researchers' Network is to provide managers and decision-makers with decision support tools and models. One of the outputs is the NOLTFOX database, in which all long-term experiments in the Nordic and Baltic countries have been documented.

In 2017, a three-day conference will be held under the theme "Forest management for the future Nordic/Baltic forest — increased biomass production, adaptation to climate change, and increased CO₂ absorption and storage." The conference will take place in June in south-eastern Norway, and it will also represent a contribution to celebrations for the 100-year anniversary of the Norwegian Forest Research Institute.

Contact: Kjell Andreassen, Norwegian Institute of Bioeconomy Research (NIBIO), kjell.andreassen@nibio.no Network meetings
- necessary for
making many small
organisations a
stronger group.
The photo shows
a network meeting
with forest
communicators in
2016,
Photo Mats Hannerz.



Conference for mycologists

The network North European Forest Mycologists (NEFOM) has arranged annual conferences since 2013. The network brings together mycology labs from the Nordic and Baltic countries and has created long-standing collaborations focused on development of the fungal sequence database UNITE. The theme of the planned conference in Finland in December 2017 is "Fungal mediation of sustainable forestry". It will highlight effects of forest management practices on fungal diversity and functioning, as well as biotechnological uses of fungal inoculations for improved forest regeneration, growth and health.

In addition, NEFOM is arranging a database-focused meeting in Uppsala in early 2017.

Contact: Karina Engelbrecht Clemmensen, Swed. University of Agricultural Sciences (SLU), <u>karina.clemmensen@slu.se</u> Network webpage: <u>www.nefom.dk</u>

Timber and climate change

Wood science in the Nordic countries suffers from research groups being small and resources being limited at the national level. The Northern European Network for Wood Science and Engineering has, for many years, brought together researchers from northern Europe, who have conducted joint research and exchanged experiences. In 2017, the network will focus on "wood technology as a factor in the bioeconomy toward climate change" by highlighting the use of timber to replace other construction materials with a worse climate impact. A two-day conference will be arranged in Copenhagen, Denmark, in autumn 2017.

Contact: Erik Larnøy, Norwegian Institute of Bioeconomy Research (NIBIO), lae@nibio.no

Regeneration and ecosystem functions

The Nordic Network of Forest Regeneration was started as an initiative of the SNS board in 2001, and has subsequently arranged several workshops and PhD courses. Major conferences are arranged every second year, and in 2017 a conference in Lund, Sweden, in September is planned. The conferences, arranged jointly with a number of IUFRO groups, focus on learning from the past for the future, stress tolerant plant materials and designing and establishing resistant and resilient forest landscapes.

Contact: Marek Metslaid, Estonian University of Life Sciences, marek.metslaid@emu.ee

Scientific seminar on the functioning of roundwood markets

The Baltic-Nordic Forest Statistics Group was established in 1999. The network brings together researchers in forest statistics, forest economics and roundwood procurement, as well as actors in roundwood and forest products markets. In May 2017, a scientific seminar will be held in Finland with the theme "Roundwood markets in the Nordic-Baltic Sea region – New needs for future bioeconomy". Topics will include the megatrends and factors affecting the development of the roundwood market. new requirements for information pertaining to the market and advanced solutions for monitoring market information. New demands for market information imply more collaboration between researchers in statistics, economics and wood procurement.

Contact: Timo Karjalainen, Natural Resources Institute Finland (Luke), timo.j.karjalainen@luke.fi

Future research topics discussed at Nordic-Baltic meeting

Eight country presentations, talks about financing opportunities from Horizon 2020 and Nordic funding instruments, a global overview, and a workshop to identify research needs. That was the content of a one-day meeting arranged by EFINORD and SNS in November 2016 at Arlanda airport, Stockholm. About 30 participants, mainly research leaders from different Northern European forest research organisations, took part in the workshop.

The aim was to identify important future research topics from a Northern European perspective, and the needs for collaboration and science—policy—practice interaction.

A summary, conclusions and presentations from the event can be downloaded from www.efinord.efi.int,

Here are some glimpses:

FTP and Horizon 2020

Johan Elvnert from the Forest-based Technology Platform (FTP) gave a presentation about EU-funding from Horizon 2020 from a forest-based perspective. FTP is a partnership owned by the four European confederations for the forests and forest industry. Its goal is to advance the competitiveness of the whole industry, partly by improving opportunities for cooperative research.

To achieve this goal, FTP strives to convince the EU of the importance of forest-related research. A general perception is that the Northern European view of the forest-based sector is not commonly accepted across Europe. Other drawbacks are the slow pace of innovation and the lack of industry and forest owner partners in EU research projects.

FTP has a set of recommendations for EU-funding in 2018-2020, including e.g. enhanced forest biomass production, secured wood supply and advanced bio-based construction products. It also includes multi-purpose management of forests, ecosystem services and the perspective of global change.

Nordic funding

Torfi Jóhannesson from the Nordic Council of Ministers (NMR) spoke about Nordic funding opportunities. NMR supports research funding through Nordic Forest Research (SNS) and also NordForsk, Nordic Energy Research and Nordic Innovation. Funding is also available to special programmes and projects like the follow up to Paris COP21.



The challenges for Europe, with its small population and ageing economies, are great. Even tougher is the challenge for Northern Europe, which will be weaker in the EU without the UK. This fact highlights the need to collaborate regionally, to compete with southern Europe and the rest of the world.

However, there is huge potential for innovation and growth in the biotechnology sector and bio-based products, but it is necessary to develop cross-sectoral partnerships.









About 30 research leaders from North European forest institutes and universities discussed future research needs. Photos Sinnika Västilä.

Shortcuts

Sweden

Applies for the IUFRO World Congress 2024

The IUFRO World Congress is held every fifth year. The most recent congresses have been hosted in Brisbane (Australia), Seoul (South Korea) and Salt Lake City (USA). In 2019, the congress will be held in Curitiba (Brazil). Thus, it would be appropriate for Europe to be the next host.

A bid to host the 2024 World Congress has come from the Swedish University of Agricultural Sciences. Sweden has also invited stakeholders from the Nordic and Baltic neighbouring countries to participate in the application process.

Coordinator of the Swedish bid: Fredrik Ingemarsson, <u>fredrik.ingemarson@slu.se</u>. Source: <u>http://www.slu.se/en/</u> (search IUFRO2024).

Finland

Wood to boost Mozambique's economy

Luke is promoting the sustainable use of forest resources in Mozambique. A wood technology laboratory has been built, and new species are being sought to replace those under threat. The forests of Mozambique cover 51 % of its area, but forestry is underdeveloped and delivers only 4 % of the country's GDP.

Luke has been running the project FORECAS since 2012 with the aim of increasing the sustainable use of wood in Mozambique. The project has helped forest research to become stronger in Mozambique, and is being granted additional funding until 2018.

Source: www.luke.fi

Denmark

Enzyme mediates reverse photosynthesis

In 2016, Danish researchers published results showing that light energy can be used in plants not only in photosynthesis, but also in the opposite way so that the energy can break down plant products. They discovered a new light-driven enzyme mechanism, which can be used to oxidise biomass.

The research team, led by Claus Felby at the Department of Geosciences and Natural Resource Management, will continue the work for three years. The findings could be used to boost existing processes such as for transforming biogas to methanol or for making biochemicals and aviation fuels.

Source: http://ign.ku.dk/english/

<u>Iceland</u> Visit a national

forest

The Icelandic
Forest Service
owns and manages
53 tracts of land.
These so-called
National forests
are open to visitors
all year round, and
many are accessible
from the public
roads. A webpage
in English guides
visitors to each
of the forests and
includes photos and

written information about each site.

Source: <u>www.skogur.is</u> (open the English version, look for National forests)

A Grand Historical Forest Grove Apareyri, road 821) Apareyri, road 821)

Sweden

Knowledge Direct becomes Forestry knowledge

The decision support tool Kunskap Direkt changed its look completely in 2016. At the same time, it changed its name to Skogskunskap (Forestry knowledge, www.skogskunskap.se). The tool is aimed at forest owners and their advisors and includes easily accessible advice for forest management, and a large number (currently about 50) calculation tools, from which the forest owner can calculate the growth and economic consequences of different management alternatives. Skogskunskap is run by Skogforsk in collaboration with the Swedish Forest Agency and the Federation of Swedish Family Forest Owners.

Source: www.skogskunskap.se

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More info about SNS:

www.nordicforestresearch.org

News & Views is a newsletter from SNS containing short, popularized articles covering Nordic forest research and forestry. Articles presenting SNS-supported activities are prioritized. The newsletter is published eight times per year, and is available for download from the SNS and Scandinavian Journal of Forest Research websites.



Nordic Forest Research

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