

Twelve SNS-financed networks

Activities of 12 networks will be financed by SNS in 2009. The aims of the networks are to promote collaboration between researchers in the Nordic and adjacent countries, and strengthen Nordic forestry research in European and other international arenas. Grants may be awarded to networks to fund activities such as research meetings, pilot projects or joint uses of research facilities, etc. The networks supported by SNS are listed on the webpage www.nordicforestresearch.org. Some of the networks have their own webpages.

1 FoRisk

The network of climate change risks on forests (FoRisk) will develop new approaches and tools to meet the risks and it provides a platform where scientists discuss climate change impacts on forest growth, productivity and the economy. An international meeting will take

place in August-September 2009.

Contact: *Elina Vapaavuori, elina.vaapavuori@metla.fi*

SNS grants in 2009: €5,000

2 Biogeomon

This network supports the hosting of Biogeomon 2009, the 6th international symposium on ecosystem behaviour, which will focus on small forested watersheds and the biogeochemical links between the atmosphere, forest, soil and water.

Contact: *Michael Starr, Michael.starr@helsinki.fi*

SNS grants in 2009: €15,000

3 Environmental services

The network “Adapting forest management to maintain the environmental services: carbon sequestration, biodiversity and water” will arrange an international seminar under the auspices of CAR-ES (the centre of advanced research on

environmental services, see News and Views 21.3). The conference will be held in Koli National Park in Finland in September 2009.

Contact:

Leena Finér, leena.finer@metla.fi

SNS grants in 2009: €10,000

4 Cone and seed insects

The Nordic cone and seed insects-network coordinates the development of a tool for monitoring the major cone pest *Dioryctria abietella*. A second aim is to exchange ideas and information on cone insects that damage seeds of conifer trees. The network plans to meet twice in 2009 to discuss research results, and to complete an ongoing review of cone insects in the Nordic-Baltic countries.

Contact: *Tiina Ylioja, tiina.ylioja@metla.fi*

SNS grants in 2009: €15,000

5 Wood science and engineering

The goal of the Nordic-Baltic network of wood science and engineering is to coordinate research within the field by maintaining a network between senior researchers, PhD students and industrial representatives. In 2009, the main activity will be a workshop in September on wood modification, including recent advances in improving wood durability.

Contact: *Andreas Bergstedt, abe@life.ku.dk*

SNS grants in 2009: €20,000

6 Noltfox

Noltfox is a joint Nordic-Baltic Database providing publicly available information on long-term forest experiments on the web. The first version of Noltfox was launched in 2001 and the database is being continuously developed. See for example News and Views 23.4.

Contact: *Kristian Karlsson, kristian.karlsson@metla.fi*

SNS grants in 2009: €4,000

7 Regeneration

The Nordic network on forest regeneration started in 2001, and organizes Nordic workshops on forest regeneration every second year. The next meeting will be held in June 2009, with special emphasis on new mechanized methods of forest regeneration.

Contact: *Taneli Kolström, taneli.kolstrom@joensuu.fi*

SNS grants in 2009: €15,000

8 Prifor

The Nordic working group on the history of primeval boreal forests (Prifor) plans a symposium to be held during the Society for Conservation Biology conference in 2009 in Prague. In addition, an excursion to western Russia and

working meetings with various research groups are scheduled.

Contact: *Bengt Gunnar Jonsson, bengt-gunnar.jonsson@miun.se*

SNS grants in 2009: €20,000

9 Growth and yield

Nordic cooperation on growth and yield has a long tradition, with peak activity in the 1970s to 1990s. This network has had a low profile recently, but will now start to arrange meetings on a more regular basis. The first will be held in Finland in June 2009, with the themes 1/ Production of biomass and utilization of forest-based bioenergy; 2/ Methods to assess risks associated with forest management in a changing climate.

Contact: *Jari Hynynen, jari.hynynen@metla.fi*

SNS grants in 2009: 10,400

10 Natural disturbance

The network "Natural disturbance dynamics analysis for forest ecosystem management" will arrange a workshop in Estonia in September 2009, focusing on the use of permanent sample plots for research on disturbances.

Contact: *Kalev Jõgiste, kalev.jogiste@emu.ee*

SNS grants in 2009: €11,000

11 Nordic arboretum

The Nordic Arboretum Committee is a network for professional and amateur dendrologists in the Nordic countries, with representatives from all of the main arboreta within the region, including Greenland, the Faroe Islands and Åland. The network arranges annual meetings, and the next will take place in Lithuania or Latvia in June 2009.

Contact: *Knud Ib Christensen, knudib@snm.ku.dk*

SNS grants in 2009: €6,500

12 NFI data

National forest inventories (NFI) started around 1920 in Norway, Finland and Sweden. Since then the inventories have generated a unique time series of data. A new network "Harmonising NFI forest data over time" will harmonize the data and evaluations from 1920 to date. The network will first undertake a pilot project, aiming to plan a full project and extend cooperation.

Contact: *Anna-Lena Axelsson, anna-lena.axelsson@srh.slu.se*

SNS grants in 2009: €15,000

New EFI regional offices

Ambitions to establish a Nordic regional office of the European Forest Institute (EFI) were reported in News and Views issue 23.4. Since then, EFI has held its annual conference and decided to accept four new regional offices. The Nordic office was not included on this list, but the proponents were asked to resubmit a proposal for a new decision at a later date.

The new offices will probably be launched in 2009, depending on when they are able to meet the conditions set by the EFI Annual Conference. The offices approved by the conference were:

- EFIATLANTIC in Bordeaux which concentrates on issues of west-European relevance in the region of Atlantic rim.
- EFICEE in Vienna with a geographical coverage in the Central-Eastern Europe.
- EFICIENT with a rotating office in Freiburg (Germany), Zürich (Switzerland) and an observatory in Nancy (France) in Central Europe.
- EFISEE in Croatia covering the region of South-East Europe.

(www.efi.int/portal/news).

Three new SNS-projects

1. Wood ash recycling – for better or worse?

Bioenergy harvests in the Nordic countries are rapidly expanding (see News and Views 23.5). Removal of logging residues naturally involves removal of nutrients from the forest ecosystem, and ash recycling has been suggested as a means to e.g. mitigate soil acidification.

However, there are a number of uncertainties regarding the effects of recycling ash. Removing biomass is known to reduce the amount of nitrogen, which may have long-term implications for tree production. Bioenergy harvests may also accelerate soil acidification, but acidification has not been shown to

affect stem growth, at least in the short term.

The project “Ash recycling – long-term effects on tree growth” will summarize the effects recorded in various Nordic experiments. The hypothesis is that ash recycling results in reduced stem growth on low-productivity soils, and increased growth on high-productivity soils.

The collaborators will analyse data from 140 experiments involving wood ash applications and liming in Sweden, Norway, Finland and Lithuania to establish prognoses of the effects over a long-term (10-20 years) horizon for various types of soil.

The project will run over the period 2009–2010 and involve partners from Sweden, Finland, Norway and Lithuania.

Project leader: Dr Ulf Sikström, Skogforsk, ulf.sikstrom@skogforsk.se
Grants from SNS: €90,000



2. Genetic engineering for customising wood properties

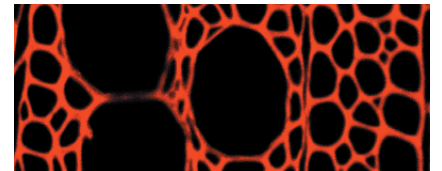
Wood hemicelluloses are some of the most important components of biomass on the Earth, constituting approximately 25% of total wood biomass. Xylan is the main hemicellulose in hardwoods, and it also occurs in softwoods. Thus, its structure is likely to have major effects on properties of raw wood materials, e.g. its pulping/delignification properties and mechanical parameters.

The project “Xylan modification for added value wood products” will utilize genetic engineering to modify the structure and content of xylan, and establish how these modifications affect wood properties. The modified xylan may be used to produce custom-tailored wood properties.

Aspen will be the main species used for the studies, which involve partners from Sweden, Finland and Denmark. The project is an extension

of a previous project on poplar xylan within the Wood-Wisdom network.

Project leader: Docent Ewa Mellerowicz, ewa.mellerowicz@genfys.slu.se
Grants from SNS: €150,000 for the period 2009–2011.



3. Seasonal changes from above

Many recent phenological monitoring studies have shown that the timing of spring onset has advanced due to climate warming. This gradual climatic change may have considerable implications for plants' growth and reproduction, especially in regions where plants grow near their distribution limits.

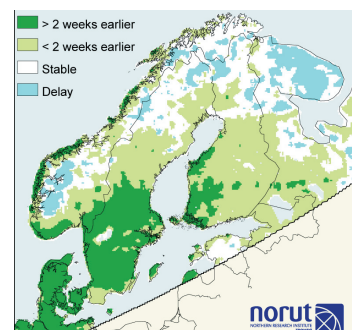
The project “Satellite-based mapping of the growing season in northern Fennoscandia and neighbouring parts of Russia” will develop new methods to map the onset

and end of the growing season with the aid of satellite-image analysis. The study will cover changes in Northern Fennoscandia and adjacent parts of north-western Russia over the period 1982–2010. The output will be a time-series that should be valuable not only for seasonal studies, but also for developing tools for monitoring phenomena such as forest disturbances.

The project is a cooperation between Finland, Sweden and Russia.

Project leader: Docent Anne Tolvanen, anne.tolvanen@metla.fi

Grants from SNS: €150,000 for the period 2009–2011.



Why Nordic cooperation?



Hans-Örjan Nohrstedt, SNS board member from Sweden and head of strategy and analysis of the Swedish Research Council Formas.

The three most popular countries for co-operation among Swedish scientists working in environmental and agricultural sciences are the USA and two non-Nordic EU countries (the UK and Germany). Is Nordic co-operation not a dead-end then, at a time when much political effort is focussed on the EU's framework program? Absolutely not! The Nordic countries share strong similarities which imply a uniquely Nordic societal need for knowledge. A joint Nordic research area provides scientists fruitful common access to scientifically interesting ecological gradients, larger datasets and other infrastructure, and to unique personal and institutional competences. There are also several examples showing that co-operation can enhance the prospects for joint Nordic groups in competition for EU funding.



Kari Mielikäinen, chairman of the SNS board and Professor in Growth and Yield, Metla, Finland.

The aim of Nordic co-operation in forest research is to connect researchers, their ideas and databases to gain so-called "Nordisk Nyttä", i.e. better understanding of issues related to Nordic forests and forestry. Combining the best expertise at the Nordic level strengthens us, and increases our ability to broaden our outlook to European or global scales. Discussion between researchers, decision-makers and politicians is also highly important in international decision-making regarding the sustainable use of forests. Due to our common roots and history, Nordic co-operation is also a great pleasure.



Håkan Wirtén, SNS board member from Sweden and Deputy General Director, Swedish Forest Agency

The Nordic countries constitute a small corner of Europe and the world, with a tiny proportion of the global population. However, we have important forest resources and first-class forest industries. The countries have much in common: culture, language (at least in part), history, common values and similar approaches to forest management. It is therefore natural and essential for us to cooperate, support each other and combine our strengths. I believe that forest research is one of the areas which benefits most from Nordic cooperation.

Contact News & Views

Write to the scientific editor:
Mats Hannerz,
Silvinformation AB
mats.hannerz@silvinformation.se

More info about SNS:

www.nordicforestresearch.org

We strongly encourage our readers to contribute to a lively and interesting journal. Letters to the News & Views section will be published if they are:

- short
- relevant to the Journal
- interesting for the readers.

Examples: comments on papers published in the Journal, views on ongoing research, trends in research policy, opinions about forestry practice etc.

News & Views is edited by
Mats Hannerz, Silvinformation AB
mats.hannerz@silvinformation.se
and produced by
Carl Henrik Palmér. chp@areca.se