



Retention

– an efficient way to preserve biodiversity?

Leaving retention trees on clearcuts is one of the key elements in the Nordic strategy to meet the demands for biodiversity. But how do Nordic practices and research compare to those in other parts of the world? An international panel met in Uppsala to undertake a global overview.

The forest policies of Finland, Norway and Sweden have much in common. An increased focus on biodiversity has paved the way for new legislation and the development of forest certification. All three countries currently have guidelines that include retention approaches.

Nature conservation in the managed, productive forests includes setting aside single trees, retention patches, buffer zones and woodland key habitats, as well as the retention and creation of dead wood. The

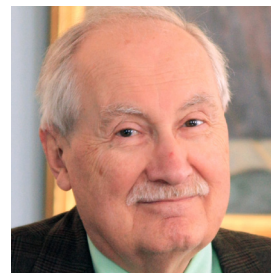
fundamental idea of the strategy is to combine practical forestry with nature conservation within the same area. Protected reserves represent an important complement. This approach has become increasingly common in many parts of the world.

Seminar in Stockholm

It is frequently questioned whether this approach is sufficient to preserve threatened species. Are species helped by retention? Should more trees be left, or should a greater area be set aside from forestry activities? Retention approaches in the international context were the focus of a seminar in Stockholm in early May. At the seminar, arranged by the Royal Swedish Academy of Agriculture and Forestry (KSLA) and Future Forests, a number of international speakers described their experiences.



Is the Swedish model efficient? Should we keep it? / Professor Lena Gustafsson, SLU, Sweden



Natural disturbances and their biological legacies provide the ecological model for Variable Retention Harvesting / Professor Jerry Franklin, Univ. of Washington, USA



Habitat loss is the key threatening process worldwide, it is still worse than the threat by climate change / David Lindenmayer, the Australian National University, Australia

Criticised strategy

The Nordic forestry practices were criticised by some of the speakers, among them Professor Christian Messier from Quebec.

– When I was a young forestry student, I was taught that "the Swedish model" was the ideal. Today, I teach my students that it is a deterrent example; the focus on intensive production is far too high, he said. We should not use the Swedish model in Quebec.

Criticism was also voiced by Professor Jerry Franklin from the University of Washington. He deemed the model to be out-of-date since there is such a strong bias towards the production aspect. More needs to be retained, at least on a landscape level.

Scientific workshop

The international experts later gathered at a workshop, led by Professor Lena Gustafsson, at the Swedish University of Agricultural Sciences. The aim was to write a scientific article on retention approaches and related research around the world.

Lena Gustafsson has led several studies about the effect of leaving dead wood, high stumps and retention trees on the survival of insects, lichens and mosses. She underlines that retention approaches are thoroughly established throughout the world, but that we still have a lot to learn about their ecological effects.

– The panel represents a broad span of conditions from Australia, North America, South America and the Baltic states, to the Nordic countries. Still, the thinking and strategies have striking similarities. I am convinced that our combined efforts will help to advance the research frontier on the question of retention approaches, she said.

Footnote: Future Forests is a research programme running as a collaboration between the Swedish University of Agricultural Sciences, Umeå University and Skogforsk.



Fennoscandia

Retention trees provide some habitat for disturbance-adapted species, but they cannot provide characteristics of mature forest / Anne Sverdrup-Thygeson, NINA, Norway



Baltic states

Three to six percent of the stock volume is retained in the clearcuts of the Baltic states. Fifty percent die in 10-15 years / Asko Lohmus, University of Tartu, Estonia



Northwest USA

Retention trees can be dispersed on a clearcut, or aggregated. The dispersed trees tend to be windfelled / Angus Brodie, Dept of Natural Resources, Washington.



Eastern–Central USA

Retention in the eastern USA focuses on live trees and snags, other elements of retention are rarely considered / Brian Palik, USDA Forest Service



West Canada

Some sensitive bird species decline below 35-40% retention / Bill Beese, Vancouver Island University, Canada



East Canada

Today, only 20% of the clearcuts in black spruce forest and 5% in boreal mixedwood forest leaves some retention in Québec / Professor Christian Messier, University of Québec, Canada



Central Canada

Aggregated retention is required to hold species associated with older forests; patches >140 m from mature forest should be larger / Jan Volney, Natural Resources Canada



Mainland Australia

Habitat retention in Western Australia has evolved since the first Forest Act in 1919. 'Fauna habitat zones' is one of the milestones / Adrian Wayne, Dept of Environment and Conservation, Australia



Tasmania

Tasmania is sometimes referred to as the national park of Australia / Sue Baker, Forestry Tasmania, Australia

SNS has opened its new portal

The website of SNS was finally launched in March. The current secretary Katrine Hahn Kristensen was happy to open the modernized portal.

The work started in autumn 2010 with a questionnaire sent to the main stakeholders. The survey revealed that visitors of the old site were often researchers or board members, who used the site only a few times per year to find information about subjects such as calls for funding, applications and project reporting.



– We wanted to broaden the audience of the website, to become more of a hub for Nordic forest research, says

Katrine Hahn Kristensen. We have highlighted news related to forestry and forest research, for example in our newsletter News and Views. We also present international news from GFIS, and we plan for other forest news as well.

The new website makes it easier to find information about ongoing projects, networks and CARs. The CARs previously produced their own websites, usually hosted by a specific institute or university.

– The inclusion of the project websites on the SNS platform makes it easier for both visitors and project partners, says Katrine Hahn Kristensen. We know from experience that there is usually a long period before a network or project website is launched. With the new site, information can be posted immediately.

– The new website is primarily presented in English, to open it up to a wider audience, and encourage cooperation with new regions such as the Baltic states and the countries

around the North Atlantic. However, basic information about SNS is also available in Swedish.

Electronic archive

– Besides being a public window, the new website will also be a valuable electronic archive. The secretariat of SNS rotates among the Nordic countries, and every fourth year a mass of documents needs to be transferred and sorted. Almost fourty years of SNS activities have created twelve large moving boxes containing archived papers.

– We are still in the process of transferring the old documents to digital format, says Katrine Hahn Kristensen. It will be an invaluable aid to me and future secretaries when searching for important papers such as old agreements or previous protocols from meetings.

www.nordicforestresearch.org

The new website can be found at the same address as before (www.nordicforestresearch.org). New functions are still being added to improve its usability, and much information is waiting to be included.

– We are still waiting for the

CARs to start using the joint portal. Once this is done, it will be much easier for the public, press, and other researchers to find updated information on research progress, she says.

SNS 2010

Some key figures from the annual report of SNS

- 1** new 3-year SNS-supported research project began in 2010
- 4** other projects continued their work
- 3** new research projects, starting in 2011, were granted support
- 12** networks undertook activities supported by SNS in 2010
- 9** networks were granted support for 2011
- 5** CARs came to the end of their five-year funding period
- 1.6** million DKK in total was given to the five CARs
- 4** new CARs were granted support starting in 2011
- 25** years of the Scandinavian Journal of Forest Research was celebrated with a seminar and a jubilee issue
- 6.4** million DKK was spent by SNS in 2010

Shortcuts

EFI launches a new book series

What Science Can Tell Us is the name of a new series issued by the European Forest Institute. The first volume deals with the important question of water for forests and people in the Mediterranean. The series is based on collective scientific expert reviews providing interdisciplinary background information for policy and decision makers, citizens and society in general.

Read more: www.efi.int

Norway: Stronger forest research centre in the north

Tromsø will become a stronger centre for land resources research when Forest and Landscape Norway moves there from its current location in Bardufoss. The institute will share a site with BioForsk North to create a more robust knowledge community. The key activity of Forest and Landscape in northern Norway is mapping land resources, including vegetation, forests and soils.

Source: www.skogoglandskap.no

Russia: Log and lumber exports increase

The world's largest log exporter, Russia, increased shipments of logs in the first quarter of 2011 after they had been in decline for four years. Higher wood demand in China, Finland and Japan are the main reasons.

Source: *Wood Resources International LLC*

Sweden: Breeding will deliver an additional ten million cubic meters

The common use of genetically improved material for reforestation will increase the annual growth in Swedish productive forests by 10 million cubic meters by the end of this century. This is far more than could be achieved through other silvicultural measures, such as fertilization or the use of foreign tree species. The main reason for the large effect is that the improved seedlings are being planted on almost all Swedish forest land.

The analysis was undertaken by Ola Rosvall, Skogforsk, and Anders Lundström, the Swedish University of Agricultural Sciences. The main purpose was to compare the magnitude of the growth increase resulting from different silvicultural measures.

Read more: www.futureforest.se



Photo: Mats Hannerz

Denmark: 75 years of tree collections

The arboretum in Hørsholm, Denmark celebrated its 75 year anniversary in May. Almost 300 guests took part in the event. The arboretum has a long history, and was established by the famous researcher Carl Syrach Larsen. The collection today includes some 1,500 species from almost all continents of the world, making it one of the most diverse biotopes in Denmark. Experiences based on activities undertaken by the arboretum will play an important role in predicting the effects of climate change.

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Finland: A rethink needed in Finland's forest sector

Change should be channelled towards renewal and diversification, instead of the support for existing structures. The forest sector could thus become a thriving combination of new and traditional activities. This conclusion is presented in a book published by researchers at the Finnish Forest Research Institute Metla. The book, *After transition – the future of the Finnish forest sector*, is edited by Metla researchers Lauri Hetemäki, Sini Niinistö, Risto Seppälä and Jussi Uusivuori.

Read more: www.metla.fi

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More info about SNS:

www.nordicforestresearch.org

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- interesting for the readers.

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