


Continuous cover forestry experiments in northern Europe

The documented observations of single tree growth and regeneration development from the accessible silvicultural experiments have been collected. A large variation of heterogeneous stand structures was recognized and classified. Key topics were highlighted when comparing different silvicultural systems. The network wrote a joint research proposal and started with the analysis of natural regeneration processes.

The scientific base for Continuous Cover Forestry in northern Europe

Extent of uneven-aged forest. Demand to apply CCF even outside uneven-aged stands. What feasible transformation methods do exist?

Focus on TRANSFORMATION and SUSTAINABILITY

	<p>1. Selection of 3-5 most relevant ecosystem services Depending on the service, we will zoom from stand- to landscape-level, and even aim for estimates for the whole country.</p> <p>Biodiversity _____ Carbon _____ Recreation _____ Wood supply, economic growth and employment _____ Water _____</p> <p>Stand Landscape Nation</p>
<ul style="list-style-type: none">- Feasible management methods- Regeneration- Stand and tree growth- Timber quality- Income and financial risks	<p>Interdisciplinary research between silviculturists and experts specialized on these services.</p>

CCF experiments as base for silvicultural research.

First results

During the first year of the newly established network, about 40 experimental sites were provided with access to single tree growth and regeneration data. In total, ca. 100 long-term experiments were identified.

The forest stands were classified into three types of stand structure: 1) uneven-aged single-tree selection forest, 2) multi-layered forest under transformation, and 3) even-aged forest with recently initiated transformation towards more heterogeneous stand structures.

The network started with the joint analysis of natural regeneration processes. Beside stand density, seed sources, climate and other site

factors, even stand structure (particularly the number of small-sized trees) appears to have a strong effect on the height growth of seedlings.

Events during the network activity

Members of the network participated in joint activities with the two other SNS/EFINORD networks PRIFOR and FORDISMAN like participation in the conference on Forest landscape mosaics in Tartu, in the 9th IUFRO international conference on uneven-aged silviculture in Zürich, in the 8th IUFRO international forest vegetation management conference in Halmstad. In addition, the network organized a workshop and a PhD course on the topic of natural regeneration and continuous cover forestry (CCF).

Why CCF?

During the workshop and discussions of research proposals, the scope of potential goals and benefits associated with CCF increased largely. Biodiversity, carbon, recreation, wood supply, economic growth and employment, and water were identified as the key issues determining the debate around alternative harvest methods to the prevailing clearfelling system.

In our network, an important goal is to provide unbiased guidance to estimate future stand development and economic income when different silvicultural options like clearcutting, shelterwood cutting, patch cutting, and target diameter cutting are compared with each other.



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