

Production forestry in drained peatlands 2007–2010

*A research programme by
the Finnish Forest Research Institute, Metla*



Metla/Erikki Oksanen

METLA

Further Information

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Background and challenges

In Finland nearly 5 million hectares of forest is on drained peat. This corresponds to 20 % of the total forestry area in Finland. The annual growth of the peatland forests is 24 million m³, and the annual cutting removals have been predicted to increase up to 15 – 20 million m³ from the present ca. 9 million m³ during the next twenty years. Specific problems related to management of drained peatland forests are the generally low profitability of silvicultural thinnings and problems in summertime harvesting. Another problem is provided by requirements for sufficient level of drainage in the tree stands, and synchronization of cuttings with drainage operations.

Environmental problems arise from nutrient loads to watercourses which may be substantial. Another problem is the high CO₂ losses from drained, organic rich peat soils which have been estimated at ca. 6.5 Tg annually.

Aims of the programme

Due to the volume and importance of peatlands in Finland, research on peatland forests has traditionally been included in the workprogramme of Metla. The new research programme aims, however, at a more comprehensive view on the issue. The general aim of the programme is to gather and synthesize the available knowledge from earlier and ongoing research into instructions that are directly usable in practical forest management planning in peatland forests.

Research themes

The research programme covers the following research themes that are based on discussions with representatives of forestry organisations covering state, company and privately owned forests:

1. Site specific management regimes for peatland forests
2. Development of harvesting techniques
3. Development of regeneration methods
4. Fertilization of peatland forests
5. Prevention of detrimental impacts on watercourses

Project homepage:

<http://www.metla.fi/ohjelma/sum/index-en.htm>



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