



Is clear-cutting the best management practice?

Central Union Of Agricultural Producers And
Forest Owners (MTK)

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Forest management in Nordics

Basics:

Even-aged forest management

Forest rotation is controlled by planting, thinning and regeneration felling. During the regeneration felling (almost) all the trees in the area are removed.

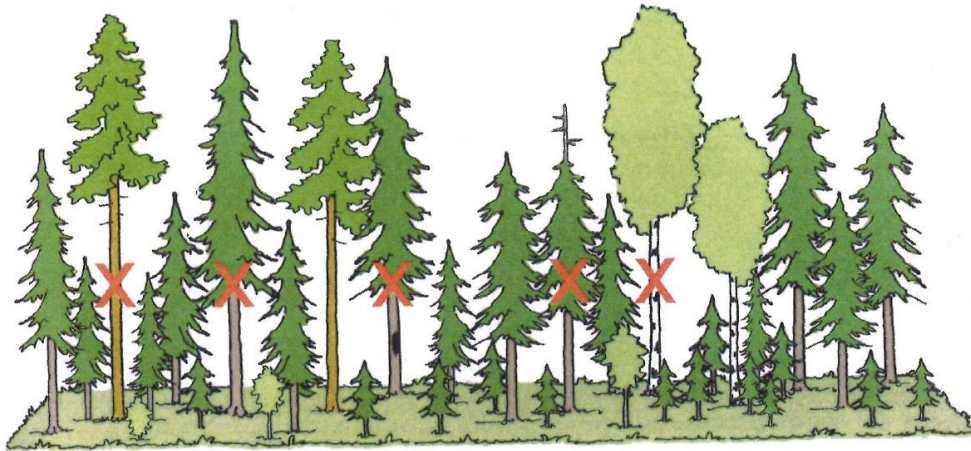


Uneven-aged forest management = **continuous cover forestry**

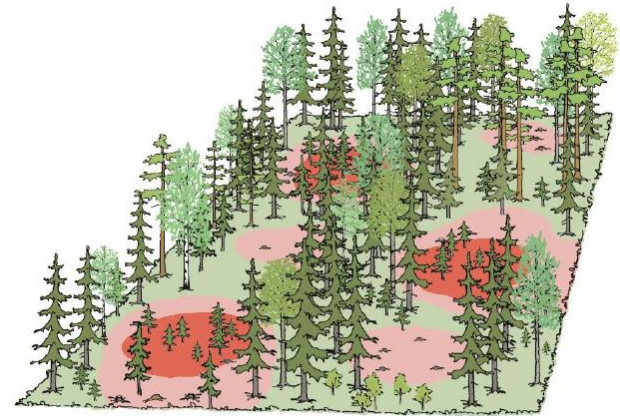
Management method where only some of the trees are removed in one harvest. Forest regenerates naturally through the trees left standing and no planting is needed.

Continous cover forestry

- Continous cover forestry CCF can suit for barren soil types as well as for peatlands
- CCF can also consist of clear-cuts, but small gaps do not have an obligation for regeneration



Juha Varhi



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- Natural Resources institute Finland (Luke): one quarter of the forests in Europe are under continuous-cover silviculture. The share is highest in south-eastern and central Europe

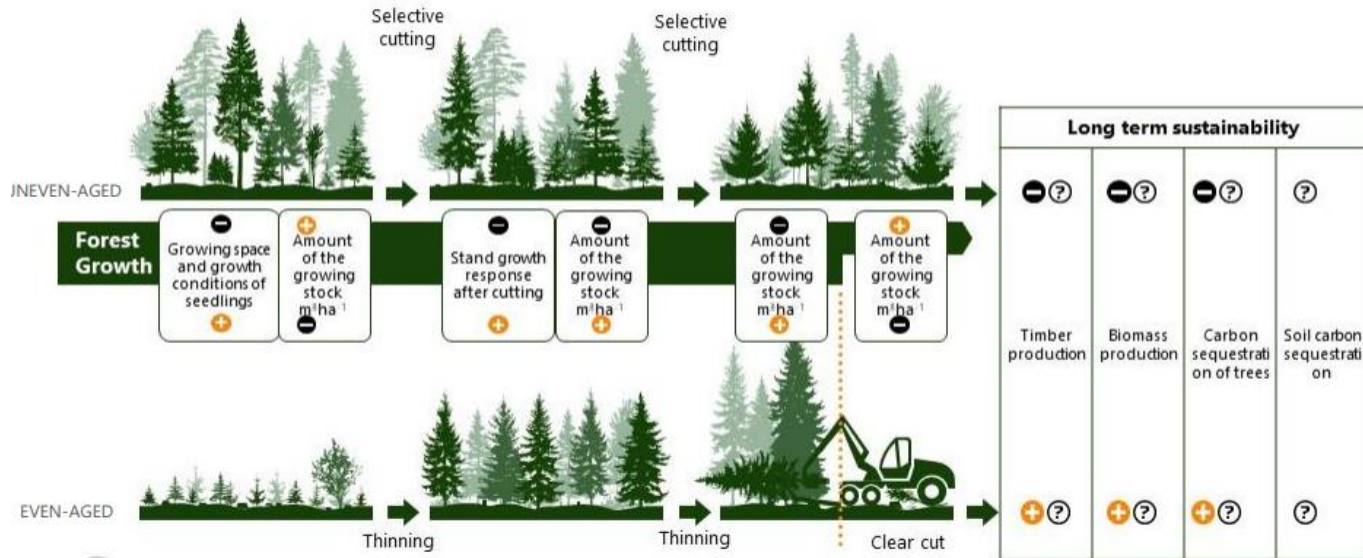
Finnish Forest Owner Survey

- Silviculture has many different objectives: e.g. carbon sequestration, biodiversity, recreational use, revenue and well-being
- Questionnaire “Forest Owner 2020”:
 - Most of forest owners consider clear-cut-based management as a workable harvest method
 - Many forest owners have tried the continuous cover forestry
- Clearcut areas in southern Finland are 1,2 hectares on average
 - The average for the whole country is 1,5 hectares



Climate impacts

- Amount of the growing stock varies between different life cycles
- The intensity and number of harvests have an impact
- In peatlands using continuous cover forestry can be successful



Picture: Natural Resources Institute Finland

Economic aspects

- Wood availability important both for forest owners as the society
- The price difference between final fellings and thinnings is remarkable
 - The price level of even-aged final fellings can be 20 % higher than for second thinnings and 46% higher than for first thinnings (Luke, 2011-2019)
- The unit costs of harvests can be higher for continuous cover forest management as it can require special skills
- Timber yield of CCF can be 15-25 % lower than in clear-cut-based forestry as the stands can be too sparse and seedlings' establishment slow

• Regeneration pace is important and can vary a lot across regions

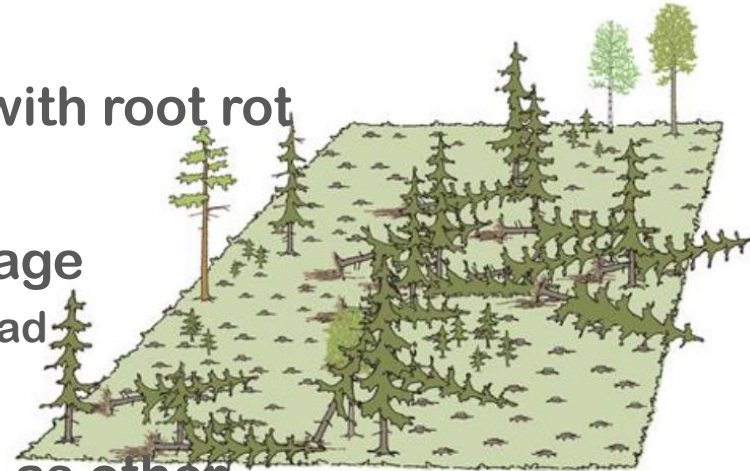


Biodiversity

- Considering the structural features of forests (old trees, mixed species, amount of deadwood) is the key
- Different species benefit from different management methods
 - Some species benefit from big gaps that allow more light to enter
- Both even-aged and uneven-aged forest management necessary to ensure the preservation of different species
- In CCF harvests can be more regular which can impact biodiversity

Forest damages

- Changing climate exposes forests to more damages why choosing the best possible method is crucial
- CCF ill suited to spruce stands infested with root rot
- Too regular fellings can cause bark damage
 - Exposing the stand to root rot, which can spread
- “Sprucification” a threat on some stands as other species do not prosper



Piirros: Juha Varhi



EU proposes a shift to closer-to-nature forestry

- The EU Forest and Biodiversity Strategy 2030 propose "closer-to-nature management" to become dominant across the EU
- The new definition should consist of a large variation of different methods
- A new definition launched by the Commission this year
- Challenging provisions e.g. on regeneration and fertilisation
- Should be kept as non-binding and voluntary

Summary

- The right felling method is chosen based on the characteristics of the growing site, tree structure and the objectives of forest owners
- Diversification of forest management methods important for climate, biodiversity and economy
- Even-aged stand is difficult to convert to the continuous-cover forests
 - The change can take decades
- Multifunctional use is key



Summary

- Long-term scientific evidence on CCF's impacts on regeneration and seedlings' future growth is still lacking
- Soil preparation is needed in many sites to provide the positive future growth of seedlings
- Forest management is a national competence: One size does not fit all
- Securing long-term wood production supports jobs, growth and economic welfare

Thank you for your attention



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Metsänomistajat