

SMALL-DIAMETER WOOD AND INNOVATIVE STAND MANAGEMENT

– Novel business for growing sustainable bioeconomy



Teppo Hujala¹ // Satu Helenius¹ // Yrjö Nuutinen² // Jukka Malinen¹

1 UEF, School of Forest Sciences, POB 111, 80101 Joensuu, Finland // 2 Natural Resources Institute Finland (Luke)

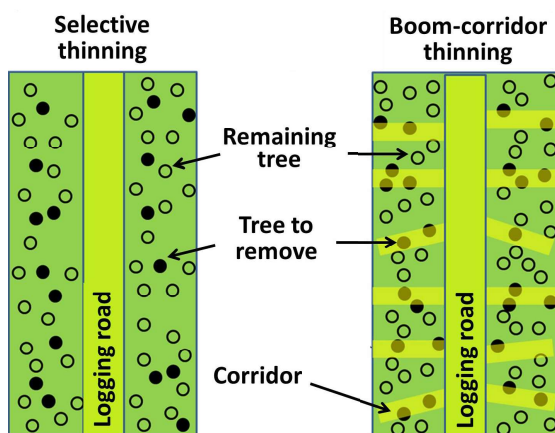
Trees from small-diameter stands, resulting from thinning, coppice, forest fire prevention cutting, and linear areas such as roadsides, are a large underutilized wood resource with high potential to support growth of the forest-based bioeconomy in Europe.

SMALLWOOD-project (2019-2022) develops and evaluates new technologies and business and operational models that can support a sustainable management of different types of small-diameter wood. The project operates in Finland, Slovenia, Spain and Sweden.

Scientific work packages:

- ▶ Harvesting, extraction and logistics systems
- ▶ Socio-economic analysis
- ▶ Environmental assessment
- ▶ Overall sustainability analysis

Concept of boom-corridor thinning:



Multi-tree harvesting head. Photograph: Bracke Forest Ltd.

SMALLWOOD employs field experiments, work efficiency analysis, soil and tree damage analysis, innovation uptake and business model analysis, and multi-criteria assessment.

The resulting business and operational models of small-diameter stand management can boost entrepreneurship and provide work opportunities in rural areas.

The acquired new knowledge will inform individual forest owners, forest owners' associations, forestry contractors, forest advisory practices, national implementations of the rural development programme, and European machine manufacturing companies.

Coordinator of the multi-national ERA-Net project: Tomas Nordfjell, SLU, Umeå, Sweden.

ForestValue



Ministry of Agriculture and Forestry of Finland



UNIVERSITY OF EASTERN FINLAND