

Baltic ForBio, WP 2, GA 2.4

Information about thinning demonstrating biofuel and Roundwood production

General information about stand

State	Latvija
Region	Ziemeļaustrumi, Vidzeme, Alūksnes
	nov. Alsviķu pag.
Stand ID	3642 006 0394
Thinning year/season	2018
Topic	Commercial thinning with chainsaws, mainly removing non-profitable trees. Assortments forwarding using a quad bike where the trailer can be attached at the rear.
Area (ha)	2.0
Age	19

Stand composition

7B 2A 1E 19

Terrain and soil conditions

Oxalidosa

Location of the demo site



Photo: www.kadastrs.lv



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Photo: Google Maps

Stand characteristic before thinning

Average DBH (cm)	9
Average height (m)	10
Number of trees (trees per ha ⁻¹)	2 500
Standing volume (m ³ /ha ⁻¹)	146

Stand management targets

No forestry actions have been done before.

Earlier thinning stands to improve the situation and the quality of trees, as well as to make the first profit.

Demonstration site before thinning



Photo: D. Supe



Stand characteristic after thinning

Average DBH (cm)	11
Average height (m)	12
Number of trees (trees per ha ⁻¹)	2 000
Standing volume (m ³ /ha ⁻¹)	50

Demonstration site after thinning



Photo: D. Supe

Mechanical damages due to thinning

Significant damages to forest stand were not detected. In the harvesting, process assortments have not been damaged. Forwarding was done only in dry weather, so that is the reason why no effects on soil (no deep rutting). The roots of the trees are not damaged.

Applied work method in thinning

Commercial thinning is done with a hand-held chainsaw. Such a technique is the most optimal option, as it causes less damage to the remaining trees and is the most economically advantageous. Assortments were preparade on the site and forwarded with a quad bike. Generally obtained 66 m³ of firewood un 30 m³ of pulpwood.

Technical unit:

For forwarding has been chosen a quad bike (2018 Can-Am Outlander 570 XMR):

engine capacity 570 cm,



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power 48 zs, length 211 cm, height 124 cm, width 116,8 cm, weight 382 kg, clearance 27,9 cm, transmission HLPNR, fuel tank 20,5 L

Trailer with a manipulator (Vahva Jussi 320):

gross weight: 372 kg load capacity:1 500 kg





$\label{lem:contact} \textbf{Contact information the person responsible for the demonstration site:}$

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