

## Information about thinning demonstrating biofuel and Roundwood production

### General information about stand

State	Latvija
Region	Kurzeme
Stand ID	6488 003 0032
Thinning year/season	2019.12.
Topic	<i>Commercial thinning with chainsaws and also before harvester starts, they work also have been extracted undergrowth trees. For forwarding process has been used to upgrade the agricultural technical unit.</i>
Area (ha)	3,05
Age	49

### Stand composition

*8A1B1Oz+Ba, Os*

### Terrain and soil conditions

Harvesting can happen only winter or summer period

### Location of the demo site



Photo: Google Maps

### *Stand characteristic before thinning*

Average DBH (cm)	44
Average height (m)	28
Number of trees (trees per ha <sup>-1</sup> )	600
Standing volume (m <sup>3</sup> /ha <sup>-1</sup> )	286

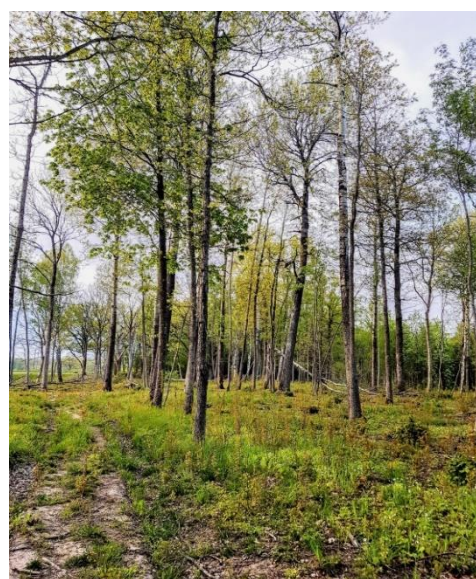
### **Stand management targets**

*Removal of wind – uprooted and severely damaged trees, at the same time as clearing the undergrowth (tree extraction). To increase forest value by extraction of damaged and small size trees and to ensure favorable growth conditions in the stand. After thinning extract of different assortments as well as material for wood chips and also firewood. Those areas which are empty from trees, a spruce plantation has been established in the squares.*

### *Stand characteristic after thinning*

Average DBH (cm)	44
Average height (m)	28
Number of trees (trees per ha <sup>-1</sup> )	500
Standing volume (m <sup>3</sup> /ha <sup>-1</sup> )	250

### **Demonstration site after thinning**





## **Mechanical damages due to thinning**

*After thinning, there are not any damages*

## **Applied work method in thinning**

*To preserve the desired forest landscape, only wind-blown, extremely dangerous, and damaged trees are removed in the area. At the same time, the undergrowth is extracted. All the prepared materials are delivered in the most suitable conditions so that there is no degrading effect on the environment. In the free places, spruce was planted, thus ensuring the formation of a new forest under the crown layers of the old forest.*

## **Technical units:**

*For thinning are used chainsaws, but forwarding has been done by specific harvesting machinery. Technological corridors, in this case, is not created because the distance between the trees allows the technical units to maneuver freely between the trees. The forwarding process has been done only in normal soil bearing capacity conditions.*

*Agriculture machinery is adapted for forestry needs.*

*Case IH Puma model (150 - 220 ZS)*

*Technical parameters:*

Lifting capacity: 10 463 kg;

Wide: 5 467 mm;

Weight: 2 476 mm;

Hight: 3 068 mm.

*Trailer technical data:*

Accessibility: 7.20 m

Lifting capacity: 57 kNm

Lifting capacity at 4 m without bucket and rotator: 1 000 kg

Lifting at maximum without bucket and rotator: 560 kg

Telescopic extension: 1.7 m



Photo: [www.dotnuvabaltic.lv](http://www.dotnuvabaltic.lv)

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