

## GENERAL INFORMATION

<b>author(s)</b>	Velghe D, Ampoorter E, Serbruyns I, Verheyen K
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<b>data</b>	

## MATERIALS & METHODS

<b>study area</b>	Aelmoeseneie: 5d, 5e, 5i
<b>time period</b>	Aelmoeseneie: 2008
<b>goal</b>	Investigate the economic consequences, the soil impact and the damage to remaining trees of forest harvesting techniques in hardwood stands in Flanders.
<b>set-up</b>	9 harvests in Flanders <ul style="list-style-type: none"><li>- thinning &amp; clearcuts</li><li>- with or without permanent skid trails</li><li>- different machinery (skidder, tracked crane)</li><li>- different soil type, topography, characteristics of the remaining stand</li></ul>
<b>data collection</b>	costs for the operator, costs for the forest manager (damage to the soil and the remaining stand)
<b>remarks</b>	

## RESULTS

Damage to the remaining stand is relatively small (larger in young stands). On the other hand, soil damage is high. Soil damage is smallest in stands with permanent skid trails that have been used well during the harvest and in which a tracked crane was used. Labour costs form the largest part of the costs for the operator. Costs are larger under difficult working conditions, e.g., wet soils and steep slopes.

Minimizing soil damage brings about large costs, both labour costs and fixed costs. Operators are not enthusiastic about permanent skid trails in hardwood stands. The winch has to be used more often, which takes more time and is physically demanding. A clear map of the stands, skid trails and area to stack the felled stems is important for the operators. When a stand is harvested for the first time using permanent skid trails, the operators like to assist in designating the position of the skid trails. A big difficulty is the harvest of tree crown wood. It is time-consuming, especially when using a winch.

Operators ask for spatially demarcated wood lots and strict supervision of the harvest.