Within- and between person variability in tree marking for CCF

Individual-tree selection and marking plays a crucial role in the management of Continuous Cover Forestry, since this management approach aims at maintaining woodland conditions at all time. This can only be achieved by selective thinning and harvesting.

In this context, a new experiment type, the marteloscope, has recently been conceived where a number of test persons are asked to mark trees and their tree selection behaviour can be quantified in relation to others. Research results have shown that the tree marking variability *between* different test persons is much higher than was assumed both in forest research and in the forest industry. This is important information for future training efforts in Continuous Cover Forestry.

It is very likely that there is even some variation in the tree marking of one and the same person marking the same trees at repeated times. However, there is currently no information about this source of variation that we might refer to as within-person marking variability.

The SLU Faculty of Forest Sciences is currently setting up a marteloscope site at Innertavle University Forest. As part of this master thesis, a student would organise experiments involving 10-15 test persons with different professional backgrounds and record their tree markings at repeated times during the course of 6-12 months. Upon completion of the experiment, the data will be analysed using statistical methods that have recently been developed at SLU. There is also an option to publish the master thesis in a peer-reviewed scientific journal.

In light of the current Corona crisis it is also possible to carry out an MSc thesis based on existing marteloscope data from the UK or Ireland.

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