Preliminary report of the field work related to my Master’s thesis on differences in growth of Norway Spruce planted mechanically and manually with two different scarification methods.

Project
I wish to examine the growth of mechanically and manually planted Norway Spruce using the different scarification options available to the mechanical planter. More specifically, I’m going to compare the diameter growth, height growth and mortality of 1 year old container saplings planted with a Bracke p11.a planter to that of manually planted seedlings using a planting tube on mounded and inverted scarification plots. Mechanical planting is a relatively new and untested method of regeneration in Norway, so I wish to provide information regarding the suitability and quality of this regeneration method as it is believed to become more relevant in the future.

Field work
The experiment consists of three newly cut stands, each housing three repeats consisting of four squares, each square planted with one of the methods tested (Manual+inverted/mounded and mechanical+inverted/mounded). The experiment sites were placed and marked on the 1st of June 2016. The sites were planted and measured throughout June and early July. I returned on the weekends of weeks 36, 37 and 38 to measure the plants a second time.

Assessment
The establishment of the experiment sites and planting went well, but capacity problems led to some slightly later planting dates than anticipated beforehand. Tool malfunctions led to a bit more travel than originally planned, but everything is ready for the final registration in the fall of 2017. A full report including some results will be sent in after the final registration.
Figur 1: The Bracke planter in action, ready to plant on a scarified plot.

Figur 2: One site (You can see the white pole with a red band on top marking my experiment site in the background) mounded and ready for manual planting.
Figur 3: Mechanically planted Norway Spruce