



Conversion of even-aged stands to uneven-aged: Preliminary experiences from Norway (Umbreyting jafnaldra skóga yfir í misaldra: Fyrstu reynslusögur frá Noregi)

Aksel Granhus¹

¹*Division of Forestry and Forest resources/Norwegian Institute of Bioeconomy Research (NIBIO)*
(aksel.granhus@nibio.no)

In Norway, selection cutting was largely abandoned after WW2 but is currently gaining increased interest among forest owners and their organizations. While uneven-sized stand structures suitable for single-tree selection are currently rare in mature forest, an alternative being investigated is to convert young homogenous Norway spruce stands to more heterogenous stands suitable for the single-tree selection system in the future. In an ongoing research project (DEMO), the concept of variable density thinning (VDT), initially developed in North America, is being tested as a means to achieve this objective when applied to Norwegian boreal forest. Six “treatments” are employed systematically to 10 x 10 m cells across the stand, including a gap to initiate regeneration (removing all trees except understory trees), skip (no cutting) and four intensities of crown thinning to enhance the growth and vigor of dominant crop trees. Currently, about 15 test sites have been established to explore the viability of the VDT concept for reaching the stated objective. Preliminary experience suggests that such a system may be easily applied by harvester operators, given proper instructions and prior experience with conventional mechanized thinning. Work studies also indicate that the productivity of harvesting and forwarding in the first stand entry is comparable to conventional thinning operations. Several of the test sites are established as long-term trials which will enable future monitoring of growth and stand development. Adaptation of the VDT system to stands of the more light-demanding Scots pine is also considered in the project.

