

PLANTING NATIVE WOODLANDS ON UPLAND FARMS, HOW HIGH CAN YOU GO?

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A number of large-scale native woodlands that extend to altitudes well beyond what had previously been allowed by the Forestry Commission under the Woodland Grant Scheme have been planted in the Scottish Highlands over the last decade. In order to receive the full grant payment landowners must comply with the scheme rules, and therefore the trees need to survive and grow at these altitudes. Knowing how well these woodlands establish is therefore vitally important for deciding whether new planting projects are appropriate and also for influencing rules in future forestry grant schemes in which the development of treeline woodland, with stunted trees and montane scrub is allowed and encouraged.

A 250 hectare native woodland was planted at SAC's Hill and Mountain Research Centre in the Southern Highlands of Scotland, in 1999, as part of the Hill Sheep and Native Woodland Project. The aim of the project is to combine sheep production and native woodland within the same block of land, providing economic benefits for the farmer and local community, an improved environment and increased biodiversity. Commercial timber production was not one of the main objectives. The *Betula pubescens* dominated woodland was planted up to an altitude of 600m. The growth and establishment of the trees has been monitored over the first five years of the scheme. Sapling height, the number of live trees, and the number of 'established' trees all decline with increasing altitude. Trees planted on east-facing slopes showed better growth and establishment than those planted on west-facing slopes. The results from the monitoring will help to identify the areas where remedial work should be concentrated and the areas that are not suitable for beating-up.