## INTEGRATION OF TREES INTO AN UPLAND LIVESTOCK FARM IN CO. ANTRIM, NORTHERN IRELAND

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In Northern Ireland agriculture (78% of the land area) is largely pastoral (93% of farmed area) and tree cover is low (6%). EU policy is to reduce livestock production, increase tree cover, enhance biodiversity and maintain rural communities. Silvopastoral systems, whereby protected broadleaved trees are planted into grazed pasture have proven to be viable, provide significant environmental, animal welfare and landscape benefits and integrate well into current farming systems.

On a commercial hill farm (300 - 400m a.s.l.) sycamore (*Acer pseudoplatanus*) trees were planted at 100 and 400 stems ha<sup>-1</sup> in 1990. Trees planted at 100 stems ha<sup>-1</sup> did not thrive and these areas were either interplanted as mixed species (native) woodland in 1997, or planted as clumps of trees. On better drained areas trees planted at 400 stems ha<sup>-1</sup> have performed well.

The original tree protection (1.5m tubex) has remained effective and, after removal at 8 –10 years, trees have suffered little damage from grazing by Scottish Blackface sheep. The resultant effect has been to create a landscape where trees have been introduced at a variety of densities and spatial orientations and perform a range of functions.

## They have provided:

- (a) Shelter and shade for sheep
- (b) Cover for Irish hares (a BAP priority species)
- (c) A more nutrient tight system
- (d) More biodiversity on the farm
- (e) Landscape diversity.

The planted areas have integrated well into the management of the rest of the mainly sheep (370 ewes) and cattle (40 suckler cows) hill farm (110 ha).

Current scenarios for decoupling allow the owner potential to develop tree planting on the farm using this pilot exercise as a template and EU expansion will likely make non – food production on these types of farms in UK more attractive.