



During the development of the new Felling Permission guidance, based on the [Forestry and Land Management Scotland Act 2018](#) (the 'Act') and associated regulations, Scottish Forestry (then Forestry Commission Scotland) took the policy decision to increase the restocking density of native broadleaves from the historically used 1100 stems per hectare (3 m spacing) to a new minimum of 1600 stems per hectare (2.5 m spacing).

Scottish Forestry chose to do this for a number of reasons:

- increased success of establishment from mutual shelter (history of failed small native woodland schemes or the native woodland component of larger schemes)
- earlier canopy closure
- the possibility of better quality timber resulting in a multi-benefit woodland resource
- improved carbon store over the longer term
- meeting the UKFS general forestry practice requirement 4, that forest should maintain their capability to produce a range of wood and non-wood forest products on a sustainable basis.

Fundamentally these reasons all relate to the duty to promote sustainable forest management, which was placed on Ministers by section 2 of the Act.

When writing the felling permission guidance there was some discussion with Confor regarding this issue. At the time 1600 stems per hectare was accepted so long as our guidance offered the opportunity for other densities based on the landowners objectives for the woodland. This was considered and the text below was used in our guidance.

Our current felling permission guidance states:

To ensure that replanted woodlands are able to fully establish and develop we expect the restocking proposals to include minimum stocking densities as set out below. In exceptional circumstances we may accept an alternative approach where there is a clear justification in line with Sustainable Forest Management.

Where native broadleaves are used to plant or restock an area of woodland we will normally accept a minimum density of 1,600 trees per hectare. If the planting of native stock is for other purposes, such as transitional woodland, we may accept an alternative density.

Following on from that, our FGS guidance now states:

It is expected that minimum stocking densities will be 2500 stems per hectare for conifers, and 1600 stems per hectare for broadleaves and native Scots pine. Where site objectives differ, for example, are for productive broadleaves the stocking density should be higher, and where site objectives are for transitional woodland, stocking densities should be lower.

Internal staff procedural guidance was also amended to clarify this.

Further discussion has been had with the Customer Reps Group (CRG) who have requested further examples of when alternative stocking densities could be considered for native broadleaved restocking.

Some examples provided by the CRG, and agreed with Scottish Forestry, where lower stocking densities could be justified include:

- Where the objective is restoring an ancient woodland site, whether using natural regeneration or planting, the restocking should reflect the character and nature of the site and surrounding woodlands.
- For transition woodlands being used for landscape objectives, stocking densities should vary along the woodland margin in order to produce a natural edge.
- Where habitat objectives require a mosaic of woodland and open ground (e.g. for ground flora, peat or specific species) stocking densities can vary across the site.
- Urban fringe and recreational areas where sightlines and security are important factors may have lower stocking densities. Arguably pruning and early intervention management of more stems might provide a multipurpose woodland with better security and visual appeal vs shrub species and low branching.

Riparian zones will require 1600 stems per hectare as they are normally restocked for habitat restoration, water quality, bank stability and reducing flood peaks and so lower stocking densities are not necessarily required, however riparian areas could have more open ground throughout. A mix of shaded and lightly shaded habitat within the riparian zone (around 50% canopy cover) is recommended for riparian corridors in order to meet the UKFS forest and water guideline (84).