

Timber Production

Site Preparation

Before trees are planted, the ground needs to be prepared. The ground may be 'scarified' with a tractor to break up the ground surface or debris left from felling (ploughing is also carried out in cases where the ground may not have had trees for a number of years).

Planting

Plants are grown in Forestry Commission nurseries outside the New Forest. They are raised from seed for 1-2 years in paper containers and are delivered to the forest at this stage. Once at the planting site the trees are planted into the prepared ground. The trees are planted approximately 2 metres apart which results in some 2500 trees per hectare.

Tree planting is still done by hand in the New Forest. To ensure a successful crop, many factors have to be taken into account including soil, climate and species type. More trees are planted than are needed and they are planted close together for protection but also to encourage competition for sunlight and therefore promote tall, straight growth which is particularly important as straight trunks are essential for good timber. In their early stages, the trees are vulnerable to various pests and competition from other vegetation. Some trees are protected from attack by animals (deer, rabbits etc) using tree shelters which are plastic tubes totally encasing the tree while it grows. These are removed once the tree has become fully established. In other areas, sensitive to browsing from deer, deer numbers are managed by shooting and/or deer proof fencing is erected around the plantation.

Thinning

Due to the large volume of trees being planted so close together, the plantations need to be thinned, which is the process by which foresters remove selected trees when they reach certain ages. Thinning is carried out to increase the amount of space and light available for the healthier looking specimens, enabling them to grow quickly and strong.

The thinning of a coniferous plantation will probably first take place at about 15-25 years, when they are at their thicket stage. Intermediate thinning will occur between 30 and 60 years, with the final thinning taking place at about 60-70 years. As the plantation reaches its final stages, more light and space on the forest floor tends to lead to the regeneration of the woodland with new young saplings.

Felling

Trees can be between 40-150 years old before they reach their economically 'mature' stage when they stop growing vigorously and are ready to be cut down. The differences in age at felling can depend on the tree species (conifers grow at a much quicker rate than broad leaved species) and also environmental factors which can affect their growth, for example, soil nutrients. Sometimes all the trees in a plantation are cleared at once, a process known as clearfelling.

Felling is carried out by a machine called a harvester or by hand with a chainsaw. When cut, the trees are carried to the roadside by a skidder or a forwarder which are specially designed tractors to pull or carry timber.

The trees are usually cut into smaller lengths on site and then picked up and taken to the roadside, where they are stacked into piles before being picked up by a timber lorry, which transports the timber to a processing site, such as a mill.

Continuous Cover Forestry

Continuous cover forestry (CCF) is an approach to forest management in which the forest canopy is maintained at one or more levels without clearfelling. It involves regular thinning, taking out individual trees and maintaining some woodland cover permanently with trees of different ages. Continuous cover is an approach to forest management that seeks to create more diverse forests, both structurally and in terms of species composition, using natural regeneration.