



Creating a Woodland *by John Davis of Tree Shop Ltd*

Why plant a woodland?

The landscape of England and Wales boasts a rich mosaic of woodland, field and stream. Properly managed, these woodlands can contribute as much as a productive field and generate a good annual income. Increasingly they are being valued accordingly. Regardless of the nature of any individual land use, be it for the purposes of biodiversity, sporting activity, historical value, tourism or timber income and firewood production, well tended and well-loved woodlands are sure to play a part. Young plantations are as important as mature woodlands and many landowners view them as their pension. Whilst the risk factor cannot be ignored, the new weather patterns brought by climate change (more rain and higher temperatures) may facilitate faster tree growth in certain circumstances. Trees can also preserve floodplains from disastrous damage. When you add in the fact that annually in the UK we all emit approximately ten tonnes of CO₂e (equivalent to approximately three tonnes of carbon) it makes perfect sense to offset this by planting enough trees to bring on between six and ten more mature trees every year. In fact, the many advantages of woodland creation are hard to ignore.

Choice of site

Sheltered woodland sites will always succeed better than exposed sites. If however the preferred site is exposed, then you should plant quite strictly in accordance with shelter belt principles, which then create microclimates on the lee side. The shelter belt trees then become important landscape and soil improvers. The soil type and depth will also broadly determine the choice of tree species. Oak for example, is quite tolerant in many soil types and likes clay soils. Ash meanwhile prefers a moderate ph whilst Sweet Chestnut and Wild Cherry require dry sandy loams.

Planting techniques

Three types of planting technique should be considered depending upon the size of your woodland. Pit planting will always give the best result and should be considered for self-planting and small scale planting of fewer than 1000 trees. One man will probably not plant more than 150 trees per day by this method.

Notch planting is most commonly used and the method employed by most contractors. Planting rates here average 1,000 trees, per man per day.



Machine planting is only suitable for large scale planting of over 10,000 trees. It is an excellent option for mineral soils where two men should achieve an average planting rate of 4,000 to 6,000 trees a day. Normal tree planting densities are between 1100 and 2250 trees per hectare.

Layout

Generally a figure of 20% unplanted open ground is the accepted norm. Be wary of creating large numbers of narrow access tracks as these will soon grow over and disappear. Instead, set any rides to the maximum permitted width to take account of both ongoing growth and ease of deer control at a later date. Shrubs and minor broadleaves are also best kept to a minimum, as they will certainly self-seed. No more than 5% of each is a useful figure to bear in mind. Naturally each site will have its own specific characteristics. Detailed advice for the successful development of any particular woodland area is available and there are a wide range of approaches all of which can work well. Hazel, for example, can be one of the best under-storey minor species to use in order to develop a future coppice with good standards.

Herbicides

Encouraging slow growing annual meadow grasses will help suppress broadleaved weeds. Selective herbicides can be used in pre-planting applications where necessary. Ex arable land should be reseeded with slow growing grass varieties prior to planting. It is advisable not to use too much glyphosate or to apply it via wide line spraying as this will lead to rapid growth of undesirable broadleaved weeds. It is however essential to spot spray for a .5m radius around each tree for the first three years and to remove any weeds growing inside the tree guards.



Predator guards and control

The density of deer, rabbits and voles will require assessment both before and after planting. New woodlands provide an ideal deer habitat and tree guards will be essential. Major tree species will require guards of 1.2m against Roe and Muntjac and 1.5m guards against Fallow deer. As deer fencing only becomes economical over 10 hectares a culling policy is also essential. Some sacrificial trees, such as Goat or Crack Willow, planted around the woodland edges will act as fraying stock and reduce losses on the main trees.

Raptor poles for kestrels and owls will help contain the vole population, aided by regular mowing of open ground. After around 10 years, grey squirrels will have also moved in. Like deer, these will require an attitude of zero tolerance.

Replacing lost trees

Some trees will always be lost to natural causes. A 20% loss is not uncommon with losses generally ranging from 15% - 25%. Replacement is called 'beating up' and a regular programme is required during the first three years.

Grants

The most desirable grant is an annual premium for 15 years (broadleaves) called the Farm Woodland Premium (FWP). This is set at £300 per hectare for ex AAPS land, £250 per hectare for improved grassland, or £90 per hectare for 'non farmers'.

The ELS and HLS annual payments will accrue on top.



Improved grassland is defined by the presence of ryegrasses and other productive species such as timothy and cocksfoot. A 'non farmer' receives 25% or more of his income from non farming activities. There is an additional planting grant of £1,800 per hectare, which is payable as £1,400 on planting with a further £400 paid at year five after satisfactory establishment. Additional premiums of £500 per ha are payable for peri-urban woodlands (within 5 km of 100,000 people) and for public access. Scoring and threshold points may also apply and will either restrict or advance a successful application. The Forestry Commission Woodland Officer can help with grant applications and specific advice.

Land Values

Landholdings with a reasonable percentage of woodland cover are almost always worth more in total than those holdings lacking woodland. As every landholding has areas of less productive land it makes economic sense to seriously consider these for regular planting. The fifteen year annual FWP can provide a useful income and advice is available to ensure these less productive areas fit the available criteria.

