

Planting of Forest Trees.

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The following notes are intended to set out, as briefly as possible, a few hints which may prove of interest to those interested in tree planting. The first four important points to be considered in the establishment of young plantations are as follows:

(a) Fences, (b) Drainage, (c) Suitable species, (d) Best type of plants.

Fences. It is imperative that the planting area should be securely fenced against trespass by farm stock. If rabbits are numerous it will be necessary to use rabbit netting to exclude these destructive pests and all rabbits must be destroyed within the area.

Drainage. As most trees dislike stagnant or water-logged soils, it may often be found necessary to drain the site in advance of planting operations. The distance between the drains and their depth will be governed by the conditions prevailing on the ground. Generally speaking, drains placed approximately 20-25 yards apart could be regarded as sufficient, even for semi swampy soils. Care should be taken not to overdrain in the first instance. In all cases, main drains should be opened first; these should be kept to the lowest hollows on the ground, i.e., placed in such a way as to carry away all water that will flow into them from the side drains which will be opened later. Drains for forest purposes need not be covered but should be cleaned periodically. Open drains should have a width at the top of approximately twice their depth.

The width at the bottom should be about one-third the width at the top. This will give a good slope to the sides and thereby reduce maintenance costs. If the sides were cut with too steep a slope undermining would ensue and they would ultimately collapse.

Selection of Species. From a forestry viewpoint this means the selection of plants which would give the best return at the end of the rotation. This can only be achieved by planting trees which are best suited to the soil and other prevailing conditions. The following table shows briefly the more important likes and dislikes of tree species commonly planted at present:

Species	Type of surface vegetation and soil conditions.	Unfavourable conditions	Other Remarks
Norway Spruce	A mixture of three or more of Rushes, grasses, bracken, bilberry or molinia Moist	Poor tight deep peat gravelly or stagnant soils or severe exposure	Useful for planting old woodlands if soil and other conditions are favourable
Sitka Spruce	Somewhat similar to above Moist	Similar to above, but stands exposure better	Faster growing than Norway. Dislikes frost hollows
Scots Pine	Mixture of two or more of Furze, heather, bracken, grass or bilberry Dry	Poor tight peat Stagnant soils or severe exposure	Not too exacting. Will succeed on most soils
Contorta	Dwarf furze, heather and inferior grasses or heather furze and bracken Dry	Heavy soils	Very useful for planting on poor gravelly mountain soils
Silver Fir	Better pasture grasses (pure) or mixed with briars and bracken Moderately heavy fertile soil	Poor soils	Stands shade well. Useful for under-planting
European Larch	Mixture of Ferns, briars and grasses Dry fertile porous soil with rapid moisture percolation	Peaty, sandy or stagnant soils or severe exposure	Does best on steep fertile rocky slopes
Jap Larch	Somewhat similar to Scots Pine Moist	Deep peat or water-logged soils	Fast grower, wind-firm, suitable for shelter purposes
Beech	Mainly good pasture grasses Dry, moderately heavy, fertile calcareous soils	Poor soils or severe exposures	As for Norway Spruce
Oak	do. Moist, heavy, fertile soils	do.	As for Norway Spruce
Ash	do. Moderately damp, fertile soils	do.	As for Norway Spruce

Type of Plants. In all species the best plants are those with well developed root systems and stout healthy stems. A good root system is much more important than stem development and lanky drawn out plants should be avoided.