DEPARTMENT OF CONSERVATION
AND LAND MANAGEMENT

SILVICULTURE SPECIFICATION 1/88

REGENERATION OF TUART FOR CONSERVATION

PREAMBLE

The Tuart forest at Ludlow is dominated by trees in the larger size classes. Natural regeneration is not occurring in the Tuart forest largely due to the absence of fire and the presence of grasses and peppermint.

For the long term conservation of the species and stability of stand structure, there is a need for intervention to establish regeneration.

Long term stability would best be achieved with a forest structure with an appropriate representation of a full range of age classes. The regeneration phase is generally absent. In many cases the stands are fully stocked by the larger size classes and therefore do not require and could not support regeneration. In other cases, while space is available, regeneration is not occurring.

OBJECTIVE

To establish regeneration of Tuart in understocked areas of forest while minimising the impact on conservation and aesthetics in the remainder of the forest.

SELECTION OF AREAS FOR REGENERATION

Regeneration establishment is to be confined to natural gaps in the Tuart canopy which are large enough to allow regeneration to develop to maturity.

As a guide, minimum gap diameter (stem to stem) should be 50-100m, the smaller diameter being used where the edge trees are more senescent .

Where the application of this would result in more than one third of a block of forest being treated for regeneration, consult Silviculture Branch before proceeding.

Gaps are not to be created by the felling of mature tuart trees.

TREATMENT OF THE GAP

Following demarcation of the gaps all peppermint trees within it should be pushed and moved a minimum of 10m from retained Tuart. They should be heaped only to the extent necessary to ensure a substantial ashbed is created when the debris is burnt. Good distribution of low heaps is preferred to fewer, larger heaps.

Tuart trees are not be pushed. Large logs in the gaps should be left undisturbed and unburnt if not required for ashbed.

Surrounding areas should remain undisturbed unless the gap is so bare of peppermint or logs that sufficient ashbed cannot be created. In this case peppermint may be pushed from adjacent areas.

Burn the tops in late autumn under conditions which will produce good ashbed without damage to the retained forest.

REGENERATION

a) Natural seed fall - This is the preferred method where seed if available. Inspect and sample for budworm damage at time of flowering. If little or no damage, hold over the burning till the seed year, sample for seed supply prior to the burn and supple ment natural seed by hand sowing if there are doubts about seed supply and on ashbeds greater than 30m from an edge.

b) Manual sowing - Use manual sowing of ashbeds where there is insufficient seed from surrounding seed trees. Seed source must be from tuart trees growing in the Ludlow forest. Until seeding trials suggest otherwise, follow the existing practice of sowing in May at the rate of 25gms seeds/50m² of ashbed, bulked to 150gms with sawdust.

c) Hand planting - Hand plant on ashbed at approx 2m x 2m spacing where insufficient seed is available or as enrichment planting where seeded regeneration has failed. Enrichment planting should be done in the winter following sowing and must be pre ceeded by spot application of Vorox at least 2 weeks prior to planting. Apply fertiliser at time of planting.

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