



SILVICULTURE SPECIFICATION 6/89

LOGGING OF REGROWTH IN TWO-TIERED KARRI STANDS

1. PREAMBLE

Technical report No. 1 (Silviculture Guidelines for Even-aged Regrowth and Two-tiered Karri Forests) describes silvicultural practices appropriate to three broad categories of forest containing regrowth, viz.

Even-aged regrowth (in "gaps" larger than 2ha)

Two-tiered stands - with gap size > 60m diam.
- with gap size < 60m diam.

The even-aged stands will be thinned at appropriate stages of development while the two-tiered stands will ultimately be clearfelled and regenerated, and the regrowth component may or may not be thinned before that time.

Under the Timber Strategy a major source of small sawlogs over the next 10 years will be from the pre-logging of the regrowth component in these two-tiered stands. Thereafter they will come from the thinning of even-aged regrowth.

It is undesirable to prelog the regrowth component of the two-tiered stands over a 10 year period if the old growth component is not to be logged in the foreseeable future. This could be up to 50 years and would leave many areas understocked for too long.

This specification describes the means by which the maximum resource of medium sawlog in two-tiered stands may be realised over a 10 year period without producing a short-term surplus of small chipwood and retaining adequate stocking within the two-tiered stands.

2. DEFINITIONS

Definitions of terms used in the specification are as follows:

2.1 Prelog - complete removal of the lower storey of a two-tiered stand prior to clearfelling of the overstorey prior to regeneration.

2.2 Thin from below - remove the poorest and smallest component of the regrowth or lower storey of the stand leaving the larger regrowth stems as crop trees for up to 10 years.

2.3 Thin from above - remove only the larger regrowth stems which have reached marketable size (in this case medium sawlogs) from the regrowth or lower storey leaving the smaller and unmarketable stems behind to be removed in a later harvest.

3. LOGGING PRESCRIPTION

3.1 Even-aged regrowth

Thin from below according to normal prescriptions. Fig. 1 (see Technical Report No. 1)

3.2 Two-tiered stands

a. Where the overstorey is to be clearfelled within 3 years - prelog regrowth (Fig. 2)

b. Where the overstorey will not be clearfelled for more than 3 years

- gaps larger than 60m diameter -

- 1989 - 1995 thin from below (figure 3A)

- 1996 + thin from above

- gaps less than 60m diameter - thin from above (Fig. 3B)

Maintain more than 20% crown cover in regrowth groups to retard regeneration.

The health and vigour of the surrounding overstorey will determine whether it can be thinned at the same time. For more detail see Technical Report No. 1 pp 15-20.

4. APPLICATION

Identification of stands containing the above structural classes is important. The recommend sequence of operations in stands not scheduled for clearfelling within the next 3 years is:

4.1 Identify areas of even-aged regrowth and two-tiered stands with gaps over 60m from aerial photos. Gaps over 60m diameter are relatively rare, most selection logging having produced smaller gaps.

4.2 Locate and demarcate those pockets requiring thinning from below.

4.3 Log the regrowth areas, removing unmarked trees from marked areas and allowing operators to select small sawlogs from the unmarked areas. Other regrowth (chipwood) may be removed within the limits of the volumes required, provided that the crown cover within the regrowth patches is not reduced below 20%.

Small areas of even-aged regrowth are difficult to protect during regeneration burning if surrounded by clearfelled areas. However because of their value every effort should be made to protect them. Wherever possible these patches should be connected to a coupe edge to minimise the difficulties. In any event all areas larger than 2ha should be given protection.


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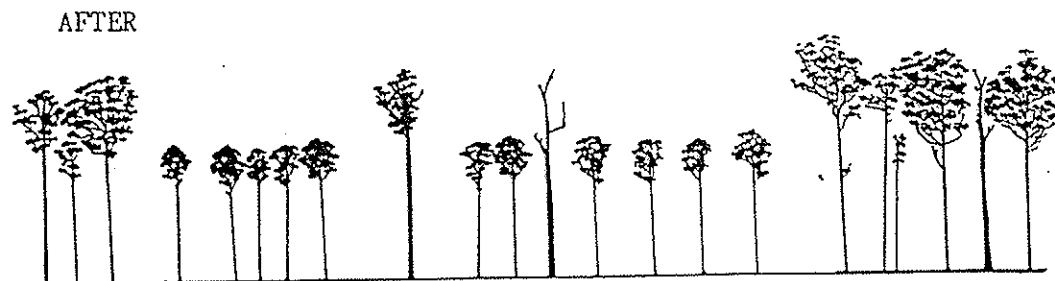
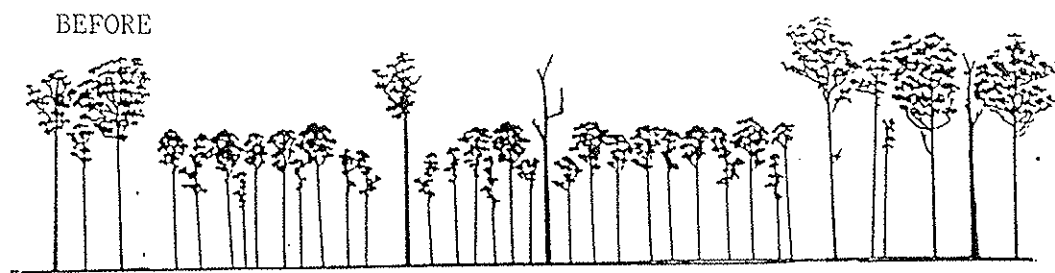


FIG. 1 EVEN-AGED REGROWTH - THIN FROM BELOW

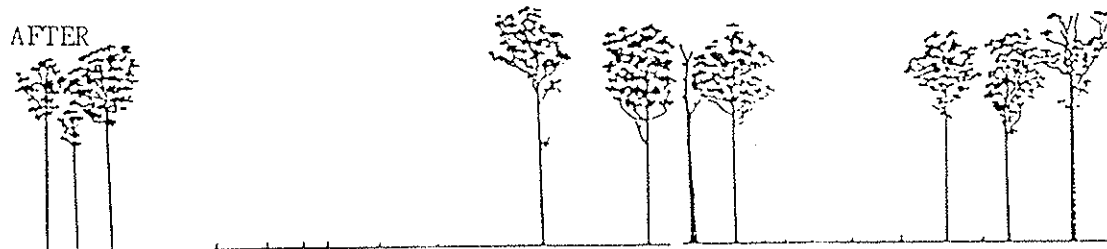
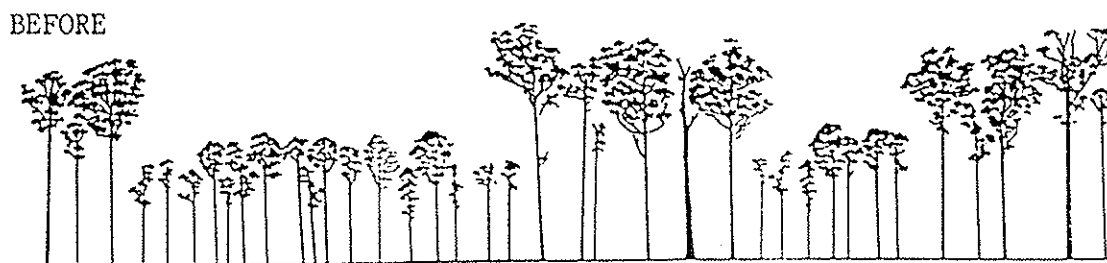


FIG. 2 TWO-TIERED STANDS TO BE CLEARFELLED WITHIN 3 YEARS. PRELOG.

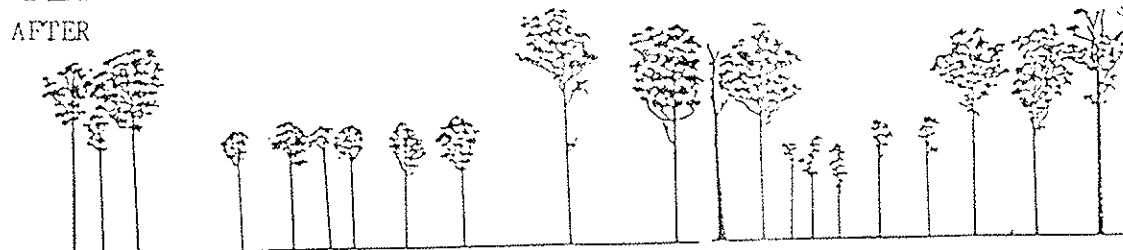
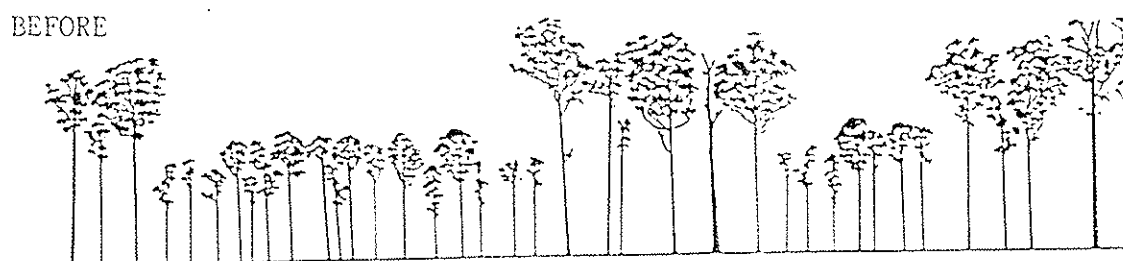


FIG. 3 TWO-TIERED STANDS

3A Thin from below in large gaps

3B Thin from above in small gaps