



SILVICULTURE SPECIFICATION 5/89

MAINTENANCE OF HABITAT FOR HOLE NESTERS IN TIMBER PRODUCTION AREAS OF THE JARRAH FOREST

PREAMBLE

The jarrah forest provides habitat for many fauna species, including some birds and mammals which were once more widely distributed through the woodlands of the coastal plain and wheatbelt. This fauna value has been maintained in a forest managed for multiple uses (including timber production) for the past 100 years, with no species known to have become extinct since European settlement.

The type of forest management which has maintained suitable habitat within the jarrah forest has varied from heavy cutting and intensive regeneration treatment to light selective cutting. Conditions common to these systems have been the survival of mature non-commercial trees, creation of considerable quantities of woody debris and the rapid regeneration of forest cover. The potential now exists to commercially remove low-grade timber and large quantities of accumulated debris. This specification retains some of these components of the fauna habitat which can be lost through intensive harvesting and regeneration operations, and which would take many years to replace.

The retention of unmerchantable trees in the forest reduces the growth of crop trees and therefore represents a trade-off between wildlife and timber values. Variation from this specification may be at the cost of one of these values.

As detailed requirements of particular fauna species become known it may be necessary to vary this specification. Note that timber harvesting and regeneration operations affect only about 1.5% of the jarrah forest each year. This specification is therefore only a subset of the wider approach to CALM's fauna management in the jarrah forest.

2. OBJECTIVE

To retain the essential components of habitat for hole nesting fauna which cannot be readily replaced through post-harvest forest manipulation.

3. STANDING TREES AS HABITAT

3.1 Characteristics of habitat trees

- * Mature and likely to live for many years. It is essential that these trees have the capacity to provide fauna habitat until regrowth trees can place them at some time in the future.
- * Contain holes, or broken branch stubs below the live crown with the potential to develop into holes.
- * Average sized crown. Excessively vigorous trees will affect regrowth over a wide area.
- * Marri in preference to jarrah.
- * Contain low value in preference to high value products.

3.2 Rate of Retention

Trees, as defined above, are to be retained for fauna habitat at a rate of 15 trees per 5 hectares. A clump of 3-4 trees is preferred to an even distribution. If insufficient trees with these characteristics are available retain mature trees as potential habitat.

Habitat trees must be deliberately marked for retention.

Do not retain habitat trees in regeneration gaps of one hectare or less, as they will provide excessive competition for regrowth.

4. GROUND HABITAT

4.1 Characteristics

Logs

Diameter 30-100cm

Pipe 6-15cm diameter extending into log

Length - pipe at one end - 1.5 metres minimum
pipe at both ends - 3 metres minimum

Stumps and Leaning Trees

Stumps which have been lifted creating a protected underground cavity due to a leaning tree or some other agency.

4.2 Rate of retention

Logs and stumps with these characteristics are not common in the forest. Operators should be trained to recognise and retain them. If necessary they should be marked by the treemaker. Where available retain at least one per hectare. All marked logs must be retained undisturbed.

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5. FAUNA HABITAT PROTECTION

As for protection of crop trees, tops and other residues larger than 7.5cm diameter are to be removed 1 metre from the bole of habitat trees to ensure subsequent protection from fire.



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