



Fauna Technical Note No. 12: Goshawk habitat categories

The Fauna Technical Note Series provides information for Forest Practices Officers on fauna management in production forests. These technical notes are advisory guidelines and should be read in conjunction with the requirements of the Forest Practices Code.

The technical notes can be accessed on the Forest Practices Authority's website: www.fpa.tas.gov.au.

1. Introduction

The habitat categories presented in this technical note have been developed for use in forest patch assessments for coupes in the **north-west** of the state within forest types used by the grey goshawk (e.g. blackwood swamp forest, *Leptospermum* or *Melaleuca* swamp forest, riparian blackwood and tea-tree scrub communities, wet eucalypt forest with blackwood/myrtle understorey and rainforest, see appendix 1).

They have been developed from the preliminary results of a current study investigating the foraging habitat of the grey goshawk (Munks, Plowright and Mooney, unpublished data) and from the results of studies which looked at nesting (Brereton and Mooney 1994) and general habitat use (Mooney and Holdsworth 1988) by this species.

These categories indicate habitat suitability for the grey goshawk (1 high priority; 2 medium priority; 3 lower priority, mainly foraging habitat) and may be used to map habitat within a particular coupe/property to assist with decisions for the management of habitat for this species. A mixture of these habitat categories (if available) should be retained in any particular operation area.

2. Categories

Suitability categories: 1 = high priority; 2 = medium priority; 3 = lower priority, mainly foraging habitat

Suitability	Habitat type	Features
1	Priority nesting habitat and foraging habitat.	Mature blackwood swamp forest, wet forest (particularly in riparian areas) with a closed canopy, low stem density and open understorey. Dense stands of <i>Leptospermum</i> or <i>Melaleuca</i> nearby (within 500m).
2	Primarily foraging habitat but some nesting habitat.	Wet eucalypt forest and rainforest with a closed canopy but dominated by regrowth or poles (medium stem density). Open understorey but dense stands of <i>Leptospermum</i> or <i>Melaleuca</i> nearby (within 500m).
3	Primarily foraging habitat.	Forest with a closed canopy but dominated by regrowth and poles (medium stem density) and a dense understorey, e.g. dense <i>Melaleuca</i> patches or; forest with an open canopy but with a dense understorey suitable for prey species or; young regrowth or predominantly dense <i>Melaleuca</i> regrowth.

Mature forest is important for this species as large 'habitat' trees provide the best nesting sites. Nest trees have a good structure for nest defense; a closed canopy enabling protection from aerial predators. Also, in general there is little branch connection between mature trees reducing the risk of predation from 'climbers' i.e. quolls and young devils.

Conservation management of grey goshawk habitat within a particular operation area should aim to:

1. identify and protect nesting sites and habitat
2. capture a minimum of 2–3 ha of prime nesting habitat as a consolidated patch in a 50ha area. The long term viability of any patches retained must be considered (ie. stock browsing, edge effects, windthrow etc.)
3. capture foraging habitat by incorporating into streamside reserves wherever possible or retaining viable patches if there are no defined streams.

Future work is required to further define the habitat categories, including:

- refinement of the nesting habitat model by collecting information on active nests in north-west including patch size
- long term monitoring of goshawk nests to obtain information on nest use and productivity
- survey of goshawk nests and activity status using a questionnaire for contractors
- comparison of foraging range in north-western wet forests with forests in the rest of the state.

Further reading

Brereton, R and Mooney, NJ 1994, 'Conservation of the nesting habitat of the grey goshawk *Accipiter novaehollandiae* in Tasmanian State forests', *Tasforests* 6: 79-91.

Mooney, N and Holdsworth, M 1988, Observations on the use of habitat by the grey goshawk in Tasmania, *Tasmanian Bird Report* 17: 1-12.

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This technical note has been prepared by Sarah Munks (FPA) and Nick Mooney (formerly DPIPWE). It should be cited as:

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APPENDIX 1

Grey goshawk habitat categories and equivalent RFA forest communities

Habitat category	RFA forest community
Blackwood swamp forest	<i>Acacia melanoxylon</i> on flats (BF)
<i>Leptospermum</i> or <i>Melaleuca</i> swamp forest	<i>Leptospermum lanigerum</i> – <i>Melaleuca squarrosa</i> swamp forest (L)
Wet eucalypt forest with blackwood/myrtle understorey	<i>Eucalyptus obliqua</i> wet forest (OT) <i>Eucalyptus brookeriana</i> wet forest (BA) <i>Eucalyptus regnans</i> forest (R) <i>Eucalyptus nitida</i> wet forest (NT)
Rainforest	Tall rainforest (M+)

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2.1	Feb 2011	Nina Roberts	Note: the wording of this document is identical to that approved by the FPA Biodiversity Manager in early 2010, except for the addition of document control information.