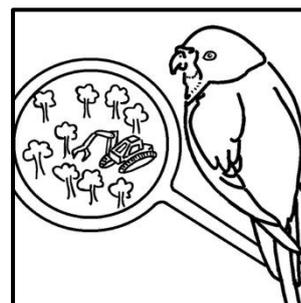


# Forestry Watch Survey Report

Coupe Number: DN007B

Location: Denison Ridge, near Lonnavale

Date: 25/7/20



## Coupe Snapshot:

<b>Size:</b>	<b>35 ha</b>	<b>Year to be logged:</b>	<b>Contingency</b>
<b>Percentage old-growth:</b>	<b>89%</b>		
<b>Natural Values:</b>	Swift parrot habitat, masked owl habitat, spotted tailed quoll habitat, numerous hollow-bearing trees, high carbon storage capacity.		

## Introduction

Forestry Watch conducted a citizen science survey of the coupe DN007B on the 25<sup>th</sup> of July 2020. This coupe was selected by the team due to its potential for good quality habitat, in particular for the critically endangered Swift Parrot (*Lathamus discolor*).

## Vegetation

DN007B is listed on TASVEG 4.0 as *Eucalyptus delegatensis* forest over rainforest. Forestry Watch found that the dominant species were *E. globulus* and in some areas, *E. regnans*. The plant community differed from the typical *E. globulus* wet forest as it also contained emerging rainforest in the understory. This suggests that the vegetation type is different than that as stated in TASVEG. The surveyed areas of the coupe show no past human disturbance, indicating old growth forest.

## Survey findings:

- Very high quality swift parrot breeding and foraging habitat
- High quality masked owl habitat
- Old growth forests, with high carbon storage potential
- High quality habitat for a variety of other threatened and non-threatened species

## Density of Large Habitat Trees

Density of Large Habitat Trees >150cm diameter	Density of Medium Habitat Trees >100cm diameter
118 per ha	20 per ha

## Conclusion:

Our survey shows that the forests within this coupe are excellent habitat for the swift parrot. The FPA Fauna Technical Note: Identifying swift parrot breeding habitat (2014) provides the following guidelines:

- High quality nesting habitat in wet forests: > 8 trees/ha with a dbh > 150cm
- High quality foraging habitat: ≥ 50% of the stems over 40cm dbh in any one hectare patch are foraging-trees (foraging-trees being *E. globulus* or *E. ovata* dbh ≥ 40)

As our survey results are far in excess of these figures, there is strong evidence that the forest in this coupe is very high quality habitat for swift parrots. The forest is also high quality habitat for threatened species such as the masked owl, as well as other threatened and non-threatened species. In particular, this is due to the prevalence of hollows in old growth trees. Carbon storage potential is also high, as there is a high density of large trees.

Forestry Watch recommends that this forest is protected in order to protect wildlife such as the critically endangered swift parrot, and for its carbon storage potential.

### **Previous findings:**

A search of the Natural Values Atlas, a state government database which records threatened species information, has found the following threatened species and other features to occur near the coupe:

- Observations of swift parrots, spotted-tail quoll, white-bellied sea eagle, masked owl, Tasmanian devil, Mount Mangana stag beetle, Tasmanian wedge-tailed eagle, azure kingfisher, and eastern quoll within a 5km radius
- Core habitat for the masked owl, grey goshawk, and the eastern quoll within a 5km radius

### **Threatened Species Information:**

*Swift parrot (Lathamus discolor)*, **Critically Endangered** (EPBC 1999)

The biggest threat to Swift Parrots is habitat destruction. Ideal nesting habitat is mature hollow bearing trees within 10 kilometres of flowering *Eucalyptus globulus* (Tasmanian Blue Gum) or *Eucalyptus ovata* (Black Gum). High quality nesting habitat for swift parrots is considered to have more than 15 trees over 100 cm diameter per hectare or 8 trees over 150cm.

*Masked owl (Tyto novaehollandiae subsp. Castanops)*, **Vulnerable** (EPBC 1999)

The Tasmanian Masked owl is estimated to have only 500 breeding pairs remaining. Masked owls require large hollows only found in mature forests. The main threat to the masked owl is the clearing of nesting and foraging habitat. High quality masked owl habitat is considered to have more than eight trees over 150cm dbh per hectare.

*Spotted tailed quoll (Dasyurus maculatus)*, **Vulnerable** (EPBC 1999)

The spotted tailed quoll requires large tracts of forest with potential den sites. Den sights and hollows required by prey are removed by intensive forestry practices, especially when logging is followed by burning, rendering the area unsuitable habitat.

*Tasmanian Devil (Sarcophilus harrisii)*, **Endangered** (Threatened Species Act 1995)

The Tasmanian Devil have large ranges which span over several square kilometres. Old-growth forests provide important habitat for denning, which includes hollow logs and dense vegetation. Logging native forests can destroy dens or potential denning habitat.

*Mt Mangana stag beetle (Lissotes menalcas)*, **Vulnerable** (Threatened Species Act 1995)

The Mount Mangana stag beetle is endemic to the wet forests of southern Tasmania. It lives in logs rotting on the forest floor. The greatest threat to the beetle is the removal of these logs by forest clearing and burning.

### **Old growth and carbon storage**

Old growth is defined as 'Ecologically mature forest where the effects of disturbances are now negligible'. Old-growth *Eucalypts regnans* forests are the most carbon dense forests in the world. Large, old trees still grow in width and draw down more carbon than younger trees. Logging of old growth followed by intensive harvesting cycles causes the release of carbon stored in forest soils in a process that continues centuries after initial logging.

### **References:**

Forest Practices Authority. (2014, June). *Fauna Technical Note No. 3 : Identifying swift parrot breeding habitat*. Forest Practices Authority.

If you would like more information about the methodology used in this survey, would like to use the data, or have any general questions, please contact us. If you would like to join one of our surveys, please send us an email or keep an eye out for events on our facebook page.

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