

## TAXON SUMMARY

# Sooty Owl (Australian)

1	Family	Tytonidae
2	Scientific name	<i>Tyto tenebricosa tenebricosa</i> (Gould, 1845)
3	Common name	Sooty Owl (Australian)
4	Conservation status	Least Concern

### 5 Reasons for listing

Most suitable habitat within the historical range of this subspecies is uncleared and surveys have shown that current logging practices do not reduce Sooty Owl density in at least 50% of their range. There are at least two sub-populations, one of which contains more than 1,000 mature individuals (so not Vulnerable: C, even were the population found to be declining).

	Estimate	Reliability
Extent of occurrence	230,000 km <sup>2</sup>	medium
trend	stable	high
Area of occupancy	50,000 km <sup>2</sup>	low
trend	stable	medium
No. of breeding birds	10,000	low
trend	stable	medium
No. of sub-populations	2	medium
Largest sub-population	9,700	low
Generation time	5 years	low

### 6 Intraspecific taxa

*T. t. arfaki* of New Guinea is the only other recognised subspecies. Global status of species is Least Concern.

### 7 Past range and abundance

Disjunct distribution through coastal and near-coastal eastern Australia, between Clarke Ra., central Qld, and Kinglake National Park, Dandenong and Strzelecki Ra., Vic. (Schodde and Mason, 1980, Higgins, 1999).

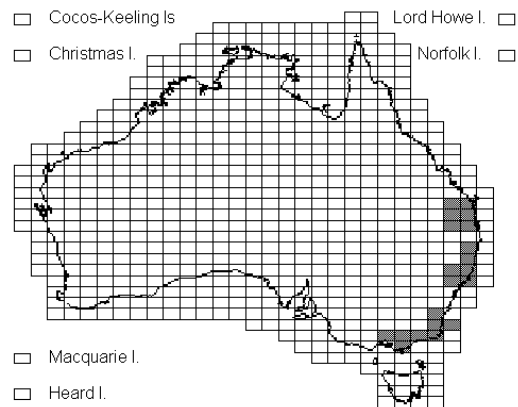
### 8 Present range and abundance

Although the overall distribution of Sooty Owls is little changed, there have been local declines and extinctions, particularly from Big Scrub area, northern N. S. W. and probably central Gippsland, Vic. In north-east New South Wales, both numbers and area occupied (now ca. 3,000-3,500 pairs) are estimated to be at 80% of pre-European levels (Debus, 1994, Kavanagh *et al.*, 1995, NSW NPWS, 1998). In Victoria, fewer than 800 (and probably 500) individuals (Silveira, 1997, Higgins, 1999). Estimated 175 individuals in 3,200 km<sup>2</sup> of State Forest and National Park in south-eastern New South Wales (Kavanagh, 1997).

### 9 Ecology

Sooty Owls live in wet eucalypt forest and rainforest that grows on fertile soils, where there are tall emergent trees. They are most frequently found in tall old-growth

forests, with a dense understorey, but may also live in younger forests if there are suitable nesting trees nearby (Higgins, 1999). Suitable habitat is largely confined to gullies and valley slopes (Smith, 1984a, Kavanagh and Jackson, 1997). Optimal habitat contains tall eucalypts with large hollows suitable for nesting and roosting, but also a range of hollows that provide shelter for prey (Milledge and Palmer, 1990). The same nest is used repeatedly, and the owls also roost, and occasionally nest, in caves (Hyem, 1979, Schodde and Mason, 1980, Hollands, 1991). Within forests, Sooty Owls hunt in both open and closed forest, but apparently avoid clearings (Loyn *et al.*, 1986, Lundie-Jenkins, 1993). Their diet is dominated by a range of arboreal and terrestrial mammals, including introduced species in disturbed areas, as well as some birds (Schodde and Mason, 1980, Smith, 1984b, Loyn *et al.*, 1986, Lundie-Jenkins, 1993, Holmes, 1994, Higgins, 1999).



### 10 Threats

Clearance of habitat for agriculture is likely to have adversely affected Sooty Owls, with some of the remaining habitat fragmented or degraded by logging, burning, dieback and urbanisation (Lundie-Jenkins, 1993, Kavanagh and Peake, 1993, Chafer and Anderson, 1994, Debus, 1994, Kavanagh and Jackson, 1997). In the Victorian Mountain Ash *Eucalyptus regnans* forests, the Sooty Owl is mainly found in forest that has not been logged or burnt for over 150 years (Milledge and Palmer, 1990, Milledge *et al.*, 1991). However, more than 50% of former habitat still remains uncleared and un-fragmented, and in northern New South Wales, the owl's presence is either independent of logging history, or associated with logged sites that have few old, hollow trees.

Recolonisation of 20 year old regrowth has been described (Kavanagh *et al.*, 1995). This apparent discrepancy may be related to differences in either floristic diversity with the Mountain Ash forests studied being less diverse than those studied elsewhere, or in logging practices (Kavanagh *et al.*, 1995). Listing at a State level may be warranted because of low regional numbers.

## 11 Recommended actions

- 11.1 Undertake follow-up surveys in N. S. W. forests to determine trends in abundance and baseline surveys in forests of south-east Qld.

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### Comments received from

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