

RECOVERY OUTLINE

Masked Owl (Tasmanian)

1	Family	Tytonidae
2	Scientific name	<i>Tyto novaehollandiae castanops</i> (Gould, 1837)
3	Common name	Masked Owl (Tasmanian)
4	Conservation status	Endangered: C2b

5 Reasons for listing

There are about 1,300 mature individuals of this subspecies in a single sub-population, which is likely to be declining (Endangered: C2b).

	Estimate	Reliability
Extent of occurrence	50,000 km ²	high
trend	stable	high
Area of occupancy	7,300 km ²	high
trend	decreasing	medium
No. of breeding birds	1,300	high
trend	decreasing	medium
No. of sub-populations	1	high
Generation time	5 years	low

6 Intraspecific taxa

T. n. melvillensis (Tiwi Is) is Endangered.

T. n. novaehollandiae (southern mainland Australia) and *T. n. kimberli* (northern mainland Australia) are Near Threatened. There are four other subspecies in New Guinea and nearby islands. The species' global status is Least Concern.

7 Past range and abundance

Endemic to mainland Tasmania, where recorded from all but the south-west. Highest densities are in the drier, lowland regions of the central valleys and the north coast (Bell *et al.*, 1997).

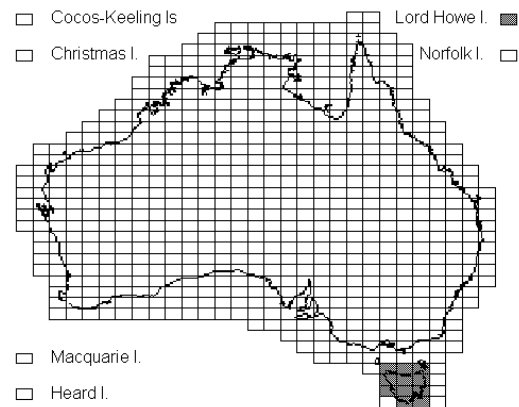
8 Present range and abundance

As above. The population is estimated to contain 1,330 breeding birds or 615 breeding pairs and probably occurs at a higher density than any of the mainland subspecies (Bell *et al.*, 1997). Many cliff roosts are no longer used, which may indicate a larger population in the past (N. Mooney). Has been successfully introduced to Lord Howe I., where it is considered a threat to the Lord Howe Woodhen *Tricholimnas sylvestris* and culled when possible (Higgins, 1999).

9 Ecology

In Tasmania, most records of the Masked Owl are from lowland, dry sclerophyll forest, although it is also found occasionally in wet eucalypt forest, non-eucalypt dominated forest, scrub and urban environments. Most records are from close to the forest edge (natural ecotones or forest edge/cleared land) and where there

is a mosaic of understorey components, ranging from open to densely vegetated (Bell *et al.*, 1997). Nests, in which 2-4 eggs are usually laid, are in large hollows in eucalypts, primarily White Gum *Eucalyptus viminalis* that is more than 150 years old (Mooney, 1997). The main foods taken in agricultural areas are introduced rabbits and Black Rats *Rattus rattus*. In less disturbed environments, marsupials and birds are taken (Hill, 1955, Mooney, 1993).



10 Threats

Although there appears to be no change in area of occupancy, habitat fragmentation has reduced hollow availability to the point that some pairs have problems breeding (N. Mooney). Woodland clearance continues apace in Tasmania, for both agriculture and pine plantations, and nest trees are often felled for rural residential development or firewood collection. There may be competition for remaining hollows with feral bees, introduced Laughing Kookaburras *Dacelo novaeguineae* and the increasing populations of Common Brushtail Possums *Trichosurus vulpecula* (Bell *et al.*, 1997).

11 Information required

- 11.1 Validate monitoring techniques.
- 11.2 Investigate effects of changes in prey abundance, habitat fragmentation and logging.
- 11.3 Assess home-range size and habitat utilisation.

12 Recovery objectives

- 12.1 Maintain existing population of Masked Owl.

13 Actions completed or under way

13.1 Known nests have been mapped and management recommendations prepared.

14 Management actions required

14.1 Undertake surveys throughout preferred habitat including production forest (on private and public lands) to identify distribution, density and nest sites

14.2 Erect nest boxes in territories that lack adequate hollows.

14.3 Protect adequate areas of current and potential breeding, feeding and roosting habitat from clearing, particularly dense gully and streamside vegetation, monitoring compliance biennially.

14.4 Place all Masked Owl breeding areas that are public land under secure conservation management, particularly those in timber reserves, transport corridors and local government land.

14.5 Within the owl's range manage at least 15% of the pre-European area of all woodland communities on public or private land for nature conservation, using incentives where necessary.

14.6 Promote revegetation and land reclamation that recreates woodland habitat with a full complement of biodiversity, including the owl.

14.7 Control and reduce firewood collection from areas occupied by Masked Owls, promoting wood-lot development close to markets.

14.8 Undertake a public information and education program.

15 Organisations responsible for conservation

Tasmanian Parks and Wildlife Service.

16 Other organisations involved

Forestry Tasmania, Australasian Raptor Association of Birds Australia, timber extraction companies, private land-holders.

17 Staff and financial resources required for recovery to be carried out

Staff resources required 2001-2005

	0.2	Project Officer
	0.5	Extension Officer ¹

Financial resources required 2001-2005

Action	Conservation agencies	Other funding sources	Total
Validate monitoring techniques	\$15,000	\$20,000	\$35,000
Ecological studies of home range and effects of clearing	\$30,000	\$45,000	\$75,000
Surveys	\$37,000	\$41,000	\$78,000
Erect nest boxes	\$2,500	\$18,000	\$20,500
Maintain a nest site register	\$9,000	\$0	\$9,000
Protect habitat on private land	\$50,000	\$20,000	\$70,000
Refine management guidelines for timber production ²	\$18,000	\$4,000	\$22,000
Manage and protect habitat in production forests	\$50,000	\$20,000	\$70,000
Run public information and education program	\$20,000	\$0	\$20,000
Total	\$231,500	\$168,000	\$399,500

¹ Does not include costs of large-scale strategic actions

² Costs shared with Swift Parrot, Australian Owlet-nightjar and Forty-spotted Pardalote

18 Bibliography

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Comments received from

Stephen Debus, Nick Mooney, Penny Olsen.