

RECOVERY OUTLINE

Forty-spotted Pardalote

1	Family	Pardalotidae
2	Scientific name	<i>Pardalotus quadragintus</i> Gould, 1838
3	Common name	Forty-spotted Pardalote
4	Conservation status	Endangered: B1+2bcd

5 Reasons for listing

The area of occupancy of this species is only 40 km² and severely fragmented (Endangered: B1). A continuing decline is projected in the area of occupancy (2b), extent of habitat (c) and number of sub-populations (d).

	Estimate	Reliability
Extent of occurrence	330 km ²	high
trend	stable	high
Area of occupancy	40 km ²	high
trend	decreasing	high
No. of breeding birds	3840	high
trend	stable	high
No. of sub-populations	5	high
Largest sub-population	1920	high
Generation time	4 years	low

6 Intraspecific taxa

None described.

7 Past range and abundance

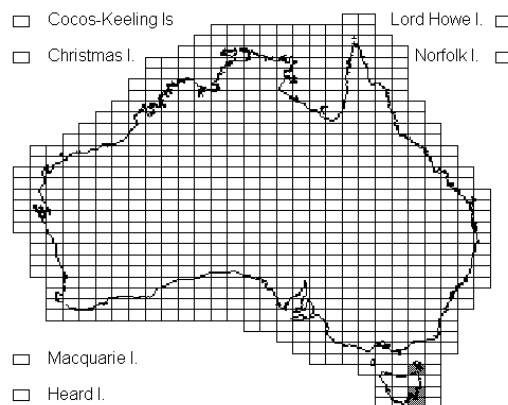
Endemic to Tasmania. Originally thought widespread and locally common through most of eastern Tasmania to 1,000 m elevation, north to Launceston and west to central highlands, around Bothwell, Ouse R. and the Steppes, and on Flinders I. (Bulman *et al.*, 1986). Recent modelling suggests always restricted to narrow strip along east coast, Tasman Peninsula and Flinders I., but particularly between St Helens and Southport (Brereton *et al.*, 1997).

8 Present range and abundance

Maria and Bruny Is (90% of total population). Small colonies on Flinders I., Tinderbox Peninsula, and at Howden and Mt Nelson near Hobart. Possibly lost from Lime Bay and Coningham. In 1986, 3520 individuals in 110 colonies on 3,789 ha (Brown, 1986, 1989). In 1994-1997, 3,840 individuals in 121 colonies on 4,107 ha (Bryant, 1997).

9 Ecology

The Forty-spotted Pardalote is found in open White Gum *Eucalyptus viminalis* forest or woodland. The White Gum provides most of the pardalote's food in the form of invertebrates, lerp secretions and manna (Woinarski and Bulman, 1985), as well as hollows for nesting.



10 Threats

About 60% of birds live in habitat that is reserved, but habitat continues to be lost from private land because of clearance, sheep grazing, which prevents White Gum regeneration, subdivision and urban development. In the past, such developments on the main island may have allowed the aggressive honeyeater, the Noisy Miner *Manorina melanocephala* or the larger Striated Pardalote *P. striatus* to invade the pardalote's habitat. Wildfire that retards regrowth of White Gums can also be a threat, particularly for isolated sub-populations (Bulman *et al.*, 1986, Bryant, 1991, TSU, 1998).

11 Information required

- 11.1 Survey all habitat identified by modelling
- 11.2 Develop a management strategy for and detailed map of White Gum communities.
- 11.3 Elucidate relationship between site variables and food productivity.
- 11.4 Develop understanding of juvenile dispersal, home range and colony dynamics.

12 Recovery objectives

- 12.1 Maintain all existing colonies.
- 12.2 Expand range, particularly on main island, as a result of habitat regeneration.
- 12.3 Integrate management with biodiversity of other species (Bryant, 1999).

13 Actions completed or under way

- 13.1 Surveys were undertaken in 1981 and 1994 and will be repeated at five to ten year intervals.
- 13.2 A key site on north Bruny I. has been acquired for the species and a management plan approved.
- 13.3 Key sites have been acquired on Flinders I.
- 13.4 Prescriptions have been identified for production forestry within 5 km of the coast between Bicheno and Southport.
- 13.5 Prescriptions have been provided for Maria I. National Park Management Plan.
- 13.6 Key sites have been surveyed and new colonies found.
- 13.7 A community network has been established on Bruny I.
- 13.8 A Recovery Plan has been implemented and a new integrated plan prepared (Bryant, 1999).

14 Management actions required

- 14.1 Prevent further White Gum clearance in any colony and provide long term protection for existing stands.
- 14.2 Manage existing White Gum stands by limiting grazing and firewood collection and managing fuel levels with a mosaic of low intensity burns.
- 14.3 Re-establish White Gum at appropriate sites within 5 km of the coast between Bicheno and Southport, particularly near existing colonies.

15 Organisation responsible for conservation

Tasmanian Parks and Wildlife Service.

16 Other organisations involved

Residents and land-owners of Bruny I. and Flinders I., local government, Landcare groups, Bruny I. School, Hobart Botanic Gardens, Forestry Tasmania, Threatened Species Network.

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

<i>Staff resources required 2001-2005</i>	0.5	<i>Project Officer</i>
	0.5	<i>Extension Officer¹</i>
	0.5	<i>PhD student</i>

Financial resources required 2001-2005

<i>Action</i>	<i>Conservation agencies</i>	<i>Other funding sources</i>	<i>Total</i>
<i>Map White Gum, develop a management strategy and undertake demographic studies</i>	\$150,000	\$0	\$150,000
<i>Provide input to prevent clearance of White Gum and establish management agreements with landowners</i>	\$29,500	\$20,000	\$49,500
<i>Review effectiveness of management guidelines for timber production in breeding areas¹</i>	\$18,000	\$4,000	\$22,000
<i>Strategically re-vegetate and rehabilitate habitat¹</i>	\$60,000	\$60,000	\$120,000
<i>Continue education, awareness and integrate management needs with other biodiversity values</i>	\$32,000	\$12,000	\$44,000
<i>Monitor population</i>	\$10,000	\$10,000	\$20,000
<i>Total</i>	\$299,500	\$106,000	\$405,500

¹ Cost shared with Swift Parrot.

18 Bibliography

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Comments received from
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