RECOVERY OUTLINE

Helmeted Honeyeater

(Yellow-tufted Honeyeater: west Gippsland)

1	Family	Meliphagidae
2	Scientific name	*Lichenostomus melanops cassidix* (Gould, 1867)
3	Common name	Helmeted Honeyeater
4	Conservation status	Critically Endangered: B1+2c, D

5 Reasons for listing

This species is found in a single area of about 5 km² (Critically Endangered: B1) and the quality of habitat is still declining (B2c). The wild population also contains fewer than 50 mature individuals (D).

	Estimate	*Reliability*
Extent of occurrence	*5 km²*	*high*
trend	*stable*	*high*
Area of occupancy	*5 km²*	*high*
trend	*stable*	*high*
No. of breeding birds	*48*	*high*
trend	*increasing*	*high*
No. of sub-populations	*1*	*high*
Generation time	*5 years*	*medium*

6 Infraspecific taxa

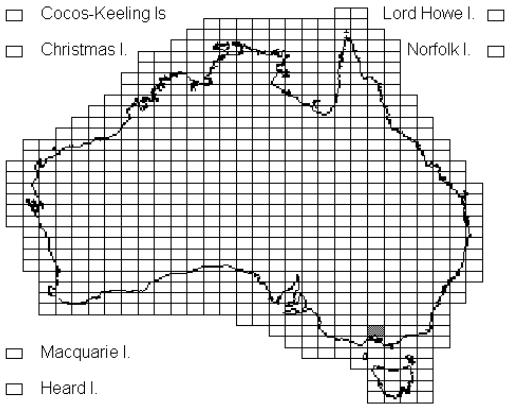
L. m. melanops (south-eastern Australia, south or east of the Great Dividing Ra.) and *L. m. meltoni* (south-eastern Australia, inland slopes of the Great Dividing Ra.). Both are phenotypically and genetically distinct from the Helmeted Honeyeater (Blackney and Menkhorst, 1993, Damiano, 1996).

7 Past range and abundance

Endemic to Victoria. Scattered distribution through tributaries of the middle Yarra R. (Hayes, 1999). The population size has declined throughout the 20th century with two of the last three colonies being eliminated by fire in 1983 (Wakefield, 1958, Backhouse, 1987, Smales *et al.*, 1990, Blackney and Menkhorst, 1993).

8 Present range and abundance

Currently 90-103 individuals, including 24 breeding pairs along 5 km beside two creeks in Yellingbo Nature Conservation Reserve. Birds have also recently been reintroduced to Woori Yallock Creek. There were fewer than 50 birds in 1987, 15 breeding pairs in 1990, and 84 birds and 22 breeding pairs in 1992/3 (Blackney and Menkhorst, 1993, McMahon and Franklin, 1993, Menkhorst *et al.*, 1999). There are also 35 individuals in captivity.



9 Ecology

The Helmeted Honeyeater inhabits streamside lowland swamp forest. It is rarely found far from water and all current birds live in closed riparian forest dominated by Mountain Swamp Gum *Eucalyptus camphora* where they feed among the decorticating bark (Pearce *et al.*, 1994). Some pairs feed on Swamp Gum *E. ovata* in winter and they will also use patchy thickets of Scented Paperbark *Melaleuca squarrosa*, Woolly Tea-tree *Leptospermum lanigerum*, Prickly Tea-tree *L. juniperinum* and sedges (Backhouse, 1987, Blackney and Menkhorst, 1993, Moysey, 1997, Menkhorst *et al.*, 1999). They are sedentary, nesting from August to January. Clutch size averages 2 (Franklin *et al.*, 1995).

10 Threats

The decline in range and abundance of the Helmeted Honeyeater has been caused by extensive destruction of its habitat, largely through clearance although some remnant habitat patches have been destroyed by fire. The remaining colonies at Yellingbo are threatened by the proximity to territories of Bell Miner *Manorina melanophrys* colonies which reduce breeding success, habitat availability and quality (Loyn *et al.*, 1983, Franklin and Smales, 1990, Pearce *et al.*, 1995, Menkhorst *et al.*, 1999), by a shortage of high quality breeding territories near existing colonies, and rapidly spreading dieback of eucalypts in one colony (Menkhorst *et al.*, 1999).

11 Information required

11.1 Determine techniques for avoiding tree death.

12 Recovery objectives

12.1 Attain a wild population of at least 200 mature individuals spread between two catchments.

12.2 Maintain the captive colony of Helmeted Honeyeaters.

12.3 Maintain genetic diversity within the overall population.

12.4 Increase the value to Helmeted Honeyeaters of the Yellingbo Nature Conservation Reserve habitat and that elsewhere in the former range.

13 Actions completed or under way

13.1 Habitat has been reserved specifically for the Helmeted Honeyeater.

13.2 A continuing high level of community commitment to recovery has been generated.

13.3 Detailed research has been undertaken on genetics, breeding biology and feeding ecology.

13.4 Population size and breeding success of existing colonies is being monitored.

13.5 Bell Miners are being controlled.

13.6 Population Viability Analysis is ongoing.

13.7 Land adjacent to Yellingbo is being regenerated.

13.8 Nest protectors have been developed.

13.9 A captive colony is established at Healesville, with two separate colonies at release sites, a captive breeding manual has been prepared and captive-reared birds are being successfully released to the wild.

13.10 Some of the causes of eucalypt dieback in the reserve have been elucidated.

13.11 Erosion control has been undertaken on Cockatoo Ck to reduce dieback cause by siltation.

13.12 A demonstration colony has been established within Healesville Sanctuary.

13.13 Recovery is being coordinated by a Recovery Team.

14 Management actions required

14.1 Monitor new colonies.

14.2 Reintroduce birds to new sites, reinforcing new sites as necessary and minimising disease transfer risks.

14.3 Encourage management of potential habitat so that it remains suitable for Helmeted Honeyeater.

14.4 Maintain genetic diversity within the total population.

15 Organisations responsible for conservation

Victorian Department of Natural Resources and Environment.

16 Other organisations involved

Birds Australia, other bird-watching societies, Friends of the Helmeted Honeyeater, Latrobe University, Parks Victoria, Healesville Sanctuary, Australian Regional Association of Zoological Parks and Aquaria, Australian Passerine Taxon Advisory Group.

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

Staff resources required 2001-2005

1.5	*Project Officer*
1.0	*Rangers*
1.5	*Bird keepers*

Financial resources required 2001-2005

Action	*Conservation agencies*	*Other funding sources*	*Total*
Bell Miner control	$78,800	$0	$78,800
Monitor population size and breeding success	$109,100	$0	$109,100
Monitor new colonies	$18,800	$0	$18,800
Ongoing Population Viability Analysis	$9,800	$20,600	$30,400
Monitor new colonies	$18,800	$0	$18,800
Reintroduction to new sites	$108,800	$3,000	$111,800
Encourage sympathetic management of potential habitat	$25,600	$0	$25,600
Review, update then implement habitat management	$57,300	$75,500	$132,800
Determine cause and solutions to tree dieback	$64,000	$0	$64,000
Maintain the captive colony	$0	$232,800	$232,800
Maintain genetic diversity within the total population	$35,500	$87,300	$122,800
Maintain public awareness and run an education program	$71,200	$50,800	$122,000

Establish a demonstration colony within Healesville Sanctuary	$0	$215,000	$215,000
Recovery co-ordination	$35,900	$41,500	$77,400
Total	$633,600	$726,500	**$1,360,100**

18 Bibliography

Backhouse, G. N. 1987. Management of remnant habitat for conservation of the Helmeted Honeyeater *Lichenostomus melanops cassidix*. Pp. 287-294 in *Nature Conservation: the Role of Remnants of Native Vegetation*. D. A. Saunders, G. W. Arnold, A. A. Burbidge and A. J. M. Hopkins (eds). Surrey Beatty, Chipping Norton.

Blackney, J. R. and Menkhorst, P. W. 1993. Distribution of subspecies of the Yellow-tufted Honeyeater in the Yarra Valley Region, Victoria. *Emu* 93:209-213.

Damiano, J. D. 1996. Microsatellite analysis of genetic variation within the Helmeted Honeyeater *Lichenostomus melanops cassidix* and between the related subspecies *L. m. gippslandicus* and *L. m. meltoni*. PhD thesis, Latrobe University.

Franklin, D. C. and Smales, I. J. 1990. Helmeted Honeyeater – the 1989/1990 breeding season. Unpublished Report to the Helmeted Honeyeater Recovery Team.

Franklin, D. C., Smales, I. J. and Menkhorst, P. W. 1995. The reproductive biology of the Helmeted Honeyeater *Lichenostomus melanophloia cassidix*. *Wildl. Res.* 22:173-191.

Hayes, V. 1999. Genetic insights into the taxonomy and conservation of the Helmeted Honeyeater (*Lichenostomus melanophloia cassidix*) using microsatellites. BSc thesis, Latrobe University, Bundoora.

Loyn, R. H., Runnals, R. G., Gorward, G. Y. and Tyers, J. 1983. Territorial Bell Miners and other birds affecting populations of insect prey. *Science* 221:1411-1413.

McMahon, A. R. G. and Franklin, D. C. 1993. The significance of Mountain Swamp Gum for Helmeted Honeyeater populations in the Yarra Valley. *Vic. Nat.* 110:230-237.

Menkhorst, P. W., Smales, I. and Quin, B. 1999. Helmeted Honeyeater Recovery Plan 1999-2003. Department of Natural Resources and Environment, Melbourne.

Moysey, E. D. 1997. A study of resource partitioning within Helmeted Honeyeater *Lichenostomus melanophloia cassidix* during the non-breeding season. *Emu* 97:207-219.

Pearce, J., Burgman, M. A. and Franklin, D. C. 1994. Habitat selection by Helmeted Honeyeaters. *Wildl. Res.* 21:53-63.

Pearce, J., Menkhorst, P. W. and Burgman, M. A. 1995. Niche overlap and competition for habitat between the Helmeted Honeyeater and the Bell Miner. *Wildl. Res.* 22:633-646.

Smales, I. J., Craig, S. A., Williams, G. A. and Dunn, R. W. 1990. The Helmeted Honeyeater: decline, conservation and recent initiatives for recovery. Pp. 225-238 in *Management and Conservation of Small Populations*. T. W. Clark and J. H. Seebeck (eds). Chicago Zoological Society, Chicago.

Wakefield, N. A. 1958. The Yellow-tufted Honeyeater, with a description of a new subspecies. *Emu* 58:162-194.

Comments received from

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