

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA



Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September – 5 October 2016

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

To transfer *Lichenostomus melanops cassidix* from CITES Appendix I to CITES Appendix II, in accordance with provisions of Resolution Conf. 9.24 (Rev CoP 16), Annex 4 precautionary measure A1 and A2a(i).

B. Proponent

Australia*

C. Supporting statement

1. Taxonomy

- | | |
|--------------------------|--|
| 1.1 Class: | Aves |
| 1.2 Order: | Passeriformes |
| 1.3 Family: | Meliphagidae |
| 1.4 Species: | <i>Lichenostomus melanops cassidix</i> |
| 1.5 Scientific synonyms: | |
| 1.6 Common names: | English: Helmeted Honeyeater
French:
Spanish: |
| 1.7 Code numbers: | |

2. Overview

As part of the ongoing periodic review of the Appendices, the Animals Committee recommended that the status of the helmeted honeyeater be evaluated (AC25 Doc. 15.6). The species was selected for periodic review between CoP15 and CoP17 by the Animals Committee at AC 25 in accordance with Resolution 14.8 (Rev. CoP16) on Periodic Review of the Appendices. Notification went to the Parties in Notification 2011/038; Australia undertook to complete this review.

L. m. cassidix was listed on CITES Appendix I on 1 July 1975.

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

The CITES trade database reports three exports from Australia (with some duplicate records due to reporting errors); one export in 2003, one in 2009 and one in 2012. All exports were for scientific research purposes. The 2009 and 2012 exports were of non-viable eggs for research into hatching failure in captive insurance populations.

The primary threat to *L. m. cassidix* is its small, isolated population size and impacts of natural events such as bushfire, drought, climate change (Chambers *et al.* 2008), and potential for disease (Menkhorst 2008).

Resolution 9.24 resolves that, when considering proposals to amend Appendix I and II, species that *are or may be affected by trade* should be included in Appendix I if they meet at least one of the biological criteria listed in Appendix I. A species "is or may be affected by trade" if:

- i) it is known to be in trade (using the definition of 'trade' in Article I of the Convention), and that trade has or may have a detrimental impact on the status of the species; or
- ii) it is suspected to be in trade, or there is demonstrable potential international demand for the species, that may be detrimental to its survival in the wild.

There is no evidence that international trade is or may be a threat to the survival of this species. Therefore *L. m. cassidix* does not meet the basic criteria for inclusion on Appendix I. *L. m. cassidix* is eligible for transfer from Appendix I to Appendix II in accordance with Resolution 9.24 (Rev Cop16).

3. Species characteristics

3.1 Distribution

The helmeted honeyeater occurs only in south-central Victoria, Australia. A natural population survives at Yellingbo Nature Conservation Reserve and there is a small colony (now no longer considered a viable population) at Bunyip State Park (Menkhorst, pers. comm., 2013 in Department of the Environment 2014). It was formerly found in riparian forest of the mid-Yarra River and adjacent catchments of Western Port and nearby areas of South Gippsland.



Source: Species Profile and Threats Database, Department of the Environment, Australia

3.2 Habitat

The helmeted honeyeater most commonly inhabits lowland swamp forest dominated by Mountain Swamp Gum *Eucalyptus camphora*. It is rarely found far from water and all known colonies live in closed riparian forest.

3.3 Biological characteristics

The 'helmeted' honeyeater is a subspecies of the widespread and common Yellow-tufted Honeyeater. Three subspecies of yellow-tufted honeyeater are recognised: *Lichenostomus m. melanops*, *L. m. meltoni* and *L. m. cassidix*, the helmeted honeyeater. The yellow-tufted honeyeater is endemic to eastern Australia and the helmeted honeyeater to south-central Victoria.

The helmeted honeyeater is active, noisy and conspicuous (Magrath et al. 2004). It is a specialist forager on *Eucalyptus* foliage, and forages for arthropods, nectar, manna and honeydew (Wykes 1985).

L. m. cassidix is territorial, and social groups consist of several adult pairs that cooperate in defending their adjacent territories (Smales et al. 1990). Nesting occurs from July to February, resulting in an average clutch of two eggs. As many as four successful clutches have been observed in a single season.

3.4 Morphological characteristics

The helmeted honeyeater is the largest and most brightly coloured subspecies of the yellow-tufted honeyeater. It measures about 17-23 cm and has a weight range of 28-32 g; with olive-green back and upper tail; a pale-yellow breast with darker striations; and yellow throat and crown, separated by a broad black eyestripe contrasting with bright yellow ear tufts that give the species its common name. Sexes are similar. *L. m. cassidix* differs from other subspecies in having a short, golden-yellow crest, which can be pushed forward when the bird is aroused, giving it a 'helmeted' appearance.

3.5 Role of the species in its ecosystem

The family Meliphagidae is the largest bird family that occurs in Australia, with 182 species in 42 genera, with roughly half endemic to Australia (Driskell and Christidis 2004). Their abundance and diversity make them an important component of the natural ecosystem, and they provide services such as pollination (Menkhorst 2008).

4. Status and trends

4.1 Habitat trends

Habitat destruction and concomitant effects have had a major effect on helmeted honeyeater populations. Its decline in range and abundance was caused by extensive clearance of habitat for agriculture. Isolated remnant populations were vulnerable to fire, harassment by Bell Miners and various stochastic events (Menkhorst, 2008).

4.2 Population size

There are estimated to be fewer than 100 mature helmeted honeyeaters in existence. In 2011 the population was estimated at 16 breeding pairs at Yellingbo and a few individuals at Bunyip State Park. Nineteen pairs are presently held in captivity at Healesville Sanctuary and Melbourne Zoo (ZAA, 2015).

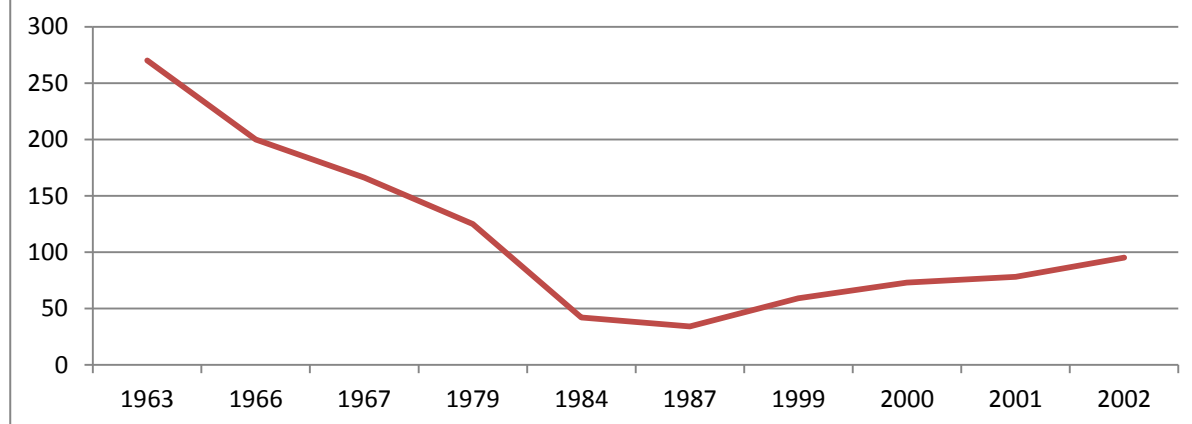
4.3 Population structure

Poorly known.

4.4 Population trends

The Helmeted Honeyeater population declined throughout the 20th century and two of the last remaining colonies were destroyed by fire in 1983 (Smales et al., 1990). The total population had declined to around 50 mature individuals by 1989 and has fluctuated since (Garnett et al., 2010).

L. m cassidix population trend Yellingbo, Victoria (breeding birds and fledgelings)



4.5 Geographic trends

L. m. cassidix is thought to have always had a restricted and patchy distribution. It was previously distributed in an area of 2000 to 3000 km², along the tributaries to the upper Yarra River and Western Port Bay drainages in Victoria (Backhouse 1987) from near Healesville south to Western Port and Outtrim, and from Childers west to Ferntree Gully.

Since 1983, three of the four remaining populations have almost certainly become extinct, and it is now confined to a small section of creek line near Yellingbo, in an area of less than 5 km² (Garnett & Crowley 2000; Higgins et al. 2001).

5. Threats

The main threats to the helmeted honeyeater are its small population size and demographic uncertainty (McCarthy et al., 1994), and limited distribution in a tiny geographical area where its habitat is restricted to linear patches (Garnett et al., 2010). Further threats to the surviving natural colonies at Yellingbo include poor regeneration of understorey as the swamp forest matures (leading to a more open, taller woodland with lower stem density and reduced diversity of shrubs and ground cover, less suited to the foraging behaviours of the species); harassment by Bell Miners *Manorina melanophrys*, which reduce breeding success and compete for food resources; and predation by both native and exotic predators (e.g. feral cat and red Fox) (Garnett et al., 2010).

There is no evidence of international trade threatening the survival of this species.

6. Utilization and trade

6.1 National utilization

None. This subspecies is on occasion displayed in zoos for conservation education purposes.

6.2 Legal trade

The CITES trade database reports three exports from Australia (with some duplicate records due to reporting errors); one export in 2003, one in 2009 and one in 2012. All exports were for scientific research purposes. The 2009 and 2012 exports were of non-viable eggs for research into hatching failure in captive insurance populations.

6.3 Parts and derivatives in trade

Scientific specimens only – preserved carcasses and non-viable eggs.

6.4 Illegal trade

There was, and is currently, no indication of illegal trade in the Helmeted Honeyeater. Illegal trade is not considered to have been a factor in this species decline.

6.5 Actual or potential trade impacts

Unlikely.

7. Legal instruments

7.1 National

The Helmeted Honeyeater is listed as Critically Endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and is listed as Threatened in Schedule 2 of Victoria's *Flora and Fauna Guarantee Act 1988* and Critically Endangered in Victoria under the Advisory List of Threatened Vertebrate Fauna in Victoria 2013.

7.2 International

L. m. cassidix has been listed on Appendix I of CITES since 1975. Permits are required for import and export and no commercial trade is allowed.

8. Species management

8.1 Management measures

L. m. cassidix is one of the most intensively managed species in Victoria, Australia. Routine management includes monitoring of the breeding outcomes; nest protection; release of captive-bred birds or addition of eggs or nestlings to wild nests to form new wild populations and supplement existing wild populations with captive-reared birds; and minimisation of the risk of in-breeding via swapping of eggs or nestlings between populations (Menkhorst 2008). Habitat protection measures include erosion control, weed and pest animal management, and revegetation and rehabilitation of adjacent habitat (Menkhorst 2008).

L. m. cassidix is subject to a recovery plan under national environment legislation (Menkhorst 2008). The long term objective of the plan is to achieve a stable population of at least 1000 individuals in 10 separate but interconnected colonies along several mid-Yarra and Western Port catchment systems. The plan also highlights the importance of managing the captive population of helmeted honeyeaters to provide an insurance population; and of improving public awareness of and support for the recovery program.

8.2 Population monitoring

The wild population is intensively monitored. Territory mapping and visual searching for begging fledglings is used to estimate the number of breeding pairs and production of fledglings. All newly established colonies are monitored, using colour-banding if necessary, to ensure that the maximum information on colony establishment is gathered. The recovery plan proposes the institution of a program of bi-annual population simulations using the most appropriate modelling techniques available and the most recent demographic data to predict the impact of a range of management scenarios.

8.3 Control measures

8.3.1 International

L. m. cassidix has been listed on Appendix I of CITES since 1975.

8.3.2 Domestic

The Helmeted Honeyeater is listed as Critically Endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and is listed as

Threatened in Schedule 2 of Victoria's *Flora and Fauna Guarantee Act 1988* and Critically Endangered in Victoria under the Advisory List of Threatened Vertebrate Fauna in Victoria 2013.

8.4 Captive breeding and artificial propagation

Helmeted Honeyeaters are held at Healesville Sanctuary (18 pairs and 23 unsexed offspring at June 2015) and Melbourne Zoo (1 pair at June 2015) (Zoo and Aquarium Association 2015) for captive breeding, with the aim of releasing progeny into the wild (Zoo and Aquarium Association 2012). Genetic diversity of captive birds is augmented by a small number of birds captured from wild populations.

8.5 Habitat conservation

The major focus of habitat management is to control erosion, re-institute a natural flood regime and reduce silt deposition on existing flood plains. Other priorities include weed and pest animal management, re-vegetation of degraded areas within the reserve (McMahon *et al.* 1991, Bennetts *et al.* 2006) and the rehabilitation of habitat on private land adjoining the reserve.

Since its formation in 1989, local group Friends of the Helmeted Honeyeater has implemented a revegetation program on private land surrounding the reserve (Gadsden & Ashby 1995), and at sites within the reserve.

8.6 Safeguards

Protection under national and state laws safeguard the species by controlling impacts on wild animals and the taking from the wild of endangered species. Permission for collection of live birds from the wild will only be issued if the proposed work falls within the framework for the recovery of the species. Other actions that may impact on the population or habitat of the species are also controlled.

9. Information on similar species

The genus *Lichenostomus* is the largest Australian bird genus and comprised of around 20 species (Nyári and Joseph 2011). Several species in the genus are characterised by a black eyestripe with contrasting shades of white, grey or yellow above and below. However, *L. m. cassidix* is most likely to be confused with its conspecifics *L. m. melanops* and *L. m. meltoni* (Australian Biological Resources Study 2015).

10. Consultations

The Australian CITES Scientific and Management Authorities are grateful for the support of the Victorian Department of Environment, Land, Water and Planning.

11. Additional remarks

While the Helmeted Honeyeater is regarded as Critically Endangered, it is illegal for anyone other than licensed institutions to keep this and related taxa in captivity in Australia. Illegal collection from the wild of this and other honeyeater taxa (Meliphagidae) is considered highly unlikely. Trade is therefore not considered a threat.

The Helmeted Honeyeater is the official bird emblem of the State of Victoria. This status should ensure its conservation remains a high priority for the state conservation agency, and that wild and captive populations will continue to be monitored closely.

12. References

Australian Biological Resources Study (2015) Australian Faunal Directory entry for *Lichenostomus melanops*.

Backhouse, G.N. (1987) Management of remnant habitat for conservation of the Helmeted Honeyeater *Lichenostomus melanops cassidix*, in Saunders, D.A., Arnold, G.W. Burbridge, A.A. & Hopkins, A.J.M.(eds) Nature conservation: the role of remnants of native vegetation. Surrey Beatty, CSIRO and CALM. pp 287-94.

- Bennetts, K., Cook, D. and Osler, D. 2006. Vegetation restoration plan, and baseline vegetation monitoring, for the degraded section of Cockatoo Swamp, Yellingbo Nature Conservation Reserve. Unpublished report to Melbourne Water. Australian Ecosystems Pty Ltd, Patterson lakes, Victoria.
- Chambers, L. E., Quin, B. R., Menkhorst, P., Franklin, D. C. and Smales, I. 2008. The effects of climate on breeding in the Helmeted Honeyeater. *Emu* 108: 15-22.
- CITES Trade Database, *Lichenostomus melanops cassidix*, accessed 3 June 2015.
- Department of the Environment (2014). Conservation Advice for *Lichenostomus melanops cassidix*
- Driskell, A.C. and Christidis, L. (2004). Phylogeny and evolution of the Australo-Papuan honeyeaters (Passeriformes, Meliphagidae). *Molecular Phylogenetics and Evolution* 31: 943–960.
- Gadsden, G. 2003. Nursery News. *Friends of the Helmeted Honeyeater Newsletter* 15(2): 7-8.
- Garnett, S.T. & G.M. Crowley (2000). The Action Plan for Australian Birds 2000. [Online]. Canberra, ACT: Environment Australia and Birds Australia. Available from:
- Garnett, S.T., Szabo, J.K. and G. Dutson. 2010. The Action Plan for Australian Birds 2010. CSIRO Publishing, Collingwood.
- Higgins, P.J., J.M. Peter & W.K. Steele (Eds) (2001). *Handbook of Australian, New Zealand and Antarctic Birds. Volume Five - Tyrant-flycatchers to Chats*. Melbourne: Oxford University Press
- Magrath, M.J.L., M.A. Weston, P. Olsen & M. Antos (2004). Draft Survey Standards for Birds: Species Accounts. Melbourne, Victoria: Report for the Department of the Environment and Heritage by Birds Australia
- McMahon, A.R.G., Carr, G.W., Race, G.J., Bedggood, S.E. & Todd, J.A. 1991. The vegetation and management of the Yellingbo State Nature Reserve with particular reference to the Helmeted Honeyeater (*Lichenostomus melanops cassidix*). Report to Department of Conservation and Environment. Ecological Horticulture Pty Ltd, Clifton Hill, Victoria.
- Menkhorst, P. (2008) National Recovery Plan for the Helmeted Honeyeater *Lichenostomus melanops cassidix*. Department of Sustainability and Environment, Melbourne.
- Nyari, AS and Joseph L (2011). Systematic dismantlement of *Lichenostomus* improves the basis for understanding relationships within the honeyeaters (Meliphagidae) and the historical development of Australo-Papuan bird communities. *Emu* 111 pp 202-211.
- Smales, I. (2004). Population ecology of the Helmeted Honeyeater *Lichenostomus melanops cassidix* : long-term investigations of a threatened bird. University of Melbourne (thesis)
- Smales, I.J., Craig, S.A., Williams, G.A. & Dunn, R.W. (1990) The Helmeted Honeyeater: decline conservation and recent initiatives for recovery, in T.W. Clark & J.H. Seebeck (eds) *Management and conservation of small populations*. Chicago Zoological Society, Chicago. pp. 225-38.
- Species Profile and Threats Database, Department of the Environment, Australia.
- Victorian Department of Sustainability and Environment (2013) Advisory List of Threatened Vertebrate Fauna in Victoria. March 2013
- Wykes, B.J. (1985) The Helmeted Honeyeater and related honeyeaters of Victorian woodlands, in Keast, A. Recher, H.F., Ford, H. & Saunders, D. (eds) *Birds of eucalypt forests and woodlands: ecology, conservation and management*. Surrey Beatty and RAOU pp 207-15.
- Zoo and Aquarium Association (2012) Australasian Species Management Program Annual Report and Recommendations for the Helmeted Honeyeater.
- Zoo and Aquarium Association (2015) Census and Plan accessed 2/6/15