



Psophodes nigrogularis leucogaster Western Whipbird (Mallee)

Taxonomy

Psophodes nigrogularis leucogaster Howe & Ross, 1933

Current conservation status

Listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*.

Listed as threatened under the *Flora and Fauna Guarantee Act 1988* (SAC 1991).

Categorised as Critically endangered in the 2013 Advisory list of threatened vertebrate fauna in Victoria (DSE 2013).

Proposed conservation status

Critically Endangered in Victoria / presumed extinct.

Criterion D

The Western Whipbird has not been recorded since the 1980s and is considered to be extinct in Victoria. If it does persist it would be critically endangered.

Species Information

Description and Life History

The Western Whipbird (eastern) is about 20 to 25 cm long and has a mass of around 47 g. It is a distinctive bird, with a short triangular crest, a short and stout bill, long and powerful legs, short rounded wings, and a long graduated tail. It is mostly greyish-olive to olive above, with a prominent white stripe down each cheek and a black chin and throat, and grey to olive below, with a broad white stripe down the centre of the breast and belly. It has dull red irides, a narrow ring of grey skin around each eye, a grey-black to black bill, and dark grey legs and feet. The sexes are alike, but juvenile birds can be distinguished from the adults by the absence of the black and white colouring on the cheeks, chin and throat (Department of the Environment 2019).

The Western Whipbird (eastern) has been recorded breeding in September and October. It builds a bowl-shaped nest from twigs, bark and grass that is placed close to the ground in a dense bush (Woinarski et al. 1988). It lays a clutch of two eggs that are pale blue with black and brown or purple spots and blotches. The eggs are incubated by the female and, based on observations of the closely-related subspecies Western Whipbird (western heath) (*P. n. nigrogularis*), probably also by the male (Smith 1991b; Webster 1966c).

Generation Length

The generation length of the Western Whipbird is estimated to be 6.4 years. This is taken from Garnett et al (2011) viz. 'A generation time of 6.4 years (BirdLife International 2011) is derived from an age at first breeding of 0.5 years and a maximum longevity of 12.3 years, both values extrapolated from Eastern Whipbird *P. olivaceus*.' A similar figure (6.4) is given in BirdLife International (2019)

Distribution

The eastern subspecies of the Western Whipbird occurs in three isolated regional populations in southern South Australia: the first on the southern Eyre Peninsula; the second on the south-western Yorke Peninsula; and the third

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in the Murray-Mallee region of south-eastern South Australia (perhaps extending across the border to western Victoria). It may also occur in a fourth isolated population in north-western Victoria. The population in the Murray-Mallee region occurs at scattered sites from Billiatt Conservation Park south to Ninety-Mile Plain, Mount Rescue Conservation Park, Ngarkat Conservation Park and Comet Bore; and at several sites further west. The population could also extend to sites across the border in western Victoria, from where there are historical records around Manya and Murrayville (Department of the Environment 2019), although the Victorian Biodiversity Atlas (VBA) has no records since 1979 and there are less than 20 individual records of the species for the state since 1920 (M.O'Brien pers. comm. March 2019). BirdLife International (2019) notes that: 'The (Murray Mallee population) ... has a declining population of about 6,000 mature individuals, and is restricted to a small number of widely scattered localities in southern South Australia and north-western Victoria.' However it is generally agreed that the taxon is most likely extinct in Victoria.

Habitat

The Western Whipbird (eastern) inhabits mallee and thicket vegetation in coastal and inland areas of southern South Australia. It usually occurs in habitats that have an open layer of mallee about 3-5 m tall and an understorey of dense shrubs about 1.5-2 m tall (Woinarski et al. 1988). It occurs in mallee scrub on sand flats, dunes and limestone that consists of an overstorey of mallee eucalypts such as Lerp Mallee (*Eucalyptus incrassata*), Red Mallee (*E. socialis*), Narrow-leaved Mallee (*E. foecunda*), White Mallee (*E. dumosa*), Soap Mallee (*E. diversifolia*) or Giant Mallee (*E. oleosa*). This habitat is characterised by a dense species-rich heath understorey of shrubs including Dryland Teatree (*Melaleuca lanceolata*), Broom Honey-myrtle (*M. uncinata*), *Baeckea behrii*, Desert Banksia (*Banksia ornata*), Mallee Pine (*Callitris verrucosa*), Desert Hakea (*Hakea muelleriana*), *Leptospermum coriaceum*, species of *Allocasuarina*, and Porcupine Grass (*Triodia irritans*). It also occurs in thickets of Acacia. The structure of the habitat appears to be more important in determining suitability than the species composition and the frequency of wildfire has an important role in maintaining a habitat structure that is suitable for the Western Whipbird (eastern). The Western Whipbird (eastern) has been recorded in habitats that were last burnt less than two years earlier, and in habitats that were last burnt forty or more years ago, but most habitats that are occupied have a post-fire age of 10 to 25 years (Department of the Environment 2019).

Threats

Past clearance of mallee has been responsible for contraction and fragmentation of the habitat of the Western Whipbird. Fire is currently the major threat, fragmenting subpopulations, even in continuous habitat by making recolonisation between fire events difficult and leading to local extinctions. Given their poor flight and subsequent low dispersal ability, Western Whipbirds are not able to disperse easily across cleared land. Ground-foraging and low nesting makes them vulnerable to introduced predators such as feral cats *Felis catus* and foxes *Vulpes vulpes*.

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IUCN Criteria

Criterion A. Population size reduction. Population reduction (measured over the longer of 10 years or 3 generations) based on any of A1 to A4			
	Critically Endangered	Endangered	Vulnerable
A1	≥ 90%	≥ 70%	≥ 50%
A2, A3, A4	≥ 80%	≥ 50%	≥ 30%
<p>A1 Population reduction observed, estimated, inferred or suspected in the past and the causes of the reduction are clearly reversible AND understood AND ceased.</p> <p>A2 Population reduction observed, estimated, inferred or suspected in the past where the causes of the reduction may not have ceased OR may not be understood OR may not be reversible.</p> <p>A3 Population reduction, projected or suspected to be met in the future (up to a maximum of 100 years) [(a) cannot be used for A3]</p> <p>A4 An observed, estimated, inferred, projected or suspected population reduction where the time period must include both the past and the future (up to a max. of 100 years in future), and where the causes of reduction may not have ceased OR may not be understood OR may not be reversible.</p> <p style="text-align: center;"><i>based on any of the following:</i></p> <ul style="list-style-type: none"> (a) direct observation [except A3] (b) an index of abundance appropriate to the taxon (c) a decline in area of occupancy, extent of occurrence and/or quality of habitat (d) actual or potential levels of exploitation (e) the effects of introduced taxa, hybridization, pathogens, pollutants, competitors or parasites 			

Evidence:

Ineligible under Criterion A

There is insufficient evidence to determine whether there has been or will be a reduction in population sufficient to meet any threshold for Criterion A. This is because the taxon may be extinct in Victoria.

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Criterion B. Geographic range in the form of either B1 (extent of occurrence) and/or B2 (area of occupancy)			
	Critically Endangered Very restricted	Endangered Restricted	Vulnerable Limited
B1. Extent of occurrence (EOO)	< 100 km ²	< 5,000 km ²	< 20,000 km ²
B2. Area of occupancy (AOO)	< 10 km ²	< 500 km ²	< 2,000 km ²
AND at least 2 of the following 3 conditions:			
(a) Severely fragmented OR Number of locations	= 1	≤ 5	≤ 10
(b) Continuing decline observed, estimated, inferred or projected in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) area, extent and/or quality of habitat; (iv) number of locations or subpopulations; (v) number of mature individuals			
(c) Extreme fluctuations in any of: (i) extent of occurrence; (ii) area of occupancy; (iii) number of locations or subpopulations; (iv) number of mature individuals			

Evidence:

Ineligible under Criterion B

The Extent of Occurrence (EoO) across the taxon's range is estimated to be 110 km² and the Area of Occupancy (AoO) is estimated to be 16 km², but other thresholds under this criterion have not been met i.e. there is no continuing decline because the taxon may be extinct in Victoria.

Criterion C. Small Population size and decline				
	Critically Endangered	Endangered	Vulnerable	
Number of mature individuals	< 250	< 2,500	< 10,000	
AND at least one of <u>C1</u> or <u>C2</u>				
<u>C1</u>	An observed, estimated or projected continuing decline of at least (up to a max. of 100 years in future):	25% in 3 years or 1 generation (whichever is longer)	20% in 5 years or 2 generations (whichever is longer)	10% in 10 years or 3 generations (whichever is longer)
<u>C2</u>	An observed, estimated, projected or inferred continuing decline AND least 1 of the following 3 conditions:			
(a)	(i) Number of mature individuals in each subpopulation	≤ 50	≤ 250	≤ 1,000
	(ii) % of mature individuals in one subpopulation =	90 – 100%	95 – 100%	100%
(b) Extreme fluctuations in the number of mature individuals				

Evidence:

Ineligible under Criterion C

It is inferred that there are no mature individuals, but other thresholds under this criterion have not been met.

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Criterion D - Very small or restricted population [Ⓜ]			
	Critically Endangered [Ⓜ]	Endangered [Ⓜ]	Vulnerable [Ⓜ]
Number of mature individuals (observed or estimated) [Ⓜ]	<50 [Ⓜ]	<250 [Ⓜ]	<1,000 [Ⓜ]
D2 - Only applies to the VU category [¶] Restricted area of occupancy or number of locations with a plausible future threat that could drive the species to critically endangered or Extinct in a very short time. [Ⓜ]	- [Ⓜ]	- [Ⓜ]	D2 - Typically: [¶] AoO < 20 km ² or number of locations < 5 [Ⓜ]

Evidence:

Eligible under Criterion D as Critically Endangered

The taxon is inferred to have no mature individuals. The taxon is widely agreed to be extinct in Victoria (e.g. DELWP 2016). There have been less than 20 individual records of the taxon for the state since 1920 (M.O'Brien pers. comm. March 2019). There have been no records since the 1980s, despite numerous detailed searches for threatened mallee birds e.g. as part of recovery programs for the Black-eared Miner, Mallee Emu-wren and Striated Grasswren (e.g. Clarke 2005).

Criterion E (Quantitative Analysis) was not addressed as the taxon does not have a detailed Population Viability Analysis.

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