# ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department for Environment and Heritage

**BIRD** 

# Hylacola pyrrhopygia parkeri

# **Chestnut-rumped Heathwren (Mount Lofty Ranges)**

AUS	SA	AMLR	Endemism	Residency
Ε	Е	V	AMLR	Resident



Photo: © Harvey Perkins (subspecies pyrrhopygia)

#### **Conservation Significance**

Endemic subspecies to the AMLR, described as 'probably declining'.<sup>1</sup> Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'.<sup>2</sup>

Endemic to Australia, with three subspecies recognised (Schodde and Mason 1999). The subspecies, *pyrrhopygia*, occurs along the coast of Australia from south-eastern QLD to the south-east of South Australia, and inland to the western slopes of the Great Dividing Range. The subspecies *pedleri* occurs in the southern Flinders Ranges, while the subspecies *parkeri* is confined to the MLR and is geographically isolated from other populations (Higgins and Peter 2002; Schodde and Mason 1999). Apart from slight differences in plumage, the biology of these three subspecies is likely to be similar throughout their range.<sup>1</sup>

#### Description

Small terrestrial bird with a long tail which is held upright. Sexes are similar in adult plumage with the female being duller in appearance. Adult males are brownish-grey above while their underbody is off-white with grey-brown streaking on the chin, throat and breast. They have a prominent off-white eyebrow and rich chestnut coloured rump. Very similar in appearance to Shy Heathwrens (*Hylacola cautus*), but the latter has a brighter white eyebrow and underbody, with more conspicuous streaking on the breast, a more intensely rufous rump and a white

mark on the wing. Juveniles have an unstreaked buff coloured underbody and a buff eyebrow. During late winter and spring they are quite vocal, producing a loud melodious song while often mimicking the calls of other bird species and interweaving these calls into their song (Chaffer 1931, Milne 1936).<sup>1</sup>

## **Distribution and Population**

Post-1983 AMLR filtered records are found along the spine of the MLR from Mount Crawford to Mount Bold and south of there concentrated around Cox Scrub, Newland Head and Deep Creek CPs.<sup>2</sup> There are questionable records for Aldinga CP and O'Halloran Hill RP in the west, and the Mount Barker-Callington area and Charleston CP in the east.<sup>4</sup>

The available estimates of distribution and population size vary widely. A recent analysis shows that the area of occupancy may currently be 62 km<sup>2</sup>, and the total population may only be approximately 1000 individuals from 6-7 sub-populations.<sup>4</sup> Habitat quality, the number of sub-populations and, hence, the number of mature individuals are all likely to be declining.<sup>3</sup>

There have been no records at sites in the Tanunda-Angaston area, Mt Barker-Callington area or at Scott CP since the 1970s. Average recording rate across the region has declined from 26% to 2% for the pre-1980 to post-1995 periods (Cale 2005). Pre-1983 AMLR filtered records show a wider distribution across Fleurieu Peninsula, and records in the north of the region near Tanunda-Angaston.

## Habitat

Mostly occur in heath and dense undergrowth within Eucalypt forests and woodlands, most commonly found in rocky areas (H. Possingham).<sup>3</sup> Although the vegetation type varies throughout their range, the presence of a dense understorey appears to be a chief characteristic of their habitat (Brooker and Rowley 1991, Brooker 1998, Higgins and Peter 2002).<sup>1</sup>

Within the AMLR, habitat comprises of heathy Eucalypt woodland, forest, mallee woodland and mallee forest structural formations. Additional detailed habitat information can be found in Pickett (2007).<sup>4</sup> The preferred broad vegetation groups are Heathy Woodland, Shrubland and Coastal.<sup>2</sup>

#### Biology and Ecology

Observations suggest that individuals occupy the same area over a year or several years (Eddy 1959).<sup>1</sup> It has been described as being sedentary or resident (Paton

#### Further information:

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and Paton 1980, Pyke et al. 1989, Higgins and Peter 2002).<sup>1</sup>

Usually seen singly or in pairs, and occasionally in family groups. Shy and secretive birds which tend to remain amongst cover (Chaffer 1931, Milne 1936).<sup>1</sup>

Appear to breed in spring (September and October). Nest is a well-concealed dome with a side entrance that is placed on or low to the ground. Nests may be situated in low shrubs, at the base of trees or beneath fallen branches (Chaffer 1931, Higgins and Peter 2002, Beruldsen 2003). The female builds the nest while the male remains nearby (Gilbert 1919). Clutch size is two to three eggs. Incubation period has been estimated at about 14 to 16 days (Eddy 1959, Higgins and Peter 2002). Both parents feed nestlings. Fledging period is unknown, but estimated to be less than 18 days. The fledglings remain with their parents for about six to eight weeks before moving out of the natal territory (Eddy 1959).

Nests are used by the Fan-tailed Cuckoo and Horsfield's Bronze-Cuckoo (Brooker and Brooker 1989).1

There have been no detailed studies of the dispersal of the species. Most birds banded under the ABBBS were recovered less than 10 km from the banding site (Higgins and Peter 2002). The species has the ability to recolonise burnt areas (e.g. Black Hill CP, Cox Scrub CP) provided large areas of nearby unburnt habitat are available.

Largely insectivorous, but occasionally eats spiders and seeds (Higgins and Peter 2002). Mainly forage on the ground, beneath dense low vegetation or in dense low shrubs (Chaffer 1931; Eddy 1959; Rix 1939).<sup>1</sup>

# **Aboriginal Significance**

Post-1983 records indicate the majority of the AMLR distribution occurs in Kaurna and Ngarrindjeri Nations. It also occurs in Peramangk Nation.<sup>2</sup>

#### **Threats**

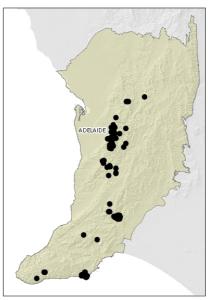
Most suitable habitat has been cleared and that which remains has been fragmented.<sup>3</sup>

The decline in average recording rate in the southern agricultural sub-region is reflected in the physical isolation of habitat areas from each other (Cale 2005).<sup>1</sup>

In a recent field survey, wildfire was considered the primary potential threat at all sites where Chestnutrumped Heathwrens were recorded. Secondary potential threats include deliberate burning, dieback due to *Phytophthora* and residential development.<sup>4</sup> Other habitat degrading factors include grazing and weed invasion (Recher et al. 1987, Scougall 1991, Hobbs 2001)<sup>1</sup>

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

### **Regional Distribution**



Map based on filtered post-1983 records.<sup>2</sup> Note, this map does not necessarily represent the actual species' distribution within the AMLR.

# References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

- 1 Cale, B. (2005). *Towards a Recovery Plan for the Declining Birds of the Mount Lofty Ranges.* Scientific Resource Document for Birds for Biodiversity. Unpublished Report.
- **2** Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database*. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.
- **3** Garnett, S. T. and Crowley, G. M. (2000). *The Action Plan for Australian Birds*. Environment Australia, Commonwealth of Australia.
- **4** Pickett, M. (2007). Assessment of the Distribution, Habitat and Conservation Status of the Chestnut-rumped Heathwren Hylacola pyrrhopygia parkeri in the Mount Lofty Ranges. Department for Environment and Heritage (Unpublished report).

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