DISTRIBUTION OF THE BLACK-CHINNED HONEYEATER *Melithreptus gularis* AND CHESTNUT-RUMPED HEATHWREN *Hylacola pyrrhopygius* IN THE SOUTH EAST OF SOUTH AUSTRALIA

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ABSTRACT

From June 2003 to January 2005, 34 locations in the South East of South Australia were surveyed for Black-chinned Honeyeater *Melithreptus gularis* and Chestnut-rumped Heathwren *Hylacola pyrrhopygius*. The Black-chinned Honeyeater was recorded at 17 locations and was particularly widespread but not abundant in its preferred habitats. It was observed further south and west than previously documented in the South East. The Chestnut-rumped Heathwren, although difficult to observe, was recorded at eight locations in the central, eastern and southern parts of the region, both in large areas of suitable habitat and fragmented smaller remnants. A total of 129 bird species was observed during the survey.

INTRODUCTION

The South East of South Australia encompasses a range of environments including the transitional zone where temperate south-eastern Australia grades into the arid central portion (Foulkes and Heard 2003; SENRCC 2003). The South East is considered to be a highly significant region for avifauna in the State due to its diversity of habitats, including coastline, wetlands, mallee and woodlands (Croft *et al.* 1999). Many of the species recorded are also on the edge of their range in south-eastern Australia.

Croft *et al.* (1999) identified 49 vegetation types throughout the region, with Foulkes and Heard (2003) detailing eight major vegetation communities including heathy and grassy woodlands as dominant communities.

Since European settlement, broad-acre clearance has resulted in the loss of extensive areas of habitat, reducing the remaining areas to small 'islands' within agricultural land (Foulkes and Heard 2003; SENRCC 2003), with less than 13% of the pre-European native vegetation remaining. This high degree of fragmentation is detrimental to the long-term survival of fauna populations and has increased the risk of populations becoming extinct through events such as wildfire, predation, disease and genetic isolation. A highly fragmented landscape also decreases the chance of species re-colonising an area, particularly after fire. Altered fire regimes through an increase or decrease in frequency and scale have affected the distribution and abundance of many species in this region (Foulkes and Heard 2003).

Several authors have documented common, rare, and/or threatened birds from the South East highlighting the need for further surveys and conservation effort for a range of grassy and heathy woodland species (Attiwill 1972; Possingham 1982; Reid 1984; Foulkes and Heard 2003; Rogers 2003, 2004). This report summarizes the results of a survey by the Birds South East Group to document the abundance and distribution of the Black-chinned Honeyeater *Melithreptus gularis* and Chestnut-rumped Heathwren *Hylacola pyrrhopygius*.

Black-chinned Honeyeater

The Black-chinned Honeyeater is widespread throughout eastern and northern Australia (Foulkes and Heard 2003). It is the largest *Melithreptus* species found on mainland Australia (Higgins, Peter and Steele 2001) and prefers open forests and woodlands dominated by grey box *Eucalyptus microcarpa*, South Australian blue gum *E. leucoxylon*, and riparian associations with river red gum *E. camaldulensis* (Croft *et al.* 1999; Higgins *et al.* 2001). In South Australia, this species is currently listed as Vulnerable under Schedule 8; *National Parks and Wildlife Act, 1972* with isolated populations throughout the Mount Lofty Ranges, Mid North and South East (Croft *et al.* 1999). Schodde and Mason (1999) describe two subspecies of *M. gularis* for South Australia with *M.g. gularis* specific to the South East and *M.g. laetior* the Mount Lofty Ranges and Mid North. *M.g. gularis* has a stronghold in the Upper South East in the Bangham/Western Flat and Naracoorte districts (Croft *et al.* 1999). Reid (1984) described them as moderately common in the Bangham/Western Flat district and recorded their preference for brown stringybark *E. baxteri* and *E. arenacea*, South Australian blue gum and ecotonal habitats.

Higgins *et al.* (2001) recognise records from a few scattered sites between Penola, Bangham and Padthaway Conservation Parks (CP).

Black-chinned Honeyeaters generally live in pairs or small colonies, being present in a locality throughout the year and they feed on nectar, invertebrates and honeydew (Blakers, Davies and Reilly 1984; Croft *et al.* 1999; Higgins *et al.* 2001; Foulkes and Heard 2003). They are relatively mobile, being locally nomadic when trees are flowering (Blakers *et al.* 1984; Croft *et al.* 1999; Higgins *et al.* 2001). Breeding is from July to December and nests are built high in the crowns of trees, suspended in thin forks, and concealed by foliage. Nests are cup shaped, thick walled and made from shredded bark and soft dry grass securely woven together with hair, wool or fur thickly interwoven; other materials used include spider web, spider cocoons and grass (Garnett and Crowley 2000; Higgins *et al.* 2001; Beruldsen 2003). This species is usually gregarious and birds forage briskly and aerobically amongst the foliage and flowers of the canopy, occasionally in shrubs and understorey and seldom on the ground (Higgins *et al.* 2001). On occasions they have been noted to descend from the canopy when feeding to peer at an intruder below (Higgins *et al.* 2001).

The Black-chinned Honeyeater's call is a very distinctive, loud, deep scratchy, churring call, often given in flight (Higgins *et al.* 2001).

Chestnut-rumped Heathwren

The Chestnut-rumped Heathwren in comparison is a ground dwelling species of dry sclerophyll forests and woodlands of south-eastern Australia (Croft *et al.* 1999; Higgins and Peter 2002), preferring low dense undergrowth, mostly associated with heathlands and eucalypt woodlands, with patches of open ground (The National Photographic Index of Australian Wildlife 1982; Croft *et al.* 1999; Higgins and Peter 2002). In South Australia, this species is currently listed as Vulnerable under Schedule 8, *National Parks and Wildlife Act, 1972* and is known to occur in the Mount Lofty Ranges, Mid North and South East (Croft *et al.* 1999). The Mount Lofty Ranges and Mid North populations are isolated from that of the South East which is contiguous with the south-western Victorian population (Croft *et al.* 1999). Schodde and Mason (1999) describe three subspecies of *H. pyrrhopygius* with all occurring in South Australia. *H.p. pedleri* is in the Mid North, *H.p. parkeri* occurs in the Mount Lofty Ranges and *H.p. pyrrhopygius* in the South East. *H.p. pyrrhopygius* is reported to occur from the Glenelg River in the south to as far north as Bangham and Padthaway across to Robe in the west (Higgins and Peter 2002). Reid (1984) documented how the Chestnut-rumped Heathwren is moderately common in the South East in its preferred habitats of stringybark and ecotonal heath. There is overlap in distribution with the Shy Heathwren *H. cauta*, which occurs in the Murray Mallee and South East extending as far south as Fairview CP (Croft *et al.* 1999; Higgins and Peter 2002).

The Chestnut-rumped Heathwren is a solitary, sedentary and secretive species actively feeding during the day on or near the ground, with seeds, insects and other small arthropods forming most of its diet (The National Photographic Index of Australian Wildlife 1982; Croft *et al.* 1999). They generally forage singly or in pairs, sometimes widely separated, hopping briskly (almost mouse-like) through and under shrubs and over the ground, with tail cocked (The National Photographic Index of Australian Wildlife 1982; Higgins and Peter 2002). Its call is described as outstanding or wonderful, a clear and sweet melody into which mimicry is woven (Higgins and Peter 2002). During the breeding season males sing persistently from perches within or atop a low shrub or on a low tree branch. Outside this period calling is sporadic and mostly at dawn and dusk. Nesting occurs from June to November in a well-concealed dome shaped structure, placed on or near ground, in or at the base of a low shrub or tussock (The National Photographic Index of Australian Wildlife 1982; Higgins and Peter 2002; Beruldsen 2003). No breeding information has been recorded for South Australia (Higgins and Peter 2002).

Foulkes and Heard (2003) indicate that in the South East of South Australia the Chestnut-rumped Heathwren requires large areas of dense cover in heathy eucalypt woodland and forest. Displacement through vegetation clearance and isolation of populations into smaller areas of habitat has occurred and is a long-term threat coupled with fire and ground predators.

METHODS

This Birds South East Group project ran from

June 2003 to July 2004 with the aim of searching for birds in native vegetation remnants all over the South East focussing on the habitat of the two target species. The target habitats included South Australian blue gum woodland, stringybark heath, river red gum open woodland and wet heathland dominated by *Melaleuca, Hakea, Allocasuarina* and *Leptospermum* species. Non-target habitats were surveyed due to their presence at target sites and included rough-barked manna-gum *E. viminalis* ssp. *cygnetensis*, mallee *E. diversifolia, E. leptophylla* and *E. incrassata*, and pink gum *E. fasciculosa.*

Large remnant areas of appropriate habitat were located from vegetation maps provided in Croft *et al.* (1999) and Foulkes and Heard (2003) and other sites were chosen to record current status of previously known populations. Opportunistic sightings from Birds South East records from 2001 to March 2006 were also included. Seventeen locations were specifically targeted for survey with a further 17 opportunistically included in the results.

Observers were familiarized with the target calls before and during surveys to enhance reporting opportunities. Notes on the ecology of both species were taken but purely opportunistically. Surveys were undertaken shortly after dawn and completed within one hour for small sites to several days in larger remnants where the Group camped (see Table 1 and Figure 1). Survey routes generally followed existing tracks around the boundaries of or through the sites. All birds seen or heard were recorded and given a numeric or coded abundance at the end of each survey period. The abundance codes were: A = 1–3 birds, B = 4–10, C = 11–30, D = 31–100, E = 101–300, F = 301–1000, and X = present but no abundance recorded. Other codes: h = heard only, and br = breeding.

Historic sightings and breeding records were sought to outline past distribution and occupation of sites and complement more recent data (see Table 2). Some historic sites were not targeted to reduce survey effort (too many sites), because they were on private land and not readily accessed, or because they were large protected remnants (presumed to be less subject to change and potentially requiring much survey effort). Some historic data were acquired post-survey (e.g. Konetta/Khayyam).

Calls of the Chestnut-rumped Heathwren from Buckingham and Jackson (1992) and a private production (P. Penney) were used in small hand held cassette players (with built-in speakers) at opportune times and locations. Tapes were played twice for 1–2 minutes during the searches with a 1–2 minute break to allow the observers to hear a response.

This project also used opportunistic sightings from local and visiting bird watchers to the region.

RESULTS

Paton (2003) documented the results of a similar project for the Mount Lofty Ranges and Mid North which reported scattered records of Black-chinned Honeyeater throughout those regions with an estimated maximum population size of <100 birds. A suggested size for the South East population is offered here.

Including the target species, we recorded a total of 129 bird species from 34 locations. A summary of all birds sighted throughout the project can be found in the Appendix. Table 1 allows the reader to cross-reference locations, habitats, size of sites, fire history and dates.

Black-chinned Honeyeater

Black-chinned Honeyeaters were observed at 17 locations. These ranged from Telford Scrub CP and adjacent red gum swamp in the south, to Mt Scott CP in the west and as far north as an area of brown stringybark near Mundulla (Table 1 and Figure 2) and included the historic sites of Geegeela, Bangham and Mary Seymour CPs (Table 2). An estimated 70 birds were recorded using the mean of each coded abundance and accurate counts. Most were from the Bangham/ Western Flat area, Killanoola district (including Mary Seymour CP and private land) and the Penola area.

Chestnut-rumped Heathwren

Chestnut-rumped Heathwrens were observed at eight locations in South Australia and two in south-western Victoria (Table 1 and Figure 3). Records came from brown stringybark heath with ecotones grading into South Australian blue gum in the north, brown stringybark near Lucindale/ Naracoorte with adjacent wet heath of swamp honey-myrtle *Melaleuca brevifolia* and brown stringybark wet heath further south. Birds were observed on the historic sites of Geegeela and

Table 1. Location data, including size (ha), habitat and fire history, and a summary of survey records of Black-chinned Honeyeater (BCH) and Chestnut-rumped Heathwren (CRHW). * = Targeted surveys (all others are incidental records). Note that locations 11 and 22 in Victoria do not appear in Figures 1 to 3. Note also that 'not relevant' is used for an area of open scattered trees where the size group is undefined or the years since fire are considered not relevant to this study.
CP = Conservation Park, HA = Heritage Agreement, NFR = Native Forest Reserve, SF = State Forest.
Abundance of BCH and CRHW appears as a number or code. Abundance Codes: A = 1–3 birds, B = 4–10, C = 11–30. (h) = heard only.
Previously published records: [1] SAOA (2002), [2] SAOA (2003a), [3] SAOA (2003b), [4] Rogers (2003), [5] Rogers (2004).
[#] = playback of CRHW call used at location.

Location Data					Sightings		
Number and name		Size group (ha)	Habitat/s (Source: Croft *et al.* 1999)	Years since fire	Date visited (dd/mm/yy)	BCH	CRHW
Upper South East district							
1a*	Bangham CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	7/7/02	10+[1,5]	–
1b	Bangham CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	15/6/03	A	–
1c	Bangham CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	20/6/03	2[3]	–
1d*	Bangham CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	12/10/03	C	4
1e	Bangham CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	24/7/04	1	–
2	Bell Scrub, Padthaway	10–100	*Eucalyptus arenacea/baxteri/diversifolia*	>30	19/9/03	A	–
7	Cockatoo Lake	10–100	Open scattered *Eucalyptus camaldulensis*	not relevant	19/4/04	4	–
10*	Desert Camp Conservation Reserve	500–1,000	*Eucalyptus arenacea/baxteri/fasciculosa/leucoxylon*/wet heathland	>25	5/6/04	–	–
13*	Geegeela CP	500–1,000	*Eucalyptus camaldulensis*	>30	11/10/03	B	–
13a	Geegeela CP	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	26/4/05	–	4
21	Michelson HA, Western Flat	500–1,000	*Eucalyptus leucoxylon/arenacea/baxteri/viminalis*	>40	15/7/02	A[5]	–
24	Mundulla (15 km SSW)	10–100	Open scattered *Eucalyptus camaldulensis/leucoxylon*	not relevant	19/6/03	3[3]	–
26*	Padthaway CP	100–500	*Eucalyptus viminalis/arenacea/leucoxylon*	>30	21/7/03	–	–
29	Pine Hill Soak CP	10–100	*Eucalyptus leucoxylon/arenacea/baxteri*	>30	25/7/04	1	–
33	Coralee Olives HA, Keppoch	500–1,000	*Eucalyptus leucoxylon/fasciculosa/arenacea*	<20 to >45	27/1/05	–	1
Mid South East district							
3*	Big Heath CP	1,000–5,000	*Eucalyptus camaldulensis/leucoxylon*	>45	1/12/03	1	–[#]
4a	Boston Reserve, Naracoorte	0–10	Open scattered *Eucalyptus camaldulensis/fasciculosa*	not relevant	22/10/01	A[4]	–
4b	Boston Reserve, Naracoorte	0–10	Open scattered *Eucalyptus camaldulensis/fasciculosa*	not relevant	14/12/03	1	–
8	Comaum Forest/Border Track	100–500	unknown	unknown	4/10/02	B[5]	–
9a	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	28/10/02	2	–
9b	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	29/3/03	2[2]	–
9c	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	27/4/03	1	–
9d	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	24/5/03	4	–
9e	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	24/5/04	2	–
9f	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	17/11/04	A	–
9g	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	22/6/03	7	–
9h	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	12/10/03	4	–
9i	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	2/12/03	1	–
9j	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	14/12/03	2	–
9k	Cowarry, Killanoola	10–100	Open scattered *Eucalyptus leucoxylon/camaldulensis*	not relevant	11/7/04	A	–

continues...

Table 1 (*continued*)

Number and name	Location Data: Size group (ha)	Habitat/s (Source: Croft *et al.* 1999)	Years since fire	Sightings: Date visited (dd/mm/yy)	BCH	CRHW
Mid South East district (continued)						
12a Fairview CP	500–1,000	*Melaleuca brevifolia, Eucalyptus arenacea/baxteri*	>30	4/5/03	–	2+
12b* Fairview CP	500–1,000	*Eucalyptus arenacea/baxteri/leucoxylon, Melaleuca brevifolia*	>30	23/9/03	–	2[#]
14a Glen Roy CP	500–1,000	*Eucalyptus leucoxylon/camaldulensis*	>30	7/4/03	A[2]	–
14b* Glen Roy CP	500–1,000	*Eucalyptus leucoxylon/camaldulensis/baxteri/arenacea/fasciculosa*	>30	15/6/03	–	–[#]
17 Hollenberg HA, Lucindale	100–500	*Eucalyptus arenacea/baxteri*	>30	4/11/03	–	A
20 Mary Seymour CP	100–500	*Eucalyptus leucoxylon/fasciculosa/arenacea/baxteri*	>30	9/4/04	2	–
23* Mt Scott CP	1,000–5,000	*Eucalyptus camaldulensis*	>30	30/11/03	1	–
23a Mt Scott CP (just north)	not relevant	Open scattered *Eucalyptus camaldulensis/leucoxylon*	not relevant	29/3/06	2	–
31 Rowley HA, Stewarts Range	500–1,000	*Eucalyptus arenacea/baxteri/fasciculosa*	>30	25/11/03	–	1
34 Caves Swamp, Bakers Range	100–500	*Eucalyptus leucoxylon/fasciculosa/camaldulensis*	unknown	14/12/04	1	–
Lower South East district						
5* Calectasia CP	10–100	*Eucalyptus baxteri, Banksia ornata, Leptospermum continentale*	>20	28/8/03	–	–[#]
6* Calectasia CP (adjacent private property to north)	10–100	*Eucalyptus baxteri, Banksia ornata, Leptospermum continentale*	unknown	28/8/03	–	–[#]
11* Drajurk SF (Hurtle Swamp), Victoria	>5,000	*Eucalyptus arenacea/baxteri*	unknown	30/7/03	–	1[#]
15a The Heath NFR, Nangwarry	100–500	Wet heathland, *Eucalyptus viminalis*	<20	10/1/03	–	1[#]
15b The Heath NFR, Nangwarry	100–500	Wet heathland, *Eucalyptus viminalis*	<20	20/4/03	–	2
15c* The Heath NFR, Nangwarry	100–500	Wet heathland, *Eucalyptus viminalis*	<20	30/7/03	–	–[#]
16 Hodges Red Gums, Mingbool	10–100	Open scattered *Eucalyptus camaldulensis*	not relevant	12/11/03	1	–
18* Honan NFR	1,000–5,000	*Eucalyptus baxteri/ovata/viminalis*	<2 to >45	18/1/04	–	–
19* McBain HA, Tarpeena	100–500	*Eucalyptus viminalis/ovata/baxteri*	unknown	30/7/03	–	–
22 Mills Swamp, Victoria	>5,000	unknown	unknown	26/1/03	–	1
25* Nangwarry NFR	1,000–5,000	*Eucalyptus ovata/viminalis/baxteri/arenacea*	<2 to >40	11/7/04	–	–
25a Nangwarry NFR	1,000–5,000	*Eucalyptus viminalis/baxteri/arenacea*	<2 to >40	29/9/05	–	1
25b Nangwarry NFR	1,000–5,000	*Eucalyptus baxteri/arenacea*	<2 to >40	17/3/06	–	1
27 Penola (5 km SW)	10–100	Open scattered *Eucalyptus camaldulensis*	not relevant	16/11/04	A	–
28a* Penola CP	100–500	*Eucalyptus viminalis/ovata/baxteri*	>20	28/8/03	–	–[#]
28b Penola CP	100–500	*Eucalyptus camaldulensis/viminalis*	>20	30/10/03	2	–
30 Reed Road Scrub, Kalangadoo	10–100	*Eucalyptus viminalis/ovata*	unknown	15/7/04	1(h)	–
32 Telford Scrub CP	100–500	*Eucalyptus ovata*	>30	5/10/03	1	–

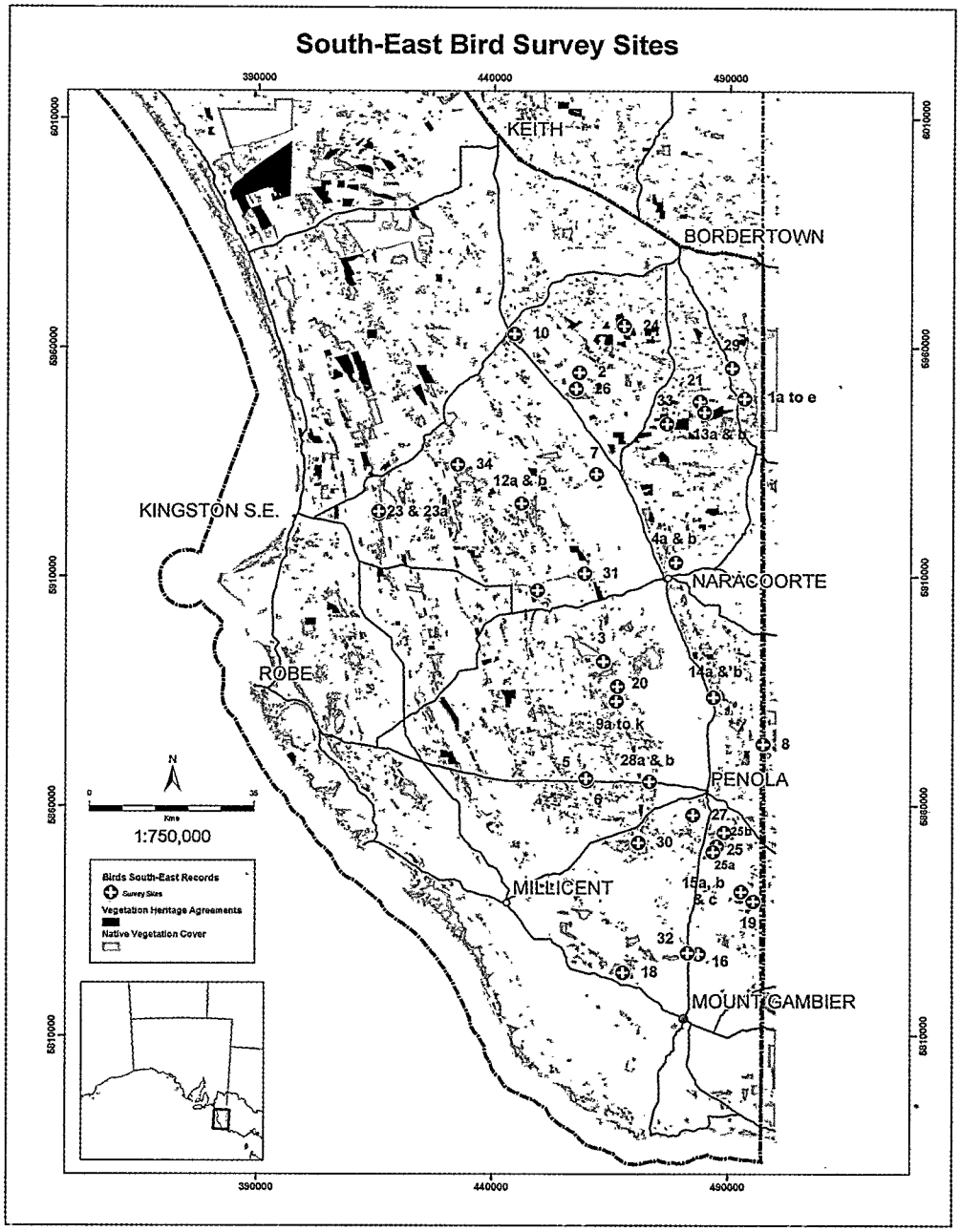

Figure 1. Map of survey sites in the South East showing site locations and numbers, vegetation Heritage Agreements and native vegetation cover.

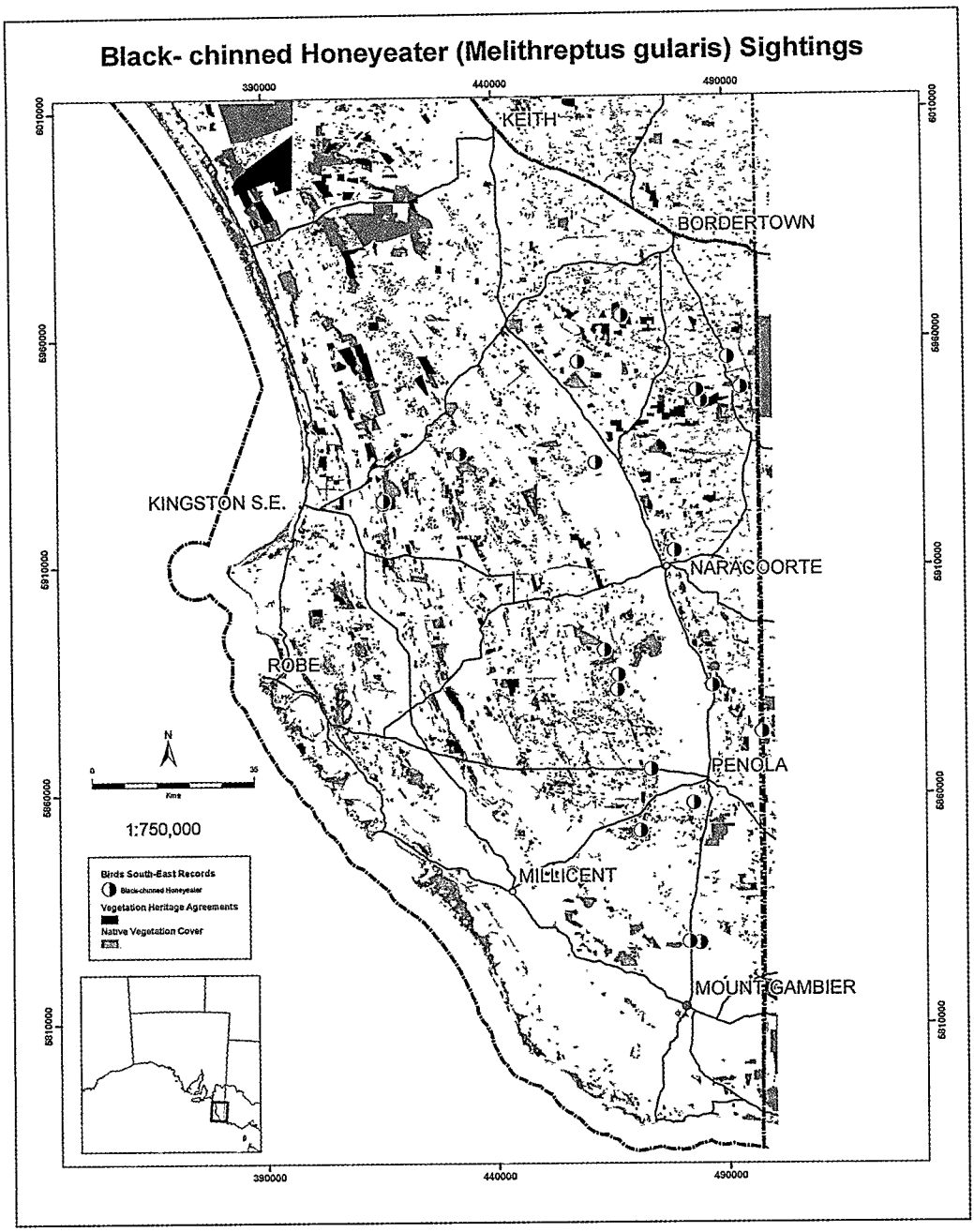

Figure 2. Map of Black-chinned Honeyeater survey sightings.

Table 2. Summary of available historic records of Black-chinned Honeyeater and Chestnut-rumped Heathwren. The following (general) locations were visited during the current survey: Bangham, Fairview, Geegeela, Glen Roy, Mary Seymour and Padthaway Conservation Parks and Nangwarry Native Forest Reserve (see Table 1).
CP = Conservation Park, HA = Heritage Agreement, NFR = Native Forest Reserve, NCS = Nature Conservation Society of South Australia, SAMA = South Australian Museum.
X = Present but abundance not recorded.
Observation Source: [1]Carpenter *et al.* (2003), [2]Reid (1984), [3]Shurcliff (1974), [4]Forestry SA fauna database, [5]pers. obs.

Black-chinned Honeyeater			
Date/s (dd/mm/yy)	**Location/Site number**	**Abundance (breeding)**	**Observer/s**
Upper South East district			
–/–/1974–82	Padthaway CP	9	Possingham[5]
–/5–6/1983	Geegeela 1 (Walker HA)	X	NCS[2]
–/5–6/1983	Geegeela 5 (Michelson HA)	X	NCS[2]
–/5–6/1983	Geegeela 8 (Geegeela CP)	X	NCS[2]
–/5–6/1983	Geegeela 13 (Danby)	X	NCS[2]
–/5–6/1983	Beeamma 10 (Pridham HA)	X	NCS[2]
18/4/1987	Bangham CP	Several	SAOA[1]
Mid South East district			
22/9/1961	Caves Range	Nest with 2 young	Attiwill/Bourne[5]
26/12/1976	Mary Seymour CP	Nest with 2 eggs	Attiwill/Bourne[5]
–/–/1982	Naracoorte Caves area	7	Possingham[5]
–/–/1982	Fairview CP	9	Possingham[5]
15/10/1983	Mary Seymour CP	Nest with 2 eggs	Attiwill/Bourne[5]
13/1/1987	Talapar CP	1	Matthew[1]
Lower South East district			
5/1/1987	Kalangadoo (8 km NNW)	2	Matthew[1]
–/–/1995	Konetta NFR	X	Carpenter[4]
–/–/1998	Khayyam NFR	X	Collard[4]

Chestnut-rumped Heathwren			
Date/s	**Location/Site number**	**Abundance (breeding)**	**Observer/s**
Upper South East district			
4/6/1983	Bangham (14 km WSW)	1 bird collected for SAMA	Reid[1]
–/5–6/1983	Geegeela 5 (Michelson HA)	X	NCS[2]
–/5–6/1983	Geegeela 8 (Geegeela CP)	X	NCS[2]
–/5–6/1983	Geegeela 13 (Danby)	X	NCS[2]
–/5–6/1983	Beeamma 10 (Pridham HA)	X	NCS[2]
Mid South East district			
15/9/1951	Caves Valley	Nest with 3 eggs	Attiwill/Bourne[5]
29/7/1957	Joanna Scrub (Hood)	Nest with 3 eggs	Attiwill/Bourne[5]
12/10/1964	Deadman's Swamp NFR	Nest with 3 eggs	Attiwill/Bourne[5]
4/11/1972	Mary Seymour CP	Nest with 2 eggs	Attiwill/Bourne[5]
–/11/1981	Glen Roy CP	Nest (young just flying)	Attiwill/Bourne[5]
10/10/1982	Fairview CP	2	Possingham[1]
–/1/1983	Big Heath CP	1 bird collected for SAMA	Pedler (per J. Bourne)
Lower South East district			
–/–/1974	Nangwarry NFR	X	Shurcliff[3]

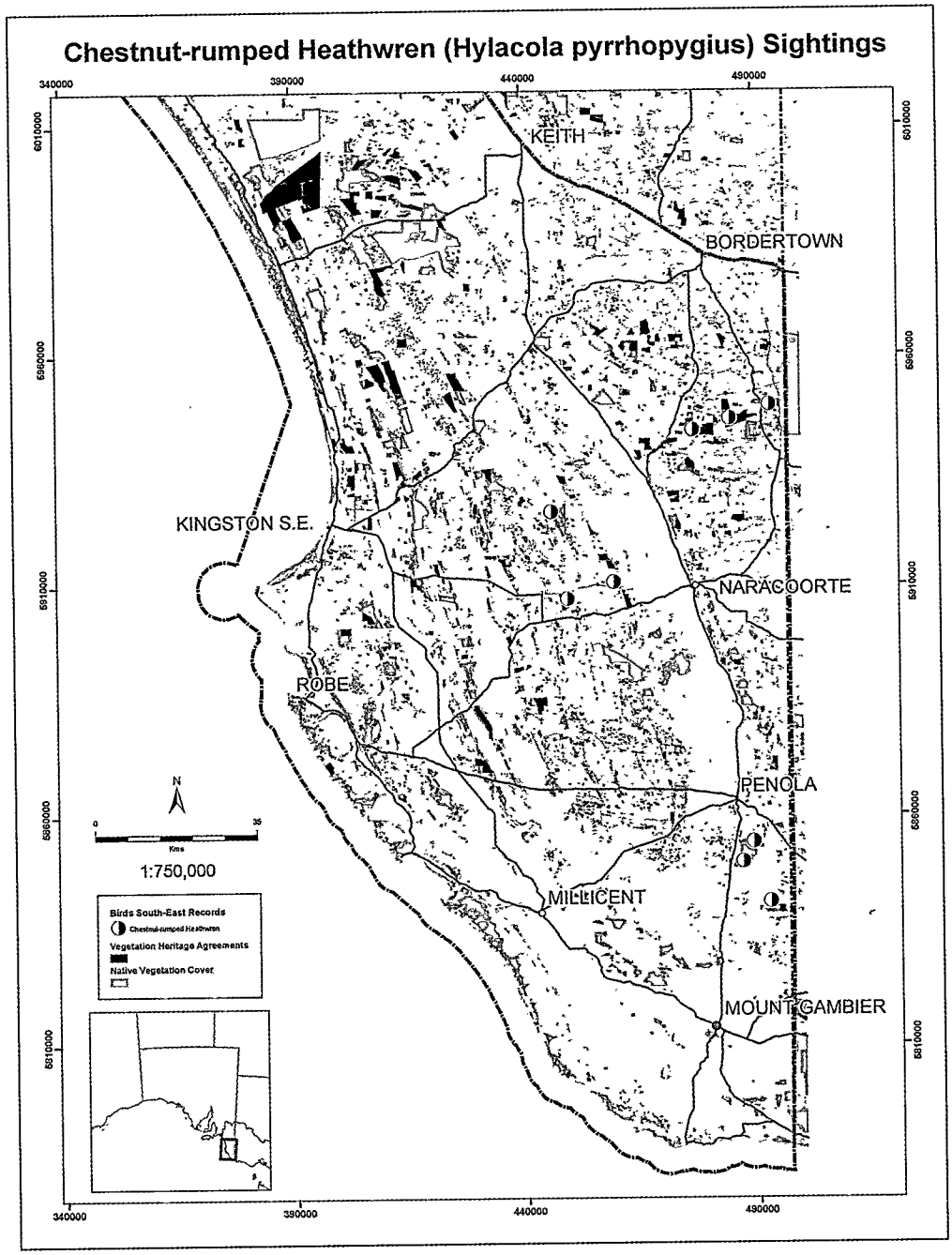

Figure 3. Map of Chestnut-rumped Heathwren survey sightings.

Fairview CPs and Nangwarry Native Forest Reserve (Table 2). Documented observations of the Chestnut-rumped Heathwren were made in remnants 100–500 ha and up to >5,000 ha in size. The size range allocated to each site (Table 1) took into account any adjoining vegetation.

From detailed fire records to anecdotal evidence (J. Bourne and K. Richardson pers. comms) summarised in Table 1, seven of the eight sites where birds were observed were within long unburnt vegetation (>30 years since fire). The eighth sighting was of one bird in a small compartment (<20 ha) within the Nangwarry Native Forest Reserve (2,200 ha) which was burnt in 2004 (less than two years since fire).

The playback tapes used to prompt responses from the Chestnut-rumped Heathwren were used at eight sites and proved to be a useful technique, although not essential. Sites where the tapes were used are shown with a (#) in Table 1. This technique proved successful at Drajurk State Forest, Victoria, Fairview CP and The Heath Native Forest Reserve. At one site where birds were known to exist, the use of the tape did not elicit a response.

Other species of regional significance

Other bird species with a regional conservation rating were observed throughout this project (see Appendix).

DISCUSSION

Habitat fragmentation and fire management

Foulkes and Heard (2003) detail some alarming statistics on how fragmented this region is. They analysed vegetation cover data and created a range of block sizes: 0–10 ha, 10–100 ha, 100–500 ha, 500–1,000 ha, 1,000–5,000 ha, and >5,000 ha. This region has over 8,200 blocks in various size classes, 99% of these are <100 ha in size (totalling 64,000 ha). The 1% (350 blocks) that are >100 ha contain 76% of the total remnant vegetation (213,000 ha).

The fire histories and degrees of fragmentation of these larger remnants (>100 ha) need to be documented to allow a better understanding of the mosaic of age classes used by our woodland species, especially the Chestnut-rumped Heathwren, and ensure suitable habitat is available and accessible by revegetation corridor and threat abatement projects.

Both species would benefit greatly from further protection of remnant native vegetation, scattered tree health improvement with understorey plantings, revegetation and linkages of fragments (with >30 m-wide corridors).

Black-chinned Honeyeater

The maximum number of Black-chinned Honeyeaters observed during this project was 70. This figure was calculated using the mean of the abundance codes and accurate numbers observed at each location (only once) during this period . It is suggested that the population of Black-chinned Honeyeaters could range from 70 to 150+ birds in the South East. This conclusion has been drawn from three main areas: the large expanse of suitable habitat in the Bangham/Western Flat, Killanoola, Penola districts, which were not completely surveyed during this project; the widespread sightings further south (Telford Scrub CP) and west (Mount Scott CP) indicating that the species' range is larger than previously documented with the potential for finding more sub-populations; and the potential of nearby populations in south-western Victoria using habitat and/or temporarily increasing numbers in South Australia.

Chestnut-rumped Heathwren

Although this species was seldom seen throughout this project (eight locations), it could be present in many more native vegetation remnants within the region ranging in size from 100–500 ha to >1,500 ha. The relatively large size and connectivity of the sites in the Bangham/Western Flat (Sites 1, 13, 21 and 33), Lucindale (Sites 17 and 31) and Nangwarry (Site 25) areas are of critical importance to the long-term survival of this species in this region. Habitat restoration of especially understorey species and further corridor establishment (focussing on providing moderate canopy cover and a continuous understorey) should be targeted to these remnant areas.

On occasion, this species is known to gather in small groups chasing each other around, calling excitedly, agitatedly and then dispersing quietly (The National Photographic Index of Australian Wildlife 1982; Higgins and Peter 2002). This behaviour was observed during the project at Site 1 by three observers for almost two minutes.

Using call playback for prompting a response from the Chestnut-rumped Heathwren is a technique encouraged to be used by others

Table 3. Diagnostic characteristics for Chestnut-rumped and Shy Heathwrens for use in the field.

Part	Chestnut-rumped Heathwren	Shy Heathwren
Bill shape	Wedged shaped, deeper base	Slender
Supercilium and eye ring	Dull, off-white	Clear, bright white
Ear coverts	Faint, pale streaking	Bold streaking
Upper body	Pale, off-white in male, buff in female	Clear and bright
1° wing patch	Small, diffuse, off-white	Brighter white and prominent
Upper tail	Dull, rufous-brown upper tail	Darker more intense rufous upper tail
Tip to tail	Prominent narrow black sub-terminal tail band with dull grey tip	Larger black area inside whiter tip

conducting organised surveys, and subject to permit approval.

Historic sites

Any further surveys should attempt to visit/ revisit historic sites (Table 2) to determine if Black-chinned Honeyeaters or Chestnut-rumped Heathwrens are still present. If not present, then the reasons need to be assessed, where possible.

Field identification of Heathwrens

The Chestnut-rumped Heathwren can be easily mistaken for the more common Shy Heathwren, but with good views they can be easily separated (Higgins and Peter 2002). Both sexes of Chestnut-rumped Heathwren are similar but females have duller underparts (The National Photographic Index of Australian Wildlife 1982). Table 3 outlines diagnostic characteristics for both species (Higgins and Peter 2002).

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DEH granted the group a permit (No. 3/2003) to use play back tapes to prompt responses from the Chestnut-rumped Heathwren.

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APPENDIX

List of the 129 bird species recorded during the Birds South East group project (Targeted Survey, June 2003 to July 2004) and opportunistically from Birds South East records (2001 to March 2006), with comments given for selected species. * = introduced species.
Conservation Status for the South East (from Carpenter and Reid 1988): [En] = endangered, [V] = vulnerable, [R] = rare, [U] = uncommon.
Abundance codes (only) are given for the Targeted Survey and Opportunistic Records: A = 1–3 birds, B = 4–10, C = 11–30, D = 31–100, E = 101–300, F = 301–1000, X = number not recorded. **br** = breeding. Sites are in parentheses (see Table 1 for site names).

Emu *Dromaius novaehollandiae.* A (1d, 10, 12b, 14b, 15c, 19, 25, 28a), B (23), C (1a); **br** (19).
[En]Malleefowl *Leipoa ocellata.* B (23).
[V]Brown Quail *Coturnix ypsilophora.* X (*27*).
Black Swan *Cygnus atratus.* A (12b, 28a); **br** (28a).
Australian Shelduck *Tadorna tadornoides.* A (1d, *1e,* 6, 12b, 14b, 25), D (*16*).
Australian Wood Duck *Chenonetta jubata.* A (12b, 14b, 28a, *29*).
Pacific Black Duck *Anas superciliosa.* A (12b), B (*16*), C (28a).
Grey Teal *Anas gracilis.* A (6).
White-faced Heron *Egretta novaehollandiae.* A (12b, *16,* 28a), B (6).
[U]White-necked Heron *Ardea pacifica.* A (*4b*).
[U]Nankeen Night Heron *Nycticorax caledonicus.* A (*9j*).
Straw-necked Ibis *Threskiornis spinicollis.* D (3, 23), B (*16*).
[U]Whistling Kite *Haliastur sphenurus.* A (3).
Swamp Harrier *Circus approximans.* A (18).
Brown Goshawk *Accipiter fasciatus.* A (14b, 23).
[U]Collared Sparrowhawk *Accipiter cirrhocephalus.* A (14b).
Wedge-tailed Eagle *Aquila audax.* A (*1b,* 11, 12b, *16,* 23), B (18).
[U]Little Eagle *Hieraaetus morphnoides.* A (*2,* 28a).
Brown Falcon *Falco berigora.* A (*3, 16, 31*).
[R]Peregrine Falcon *Falco peregrinus.* A (10, 14b).
Nankeen Kestrel *Falco cenchroides.* A (1a, 23).
[En]Brolga *Grus rubicunda.* A (*9f, 16,* 18, 28a); **br** (28a).
[V]Painted Button-quail *Turnix varia.* A (*9i,* 10).
[V]Latham's Snipe *Gallinago hardwickii.* A (*32, 34*), B (*9f*), C (*9j*).
Masked Lapwing *Vanellus miles.* A (*29*), B (12b).
Common Bronzewing *Phaps chalcoptera.* A (1d, 13, 14b, 18, 28a, *29*), B (3, 10, 25, *31*), X (*4a*).
[U]Brush Bronzewing *Phaps elegans.* B (10, *12a*).
[En]Peaceful Dove *Geopelia striata.* X (*4a*).
[En]Red-tailed Black-Cockatoo *Calyptorhynchus banksii.* A (1a), B (*1e*), C (*15b*), D (25).
[V]Yellow-tailed Black-Cockatoo *Calyptorhynchus funereus.* A (1d, 6, *29*), B (3, *4b*), C (23), D (15c, 19), X (*4a*).
Galah *Cacatua roseicapilla.* A (13), B (1d, *1e, 2,* 3, 12b, 14b, 15c, *16,* 23, 26, 28a, *31*), C (1a, 10), D (*29*), X (*4a*).

continues...

APPENDIX *(continued)*

[U]Long-billed Corella *Cacatua tenuirostris.* B (1a, 1d, 14b, 28a), F (*29*); **br** (1d).
[U]Sulphur-crested Cockatoo *Cacatua galerita.* A (3, 14b, 15c), B (25, 26), C (13), D (1a, *1b, 1e,* 1d, *29*); **br** (1d).
Rainbow Lorikeet *Trichoglossus haematodus.* A (1d, 15c, *31*), B (*1b,* 10, 23), C (12b), X (*4a*).
Musk Lorikeet *Glossopsitta concinna.* A (26), B (*2,* 3, 10, 14b, *16*), C (23), D (*1e, 29*); **br** (1d).
Purple-crowned Lorikeet *Glossopsitta porphyrocephala.* A (13), B (1a, 1d, *1e,* 23, *29*).
Crimson Rosella *Platycercus elegans.* A (5, *16,* 26), B (1d, *1e, 2,* 3, *4b,* 10, 13, 14b, 18, 19, *29, 31*), C (1a, 15c, 23, 25, 28a, *33*), X (*4a*).
Eastern Rosella *Platycercus eximius.* A (*2,* 15c, 26), B (3, 13, 28a, *29, 33*), C (1a, 1d, *1e,* 10, 12b, 23), X (*4a*).
[U]Australian Ringneck *Barnardius zonarius.* A (10, *33*), C (23).
Red-rumped Parrot *Psephotus haematonotus.* A (*16, 29, 31*), B (1d, 3, *4b*), C (1a, 10, 12b, 23); **br** (1d).
[V]Blue-winged Parrot *Neophema chrysostoma.* A (*4b,* 18), B (14b, 23, 28a), C (*32*).
Fan-tailed Cuckoo *Cacomantis flabelliformis.* A (1a, 12b, 14b, 15c, 25, 28a).
Horsfield's Bronze-Cuckoo *Chrysococcyx basalis.* A (12b).
[R]Shining Bronze-Cuckoo *Chrysococcyx lucidus.* A (12b), B (*32*).
[En]Barking Owl *Ninox connivens.* A (3, *9k*). Resident in the Killanoola district.
Southern Boobook *Ninox novaeseelandiae.* A (1a, 1d, 23).
White-throated Needletail *Hirundapus caudacutus.* C (18).
Laughing Kookaburra *Dacelo novaeguineae.* A (*1e,* 3, 13, 15c, *16,* 26, *29, 33*), B (1a, *1b,* 1d, 14b, 15c, 25).
Sacred Kingfisher *Todiramphus sanctus.* A (3, *9f, 9j,* 13, 18, *31*); **br** (*9f, 9j*).
[U]White-throated Treecreeper *Cormobates leucophaeus.* A (*2,* 3, 5, 11, 12b, 15c, 19, *33*), B (*1b,* 1d, 6, 13, 14b, 18, 26, 28a, *29*), C (1a, 25).
[U]Brown Treecreeper *Climacteris picumnus.* A (*9f, 9k, 29*), B (1a, *1b,* 13, 26), C (1d, 14b).
Superb Fairy-wren *Malurus cyaneus.* A (*4b*), B (*1e, 2,* 5, 11, 25, 26, *33*), C (1a, *1b,* 1d, 6, 12b, 13, 14b, 15c, 18, 19, 28a, *29, 31*), D (3, 10, 23), X (*4a*).
[U]Variegated Fairy-wren *Malurus lamberti.* A (*33*), B (13, 23), C (1d). South East of SA is the extreme south of their range. This project's most southerly record was at Mt Scott CP, NE of Kingston.
[V]Southern Emu-wren *Stipiturus malachurus.* A (*9i,* 10, 11, 19, *30*), B (12b, 15c, 25), C (28a).
[U]Spotted Pardalote *Pardalotus punctatus.* A (*1b, 1e, 2,* 3, 6, 12b, 25, *31, 33*), B (1a, 1d, 10, 13, 15c, 26, *29*), C (14b).
Striated Pardalote *Pardalotus striatus.* A (*1e,* 12b, 15c, 26, *31*), B (1a, 1d, 3, 13, *16, 19*), C (10, 23).
[U]White-browed Scrubwren *Sericornis frontalis.* A (1d, 6), B (3, 10, 12b, 15c, 18, 19, 23, 28a, *31*), C (25).
[V]**Chestnut-rumped Heathwren** *Hylacola pyrrhopygia.* A (11, *12a,* 12b, *15a, 15b, 17, 22, 25a, 25b, 31, 33*), B (1d, *13a*). Playback of Chestnut-rumped Heathwren call used at sites 3, 5, 6, 11, 12b, 14b, 15a, 15c and 28a.
[U]Shy Heathwren *Hylacola cauta.* A (*2,* 10, 23, *31*). A sighting at Rowley Heritage Agreement (Site 31) is further south (*c.* 20 km SE) than previously documented at Fairview CP (Site 12) by Higgins and Peter (2002).
[U]Weebill *Smicrornis brevirostris.* A (1d, *2*), B (1a, 3, 14b, 25, 26, *33*), C (10, 23).
Brown Thornbill *Acanthiza pusilla.* A (*1e,* 5), B (1a, 10, 11, 26, 28a), C (3, 6, 12b, 14b, 15c, 18, 19, 23, 25, *31*).
Buff-rumped Thornbill *Acanthiza reguloides.* A (28a), B (*2,* 23), C (1a, 13).
Yellow-rumped Thornbill *Acanthiza chrysorrhoa.* A (28a), B (*2,* 3, 6, *31, 33*), C (10, 12b).
[R]Yellow Thornbill *Acanthiza nana.* A (*2*).
Striated Thornbill *Acanthiza lineata.* A (18, 19), B (5, 11, 15, 25, 28a, *31*), C (1d, 6, 14b, 23).
Red Wattlebird *Anthochaera carunculata.* A (*4b,* 6, *16,* 26), B (*1b,* 25, *31*), C (1a, 1d, *1e,* 3, 10, 12b, 13, 15c, 23, *29*), D (14b), X (*4a*).
[U]Little Wattlebird *Anthochaera chrysoptera.* A (1d, 26, 28a, *29*), B (1a, *1b, 1e,* 5, 10, 14b), C (12b, 23).
Spiny-cheeked Honeyeater *Acanthagenys rufogularis.* A (1d, 23), B (10).
[U]Noisy Miner *Manorina melanocephala.* A (*1b,* 6, 13, *16*), B (26, *31*), C (1a, 1d, *1e,* 28a), D (*29*).
Yellow-faced Honeyeater *Lichenostomus chrysops.* A (*2,* 18, 19, 26), B (1a, 1d, *1e,* 10, 12b, 13, 25, 28a, *31*), C (14b, 15c, 23, *29*), D (11).
Singing Honeyeater *Lichenostomus virescens.* A (10).
White-eared Honeyeater *Lichenostomus leucotis.* A (6, 23, 28a), B (15c, 18, 19), C (10, 11, 14b, 25).
[U]Purple-gaped Honeyeater *Lichenostomus cratitius.* C (23).
White-plumed Honeyeater *Lichenostomus penicillatus.* A (10, 23), B (*1b,* 1d, 3, *4b,* 12b, 14b, *29*), C (*1e,* 13, 26, *29*), C (*1e, 16*), D (1a), X (*4a*).
[R]**Black-chinned Honeyeater** *Melithreptus gularis.* A (*1b, 1c, 1e, 2,* 3, *4a, 4b, 9a, 9b, 9c, 9e, 9f, 9i, 9j, 9k, 14a, 16, 20, 21,* 23, *23a, 24, 28b, 29, 30, 32, 34*), B (*7, 8, 9d, 9g, 9h,* 13, *13a*), C (1a, 1d), X (*27*).
Brown-headed Honeyeater *Melithreptus brevirostris.* A (13, *33*), B (*1b,* 1d, *2,* 3, 14b, *29, 31*), C (10, 23, 25), D (1a, 12b).
[U]White-naped Honeyeater *Melithreptus lunatus.* A (15c, 18, 19), B (*1b,* 1d, 12b), C (1a, 25, *29*), D (14b).
New Holland Honeyeater *Phylidonyris novaehollandiae.* A (11), B (*33*), C (*1e, 2,* 3, 6, 15c, 18, 19, 26, *31*), D (*1b,* 1d, 13, 14b, 23, 25, 28a, *29*), E (1a, 10, 12b), X (5), **br** (1d), X (*4a*).
[U]White-fronted Honeyeater *Phylidonyris albifrons.* A (14b), B (1d).
[U]Tawny-crowned Honeyeater *Phylidonyris melanops.* A (*12a*), B (1d, 13), C (11).
Eastern Spinebill *Acanthorhynchus tenuirostris.* B (11, 14b, 18, 19, 23, 25).

continues...

APPENDIX (*continued*)

White-fronted Chat *Epthianura albifrons*. B (28a).
[U]Jacky Winter *Microeca fascinans*. A (*1e, 4b,* 6, 13, 15c, 23, *29, 30*), B (1a, 1d, 14b), X (*4a*).
[U]Scarlet Robin *Petroica multicolor*. A (1a, 1d, 10, 15c, 19, 26, 28a), B (11, 14b, 25); **br** (1d).
[U]Flame Robin *Petroica phoenicea*. A (14b), B (*9k*).
[U]Hooded Robin *Melanodryas cucullata*. A (12b, *29, 31*), B (1a, 1d, 10, 26); **br** (1d).
[U]Eastern Yellow Robin *Eopsaltria australis*. A (*2, 4b,* 15c, 26, *31*), B (3, 12b, 14b, 18, 23), X (*4a*).
[U]Southern Scrub-robin *Drymodes brunneopygia*. A (13, 26), B (1a, *1b,* 1d, 10, *29*).
[U]White-browed Babbler *Pomatostomus superciliosus*. A (*4b,* 13, 14b), B (*1e, 33*), C (*1b,* 1a, 1d, 10, 12b, 23, 26, *29, 31*), X (*4a*).
Varied Sittella *Daphoenositta chrysoptera*. A (3, 15c), B (1d, 19, 23), C (25), X (*4a*).
[V]Crested Shrike-tit *Falcunculus frontatus*. A (*9g, 9i,* 14b, *15a, 22,* 28a), B (32). These records are all in the Lower South East.
[V]Crested Bellbird *Oreoica gutturalis*. A (12b). An extremely rare species in this region with only one bird seen at Fairview CP in an ecotone of mallee and brown stringybark heath.
Gilbert's Whistler *Pachycephala inornata*. A (1a). Only one bird seen.
[U]Golden Whistler *Pachycephala pectoralis*. A (1a, 11, 12b, 15c, 18, 25, 28a), B (1d, 14b, 23, *29*).
[U]Rufous Whistler *Pachycephala rufiventris*. A (1d, *4b,* 12b, 18, *33*), B (23, *31*), C (3), X (*4a*).
Grey Shrike-thrush *Colluricincla harmonica*. A (1a, 1d, *4b,* 5, 6, 10, *16,* 28a), B (3, 12b, 13, 14b, 15c, 18, 23, 25, 26, *31*), X (*4a*).
Restless Flycatcher *Myiagra inquieta*. A (1a, 1d, *4b,* 12b, 14b, 23, 26, *32*), B (*16*), X (*4a*).
Magpie-lark *Grallina cyanoleuca*. A (14b, *16,* 23).
Grey Fantail *Rhipidura fuliginosa*. A (1d, *4b,* 5, 6, 13, 15c, 19, 26, *33*), B (*2,* 3, 10, 12b, 14b, 23, 28a, *31*), C (18, 25), X (*4a*).
Willie Wagtail *Rhipidura leucophrys*. A (1a, 1d, *1e,* 3, *4b,* 5, 10, 13, 14b, *16,* 26, 28a, *31*), B (12b), X (*4a*).
Black-faced Cuckoo-shrike *Coracina novaehollandiae*. A (1d, 3, 6, 10, 14b, 18, 26), B (23).
[R]White-bellied Cuckoo-shrike *Coracina papuensis*. A (14b, 25, *32*). All sites in the Lower South East. Two birds seen on each occasion.
White-winged Triller *Lalage sueurii*. A (1d, *2,* 23, *32*).
Masked Woodswallow *Artamus personatus*. B (1d).
White-browed Woodswallow *Artamus superciliosus*. C (1d).
Dusky Woodswallow *Artamus cyanopterus*. A (*4b,* 10, *31*), B (1a, 1d, *16,* 23), C (12b, 14b), X (4a).
[U]Grey Butcherbird *Cracticus torquatus*. A (1a, 10, 28a, *29*).
Australian Magpie *Gymnorhina tibicen*. A (*2,* 5, 6, 26), B (*1b,* 1d, *1e,* 3, 12b, 14b, *16,* 18, 23, 25, 28a, *29, 33*), C (1a, 10, 13, 15c).
[U]Grey Currawong *Strepera graculina*. A (1a, *1b, 1e,* 11, 12b, 14b, 15c, 25, 26, 28a, *31*), B (1d, *2,* 3, 13, 23), C (10).
Australian Raven *Corvus coronoides*. A (*1e, 2*), B (*1b,* 1d, 10, 26, *29*).
[U]Forest Raven *Corvus tasmanicus*. A (11, 14b, 18), B (*2,* 15c, 28a).
Little Raven *Corvus mellori*. A (6, 11, 14b, 19), B (1d, 13, 15c, *16*), C (28a).
Unidentified raven *Corvus* spp. A (5), B (3, 12b, 18), C (1a, 23).
[V]White-winged Chough *Corcorax melanorhamphos*. B (*14a*).
*Skylark *Alauda arvensis*. A (14b).
Richard's Pipit *Anthus novaeseelandiae*. A (*2,* 12b), B (11).
Red-browed Finch *Neochmia temporalis*. A (*31*), B (3, *4b,* 14b, 18, 23), X (*4a*).
[En]Diamond Firetail *Stagonopleura guttata*. B (1a).
[R]Beautiful Firetail *Stagonopleura bella*. A (*9h*), B (23). The sites are in the Mid South East.
*European Goldfinch *Carduelis carduelis*. A (1d, *4b,* 5, 19, 28a), B (18, *31*), C (23).
Mistletoebird *Dicaeum hirundinaceum*. A (*2, 4b,* 12b, 18, *22, 29, 33*), B (10, 14b), X (*4a*).
Welcome Swallow *Hirundo neoxena*. A (1a, *1e, 4b,* 10, 11, 15c, 18), B (*5,* 13, 14b, 23, *31*), C (*16*).
Tree Martin *Hirundo nigricans*. A (12b, 13, *33*), B (5, 14b), D (1a, *16,* 23).
Fairy Martin *Hirundo ariel*. C (23).
Rufous Songlark *Cincloramphus mathewsi*. X (*4a*).
[R]Golden-headed Cisticola *Cisticola exilis*. A (11).
Silvereye *Zosterops lateralis*. A (19), B (1a, 1d, 23, *31*), C (10, 11, 12b, 18), D (25).
*Common Blackbird *Turdus merula*. A (3, *4b,* 18, 23, *31*), X (*4a*).
*Common Starling *Sturnus vulgaris*. A (28a), C (14b, *16*).

CORRIGENDA

Please amend the following in the *South Australian Ornithologist:*

Vol. 34, Parts 2 & 3, p. 53, Table 1, Ibis Is. (first occurring), column 5: 6-8/8/00 should be 6-8/7/00.

Vol. 35, Parts 1 & 2:

Hylacola pyrrhopygius should be *Hylacola pyrrhopygia* on p. 1 (thrice, including in the title), p. 9 and the contents page (back cover).

On p. 1, under the subheading *Black-chinned Honeyeater*, line 16: replace 'subspecies' with 'ultrataxa (subspecies)'.

On p. 2, column one, second last line: replace the remainder of the sentence after 'three' with 'ultrataxa (subspecies) of *Calamanthus pyrrhopygius* (*H. pyrrhopygia*)' and replace the next sentence with '*C.p. pedleri* (*H.p. pedleri*) is in the Mid North, *C.p. parkeri* (*H.p. parkeri*) occurs in the Mount Lofty Ranges and *C.p. pyrrhopygius* (*H.p. pyrrhopygia*) in the South East.' In the next sentence replace *pyrrhopygius* with *pyrrhopygia.*

My thanks to Marcus Pickett and Andrew Black for bringing these heathwren matters to my attention.

—Ed.