## EXPANSION OF RANGE BY THE PIED BUTCHERBIRD IN SOUTH AUSTRALIA.

The Pied Butcherbird Cracticus nigrogularis is generally regarded as a resident species (Higgins, Peter and Cowling 2006). In South Australia, the two areas in which the species is known to be resident are the upper River Murray valley and an area in the North West, roughly north and west of Oodnadatta (c. 27°32'S, 135°26'E). Occasional reports of birds well beyond this core range have caused difficulties when endeavouring to establish the precise definition of the species' range in this State. Badman (1979) and later Reid et al. (1997), with more detail, pointed out the inaccuracies of Condon's (1969) account which stated, 'Southern Australia generally, but not reaching the coast of South Australia. Fairly common in the Murray Mallee (near the River) and the arid interior.' Reid et al. (1997) reviewed Flinders Ranges records, mentioned that in other parts of Australia the species is known to be expanding its range and encouraged submission of records outside core areas. The following information supports and adds to their work.

Examination of the literature suggests that in the River Murray valley in South Australia the Pied Butcherbird may have been steadily expanding its range over a long period. In an account of a trip on the River Murray in 1917, A.M. Morgan (1917) listed the species as seen only between Renmark (c. 34°10'S, 140°45'E) and the State border. By 1928 the species was listed for Cobdogla (c. 34°15'S, 140°24'E) (Tubbs 1928) and in 1933 a pair was recorded at Lowbank (c. 34°11'S, 140°05'E), just east of Waikerie (Kuss 1933). E.F. Boehm (1939) stated that it was occasionally observed and heard calling, in the river valley only, in the Morgan and Cadell districts. A male specimen taken there by him on 10 February 1961 (South Australian Museum, SAMA, B25429) seems to have established Morgan (c. 34°21'S, 139°37'E) as a range limit (see Parker in Badman 1979) despite A. Boaden previously taking a male downstream, north of Blanchetown (c. 34°21'S, 139°37'E) on 5 May 1957 (SAMA B24818). Julian Reid (pers. comm.) observed a pair over several days on the banks of the River Murray at Scott Creek (c. 34°06'S, 139°40'E), c. 7 km S of Morgan, in autumn 1978. Joan Paton et al. (SAOA 1981) reported a Pied Butcherbird with two young at Roonka Station (c. 34°18'S, 139°38'E), north of Blanchetown, on 18–19 November 1980 and Joan Paton (SAOA 1988) reported seeing two birds attending a nest at Blanchetown (c. 34°21'S, 139°37'E) on 14 October 1987. Members of the Strathalbyn Naturalists Club and I saw a family party of two adults and two immature birds bathing under a sprinkler in the garden of Roonka homestead on 13 October 1991, indicating that the species had established in the Blanchetown area in the thirty years since Boaden first noted its presence.

E. Pascoe (SAOA 1996 and 1997) reported one from north of Walker Flat (c. 34°45'S, 139°33'E) on 6 April 1996 and again on 26 March 1997 with the comment, 'sporadically seen in the area'. Interestingly B. Glover (SAOA 1982) had reported hearing a brief burst of song believed to be from this species about 8 km N of Walker Flat on 19 April 1982 but could not locate the bird. This suggests that, as at Blanchetown, vagrant birds were probably moving down river well in advance of breeding becoming established. P. and G. Murphy (SAOA 1998) recorded single birds at Teal Flat (c. 34°54'S, 139°33'E), 25 km upstream of Mannum, on 5 April and 24 May 1998, a locality not far downstream from Bowhill (c. 34°53'S, 139°37'E) where Rick Eckert (pers. comm.) had seen adults with semi-dependent young being fed at times by shack-owners in 2003 and 2004. All the above localities south of Blanchetown come within the area dealt with by J.B. Cox (1973) who stated that it was outside the species' range. His observations were from 1969 to 1971, therefore it appears that since 1971 the species has effectively colonised the river valley from south of Blanchetown to about Teal Flat.

That vagrants continue to move further south is evidenced by David Hender (pers. comm.) sighting a Pied Butcherbird 3 km S of Langhorne Creek (c. 35°18'S, 139°02'E) on 2 September 2002. Sightings of this species from unexpected places need careful appraisal. There have been several instances in the Langhorne Creek area where suspected Pied Butcherbirds on closer examination proved to be bright black and white males of the Grey Butcherbird C. torquatus (e.g. Anon. 1982). However three days later David Hender found injured what was likely the bird he sighted earlier and it proved to be a female Pied Butcherbird (SAMA B55406). A week later Jenny Scutchings (pers. comm.) heard then saw another, 1 km E of Langhorne Creek. David Hender's son Luke attends a school at Murray Bridge and the students do voluntary work at Monarto Zoological Park (c. 35°06'S, 139°09'E). He claimed that a Pied Butcherbird stole potato chips from unwary students on some occasions (D. Hender pers. comm.). I visited there some months later (date unknown) and heard the call of a Pied Butcherbird from the mallee scrub but failed to obtain a satisfactory sighting. However, the record of the species from near that locality on the SAOA excursion of 14 January 2006 (SAOA 2006) supports its presence in that general area. P. Koch (pers. comm.) recorded one at 'Paiwalla' (c. 35°01'S, 139°22'E), 12 km NE of Murray Bridge on 27 September 2003. This is currently the most southerly record from within the River Murray valley<sup>1</sup>. These occurrences probably relate to post-breeding dispersal down the river, presumably from above Mannum. Their occurrence at localities some distance from the river may be due to its lower reaches becoming vegetated more by exotic weeping willows Salix babylonica and less by eucalypts Eucalyptus spp. and therefore likely offering poorer habitat for the species.

Elsewhere, below Morgan, vagrant sightings outside the River Murray valley are few. To the west Stephanie Williams (pers. comm.) during her residence at Brookfield Conservation Park (c. 34°21'S, 139°31'E) in the 1980s noted the species at the park on several occasions, 12 km from the river. Further south-west M. Pickett (SAOA 1992) claimed a sighting from near Woodside (c. 34°21'S, 138°33'E) on 7–9 August 1992. Condon's (1969) claim that the species was fairly common in the Murray Mallee is puzzling, because until recently there was just one sighting from the area usually regarded as the heart of the mallee, south and east of the river. This was about 8 km E of Lameroo (c. 35°20'S, 140°31'E) where one was seen by the author and several others while driving by on 31 October 1965 (Glover 1966). The black throat was noted but no special attention was given due to the belief that the sighting was well within the species' normal range. This record could be regarded with suspicion were it not for a further recent occurrence detailed here. While I was driving about

3 km S of Pinnaroo (c. 35°16'S, 140°54'E) on 5 October 2005, a black and white butcherbird flew across the road. I halted and retreated to try to identify the bird. My companion Rosemary Christopher then located a female Pied Butcherbird sitting on a nest. A brighter male was seen nearby shortly after. Observations made on 20 October suggested that the female was feeding small chicks which needed brooding at frequent intervals. A week later the chicks had the body size about that of a House Sparrow Passer domesticus but were still covered with long yellowish down. By 2 November the largest chick of the clutch of three had body size slightly larger than a Starling Sturnus vulgaris with wing feathers partly grown and body thickly covered with downy feathers starting to resemble the adult colour pattern. The tail feathers were just starting to emerge. This chick was taken on this date as proof of identity and the breeding event (SAMA B55407). While climbing to the nest J. Ragless was attacked by the male and twice struck on the head. The female scolded but did not attack. When the climber neared the nest the pair was joined by another bird that appeared to be an adult female which did not venture quite as close as either of the main pair. This was unexpected and I realised that while I had thought that the female mostly fed the young (the male only participating occasionally as the chicks got older), it was possible that two females were involved in the feeding because I would not have been able to differentiate them. Obviously a second female was in some sort of association with the pair. There are numerous instances of helpers at the nest of Pied Butcherbirds. They are sometimes suspected of being young of a previous season and their duties are considered to be restricted to feeding young and defending the nest (Thomas 1951; Courtney and Marchant 1971; Rowley 1976; Dow 1980).

While there is now a breeding record from Pinnaroo to substantiate the species' presence in the southern Murray Mallee, I would hesitate to regard this as a mallee population. Colin Ribbons, son of renowned mallee ornithologist Roy G. Ribbons, thus having the benefit of experience with birds in the Pinnaroo general district extending back to the time of early European settlement, had no knowledge of the species ever being present in the area before (pers. comm.). Due to interest in the Mallee Whipbird Psophodes nigrogularis, the Pinnaroo area has

<sup>&</sup>lt;sup>1</sup> Editor's note: There is now a more southerly record by Peter Koch of a Pied Butcherbird at Wood Point, c. 12 km SE of Murray Bridge, on 19 September 2006 (SAOA 2006, p. 17). Reference

SAOA. 2006. Bird records. *Birds SA Newsletter*, November 2006, 200: 15-17.

had more ornithological attention than most other mallee localities so, if present, a Pied Butcherbird should not have been missed easily. With a known presence of three adults plus two young having potential to join the group, an opportunity exists to examine whether the species will establish in that vicinity or merely be a transient group taking advantage of good seasonal conditions.

North of the River Murray are a number of examples of birds being seen well away from the river. Reid et al. (1997), when assessing records from the Flinders Ranges, conjectured that a resident population in the Ranges seemed unlikely. They drew attention to the number of ornithologists who had spent considerable time in that area without ever detecting the species, a view supported soon after by Hornsby (1997). This is given greater credence by the fact that no breeding has been recorded even though half of the sightings come from what could be considered a potential breeding time. Reid et al. (1997) considered that if the Flinders Ranges sightings all related to transients then the lower North East of the State was the most likely source population. This they defined as occurring north of the River Murray to just beyond the Broken Hill road, giving northern limits as Mutooroo Station (c. 32°27'S, 140°55'E) and Boolcoomata Station (c. 32°06'S, 140°17'E) with westerly limits of Olary (c. 32°17'S, 140°19'E) and Sturt Vale Station (c. 33°15'S, 140°02'E). However no nesting records have come from this area either and all of the records could easily have been judged as wandering birds since there had been no repeat records from any of those localities prior to 2000. Their source could be explained as surplus birds moving out from the River Murray to seek new areas or to allow breeding areas to recover during the off-season. The probable family group seen foraging near the Timor Ruin (c. 33°52'S, 140°39'E) on Calperum Station well north of the River Murray in late May 1998 (Ludewigs 1999) provides an example of what might be considered a not-infrequent seasonal movement. There is also the possibility that some birds could come into this area from the east as the Anabranch and Darling Rivers and Menindee Lakes all probably generate surplus birds at times and Mutooroo for instance, is closer to these than Renmark (c. 32°10'S, 140°45'E). Forward and Reid (1996) also alluded to the possibility that transient birds in that general area might be of riverine origin (also see Mack 1970, p. 141). However A.B. Black (2006, this issue) has provided a substantial number of further records, particularly from the Mutooroo–Boolcoomata area which indicate that the species is now permanently established in that region.

When dealing with the population in the North West of the State, Reid et al. (1997) set limits based mainly on the observations of Badman (1979)—Eringa (Ruin) (26°17'S, 134°44'E), and Todmorden (27°08'S, 134°45'E) and Copper Hill (27°57'S, 134°19'E) Stations—with the addition of a sighting from the south at Vokes Hill Corner (c. 28°34'S, 130°41'E). This presents quite a conservative picture and overlooks the record of Cleland (1927) who wrote, 'Common on the Macumba, thence up to Alice Springs.' He took an immature female specimen at Ross Waterhole near Macumba homestead (c. 27°15'S, 135°39'E), indicating that breeding was occurring there. The only clutch of eggs of this species in the South Australian Museum Collection taken from within this State was collected from Allandale Station (c. 27°38'S, 135°35'E), not far south-east of Oodnadatta, on 18 September 1966 by T. Brandon. Julian Reid (2006, this issue) observed a pair on two occasions (1 April 2002) and 18 February 2003) at Mathieson Waterhole (c. 27°39'S, 135°24'E), Neales River, c. 11 km SSW of Oodnadatta. Further south-west I took one of a pair that frequented fairly open woodland along Algebullcullia Creek (c. 28°34'S, 134°54'E) adjacent to the northern margin of the Moon Plain some 50 km N of Coober Pedy on 19 April 1982 (SAMA B36547). McGilp (1949) recorded a pair some 60 km S of Coober Pedy at Brumby Creek (c. 29°32'S, 134°42'E) in May 1947. Further west there are sightings from east of the Serpentine Lakes (c. 28°50'S, 129°09'E) and just west of those lakes (Tjindelkara Rockhole, Western Australia; Bransbury 1984). Additionally R. Sim informs (pers. comm.) that the species is now resident at Oak Valley Community (c. 29°19'S, 130°49'E). The species was first recorded there in 1999 and the presence of immature birds indicates that breeding occurs. He has recently seen a pair 20 km SW of the Community, his first indication that possibly surplus birds are radiating out from the established core population. Oak Valley is c. 160 km S of Vokes Hill Corner. Graham Carpenter (pers. comm.) recently recorded a pair in the eastern Great Victoria Desert in open mulga woodland 50 km SE of Emu (c. 150 km ENE of DECEMBER 2006 55

Oak Valley) on 11 July 2002. Andrew Black (pers. comm.) and Stephen Walker had clear views of two Pied Butcherbirds near Mabel Creek Dam (c. 28°58'S, 133°20'E) on 5 March 2005, and Andrew Black (pers. comm.) and Lynn Pedler saw one Pied Butcherbird at the same locality on 20 April 2006. The status of this north-western population, below latitude 28°S, is uncertain because records are sporadic and breeding unrecorded except for Oak Valley. This is probably because most of the area is remote and little-visited by observers. However similar country in adjacent Western Australia is believed to be thinly populated by the species (Higgins et al. 2006). Julian Reid (this issue) details records which define and clarify the species' range in the North West above 28°S. Below this the range could be encapsulated by a southern boundary from the area of the Serpentine Lakes to 20 km SW of Oak Valley then to Brumby Creek thence north to Algebullcullia Creek (passing just east of Coober Pedy, see Reid this issue) and across to Algebuckina (c. 27°55'S, 135°49'E)2.

It would seem that the taller tree cover along watercourses and drainage lines, especially if eucalypt, is a preferred habitat which allows movement into and through otherwise inhospitable country and is favoured for breeding. In this context, the breeding event at Pinnaroo in road-side mallee would seem somewhat aberrant since that area of the Murray Mallee has no water-

courses and there seemed little to differentiate the breeding site from unoccupied roadside mallee radiating for hundreds of kilometres in any direction, apart from it being only 3 km to watered parklands in the town. These seem not to have been an attraction for no report of the species has ever come from Pinnaroo or Lameroo townships despite the residence of members of the Ribbons family in the former and my having eaten numerous meals in the parklands of both towns.

The above information suggests that the Pied Butcherbird is expanding its range, both along the River Murray and in the far west of the State. At Oak Valley it could be argued that the provision of water might have assisted the expansion. This would not apply to the Murray population where water has never been a limiting factor. It seems that some of the ostensibly established riverine pairs and family groups might foray out from their breeding area into more marginal habitat in the off-season, while some individuals will travel much further. Yet despite the increased knowledge of the species in range and status presented in this issue of the journal there is little to clarify the direction from which those birds reaching the Flinders Ranges might have come. Terrill and Rix (1950) indicated that there was a specimen record from Quorn but this cannot be located. This is unfortunate since Schodde and Mason (1999) recognise two subspecies (ultrataxa) within the Pied Butcherbird, nominate nigrogularis in the

<sup>&</sup>lt;sup>2</sup>Editor's note [per Andrew Black *in litt.*]: Regarding the North West, some differentiation between the northern ranges/rivers and the eastern Great Victoria Desert (GVD) follows:

In reporting on the August 1980 Nature Conservation Society of South Australia survey of the eastern (i.e. South Australian) part of the GVD, Black and Badman (1986) wrote that the Pied Butcherbird is not found on Eyre Peninsula and was previously unrecorded from the eastern GVD. Its calls were first heard near Tjindelkara Rockhole (Western Australia) and later confirmed east of Serpentine Lakes. Subsequently a single bird was observed there closely by T. Dennis and I. Olsen. The species was also recorded by Close *et al.* in the northern GVD in August 1980. The Pied Butcherbird is resident about the central Australian mountain ranges, including the Musgrave Ranges, and is also found in the eucalypt woodland west of the Nullarbor Plain. Its range appears therefore to include the western and northern parts of the GVD.

In this paper, Eckert writes of more recent records in the GVD from c. Vokes Hill, Emu and Oak Valley, giving credence to the apparent range extension in the eastern GVD shown by comparing the first and second Australian bird atlases (Blakers, Davies and Reilly 1984; Barrett et al. 2003). The first atlas indicates a presence in only one 1° square in the North West, south of 28°, viz. 28°S, 129°E. This is presumably the record east of Serpentine Lakes, cited by Bransbury (1984)—who, incidentally had led a party through the GVD along the Anne Beadell 'Highway' in August 1979 without recording the species. The second atlas has records in six 1° squares, viz. 28°S, 129°–131°E and 29°S, 129°–131°E. There is also an apparent filling in of squares west of the Western Australia border at these latitudes. Note also that the North West of South Australia is consistently shown to be occupied south to 28° in both atlases.

References

Barrett, G., Silcocks, A., Barry, S., Cunningham, R., Poulter, R. 2003. *The new atlas of Australian birds*. Birds Australia, Melbourne. Black, A.B. and Badman, F.J. 1986. Birds of the eastern Great Victoria Desert. In *The Great Victoria Desert*. P. Greenslade, L. Joseph and R. Barley (eds), Nature Conservation Society of South Australia, Adelaide, pp. 66-94.

Joseph and R. Barley (eds). Nature Conservation Society of South Australia, Adelaide, pp. 66-94.
Blakers, M., Davies, S.J.J.F., and Reilly, P.N. (eds). 1984. The atlas of Australian birds. RAOU and Melbourne University Press, Melbourne.

Close, D.H. and Jaensch, R.P. 1984. Birds of the North-West of South Australia. South Australian Ornithologist, 29 (4): 81-99.

east and *picatus* in the north and west. Therefore, if specimens were available, their subspecific status would give some indication of their likely origin, bearing in mind that over time vagrants of both subspecies could possibly reach the Flinders Ranges.

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## REFERENCES

- Anon. 1982. [Title unknown]. Western Australia Bird Notes, 21: 6.
- Badman, F.J. 1979. Birds of the southern and western Lake Eyre drainage. South Australian Ornithologist, 28 (3): 57-81.
- Black, A.B. 2006. Status of the Pied Butcherbird in the Lower North East (Olary Plains) of South Australia. South Australian Ornithologist, 35 (1 & 2): 57-58. [This issue].
- Boehm, E.F. 1939. Birds of the Morgan and Cadell districts. South Australian Ornithologist, 15 (2): 38-46.
- Bransbury, J. 1984. Bird report, 1977-1981. South Australian Ornithologist, 29 (5 & 6): 121-168.
  Cleland, J.B. 1927. Birds seen between Oodnadatta and Alice
- Springs. South Australian Ornithologist, 9 (3): 84-89.
- Condon, H.T. 1969. A handlist of the birds of South Australia. Second edition. SAOA, Adelaide.
   Courtney, J. and Marchant, S. 1971. Breeding details of some
- Courtney, J. and Marchant, S. 1971. Breeding details of some common birds in south-eastern Australia. *Emu*, 71: 121-33.
- Cox, J.B. 1973. Birds of the Mannum area. South Australian Ornithologist, 26 (5): 103-114.
- Dow, D.D. 1980. Communally breeding Australian birds with an analysis of distributional and environmental factors. *Emu*, 80: 121-40.
- Forward, L.R. and Reid, J.R.W. 1996. Birds. In A biological

- survey of the South Olary Plains South Australia. Department of Environment and Natural Resources, Adelaide, pp. 195-230.
- Glover, B. 1966. Bird report, 1965. South Australian Ornithologist, 24 (5): 99-107.
- Higgins, P.J., Peter, J.M. and Cowling, S.J. (eds). 2006. Handbook of Australian, New Zealand and Antarctic birds. Volume 7, boatbill to starlings. Oxford University Press, Melbourne.
- Hornsby, P. 1997. An addendum to 'Comments on the distribution of five bird species in the Flinders Ranges: some new data and a reappraisal of historical records'. *South Australian Ornithologist*, 32 (8): 169.
- Kuss, M.S. 1933. Birds of the Lowbank district. South Australian Ornithologist, 12 (4): 127.
- Ludewigs, M. 1999. Hunting association between Australian Hobby and Pied Butcherbird. South Australian Ornithologist, 33 (3 & 4): 62.
- Mack, K.J. 1970. Birds of the North-East of South Australia. South Australian Ornithologist, 25 (5): 126-141.
- McGilp, J.N. 1949. Birds on the fringe of cattle country, N.E. South Australia. *South Australian Ornithologist*, 19 (5): 42-50.
- Morgan, A.M. 1917. Birds on the River Murray. South Australian Ornithologist, 3 (4): 99-109.
- Reid, J. 2006. Pied Butcherbirds in the near North West of South Australia. South Australian Ornithologist, 35 (1 & 2): 59-63. [This issue].
- Reid, J., Brissenden, P., Puckridge, J., Carpenter, G. and Paton, P. 1997. Comments on the distribution of five bird species in the Flinders Ranges: some new data and a reappraisal of historical records. South Australian Ornithologist, 34 (4): 113-118
- Rowley, I.C.R. 1976. Co-operative breeding in Australian birds. *International Ornithological Congress Proceedings*, 16: 658-666.
- SAOA. 1981. Bird notes. South Australian Ornithological Association Newsletter, 97: 12.
- SAOA. 1982. Bird notes. South Australian Ornithological Association Newsletter, 104: 9.
- SAOA. 1988. Bird notes. South Australian Ornithological Association Newsletter, 125: 11.
- SAOA. 1992. Bird notes. South Australian Ornithological Association Newsletter, 154: 15.
- SAOA. 1996. Bird records. South Australian Ornithological Association Newsletter, 158: 19.
- SAOA. 1997. Bird records. South Australian Ornithological
- Association Newsletter, 162: 15. SAOA. 1998. Bird records. South Australian Ornithological
- Association Newsletter, 166: 12. SAOA. 2006. Past excursions. South Australian Ornithological
- Association Newsletter, 197: 17.
- Terrill, S.E. and Rix, C.E. 1950. The birds of South Australia. Their distribution and habitat. South Australian Ornithologist, 19 (6-8): 53-99.
- Thomas, H. 1951. Notes on the Pied Butcherbird. Emu, 52: 165-8
- Tubbs, W.H. 1928. Birds of Cobdogla, River Murray. South Australian Ornithologist, 9 (5): 170-172.

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