

TAXON SUMMARY

Thick-billed Grasswren (western)

1	Family	Maluridae
2	Scientific name	<i>Amytornis textilis textilis</i> (Dumont, 1824)
3	Common name	Thick-billed Grasswren (western)
4	Conservation status	Near Threatened: a

5 Reasons for listing

This subspecies suffered a massive decline early in 20th century (Near Threatened: a), which inexplicably stopped before extinction was reached. Remnant sub-populations are stable.

	Estimate	Reliability
Extent of occurrence	20,000 km ²	low
trend	stable	high
Area of occupancy	1,200 km ²	medium
trend	stable	high
No. of breeding birds	21,500	medium
trend	stable	medium
No. of sub-populations	2	medium
Largest sub-population	20,500	medium
Generation time	4 years	low

6 Intraspecific taxa

A. t. myall (Gawler Ra.) and *A. t. modestus* (Eyre basin) are Least Concern. Though the three subspecies have been recognised for some time (Schodde, 1982), their distributions have been re-assessed (Schodde and Mason, 1999). The now extinct sub-population, previously attributed to *A. t. myall*, at the eastern end of the Nullarbor Plain is now considered to have been *A. t. textilis*, considerably expanding both former range of subspecies, and extent to which it has declined.

7 Past range and abundance

Arid and semi-arid southern south-western Australia from the eastern Nullarbor Plain, S. A., to Shark Bay, Esperance and Dirk Hartog I., W. A. (Schodde, 1982, Schodde and Mason, 1999, Brooker, 1998, 2000).

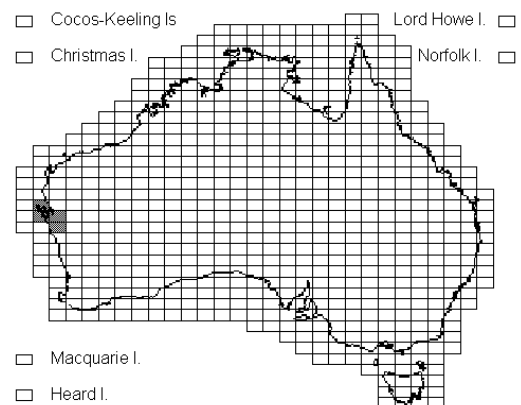
8 Present range and abundance

Range contracted to Shark Bay region: northern Peron Peninsula and from Nanga, Hamelin and Woodleigh Station (Schodde, 1982, Storr, 1985, Curry, 1986, Brooker, 1998, 1999, 2000). Also thought to be extinct on Dirk Hartog I. (Carter, 1917, Whitlock, 1921, Davies and Chapman, 1975).

9 Ecology

Around Shark Bay, Thick-billed Grasswrens inhabit acacia shrubland, *Triodia* hummock grassland and dense vegetation in drainage depressions, where they feed on a range of invertebrates and seeds (Brooker, 1988, Brooker, 1998, 1999, 2000). Pairs occupy

territories of 1-2 ha, usually laying 3 eggs in deeply cupped or hooded nests that are built in low bushes, especially those inter-woven with climbing plants. Breeding was found to be most successful in years of good rainfall when climbing plants were more abundant (Brooker, 1998, 1999, 2000).



10 Threats

Overgrazing by livestock and rabbits, particularly during drought, is thought to have been the main factor that has eliminated the western subspecies of the Thick-billed Grasswren from most of its range (Brooker, 1999). Areas from which the subspecies has disappeared have all lost cover at ground level, whereas places where it has persisted have always maintained ground cover among the shrubs, even where there has been heavy grazing (P. Curry). The apparent disappearance from Dirk Hartog I. has been attributed to cat predation (Carter, 1917, Whitlock, 1921, Schodde, 1982), but heavy grazing by sheep on the island is thought the more likely reason for local extinction (Brooker, 1999). There appears to have been no recent decline in abundance or distribution, and the subspecies is common through its now restricted range, particularly on the well-protected Peron Peninsula.

11 Recommended actions

- 11.1 Monitor island sub-populations every two years.
- 11.2 Restrict spread of extensive wild-fires.
- 11.3 Take measures to prevent establishment of predators, particularly rats, to islands.

- 11.4 Investigate relationship between ground cover and abundance of subspecies.
- 11.5 Minimise likelihood of habitat destruction by encouraging appropriate land management outside existing reserves.
- 11.6 Consider reintroduction to habitat that has recovered and is now protected from grazing.

12 Bibliography

Brooker, B. 1998. A comparison of the ecology of an assemblage of ground-dwelling birds in an arid environment. PhD thesis, Murdoch University.

Brooker, B. 1999. Thick-billed Grasswren (*Amytornis textilis textilis*) Interim Recovery Plan. Department of Conservation and Land Management, Wanneroo.

Brooker, B. 2000. The range and habitat characteristics of the Thick-billed grasswren *Amytornis textilis* in the Shark Bay Region. *Wildl. Res.* in press.

Brooker, M. G. 1988. Some aspects of the biology and conservation of the Thick-billed Grasswren *Amytornis textilis* in the Shark Bay area, Western Australia. *Corella* 12:101-108.

Carter, T. 1917. The birds of Dirk Hartog Island and Peron Peninsula, Shark Bay, Western Australia, 1916-1917. With nomenclature and remarks by Gregory M. Mathews. *Ibis* 5:564-611.

Curry, P. J. 1986. Habitat characteristics of the Thick-billed Grasswren *Amytornis textilis* in grazed shrublands in Western Australia. Pp. 566- 570 in *Rangelands: a Resource Under Siege*. Joff, P. J., Lynch, P. W. and Williams, O. B. (eds). Australian Academy of Science, Canberra.

Davies, S. J. J. F. and Chapman, G. S. 1975. The status of birds on Peron Peninsula and Dirk Hartog Island, Shark Bay, WA. *Emu* 75:55-61.

Storr, G. M. 1985. Birds of the Gascoyne Region, Western Australia. *Rec. W. Aust. Mus.* Suppl. 21.

Schodde, R. 1982. *The Fairy-Wrens. A Monograph of the Maluridae*. Lansdowne Editions, Melbourne.

Schodde, R. and Mason, I. J. 1999. *The Directory of Australian Birds: Passerines*. CSIRO, Collingwood, Victoria.

Rowley, I. and Russell, E. 1997. *Fairy-wrens and Grasswrens*. Oxford University Press, Oxford.

Whitlock, F. L. 1921. Notes on Dirk Hartog Island and Peron Peninsula, Shark Bay, Western Australia. *Emu* 20:168-186.

Comments received from

John Blyth, Allan Burbidge, Andrew Burbidge, Belinda Cale, Peter Mawson, Ian Rowley, Eleanor Russell.