

## Habitats of the Grey Grasswren *Amytornis barbatus diamantina* and a review of the species' distribution

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Grey Grasswrens *Amytornis barbatus* were first described in swamps at the termination of the Bulloo River and that population and nominate subspecies is now considered threatened. A second subspecies is found to the north in wetlands of the Diamantina/Goyder Lagoon/Warburton system. We found the species at 54 sites within the Goyder Lagoon/Warburton floodplain and conclude that that population appears secure. Grey Grasswrens were found chiefly in Lignum (dominant at 57%, present at 88%) and Old-man Saltbush (dominant at 19%, present at 43%) with average vegetation cover of 32.5 per cent but ranging from seven per cent to 81 per cent. While the species occurs above Goyder Lagoon, in both the Georgina/Eyre and Diamantina catchments, connectivity between these localities has not been demonstrated. The Grey Grasswren occurs in a third catchment, Cooper Creek, where its relationship with other populations, including its subspecific status is unproven. The species is best known from dense shrublands of Lignum *Muehlenbeckia florulenta* and Swamp Canegrass *Eragrostis australasica* but we have shown that it occupies and may breed in more open shrublands such as Old-man Saltbush *Atriplex nummularia* ssp. *nummularia*. Our findings question the relative reliance of Grey Grasswrens on these two rather disparate habitats; whether they occupy the more open habitats when forced from deeply inundated Lignum swamps and whether the former serve to aid dispersal between what otherwise appear to be isolated populations.