



Threatened Species of the South Australian Murray-Darling Basin

Mallee Emu-wren *Stipiturus mallee*

Vulnerable

Description and habits

A tiny wren with a long tail of filamentous feathers that look like emu feathers. The male has a blue face and breast while the female is quite plain. Their call is weak and difficult to hear in windy conditions. Curious in nature, they often perch atop a shrub to look around, but quickly drop to cover if they sense danger.

The Mallee Emu-wren, one of Australia's smallest birds, weighs up to 6.5 grams. It uses its size to great advantage to move quickly through dense shrubs, darting about amongst the very prickly spinifex (*Triodia*).

Mallee Emu-wrens are thought to have home ranges of 0.5–3 hectares, and are said to be insectivores, but may also eat seeds. In spring they build a domed nest, usually inside a dense clump of spinifex, and lay 3 eggs.

Family ties

Mallee Emu-wrens live in family groups consisting of a breeding pair and the newest offspring. The young leave the family group to establish their own territories as the new breeding season approaches. It's possible that juveniles sometimes stay behind to help their parents with the next brood, particularly if competition for nearby habitat is high.

Fire - friend *and* enemy

Fire is an essential part of Australian ecosystems, and the habitat of Mallee Emu-wrens needs periodic fires to maintain its suitability. However, very large or frequent fires can eliminate these birds from large areas, leaving them isolated in small, scattered locations, unable to escape further fires.

What do they need to survive?

Several types of habitat are suitable for Mallee Emu-wrens: spinifex heaths, *Xanthorrhoea* (Yacca) heaths, and spinifex grasslands with a mallee overstorey. A dense layer of vegetation at least 40cm tall seems to be the main habitat requirement of these birds. Suitable habitat occurs on the east-facing slopes of sand dunes, on flats between dunes, and on larger sand plains. This species is poorly understood and further research is needed to determine its other requirements.

Why are they threatened?

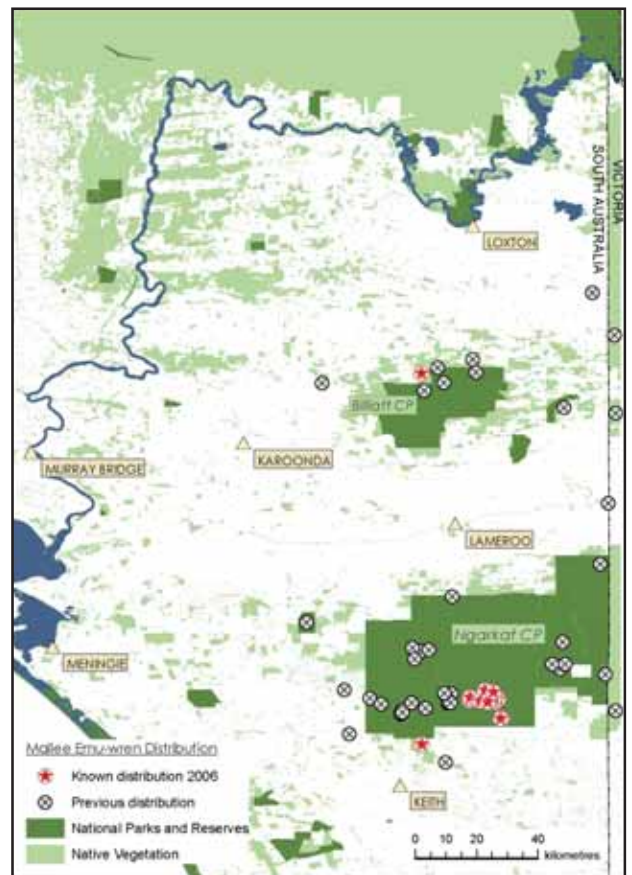
The past broad-scale clearance of vegetation in the Murray Mallee caused a large decline in many native animals, including Mallee Emu-wrens. Fortunately, two large areas of suitable habitat were conserved in Billiatt and Ngarkat Conservation Parks. A 1988 fire in Billiatt CP likely had a large effect on that population and fire continues to be the main threat—recent fires in Ngarkat CP and Carcuma CP have reduced the area of suitable habitat. Currently, most of the remaining birds in South Australia are believed to be in one large patch of heath in Ngarkat CP, so more fires in this area could spell disaster for this species.

What are we doing to help?

A regional Recovery Plan is in place for a group of mallee birds, including the Mallee Emu-wren. Surveys have helped to establish its current distribution and habitat requirements. This information is being used in Fire Management Plans for mallee parks, so important areas will be given priority protection. Further research into the Mallee Emu-wren's social and breeding biology and habitat requirements will help with the future management of this species.

What can you do to help?

If you know of any current locations of Mallee Emu-wrens, especially outside of conservation parks, record the date you saw them and inform the Regional Ecologist, DEH Murraylands, Ph (08) 8595 2111. Every record is extremely valuable.



Where do they occur?

Mallee Emu-wrens occur in the mallee and heaths of the Murray-Darling Basin in South Australia and Victoria, to the south and east of the river. They have been declining in South Australia for some time and are now largely restricted to Ngarkat and Billiatt Conservation Parks (see map).



A female Mallee Emu-wren on an *Allocasuarina* shrub.

Further information contact

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