TAXON SUMMARY

Purple-crowned Fairy-wren (western)

1	Family	Maluridae
2	Scientific name	*Malurus coronatus coronatus* Gould, 1858
3	Common name	Purple-crowned Fairy-wren (western)
4	Conservation status	Near Threatened: c

5 Reasons for listing

This subspecies has disappeared from part, and probably occurs at a reduced density in more than half, of its historical range (Near Threatened: c). The rate of decline has been less than 20% over three generations (so not Vulnerable: A), and the population is neither severely fragmented (C2a), nor singular (C2b). The area of occupancy may be less than 2,000 km^2, but the subspecies occurs at seven locations (so not Vulnerable: B1), and there are probably more than 10,000 mature individuals.

	Estimate	*Reliability*
Extent of occurrence	*250,000 km^2*	*high*
trend	*stable*	*high*
Area of occupancy	*1,000 km^2*	*low*
trend	*decreasing*	*medium*
No. of breeding birds	*12,000*	*low*
trend	*decreasing*	*medium*
No. of sub-populations	*7*	*high*
Largest sub-population	*5,000*	*low*
Generation time	*4 years*	*medium*

6 Infraspecific taxa

M. c. macgillivrayi (Gulf of Carpentaria) is Least Concern.

7 Past range and abundance

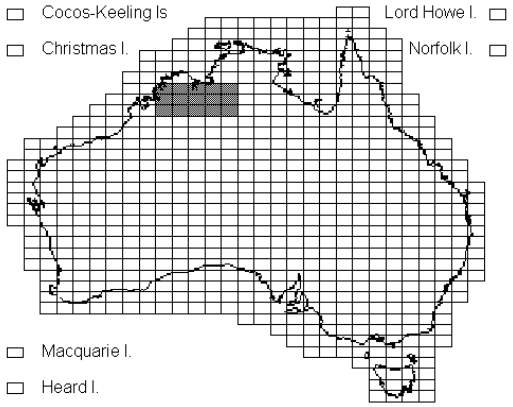
Western Australia: along the Fitzroy, Isdell, Drysdale, Durack, Pentecost and Ord R. systems; Northern Territory: Victoria R. and tributaries (Smith and Johnstone, 1977, Boekel, 1979, Schodde, 1982, Blakers *et al.*, 1984, Rowley, 1987, 1988, Aumann, 1991, Tidemann and Wilson, 1991, J. Woinarski).

8 Present range and abundance

Distribution severely reduced (Rowley, 1993), no longer on upper reaches of Pentecost R. or lower reaches of Fitzroy R. Sparse along middle and upper Fitzroy R. Population estimated at less than 7,000 birds in 7 sub-populations (Rowley, 1993), but recent surveys along Victoria R. suggest numbers there much larger than previously thought (D. Franklin, J. Woinarski), so the population estimate revised to 12,000.

9 Ecology

The western subspecies of Purple-crowned Fairy-wren is generally confined to riparian vegetation, often within 10 m of permanent rivers or associated swamps (Rowley, 1993), although is more widespread along stretches of the Victoria R. (J. Woinarski). The pairs or family parties are most often associated with tall canegrass *Mnesithea rottboellioides* and *Pandanus* stands that have a high stem density (Rowley, 1993), but also use dense patchy shrubs up to 3 m high (A. Start). They forage in the shade, either on the ground or in the foliage, and take a range of insects (Rowley and Russell, 1993).



10 Threats

Livestock seeking access to water eat and trample favoured habitat, whilst hot fires, which have become more frequent since the advent of pastoralism, have also been detrimental in some places. Fire ingress to riparian habitats on the large rivers is often a function of weediness. Increased flood energy, a consequence of rangeland degradation and increased run-off, has also destroyed areas of riparian vegetation (A. Start). These processes expose the soil, leading to erosion and, ultimately, denudation and weed invasion of the river banks, which are then abandoned by the fairy-wrens (Rowley 1987, 1988, 1993). These effects have been ameliorated along some parts of the Victoria R. and in the Kimberley, where stock have been excluded from riparian areas on several large pastoral stations. High and increasing densities of weeds along many rivers that are occupied by the species may eventually also have an adverse effect (D. Franklin, J. Woinarski), although one of the densest sub-populations in the Ord R. lives in a weed-dominated riparian understorey.

11 Recommended actions

11.1 Determine the effects of riparian weed invasion.

11.2 Continue and extend conservation management in riparian zone with the aim of reducing damage by cattle to riverside vegetation, weed invasion and damage from fire.

12 Bibliography

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