

THE GENUS MALURUS

2 THE PURPLE-CROWNED WREN



Purple-crowned Fairywren
Illustration by:
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The Purple-crowned Fairywren, *Malurus coronatus*, is a species of bird in the Maluridae family. It is endemic to northern Australia; two subspecies are recognized—an eastern race, *M. c. macgillivaryi* that occurs in the sub-coastal region from the Roper River in the Northern Territory to the Flinders River in Queensland; and; a western race, *M. c. coronatus*, that inhabits the Kimberley region of Western Australia and the Northern Territory. These two races do not come into contact with each other as more than 400km (250 miles) separate them geographically.

These wrens are small, active, and personable. Their feathers are a warm brown above and whitish-buff below. They have a soft blue vertical tail which they constantly twitch as they forage through the undergrowth in search of food. When in nuptial plumage the male has a distinctive purple and black crown, and the female a chocolate-coloured cheek patch. Adult birds are approximately 14cm (5½") in length, and have a wing-span of about 16cm (6¼") and weigh around 9-13g (0.3–0.46 ounces).



Purple-crowned Wrens live amongst the thick vegetation that lines the freshwater rivers and creeks (the 'riparian strip') of northern Australia. Their preference is for streams with wide marginal vegetation. They seldom move more than 10m (33') from the creek-side vegetation. They have a close association with tall river grasses (*Cionachne sp.*) and Canegrass, *Mnesithea rottboellioides*. They also frequent Pandanus, *Pandanus spiralis*, stands with high stem density. They are able to travel over and through these dense thickets with ease, the barbed leaves of which help to deter predators, this is especially relevant when nesting. Tall trees, such as eucalypts and paperbarks are scattered throughout this thick vegetation, and are used when the riverside vegetation is inundated during the wet season.

Vocalisation is used in many ways, from attracting a mate to warning family members of the approach of a predator. A pair will even sing in concert to drive off strange wrens from entering their territory. The mainstay of their diet is insects of many kinds (including beetles, ants, wasps, grasshoppers, moths and flies), and their larvae, and spiders, which



they find in the debris that accumulates in the leaf-axils of Pandanus after flooding. They typically forage for food in the shaded areas beneath clumps of Pandanus. Foraging is an individual pursuit, however, they always maintain contact with other group members as they rapidly hop over the ground by means of 'chet' calls. Another popular foraging site is amongst the leaves of the Pandanus itself, through which they progress remarkably



Typical Purple-crowned Wren habitat

quickly, using their large feet to grasp the blades of the leaves.

Purple-crowned Wrens usually occur in family groups of five to six birds, consisting of a breeding pair and their young from previous years. All members of the group help to raise the young of the dominant pair. This mating system is known as "cooperative breeding". Some of these "helpers" may stay with their parents for up to

four years or more before departing to find a mate and start their own cooperative breeding group.

Breeding can occur at any time of the year, but may be suspended in very dry years. The female only builds the nest and incubates the clutch of 2-3 eggs. The male remains with her while she builds, and may even feed her.

The nest is a dome-shaped construction built close to the ground in a pandanus, river grass or canegrass thicket. The main construction materials are rootlets, grass stems, leaves and bark. The young remain in the nest for just ten days, and are barely able to fly at first, so they remain in dense cover for about a week.

The Purple-crowned Wren population has declined dramatically since they were first discovered a hundred and thirty years ago. For instance, it is estimated that just 12,000 breeding birds remain of *M. c. coronatus* in the Kimberleys.

The decline is largely due to suitable habitat becoming less and less as creek-side vegetation is removed for pastoral activities, trampled by cattle, destroyed by frequent hot fires or invaded by weeds. This results in increasing distance between suitable patches of habitat, which fragments the already vulnerable population. The impact of climate change on the creeks and river systems of northern Australia is likely to exacerbate the plight of this avian gem.

The Purple-crowned Wren is now listed by the Commonwealth government as "vulnerable".

Reference: 1. Australian Wildlife Conservancy website
2. Wikipedia

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