



Water for a Healthy Country

Taxon Attribute Profiles *Falcunculus frontatus*

Crested Shrike-tit

Taxonomy and Ecology

Life Form/Morphology

Falcunculus frontatus is an endemic passerine bird measuring some 17 cm in length. The genus is monotypic and the species is divided into three isolated forms, sometimes considered full species, all of which are characterised by bold plumage, large crested head, and stout powerful bill. The head of the Crested Shrike-tit is striped black and white, with a broad median crown stripe and black eyelines setting off its otherwise white cheek patches. The head pattern of females is similar to but less bold than that of males, and males have a black chin and throat patch, whereas that of females is olive or olive-brown. Birds of the eastern race *frontatus* have dark olive backs and are pale yellow to yellow beneath; those of the northern race *whitei* have yellow-olive backs but are similar to eastern birds below. Individuals of the southwestern form *leucogaster* also have yellow-olive backs but below they are mainly white, with yellow only on the breast, vent, and undertail coverts.



photo: Graeme Chapman

Distribution

In the east, *F. frontatus* is found mainly in southeastern Australia, ranging from southeastern and south-central Queensland through much of New South Wales (especially in the east) and most of Victoria and into southeastern South Australia; isolated Queensland populations additionally occur as far north as the Atherton region (HANZAB 2001; Barrett et al. 2003). There are scattered records of the northern race *whitei* from the Top End, Northern Territory, and this race also occurs in the Kimberley region of Western Australia. The race *leucogaster* is confined to southwestern WA. The distribution of the Crested Shrike-tit in western NSW is very distinctive: the species is widespread in woodlands along the western slopes of the Great Dividing Range, but further west is found mainly along the larger rivers, especially the Murray and the Darling, although it is rarely seen in NSW west of Wentworth (Cooper and McAllan 1995).



Habitat

All subspecies of *F. frontatus* occupy eucalypt woodlands and forests. Populations in the Murray-Darling Basin, especially those to the west, are strongly associated with the river red gum *Eucalyptus camaldulensis*. In this region, the Crested Shrike-tit appears to be reliant on extensive stands of this species. *F. frontatus* is rarely found in areas in which black box *E. largiflorens* is predominant and river red gums form only a fringing strip along riverbanks and backwaters. The Shrike-tit can more easily glean prey from the loose ribbon-like bark of *E. camaldulensis* than from the deeply furrowed bark of *E. largiflorens* (Joseph and Reid 1981).

Role in community

F. frontatus is largely an insectivore; it also feeds on spiders and other invertebrates and occasionally takes plant matter such as fruit or seeds. Insects most often eaten near Armidale, NSW, were Coleoptera, especially Chrysomelidae (Ford 1985). This species specialises in prising peeling bark from large branches or tree-trunks and extracting prey from underneath. It is active at all forest strata, but is typically found in the sub-canopy or canopy. This species also gleans insects from foliage and can use its powerful bill to open woody galls of insects. Despite its bill, the Crested Shrike-tit prefers to forage on gums, stringybarks, and other trees with flaky ribbon-like bark, rather than those with rough bark, from which it is more difficult to extract prey items.

Reproduction and Establishment

Reproduction

Breeding occurs in the eastern race *frontatus* from August through January and 2-3 eggs are laid. The nest is a deep cup or cone woven from grass fibres and strips of bark, lined with fine strips of bark and grass and covered outside with filaments of spider webs. The nest is typically placed in a vertical fork high in a eucalypt tree or sapling, and the birds trim or nip off leaves in the vicinity of the nest. Two broods are generally raised. The incubation period is 18-20 days; both sexes incubate although the female more so than the male (HANZAB 2001).



photo: Ellis McNamara

Dispersability

The Crested Shrike-tit is a diurnal bird that occupies large territories during most of the year. The species appears to be resident in most parts of its range, although local or seasonal movements have been reported in some areas. For example, *F. frontatus* has been described as nomadic in the Inverell, NSW, area (Baldwin 1975), and the species occurs in Rockhampton, Qld, only in late winter and spring (Longmore 1978). This species can be found in pairs, in small groups of 3-5 birds (often family groups of parents and young), and as single individuals. *F. frontatus* occasionally joins mixed-species flocks.

Juvenile Period

Young of the Crested Shrike-tit are altricial (completely dependent on parents) and remain in the nest for some time after hatching. Time from fledging to independence is some 15-20 days (HANZAB 2001). Juvenal plumage is typically worn until late summer or early autumn.

Hydrology and Salinity

Flooding Regimes

This species will be affected by differing flooding regimes to the extent that they change the distribution of river red gums or the abundance of invertebrates under their bark.

Conservation Status

The eastern subspecies is of least conservation concern, although the western form *leucogaster* is near-threatened and the northern form *whitei* is endangered (Garnett and Crowley 2000). Populations of the northern form are severely fragmented, and individuals may now be at such low density that many local populations are no longer viable. The western form has declined primarily due to habitat loss, particularly clearing of habitat for agriculture. Nests of *F. frontatus* have been reported to be depredated by cats (Chisholm 1915).

Summary

The Crested Shrike-tit *Falcunculus frontatus* is closely associated in much of the Murray Darling Basin with stands of the river red gum *Eucalyptus camaldulensis*. Changes in the distribution or abundance of *F. frontatus* in the Murray Darling will likely be linked to alterations in distribution of river red gums or to changes in abundance of their bark-dwelling invertebrates. Declines of the northern form of this species may be linked to changes in the frequency of fires, which now occur too often for insects to become established beneath the bark of gum-barked trees (Robinson and Woinarski 1992).

References

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More information contact:
Dr Judy West
02 6246 5113
judy.west@csiro.au
www.csiro.au