

## Windharps of the Wimmera

*In the increasingly hostile woodlands of the south-east, the endangered Buloke woodlands are a haven for small birds*

TEXT BY MARTINE MARON

The leafless Buloke trees of western Victoria's Wimmera Plains used to be viewed as scruffy and useless, inferior to the more majestic Red Gums and shade-giving Grey Box. Farmers preferentially cleared the Buloke, considered more useful for fence posts than stock shelter. But increasingly, the Buloke trees are appreciated for what they are—essential components of the unique and threatened woodlands of the Wimmera and important habitat for the region's avifauna. The sound of the wind as it whips through the tangled foliage has earned them the evocative nickname 'windharps of the Wimmera'.

Today a dryland grain-growing area, the Wimmera landscape was once grassy, lightly wooded plains. Despite the low rainfall, the fertile soils encouraged the clearance of over 95 per cent of the plains for grazing and then cropping. Remnant woodland is packaged into small neat squares and rectangles of a few hectares in size and linear ribbons clinging to roadsides. From the air, the extent of clearing is particularly stark.

We are all aware of the frightening loss of native birds from our agricultural landscapes; not only in Australia, but in many parts of the world. While the ultimate causes of these declines are clear—the loss, fragmentation and degradation of habitat—the proximate mechanisms vary from place to place. In eastern Australia, for example, increased populations of the edge-loving Noisy Miner have been repeatedly implicated in decreases of other woodland species. This is where the humble Buloke tree is doing more than its fair share for the conservation of the Wimmera's woodland birds.

A typical eastern Australian landscape cleared and fragmented to a similar degree to the Wimmera is not the sort of place you'd recommend for birding. Groups of Noisy Miners patrol the remaining trees and a few butcherbirds and magpies might be stalking about. But the Buloke remnants of the Wimmera are different.

Standing in a patch of Buloke woodland in the still, clear cold of a Wimmera spring morning, you can perhaps see paddocks on all sides. The ground might be grazed and no shrubs remain. But listen. Ever-present is the quiet tick and rolling call of the Red-capped Robin. The high-pitched notes of a group of sittellas grow louder as the flock approaches, claims a tree and sets to foraging busily, heads downwards. A cloud of little birds flies up from the ground: Chestnut-rumped Thornbills mixed with Southern Whitefaces. A Hooded Robin pounces on its prey from a nearby stump and a family of Brown Treecreepers protests loudly at your presence as you wander too close to their territory. In the southern Wimmera, Diamond Firetails might be seen foraging among the early spring grasses and attending to their nests in the thick mistletoe clumps.

How can it be that such small, degraded woodlands continue to host this wonderful combination of birds, set as they are in a vast matrix of cropland? Why haven't the Wimmera's birds long vacated these remnants?

One reason becomes clear if you investigate the other woodland types in the area. Step into a nearby remnant, this one dominated not by Bulokes, but by eucalypts—Red or Yellow Gums, or Grey Box. These remnants are like many others

in agricultural eastern Australia: Noisy Miners call incessantly, joined perhaps by some White-plumed Honeyeaters. Striated Pardalotes add to the soundscape and Eastern Rosellas fly through in pairs. The aggressive Noisy Miners rule here—most smaller woodland species simply don't risk taking them on.

So it seems that a large part of what makes Buloke woodlands so special for the Wimmera's birds is the absence of one particular species—the Noisy Miner. A recent study funded by Greening Australia reveals the stark contrast between the bird communities of pure Buloke remnants and those with eucalypts.

The Noisy Miners were never recorded in pure Buloke woodlands. But in mixed woodlands, where eucalypts occurred in amongst the Bulokes at a density of just five (or more) per hectare, the picture was very different. Miners had moved in to these patches, and the rest of the avifauna was dramatically different—characterised by large-bodied, open country species. In all, six times as many small woodland birds were found in the miner free Buloke-dominated woodlands compared to the mixed woodlands. Several species, common in Buloke remnants, were not recorded at all in the miner-patrolled mixed woodlands: the Varied Sittella, Yellow Thornbill, Southern Whiteface and Red-capped Robin. Even Buloke remnants directly adjacent to eucalypt patches were not infiltrated by Noisy Miners, provided they were low in eucalypt density.

Despite their relationship with aggressive Noisy Miners, eucalypts at low densities play an important role in Buloke woodlands. Brown Treecreepers were rarely recorded in a woodland unless there was at least one eucalypt present. Large, gnarled old Grey Box with the small hollows they preferred for nesting often seemed to be the focal centre of a family territory, with groups often taking refuge there when disturbed. Bulokes do not readily form hollows, so the presence of these big old eucalypts is probably important for many other species too. Fortunately, however, the treecreepers seem only to require two or three eucalypts in several hectares of woodland, much less than the threshold requirement of Noisy Miners.

Although many species that are declining elsewhere are hanging on in the Buloke, all is not rosy for the birds of the Wimmera. Already the Grey-crowned Babbler is reduced to a few birds and its days in the region are numbered. There are also worrying signs that the White-browed Babbler is heading the same way. Farmers lament that the eerie cry of the Bush-stone Curlew is no longer heard at night in the north. In the south, they are hanging on in small numbers, but their breeding success is poor and the outlook is grim. It is impossible to remove over 95 per cent of the native vegetation of an area, introduce weeds and feral animals, and still maintain all species that once occurred there. But for the species that remain common, there is still hope.

For many, Buloke woodland captures the essence of the Wimmera. In summer, the whole woodland is colored in subtle pastels—the spear and wallaby grasses bleached pale, the grey-green of the Buloke cladodes. In spring, the rare patches with an intact ground layer are carpeted with white and yellow daisies, purple Broughton Peas and fluffy pink-and-white *Ptilotus*. In some years, the spear grasses flower en masse, transforming the woodland floor to a shimmering ocean of silver and purple.

The Buloke trees themselves support their own flora. Mistletoes seem to love Buloke trees. Bunches of Harlequin Mistletoe with their bright green foliage are easy to spot amongst the grey cladodes, but the threatened Buloke Mistletoe blends in perfectly with its velvety grey needles. Only in summer does it become clear that the woodland is scattered with hundreds of Buloke Mistletoes contrasting with the almost

fluorescent pink glow of the flowering trees, which attract scores of honeyeaters. Spiny-cheeked and Singing Honeyeaters, which spend all year in the otherwise nectarless woodlands, have a field day, and in some years White-fronted Honeyeaters descend on the Wimmera in their thousands from their usual inland haunts to take advantage of the bounty.

Adding to the importance of these woodlands is the fact that Buloke is one of only three tree species in which the endangered south-eastern Red-tailed Black-Cockatoo feeds. In the southernmost part of the Wimmera, a large proportion of the 1000 or so remaining red-tails can be seen foraging on Buloke seed in summer.

Yet in this region, centuries-old Bulokes are still felled to make way for agricultural intensification, particularly centre-pivot irrigation. Careless burning of crop stubbles also contributes annually to tree decline throughout the Wimmera, and the growing size of farm machinery and moves toward using GPS technology to drive headers is an added incentive to remove trees from the landscape.

Big old Bulokes are hard to replace. Attempts to revegetate by direct-seeding have been unsuccessful, so seedlings must be planted by hand. Seedlings are highly palatable to grazers including sheep and hares and they are slow—taking perhaps 100 years to attain a diameter of just 20 cm, still far smaller than the trees preferred by the red-tail. One promising method is to encourage suckering from parent trees, as suckers are faster growing and more robust to grazing and competition from weeds than young seedlings.

Bill Wallace is one grazier who is making the effort. He has planted over 1000 Bulokes on his Apsley property, fenced off areas of scattered trees to allow regeneration, and changed stocking patterns to reduce impacts from livestock on the unfenced paddock trees. He has also fenced off an area of scattered trees with electric fencing to exclude foxes—resulting in the first successful raising of Bush Stone-curlew chicks on his property in at least 30 years.

Further north, Minyip farmer Darryl Barber owns several stands of Buloke woodland near Minyip and Warracknabeal. These blocks, plus an area of previously cropped open paddock, are fenced from livestock, and Darryl hopes to return the more open areas to native grassland. ‘The trees were looking sick,’ he says, ‘and Bulokes haven’t regenerated since grazing was first introduced to this area in the 19<sup>th</sup> century. I wanted to make sure these trees had a future’. Along with Greening Australia, Darryl is involved in trials aiming to develop an efficient methodology to restore the grassy ground-layer of the threatened plant community.

If we are to have Bulokes and Buloke woodlands long into the future, and the diverse and unique bird communities they support throughout the Wimmera, the problems of tree loss and woodland senescence must be tackled from both ends. The marvellous efforts of those forward-thinking individuals who value the Buloke woodlands enough to plant and care for young trees throughout their protracted seedling stage are to be rewarded and encouraged. Programs such as those run by Greening Australia and regional natural resource management bodies that help landowners replant, protect and encourage regrowth in Buloke woodlands will be vital. Allowance for the potential effects of eucalypt density in revegetation and restoration efforts will be critical to ensure the avifauna that eventually inhabits the woodland is not dominated by Noisy Miners.

But in parts of the Wimmera, trees are still being lost at an artificially high rate. To replace a typical 40 cm diameter Buloke tree, with its small hollows for birds and bats and large canopy providing profitable foraging for red-tails, might take over 300

years. We must retain existing trees for as long as we can to help bridge the gap. The importance of scattered trees and small Buloke remnants must not be underestimated, as they are a vital link to the future for the Wimmera's unique and valuable avifauna.

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Early photos (scans): Wimmera farmer Bill Wallace affixing Trust For Nature sign to newly covenanted woodland block; *Ptilotus* flowers; Buloke woodland; a tiny patch of Buloke woodland that is nevertheless home to breeding Diamond Firetails, Dusky Woodswallows, Brown Treecreepers and Southern Whitefaces.

Citation:

**Maron, Martine (2006) *Windharps of the Wimmera*. *Wingspan*, 16 (3). pp. 22-25.**

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