

MASTER MOCKERS

Rufous Scrub-birds



OF THE FOREST



By Cheryl Gole
and Mike Newman

Mousebird, Mysterybird, Mockingbird: all these names conjure up images of different species. They're all one: the Rufous Scrub-bird. One of this continent's most ancient birds, this small denizen of eastern Australia's sub-tropical rainforest struts its stuff in the dense understorey and challenges us to see it if we can.

The closest relative of the scrub-bird is the lyrebird. Like lyrebirds, scrub-birds have their origins in the Eocene, the 'dawn of recent life'. This period of warm, tropical life occurred 56-34 million years ago, when mammals continued to develop while Australia separated from Antarctica and the rest of the Gondwana supercontinent. As the Australian continent became progressively more arid, scrub-bird populations contracted, eventually becoming two separate relict species, one in south-western Australia, and the other in eastern Australia.

Europeans encountered both species in the nineteenth century, collecting the Noisy Scrub-bird for the first time in 1844 and the Rufous Scrub-bird in 1866. By 1869, only 25 years after it had been 'discovered', habitat loss and changed fire regimes had apparently driven the Noisy Scrub-bird to extinction. In 1961 it was found again as a tiny population on Western Australia's south coast. The target of intensive study and management since it was rediscovered, the Noisy Scrub-bird is one of modern Australia's conservation success stories, although it still requires active management in its fire-prone south coast habitat.

While the Rufous Scrub-bird fared somewhat better, it too disappeared from substantial parts of its range in south-eastern Queensland and north-eastern New South Wales, driven from abundance to extinction in the New South Wales lowland sub-tropical forest—the so-called 'Big Scrub'—by massive clearing of habitat. The Rufous Scrub-bird is now restricted to a number of isolated populations in areas mostly above 600 m, a distribution corresponding broadly with the 'Gondwana Rainforests of Australia' World Heritage Area.

There are two subspecies of Rufous Scrub-bird. The northern subspecies is restricted to Main Range, Border Ranges, Gibraltar Range and Barool National Parks; the southern subspecies is confined to Werrikimbe, Carrai, Oxley Wild Rivers, New England and Barrington Tops National Parks. Survey work in the last decade supports anecdotal evidence that the northern subspecies is the less common of the two. The Rufous Scrub-bird is listed under state threatened species legislation as Vulnerable in Queensland and New South Wales. While it is not listed under Commonwealth threatened species legislation, consideration has been given to making a case for its listing. The monitoring program, begun in 1999, coincided with severe drought across much of its range and showed that under drought conditions Rufous Scrub-birds are likely to disappear from areas in which they have previously occurred. It would appear that this is one more species highly susceptible to the adverse effects of climate change.

Often thought of as a rainforest species, Rufous Scrub-birds also utilise moist, dense understorey in more open forest or on the edges of rainforest. Patches of rainforest where canopy gaps have resulted from tree fall are important, as are areas of long-unlogged forest. Ideal habitat also includes clumps of sedges suitable for nesting.

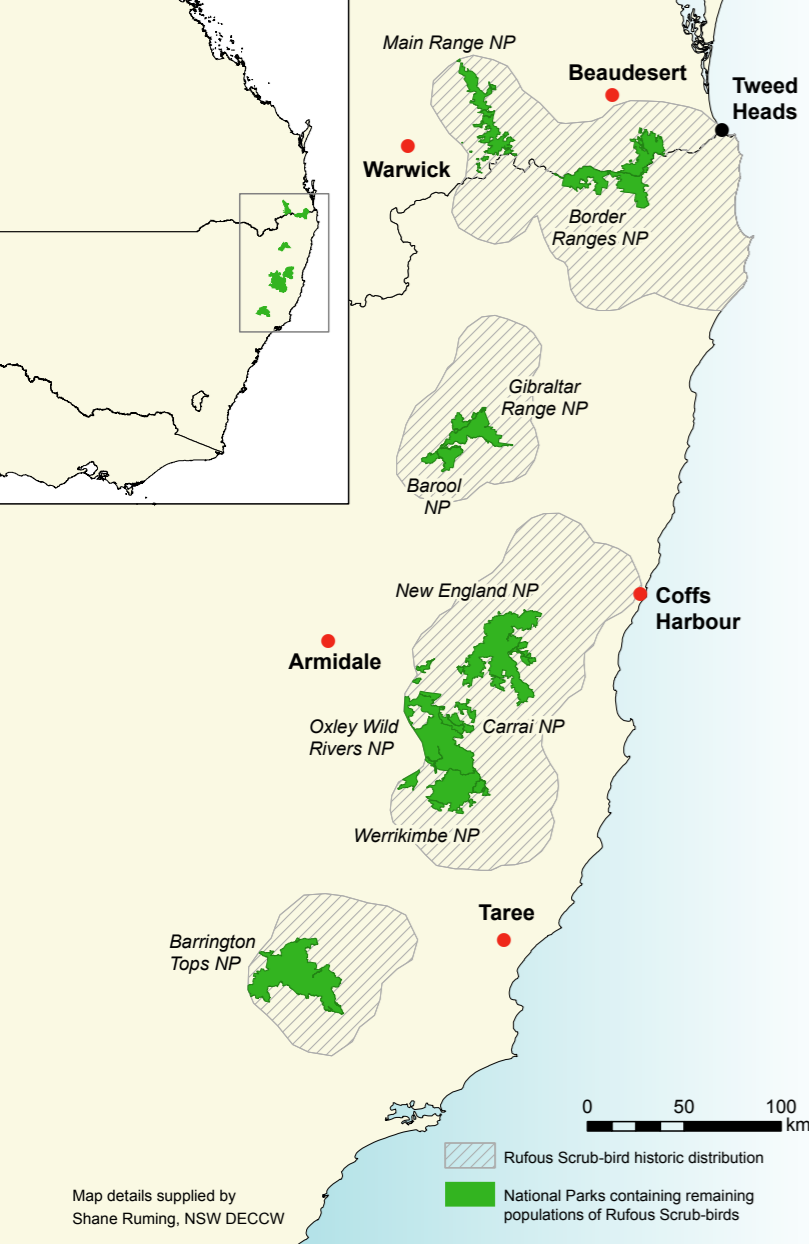
Rufous Scrub-birds favour the dense undergrowth along wet gullies, watercourses, roads and walking tracks, including areas supporting native species such as Bracken Fern and other ground dwelling ferns, native raspberry and blackberry, and native grape as well as areas infested with weeds such as Crofton Weed and Mist Flower. This is an important consideration for land managers, who need to ensure that weed control measures include the strategic replacement of weed thickets with native plant species that form similarly dense patches of habitat.



Top:
Very few images exist of the extremely shy Rufous Scrub-bird. This is one of Michael Morcombe's iconic portraits taken in the 1970s. Photo by Michael Morcombe

Opposite, top:
The Rufous Scrub-bird is isolated to a few mountaintop refuges such as New England National Park, now a designated Important Bird Area (IBA). Photo by Shane Ruming

Opposite, bottom:
Rufous Scrub-birds can inhabit dense, ferny understorey such as this bordering a stream in the Border Ranges National Park in the Scenic Rim IBA. Photo by Shane Ruming



Monitoring Rufous Scrub-birds in Important Bird Areas

Important Bird Areas (IBAs) form a worldwide network of sites for the conservation of birds. IBAs are designated for sites that meet at least one of a number of internationally agreed criteria, including regularly supporting species of global conservation concern. These are species listed as Vulnerable, Endangered or Critically Endangered under the IUCN Red List of Threatened Species.

Five IBAs have been designated for the Rufous Scrub-bird; four of them in NSW and one on the NSW-Queensland border. Since September 2010, surveys have been undertaken by volunteers in the Barrington Tops, New England, Gibraltar Range, Scenic Rim and Werrikimbe IBAs.

This monitoring and community project is an initiative of the Hunter Bird Observers Club, the Birds Australia IBA project and the NSW Department of Environment, Climate Change and Water, with input from other birding groups in NSW. It provides an excellent opportunity for any observer interested in working to help conserve this species. Volunteers are needed for all Rufous Scrub-bird IBA surveys, and training is available for everyone. Periodic training campouts and surveys at Gloucester Tops in the Barrington Tops National Park in NSW are organised by Hunter Bird Observers Club. For field surveys, we need people with some time, a degree of physical fitness and good bird identification skills. CDs with Rufous Scrub-bird calls will be provided for everyone who participates, so you don't need to be immediately familiar with the (very loud!) calls of this famous mimic. The surveys will also incorporate area searches that will collect data on all species for the BA Atlas.

For anyone interested in this great opportunity to get involved in the conservation of one of Australia's most enigmatic birds, contact Peter Marsh at BASNA on 02 9810 4264 or peter_marshall@scp.com.au

What is most important in these habitats is a cool, moist micro-climate at ground level, underneath dense understorey with abundant leaf litter, debris and rotting wood. It is here that the ground-dwelling, almost flightless scrub-birds forage for invertebrates, shovelling with their bills, flicking litter over their heads and scratching with both feet to disturb their prey.

Rufous Scrub-birds are remarkably difficult to see. Small, dark and secretive, they move through the undergrowth like rodents, frustrating many an observer wanting to have a good look at these elusive birds. Few people, however, fail to hear them: the male's calls are so loud that they have been described as ear-splitting. Females seldom call and are less likely to be heard, usually making soft, simple, single note calls. Males are highly territorial, occupying permanent territories which they defend with song. The most frequent, territorial call is the resonating 'chipping song', described as hitting a piece of tin with a metal hammer on an anvil. Scrub-birds call more frequently during the breeding season, generally September to December, although birds with permanent territories have been recorded singing at all times of the year. The calls of males are the only reliable way of detecting the birds—the species is a particularly challenging one to survey and monitor.

Accomplished ventriloquists and mimics, Rufous Scrub-birds are able to confound the ears of all but the most experienced listeners. They are known to impersonate a large number of other birds, including mimics such as the Superb Lyrebird as well as birds like the Green Catbird, Australian King-Parrot, Lewin's Honeyeater, Australian Logrunner, Eastern Whipbird and Golden Whistler.

A comprehensive study of the Rufous Scrub-bird by Simon Ferrier in the 1980s provided the basis of our present understanding of the species. His work highlighted the ongoing vulnerability of the species and suggested that the long term survival of the scrub-birds was dependent on effective management of its critical habitat. Monitoring was initiated by Birds Australia and the NSW National Parks and Wildlife Service and carried out over

a six year period from the late-1990s. While the monitoring program did not clearly identify abundance trend data, the baseline data were used to assess the species' conservation status at the national level in the Commonwealth Government's *Action Plan for Australian Birds* and *Birds Australia's State of Australia's Birds Report 2003*.

Most Rufous Scrub-birds are confined to areas with secure tenure in national parks or state forests, and vegetation clearance is no longer a significant threat. The ongoing effects of altered fire regimes and the longer-term effects of climate change might affect the local range and abundance of the species. More recently, the Birds Australia Important Bird Areas (IBAs) project has designated five areas as globally significant sites for the conservation of these birds (see breakout box p. 18). The task of engaging local communities in monitoring and raising the profile of the species is still crucial. Once again, volunteers and the community are getting involved in the conservation of this fascinating species.

Further Reading

Ekert, P.A., 2005. *Monitoring the Rufous Scrub-bird (Atrichornis rufescens) in the Central Eastern Rainforest Reserves of Australia*. Unpublished report for the Department of Environment and Conservation, Sydney.

Ferrier, S., (1985) "Habitat Requirements of a Rare Species, The Rufous Scrub-bird" in *Birds of Eucalypt Forests and Woodlands, Ecology, Conservation and Management*. Keast et al. (Eds) Published Surrey Beatty and Sons in association with the RAOU. Chapter 20 pages 241-248

Higgins, P.J., J.M. Peter, W.K. Steele, 2001. *Handbook of Australian, New Zealand & Antarctic Birds. Vol. 5: Tyrant Flycatchers to Chats*. Oxford University Press, South Melbourne.

Cheryl Gole manages *Birds Australia's Important Bird Areas project*. She has never seen a Rufous Scrub-bird.

Mike Newman is a *Fellow of Birds Australia* best known for his studies of the *Australian Pied Oystercatcher*. He is also the *Hunter Bird Observers Club's Field Studies coordinator*

Acknowledgements

The article would not have been possible without Andrew McIntyre, Mick Roderick, Shane Ruming and Tricia Waters at the NSW Department of Environment, Climate Change and Water; Alan Stuart at Hunter Bird Observers Club; Peter Ekert at Ekerlogic Consulting; and Peter Marsh at BASNA, who all commented on drafts, provided photographs and drafted maps.

Master mockers of the forest



Top left: In some areas, roadside vegetation is an important habitat for Rufous Scrub-birds. This roadside verge vegetation in the Border Ranges in the Scenic Rim IBA is dominated by weed species, including Mist Flower. Photo by Peter Ekert

Top right: High altitude tall open eucalypt forest with an almost impenetrable understorey in Werrikimbe National Park supports multiple Rufous Scrub-birds. Photo by Peter Ekert

Middle left: Extremely dense thickets of native blackberry provide abundant habitat in the Main Range National Park in the Scenic Rim IBA. Photo by Peter Ekert

Middle right: Low roadside vegetation dominated by Bracken Fern and weed species including Mist Flower provides important areas for Rufous Scrub-birds in the Border Ranges and Scenic Rim IBA. Photo by Peter Ekert

Bottom: A rare photograph of the southern race of Rufous Scrub-bird taken at Gloucester Tops, Barrington Tops National Park. Photo by David Stowe