

# Territory occupancy by Southern Rufous Scrub-birds *Atrichornis rufescens ferrieri* in the New England region, New South Wales monitored over two decades

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Over two decades (1999 to 2018), three monitoring programs have been undertaken on the Southern Rufous Scrub-bird *Atrichornis rufescens ferrieri* in the New England region, New South Wales. The most recent monitoring was conducted over three breeding seasons (2016 to 2018) along 12 km of transects located in scrub-bird habitat in the Horseshoe Road area. The aim of this recent monitoring program was to document territory occupancy, facilitate comparison with previous occupancy patterns and provide critical population information valuable in the conservation of this endangered species. Transects were each surveyed 10 times and, based on male birds calling on three separate occasions from the same site, 12 territories were identified. This result resembles those obtained in the two previous survey periods, with 12 territories also being found in 2010-13 and 14 in 1999-2004. In the 2016-18 period, scrub-bird presence was recorded an average of 5.6 times at an occupied territory and scrub-birds were detected at such sites on 58% of systematic surveys. Nine of 12 (75%) territories occupied during the 2016-2018 survey period were in the same locations used in 2010-13. Over the two decades, 18 different territories are known to have been occupied and the locations of seven of them were unchanged over the entire period. We estimate that there may be 36 sites along the study transects that have been or could potentially be used as territories; 28 of them have yielded at least one record of a scrub-bird. Future surveys are therefore likely to identify 'new' territories. The habitat in the study area remains of high quality for the Southern Rufous Scrub-bird; however, it is becoming increasingly threatened by drought and fire.

**Key words:** Southern Rufous Scrub-bird; territory occupancy; calling males; long-term monitoring; conservation