

Assessment of avian site fidelity in arid *Acacia* shrubland based on a ten-year mark-recapture study in central Australia
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Mark-recapture surveys of bird communities were conducted at five *Acacia* shrubland sites near Alice Springs, central Australia, between 2001 and 2011. The primary objective was to examine the levels of site fidelity displayed by individuals to provide insight into local bird community dynamics that cannot be ascertained by visual surveying. Approximately 1800 birds from 50 species were banded and over 150 individuals were recaptured. Results for the 27 species whose members were captured and banded 10 or more times are reported and assessed for evidence of site fidelity. Eleven species were classified as sedentary based on relatively high recapture rates and individuals being recaptured over long time periods. Species with the highest rates of recapture and with individuals persisting at sites for many years included the Splendid Fairy-wren *Malurus splendens*, Redthroat *Pyrrolaemus brunneus* and Chestnut-rumped Thornbill *Acanthiza uropygialis*. The results provide new evidence of high site fidelity for a suite of species associated with *Acacia* shrubland habitat in central Australia. Conclusions about which species are sedentary and which are mobile are broadly consistent with those of previous studies in this habitat based on visual surveys and with banding data from other regions, but with some new insights being gained.