Why is the research needed?

Woodland birds are a nationally threatened species assemblage, with ongoing population declines attributed to habitat loss and fragmentation. Over 90% of box-gum grassy woodland has been cleared from agricultural regions in south-eastern Australia since European settlement. Restoration plantings are increasingly implemented to address habitat loss in agricultural landscapes. However, unless plantings support breeding populations of threatened fauna, their effectiveness as a conservation strategy cannot be guaranteed. It is vital to understand the effects of restoration plantings on woodland bird populations, lest they fail to address population declines.

How will the research help?

The results of this study will address a critical knowledge gap regarding the role of restoration plantings in woodland bird conservation. There is an ongoing drive for restoration projects in box-gum grassy woodland regions, aimed at both improving farm productivity and bringing back biodiversity in these highly modified areas.
Habitat restoration is a key component of many recovery plans for endangered woodland birds, including the NSW Government’s Saving our Species program. It is crucial that restoration programs provide good-quality habitat for these birds in the long-term.

Knowledge gained from this study will directly benefit guidelines for future restoration plantings. For example, data analysis has already revealed that small plantings are particularly valuable for breeding birds. If we can inform restoration efforts by quantifying the value of particular habitat characteristics, we can optimise the quality and long-term effectiveness of the habitat for woodland bird communities.

What research activities are being undertaken?

The project consists of three major components:

1. **Surveying breeding activity**
   In the breeding season (September to November), the team systematically surveys sites for evidence of breeding behaviour and related activities.

2. **Monitoring nests and young**
   We monitor the success of individual woodland bird nests using fixed wildlife cameras situated near the nests. Parental behaviour, brood size, nestling development, fledging rates and nest predation are recorded.

3. **Assessing site fidelity and habitat-use of woodland birds**
   At each study site, we have trapped woodland birds and fitted them with coloured and/or standard ABBBS leg bands. Individual birds are GPS tracked to determine habitat-use and territory sizes. We will also recapture birds at seasonal intervals over the duration of the project, to assess site fidelity over time.

Who is involved?

This project is being undertaken by The Australian National University.

Further Information

For more information please contact:
Donna Belder
donna.belder@anu.edu.au

Where is the research happening?

The study sites are located in the South West Slopes Bioregion of NSW. There are 21 sites: 12 plantings and 9 woodland remnants, including two travelling stock reserves. Sites are on farms within a matrix of pasture and cropland.

When is the research happening?

Fieldwork was undertaken from 2015 to 2017. Data analysis and reporting on results will conclude in 2019.

Donna with a Common Bronzewing.
Photo: Jas Allnutt