

APPLICATION

Applicant details	
Applicant name	Justine Rice
Applicant address	████████████████████
Daytime telephone	██████████
Email address	j.rice@uq.net.au
Institution name	The University of Queensland
Institution address	The University of Queensland, Gatton Campus, QLD 4343
Department	School of Agriculture & Food Sciences
Supervisor's name	April Reside
Supervisor's phone and email	██████████ a.reside@uq.edu.au
Secondary supervisor's name	Martine Maron
Secondary supervisor's phone and email	██████████ m.maron@uq.edu.au

About your research project	
Project title	Can woodswallows help find Black-throated Finch (<i>Poephila cincta cincta</i>)?
Brief description of project (max 200 words)	<p>The Endangered Southern Black-throated Finch (<i>Poephila cincta cincta</i>; BTF) is one of seven declining granivorous birds in Australia, and has disappeared from over 80% of its former range. It occurs in low density across its distribution, primarily on private land, most of which is grazed by livestock. It is yet unknown why BTF persist in some grazed landscapes but not all. It's rare and inconspicuous nature, combined with the inaccessibility of much of its habitat, provides substantial challenges for survey and monitoring. However, BTF has a strong association with the Black-faced Woodswallow (<i>Artamus cinereus</i>) in mixed-species flocks, which are more conspicuous due to their ariel hawking of arthropod prey. The primary aim of this research is to determine if focusing search efforts on Black-faced Woodswallows will increase our ability to detect BTF, particularly throughout its inland distribution in the Desert Uplands Bioregion. The secondary aim is to better understand the habitat features associated with BTF. Habitat characteristics (e.g. grass species composition; management history; productivity indices) of sites with and without BTF will be measured to increase our understanding of their habitat needs. This research addresses the key knowledge gaps of both effective survey techniques and habitat requirements for BTF.</p>

Project aim (max 100 words)	My aim is to investigate whether a novel survey method will increase the likelihood of detecting Black-throated finch
What are the anticipated conservation outcomes of your research? (max 200 words)	<p>There are three main anticipated outcomes of my research:</p> <p>1) Test of a new method for increasing detection rates of BTF. This could aid further survey and monitoring of BTF, and be useful for updating the survey guidelines. Furthermore, this survey method is likely to be useful for the survey of other small granivores, as anecdotes suggest Black-faced woodswallows are used to help find Gouldian Finch and possible some buttonquail species.</p> <p>2) Greater understanding of habitat requirements for BTF. Refining our knowledge on the ground layer composition and structure of BTF habitat was identified in a recent review of key knowledge gaps for BTF. Most of the work on BTF habitat has been done on the Townsville Coastal Plain, and little habitat investigation has been done in the more inland parts of their range across the Desert Uplands Bioregion.</p> <p>3) Strengthening of relationships with landholders throughout the BTF range. As BTF's remaining habitat is almost entirely on private land, ongoing persistence of BTF will require that landholders maintain grazing management that benefits BTF. I hope that by engaging with the landholders in a respectful way will result in them looking favourably on having robust bird communities on their properties.</p>
Project methodology (max 100 words)	This study will be conducted in the Desert Uplands Bioregion of Queensland, in the BTF's preferred Regional Ecosystems (identified in the Draft National Recovery Plan). I will drive slowly (40 km/hour) scanning for Black-faced woodswallows. Upon detection of a woodswallow I will conduct a 20 minute 1 ha bird survey and identify all bird species associating with the woodswallow, and record any granivores within the area. I will repeat the survey at a matched control site within 500 m of each woodswallow survey, and will aim for 40 paired sites. Vegetation will be assessed using a modified BioCondition assessment.
What are the start and finish dates of your research project?	February – 20 October 2023
If this is longer than a one year project, identify milestones and outcomes to be completed within this academic year	It is a one-year project.
If successful, how do you intend to spend the grant funds (excludes conferences)?	I will spend the funds on expenses related to field trips. I have a small grant to cover fuel, accommodation and food costs of the field trips. However, liaising with landholders was time consuming and working with their schedules resulted in a shifting of dates, which became problematic for my field assistants. As a result, field assistants will have to fly from Brisbane to Townsville to join the field trips.
How do you intend to communicate your research? e.g., papers, presentations	<p>Presentation to UQ</p> <p>Presentation to the Australasian Ornithological Congress in Brisbane November 2023</p> <p>Honours thesis</p> <p>Scientific publication</p>