

RESEARCH DIRECTIONS

The endangered Bush Stone-curlew

Dr Julie Old, Dr Ricky Spencer and Mr Jack Wolfenden of the School of Natural Sciences have received funding from the Hunter-Central Rivers Catchment Management Authority to undertake research that will help protect and enhance habitat for the Bush Stone-curlew.

'Bush Stone-curlews (*Burhinus grallarius*) are nocturnal members of the Charadriiformes Order or shorebird group', explains Dr Old. 'Bush Stone-curlew have become endangered because of habitat modification and predation by foxes, dogs and cats as well as native predators, such as Australian ravens, noisy minors and Australian magpies. The birds lay their eggs directly on the ground greatly magnifying their vulnerability to habitat changes and predation. We currently lack basic information on habitat preferences, distribution and abundance and there is little geographically explicit information available to guide landscape-level conservation planning.'

This study will identify the preferred locations and habitats of the Bush Stone-curlew based on vegetation and site surveys in the central and mid-north coast of NSW. Using a combination of inductive deductive modelling, the researchers will assess specific habitat preferences, studying habitat and vegetation in areas with and without this bird species. They will then link the model to a geographic information system (GIS) to create a map, showing predicted probability of the location of these birds.

The researchers will work with the Catchment Management Authority and other stakeholders, including the Department of Environment, Climate Change and Water, National Parks and Wildlife Service, local councils, bird watching groups and volunteers to identify suitable sites for field survey sites, such as where the bird has been recorded nesting and roosting.



This project will contribute to conservation planning for this endangered species. With the increased knowledge gained via this project, an implementation plan will be developed to protect and manage key sites. The project will also develop and increase the skills of an Honours student by providing relevant field experience.

Project Title: Identification of key sites for protection and habitat enhancement for the endangered Bush Stone-curlew

Funding has been set at: \$18,000

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