PhD project opportunity: Maximising the resilience of pastures to grazing and extreme drought events

Brief Project Summary:

This project aims to address the significant knowledge gap of how species composition may change due to extreme drought, and in-turn, quantify the loss of ecosystem function resulting from species turnover. Further, this project will identify species that contribute the most to function.

L'lara, Narrabri. Photo by Kieran Shephard

A unique combination of methods will be used: The international DroughtNet protocol will be employed, where drought will be imposed using fixed shelters that passively reduce rainfall events and remote camera traps will be used as phenocams to quantify the loss of gross primary production in pastures after an extreme drought event. Results from this study will provide land managers, in both the agricultural and environmental sectors, the critical knowledge of how natural and human-modified systems will be impacted by more frequent and extreme drought events in order to maintain food security and biodiversity.

The project has financial support from the Hermon Slade Foundation and in-kind support from the Sydney Institute of Agriculture.

Project start either late 2019 or beginning of 2020 for three years.

Please email an expression of interest, including CV to Dr Aaron Greenville, School of Life and Environmental Sciences, University of Sydney.

Further information:

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