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The Australian Rangeland Society

Title: AusPlots-Rangelands: survey progress in the Northern Territory

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AusPlots-Rangelands is establishing permanent surveillance plots throughout the Australian rangelands to assess baseline stocks and condition of vegetation and soils at a continental-scale and collect a wide range of plant and soil samples for downstream analysis. This is achieved in partnership with local jurisdictions through surveys using a set of standardised methods and sample collections at replicated plots within significant bioregions. AusPlots-Rangelands is part of TERN (Terrestrial Ecosystem Research Network), a national science research infrastructure project.

The Northern Territory surveys commenced in September 2011, refining the methods to be implemented across Australia. Over 85 plots have been surveyed in southern NT bioregions (Finke, Central Ranges, Burt Plain and MacDonnell Ranges) and the Gulf Fall and Uplands in the northern NT. 150 NT sites should be established by the end of 2012.

So far, over 5,000 plant specimens have been collected and identified, over 6,800 plant samples have been collected for DNA barcoding and isotope analysis. Soil profiles have been described at each site and 2,670 soil samples collected for inclusion in the CSIRO National Soil Archive. Additionally, 657 soil metagenomic samples have been collected, the first significant collection in the NT.

Collaborations have been established with other parts of TERN i.e. Supersites at Ti Tree and Calperum, AusCover (remote sensing) and TERN Soils, as well as cooperation with conservation groups, pastoral companies and Indigenous groups, representing significant advances in cross-disciplinary cooperation. The poster will present preliminary data on vegetation and soils and downstream analysis of samples.