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Foreword

This Research Front for Animal Production Science details the research conducted at the Orange proof site (Panuara, NSW Central Tablelands) as part of the national EverGraze program. The EverGraze program aimed to develop livestock systems based on productive perennial pasture to increase profit and improve environmental outcomes (i.e. reduce land and river salinity and erosion) in the HRZ of southern Australia (Friend et al. 2007). Identifying the most appropriate grazing-management system to underpin the profitability and sustainability of livestock production was highlighted as a regionally important issue for the Central Tablelands and Slopes of NSW (Michalk et al. 2017). The Orange proof site was established to investigate the interactions among landscape variability, grazing method and stocking rate. Grazing methods based on one paddock (continuous grazing), four paddocks (rotational grazing) and 20 paddocks (short duration grazing) were compared.

A decision was made by the project team to publish this research in a Research Front, because the systems nature of the research meant there was a high degree of linkage between components described in each paper. The Research Front also helped to build a narrative (Badgery and Michalk 2017) that flowed from the impacts of grazing systems on soil (water and fertility; Badgery et al. 2017a; Mitchell et al. 2017), pastures (Badgery et al. 2017b; Broadfoot et al. 2017), grazing process (Cox et al. 2017), animal production (Badgery et al. 2017c; Broadfoot et al. 2017) and whole farm profitability (Amidy et al. 2017). When each component was examined individually different conclusions can be drawn to when considered as a system, where there are feedbacks between components. Furthermore, it was also important to understand why there were or were not differences between components of the grazing system, under different intensities of grazing

The EverGraze program was part of the Future Farm Industries CRC and was a collaboration between the CRC, Meat and Livestock Australia, Australian Wool Innovation and partner organisations, including the NSW Department of Primary Industries, Charles Sturt University, Victorian Department of Economic Development and Department of Agriculture and Food, Western Australia, natural resource management (NRM) authorities, retailers, private and public sector advisers and farmers (Sargeant and Glyde 2013; Michalk et al. 2017). One of the programs strengths was the engagement of producers, extension staff and advisors through a steering committee called the EverGraze Regional Group (ERG). Consistent with the combined research outcomes presented in this Research Front is the concept that no one aspect of farm management systems exists in isolation. Whilst not the sole factor, a key benefit of collaborative research engagement by producers, extension staff and advisors was the holistic input provided by the producer members of the ERG. ERG involvement provided climatic, geographic and market variability production based perspectives, facilitating the development of commercially relevant and flexible systems. The ERG also helped to synthesise the research findings into key messages that were meaningful to farmers (http://www.evergraze.com.au/research-and-demonstration/orange-proof-site/, accessed 20 June 2017).

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