Trees in a grazing landscape: Vegetation patterns in sheep-grazing agro-ecosystems in southern Queensland

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The modification of natural woodland tree densities through tree removal or clearing has been used by landholders to increase native grass production for livestock grazing. This paper describes studies that aim to determine if vegetation management by graziers affect floristic composition, species richness and plant cover (including production attributes) in the Traprock wool-producing region of southern Queensland. Forty-seven sites were sampled across the study area according to vegetation type (ironbark/gum woodland and box woodland), density of mature trees (low: 6 trees/ha, medium: 6-20 trees/ha, and high >20 trees/ha), and the presence or absence of woody regrowth in the understorey to determine vegetation patterns. A subset of 18 sites was selected to establish grazing exclusion experiments in both vegetation types under varying mature tree densities. This paper describes the general patterns in vegetation under differing mature tree densities and provides preliminary results of the 12-month grazing exclusion experiments.