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**Impact of grazing management practices on rangeland condition in the Eastern Cape grassland biomes of South Africa****Solomon T Beyene and Charlene Mudita**  
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In South Africa rangelands, two main livestock production and management practices can be recognized: communal-continuous (CG) and commercial-rotational (RG) ranching. After decades of trials, another management planning known as Holistic Planned Grazing (HPG) has been suggested and its recognition is growing. This planning allows much higher animal density stay over a short time period and moves to mimic nature. The current study evaluated variations in vegetation and soil characteristics in response to the three grazing management systems in the grassland biomes of South Africa. From each management practice, two farms were selected giving a total of six farms. Each farm was divided into three landscape units namely; bottomlands, slope and uplands. Three 100 m by 50 m transects were established in each landscape unit to record vegetation and soil data. Results showed that farms under HPG had higher ( $P<0.05$ ) basal cover, followed by RS, whereas CG had the lowest. Biomass production was highest ( $P<0.05$ ) in RG and lowest in CG grazing system. Communal grazing sites were characterized by high abundance grass species that have low grazing and ecological benefits, where as the dominant grasses under RG and HPG were strong perennials with high grazing values. Aggregate stability, Particulate organic matter, Organic carbon and many soil nutrients were relatively higher in soils collected from RG followed by HPG. Landscape greatly influenced many vegetation and soil variables and this appeared to interact significantly with grazing management. Significant variations for several vegetation and soil variables between the land management practices suggest that differences in grazing pressure and system might be the primary cause. This supports the equilibrium models that stress the greatest role of livestock density and movement on soil and vegetation dynamics. We conclude from this study that RG and HPG may promote soil and vegetation stability, whereas CG resulted in poor soil and vegetation conditions. Therefore, we recommend studies to evaluate best practices based on RG and HPG principles under communal rangeland system.

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