

FORAGE SPECIES OF IMPALA SANCTUARY, KISUMU; KENYA

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ABSTRACT

The study evaluated the forage species of Impala sanctuary-Kisumu over a six month period that corresponded to two seasons (wet and dry). The study identified the grasses in the sanctuary with the help of a hand book on Primer on grass identification and uses in Kenya. Further identification was done with assistance of grass manuals and family taxonomic keys of Poaceae (graminae) which provide food for the impalas of the sanctuary. The sanctuary was divided into three ecosystems that is grassland, marshes and shrubland. Quadrats of 1m x 1m were used to sample grassland and marshes while those of 5m x 5m used to sample shrubland in a completely randomized design. The plant species diversity in the three ecosystems was calculated using the Shannon wiener diversity index. The results revealed that grassland had the highest species richness of 37 grass species. Shrubland had 13 grass species while 9 grass species were recorded in marshes. In terms of diversity, grassland had a diversity index of 1.6; shrubland had 1.03 while marshes had 0.92. In conclusion, impala sanctuary has different species of grasses distributed within it, which provide forage for the grazers. This study is significant as it will provide the managers with information about forage species present in the sanctuary for better management practises with reference to the forage. It can also be replicated in other similar sanctuaries.

Keywords: Grazing, Forage, Grasses, Herbivores, Sanctuary, Ecosystem.