

Species Composition, Richness and Diversity in Miombo Woodland of Bereku Forest Reserve, Tanzania

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ABSTRACT There is increased interest in the academic world with regards to tree and shrub species richness and diversity within the Miombo Woodlands and to determine the potential for biodiversity conservation. This study assessed species richness, diversity, dominance and exploitation of tree and shrub in Bereku Forest Reserve. Plant inventory was carried out in 80 systematically selected sample plots. The information recorded includes: diameter at breast height, species name and frequency of regenerants. Analysis of inventory data was done by using Microsoft Excel. A total of 110 species belonging to 53 families were identified. Results showed Shannon-Wiener Index and Simpson Diversity Index of 4.27 and 0.043 respectively for the Miombo woodland of Bereku. Moreover, the findings in this study show mean stems density and mean total density of regenerants of 616 stems per hectare and 2780 stems per hectare respectively. The paper concludes that despite the Miombo Woodland providing products and services to the surrounding communities the woodland is still fairly stocked with high tree and shrub species diversity. The study recommends in-depth forest inventory, preparation of management plan and promotion of good governance in management of Bereku forest reserve.