

Population Parameters and Biomass of African Buffalo (*Syncerus caffer*) in Kainji Lake National Park, Nigeria

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Abstract: The study examined some population parameters such as relative abundance, distribution, population composition and biomass of *Syncerus caffer* in Kainji Lake National Park. Six, 4x4 km transects were constructed in the Park with an effective study area of 96 km². Transects were traversed twice a month for 12 months. Estimates were based on direct censusing techniques only. The results revealed that riparian forest and woodland habitat harboured the highest population of *Syncerus caffer* in both dry and wet seasons 9 and 5 groups, respectively with a total of 149±8.17 individuals, while *Diospyros mespliformis* dry forest harboured the least of 20±2.84 individuals. Population compositions of *Syncerus caffer* were significantly difference ($p < 0.05$) in both dry and wet seasons. A total *Syncerus caffer* biomass of 54.57± 1 0.9 kg km⁻² was recorded in the Park. Measures for adequate conservation of existing *Syncerus caffer* population in the Park are discussed.

Keywords: Abundance, buffalo, distribution, population, biomass, national park