

POPULATION ECOLOGY OF THE SITATUNGA (*Tragelaphus spekei*  
*spekei*) AT SAIWA SWAMP NATIONAL PARK - KENYA<sup>1)</sup>

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A thesis submitted in partial fulfilment of the requirement for  
a Master of Science in Biology of Conservation in the Department  
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March 1993

## ABSTRACT

In this study I examined the population structure, distribution, habitat utilization and feeding preference of the sitatunga, (*Tragelaphus spekei spekei*, Solater, 1864) at Saiwa Swamp as well as species activity and behaviour patterns. The attitudes of the local communities towards the park with their use of its resources were also examined. The results and findings were useful in the identification and formulation of management problems and proposals.

Absolute numbers of the sitatunga in the study area were difficult to ascertain, but the best estimate was 118 (60 inside and 58 outside the park). Age and sex structure vary with season and location, adult female to adult male sex ratios being larger in the dry season than in the wet season, while adult to young ratios are larger in the wet season outside the park than in the wet and dry seasons inside the park. A range of 2.6-3.29 adult females to one young between seasons may not reflect on the birth rates.

The group sizes in the study were either single or in pairs, with mostly the latter being adult or subadult females. This present study and that by Owen (1970) indicate small effective population sizes (10 upper and 5 lower limits for Owen *loc.cit* and 53 for the present study (29 inside and 24 outside the park). Judging from the small effective population sizes, this population of the sitatunga could be an inbred one.

The seasonal distribution, habitat utilization as well as the feeding preference at Saiwa Swamp are affected by the level of water and human disturbances in the park. Most activity of sitatunga occurs between 6 - 11.00 a.m. and 5-7.00 p.m. Fuelwood and water are the most utilized resources in the park by the local inhabitants, many of whom had little support for the park. A greater number of low-medium income persons support the park compared to persons of high income. The rich have a negative attitude towards the park.