

ECOLOGICAL IMPACT OF LARGE HERBIVORES ON WOODY VEGETATION AT SELECTED WATERING POINTS IN THE KRUGER NATIONAL PARK

by

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Dedicated to my wife, Letitia

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ABSTRACT

The impact of large herbivores on woody vegetation structure around watering points in the Kruger National Park, necessitated an in depth study. The logistic curve successfully modelled the impact of large herbivores on the woody vegetation around artificial watering points in the KNP. The trends found in biomass around most artificial watering points, indicate that a browsing gradient does exist around artificial watering points in the KNP. Browsing intensity is greatest closer to the watering point and decreases with distance from the watering point. The impact on biomass, extending between 500 m and 2 300 m from the watering point. This means that, on average 3 % of the total area of the KNP is affected by large herbivores congregating around artificial watering points. The eastern basaltic soils showed a trend of low shrub density close to the watering points with increasing density away from the watering point. The western granitic soils showed shrub encroachment close to the watering points on the crestal areas and trends on the footslope areas depended on woody species composition. From the results, it can not be concluded that the provision of artificial water and the accompanying grazing and browsing gradients, play a major role in the decline of large trees in the KNP.

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