



SPATIO-TEMPORAL ANALYSIS OF NUTRIENTS (NITROGEN AND PHOSPHORUS) IN BIOMASS AND DUNG IN THE MID ZAMBEZI VALLEY

BY

DORCAS MATANGI

LIBRARY NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY P.O. BOX 346 BULAWAYO ZIMBABWE		
DATE	ACCESSION	CLASS
24/03/10	SC 09194	

**Submitted in Partial Fulfilment of the Requirements for the Bachelor of Science
(Honours) Degree in Forest Resources and Wildlife Management**

Department of Forest Resources and Wildlife Management

Faculty of Environmental Science

National University of Science and Technology

Bulawayo, Zimbabwe

August, 2009

Supervised by: Ms A. Gumbi

Abstract

The study was carried out in the Mid-Zambezi valley in Mushumbi (livestock), East Angwa (mixed) and West Angwa (wildlife), for the early dry season (April and June) and the late dry season (September). It was to determine the nitrogen (N) and phosphorus (P) in dung and biomass. The variables used were the spatial differences (the three areas) and the temporal differences (the early dry season and the late dry season). The biomass was collected from cotton fields and sorghum fields were used. The results showed that there were no significant differences in N and P in biomass in the three areas. The dung N and P was also the same in all areas. There were seasonal variations in the dung N for East Angwa and there were no significant differences in the other areas. There wet season highlighted spatial differences in dung N in the areas and there was no significant differences in the dry season. There was a seasonal difference in East Angwa for the biomass P and in West Angwa for the biomass N. These observations highlighted that there is dry season nutrient retention by dry season growth of weeds and crop residues.