COMPOSITION, STRUCTURE AND DISTRIBUTION OF PLANT COMMUNITIES IN LAKE NAKURU NATIONAL PARK.

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A B S T R A C T

The apparent lack of quantitative information on the
vegetation status of Lake Nakuru National Park, where
there are alarming reports of high mortality rates among
the browsing and grazing mammals such as waterbuck, warthogs,
impalas and buffalos, prompted this study. It's main purpose
was, therefore, to provide baseline data on the composition,
structure and distribution of vegetation in the park.

The vegetation analysis involved the use of Releve
Method to obtain data for classification and mapping.
Quantitative analysis of woody species was carried out
by P.C.Q. Method (Point-Centred Quarter Method) using
line transects, in order to determine the distribution
patterns of species and consequently that of plant
communities. Soil analysis was also done using
standard methods.

From the results obtained by Releve Method, 19 plant
communities were distinguished and with reference to
land scape features, a vegetation map of the Park was
drawn up. Results from quantitative analysis interpreted
statistically using reciprocal averaging ordination
have indicated floristic overlap between plant communities.

The ecological importance, abundance and distribution
of these species has been discussed. The pattern of
variation in vegetation has been shown to coincide with
the pattern of variation in soil properties, with an
altitudinal range simulating vegetation zonation from
the Lake to the escarpments.

A number of suggestions and recommendations have been
put forward and it is hoped that the scientific findings
of this study will provide baseline data upon which
future ecological monitoring will depend. They will
also be used in the planning and management of the
Park.