Long-distance Movements of an Unprotected Population on the Laikipia Plateau, Kenya

Chris Thouless

The Laikipia-Samburu elephant population of approximately 3,000 animals, is the largest surviving population in Kenya outside protected areas. The southern part of their range is in Laikipia District, which consists of large-scale private ranches and small-scale farming settlement schemes. The northern part of their range is in Samburu District, consisting of low lying pastoralist areas and forested mountains. In the 19th and early 20th centuries there were many elephants in Samburu and almost none in Laikipia, which was gradually colonized by them during the late 1960's onwards. This southwards movement was accelerated by the heavy poaching in Samburu during the 1970's and 1980's, while Laikipia ranches provided greater security.

Radiotracking of 20 elephants during the past two years by the Laikipia Elephant Project has shown'that there are now 4 main subpopulations.

- (1) Laikipia residents with home ranges of about 100 km²
- (2) Itinerant Laikipia elephants moving around

- ranches and settlement areas, which are the main crop-raiders
- (3) Forest elephants, moving onto the plains after rain
- (4) Long distance migrants, moving twice yearly between Laikipia and Samburu, during the long and short rainy seasons, a distance of more than 100km, giving total home ranges in excess of 3,000 km²

The regularity of this movement gives the appearance of a traditional migration, but it cannot have occurred for more than 20 years and older elephants will once have been residents in Samburu. It appears that the reason for the return to Laikipia during the dry season, even though poaching is now at a very low level, is a result of increasing human populations in pastoralist areas. As temporary rain pools dry up, elephants are forced to use dams and rivers where they compete with herders for access to water, and are vulnerable to spearing. In contrast Laikipia ranches have abundant permanent water and there is an attitude of tolerance towards elephants.

The Impact of Elephant Density on Biodiversity in Different Eco-climatic Zones in Kenya

John Waithaka

Poaching pressure and habitat fragmentation in Kenya, coupled with an unprecedented demand for land from an ever increasing human population, have brought about the compression of elephants into few refuge areas. The same forces have caused loss of this species from many areas that previously constituted their natural range. The direct consequence of concentrating elephants into a few areas is the creation of artificially high elephant densities which may cause undesirable changes in woodlands, bushes, swamp vegetation and other existing habitats. On the other hand, extermination of elephants from their

natural habitats removes a species that plays a central role in determining the rate, scale and direction of habitat change. Available information *suggests* that the disappearance of the elephant will reduce biological diversity and increase species extinction rates.

The aim of this study was to quantify the role of elephant density in the restructuring of habitats. The first objective was to determine whether there have been major vegetation changes over the years in areas with adequate information on trends in elephant numbers. Secondly, the study undertook to investigate