AN APPARENT DECLINE IN THE MASAI MARA BLACK RHINO POPULATION

Recent surveys suggest an apparent decline in the black rhino *(Diceros bicornis michaeli* L.) population within Masai Mara National Reserve (MMNR) in Kenya Since the mid-1980s the black rhino population within MMNR has been recovering from a serious decline due to poaching. A population of at least 108 rhinos in the early 1970s (Mukinya, 1973) was reduced to less than 13 individuals by the mid-I980s. An increase in surveillance and a virtual elimination of poaching saw the population increase to a high of 38 to 40 individuals within a decade (Morgan-Davies, 1996). However, over the past few years daily ground-based surveillance patrols conducted by Narok County Council (NCC) Rangers with assistance from Friends of Conservation (FoC) have been sighting progressively fewer numbers of known individuals.

During the year April 1997 to March 1998, a total of 30 known rhinos was recorded within MMNR, of which 29 where photographed (S.Milledge, pers comm). However, during the subsequent year (April 1998 - March 1999) only 21 known rhinos were recorded. In February 1999, a three day aerial census conducted jointly by FoC, the Eden Wildlife Trast (EWT), Kenya Wildlife Service (KWS) and NCC identifled only 17 different individuals, although an 18th known individual was recorded during ground-based surveillance in the same month.

There are four possible explanations for the apparent decline: (1) the population was previously overestimated; (2) the current population is being underestimated as a result of increasing numbers of individuals becoming less readily observable; (3) the population has declined through mortality, or; (4) the population within MMNR has declined as a result of individuals moving out of the Reserve into surrounding areas, including northern Tanzania and the hills to the north and east of MMNR. Photographic evidence suggests that there have been more rhinos within MMNR in the recent past than are now being observed. However, the fate of many of the animals that are no longer being seen is unknown.

Regular foot patrols would help **to** determine whether these animals are still present in thicker bush or in areas inaccessible to vehicle patrols. Similarly, expanding both ground-based and aerial surveys beyond the boundaries of MMNR may reveal whether rhinos have dispersed from the Reserve. A collaborative project between the Durrell Institute of Conservation and Ecology (DICE), NCC, Trans Mara County Council (TMCC), KWS,WWF, Moi University and the Kenya Department of Resource Surveys and Remote Sensing (DRSRS) is currently investigating factors affecting the recovery of the black rhino population in MMNR, and hopes to shed light on current carrying capacity and the role of habitat change and human disturbance in rhino distribution.

REFERENCES

Morgan-Davies, M. (1996) Status of the black rhinoceros in the Masai Mara National Reserve, *Pachyderm* 21:38-45.

Mukinya, J.G. (1973) Density, distribution, population structure and social organisation of the black rhinoceros in Masai Mara Game Reserve, *E Afr. Wildl.* J. 11 :385-400.

Sources: Matt Walpole, Durrell Institute of Conservation and Ecology (DICE), c/o P0 Box 57046, Nairobi, Kenya and Philip Bett, Masai Mara National Reserve, P0 Box 60, Narok Kenya

US FISH AND WILDLIFE SERVICE RHINOCEROS AND TIGER CONSERVATION FUND, AFRICA REGION UPDATE

The Rhinoceros and Tiger Conservation Act of 1994, passed by the US Congress, provides financial resources through the Rhinoceros and Tiger Conservation Fund (RTCF) for conservation programmes that seek to promote the survival of these beleaguered species. The fund is administered through the Secretary of the Interior in consultation with the Administrator of the U.S. Agency for International Development. Funding in fiscal year (FY) 1996 was $200,000 followed by $400,000 per annum in FY The