# 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 1997 and 1998. Funding has been increased **to** \$500,000 for FY 1999. For the period ending in FY 1998,56 grants for a total of \$970,000 were awarded.

In Africa, the RTCF has sponsored a variety of projects dealing with both black and white rhino conservation. These projects cover a wide range of activities including protection of rhino and critical rhino habitat, capacity building, ecological monitoring, conservation education, and protected area management. The RTCF addresses the challenges of rhino conservation in Africa by considering both short term and long term needs. Practical, high priority activities such as capacity building in rhino monitoring via mark and recapture methods and anti-poaching training have been funded alongside programmes which yield a less immediate return such as conservation education and development of strategic materials for rhino conservation. Thus far, a total of 16 projects in five African countries have been supported or tentatively approved for support by the RTCF. An additional 14 proposals are under consideration. A complete list of projects funded, arranged by target species follows.

## **BLACK RHINO**

- Naikarra/Laleta Community Rhino Scout Programme for Survival of the Black Rhino Population (Friends of Conservation, \$5,690), Kenya
- Training Programme for Game Scouts Involved in Rhino Population Monitoring - revision and production of a new version (IUCN SSC African Rhino Specialists Group, \$5,105), South Africa.
- 3) Rhino Security Appeal (Lewa Wildlife Conservancy, \$20,960), Kenya.
- 4) Staff Training and the Survey of Four Black Rhino Populations in the Selous Game Reserve, Tanzania (World Wide Fund for Nature, \$30,480).
- 5) The Management of a Black Rhino Population and Proposals to Enhance the Effectiveness Thereof (Eastern Cape Nature Conservation, \$1,342 -pilot study), South Africa.
- Black Rhinoceros Monitoring Tembe-Ndumo Complex (Wildlands Trust, \$10,400), South Africa.
- Assistance with the Training Project of the Naikarra/Laleta Community Rhino Scout Programme (Friends of Conservation, \$12,660), Kenya.

- Purchase of Equipment and Supplies for the Masai Mara National Reserve Radio Telemetry Rhino Monitoring Project (Friends of Conservation, \$12,405), Kenya.
- Black Rhino Ear Notching for Population Monitoring in Itala Game Reserve (KwaZulu-Natal Nature Conservation Service, \$6,625), South Africa.
- 10) Rhino Management Group Black Rhino Status Report Summary for 1997 and 1998 (Rhino Management Group, \$3,300), South Africa.

#### WHITE RHINO

- 11) Aerial Monitoring of the Northern White Rhinoceros in Garamba National Park Zaire (World Wide Fund for Nature, \$19,680), Democratic Republic of Congo.
- 12) Environmental Education at the Khama Rhino Sanctuary (The Khama Rhino Sanctuary Trust, \$20,818), Botswana
- 13) White Rhino Ear Notching for Population Monitoring in Itala Game Reserve (KwaZulu-Natal Nature Conservation Service, \$8,125), South Africa.

### **BLACK AND WHITE RHINO**

- 14) Proposed National Research Project Regarding Suspects Involved in the Organised Poaching of Rhinoceros (Endangered Species Protection Unit of the South African Police Service, \$21,096), South Africa.
- Passive Transponder System Equipment for Rhinoceros in KwaZulu-Natal (KwaZulu-Natal Nature Conservation Service, \$10,182), South Africa.
- 16) Fencing of Weenen Nature Reserve (KwaZulu-Natal Nature Conservation Service, \$4,716), South Africa

The RTCF accepts proposals from Federal, State and local government agencies, non-governmental non-profit organisations, and public and private institutions of higher education or any other entity. Proposals should be submitted to Dr Herb Raffaele, Chief, Office of International Affairs, US Fish and Wildlife Service, 4401, North Fairfax Drive, Room 730, Arlington, VA 22203-1622, USA. Questions regarding the RTCF (Africa Region) may be addressed to Dr Karl A K Stromayer, at the above mailing address and fax. E-

mail:Karl\_Stmmayer@mail.fws.gov and telephone: 703-358-1764. Questions regarding other issues concerning the RTCF (Asian Programmes and Administration) may be and fax. E-mail:

Fred\_Bagley@mail.fws.gov and addressed to Fred Bagley, at the above mailing address telephone: 703-358-1760.

Source: Karl A.K. Stromayer, US Fish and Wildlife Service, Office of International Conservation

# TWIN ELEPHANTS BORN IN ADDO

Addo Elephant National Park (AENP), situated approximately 60km NNE of Port Elizabeth in the Eastern Cape Province of South Africa, is home to Africa's southern most elephant population (excluding the three remaining elephants in the Knysna State Forest). Founded in 1931 with just eleven elephants, Addo's elephant population has now increased (with no immigration) to over 285 individuals, and expansion of the Park is underway to enable continued growth of the population.

A record number of births occurred in 1998, with a total of 29 calves born during the year. Amongst these births were Addo's first ever recorded twins, two females named Duet and Duo, born on 7 October. Although both twins were regularly observed together with their mother, suckling simultaneously (one on each side), following her, or just standing close to her, it was not uncommon to find the twins separated. Duet was usually with her mother, while Duo was often some distance away with other family members. Their mother, a young

cow (18 years old) with just one previous calf, was possibly unable **to** cope with the demands of two calves at once. Duo was never seen successfully suckling whilst away from her mother — lactating adult cows were observed **to** push her away, and although sub-adult cows were tolerant of her suckling attempts, they were unable to provide milk. Always the weaker of the twins, Duo unfortunately died shortly before Christmas, when she was just over two months old. Duet, however, appears to be thriving.

Every elephant within Addo (n = 286, February 1999) is currently known as a result of an ongoing research project on the population, initiated in 1996. Additionally, the history of the population has been reconstructed by tracing individual elephants' life histories through photographic and other records. Maternal family trees throughout the Park's life-span have been compiled. These data indicate that Duet, the surviving twin, is the great-great granddaughter of the Park's oldest elephant, 60 year old Buttercup!

Source: Anna Woodd, Addo Elephant National Park P0 Box 52, Addo 6105, South Africa