

Tana River Red Colobus

Procolobus rufomitratatus (Peters, 1879)

Kenya

(2002, 2004, 2006, 2008)

David N. M. Mborá & Thomas M. Butynski



Gallery forests found in the lower Tana River, Kenya, appear to be remnants of a previously continuous forest that extended from Central Africa to East Africa 25,000–30,000 years ago). The forests are part of the East African Coastal Forests Biodiversity Hotspot and for this, and other reasons, are of great conservation value. In particular, they are the only habitat for two endemic primate species; Tana River red colobus, *Procolobus rufomitratatus* (Peters, 1879), and Tana River mangabey, *Cercocebus galericus* Peters, 1879. These two species inhabit the forests along a 60-km stretch of the lower Tana River from Nkanjonja to Mitapani (01°55'S, 40°05'E). All of these forests are small, ranging in size from <1 ha to c.500 ha. Six other species of nonhuman primates are found in this area. However, the Tana River red colobus and Tana River mangabey are forest dependent, and account for the bulk of the primate biomass in these forests.

The Tana River red colobus and the Tana River mangabey are both greatly threatened by forest loss and fragmentation caused by a growing human population. Forest is cleared mainly for agriculture; an estimated 50% of the original forest has been lost in the last 20 years. In addition, people use the remaining forest for materials to build homes and canoes, and for other non-timber forest products. Consequently, the current population of the Tana River red colobus is less than 1,000 individuals and declining, while the population of the Tana River mangabey is not much larger and declining. Furthermore, it has recently been found that the forest loss and fragmentation causes high levels of parasitism in these two primates (Mborá and McPeck 2009). The effect of this on the status of these two populations is currently unknown.

The long-term survival of the two endemic Tana River primates looks very bleak. In January 2007, the High Court of Kenya ruled that the Tana River Primate National Reserve (TRPNR), where 13 km² of forest were protected, was not established in accordance with the law. The TRPNR must, therefore, be degazetted,

which means that none of the habitat of the Tana River red colobus and Tana River mangabey is legally protected. Furthermore, habitat loss outside the TRPNR has been exacerbated by the failure of the Tana Delta Irrigation Project's (TDIP) rice-growing scheme (under the administration of the Tana and Athi Rivers Development Authority [TARDA], with financing from Japan International Cooperation Agency [JICA]) to protect forest patches on their land. Now TARDA is in the process of expanding its activities in the region by establishing a 110 km² sugar cane plantation. In addition, a further 500 km² of land in and around the delta are earmarked for the development of sugarcane plantations by Mat International Sugar Limited. These new plantations will result in a large influx of people and an increase in the demand for forest resources.

Curiously, despite the dire circumstance of Tana River red colobus and the species being on the list of The World's 25 Most Endangered Primates since 2002, not one conservation agency is working in the forests of the lower Tana River. A five-year Kenya Wildlife Service (KWS) and Kenya Forest Department project, funded by the World Bank/GEF, was initiated in 1996 to enhance conservation and protection of the primates and forests. Unfortunately, this potentially important project was terminated prematurely due to poor project management. This left the responsibility for the conservation and protection of the Tana River's forests and primates entirely to the KWS.

Despite the troubles highlighted above, the Tana River situation is not hopeless. One of us (DNMM) has maintained a (relatively poorly funded) research project in the area over the last five years. He has thus been able to monitor developments on the ground. In addition, more than 250 families who farmed within the TRPNR were voluntarily relocated in 2005 to Kipini (about 90 km away) by the KWS. At the moment, there appears to be growing concern for forest and biodiversity conservation among local people. For example, several local leaders have expressed a

desire to convert the now degazetted TRPNR into a community wildlife sanctuary. However, there is need for strong support and encouragement from conservation organizations for a community-based conservation effort.

References

- Butynski, T. M. and G. Mwangi. 1995. Census of Kenya's endangered red colobus and crested mangabey. *African Primates* 1: 8–10.
- Luke, Q., R. Hatfield and P. Cunneyworth. 2005. Rehabilitation of the Tana Delta Irrigation Project Kenya: An Environmental Assessment. Report to the Critical Ecosystem Partnership Fund (CEPF), Conservation International, Arlington, VA. Website: <http://www.cepf.net/ImageCache/cepf/content/pdfs/final_2etdip_5fenvironmental_5fassessment_2epdf/v1/final.tdip_5fenvironmental_5fassessment.pdf>.
- Marsh, C. W. 1985. A survey of Tana River primates. Report to the Institute of Primate Research, Nairobi, Kenya.
- Mbora, D. N. M. and D. B. Meikle. 2004. Forest fragmentation and the distribution, abundance and conservation of the Tana River red colobus (*Procolobus rufomitratus*). *Biological Conservation* 118: 67–77.
- Mbora, D. N. M. and D. B. Meikle. 2004. The value of unprotected habitat in conserving endangered species: case study of the Tana River red colobus in eastern Kenya. *Biological Conservation* 120: 91–99.
- Mbora, D. N. M. and E. Munene. 2006. Gastrointestinal parasites of critically endangered primates endemic to Tana River Kenya: the Tana River red colobus (*Procolobus rufomitratus*) and the crested mangabey (*Cercocebus galerritus*). *Journal of Parasitology* 92: 928–932.
- Mbora, D. N. M. and M. A. McPeck. 2009. Host density and human activities mediate increased parasite prevalence and richness in primates threatened by habitat loss and fragmentation. *Journal of Animal Ecology* 78: 210–218.
- Wieczkowski, J. and D. N. M. Mbora. 2000. Increasing threats to the conservation of endemic endangered primates and forests of the lower Tana River, Kenya. *African Primates* 4(1-2): 32–40.
- Wieczkowski, J., D. N. M. Mbora, A. Kariuki and S. Strum. 2001. Tana River Primate and Habitat Monitoring Project. Report to Margot Marsh Biodiversity Foundation, Great Falls, Virginia. 13pp.