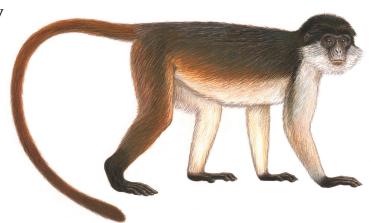
## Niger Delta Red Colobus Monkey

Procolobus epieni Grubb and Powell, 1999 Niger Delta, Nigeria (2008)

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This colobus monkey is listed as Critically Endangered on the 2008 IUCN Red List of Threatened Species. It only became known to science in 1993 in the course of a biodiversity survey co-ordinated by C. Bruce Powell (Powell 1994). The monkey's scientific name is based on its name in the Ijaw language of the people who inhabit the limited area (1,500 km<sup>2</sup>) where it occurs in the central Niger Delta. Studies of vocalizations and mitochondrial DNA suggest that epieni is not closely related to its closest geographic relatives, the Bioko red colobus (Procolobus pennantii pennantii) or Preuss's red colobus (Procolobus preussi), leading Ting (2008) to treat this monkey not as a subspecies of pennantii (see Groves 2001, 2005; Grubb et al. 2003) but as a distinct species, Procolobus epieni. Groves (2007) regarded almost all the different forms of red colobus monkeys, including epieni, pennantii and preussi as separate species, in the genus Piliocolobus.

There has been only one field study of this red colobus. Werre (2000) established that epieni occurs only in the so-called "marsh forest" zone of the Central Delta, an area that has a year-round high water table, but which does not suffer deep flooding or tidal effects. The study suggested that the more clumped distribution of food species in the marsh forest was a key factor restricting the monkey to its limited range, which is demarcated by the Forcados River and Bomadi Creek in the northwest, the Sagbama, Osiama and Apoi Creeks in the east, and the mangrove belt to the south. At the time of its discovery the Niger Delta red colobus was locally common, especially in forests near the town of Gbanraun, but it was beginning to come under intense pressure from degradation of its habitat and commercial hunting. Important colobus food trees—especially Hallea ledermannii—were being felled at a high rate by artisanal loggers, and the logs floated out of the Delta on rafts to processing centers in Lagos and elsewhere. In addition, large canals dug as part of oil extraction activities, as well as smaller canals dug by loggers into the interior swamps, were changing local hydrology (Werre and Powell 1997; Grubb and Powell 1999). The Ijaw people are traditionally fishermen but outside influences introduced by the oil industry have encouraged commercial bushmeat hunting and logging throughout the Niger Delta.

As part of his research Werre (2000) formulated a conservation plan that was initially to protect 500 ha of forest near the settlement of Gbanraun through a leasehold arrangement with community landholders. It was hoped that this could eventually be expanded to a full protected area based on the proposed Apoi Creek Forest Reserve. At present there are no formal protected areas in the Niger Delta, even though it has great ecological significance and supports many rare, unique and/or threatened taxa. The Niger Delta red colobus shares its marsh forest habitat with two other threatened primates; the Nigerian white-throated guenon (Cercopithecus erythrogaster pococki) and the redcapped mangabey (Cercocebus torquatus), each listed as Vulnerable on the Red List. Also found in these forests are the putty-nosed monkey (Cercopithecus nictitans), the mona monkey (Cercopithecus mona), and possibly the olive colobus (Procolobus verus). However, political instability in the Delta, related in the most part to disputes over the allocation of oil revenues, has prevented any progress in biodiversity conservation during the last decade. Because red colobus monkeys have been found to be highly vulnerable to habitat disturbance and hunting in other parts of Africa (Struhsaker 2005), it is feared that the Niger Delta red colobus is being driven to the edge of extinction.

The red colobus monkeys are probably more threatened than any other taxonomic group of primates in Africa (Oates 1996; Struhsaker 2005). Almost all those of western Africa are in a precarious position. *Procolobus badius waldroni* (eastern Côte d'Ivoire and western Ghana), *Procolobus preussi* (western Cameroon and eastern Nigeria), and *P. pennantii bouvieri* (Republic of Congo) are also now Critically Endangered. *Procolobus badius temminckii* 

(Senegal to Guinea or Sierra Leone), Procolobus badius badius (Sierra Leone to western Côte d'Ivoire) and Procolobus pennantii pennantii (Bioko Island, Equatorial Guinea) are listed as Endangered. There has been evidence of a few P. badius waldroni surviving in swamp forest in the far southeastern corner of Côte d'Ivoire (McGraw and Oates 2002; McGraw 2005), but it is feared that this population may now be extinct. Procolobus pennantii bouvieri of the Republic of Congo has not been observed alive by scientists for at least 25 years, raising concerns that they may be extinct (Oates 1996; Struhsaker 2005). Procolobus pennantii pennantii is just hanging on in the southwestern corner of Bioko Island, where it has been decimated by bushmeat hunting (Hearn et al. 2006) in what is, theoretically, a protected area.

Although the security situation in the Niger Delta is challenging, a pilot survey is planned for early 2009 to gather information on the present status of forest and primates near Gbanraun, and to assess what options may be available for conserving any remaining *P. epieni*. A survey is also urgently needed for Bouvier's red colobus in Congo. In all the protected areas where red colobus monkeys occur, much greater efforts must be made to improve management, especially the enforcement of laws against hunting.

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