

## Short Communication

# Hope for the survival of the Critically Endangered white-naped mangabey *Cercocebus atys lunulatus*: a new primate species for Burkina Faso

Gérard Galat and Anh Galat-Luong

**Abstract** From 2003 to 2005 we carried out surveys in Burkina Faso to investigate the status of primate taxa. In the south-west near the border with Côte d'Ivoire we discovered sooty mangabey *Cercocebus atys*, a primate species that had not been previously reported in the country. This population is the subspecies *C. a. lunulatus*, the white-naped mangabey, one of the 25 most threatened primate taxa. As the subspecies occurs in a gallery forest that is next to a wildlife safari hunting area, we recommend that hunting is prohibited near

these forests. The recent creation of the Warigué protected area, linking the Comoé-Léraba Reserved Forest and Partial Wildlife Reserve in Burkina Faso where we observed the subspecies, with the Comoé National Park in Côte d'Ivoire, could make an important contribution to the survival of this, the northernmost population, of the subspecies.

**Keywords** Burkina Faso, *Cercocebus atys lunulatus*, Côte d'Ivoire, sooty mangabey, white-naped mangabey.

Oates *et al.* (1997) and McGraw (1998a) have stressed that the white-naped mangabey *Cercocebus atys lunulatus*, categorized as Critically Endangered on the IUCN Red List (IUCN, 2006), could become extinct. Since 2000 a collective of 54 international primatologists have, every year, classified this subspecies as one of the 25 most threatened primates (Mittermeier *et al.*, 2005). The known geographic distribution of the white-naped mangabey spans an area from Côte d'Ivoire, east of the Sassandra River, to Ghana, west of the Volta River (Dorst & Dandelot, 1970; Kingdon, 1997). The species occurs in only a few remaining forest patches in Ghana (Ankasa Resource Reserve, Dadieso and Yoyo Forest Reserves) and Côte d'Ivoire (Marahoué National Park, Dassioko and Niegre Forest Reserves and forest east of the Ehi Lagoon; McGraw, 1998a, b; Magnuson, 2002; McGraw & Oates, 2002; Kone, 2004; Mittermeier *et al.*, 2005). Although none of these authors include the Comoé National Park, Côte d'Ivoire, in the subspecies' range, the subspecies has been recorded several times in this Park in 1984 and 1985 by ourselves, by Bousquet (1992), and between 1993 and 2000 by Fischer *et al.* (1999–2000; 2002). Bousquet (1992), who made several mammal censuses in neighbouring Burkina Faso, never recorded mangabeys there.

We carried out surveys in Burkina Faso from 2003 to 2005 to investigate the status of primate taxa. During 6–21 June 2005 we interviewed rangers and senior hunters and conducted a 6-day survey in the AGEREF/Comoé-Léraba Reserve (Associations pour la Gestion des Ressources Naturelles et de la Faune de la Comoé-Léraba, which is a Reserved Forest and Partial Wildlife Reserve) in Burkina Faso (Fig. 1). We recorded, with a global positioning system, the location of any groups of primates encountered.

We first saw white-naped mangabeys at 07.25 on 7 June 2005, at 9°55'42.24" N 4°36'39.04" W, in gallery forest extending along the Comoé River. The monkeys were feeding on *Saba senegalensis* (Apocynaceae) fruit. We spotted individuals again between 12.44 and 13.24 on the same day, at 9°55'55.85" N 4°36'30.57" W, feeding on *Dialium guineense* (Caesalpiaceae) fruit. The site is at the extreme northern edge of the AGEREF/Comoé-Léraba Reserve.

We encountered mangabeys again in the same place at 06.20 on 20 June 2005. They were associated with green monkeys *Cercopithecus (aethiops) sabaeus*. Considering the time of day, the mangabeys had probably spent the night in the vicinity of the group of green monkeys. We subsequently recorded mangabeys again further south at 09.40 on the same day, also along the Comoé River, at 9°55'24.69" N 4°36'59.46" W.

We observed at least nine distinct individuals, including an adult male, two adult females and three juveniles. We heard rustling leaf sounds and other mangabey calls, indicating that there were probably

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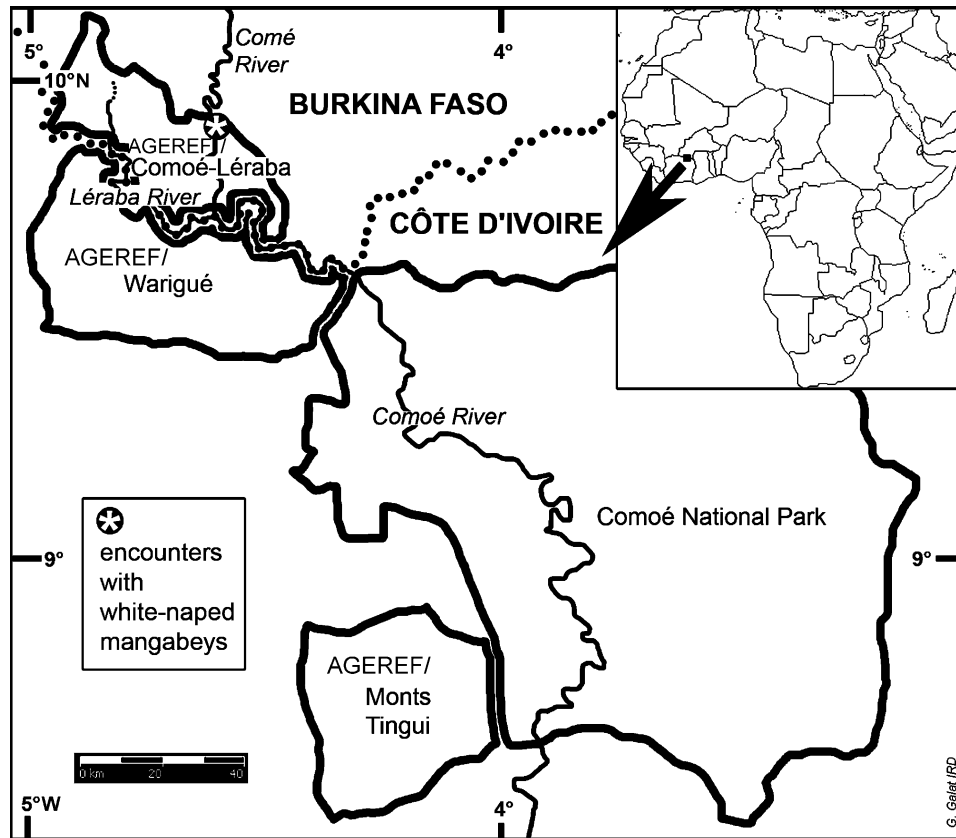


Fig. 1 Location of sightings of the white-naped mangabey, the Comoé/Léraba (Burkina Faso) and Warigué (Côte d'Ivoire) AGEREF Reserves, and the Comoé National Park (Côte d'Ivoire).

other members of the group that we did not see. We tape recorded their calls under good conditions. The dates, times and locations of our sightings are compatible with the movement patterns of a single group. The sites where we encountered the species are 50 km north of the Comoé National Park. Thus, this population is probably isolated from their congeners in Côte d'Ivoire.

In addition to the green monkeys, other primate species encountered in the area where we found the mangabeys were Geoffroy's pied colobus monkeys *Colobus vellerosus*, doguera baboons *Papio anubis* and patas *Erythrocebus patas*.

To enhance the conservation of the Comoé basin ecosystem, the World Bank has implemented GEPRENAF (Projet de Gestion Participative des Ressources Naturelles et de la Faune), a Global Environment Fund community-based land management project. In Burkina Faso the Diéfooula and Logoniégué forests have been merged and transformed into the AGEREF/Comoé-Léraba Reserve. In Côte d'Ivoire, to fill the 35 km gap between the Comoé-Léraba reserve in Burkina Faso, and the Comoé National Park in Côte d'Ivoire, a new protected area, Warigué, has been created. The AGEREF/Comoé-Léraba and Warigué areas are

contiguous and lie across the international border between Burkina Faso and Côte d'Ivoire. In both countries the new protected areas are managed by local community-based natural resource and wildlife management projects. The implementation of this transboundary continuum of protected areas from the AGEREF/Comoé-Léraba Reserve to the Comoé National Park could make an important contribution to the survival of this Critically Endangered subspecies.

Given that the white-naped mangabey has recently been discovered in new localities in Côte d'Ivoire (Fischer *et al.*, 2002) and Burkina Faso (this study) one could reasonably ask whether it should remain on the list of the 25 most threatened primates. Three facts suggest that it should do so:

Firstly, the AGEREF/Comoé-Léraba Reserve is not a sanctuary but partly a safari hunting area. Secondly the number of new migrant families from Côte d'Ivoire to the AGEREF/Comoé-Léraba area in Bourkina Faso is increasing each year (we have observed that the number of houses in the villages of the area have recently increased up to three-fold), with consequent increases in human activities and land use. Hunting for bush meat may be an increasing threat. It is unlikely that the

white-naped mangabeys wander further north outside the boundaries of the AGEREF/Comoé-Léraba Reserve. Thirdly, the Burkinabe white-naped mangabey population is probably small. Local Burkinabe hunters and rangers, although they guide safari hunters through the savannah, do not know the species. Thus, it is doubtful that the mangabeys move on the savannah beyond the gallery forest. They are probably restricted to the gallery forest where we recorded them. This forest, located in the centre of the Reserve, divides the area in two. Using the gallery forest as a refuge the monkeys can easily hide or, unlike the hunters, flee across the river. The breadth of the gallery forest, although it is dense in some areas, is <100 m wide on either side of the river. If group home range is 5 km<sup>2</sup>, as measured for mangabeys in Taï in Côte d'Ivoire (Galat & Galat-Luong, 1985), then only a few groups may be able to exploit the forested areas along the Comoé and Léraba Rivers.

The capacity of this rainforest species to adapt to more seasonal and perhaps less diversified food resources will be a key to its survival (Oates, 1988), but organizations responsible for its protection will have to be vigilant. The AGEREF/Comoé-Léraba Reserve is a wildlife safari hunting reserve. Safari game hunters seldom hunt monkeys, but the sound of their gunshots disturbs wildlife. As all mangabey individuals were encountered in the gallery forest extending along the Comoé River, we strongly recommend that hunting be totally prohibited throughout the forest extending along this River and its tributary the Léraba River. The findings described here, and also our surveys in other protected areas of Burkina Faso, are being submitted to the Direction des Eaux et Forêts, who have the authority to make any appropriate changes to the areas where hunting can take place in the Reserve.

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## Biographical sketches

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