

A Note on the Distribution of Allen's Swamp Monkey, *Allenopithecus nigroviridis*, in Northwestern Congo

Authors: Maisels, Fiona, Blake, Stephen, Fay, Mike, Mobolambi, Gabriel, and Yako, Valentin

Source: Primate Conservation, 2006(21) : 93-95

Published By: Conservation International

URL: <https://doi.org/10.1896/0898-6207.21.1.93>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

A Note on the Distribution of Allen's Swamp Monkey, *Allenopithecus nigroviridis*, in Northwestern Congo

Fiona Maisels¹, Stephen Blake¹, Mike Fay¹, Gabriel Mobolambi² and Valentin Yako²

¹Wildlife Conservation Society, Bronx, New York, USA

²Nouabalé-Ndoki Project, Wildlife Conservation Society, Brazzaville, Republic of Congo

Abstract: Allen's swamp monkey, *Allenopithecus nigroviridis*, is confined to the swamp and riparian forests of the Central African region. It occurs along the Congo River and its tributaries. Recent data show that it occupies suitable habitat at least 100 km to the northwest of its previously known distribution, in an area to the west of the Nouabalé-Ndoki National Park, in the northern Republic of Congo. The apparent absence of the swamp monkey from most of the interior of the Nouabalé-Ndoki National Park itself suggests that the species probably reached northwest Congo along the Sangha and Ndoki Rivers, rather than by dispersing across the watersheds from the Oubangui. Hunters find the species easy to shoot from canoes at night, as these monkeys like to sleep in overhanging vegetation beside the rivers. More details on its distribution in the region and of its conservation status are required.

Résumé: Le singe des marais, *Allenopithecus nigroviridis*, est une espèce inféodée aux marécages et aux forêts ripicoles de la région d'Afrique Centrale. Ils se trouvent le long du fleuve Congo et ses tributaires. Les observations récentes montrent qu'il occupe l'habitat convenable au moins 100 km au nord-ouest de sa distribution auparavant connue, dans une zone à l'ouest du Parc National de Nouabalé-Ndoki, dans le nord du République de Congo. L'absence apparente du singe de marais du Parc National de Nouabalé-Ndoki lui-même suggère que l'espèce a probablement arrivée dans la région par les fleuves Sangha et Ndoki, plutôt que à travers les interfleuves de l'Oubangui. Les riverains du fleuve Congo trouvent cette espèce facile à chasser en pirogue, la nuit, parce que ces singes dorment dans la végétation aux bords des fleuves. Plus des détails sur sa distribution dans la région et de son statut de conservation sont nécessaire.

Key Words: *Allenopithecus*, Allen's swamp monkey, biogeography, distribution, conservation, Congo

Introduction

The distribution of Allen's swamp monkey, *Allenopithecus nigroviridis*, is centered on the lowland forests of the central Congolian basin. The known limits of its east-west distribution are from about 16°E to about 26°–27°E, and its north-south distribution from about 3°N to 6°30' S (Gautier 1985; Colyn 1988; Lernould 1988; Kingdon 1997, IEA 1998) (Fig. 1). The known distribution includes an area to the northwest of the Congo River, which comprises the lower courses of the Oubangui, Likouala-aux-Herbes, and Sangha rivers (Fig. 1). These watercourses are typically bordered by wide bands of swamp and riparian forest, the habitat favored by this monkey (Gautier 1985; Colyn 1987, 1988; Lee *et al.* 1988; Lernould 1988; McGraw 1994; Kingdon 1997).

In the 1990s, rumors of the occurrence of Allen's swamp monkey on the upper Sangha River came to the attention

of the personnel of a Wildlife Conservation Society project (the Nouabalé-Ndoki Project) based in the Nouabalé-Ndoki National Park, Republic of Congo (Fig. 1). This area is at least 100 km to the northwest of the previously known distribution of the species. This paper provides details of the sightings of this species in the area, besides some information on its local conservation status.

Observations

The village of Bomassa, on the Sangha River, lies 20 km to the east of the Ndoki River, and is outside the Nouabalé-Ndoki National Park. Makao is about 40 km to the east of the Park, and more than 120 km from Bomassa. No traditional villages exist along the Ndoki nor above Makao on the Motaba, and there is little or no communication or exchange of local people between the two areas because they are separated by completely uninhabited forest lacking any roads.

Allen's swamp monkeys were seen on two islands in the Sangha River near the village of Bomassa (Fig. 1), the headquarters of the Nouabalé-Ndoki National Park. The islands where Allen's swamp monkey has been observed are small—about 0.5 km² and 0.08 km², respectively. Both islands are near to the banks of the Sangha River: 120 m from the west bank and about 70 m from the east bank, respectively. There are no connections to the mainland either via the canopy or dry season land bridges. The monkeys must therefore swim between the islands and the mainland. They are known for their ability to escape from predators by plunging into water and swimming away (Rowe 1996; Gautier-Hion *et al.* 1999). De Brazza's monkeys (*Cercopithecus neglectus*) and moustached monkeys (*Cercopithecus cephus*) are also natural inhabitants of the islands—they have never been introduced by humans.

on the Ndoki and Mbeli involved several individuals; minimum counts were about 10.

We were informed that Allen's swamp monkey did not occur in the vicinity of Makao, the village closest to the Nouabalé-Ndoki National Park, on the upper Motaba (Fig. 1). However, hunters in Bomassa could correctly imitate the call of the adult male swamp monkey, and described them and their behavior to one of the authors (FM) who was already familiar with the species from work in the Salonga National Park, Democratic Republic of Congo (Gautier-Hion and Maisels 1994). Behaviors mentioned by hunters in Bomassa were, specifically, descriptions of their semiterrestrial habits, feeding on "worms" by raking through leaf litter; and the habit of large groups sleeping on branches overhanging rivers. Hunters described males as being much larger than females. Valentin Yako is familiar with the species from observations near the villages of Dongou, on the Oubangui River in eastern Congo (Fig. 1), and Boha, just north of Lac Tele, confirming that the species occurs on the Likouaa-aux-Herbes, and the lower Motaba and Ibenga, as suggested by the IEA (1998) (Fig. 1). The local name for the species, *Simbi*, is consistent throughout northern Congo, from the Oubangui across to Bomassa, 200 km to the west.

Over the course of the last 10 years, at least 4,000 km of ecological foot surveys have been carried out throughout the area, including the Nouabalé-Ndoki National Park and its buffer zones, by two of the authors (SB and MF) (see Fig. 1 for the extent of these surveys). About 30% of the areas covered were in close proximity to swamp and riparian habitats. The surveys were designed to provide relative abundance data on all large mammal species, including monkeys. No evidence of Allen's swamp monkey was recorded during these surveys, either on the west or on the east, apart from on Bomassa Island.

Discussion

The observations detailed here confirm the most northwesterly limit of the distribution of Allen's swamp monkey recorded to date. The apparent absence of the swamp monkey from the central sectors of Nouabalé-Ndoki National Park itself suggests that the species probably reached northwest Congo along the Sangha and the Ndoki, rather than by dispersing across the watersheds from the Oubangui.

Allen's swamp monkey is listed in Annex II of CITES (Inskipp and Gillett 2005) and ranked as Lower Risk, Near Threatened on the IUCN Red List (IUCN 2006). Although it apparently has a wide geographic distribution, it occurs only near water bodies. About a third of the area within its range is considered to be ecologically unsuitable (as defined as >1 km from permanent water; IEA 1998). Due to its relatively small size (3.6–6.2 kg; Kingdon 1997), and apparent local scarcity, Allen's swamp monkey appears not to be an important target for hunters on the upper Sangha. In addition, work by the Nouabalé-Ndoki Conservation Project has resulted in fairly well respected agreements by local people that they do not export meat outside the village, but use it only for their own

consumption (Ruggiero 1998). These monkeys, therefore, are in general not regularly hunted and the conservation status of Allen's swamp monkey appears stable at least in the immediate vicinity of Bomassa. The swamplands of the Likouala-aux-Herbes and the Congo rivers, on the other hand, are regularly, and in some areas intensively, hunted for the bushmeat trade (Blake 1993, pers. obs.; B. Djoni pers. comm.), which may present a serious problem for this species. Extensive ecological surveys and hunting studies are required on the major watercourses of northern Republic of Congo, southwestern Central African Republic, and southeastern Cameroon, before any firm conclusions on distribution, population sizes, and conservation status can be drawn for this population.

Acknowledgments

We thank the Government of Congo Ministry of Forest Economy and the Department of Wildlife and Protected Areas, especially M. Oday, (Director of the Department of Wildlife and Protected Areas at the time) and B. Djoni (Conservator of Nouabalé-Ndoki National Park at the time) for their support for the Nouabalé-Ndoki National Park and for conservation in the Republic of Congo. The Wildlife Conservation Society (Nouabalé-Ndoki Project) provides, or provided, support for all the authors. Thanks to all staff of the Nouabalé-Ndoki project and the people of the villages of Bomassa and Bon Coin.

Literature Cited

- Blake, S. 1993. A Reconnaissance Survey in the Likouala Swamps of Northern Congo and Its Implications for Conservation. Master's thesis, University of Edinburgh, Edinburgh.
- Colyn, M. M. 1987. Les primates de la forêt ombrophile de la Cuvette du Zaïre: Interprétations zoogéographiques des modèles de distribution. *Rev. Zool. Africaine* 101: 183–196.
- Colyn, M. M. 1988. Distribution of guenons in the Zaïre-Lualaba-Lomani river system. In: *A Primate Radiation: Evolutionary Biology of the African Guenons*, A. Gautier-Hion, F. Bourlière, J.-P. Gautier and J. Kingdon (eds.), pp.104–124. Cambridge University Press, Cambridge, UK.
- Gautier, J.-P. 1985. Quelques caractéristiques écologiques du singe du marais: *Allenopithecus nigroviridis* Lang, 1923. *Rev. Ecol. (Terre Vie)* 40: 331–342.
- Gautier-Hion, A. and F. Maisels 1994. Mutualism between a leguminous tree and large African monkeys as pollinators. *Behav. Ecol. Sociobiol.* 34: 203–210.
- Gautier-Hion, A., M. Colyn and J.-P. Gautier. 1999. *Histoire Naturelle des Primates d'Afrique Centrale*. ECOFAC, Libreville, Gabon.
- IEA. 1998. *Allenopithecus nigroviridis*. *African Mammals Databank—A Databank for the Conservation and Management of the African Mammals, Vols. 1 and 2*. Institute of Applied Ecology (IEA), European Commission Directorate, Brussels. Website: <<http://www.gisbau.uniroma1.it/amd/amd061b.html>>. Accessed 22 July 2006.
- Inskipp, T. and H. J. Gillett (eds.). 2005. *Checklist of CITES Species and Annotated CITES Appendices and Reservations*. CITES Secretariat, Geneva, Switzerland and UNEP-WCMC, Cambridge, UK. 339pp. and CD-ROM.
- IUCN. 2006. *2006 IUCN Red List of Threatened Species*. IUCN – The World Conservation Union, Species Survival Commission (SSC), Gland, Switzerland. Website: <www.iucnredlist.org>. Accessed 25 July 2006.
- Kingdon, J. 1997. *The Kingdon Field Guide to African Mammals*. Academic Press, London.
- Lee, P. C., J. Thornback and E. L. Bennett. 1988. *Threatened Primates of Africa: the IUCN Red Data Book*. IUCN—The World Conservation Union, Gland, Switzerland and Cambridge, UK.
- Lernould, J. 1988. Classification and geographical distribution of guenons: A review. In: *A Primate radiation. Evolutionary Biology of the African Guenons*, A. Gautier-Hion, F. Bourlière, J.-P. Gautier, and J. Kingdon (eds.), pp.54–78. Cambridge University Press, Cambridge, UK.
- McGraw, S. 1994. Census, habitat preference and polyspecific association of six monkeys in the Lomako Forest, Zaïre. *Am. J. Primatol.* 34: 295–308.
- Rowe, N. 1996. *The Pictorial Guide to the Living Primates*. Pogonias Press, East Hampton, New York.
- Ruggiero, R. G. 1998. The Nouabalé-Ndoki Project: Development of a practical conservation model in Central Africa. In: *Resource use in the Trinational Sangha River Region of Equatorial Africa: Histories, Knowledge Forms, and Institutions. Bulletin 102*. H. Eves, R. Hardin and S. Rupp, (eds.), pp.176–188. Yale University. New Haven, Connecticut.

Authors' addresses:

Fiona Maisels, Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York, NY 10460-1099, USA. E-mail: <fmaisels@wcs.org>.

Stephen Blake and **Mike Fay**, Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York, NY 10460-1099, USA.

Gabriel Mobolambi and **Valentin Yako**, Nouabalé-Ndoki Project, Wildlife Conservation Society, New York Zoological Society, B.P. 14537, Brazzaville, Republic of Congo.

Received for publication: 23 July 2006

Revised: 5 August 2006