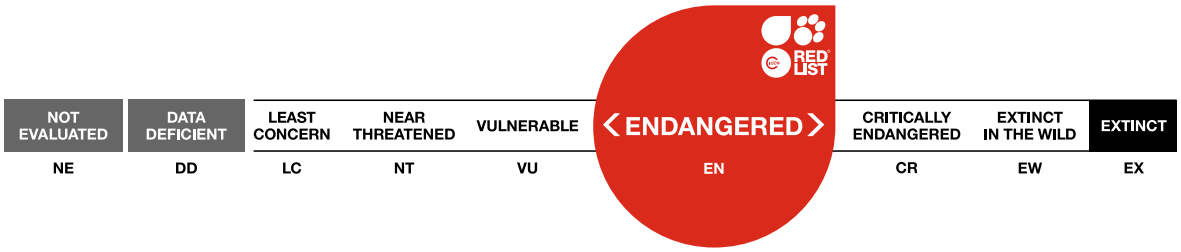
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2020: T18252A92659769
Scope(s): Global
Language: English

Piliocolobus foai, Foa's Red Colobus

Assessment by: Hart, J., Ting, N. & Maisels, F.



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Citation: Hart, J., Ting, N. & Maisels, F. 2020. *Piliocolobus foai*. *The IUCN Red List of Threatened Species* 2020: e.T18252A92659769. https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T18252A92659769.en

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Primates	Cercopithecidae

Scientific Name: *Piliocolobus foai* (de Pousargues, 1899)

Synonym(s):

- *Colobus foai* de Pousargues, 1899
- *Piliocolobus rufomitratus* ssp. *foai* (de Pousargues, 1899)
- *Procolobus badius* ssp. *foai* (de Pousargues, 1899)
- *Procolobus rufomitratus* ssp. *foai* (de Pousargues, 1899)

Common Name(s):

- English: Foa's Red Colobus
- French: Colobe de Foa
- Spanish; Castilian: Colobo Rojo del Ouroua

Taxonomic Source(s):

Mittermeier, R.A., Rylands, A.B. and Wilson D.E. 2013. *Handbook of the Mammals of the World: Volume 3 Primates*. Lynx Edicions, Barcelona.

Taxonomic Notes:

Modern taxonomic arrangements of the colobus monkeys either distinguish the red colobus monkeys and the olive colobus as separate genera, *Piliocolobus* and *Procolobus*, respectively (e.g., Groves 2001, 2005, 2007; Roos *et al*. 2011; Kingdon 2015), or consider them to belong to one genus *Procolobus*, with two subgenera (*Procolobus* for the olive colobus and *Piliocolobus* for the red colobus) (Oates *et al*. 1994; Grubb *et al*. 2003, 2013; Oates 2011). Ting (2008) placed all the red colobus as subspecies of *Procolobus* (*Piliocolobus*) *badius*. The 2008 IUCN Red List assessments followed the taxonomy of Grubb *et al*. (2003).

The arrangement of two genera in Groves (2001, 2005, 2007) is followed here: a monotypic *Procolobus* de Rochebrune, 1887 (Olive Colobus) and polytypic *Piliocolobus* de Rochebrune, 1887 (red colobus).

Piliocolobus lulindicus was recognised as a distinct taxon by Colyn (1991), who reviewed its nomenclatural history and resurrected the forms *foai* and *lulindicus* as subspecies of *Colobus badius*. He argued that the montane form *foai* (*sensu stricto*) in the east and lowland form *lulindicus* (*sensu stricto*) in the west are separated by an intermediate and possible hybrid lowland form, *kabambarei* Matschie. However, Groves (2007) considered both *lulindicus* and *kabambarei* as junior synonyms of *Piliocolobus foai*, noting continuous variation among these forms. The consensus at a workshop held in Rome in 2016 to update the African primate Red List assessments was that it would be expedient (precautionary) to continue to recognise *lulindicus* as a distinct taxon, considering the threatened status of all the red colobus monkeys. We include in this species Colyn's (1991) *lulindicus* (*sensu stricto*) as well as the intermediate and potential hybrid populations that exist in the lowland regions to the west, with the western boundary being the Albertine rift where it is replaced by the montane form *P. foai*. Further research is needed to resolve this taxonomy.

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Assessment Information

Red List Category & Criteria: Endangered A2cd ver 3.1

Year Published: 2020

Date Assessed: January 12, 2020

Justification:

This species is listed as Endangered, based on a precipitous reduction in extent of occurrence (EOO) in the past 30 years that is expected to continue into the future. *Piliocolobus foai* is threatened by uncontrolled hunting and habitat loss in an area that has seen high levels of civil unrest in the past 30 years. The geographic range described by Colyn (1991) was approximately ~23,000 km². Since then, surveys have shown that this species remains in only two small and isolated populations and currently has an EOO of ~6,700 km², representing a 70% decline since the range was defined in the 1990s. Furthermore, only a single sighting was recorded between 2003 and 2019 in for one of the populations (D. Kujirakwinja pers. comm. 2019). Given past trends of uncontrolled hunting that have not stopped, it is extremely likely that *P. foai* will be extirpated from Itombwe Nature Reserve in the near future, if it even still exists there.

The two known locations for *P. foai* are 1) Kabobo and Ngandja Reserves and adjacent Luama Hunting Reserve (together comprising the Kabobo Massif protected area complex) where it occupies an area of forest of about 1,200 km²; and 2) Itombwe Nature Reserve, where numbers have declined dramatically during the past 30 years due to habitat loss and hunting.

Piliocolobus foai has not been recorded in Kahuzi-Biega National Park in the past three decades, and is thought to be no longer present in this area.

The Kabobo Massif, the location of the only confirmed population, has had low levels of human impact; it has been protected historically because civil conflicts meant that human settlement in the region has been low (Plumptre *et al*. 2008, 2010). Establishment of the Kabobo Massif protected area complex (Rainforest Trust 2016) has contributed significantly to the conservation of Foa's Red Colobus. Nevertheless, human populations are currently increasing in the area. Hunting and habitat degradation associated with artisanal mining are occurring, particularly in Luama Hunting Reserve (A. Plumptre and D. Kujirakwinja pers. comm. 2019).

In addition to habitat loss, a major threat is hunting: *P. foai* is targeted for bushmeat across its range. Because red colobus monkeys are large-bodied and bring a higher profit per cartridge than smaller species, they are preferentially selected by hunters and tend to be eliminated or at least greatly reduced in abundance before other, smaller monkeys. They live in relatively large groups (Struhsaker 2010, Struhsaker and Grubb 2013), and they have a tendency to observe humans rather than flee – which affords hunter with very easy, multiple targets. Hunting pressure was high in all areas surveyed in the recent past, and is associated with the expansion of artisanal mining and insecurity during periods of civil unrest.

Monkeys are eaten in villages and traded commercially for consumption in towns and cities; the bushmeat trade is a serious threat to red colobus monkeys across Africa (Struhsaker 2010). In the

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Democratic Republic of Congo (DRC), there were approximately three times more people in 2019 than in 1990 (3% mean annual human population growth in DRC 1990–2018). The ability to pay much higher prices for bushmeat by the increasing proportion of urban dwellers in DRC has created a highly lucrative market for commercial hunters, which is the increasing rate of bushmeat extraction. At present, 44% of the human population in DRC lives in towns and cities (World Bank 2019), compared with 27% in 1980, and this upward trend has been the case since 1960 (when it was 22%). Given the human population growth, increasing human access to previously intact forest, uncontrolled hunting and the vulnerability of red colobus to hunting, this species is expected to continue declining.

Piliocolobus foai is listed as Endangered under criterion A2cd due to a 70% decline in its extent of occurrence (EOO) in the recent past and hunting for bushmeat. The causes are not reversible, have not ceased, nor will they in the foreseeable future.

Previously Published Red List Assessments

2008 – Not Evaluated (NE)

2000 – Data Deficient (DD)

1996 – Data Deficient (DD)

1994 – Insufficiently Known (K)

1990 – Insufficiently Known (K)

1988 – Insufficiently Known (K)

1986 – Insufficiently Known (K)

Geographic Range

Range Description:

Endemic to the Democratic Republic of Congo (DRC), *Piliocolobus foai* (*sensu stricto*, Colyn 1991) is restricted to montane forest habitats and does not occur west of the Albertine Rift highlands in areas of lower elevation. Historically, the species' ranged through montane and submontane forests (900–2,800 m asl) in the Albertine Rift, from Kahuzi-Biega National Park (KBNP), south through the Itombwe Massif to Mt Kabobo (Rahm 1964). Colyn (1991) suggested, although without confirmed specimens, that *P. foai* ranged south to the Lukuga River (800 m asl); however, there is now very little if any remaining suitable habitat in this region, which borders on the city of Kalemie. Specimens from Irangi, west of the KBNP highlands, have been attributed to P. ellioti (Rahm and Christiaensen 1963). West of the Albertine Rift highland forests, red colobus populations show intergradation between *P. foai* and *P. lulindicus* and possibly other forms, and are considered to be hybrids (Colyn 1991).

Piliocolobus foai is currently known from only two widely-separated locations. In the Kabobo region, it occurs in an area of ~1,200 km² of evergreen and gallery forests on the Lake Tanganyika escarpment (Plumptre *et al*. 2008, unpubl. data 2019). In the Itombwe Massif, it was recorded in 1996 (Omari *et al*. 1999), but patrol teams have reported only one sighting since 2003 (D. Kujirakwinja pers. comm. 2019).

Country Occurrence:

Native, Extant (resident): Congo, The Democratic Republic of the

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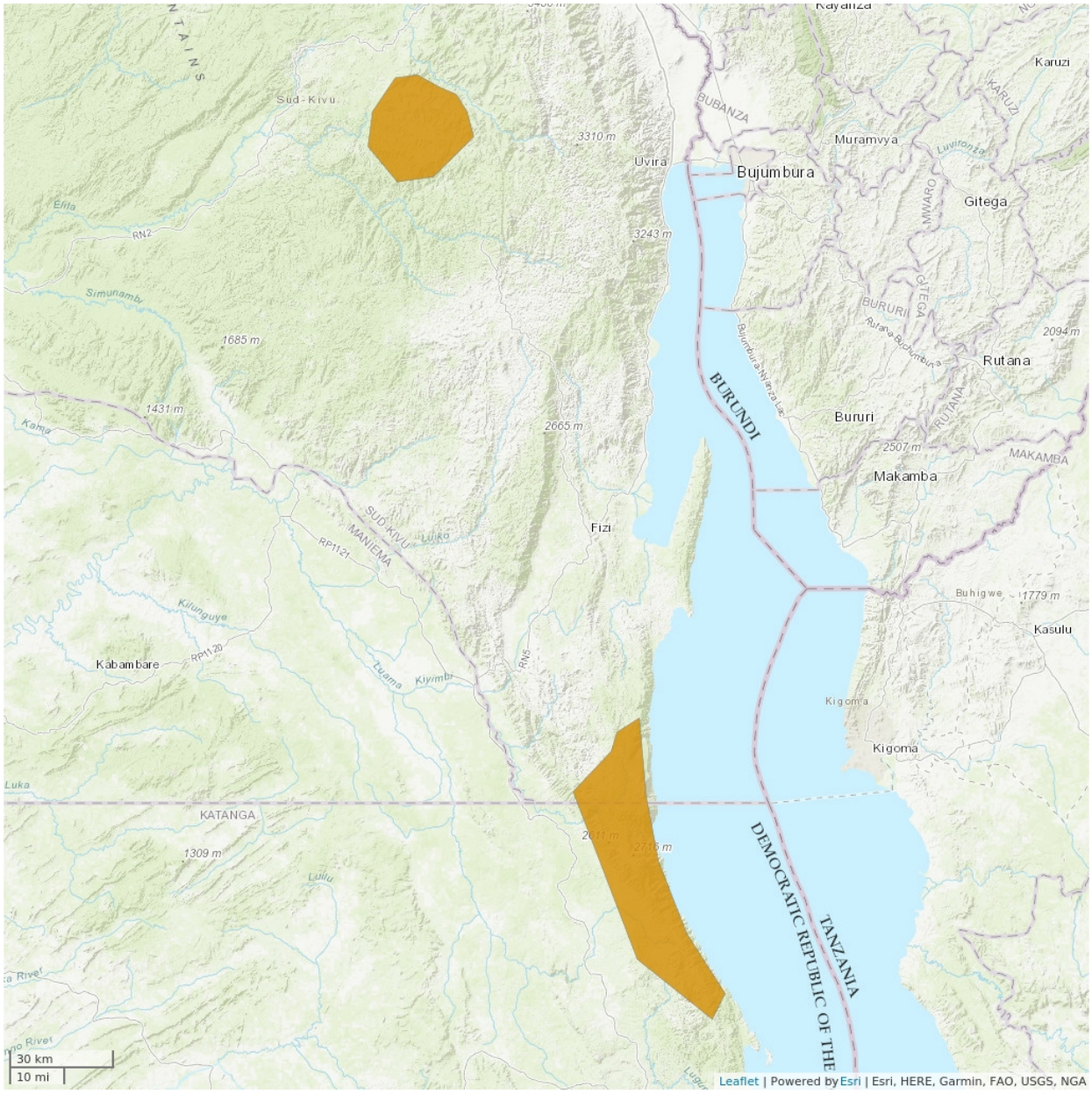
Distribution Map



Legend

EXTANT (RESIDENT)

Compiled by:

Red Colobus (Piliocolobus) Conservation Action Plan, 2020–2025 2020

The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

No population estimates are available for *P. foai*, which has a restricted range that is threatened by habitat degradation and hunting.

The species was described as uncommon in the Itombwe Massif in the early 1990s (Doumenge and Schliter 1997). It was recorded in 1996 in lower montane formations between 1,220 and 1,850 m asl by Omari *et al*. (1999), who noted low overall encounter rates of primates in the massif (0.1 groups/km) and widespread evidence of hunting. Subsequent surveys and patrols between 2003 and 2019 yielded only a single observation of *P. foai* from Itombwe (Plumptre *et al*. 2010, D. Kujirakwinja pers. comm. 2019).

Rahm and Christiaensen (1963) and Rahm (1964) reported the species in what are now the highland sector and corridor of Kahuzi-Biega National Park (KBNP). Specimens attributed to *P. foai* were collected in this same region (Colyn 1991); however, there are no recent records of this species from surveys in this area (Inogwabini *et al*. 2001, Spira *et al*. 2015).

The last remaining stronghold for *P. foai* is the Kabobo Massif Reserve Complex, where it was recorded several times during surveys conducted in 2008 (Plumptre *et al*. 2008). It is threatened here, nonetheless, and rare in the Luama Hunting Reserve (Plumptre *et al*. 2010).

Current Population Trend: Decreasing

Habitat and Ecology **(see Appendix for additional information)**

Piliocolobus foai occurs in primary montane and submontane forest from 800 to 2,270 m asl. In Itombwe, it is restricted to evergreen closed forests; in Kabobo, it also occurs in adjoining gallery forests on the escarpment above Lake Tanganyika. It is not known to range far into gallery forests or the forest islands west of the escarpment (Plumptre *et al*. 2008).

Systems: Terrestrial

Use and Trade **(see Appendix for additional information)**

Uncontrolled hunting for local consumption and sale to bushmeat markets is a significant threat to Foa's Red Colobus. Levels of offtake are probably declining as numbers of this monkey are reduced.

Threats **(see Appendix for additional information)**

Piliocolobus foai populations have been reduced or extirpated from over 50% of the species' range by hunting and by range loss due to habitat conversion and degradation during the past 30 years. Hunting certainly contributed to the loss of the taxon from KBNP, and remains a threat in Itombwe Nature Reserve, where the species is now apparently almost extirpated.

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For the past two decades, eastern DRC has been the theatre of entrenched conflict promulgated by a multiplicity of rural militias, a number of whom are based in the region's protected areas, including Itombwe Nature Reserve and the Kabobo Massif. This has not had an entirely negative impact. Rebels based in the Kabobo Massif prevented widespread occupation by farmers, herders and miners for two decades from the late 1970s through the fall of the Mobutu regime in 1997 (Plumptre *et al*. 2008, 2010). As security returned, incursions in the landscape increased (Plumptre *et al*. 2016). Elsewhere, however, occupation by militias and brigands has made management and protection of these protected areas difficult or impossible, favouring resource extraction and use by hunters, miners and pastoralists.

Outside protected areas, habitat loss and degradation are due primarily to shifting cultivation and smallholder farming, small-scale logging, charcoal production and conversion of forest to pastures. Deforestation in DRC increased by a factor of 2.5 between 2011 and 2017 (Harris *et al*. 2017). Forest loss and associated degradation has been particular severe in the range of *P. foai*, the region of DRC where human population densities are highest.

Small-scale (artisanal) and industrial-scale mining threaten the remaining forests in eastern DRC. Notably in the Itombwe Massif, where artisanal miners have reached even the most remote areas of this site. Since 2011, a major Canadian-registered, international gold mining company, Banro, has been operating concessions totalling 2,616 km² in and around Itombwe, and the company has outstanding requests for prospection within the boundaries of the Nature Reserve (Thierry Regards 2019).

In the Kabobo Massif, fires set for hunting and to clear land for agriculture are among the main threats to the evergreen montane forests favoured by *P. foai* (Plumptre *et al*. 2016).

Conservation Actions **(see Appendix for additional information)**

All red colobus are protected by CITES (Appendix 1I). They are also listed as totally protected species by national laws in DRC (Enerunga 2006).

The most important hope for the conservation of *P. foai* is the establishment and protection of the Kabobo Massif Reserve Complex, composed of the Kabobo and Nagandja Natural Reserves (Rainforest Trust 2016).

Efforts to control the killing of red colobus and trade in bushmeat would have a positive impact on remaining populations, especially in areas where mining and settlement do not occur.

The first conservation action plan for red colobus monkeys will be published in 2020. The plan identifies priority areas for conservation and recommends range-wide and taxon-based actions to prevent red colobus extinctions. Range-wide conservation priorities include actions that aim to improve government investment in wildlife conservation, expand and improve protected areas, determine taxon-specific distribution and abundance, engage with local human populations and integrate them into conservation activities, remove barriers that prevent local access to human healthcare and family planning, and raise awareness of the plight of red colobus.

Credits

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Authority/Authorities: IUCN SSC Primate Specialist Group

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Bibliography

Colyn, M. 1993. Coat color polymorphisms of red colobus monkeys (*Colobus badius*, Primates, Colobinae) in eastern Zaire: taxonomic and biogeographic implications. *Revue de Zoologie Africaine* 107: 310-320.

Colyn, M. M. 1991. L'importance zoogeographique du Bassin du Fleuve Zaire pour la speciation: le cas des Primates simiens. *Koninklijk Museum voor Midden-Afrika* 264: 1-250.

Doumenge, C and Schilter, C. 1997. Les Monts Itombwe: une enquête environnmentale et socio-économique à la planification d'interventions au Zaire. Unpublished report, IUCN, Kinshasa.

Enerunga, A. 2006. *Arrêté ministériel n°020/CAB/MIN/ECN-EF/2006 du 20 mai 2006 portant agrément de la liste des espèces animales protégées en République Démocratique du Congo*. Le Ministre de l'environnement, conservation de la nature, eaux et forêts, Kinshasa, DRC.

GFW. 2019. Country profile page: Tree cover loss by country 2001-2019. Global Forest Watch/World Resources Institute. Available at: https://www.globalforestwatch.org/dashboards/country/.

Groves C.P. 2001. *Primate Taxonomy*. Smithsonian Institution Press, Washington, DC, USA.

Groves, C.P. 2005. Order Primates. In: D.E. Wilson and D.M. Reeder (eds), *Mammal Species of the World*, pp. 111-184. The Johns Hopkins University Press, Baltimore, Maryland, USA.

Groves, C.P. 2007. The taxonomic diversity of the Colobinae of Africa. *Journal of Anthropological Sciences* 85: 7-34.

Grubb, P., Butynski, T.M., Oates, J.F., Bearder, S.K., Disotell, T.R., Groves, C.P. and Struhsaker, T.T. 2003. Assessment of the diversity of African primates. *International Journal of Primatology* 24(6): 1301-1357.

Grubb, P., Struhsaker, T.T. and Siex, K.S. 2013. Subgenus *Piliocolobus* Red Colobus Monkeys. In: T.M. Butynski, J. Kingdon and J. Kalina (eds), *The Mammals of Africa. Volume II: Primates*, pp. 125–128. Bloomsbury Publishing, London.

Harris, N.L., Goldman, E., Gabris, C. Nordling, J., Minnemeyer, S., Ansari, S., Lippmann, M., Bennett, L., Raad, M., Hansen, M. and Potapov, P. 2017. Using spatial statistics to identify emerging hot spots of forest loss. . *Environmental Research Letters* 12: 024012.

Inogwabini, B., Hall, J., Vedder, A., Curran, B., Yamagiwa, J. and Basabose, K. 2001. Status of large mammals in the mountain sector of Kahuzi-Biega National Park, Democratic Republic of Congo, in 1996 . *African Journal of Ecology* 38: 269-276.

IUCN. 2020. The IUCN Red List of Threatened Species. Version 2020-1. Available at: www.iucnredlist.org. (Accessed: 19 March 2020).

Kingdon, J. 1997. *The Kingdon Field Guide to African Mammals*. Academic Press, San Diego, California, USA.

Kingdon, J. 2015. *The Kingdon Field Guide to African Mammals*. Bloomsbury, London.

Oates, J.F. 2011. *Primates of West Africa: A Field Guide and Natural History*. Conservation International, Arlington, VA.

Oates, J.F., Davies, A.G. and Delson, E. 1994. The diversity of living colobines. In: Davies, A.G. and Oates, J.F. (eds), *Colobine Monkey: Their Ecology, Behavior and Evolution*, pp. 45–73. Cambridge University Press, Cambridge.

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Omari, I.; Hart, J. A.; Butynski, T. M.; Birnashirwa, N. R.; Upoki, A.; M'Keyo, Y.; Bengana, F.; Bashonga, M.; Baguruburnwe, N. 1999. The Itombwe Massif, Democratic Republic of Congo: biological surveys and conservation, with an emphasis on Grauer's gorilla and birds endemic to the Albertine Rift. *Oryx* 33: 301-322.

Plumptre, A.J., Amsini, F., Bamba, A., Shamavu, P. and Kujirakwinja, D. 2010. Biological Surveys for Itombwe and Support to Process of Establishment of Misotshi-Kabogo as a Protected Area. Wildlife Conservation Society and World Wide Fund for Nature.

Plumptre, A.J., Ayebare, S., Segan, D., Watson, J. and Kujirakwinja, D. 2016. Conservation action plan for the Albertine Rift. . Wildlife Conservation Society Report to Governments of Uganda, Rwanda, Burundi, Tanzania and Democratic Republic of Congo.

Plumptre, A.J., Kujirakwinja, D., Matunguru, J., Kahindo, C., Kaleme, P., Marks, B. and Huhndorf, M. 2007. *Biodiversity surveys in the Misotshi-Kabogo and Marungu regions of eastern Democratic Republic of Congo, with a focus on chimpanzees*. Wildlife Conservation Society.

Rahm, U. 1965. Distribution et écologie de quelques mammifères de l'est du Congo. *Zoologica Africana* 1: 149-164.

Rahm, U. and Christiaensen, A. 1963. Les mammifères de la région occidentale du Lac Kivu. *Annales Musée Royal de l'Afrique Centrale, Sciences Zoologiques ser 8* 118: 1-183.

Rainforest Trust. 2016. New nature reserve completes massive protected area complex in the Congo. Available at: https://www.rainforesttrust.org/new-nature-reserve-completes-massive-protected-area-complex-congo-basin/.

Roos, C. Zinner, D., Kubatko, L.S., Schwarz, C., Yang, M., Meyer, D., Nash, S.D., Xing, J., Batzer, M.A, Brameier, M., Leendertz, F.H., Ziegler, T., Perwitasari-Farajallah, D., Nadler, T., Walter, L. and Osterholz, M. 2011. Nuclear versus mitochondrial DNA: evidence for hybridization in colobine monkeys. *BMC Evol. Biol* 11: 77.

Spira, C., Kujirakwinja, D., Kirkby, A., Mitamba, G.M., Dumbo, P., Tokunda, R., Plumptre, A. & Nishuli, R. 2015. Inventaire de la Biodiversité dans le Parc National de Kahuzi Biega, République Démocratique du Congo. Secteur de Kasese (basse altitude). Institut Congolais pour la Conservation de la Nature/ Wildlife Conservation Society, Kinshasa, DRC.

Struhsaker, T.T. 2010. *The Red Colobus Monkeys: Variation in Demography, Behavior, and Ecology of Endangered Species*. Oxford University Press, New York.

Struhsaker, T.T. and Grubb, P. 2013. *Procolobus rufomitratus* Eastern Red Colobus. In: T.M. Butynski, J. Kingdon and J. Kalina (eds), *The Mammals of Africa. Volume II: Primates*, pp. 142-147. Bloomsbury Publishing, London.

Thierry Regards. 2019. Banro Corp Ltd - Twangiza mining. Available at: https://www.thierryregards.eu/2019/06/banro-twangiza-mining-mine-extraction-or-gold-kivu/.

Ting, N. 2008. Mitochondrial relationships and divergence dates of the African colobines: evidence of Miocene origins for the living colobus monkeys. *Journal of Human Evolution* 55: 312-325.

Ting, N. 2008. Molecular systematics of red colobus monkeys (*Procolobus* [*Piliocolobus*]): understanding the evolution of an endangered primate. PhD thesis, City University of New York, New York.

World Bank. 2019. Africa Development Indicators. Available at: http://databank.worldbank.org/data/views/variableselection/selectvariables.aspx?source=Africa-Development-Indicators.

Citation

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External Resources

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Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Suitable	Yes

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.1. Shifting agriculture	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.1. Nomadic grazing	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
3. Energy production & mining -> 3.2. Mining & quarrying	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
4. Transportation & service corridors -> 4.1. Roads & railroads	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.1. Intentional use: (subsistence/small scale) [harvest]	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
6. Human intrusions & disturbance -> 6.2. War, civil unrest & military exercises	Ongoing	Majority (50-90%)	Slow, significant declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		

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Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: Yes
In-place land/water protection
Conservation sites identified: Yes, over entire range
Occurs in at least one protected area: Yes
In-place education
Included in international legislation: Yes
Subject to any international management / trade controls: Yes

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action Needed
1. Land/water protection -> 1.1. Site/area protection
1. Land/water protection -> 1.2. Resource & habitat protection
2. Land/water management -> 2.1. Site/area management
3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.2. National level
5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-national level

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
1. Research -> 1.1. Taxonomy
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.3. Life history & ecology
1. Research -> 1.5. Threats
2. Conservation Planning -> 2.2. Area-based Management Plan

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https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T18252A92659769.en

Research Needed
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.2. Harvest level trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): No
Continuing decline in extent of occurrence (EOO): Yes
Extreme fluctuations in extent of occurrence (EOO): No
Lower elevation limit (m): 900
Upper elevation limit (m): 2,280
Population
Continuing decline of mature individuals: Yes
Population severely fragmented: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 10
Movement patterns: Not a Migrant

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The IUCN Red List Partnership

The IUCN Red List of Threatened Species™ is produced and managed by the IUCN Global Species Programme, the IUCN Species Survival Commission (SSC) and The IUCN Red List Partnership.

The IUCN Red List Partners are: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.