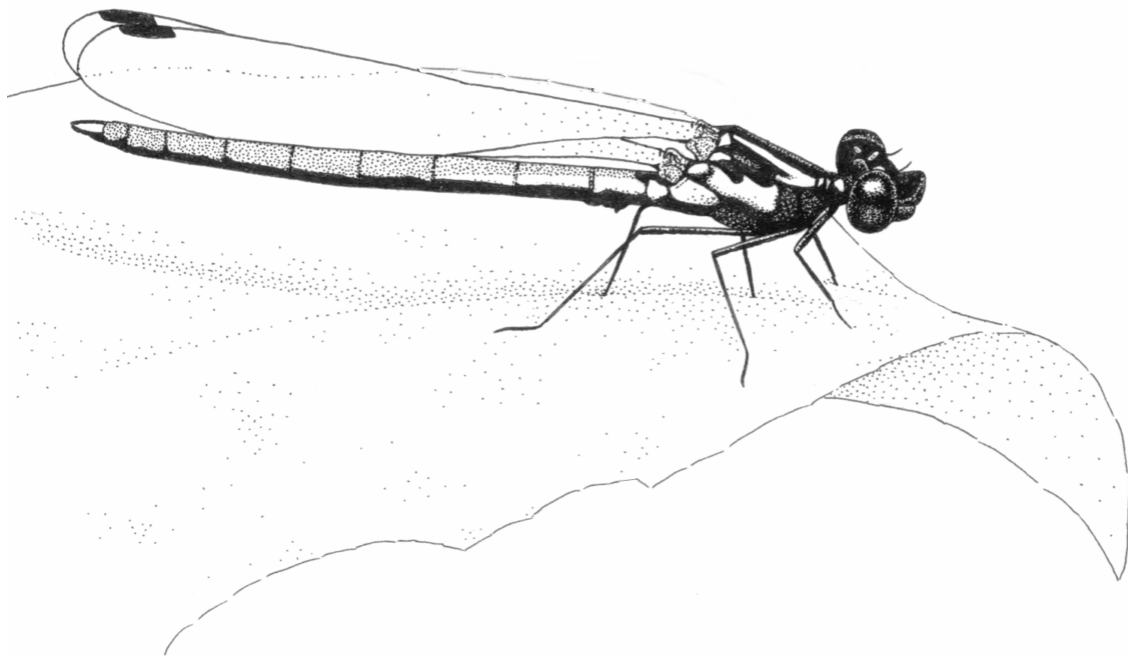


ISSN 0012-8317

Journal of East African Natural History

Volume 111 Part 1

2022



A Journal of Biodiversity

Journal of East African Natural History

A Journal of Biodiversity

Editor-in-chief

Benny Bytebier

University of KwaZulu-Natal, South Africa

Editors

Charles Warui

Nature Kenya, Kenya &
Murang'a University of Technology, Kenya

Geoffrey Mwachala

National Museums of Kenya, Kenya

Editorial Committee

Thomas Butynski

Eastern Africa Primate Diversity and Conversation
Program, Kenya and Lolldaiga Hills Research
Programme, Kenya

Norbert Cordeiro

Roosevelt University & The Field Museum, USA

Yvonne de Jong

Eastern Africa Primate Diversity and Conversation
Program, Kenya

Marc De Meyer

Royal Museum for Central Africa, Belgium

Ian Gordon

University of Rwanda, Rwanda

James Kalema

Makerere University, Uganda

Quentin Luke

East African Herbarium, Kenya

Muthama Muasya

Universtiy of Cape Town, South Africa

Deborah Manzolillo Nightingale

Nature Kenya, Kenya

Henry Ndangalasi

University of Dar es Salaam, Tanzania

Darcy Ogada

The Peregrine Fund, Kenya

Francesco Rovero

University of Florence, Italy

Stephen Spawls

Independent, United Kingdom

Patrick Van Damme

Czech University of Life Sciences, Czech
Republic

Martin Walsh

Nelson Mandela African Institution of Science and
Technology, Tanzania

Paul Webala

Maasai Mara University, Kenya

Production: Lorna A. Depew

Published: 9 May 2022

Front cover: Chlorocypha tenuis, a species of damselfly found in Kakamega Forest. Drawing by K.-D. B. Dijkstra.



NatureKenya

THE EAST AFRICA NATURAL HISTORY SOCIETY



NATIONAL MUSEUMS OF KENYA

WHERE HERITAGE LIVES ON

A CHECKLIST OF THE MAMMALS OF RWANDA

Zarek S. Cockar

Kenya Professional Safari Guides Association
P.O. Box 63838, Nairobi, Kenya
zarekcockar@gmail.com

ABSTRACT

Despite its small geographical size and its tumultuous recent political history, Rwanda is home to a diverse mammal fauna. Having reviewed 53 published books and papers, including the six volumes of *Mammals of Africa*, I have developed a simple checklist of all mammals recorded within Parc National des Volcans, Akagera National Park, Nyungwe National Park, and along the eastern shore of Lake Kivu. With a few exceptions, almost all of Rwanda's mammal species are represented in these four areas. A total of 205 species were identified within these four areas, though the presence of some species may be in doubt, some may become locally extirpated, and a few additional species may be found with more ground surveys.

Keywords: ungulate, rodent, bat, carnivore, shrew, primate

INTRODUCTION

The Republic of Rwanda (26 388 km²; figure 1) is a small eastern African nation that lies just south of the equator, bordered by the Democratic Republic of Congo, Uganda, Tanzania and Burundi. As a mountainous country, the lowest altitude is 950 metres above sea level (Rusizi River), whereas the highest is at 4507 metres above sea level (Mount Karisimbi). In the past, much of Rwanda would have been covered in montane and Afromontane forest, wooded savanna, plains and swamps. A rapidly growing human population, however, has created great pressure on Rwanda's natural resources, leading to large areas of indigenous vegetation being cleared for agriculture, commercial forestry, and settlements (USAID, 2016). Other than the three large protected areas, Parc National des Volcans (160 km²), Nyungwe National Park (1019 km²), and Akagera National Park (1120 km²), remnants of the original forest and woodlands are confined to tiny forest reserves and parks, with almost no indigenous vegetation elsewhere. Rwanda's protected areas cover approximately 9% (2389 km²) of the total land area (CBD, 2014; Dubois *et al.*, 2018).

Rwanda receives an average of 950 mm of rain per year spread out over two main rainy seasons, from March to May, and from October to December. Average temperatures range between 12–32°C depending on season and altitude, whereas the temperature on top of the highest peaks can drop below freezing (Rwanda Meteorology Agency, 2021).

Rwanda's fertile soils and high rainfall, combined with the fact that much of its western forests would have, until the mid-20th century, been connected with the great Guineo-Congolian rainforest, have resulted in high biodiversity in a relatively small area. Rwanda is home to around 2150 species of plants (CBD, 2014), approximately 56 of which are endemic (REMA, 2021). According to *Clements Checklist of the Birds of the World* (Clements *et al.*, 2019), Rwanda is home to 705 bird species, an impressive number for such a small country, although none of them is endemic.

Checklists of even the large, conspicuous mammals are hard to find for Rwanda, with a few non-exhaustive biodiversity surveys of the Virunga Volcanoes and Nyungwe Forests making up the bulk of the available literature. Several surveys were carried out during the 1950s to the early 1980s, but little since as the civil war brought many scientific endeavours to a halt in the early 1990s. Since those surveys and checklists were first published, much of the taxonomy has changed, and an updated checklist of Rwanda's mammals is needed. Thus, this checklist is an attempt to fill that gap in the interim until more studies can be conducted on the ground, and an exhaustive, annotated list can be developed for the entire country.



Figure 1. The Republic of Rwanda, showing protected and non-protected areas covered by this checklist. Contiguous protected areas in neighbouring countries are also indicated. Adapted from: <https://dopa-explorer.jrc.ec.europa.eu/country/RW>

MATERIALS AND METHODS

This checklist was compiled from a review of the literature, with the six volumes of *Mammals of Africa* (MoA) as a starting point (Kingdon *et al.*, 2013), while *Primates of East Africa Pocket Identification Guide* (de Jong & Butynski, 2018) and *Keys to the Bats (Mammalia: Chiroptera) of East Africa* (Patterson & Webala, 2012) were used as the primary sources for their respective taxa. Beyond this, the following references were examined for specific taxa and protected areas: Hutterer *et al.* (1987), Dowsett & Dowsett-Lemaire (1990), Chao (2008), Apio & Wronski (2011), Tuyisingize *et al.* (2013), Owunji *et al.* (2015), and Van Cakenberghe *et al.* (2017). Personal email communication with Dr. Torsten Wronski, on the 21st of April, 2021, is also cited regarding the presence of select species at Akagera National Park. The taxonomic order of the checklist follows Kingdon (2015) as this is the recommended field reference for field assistants, safari guides, and tourists. Nomenclature follows Kingdon *et al.* (2013) and de Jong & Butynski (2018) for scientific and common/English names, unless more recent publications provide sufficient evidence supporting different nomenclature or taxonomic changes, such as for *Dasymys rwandae*, a recently described species, not included in MoA. Where two subspecies occur within Rwanda, both are listed, as for *Cercopithecus mitis doggeti* and *Cercopithecus mitis kandti*. The checklist was prepared with the protected area names listed across the top, with spaces for the checklist below them.

RESULTS

A total of 205 species of mammal in 129 genera and 43 families are presented in the checklist, each having been confirmed in at least one of the four areas covered. Of these, only two are endemic to Rwanda: Rwandan shaggy rat *Dasymys rwandae*, and Hill's horseshoe bat *Rhinolophus hilli*. One hundred and twenty-six species are found within Parc National des Volcans, 138 around Lake Kivu and the surrounding forests, 138 at Nyungwe National Park, and 105 at Akagera National Park. The most species rich families

are Muridae (21 genera/37 species) and Soricidae (6 genera/22 species). The full checklist is presented in the Appendix.

DISCUSSION

Rwanda's small geographical area belies the diversity of mammal species that it holds, despite its difficult political past and violent civil war (Kanyamibwa, 1998; Plumptre *et al.*, 2001). Rwanda's largely agrarian human population has more than doubled in the last 40 years (National Institute of Statistics of Rwanda, 2021), putting increasing pressure on the ecological condition of the gazetted protected areas. These protected areas are the only areas of Rwanda with any extensive indigenous vegetation and less-disturbed habitats (Dubois *et al.*, 2018). If it were not for adjoining protected areas in neighbouring nations (*e.g.* Kibira National Park in Burundi contiguous with Nyungwe National Park, and Virunga National Park in Democratic Republic of Congo and Mgahinga Gorilla National Park in Uganda forming a contiguous ecosystem with Rwanda's Parc National des Volcans), Rwanda's protected areas would be isolated islands in a sea of intensively cultivated and settled land (figure 1).

While this checklist focuses on Rwanda's three primary protected areas and the eastern shore of Lake Kivu (including Gishwati-Mukura National Park), a relatively small number of species may be so range-restricted as to have been missed by this checklist. Nevertheless, this is a limitation, and further studies focusing on a few additional sites, such as Rugezi Marsh, the Rweru-Mugesera Wetlands complex, Cyamudongo Forest, and the savanna surrounding Akagera, may yield additional, perhaps unexpected, species for Rwanda. The highest diversity of bats in Rwanda has been recorded in caves and isolated woodlands outside protected areas, especially around Musanze, and therefore some of that diversity will not be reflected in this checklist (P. Webala, pers. comm.)

Repeated, focused biodiversity surveys are required both inside and outside of Rwanda's protected areas in order to obtain a clearer picture of the status and trends of the nation's biodiversity, including its mammals. In addition, the taxonomy of many of the rodents, bats, and shrews will certainly continue to be revised with more studies. To the best of the author's knowledge, this is the first attempt to compile a comprehensive list of the mammals of Rwanda's protected areas since 1985 when Nicole Monfort published her book "*Les Mammifères du Rwanda*" in French. Unfortunately, having been published 36 years ago, Monfort's work uses now-outdated taxonomy (affecting entire taxonomic orders), provides little information on many of the small mammal orders, excludes a number of species, and rarely mentions specific locations or protected areas where species can be found. It was, therefore, consulted, but not relied upon for taxonomic or geographic accuracy. Over time, the number of species contained in this checklist will surely change as new surveys are undertaken and taxonomies revised, particularly among small mammals.

One final issue to note is the difficulty with identifying certain species with accuracy. For example, *Hystrix cristata* and *H. africae australis* are notoriously difficult to differentiate in the field and in camera-trap images, unless a good view of the rump is presented. Distribution (range) and habitat information for both species overlap across Rwanda. Further, intensive field surveys focused on members of this genus are required to clarify the occurrence of each species in Rwanda. Similar issues arise for many of the rodents and bats, where past surveys list species that are not known to occur anywhere near a particular site. An example of this is *Dendromus mesomelas*, listed in Chao (2008) as occurring in Nyungwe National Park, while more recent publications on rodents of East Africa seem to disagree. In these situations, records from more recent publications are used.

ACKNOWLEDGMENTS

I am grateful to Roelof Schutte from Asilia Africa, who got me started on this project and who was happy for me to publish the full checklist independently. I would like to extend my thanks to Venkat Sankar, who looked over the checklist before anyone else and provided valuable feedback on taxonomy. I am particularly grateful to Tom Butynski and Yvonne de Yong who graciously responded to countless emails from me, providing invaluable input and editing suggestions. I am similarly grateful to Torsten Wronski who also provided very useful comments and resources regarding Akagera, Gishwati-Mukura, and general taxonomy.

REFERENCES

- Apio, A., M. Plath & T. Wronski (2015). Recovery of ungulate populations in post-civil war Akagera national park, Rwanda. *Journal of East African Natural History* **104**: 127–141.
- Apio, A. & T. Wronski (2011). A rough population estimate of large ungulates in the Akagera National Park, Rwanda. *Gnusletter* **29**: 18–20.
- Bahaa-el-din, L., P. Henschel, T.M. Butynski, D.W. Macdonald, D. Mills, R. Slotow & L. Hunter (2015). Review of the African golden cat. *Mammal Review* **45**: 63–77.
- BirdLife International (2021). Country profile: Rwanda. <http://www.birdlife.org/datazone/country/rwanda> [accessed 13 April 2021].
- Butynski, T.M. & Y.A. de Jong (2019). *Cercopithecus mitis ssp. doggetti*. *The IUCN Red List of Threatened Species 2019*. e.T136861A92570828. <https://www.iucnredlist.org/species/136861/92570828> [accessed 23 August 2021].
- CBD – UNEP (2014). Fifth National Report to the Convention on Biological Diversity – Republic of Rwanda. Montreal, Canada
- Chao, N. (2008). Bird & mammal lists: Nyungwe National Park. Wildlife Conservation Society. Rwanda Environment Management Authority. Kigali.
- Clements, J.F., T.S. Schulenberg, M.J. Iliff, S.M. Billerman, T.A. Fredericks, B.L. Sullivan & C.L. Wood (2019). The ebird/Clements checklist of birds of the world: v2019. <http://www.birds.cornell.edu/clementschecklist/download/> [accessed 13 April 2021].
- de Jong, Y.A. T.M. Butynski, A. Perkin, M. Svensson & E. Pimley (2019). *Perodicticus ibeanus*. *The IUCN Red List of Threatened Species 2019*. e.T136875A91996195. <http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T136875A91996195.enC> [accessed 29 March 2021]
- de Jong, Y.A. & T.M. Butynski (2018). *Primates of East Africa Pocket Identification Guide*. Global Wildlife Conservation. Washington D.C. <https://www.wildsolutions.nl/wp-content/uploads/DeJongButynski-2018-PG-EAP-5July18.pdf>
- Denys, C., L. Granjon & A. Poulet (2001). *African Small Mammals. Proceedings of the 8th International Symposium on African Small Mammals*, IRD Edition. Collection Colloques et Seminaires. Paris.
- Dowsett, R.J. & F. Dowsett-Lemaire (1990). Les mammifères de la Forêt de Nyungwe (Rwanda): état des connaissances. In R.J. Dowsett, (ed.), *Survey of the Fauna and Flora of Nyungwe Forest, Rwanda*. Liège, Belgium. Tauraco Research Report **3**: 111–121.
- Dubois, G., A. Mandrici, G. Delli, L. Battistella, L. Bastin, E. Garcia Bendito, M. Graziano, S. Saura Martinez De Toda, M. Conti & B. Bertzky (2018). Digital Observatory for Protected Areas v3.0, European Commission, JRC115972.
- Fahr, J. (2010). *Rhinolophus hilli*. *The IUCN Red List of Threatened Species 2010*: e.T44781A10937550. <https://dx.doi.org/10.2305/IUCN.UK.2010-2.RLTS.T44781A10937550.en> [accessed 13 April 2021].
- Fahr, J., H. Vierhaus, R. Hutterer & D. Kock (2002). A revision of the *Rhinolophus maclaudi* species group with the description of a new species from West Africa (Chiroptera: Rhinolophidae). *Myotis* **40**: 95–126.
- Fennessy, J., T. Bidon, F. Reuss, V. Kumar, P. Elkan, M. Nilsson, M. Vamberger, U. Fritz & A. Janke (2016). Multi-locus analyses reveal four giraffe species instead of one. *Current Biology* **26**: 1–7.
- GBIF Secretariat (2021). *Gerbilliscus boehmi* (Noack, 1887) in GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/dl.7anpme> [accessed 23 August 2021].
- GBIF Secretariat (2021). *Gerbilliscus validus* (Bocage, 1890) in GBIF Backbone Taxonomy. Checklist dataset <https://doi.org/10.15468/39omei> [accessed 23 August 2021].
- Grant S., K. Webbink, J. Jones & A. Ferguson (2020). Field Museum of Natural History (Zoology) Mammal Collection. Version 9.18. Field Museum. Occurrence dataset <https://doi.org/10.15468/n4zgxw>. <https://www.gbif.org/occurrence/1805725640> [accessed 23 August 2021].
- Groves, C. & P. Grubb (2011). *Ungulate Taxonomy*. The Johns Hopkins University Press. Baltimore.
- Hutterer, R., E. Van Der Straeten & W.N. Verheyen (1987). A checklist of the shrews of Rwanda and biogeographical considerations on African Soricidae. *Bonner Zoologische Beiträge* **38**: 155–172.
- IUCN (2021). The IUCN Red List of Threatened Species. Version 2021-3. <https://www.iucnredlist.org> [accessed 18 January 2022].
- Jacques, H., G. Veron, F. Alary & S. Aulagnier (2009). The Congo clawless otter *Aonyx congicus* (Mustelidae: Lutrinae): A review of its systematics, distribution and conservation status. *African Zoology*. **44**: 159–170.
- Joint Research Centre of the European Commission (2021). The Digital Observatory for Protected Areas (DOPA) Explorer 4.1, Ispra, Italy. <http://dopa-explorer.jrc.ec.europa.eu> [accessed 2 May 2021].

- Kanyamibwa, S. (1998). Impact of war on conservation: Rwanda environment and wildlife in agony. *Biodiversity and Conservation* **7**: 1399–1406.
- Kingdon, J. (2015). *The Kingdon Field Guide to African Mammals* (2nd edition). Bloomsbury, London.
- Kingdon, J., D. Happold, T.M. Butynski, M. Hoffmann, M. Happold & J. Kalina (2013). *Mammals of Africa Vols. 1–6*, Bloomsbury, London.
- Kitchener A.C., Ch. Breitenmoser-Würsten, E. Eizirik, A. Gentry, L. Werdelin, A. Wilting, N. Yamaguchi, A.V. Abramov, P. Christiansen, C. Driscoll, J.W. Duckworth, W. Johnson, S.J. Luo, E. Meijaard, P. O’Donoghue, J. Sanderson, K. Seymour, M. Bruford, C. Groves, M. Hoffmann, K. Nowell, Z. Timmons & S. Tobe (2017). A revised taxonomy of the Felidae. The final report of the Cat Classification Task Force of the IUCN/SSC Cat Specialist Group. *Cat News Special Issue 11*, Bern, Switzerland.
- Lejeune, A. & V. Frank (1990). Distribution of *Lutra maculicollis* in Rwanda: ecological constraints. *IUCN Otter Specialist Group Bulletin* **5**: 8–16.
- Mammal Diversity Database (2021). Mammal Diversity Database (Version 1.6) [Data set]. Zenodo. <http://doi.org/10.5281/zenodo.4139818> [accessed 10 April 2021].
- Monadjem, A., T.C. Demos, D.L. Dalton, P.W. Webala, S. Musila, J.C. Kerbis Peterhans & B.D. Patterson (2021). A revision of pipistrelle-like bats (Mammalia: Chiroptera: Vespertilionidae) in East Africa with the description of new genera and species. *Zoological Journal of the Linnean Society* **191**(4): 1114–1146.
- Monfort, N. (1985). *Les Mammifères du Rwanda*. Rotary Club de Kigali, Kigali.
- Moore J.F., M. Nyiratuza, E. Akampurira, & T.G. O’Brien (2018). Sightings of Lestrade’s duiker (*Cephalophus weynsi lestradei*) in Rwanda and Uganda. *Gnusletter* **35**: 17–20.
- National Institute of Statistics of Rwanda (2014). Rwanda – Recensement Général de la Population et de l’Habitat 1978 – Overview. <https://microdata.statistics.gov.rw/index.php/catalog/46/study-description> [accessed 21 May 2021].
- National Institute of Statistics of Rwanda (2021). Population size and Population Characteristics. <https://www.statistics.gov.rw/statistical-publications/subject/population-size-and-population-characteristics> [accessed 21 May 2021].
- Owiunji I., D. Nkuutu, D. Kujirakwinja, I. Liengola, A. Plumptre, A. Nsanzurwimo, K. Fawcett, M. Gray & A. McNeilage (2005). The Biodiversity of the Virunga Volcanoes. Technical Report. Wildlife Conservation Society. New York.
- Patterson, B.D., & P. Webala (2012). *Keys to the Bats (Mammalia: Chiroptera) of East Africa. Fieldiana: Life & Earth Sciences* No. 6. Field Museum of Natural History, Chicago.
- Patterson, B.D., P.W. Webala, M. Bartonjo, J. Nziza, C.W. Dick & T.C. Demos (2018). On the taxonomic status and distribution of African species of Otomops (Chiroptera: Molossidae) *PeerJ* **6**:e4864.
- Ping, S. (2021). Species Richness, Relative Abundance and Occupancy of Ground-dwelling Mammals in Gishwati-Mukura National Park (Rwanda) Using Camera Trapping Technology. Eberswalde University for Sustainable Development. Eberswalde, Germany.
- Ping, S., P.D. Bariyanga & T. Wronski (2018). A literature review of mammalian research respective to the Akagera ecosystem in Rwanda. *Rwanda Journal, Series D*. **2**: 1–16.
- Plumptre, A.J., E.A. Williamson, R. Rose, G. Nangendo, K. Didier, J. Hart & F. Mulindahabi (2010). Eastern Chimpanzee (*Pan troglodytes schweinfurthii*): status survey and conservation action plan 2010–1–2020. IUCN, Gland, Switzerland.
- Plumptre, A.J., M. Masozera, P.J. Fashing, A. McNeilage, C. Ewango, B.A. Kaplin & I. Liengola (2002). Biodiversity surveys of the Nyungwe Forest Reserve in S.W. Rwanda. *WCS Working Papers No. 18*. Technical Report. New York.
- Plumptre, A.J., M. Masozera & A. Vedder (2001). *The Impacts of Civil War on the Conservation of Protected Areas in Rwanda*. Biodiversity Support Program, World Wildlife Fund. Washington, D.C.
- Plumptre, A.J., T. Davenport, M. Behangana, R. Kityo, R. Eilu, P. Ssegawa, C. Ewango, D. Meirte, C. Kahindo, M. Herremans, J. Kerbis Peterhans, J.D. Pilgrim, M. Wilson, M. Languy & D. Moyer (2007). The biodiversity of the Albertine Rift. *Biological Conservation*, **134**: 178–194.
- Ralph, T.M., L.R. Richards, P.J. Taylor, M.C. Napier & J.M. Lamb (2015). Revision of Afro-Malagasy Otomops (Chiroptera: Molossidae) with the description of a new Afro-Arabian species. *Zootaxa* **4057**(1):1–49.
- Rwanda Development Board (2017). *Guidebook Gishwati-Mukura National Park*. Critical Ecosystem Partnership Fund. Kigali.

- Rwanda Environmental Management Authority (REMA) (2009). Rwanda state of the environment and outlook report. Biodiversity and genetic resources. <https://www.rema.gov.rw/soe/chap5.php> [accessed 22 May 2021].
- Rwanda Meteorology Agency (2021). Climatology of Rwanda. <https://www.meteorwanda.gov.rw/index.php?id=30> [accessed 21 May 2021].
- Tuyisingize, D., J.C. Kerbis Peterhans, G.N. Bronner & T.S. Stoinski (2013). Small mammal community composition in the Volcanoes National Park, Rwanda. *Bonn Zoological Bulletin* **62** (2): 177-185.
- Stephenson, P.J. (2016). *Micropotamogale ruwenzorii*. *The IUCN Red List of Threatened Species 2016*: e.T13394A21287768. <https://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T13394A21287768.en>. [accessed 23 August 2021].
- Stuart C. & M. Stuart (2017). *Stuart's Field Guide to the Larger Mammals of Africa*. Penguin Random House. Cape Town.
- Svensson, M., E. Bersacola & S. Bearder (2019). Demidoff's Dwarf Galago (*Galagoides demidoff*). *The IUCN Red List of Threatened Species 2019*: e.T40649A17962255. <http://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T40649A17962255.en>. [accessed 20 August 2021].
- Van Cakenberghe, V., G.C. Gembu Tungaluna, P. Musaba Akawa, E. Seamark & E. Verheyen (2017). The bats of the Congo and of Rwanda and Burundi revisited (Mammalia: Chiroptera). *European Journal of Taxonomy* **382**: 1-327.
- Verheyen W., J. Hulselmans, T. Dierckx, M. Colyn, H. Leirs & E. Verheyen (2003). A craniometric and genetic approach to the systematics of the genus *Dasymys* (Peters, 1875) and the description of three new taxa (Rodentia, Muridae, Africa). *Bulletin van het Koninklijk Belgisch Instituut voor Natuurwetenschappen* **73**: 27-71.
- Verschuren, J. (1987). Liste commentee des Mammiferes des Pares Nationaux du Zaire, du Rwanda et du Burundi. *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique, Biologie*, **57**: 17-39.
- Winter, S., J. Fennessy & A. Jenke (2018). Limited introgression supports division of giraffe into four species. *Ecology and Evolution* **8**: 10156-10165.
- Woodroffe, R. & C. Sillero-Zubiri (2020). *Lycyon pictus* (amended version of 2012 assessment). *The IUCN Red List of Threatened Species 2020*: e.T12436A166502262. <https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T12436A166502262.en>. [accessed 23 August 2021].
- UNEP-WCMC (2021). Protected area profile for Rwanda from the World Database of Protected Areas. <https://www.protectedplanet.net/country/RWA> [accessed 17 April 2021].
- USAID (2016). Lake Victoria Basin Ecosystem Profile Assessment Report. Land Trees & Sustainability Africa Ltd.

APPENDIX. CHECKLIST

Species with a confirmed presence in an area are indicated by an 'X'. Those which have either not been reported for several years or the presence of which has never been confirmed but, in the author's opinion, are very likely to occur based on distribution and habitat requirements, are indicated with a '?'. Those extirpated from the area are designated by an 'E', while introduced species are designated by an 'I'. See also 'Abbreviations' at the end of the checklist.

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
Hyracoidea	Hyraxes						
Procaviidae	Hyraxes						
<i>Heterohyrax brucei</i> (Gray, 1868)	Bush hyrax (yellow-spotted hyrax)	LC				?	Verschuren, 1987
<i>Dendrohyrax arboreus</i> (A. Smith, 1827)	Southern tree hyrax	LC	X			X	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Dendrohyrax dorsalis</i> (Fraser, 1855)	Western tree hyrax	LC			X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008
Proboscidea	Elephants						
Elephantidae	Elephants						
<i>Loxodonta africana</i> Blumenbach, 1797	Savanna elephant	EN	X			X	Kingdon <i>et al.</i> , 2013
Afrosoricida	Afrosoricids						
Tenrecidae	Otter-shrews						
<i>Micropotamogale ruwenzorii</i> (de Witte & Frechkop, 1955)	Rwenzori otter-shrew	LC	?	?	X		Kingdon <i>et al.</i> , 2013; Stephenson, 2016; Grant, 2020
Chrysochloridae	Golden-moles						
<i>Chrysochloris stuhlmanni</i> Matschie, 1884	Stuhlmann's golden-mole	LC	?	X	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon, <i>et al.</i> , 2013
Macroscelidea	Sengis or elephant-shrews						
Macroscelidinae	Soft-furred sengis						
<i>Petodomus tetradactylus</i> Peters, 1846	Four-toed sengi	LC				X	Kingdon <i>et al.</i> , 2013
Tubulidentata	Aardvark						
Orycteropodidae	Aardvark						
<i>Orycteropus afer</i> Pallas, 1766	Aardvark	LC		?	?	X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
Primates	Primates						
Hominidae	Great apes						
<i>Gorilla beringei</i> Matschie, 1903	Eastern mountain gorilla	CR	X				Kingdon <i>et al.</i> , 2013; de Jong & Butynski, 2018
<i>Pan troglodytes</i> (Blumenbach, 1775)	Eastern robust chimpanzee	EN		X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Plumptre <i>et al.</i> , 2010; RDB, 2017; de Jong & Butynski, 2018; Ping, 2021;
Cercopithecoidea	Old World monkeys						
<i>Colobus angolensis</i> Sclater, 1860	Rwenzori Angola colobus	VU		?	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; de Jong & Butynski, 2018
<i>Papio anubis</i> (Lesson, 1827)	Olive baboon	LC	X	X	X	X	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski, 2018
<i>Lophocebus albigena</i> (Gray, 1850)	Johnstone's grey-cheeked mangabey	<u>VU</u>		X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski, 2018
<i>Chlorocebus pygerythrus</i> (F. Cuvier, 1821)	Reddish-green vervet monkey	LC	X	X	X	X	Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; de Jong & Butynski, 2018

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Allochrocebus lhoesti</i> (Sclater, 1899)	L'Hoest's monkey	VU		X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018; Ping, 2021
<i>Cercopithecus denti</i> Thomas, 1907	Dent's monkey	LC		X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
<i>Cercopithecus hamlyni</i> Pocock, 1907	Owl-faced monkey	VU		X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
<i>Cercopithecus mitis doggetti</i> Wolf, 1822	Doggett's silver monkey	LC	X		X	?	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018; Butynski & de Jong, 2019
<i>Cercopithecus mitis kandti</i> Wolf, 1822	Golden monkey	LC	X	X			Kingdon <i>et al.</i> , 2013; RDB, 2017; de Jong & Butynski 2018
<i>Cercopithecus ascanius</i> (Audebert, 1799)	Schmidt's red-tailed monkey	LC	X	X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
Lorisidae	Lorisids						
<i>Perodicticus ibeanus</i> Thomas, 1910	Eastern potto	LC		?	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski, 2018; de Jong <i>et al.</i> , 2019
Galagidae	Galagos or bushbabies						
<i>Galagoides demidoff</i> G. Fischer, 1808	Demidoff's dwarf galago	LC	X	X	X	?	Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018; Svensson <i>et al.</i> 2019
<i>Galagoides thomasi</i> (Elliot, 1907)	Thomas's dwarf galago	LC	X	X	X		Dowsett <i>et al.</i> , 1990; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
<i>Otolemur crassicaudatus</i> (E. Geoffroy, 1812)	Silver galago	LC	?	?	X	X	Dowsett <i>et al.</i> , 1990; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
<i>Galago matschiei</i> Lorenz, 1917	Spectacled lesser galago	LC	?	?	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
<i>Galago senegalensis</i> E. Geoffroy, 1796	Lesser galago	LC				X	Kingdon <i>et al.</i> , 2013; de Jong & Butynski 2018
Rodentia	Rodents						
Hystricidae	Porcupines						
<i>Atherurus africanus</i> Gray, 1842	Brush-tailed porcupine	LC	?	?	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Hystrix cristata</i> Linnaeus, 1758	North African crested porcupine	LC	?	?	?	?	Kingdon <i>et al.</i> , 2013
<i>Hystrix africaeaustralis</i> Peters, 1852	South African (Cape) crested porcupine	LC	X	?	?	X	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013; T. Wronski (pers. comm.)
Thryonomyidae	Cane rats						
<i>Thryonomys gregorianus</i> (Thomas, 1894)	Savanna cane rat	LC		?	X	X	Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Thryonomys swinderianus</i> (Temminck, 1827)	Marsh cane rat	LC	?	?		?	Kingdon <i>et al.</i> , 2013
Sciuridae	Squirrels						
<i>Heliosciurus ruwenzori</i> (Schwann, 1904)	Rwenzori sun squirrel	LC	X	X	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013; RDB, 2017; Ping, 2021
<i>Heliosciurus rufobrachium</i> Waterhouse, 1842	Red-legged sun squirrel	LC		?	?		Kingdon <i>et al.</i> , 2013

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Protoxerus stangeri</i> (Waterhouse, 1842)	African giant squirrel	LC			X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Funisciurus carruthersi</i> Thomas, 1906	Carruthers's mountain squirrel	LC	X	X	X		Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013; Ping, 2021
<i>Funisciurus pyropus</i> (F. Cuvier, 1842)	Fire-footed rope squirrel	LC		?	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Paraxerus alexandri</i> (Thomas & Wroughton, 1907)	Alexander's bush-squirrel	LC			X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Paraxerus boehmi</i> (Reichenow, 1886)	Bohm's bush-squirrel	LC	X	X	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Xerus erythropus</i> (E. Geoffroy, 1803)	Striped ground squirrel	LC				X	Kingdon <i>et al.</i> , 2013
Gliridae	Dormice						
<i>Graphiurus microtis</i> (Noack, 1887)	Noack's African dormouse	LC		?		X	Kingdon <i>et al.</i> , 2013
<i>Graphiurus murinus</i> (Desmarest, 1822)	Forest African dormouse	LC	X	?	?		Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
Anomaluridae	Anomalures						
<i>Anomalurus derbianus</i> (Gray, 1842)	Lord Derby's anomalure	LC	?	X	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Anomalurus pusillus</i> Thomas, 1887	Lesser anomalure	LC	?				Kingdon <i>et al.</i> , 2013
<i>Idiurus zenkeri</i> Matschie, 1894	Zenker's flying mouse	LC		?			Kingdon <i>et al.</i> , 2013
Spalacidae	Root-rats						
<i>Tachyoryctes splendens</i> (Rüppell, 1835)	African root-rat	LC	X	X	X		Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
Nesomyidae	Archaic muroids						
<i>Delanymys brooksi</i> Hayman, 1962	Delaney's swamp mouse	VU	X	X	X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Cricetomys gambianus</i> Waterhouse, 1840	Gambian giant pouched rat	LC			X		Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Cricetomys emini</i> Wroughton, 1910	Emin's giant pouched rat	LC	X	X			Kingdon <i>et al.</i> , 2013; Ping, 2021
<i>Steatomys parvus</i> Rhoads, 1896	Tiny fat mouse	LC				X	Kingdon <i>et al.</i> , 2013
<i>Dendromus insignis</i> (Thomas, 1903)	Montane African climbing mouse	LC	X	X			Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Dendromus nyasae (kivu)</i> Thomas, 1916	Kivu African climbing mouse	LC		X	X		Chao, 2008; Kingdon <i>et al.</i> , 2013
Family Muridae	Murids						
<i>Deomys ferrugineus</i> Thomas, 1888	Link rat	LC	?		X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Lophuromys flavopunctatus</i> Thomas, 1888	Yellow-spotted brush-furred rat	LC	X	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Lophuromys medicaudatus</i> Dieterlen, 1975	Medium-tailed brush-furred rat	VU	X	X	X		Plumptre, 2002; Kingdon <i>et al.</i> , 2013
<i>Lophuromys woosnami</i> Thomas, 1906	Woosnam's brush-furred rat	LC	X		X		Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Gerbilliscus boehmi</i> (Noack, 1887)	Boehm's gerbil	LC				X	Kingdon <i>et al.</i> , 2013; GBIF, 2021
<i>Gerbilliscus validus</i> (Bocage, 1890)	Savanna gerbil	LC				X	Kingdon <i>et al.</i> , 2013; GBIF, 2021

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Rattus rattus</i> (Linnaeus, 1758)	Black rat	LC	?	I	I	?	Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Mus bufo</i> Thomas, 1906	Toad pygmy mouse/Rwenzori mouse	LC	X	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Mus musculoides</i> Temminck, 1853	West African pygmy mouse	LC	X	X	X		Plumptre, 2002; Kingdon <i>et al.</i> , 2013
<i>Mus triton</i> (Thomas, 1909)	Grey-bellied pygmy mouse	LC	X	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Praomys degraaffi</i> Van der Straeten & Kerbis Peterhans, 1999	De Graaff's soft-furred mouse	LC	X		X		Denys <i>et al.</i> , 2001; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Praomys jacksoni</i> (de Winton, 1897)	Jackson's soft-furred mouse	LC	X	X	X		Denys <i>et al.</i> , 2001; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Malacomys longipes</i> Milne-Edwards, 1877	Long-footed rat	LC		X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Colomys gosling</i> Thomas & Wroughton, 1907	African water rat	LC	X	X	X		Plumptre, 2002; Kingdon <i>et al.</i> , 2013
<i>Zelotomys hildegardei</i> (Thomas, 1902)	Hildegarde's broad-headed mouse	LC	?	?			Kingdon <i>et al.</i> , 2013
<i>Mastomys erythroleucus</i> (Temminck, 1853)	Guinean multimammate mouse	LC	?	?	?		Kingdon <i>et al.</i> , 2013
<i>Mastomys natalensis</i> (Smith, 1834)	Natal multimammate mouse	LC	?	?	?	?	Kingdon <i>et al.</i> , 2013
<i>Hylomyscus aeta</i> (Thomas, 1911)	Beaded wood mouse	LC	X	?	X		Plumptre, 2002; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Hylomyscus denniae</i> (Thomas, 1906)	Montane wood mouse	LC	X	?	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Hylomyscus stella</i> (Thomas, 1911)	Stella wood mouse	LC	X	?	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Otomys angoniensi</i> Wroughton, 1906	Angoni vlei rat	LC	?	?		?	Kingdon <i>et al.</i> , 2013
<i>Otomys denti</i> Thomas, 1906	Dent's vlei rat	LC	X	?	X		Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Otomys tropicalis</i> Thomas, 1902	Tropical vlei rat	LC	X	X	X	?	Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Oenomys hypoxanthus</i> (Pucheran, 1855)	Common rufous-nosed rat	LC	X	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Thamnomys kempfi</i> Dollman, 1911	Kemp's thicket rat	VU	X	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Hybomys univittatus</i> (Peters, 1876)	One-striped forest mouse	LC	?	X	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Aethomys kaiseri</i> (Noack, 1887)	Kaiser's veld rat	LC				X	Kingdon <i>et al.</i> , 2013
<i>Grammomys dolichurus</i> (Smuts, 1832)	Woodland thicket rat	LC	X	?	?	?	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Grammomys dryas</i> (Thomas, 1907)	Albertine rift thicket rat	LC	X	X			Kingdon <i>et al.</i> , 2013
<i>Grammomys kuru</i> (Thomas & Wroughton, 1907)	Shining thicket rat	LC	X	X			Kingdon <i>et al.</i> , 2013
<i>Dasymys incomptus</i> (Sundervall, 1847)	Common shaggy rat	LC	X	X	?	?	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Dasymys rwandae</i> Verheyen, 2003	Rwandan shaggy rat	LC	X				Verheyen, 2003; Tuyisingize <i>et al.</i> , 2013

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Pelomys fallax</i> (Peters, 1852)	East African creek rat	LC		?		X	Kingdon <i>et al.</i> , 2013
<i>Pelomys hopkinsi</i> Hayman, 1955	Hopkins's creek rat	DD				X	Kingdon <i>et al.</i> , 2013
<i>Lemniscomys macculus</i> (Thomas & Wroughton, 1910)	Buffoon grass mouse	LC	?	?		?	Kingdon <i>et al.</i> , 2013
<i>Lemniscomys striatus</i> (Linnaeus, 1758)	Striated grass mouse	LC	X	X	X	X	Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Arvicanthis niloticus</i> (E. Geoffroy, 1803)	Nile grass rat	LC	X	X		X	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
Lagomorpha	Hares, rock-hares, & rabbits						
Leporidae	Hares, rock-hares, & rabbits						
<i>Lepus victoriae</i> Thomas, 1893	African savanna hare	LC				X	Kingdon <i>et al.</i> , 2013
Erinaceomorpha	Hedgehogs						
Erinaceidae	Hedgehogs						
<i>Atelerix albiventris</i> (Wagner, 1841)	White-bellied hedgehog	LC				X	Kingdon <i>et al.</i> , 2013
Soricomorpha	Shrews						
Soricidae	Shrews						
<i>Myosorex babaulti</i> Heim de Balsac & Lamotte, 1956	Babault's mouse shrew	LC	X	X			Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Suncus megalura</i> (Jentink, 1888)	Climbing dwarf shrew	LC	X	X	X	?	Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Sylvisorex granti</i> Thomas, 1907	Grant's forest shrew	LC	X	X	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013;
<i>Sylvisorex johnstoni</i> (Dobson, 1888)	Johnston's forest shrew	LC	?	?	X		Plumptre, 2002; Kingdon <i>et al.</i> , 2013;
<i>Sylvisorex lunaris</i> Thomas, 1906	Moon forest shrew	NT	X	X	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Sylvisorex vulcanorum</i> Hutterer & Verheyen, 1985	Volcano forest shrew	LC	X	?	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Scutisorex somereni</i> (Thomas, 1910)	Amoured shrew	LC		X	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013;
<i>Ruwenzorisorex suncoides</i> (Osgood, 1936)	Rwenzori water shrew	VU	X	?	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Plumptre, 2007; Chao, 2008; Kingdon <i>et al.</i> , 2013;
<i>Paracrociodura maxima</i> Heim de Balsac, 1959	Greater large-headed shrew	LC	X	X	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Crociodura dolichura</i> Peters, 1876	Long-tailed shrew	LC	X	?	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Kingdon <i>et al.</i> , 2013;
<i>Crociodura fuscomurina</i> (Heuglin, 1865)	Bicoloured shrew	LC				X	Hutterer <i>et al.</i> , 1987; Kingdon <i>et al.</i> , 2013;
<i>Crociodura hildegardae</i> Thomas, 1904	Hildegarde's shrew	LC		?		X	Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Kingdon <i>et al.</i> , 2013;
<i>Crociodura jacksoni</i> Thomas, 1904	Jackson's shrew	LC	?	?	?		Hutterer <i>et al.</i> , 1987; Kingdon <i>et al.</i> , 2013;
<i>Crociodura lanosa</i> Heim de Balsac, 1968	Kivu long-haired shrew	VU		?	X		Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013;

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Crocidura luna</i> Dollman, 1910	Moonshine shrew	LC				?	Kingdon <i>et al.</i> , 2013;
<i>Crocidura maurisca</i> Thomas, 1904	Gracile naked-tailed shrew	LC	?	?	X		Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013;
<i>Crocidura nigrofuscata</i> Matschie, 1895	African black shrew	LC			X	?	Hutterer <i>et al.</i> , 1987; Plumptre, 2002; Chao, 2008; Kingdon <i>et al.</i> , 2013;
<i>Crocidura niobe</i> Thomas, 1906	Niobe's shrew	LC	X				Kingdon <i>et al.</i> , 2013; Tuyisingize <i>et al.</i> , 2013
<i>Crocidura olivieri</i> (Lesson, 1827)	African giant shrew	LC	X	X	X	X	Hutterer <i>et al.</i> , 1987; Kingdon <i>et al.</i> , 2013;
<i>Crocidura parvipes</i> Osgood, 1910	Small-footed shrew	LC				X	Kingdon <i>et al.</i> , 2013;
<i>Crocidura roosevelti</i> (Heller, 1910)	Roosevelt's shrew	LC				X	Hutterer <i>et al.</i> , 1987; Kingdon <i>et al.</i> , 2013;
<i>Crocidura tarella</i> Dollman, 1915	Tarella shrew	EN	X				Kingdon <i>et al.</i> 2013; Tuyisingize <i>et al.</i> , 2013
<i>Crocidura turba</i> Dollman, 1910	Turbo shrew	LC		?	?	?	Kingdon <i>et al.</i> , 2013;
Chiroptera	Bats						
Pteropodidae	Fruit bats						
<i>Eidolon helvum</i> (Kerr, 1792)	Straw-coloured fruit bat	NT	?	X	X	?	Dowsett <i>et al.</i> , 1990; Plumptre, 2002; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Rousettus aegyptiacus</i> (E. Geoffroy, 1810)	Egyptian rousette	LC	?	?	X	?	Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Rousettus lanosus</i> Thomas, 1906	Long-haired rousette	LC	X	?	X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Lissonycteris angolensis</i> (Bocage, 1898)	Angolan soft-furred fruit bat	LC	X	?	X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Myonycteris relicta</i> Bergmans, 1980	Bergmans's collared fruit bat	LC	X				Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Megaloglossus woermanni</i> Pagenstecher, 1885	Woerman's long-tongued fruit bat	LC	X	X	X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Hypsignathus monstrosus</i> H. Allen, 1861	Hammer-headed fruit bat	LC			X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Epomophorus labiatus</i> (Temminck, 1837)	Little epauletted fruit bat	LC	?	X	X	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Megadermatidae	Large-winged bats						
<i>Lavia frons</i> (E. Geoffroy, 1810)	Yellow-winged bat	LC	X			X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Rhinolophidae	Horseshoe bats						
<i>Rhinolophus clivosus</i> Cretzschmar, 1828	Geoffroy's horseshoe bat	LC	?	?	X	?	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Webala, 2021
<i>Rhinolophus eloquens</i> K. Anderson, 1905	Eloquent horseshoe bat	LC	X		?		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Rhinolophus fumigatus</i> Rüppell, 1842	Rüppell's horseshoe bat	LC				X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Rhinolophus hilli</i> Aellen, 1973	Hill's horseshoe bat	CR			X		Fahr, 2002; Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Rhinolophus landeri</i> Martin, 1838	Lander's horseshoe bat	LC		X	X	?	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Hipposideridae	Leaf-nosed bats						
<i>Hipposideros caffer</i> (Sundevall, 1846)	Sundevall's leaf-nosed bat	LC		X	X		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Hipposideros cyclops</i> (Temminck, 1853)	Cyclops leaf-nosed bat	LC	?	X	X		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Hipposideros ruber</i> (Noack, 1893)	Noack's leaf-nosed bat	LC	?	X	X		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Nycteridae	Slit-faced bats						
<i>Nycteris arge</i> Thomas, 1903	Bates's slit-faced bat	LC		?	X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Nycteris hispida</i> (Schreber, 1775)	Hairy slit-faced bat	LC	?		X	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Nycteris macrotis</i> Dobson, 1876	Large-eared slit-faced bat	LC	?	?	?	?	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Nycteris nana</i> (K. Andersen, 1912)	Dwarf slit-faced bat	LC	?	?	X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Nycteris thebaica</i> E. Geoffroy, 1818	Egyptian slit-faced bat	LC	X	X	?	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Embalonuridae	Sheath-tailed bats						
<i>Coleura afra</i> (Peters, 1852)	African sheath-tailed bat	LC	?	?	?	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Taphozous mauritanus</i> E. Geoffroy, 1818	Mauritian tomb bat	LC		?		X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Molossidae	Free-tailed bats						
<i>Tadarida bemmeleni</i> (Jentink, 1879)	Gland-tailed free-tailed bat	LC				?	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Tadarida condylura</i> (A. Smith, 1833)	Angolan free-tailed bat	LC				X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Tadarida fulminans</i> (Thomas, 1903)	Madagascan free-tailed bat	LC				X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Tadarida thersites</i> (Thomas, 1903)	Railer free-tailed bat	LC	X				Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Otomops harrisoni</i> Ralph, Richards, Taylor, Napier & Lamb, 2015	Harrison's giant mastiff bat	VU	X				Ralph <i>et al.</i> , 2015; Patterson <i>et al.</i> , 2018;
<i>Otomops martiensseni</i> (Matschie, 1897)	Large-eared giant mastiff bat	NT	?	?	?	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
Miniopteridae		Long-fingered bats					
<i>Miniopterus inflatus</i> Thomas, 1903	Greater long-fingered bat	LC			X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
Vespertilionidae		Vesper bats					
<i>Kerivoula cuprosa</i>	Copper-woolly bat	DD			X		Chao, 2008
<i>Myotis bocagii</i> (Peters, 1870)	Rufous mouse-eared bat	LC	?	X	X	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Myotis tricolor</i> (Temminck, 1832)	Temminck's hairy bat	LC	X	?	?		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Myotis welwitschii</i> (Gray, 1866)	Welwitsch's myotis	LC	X	?	?		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Scotophilus dinganii</i> (A. Smith, 1833)	Yellow-bellied house bat	LC			?	X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Scotoecus hirundo</i> (de Winton, 1899)	Dark-winged lesser house bat	LC			X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Glauconycteris argentata</i> (Dobson, 1875)	Common butterfly bat	LC	X	X			Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Nycticeinops eisentrauti</i> (Hill, 1968)	N/A	DD			X		Chao, 2008; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
<i>Laephotis capensis</i> (A. Smith, 1829)	Cape serotine	LC			X		Chao, 2008; Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
<i>Pipistrellus hesperidus</i> (Temminck, 1840)	Dusk pipistrelle	LC	X	?	X		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017
<i>Pseudoromicia rendalli</i> (Thomas, 1889)	Rendall's serotine	LC	?	?	?		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
<i>Pseudoromicia tenuipinnis</i> (Peters, 1872)	White-winged serotine	LC	?	?	?		Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
<i>Vansonia rueppellii</i> (J. Fischer, 1829)	Ruppell's serotine	LC	?	?	?	?	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
<i>Neoromecia somalica</i> (Thomas, 1901)	Somali serotine	LC				X	Patterson & Webala, 2012; Kingdon <i>et al.</i> , 2013; Van Cakenberghe <i>et al.</i> , 2017; Monadjem <i>et al.</i> , 2021
Carnivora		Carnivores					
Canidae		Dogs & allies					
<i>Lupulella adustus</i> (Sundevall, 1847)	Side-striped jackal	LC	X	X	X	X	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; RDB, 2017; MDD, 2021; Ping, 2021
Mustelidae		Mustelids					
<i>Mellivora capensis</i> (Schreber, 1776)	Ratel (Honey badger)	LC				X	Kingdon <i>et al.</i> , 2013
<i>Ictonyx striatus</i> (Perry, 1810)	Zorilla (Striped polecat)	LC	?	?	?	?	Kingdon <i>et al.</i> , 2013

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
<i>Poecilogale albinucha</i> (Gray, 1864)	African striped weasel	LC	?	?	X	?	Dowsett <i>et al.</i> , 1990; Kingdon <i>et al.</i> , 2013
<i>Hydricictis maculicollis</i> (Lichtenstein, 1835)	Spotted-necked otter	NT	?	?	?	X	Verschuren, 1987; Lejeune & Frank, 1990; Kingdon <i>et al.</i> , 2013
<i>Aonyx capensis</i> (Schinz, 1821)	African clawless otter	NT				X	Verschuren, 1987
<i>Aonyx congicus</i> Lönnerberg, 1910	Congo clawless otter	NT	?	X	X	?	Dowsett <i>et al.</i> , 1990; Chao, 2008; Jacques, 2009; Kingdon <i>et al.</i> , 2013
Nandiniidae	Tree civet						
<i>Nandinia binotata</i> (Gray, 1830)	Two-spotted palm civet	LC	?	X	X	?	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; Ping, 2021
Felidae	Cats						
<i>Panthera leo</i> (Linnaeus, 1758)	Lion	VU				X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
<i>Panthera pardus</i> (Linnaeus, 1758)	Leopard	VU	?	E	X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Leptailurus serval</i> (Schreber, 1776)	Serval	LC	X	X	X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; RDB, 2017; Ping, 2021
<i>Caracal aurata</i> (Temminck, 1827)	African golden cat	VU	X	?	X		Chao, 2008; Kingdon <i>et al.</i> , 2013; Bahaa-el-din <i>et al.</i> 2015; Kitchener <i>et al.</i> , 2017
<i>Felis lybica</i> Forster, 1780	African wildcat	LC	X		X	X	Verschuren, 1987; Chao, 2008; Kingdon <i>et al.</i> , 2013; Kitchener <i>et al.</i> , 2017; T. Wronski (pers. comm.)
Viverridae	Genets & civets						
<i>Civetticis civetta</i> (Schreber, 1776)	African civet	LC		X	X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; RDB, 2017
<i>Genetta maculata</i> (Gray, 1830)	Blotched (rusty-spotted) genet	LC		?	X	X	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Genetta servalina</i> Pucheran, 1855	Servaline genet	LC	X	X	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Genetta victoriae</i> Thomas, 1901	Giant genet	LC			X		Kingdon <i>et al.</i> , 2013
Hyaenidae	Hyaenas & aardwolf						
<i>Crocuta crocuta</i> (Erleben, 1777)	Spotted hyaena	LC	?			X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
Herpestidae	Mongoose						
<i>Atilax paludinosus</i> (G. Cuvier, 1829)	Marsh mongoose	LC	?	X	X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Herpestes ichneumon</i> (Linnaeus, 1758)	Egyptian mongoose	LC	?	?	X	?	Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Herpestes sanguineus</i> (Rüppell, 1835)	Slender mongoose	LC			X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; T. Wronski (pers. comm.)
<i>Bdeogale nigripes</i> Pucheran, 1855	Black-legged mongoose	LC			X		Kingdon <i>et al.</i> , 2013
<i>Icheumia albicauda</i> (G. Cuvier, 1829)	White-Tailed mongoose	LC		?	?	X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
<i>Mungos mungo</i> (Gmelin, 1788)	Banded mongoose	LC				X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
<i>Helogale parvula</i> (Sundevall, 1847)	Dwarf mongoose	LC				X	Kingdon <i>et al.</i> , 2013

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
Pholidota	Pangolins						
Manidae	Pangolins						
<i>Phataginus tricuspis</i> (Rafinesque, 1821)	Tree pangolin	EN			X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Smutsia gigantea</i> (Illiger, 1815)	Giant pangolin	EN				X	Kingdon <i>et al.</i> , 2013
Perissodactyla	Odd-toed ungulates						
Equidae	Horses						
<i>Equus quagga</i> Boddaert, 1785	Plains zebra	NT				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
Rhinocerotidae	Rhinoceroses						
<i>Diceros bicornis</i> (Linnaeus, 1758)	Black (hook-lipped) rhinoceros	CR				X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
Cetartiodactyla	Even-toed ungulates						
Suidae	Pigs						
<i>Phacochoerus africanus</i> (Gmelin, 1788)	Common warthog	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Potamochoerus larvatus</i> (F. Cuvier, 1822)	Bushpig	LC	?	?	X	?	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Hylochoerus meinertzhageni</i> Thomas, 1904	Giant forest hog	LC			X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
Hippopotamidae	Hippopotamuses						
<i>Hippopotamus amphibius</i> Linnaeus, 1758	Common hippopotamus	VU		E		X	Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
Giraffidae	Giraffes						
<i>Giraffa tippelskirchi</i> Matschie, 1898	Maasai giraffe	EN				X	Apio & Wronski, 2011; Groves & Grubb, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015; Fennessy <i>et al.</i> , 2016; Winter <i>et al.</i> , 2018
Bovidae	Horned ungulates						
<i>Syncerus caffer</i> (Sparrman, 1779)	African buffalo	NT	X	E	E	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Chao, 2008; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Tragelaphus sylvaticus</i> (Sparrman, 1780)	Southern bushbuck	LC	X	E	X	X	Verschuren, 1987; Dowsett <i>et al.</i> , 1990; Apio & Wronski, 2011; Groves & Grubb, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Tragelaphus spekii</i> Speke, 1863	Sitatunga	LC				X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
<i>Tragelaphus oryx</i> (Pallas, 1766)	Common eland	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Philantomba monticola</i> (Thunberg, 1789)	Blue duiker	LC	?	E	X		Dowsett <i>et al.</i> , 1990; Kingdon <i>et al.</i> , 2013
<i>Sylvicapra grimmia</i> (Linnaeus, 1758)	Bush/common duiker	LC				X	Verschuren, 1987; Kingdon <i>et al.</i> , 2013
<i>Cephalophus nigrifrons</i> Gray, 1871	Black-fronted duiker	LC	X	E	X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Cephalophus weynsi</i> Thomas, 1901	Weyn's duiker	LC	?		X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013; Moore <i>et al.</i> , 2018
<i>Cephalophus silvicultor</i> (Afzelius 1815)	Yellow-backed duiker	NT	X		X		Dowsett <i>et al.</i> , 1990; Chao, 2008; Kingdon <i>et al.</i> , 2013
<i>Ourebia ourebi</i> (Zimmerman, 1783)	Oribi	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> ,

Order, family and species	Common name	IUCN	Vol	Kiv	Nyu	Aka	Specific Citations
							2013
<i>Redunca redunca</i> (Pallas, 1767)	Bohor reedbuk	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013
<i>Kobus ellipsiprymnus</i> (Ogilby, 1833)	Waterbuck	LC		?		X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Oreotragus oreotragus</i> (Zimmerman, 1783)	Klipspringer	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013
<i>Aepyceros melampus</i> (Lichtenstein, 1812)	Impala	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Damaliscus lunatus</i> (Burchell, 1824)	Topi	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015
<i>Hippotragus equinus</i> (E. Geoffroy Saint-Hilaire, 1803)	Roan antelope	LC				X	Verschuren, 1987; Apio & Wronski, 2011; Kingdon <i>et al.</i> , 2013; Apio <i>et al.</i> , 2015

**Abbreviations:*

IUCN = Global conservation status based on the IUCN Red List of Threatened Species, DD = Data Deficient, LC = Least Concern, NT = Near Threatened, VU = Vulnerable, EN = Endangered, CR = Critically Endangered; Vol = Parc National des Volcans. Kiv = Lake Kivu shore and nearby forests (including Gishwati-Mukura). Nyu = Nyungwe National Park. Aka = Akagera National Park