



THE REPUBLIC OF UGANDA  
MINISTRY OF TOURISM,  
WILDLIFE AND ANTIQUITIES

# National Giraffe Conservation Strategy and Action Plan for Uganda (2020-2030)





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**Editors**

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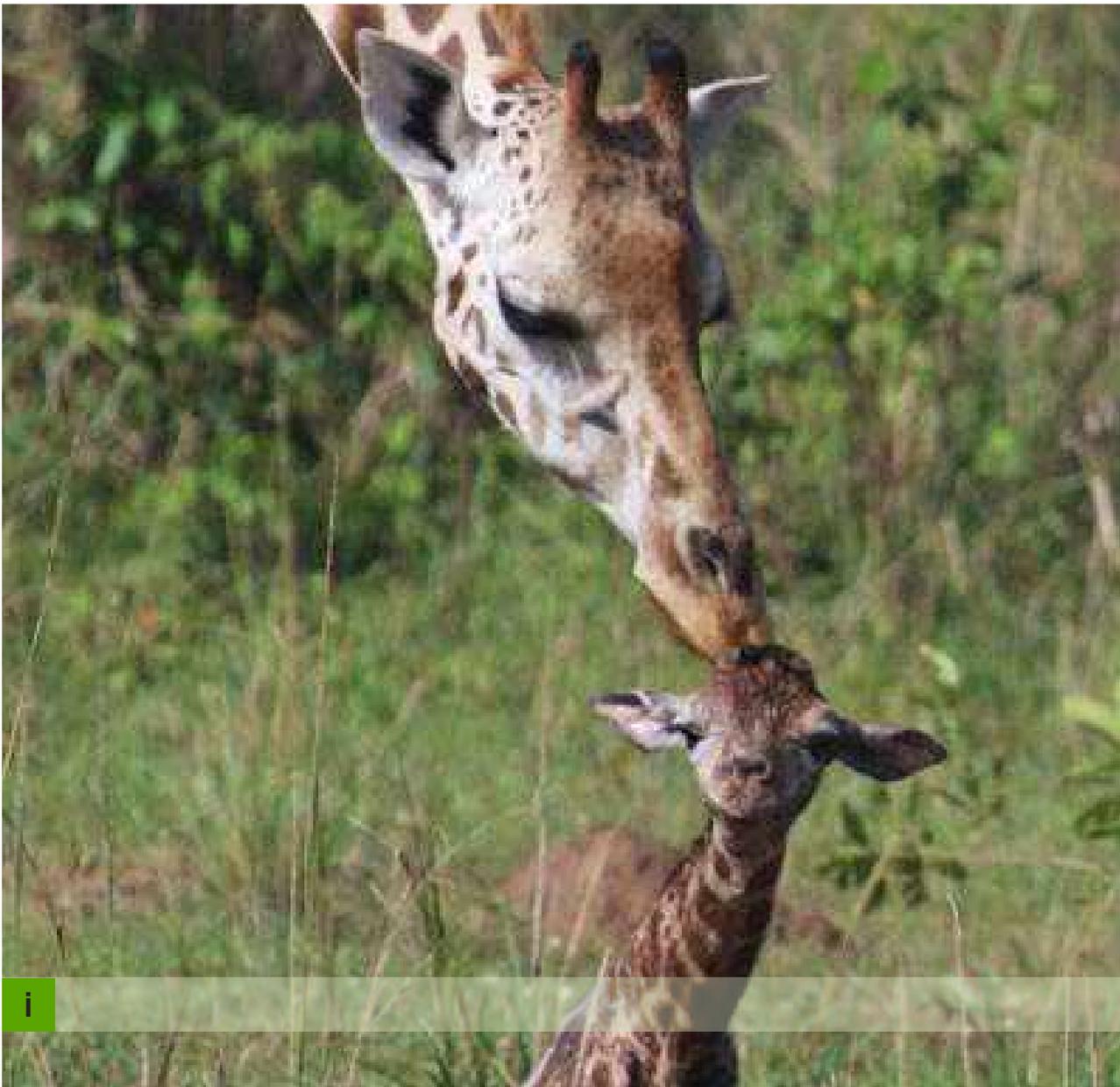
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## APPROVAL

The Uganda Wildlife Authority Board of Trustees approved the National Giraffe Conservation Strategy and Action Plan 2020–2030 for implementation at its 43rd sitting, which was held on 30 June 2020.

.....  
Dr Pantaleon Kasoma  
CHAIRMAN, BOARD OF TRUSTEES

.....  
Mr Sam Mwandha  
EXECUTIVE DIRECTOR



## Preface

Wildlife resources play critical ecological roles and contribute significantly to Uganda's economic development. However, the management of these resources has faced many challenges, including the lack of species-specific action plans.

This National Giraffe Conservation Strategy and Action Plan is now the seventh of such species conservation plans for Uganda; the others being for great apes, elephant, rhino, large mammal carnivores, and the grey crowned crane and shoebill, as enshrined in the Wildlife Policy 2014 and Uganda Wildlife Act 2019. This Strategy and Action Plan highlights the policies, gaps, and opportunities for giraffe conservation in Uganda, and it is intended to attract support from local, regional and international stakeholders as well as partners and the donor community for its implementation to promote the long-term conservation and management of giraffe.

The development of the National Giraffe Conservation Strategy and Action Plan is an important milestone for the country, and it comes at a time wherein Uganda is implementing the National Development Plan III (2020–2025) and Vision 2040, both of which have identified wildlife-based tourism as a key catalyst for propelling Uganda to an industrialised middle-income nation. Importantly, Uganda is currently grappling with unprecedented levels of habitat loss, including deforestation and environmental degradation, which is largely driven by increased human population growth that negatively impacts the conservation of species. This Strategy and Action Plan will therefore provide an important reference for Ugandans and the global community to promote the survival and protection of the remaining giraffe populations and their habitats.

Finally, this Strategy and Action Plan may be used by stakeholders in conservation, community development and tourism promotion. I therefore encourage all stakeholders, policy makers and the general public to use this plan for its purpose, which is to benefit giraffe conservation and our country.

Tom R. Butime (MP)  
MINISTER OF TOURISM WILDLIFE AND ANTIQUITIES



## Foreword

The Nubian giraffe, which was recently genetically identified as indistinguishable from the formerly known Rothschild's giraffe, is one of the most threatened large mammals remaining in the country. Uganda's giraffe population decreased drastically in the 1970s and 1980s due to political instability and the breakdown in the rule of law, which resulted in the illegal hunting of wildlife, including giraffe for bushmeat and illegal trade. Giraffe, which previously occurred across most of northern Uganda, now only exist in protected areas: the Murchison Falls, Kidepo Valley and Lake Mburo National Parks, as well as in the Pian Upe Wildlife Reserve where they were reintroduced in 2019 after more than 20 years of local extinction.

From 2013 to 2017, the Uganda Wildlife Authority (UWA) and the Giraffe Conservation Foundation (GCF) undertook a countrywide assessment of giraffe in Uganda. The major concern noted in the assessment was the shrinking range of giraffe; therefore, securing more habitat for the species was recommended. Over the past five years, the UWA and GCF have undertaken several activities aimed at securing the survival of giraffe in Uganda. These activities include increased monitoring, augmentation of existing populations, and the expansion of the giraffe range through translocations. Already, these efforts are gradually leading to increased giraffe populations and expanded ranges in Uganda.

The Wildlife Policy 2014 and Uganda Wildlife Act 2019 mandate the Executive Director of the UWA to prepare and implement General Management Plans (GMPs) for protected areas and species-specific action plans. Although GMPs for protected areas have been duly developed and regularly updated, the development of species-specific plans is still a challenge. Therefore, the development of the National Giraffe Conservation Strategy and Action Plan is a great achievement for the UWA.

This ten-year Strategy and Action Plan presents strategic objectives and actions aimed at minimising the threats to giraffe to maintain viable populations across their range in Uganda. This Strategy and Action Plan will guide the allocation of resources for giraffe conservation and management in the country. It was prepared through a rigorous consultative process involving active participation of local, regional and international stakeholders. The consultative approach involved participatory methods following IUCN best practices and guidelines for the development of a species action plan.

Now that the Strategy and Action Plan is approved, I call upon every stakeholder and the managers of the current and future giraffe populations to promote its implementation.  
Conserving for Generations

.....  
Sam Mwandha  
EXECUTIVE DIRECTOR  
UGANDA WILDLIFE AUTHORITY



# Abbreviations and Acronyms

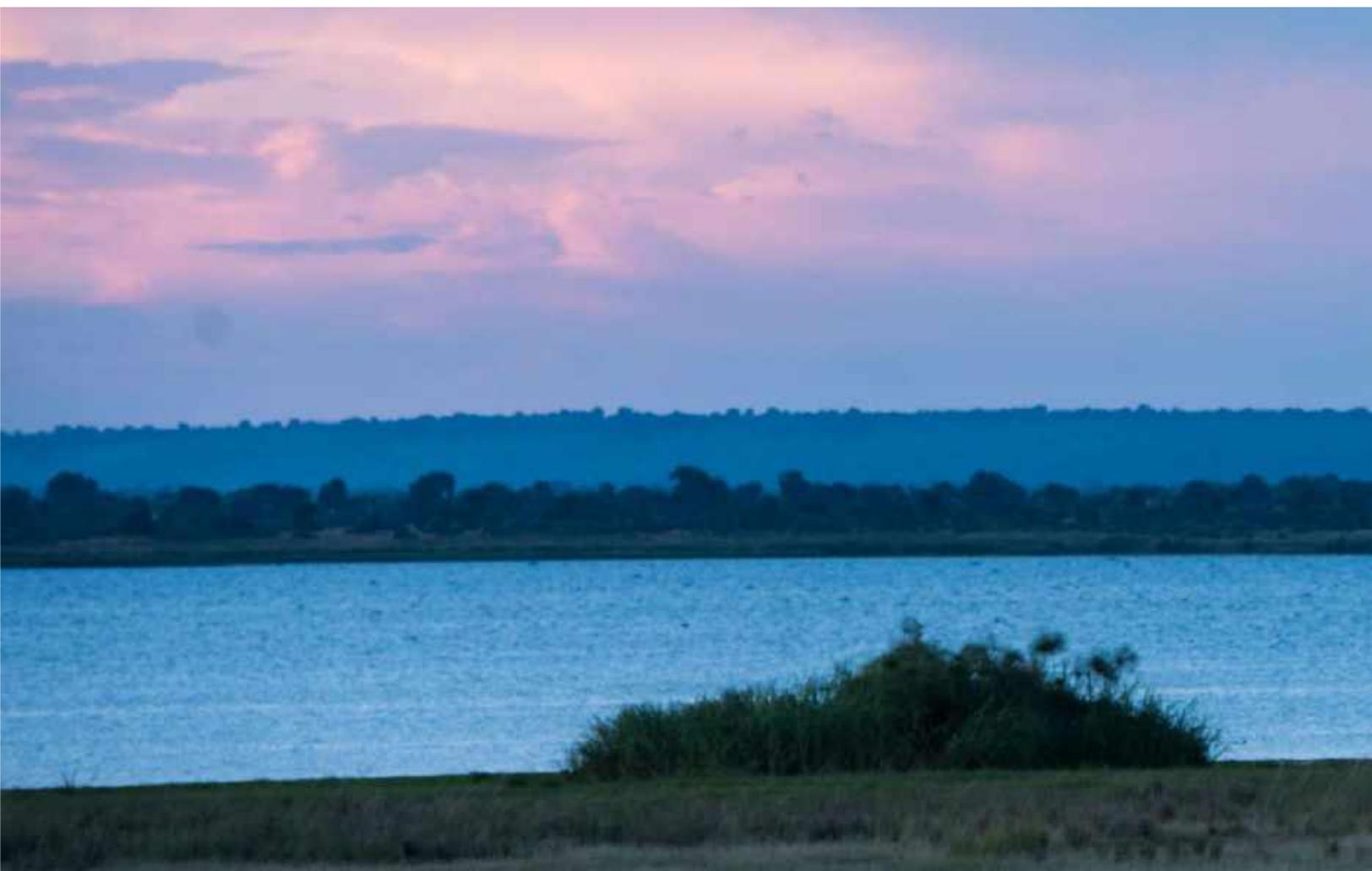
<b>AUTO</b>	Association of Uganda Tour Operators
<b>AWF</b>	African Wildlife Foundation
<b>AZA-SAFE</b>	Association of Zoos and Aquariums-Saving Animals From Extinction
<b>CAA</b>	Civil Aviation Authority
<b>CBO</b>	Community-Based Organisation
<b>CITES</b>	Convention of International Trade in Endangered Species of Wild Fauna and Flora
<b>CoVAB</b>	College of Veterinary Medicine, Animal Health and Bio-Security
<b>CMI</b>	Chieftaincy of Military Intelligence
<b>CMS</b>	Convention of Migratory Species
<b>CoP</b>	Conference of Parties
<b>CPTH</b>	Conservation Through Public Health
<b>CSO</b>	Civil Society Organisation
<b>DETRA</b>	Development Training and Research Associates Africa
<b>DRC</b>	Democratic Republic of Congo
<b>ESIA</b>	Environmental Social Impact Assessment
<b>et al.</b>	...and others
<b>FFI</b>	Flora and Fauna International
<b>GCF</b>	Giraffe Conservation Foundation
<b>GMPs</b>	General Management Plans
<b>GCTWG</b>	Giraffe Conservation Technical Working Group
<b>GoU</b>	Government of Uganda
<b>ITFC</b>	Institute of Tropical Forest Conservation
<b>IUCN</b>	International Union for Conservation of Nature
<b>KVCA</b>	Kidepo Valley Conservation Area
<b>KVNP</b>	Kidepo Valley National Park
<b>KWS</b>	Kenya Wildlife Service
<b>LG</b>	Local Government
<b>MAAIF</b>	Ministry of Agriculture, Animal Industry and Fisheries
<b>MAK</b>	Makerere University

<b>MBWR</b>	Matheniko and Bokora Wildlife Reserves
<b>MEMD</b>	Ministry of Energy and Mineral Development
<b>MFCA</b>	Murchison Falls Conservation Area
<b>MFNP</b>	Murchison Falls National Park
<b>MLHUD</b>	Ministry of Land, Housing and Urban Development
<b>MoES</b>	Ministry of Education and Sports
<b>MoWE</b>	Ministry of Water and Environment
<b>MSU</b>	Michigan State University
<b>MTWA</b>	Ministry of Tourism, Wildlife and Antiquities
<b>MUST</b>	Mbarara University of Science and Technology
<b>NBDB</b>	National Biodiversity Data Bank
<b>NFA</b>	National Forestry Authority
<b>NGO</b>	Non-Governmental Organisation
<b>NGCSAP</b>	National Giraffe Conservation Strategy and Action Plan
<b>NP</b>	National Park
<b>NR</b>	National Reserve
<b>PA</b>	Protected Area
<b>pers. comm.</b>	Personal Communication
<b>PUWR</b>	Pian Upe Wildlife Reserve
<b>RBDC</b>	Ranger-Based Data Collection
<b>RI</b>	Research Institutions
<b>RS</b>	Revenue Sharing
<b>UCF</b>	Uganda Conservation Foundation
<b>UNEP-WCMC</b>	UN Environment Programme – World Conservation Monitoring Centre
<b>UPF</b>	Uganda Police Force
<b>USAID</b>	United States Agency for International Development
<b>UTB</b>	Uganda Tourism Board
<b>UWA</b>	Uganda Wildlife Authority
<b>UWEC</b>	Uganda Wildlife Conservation Education Centre
<b>UWRTI</b>	Uganda Wildlife Research & Training Institute
<b>WCS</b>	Wildlife Conservation Society
<b>WR</b>	Wildlife Reserve



## Glossary

- Extinct:** a taxon is considered extinct when it no longer has living members in a particular area where it previously existed
- Extirpated:** a species that has been completely eradicated or destroyed in an area where it previously existed
- Extralimital population:** a wildlife population introduced outside the species' natural range
- Extralimital introduction:** the process of introducing a wildlife population outside the species' natural range
- Invasive species:** a plant or animal that has a tendency to spread, causing damage to the environment, humans, or animals
- IUCN Red List:** a list of globally threatened species that represents the categories Extinct, Critically Endangered, Endangered, Vulnerable, Near Threatened, or Least Concern (the IUCN Red List has become an important tool for defining conservation status and subsequent action at international, national, and thematic levels; the existing definitions are based on a series of criteria)





## Executive Summary

This Strategy and Action Plan provides guidance in the formulation and coordination of management intervention actions essential for the protection and conservation of viable giraffe populations in Uganda. Primarily, it aims to establish a monitoring and research framework to guide planning processes and management decisions for giraffe conservation over the next ten years (2020 to 2030). It further outlines strategies to reduce poaching and other threats to giraffe conservation as well as their mitigation measures; and it provides specific strategies for addressing the potential impacts on habitats and human-wildlife conflicts that could arise with the growing giraffe and human populations.

This Strategy and Action Plan articulates realistically achievable tangible outcomes, as well as appropriate indicators to assess progress towards the achievement of these outcomes. Regular monitoring and assessment will be key to achieving the desired objectives during the implementation period. A Giraffe Conservation Technical Working Group (GCTWG) will be established, specifically to oversee the implementation of the Strategy and Action Plan. The Working Group will comprise experts from the following institutions: two will be drawn from the UWA, where one will function as the designated Chairperson; two scientists will be drawn from the Giraffe Conservation Foundation (GCF); and one representative will be drawn from the Ministry of Tourism Wildlife and Antiquities, the Uganda Wildlife Conservation Centre, and the College of Veterinary Medicine Animal Resources and Biosecurity, Makerere University.







# 1. Introduction

## 1.1 Background

When Lydekker first described the Rothschild's giraffe (*Giraffa camelopardalis rothschildi*) in 1903 (Lydekker, 1904a), their distribution ranged from the great Rift Valley of central-west Kenya into Uganda, extending to the Nile River and northwards into Sudan (Dagg and Foster, 1976). Today, the Rothschild's giraffe is genetically identical to the Nubian giraffe (*G. c. camelopardalis*) and, thus, subsumed into it (Fennessy et al., 2016; Winter et al., 2018).

Since the beginning of the 20th century, the Nubian giraffe has been extirpated from much of its former range. Their current global distribution is now limited to 19 isolated populations, of which five are in Uganda (including the newly reintroduced population to the Pian Upe Wildlife Reserve (WR)) and 14 in Kenya (Fennessy et al., 2018; Fennessy and Brenneman, 2010). Of all the populations, only two occur naturally in Uganda – the Murchison Falls (northern bank of the Nile River) and Kidepo Valley National Parks (NP); and two were reintroduced to their previous natural ranges – the Pian Upe WR, Uganda, and the Ruko Conservancy, Kenya (Fennessy et al., 2018; GCF pers. comm.). The remaining Nubian giraffe populations, including the population in Lake Mburo NP, Uganda, are extralimital conservation introductions (Fennessy et al., 2018). It is, therefore, important to note that Uganda is home to the largest Nubian giraffe population in its natural range – the Murchison Falls NP. However, like all other populations, it is geographically isolated, making this population essential for giraffe conservation (Brown et al., 2019). The vulnerability of the Nubian giraffe is exacerbated by its classification as a distinct subspecies of the Northern giraffe (*G. camelopardalis*), having split around 0.27 million years ago (Winter et al., 2018; Fennessy et al., 2016; Bock et al., 2014). Therefore, Nubian giraffe in Uganda represent a unique genetic lineage that should be afforded a higher conservation priority to promote its survival in the wild.

## 1.2 Giraffe Conservation Status and Distribution in Africa

### 1.2.1 Taxonomy and Scientific Classification

The giraffe is the tallest and largest even-toed ruminant. It belongs to:

Kingdom:	Mammalia
Phylum:	Chordata
Order:	Artiodactyla
Family:	Giraffidae
Genus:	<i>Giraffa</i>

The International Union for Conservation of Nature (IUCN) currently recognises one species (*Giraffa camelopardalis*) and nine subspecies of giraffe, historically based on out-dated assessments of their morphological features and geographic ranges (Muller et al., 2018). The subspecies are thus divided: Angolan giraffe (*G. c. angolensis*), Kordofan giraffe (*G. c. antiquorum*), Masai giraffe (*G. c. tippelskirchi*), Nubian Giraffe (*G. c. camelopardalis*), reticulated giraffe (*G. c. reticulata*), Rothschild's giraffe (*G. c. rothschildi*), South African giraffe (*G. c. giraffa*), Thornicroft's giraffe (*G. c. thornicrofti*), and West African giraffe (*G. c. peralta*). However, the most recent comprehensive phylogenetic studies clearly identify four distinct species and five subspecies of giraffe based on comprehensive genetic analysis (genomic, nuclear and mitochondrial) from all major natural populations of giraffe throughout their range in Africa (Fennessy et al., 2016; Winter et al., 2018). The four species are Masai giraffe (*G. tippelskirchi*), northern giraffe (*G. camelopardalis*), reticulated

giraffe (*G. reticulata*) and southern giraffe (*G. giraffa*). Nubian giraffe (*G. c. camelopardalis*), Kordofan giraffe (*G. c. antiquorum*) and West African giraffe (*G. c. peralta*) are the three subspecies of the northern giraffe, while Angolan giraffe (*G. g. angolensis*) and South African giraffe (*G. g. giraffa*) fall under the southern giraffe. The IUCN Species Survival Commission (SSC) Giraffe and Okapi Specialist Group has proposed to review all the available data and literature to update the taxonomy of giraffe, as the current classification is adapted from Lydekker (1904), whose interpretation of geographical range was based on limited knowledge of their actual distribution and samples from across their range.

### 1.2.2 Geographical Distribution and Trends in Africa

Giraffe currently occur in 22 countries, forming a wide arc throughout sub-Saharan Africa from Niger to Central and East Africa down to Southern Africa (GCF, 2020). Specifically, giraffe naturally occur in Angola, Botswana, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Ethiopia, Kenya, Mozambique, Namibia, Niger, Somalia, South Africa, South Sudan, Tanzania, Uganda, Zambia and Zimbabwe. Extralimital populations have been introduced to Eswatini, Malawi, Rwanda and Senegal (GCF, 2020).

Giraffe numbers across Africa are thought to have declined by approximately 30% in the last 30 years from a historic estimate of ~155,000 to ~111,000 individuals (GCF, 2020). This decline has resulted in uplisting giraffe as one species from 'Least Concern' to 'Vulnerable' on the IUCN Red List of threatened species (Muller et al., 2018). In 2018–19, all subspecies (excluding the South African giraffe) were assessed for separate IUCN Red List standings, many for their first time. The Rothschild's giraffe and the Nubian giraffe have been respectively listed as 'Near Threatened' and 'Critically Endangered', with less than 2,500 mature individuals in wild populations and with more than 60% in the Murchison Falls NP in Uganda (Fennessy et al., 2018; Wube et al., 2018). It is important to acknowledge that the re-assessment for Rothschild's giraffe resulted in them being downlisted from 'Endangered' to 'Near Threatened' – a positive story, and a result of effective conservation efforts by Uganda and Kenya. However, as they are now subsumed into the Nubian giraffe, they become 'Critically Endangered'. The population of Nubian giraffe in Uganda is key to saving the species in the long term because other populations are declining rapidly in surrounding East African countries.

In October 2017, giraffe were listed in Appendix II of the Convention of Migratory Species (CMS) at the twelfth Conference of Parties (CoP) meeting in recognition of their transboundary movements across Africa (CMS CoP12, 2017). The CMS Appendix II listing calls for collaboration across all appropriate giraffe Range States, and for improved awareness and management of their plight internationally. In August 2019, giraffe as a single species were added for the first time to Appendix II of the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) to regulate international trade of the species (UNEP-WCMC 2020).

### 1.2.3 Behaviour and Biology

Giraffe are predominantly browsers, and their long legs and neck ensure utilisation of a food source beyond the reach, except for African elephant, of any other animals. Despite this highly specialised adaptation, giraffe are extremely versatile and flourish in habitats with relatively few trees where, instead, they browse the tops of bushes and smaller trees (GCF, 2020). In the Murchison Falls NP, giraffe are observed in most habitat types on the north side of the Victoria Nile, ranging from open savannah with scattered woodland patches consisting of *Acacia (Vachellia) senegal*, *A. drepanolobium* and *A. sieberiana*, to open savannah with *Harrisonia abyssinica* and *Crateva adansonii* stands, to *A. sieberiana* woodland (Brown et al., 2018). In recent surveys in the Kidepo Valley NP, giraffe were observed in predominantly dry *Acacia* savannah. In the Lake Mburo NP, the recently introduced giraffe have been observed to feed mostly on *Acacia* species (Bryant et al., 2015). Giraffe are highly mobile, and members of some subspecies have demonstrated a capacity to move long distances in pursuit of sufficient forage or mating opportunities (Flanagan et al., 2016). To drink, giraffe spread their forelegs and/or bend their knees to lower their necks to reach the surface of water. However, despite their body mass, water is not a necessity as they can absorb moisture from their food plants. Even when water is readily available, evidence shows that many giraffe do not drink regularly (GCF, 2020).

Adult male giraffe are approximately 5.3 m tall and females are approximately 4.3 m tall, and they weigh an average of 1,200 kg and 830 kg respectively. Females have a gestation period of about 15 months and deliver

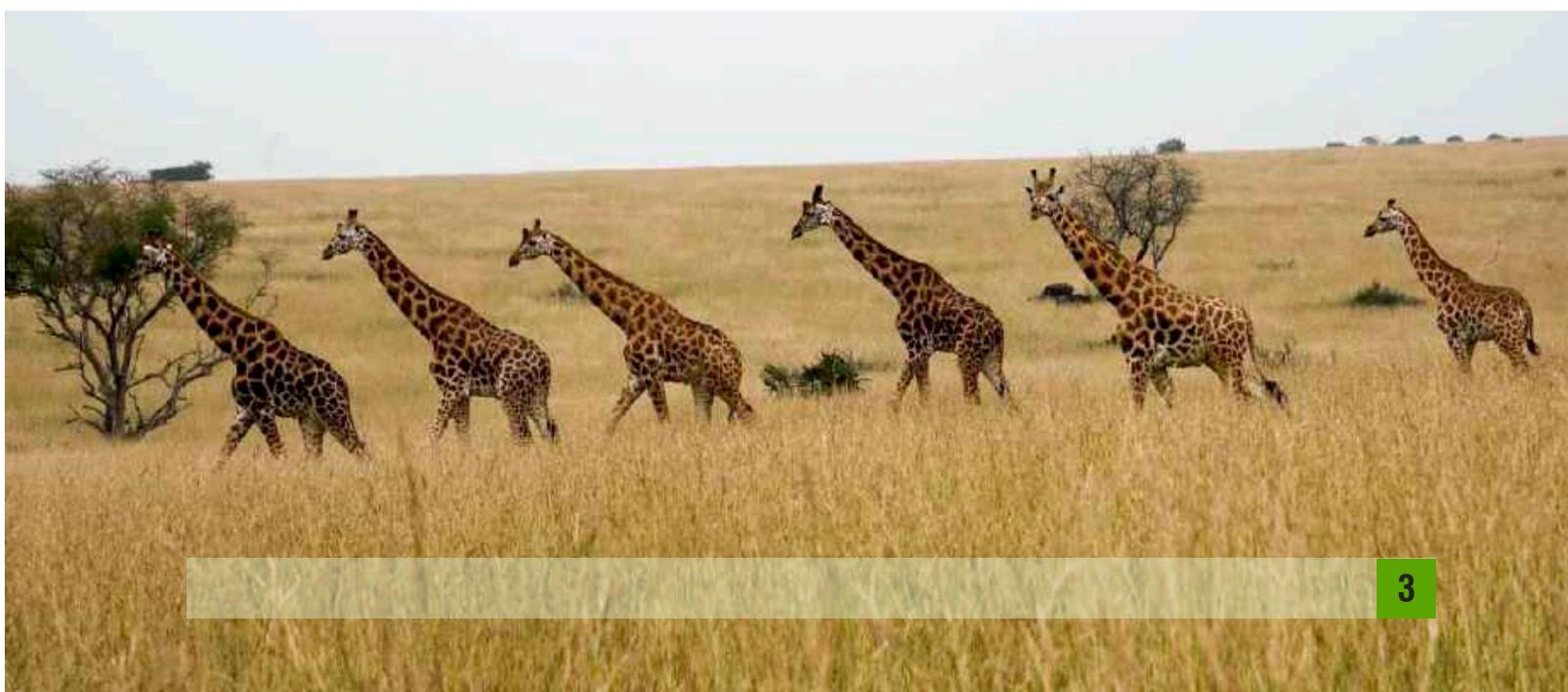
a single calf; twins are rare. Their social behaviour ranges from solitary to large, loosely associated herds. Herds often shift in composition, known as fission–fusion, by individuals or small groups readily merging with or splitting from the herd. It is estimated that giraffe can live up to 25 years in the wild; however, current research shows that this could be longer (GCF, 2020).

## 1.3 Status and Distribution of Giraffe in Uganda

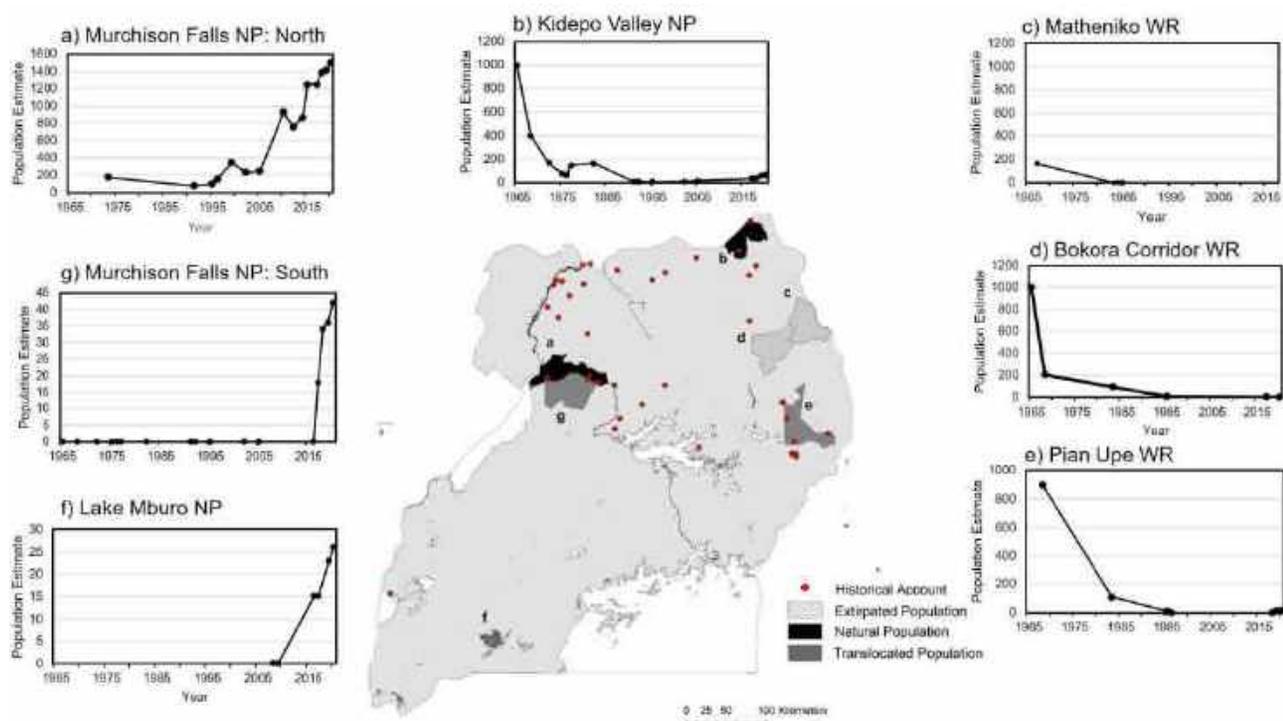
At the turn of the 20th century, the distribution of what was then known as the Rothschild's giraffe ranged from the Rift Valley of central–west Kenya across Uganda to the northern banks of the Nile River, extending northwards into South Sudan (Dagg and Foster, 1976). Additionally, there are anecdotal reports that giraffe existed in the Ankole Region of south–western Uganda around the 1890s (Brown et al., 2019), but it is suspected that the rinderpest outbreak during that time completely extirpated these giraffe (Spinage, 2003) and the remaining giraffe populations of Uganda were concentrated north of the Nile River (Baker, 1880). It is important to note that the taxonomic identity of the giraffe that were historically distributed south of the Nile in Uganda remains unresolved, and, given the current understanding of giraffe biogeography, they were possibly Masai giraffe (*G.tippelskirchi*). In the 1920s Uganda had approximately 2,500 giraffe, widely distributed in the north and north–eastern parts of Uganda (Pitman, 1942). However, poaching pressure in the 1960s–1970s extirpated giraffe on community land, and the small number of individuals left were restricted to national parks and game reserves, which included the Murchison Falls NP, Kidepo Valley NP, Debasian Animal Sanctuary (currently Pian Upe WR), and Matheniko and Bokora WRs (Rwetsiba, 2005). Recent habitat assessments conducted indicate that the environments within these reserves are conducive for giraffe survival, with adequate food resources, enhanced security, and improved management. These reserves are potential reintroduction sites for giraffe (Fennessy et al., 2019; Brown et al., 2019).

### 1.3.1 Giraffe population in Murchison Falls National Park

In the early 1970s, the Nubian giraffe population in the Murchison Falls NP was approximately 200 individuals, a number which subsequently declined as a result of armed poaching (Rwetsiba and Nuwamanya, 2010). Aerial surveys conducted in 1991 estimated the population at 78 giraffe (Lamprey and Michelmore, 1996). With improved law enforcement and effective wildlife monitoring, the giraffe population in the Murchison Falls NP increased from 153 individuals in 1995 (Lamprey, 2000) to, now, over 1,500 (Brown et al., 2019). The giraffe population in the Murchison Falls NP is of extreme importance, both locally and globally, because it is the largest population of Nubian giraffe existing in their original natural habitat (Fennessy et al., 2018). More than 60% of the global Nubian giraffe in the wild is found in the Murchison Falls NP (Brown et al., 2019). In a series of conservation translocations that occurred during 2016–17, a new giraffe population of 36 individuals was introduced to the south side of the Nile River in the Murchison Falls NP. During subsequent post–translocation monitoring by the UWA and GCF, numerous new calves have been observed, bringing the estimated population in the south side of the Murchison Falls NP to >42 individuals (GCF pers. comm.).



**Figure 1:** Historical and current Nubian giraffe population numbers and distribution across Uganda



### 1.3.2 Giraffe populations in Kidepo Valley National Park and Lake Mburo National Park

The Kidepo Valley NP formerly supported one of the country's largest population of Nubian giraffe, with an estimated 400 giraffe in the 1970s (East, 1999). As with other parks, the Kidepo Valley NP experienced substantial poaching pressure in the late 1970s, where the population decreased to 160 giraffe in 1982, and by 1993 only three giraffe (2 males and 1 female) remained in the park (Brown et al., 2019, Lamprey and Michelmore, 1996). In 1998, three giraffe were translocated from the Lake Nakuru NP in Kenya to reinforce the population in the Kidepo Valley NP in Uganda (Kalema, 1998). Through births, the population increased to 35 individuals in 2016, of which 25 were males. In 2018, 14 giraffe (13 females and 1 male) were translocated from the Murchison Falls NP to reinforce the giraffe population in the Kidepo Valley NP. This population has continued to grow, with surveys in March 2020 enumerating ~61 individuals (GCF pers. comm.).

In August 2015, the UWA in partnership with the Kenya Wildlife Service (KWS) translocated 15 giraffe from the Murchison Falls NP to establish a giraffe population in the Lake Mburo NP. These giraffe have since increased in number through births, with an estimate of >29 individuals recorded as of May 2020 (GCF pers. comm.).

### 1.3.3 Giraffe populations in Pian Upe, Matheniko and Bokora Wildlife Reserves

Giraffe populations in the Pian Upe, Matheniko and Bokora WRs also suffered a drastic decline as a result of intense armed poaching in the Karamoja Region. In 1967, about 157 giraffe were estimated to occur in the Matheniko WR (Rwetsiba, 2005), and by 1983, giraffe were extinct in this reserve (Lamprey and Michelmore, 1996, Nampindo et al., 2005).

In 1968, the population of giraffe in the Bokora Corridor Reserve was estimated to be 207 (Lamprey and Michelmore, 1996). This population was reduced to 96 giraffe in 1983, and by 1996 only five giraffe were recorded. The last giraffe was reportedly shot by poachers in the reserve in 1996 (Lamprey and Michelmore, 1996, Nampindo et al., 2005, Rwetsiba, 2005).

In 1968, an aerial survey of the Pian Upe WR in the Karamoja Region estimated 899 giraffe (Lamprey and Michelmore, 1996). Later in 1983, the population decreased to an estimated 109 giraffe (Eltringham and

Malpas, 1993). In 1995, an aerial survey of the Pian Upe WR estimated the population at only ten individuals (Lamprey and Michelmore, 1996). A ground survey conducted in 1996 recorded a single sighting of the remains of a giraffe, and an aerial survey conducted in the same year did not record any giraffe (Nampindo et al., 2005). After a comprehensive translocation assessment, 15 giraffe were reintroduced to the Pian Upe WR in November 2019, and there is great promise that they will thrive.

**Table 1:** Current Nubian giraffe population estimates in each protected area throughout Uganda (GCF pers. comm.)

Protected Area	Current Estimated Population Size
Murchison Falls National Park (North)	~1,500
Murchison Falls National Park (South)	42
Kidepo Valley National Park	61
Lake Mbuoro National Park	29
Pian Upe Wildlife Reserve	15
<b>Total</b>	<b>~1,647</b>







## 2. Policy and Legal Framework for the Conservation of Giraffe in Uganda

### 2.1 The 1995 Constitution of the Republic of Uganda

Wildlife conservation in Uganda is governed under the overarching policy guidance of the National Constitution. Objective XIII of the 1995 Constitution of the Republic of Uganda provides for State protection of important natural resources such as land, water, wetlands, minerals, and fauna and flora on behalf of the people of Uganda. The Constitution provides for the creation and development of parks, reserves and recreation areas, and for the conservation of natural resources by central and/or local governments under Objective XXVII. The same objective further obligates the State to promote the rational use of natural resources so as to safeguard and protect the biodiversity of Uganda.

### 2.2 Wildlife Policy 2014

As per the 1995 Constitution, the government of Uganda formulated the Wildlife Policy 2014, which provides for the sustainable management and development of wildlife resources in a manner that contributes to the development of the nation and the well-being of its people. The Policy, whose theme is '*Enhanced wildlife contribution to national growth, employment and socio-economic transformation for prosperity*', emphasises strategies for species-specific conservation under Objective 2. The Policy calls for the formulation and implementation of species-specific national conservation plans and strategies for rare, endemic, threatened, endangered or extinct species. As giraffe in Uganda are listed as 'endangered' on the National Red List, 2018, it calls for more focused conservation efforts to promote the survival of giraffe in the wild.

### 2.3 The Uganda Wildlife Act 2019

Section 6 (1) (a) (f) of the Uganda Wildlife Act 2019 mandates the Uganda Wildlife Authority to sustainably manage wildlife conservation areas, and to develop and implement management plans for conservation areas and wildlife populations outside conservation areas. The wildlife protected areas specifically under section 27 (c) serve to preserve populations of rare, endemic and endangered species, including Nubian giraffe.

### 2.4 Uganda Wildlife Conservation Education Centre Act 2015

The Uganda Wildlife Conservation Education Centre (UWEC) is mandated to conduct and manage conservation education; to breed wildlife, focusing on rare, endemic and endangered species, which includes giraffe; and to restock wildlife protected areas in accordance with section 5(a), (f) and (g) of the Uganda Wildlife Conservation Education Centre Act 2015. The participation of communities in giraffe conservation and the need to breed and expand their range as the key components of this National Giraffe Conservation Strategy and Action Plan are well supported by this Act.

### 2.5 Uganda Wildlife Research and Training Institute Act 2015

The Uganda Wildlife Research and Training Institute Act 2015 provides for the establishment of a self-sustaining centre of excellence for conducting research and training and consultancy services for the conservation and sustainable development of wildlife resources in and outside protected areas. Sustainable giraffe conservation requires data and scientific information to guide decision making. It is envisioned that the Uganda Wildlife Research and Training Institute (UWRTI) and other research institutions will play a critical role

in the implementation of research actions that are highlighted in the National Giraffe Conservation Strategy and Action Plan.

## 2.6 The National Environment Act 2019

The objective of the National Environment Act 2019 is to further the principles of environmental management by facilitating the conservation and enhancement of the environment. The Act provides for the protection of wildlife, including the *in situ* conservation of biological resources and selection and management of protected and buffer areas. The Act provides a basis for environmental social impact assessments (ESIAs) and audits for developments with potential negative impacts on wildlife resources in and outside protected areas. The National Giraffe Conservation Strategy and Action Plan aims to enhance giraffe populations through translocations. Such an undertaking is listed under Schedule 5 of the National Environment Act 2019 (Uganda), and a full environmental social impact assessment will need to be conducted.

## 2.7 The Land Act, Cap 227, 2000

The Land Act, Cap 227, 2000 mandates both national and local governments to acquire land for the purpose of wildlife protection. The Land Act includes provisions which oblige an occupier of land to manage and utilise the land in an environmentally sound manner, and in accordance with provisions of the Forestry and Tree Planting Act 2003, National Environment Act 2019, the Wildlife Act 2019, and other relevant legislation. The provisions of the Land Act are compatible with the allocation of wildlife use rights on private- and community-held land, as provided for in the Wildlife Act 2019.

## 2.8 International Laws

The 1995 Constitution of the Republic of Uganda, under Objective XXVIII, sets out the principles of the foreign policy objective for Uganda as (a) promotion of the national interest of Uganda as a sovereign state, (b) respect for international law and treaty obligations, (c) peaceful coexistence and nonalignment, (d) settlement of international disputes by peaceful means, and (e) opposition to all forms of domination, racism and other forms of oppression and exploitation.

Uganda is a State Party and signatory to a number of international conventions, treaties and agreements relating to wildlife. These are in line with Uganda's foreign policy and Objective XIII of the Constitution, which obligate the State to conserve wildlife and wildlife protected areas, and to promote sustainable development of wildlife resources. The international laws that are most direct and of immediate importance for the conservation of wildlife, of which Uganda is a member state, include the following:

### 2.8.1 Convention on Biological Diversity (CBD) of 1992

This convention obliges member states to establish a system of protected areas; develop guidelines for the selection, establishment, and management of protected areas; promote the protection of ecosystems, natural habitats, and the maintenance of viable populations of species, including giraffe, in natural surroundings; and promote the integration of sustainable utilisation of natural resources in national strategies.

### 2.8.2 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) of 1973

This convention obliges member states to regulate international trade in endangered species of fauna and flora through international cooperation. As the Management Authority of CITES, the listing of giraffe in Appendix II by the CITES CoP18 in August 2018 further mandates the UWA to regulate trade in giraffe and giraffe products.

### **2.8.3 Convention on Migratory Species (CMS) of 1979**

This convention obligates Uganda to conserve migratory species of wildlife across their migratory range. It requires Uganda to cooperate with other states that form part of the migratory range of wildlife resources found in or migrating through Uganda. As some of the protected areas that house giraffe in Uganda are transboundary parks and as giraffe were listed in Appendix II of the CMS in October 2017, this convention is relevant for the protection of giraffe in Uganda.

### **2.8.4 East African Community Protocol on Environment and Natural Resources**

This protocol obligates Uganda as one of the Partner States of the East African Community to sustainably conserve wildlife resources in collaboration with local communities. The protocol requires Uganda to cooperate in the management of transboundary wildlife resources and the promotion of social and economic incentives for conservation, and to conclude agreements aimed at conserving transboundary wildlife resources.

### **2.8.5 Ramsar Convention**

Parties to the Ramsar Convention are expected to demonstrate their commitments to wetland management through three 'pillars' of action: wise (or sustainable) use of wetlands; identification of internationally important wetlands for inclusion in the Ramsar List; and the international cooperation and sharing of information and expertise. Uganda ratified the Ramsar Convention in 1988. Since then, the country has made significant progress in implementing the principles of the convention. Some of the listed Ramsar sites, such as the Lake Mburo–Nakivale, Lake Opeta and Murchison Falls–Alberta Delta wetlands systems, are critical for the survival of giraffe in Uganda.



## 3. Threats to the Survival of Giraffe in Uganda

The main threats to giraffe conservation include poaching, habitat loss and fragmentation, climate change, and diseases and parasites.

### 3.1 Poaching

Illegal hunting for bushmeat and cultural reasons remains rampant around the Murchison Falls and Kidepo Valley NPs. Although the UWA has made progress in addressing poaching, there still remains the challenge of inadequate manpower and financial resources to facilitate adequate anti-poaching patrols in giraffe areas (Nampindo et al., 2012). Poaching has been cited as the main cause of extirpation of giraffe in community areas and in protected areas such as the Pian Upe and Matheniko WRs (Lamprey and Michelmore, 1996). Giraffe are predominantly hunted for their meat, skin, tail hair, and potentially for traditional medicinal purposes (Brenneman et al., 2009; GCF pers. comm.). Giraffe are also trapped by indiscriminate wire snares intended for other wildlife, as widely seen on the northern bank of the Nile River in the Murchison Falls NP (Olupot et al., 2009). For example, between July 2019 and May 2020, the veterinary team in the Murchison Falls National Park rescued 82 giraffe that were trapped in snares (GCF pers. comm.). Therefore, there is a crucial need to strengthen law enforcement to protect giraffe against poaching in these protected areas.

### 3.2 Habitat Loss and Fragmentation

Habitat loss in the form of degradation, fragmentation or outright loss has been cited as a major challenge for wildlife conservation in Uganda (Brown et al., 2019). The drivers for habitat loss in Uganda include increased population growth, human settlements, changes in land tenure systems, agricultural expansion, infrastructural development, and the inadequate enforcement of laws and policies. Infrastructural developments and land use conversions around protected areas are a threat to giraffe. Wildlife corridors (such as the one connecting the Karenga Community Wildlife Area and Kidepo Valley NP to the Orom Central Forest Reserve) are under threat by human settlement, reducing connectivity and restricting the dispersal of giraffe into neighbouring protected areas (Rwetsiba and Wanyama, 2005).

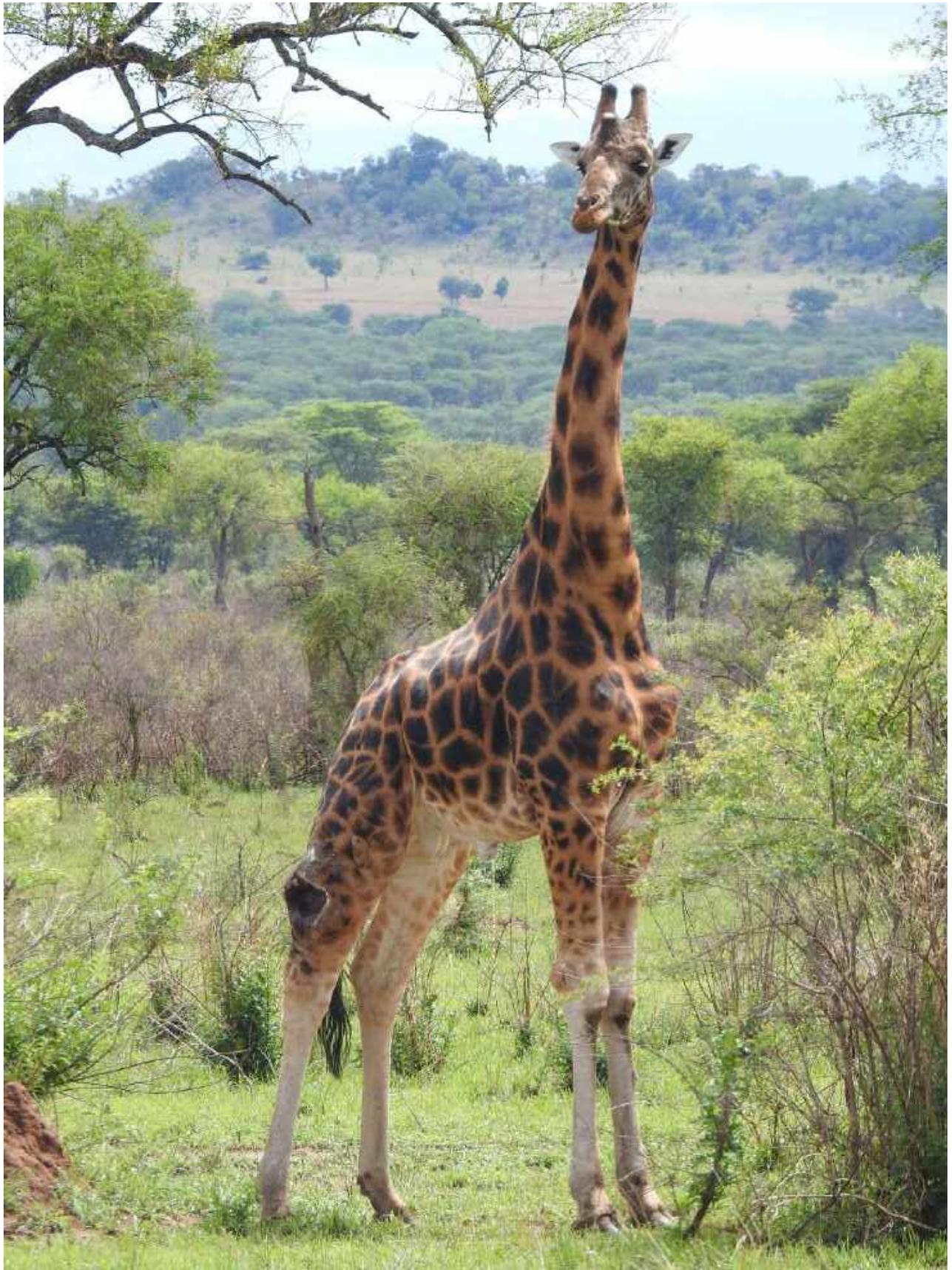
Recent oil and gas explorations have shown substantial commercial quantities within the Murchison Falls NP and adjoining areas (USAID, 2011). Oil sector development has already resulted in the destruction of wildlife habitat (Dowhaniuk et al., 2018; Mulondo, 2015; Prinsloo et al., 2011), and preliminary studies undertaken to assess the impacts of oil exploration activities on large mammals in the Murchison Falls NP have found that giraffe are one of the mammal species most negatively affected. The results of these studies suggested indirect habitat loss at different temporal and spatial scales as giraffe showed increased habitat avoidance around the exploration activities (Dowhaniuk et al., 2018; Mulondo, 2015; Prinsloo et al., 2011).

### 3.3 Climate Change

Climate change directly affects ecosystems through seasonal increases in air temperatures and changes in precipitation, which may result in extreme and unpredictable weather conditions such as droughts, El Nino events, and bush fires. A recent Intergovernmental Panel on Climate Change (IPCC) report predicts that the earth will be warmer by about 1.5°C by 2030 (IPCC, 2019). With climate change, there will most likely be shifts in the availability, accessibility and quality of resources on which people and wildlife rely. These shifts in resource availability have implications on the protection and management of giraffe and wildlife in general, as well as their habitats. Furthermore, climate change has been cited as the cause of the spread of invasive species by accelerating natural selection, as well as the emergence or re-emergence of diseases in humans, domestic animals and wildlife (Brodie et al., 2012; Harvell et al., 2009).

### 3.4 Diseases and Parasites

Giraffe are not only affected by anthropogenic disturbances, they are also vulnerable to diseases. There is evidence that giraffe populations in Africa have been affected by outbreaks of diseases such as rinderpest, anthrax, papilloma virus, and lumpy skin disease. The epidemiology and pathophysiology of these diseases in wildlife is not well understood, given that they occur in a variety of other mammalian taxa. In Uganda, giraffe have been observed with skin disease, which is termed Giraffe Skin Disease (GSD). This skin disease, which was first observed in 1995 (Kalema, 1996), has spread to more than 50% of adult giraffe and it is caused by a microfilaria worm of the genus *Stephanof raridae* (Muneza et al., 2016; Whittier et al., 2020). It is not clear whether the skin disease in Uganda is similar to the giraffe ear and skin diseases observed in Tanzania. The impact of these diseases on giraffe populations still remains unknown.





## 4. National Giraffe Conservation Strategy and Action Plan: Preparation and Development

Preparation for the Strategy and Action Plan began with the initial identification of local, regional and international stakeholders (both at individual and institution levels) for consultation. The stakeholders identified included the Ministry of Tourism Wildlife and Antiquities, UWEC, and UWA staff; local and international conservation experts from academic, research, and educational institutions; and governmental and non-governmental organisations. Background information for the development of the Strategy and Action Plan was collected and compiled from primary and secondary data. A stakeholder workshop was conducted in Entebbe from 13–15 June 2017. The workshop followed the process established for strategic planning by the IUCN Species Survival Commission (IUCN/SSC, 2008). The workshop participants developed the Strategy and Action Plan with a Vision, Goals and Strategic Objectives; subsequent identification of activities; time frames; and responsibilities and finances required for the logframe.

### 4.1 Vision, Goals, and Strategic Objectives

#### **Vision**

*Viable populations of giraffe thriving throughout their range in healthy and secure ecosystems, acting as a flagship species for Uganda, coexisting with human populations, contributing to livelihoods and national development, and retaining cultural values for posterity.*

#### **Goals**

*To secure and increase the existing giraffe populations, and to establish breeding populations in suitable conservation areas within their former ranges.*

#### **Strategic Objectives**

1. To maintain viable populations of giraffe in Uganda
2. To promote the use of sound scientific and evidence-based data in the management of giraffe populations
3. To enhance the resilience of giraffe populations
4. To arrest and reverse the current decline in the quality and size of giraffe habitats
5. To enhance community involvement in giraffe conservation to facilitate education and awareness

### 4.2 Strategic Objectives, Outputs, and Actions

#### 4.2.1 Strategic Objective 1: To maintain viable populations of giraffe in Uganda

Target: To reduce the proportion of giraffe illegally killed by more than 95% within 10 years

Action	Outputs	Time Frame	Actors	Estimated Cost (USD)
1.1. Critical mass of law enforcement staff in place in giraffe areas	i) Assess staffing gaps ii) Recruit the required number of rangers and law enforcement staff iii) Assess training needs iv) Produce training materials v) Train staff in key giraffe topics vi) Deploy trained staff in designated conservation areas	Ongoing	UWA, UCF, WCS	UWA Recurrent Budgets
1.2. Requisite law enforcement equipment procured and deployed	i) Assess equipment needs ii) Record the amount of equipment procured and disbursed	Year 2	UWA, UCF, WCS, AWF	Initial 20,000 investment
1.3. Ranger posts established within key giraffe areas	i) Identify key giraffe areas without adequate outposts ii) Establish the required outposts	Year 2-3	UWA, UCF	25,000 per outpost
1.4. Frequency of law enforcement patrols and area of coverage increased in high threat areas	i) Identify high threat areas with low patrol coverage ii) Conduct patrols where necessity has been identified iii) Increase distance and area covered by patrols	Ongoing	UWA	20,000
1.5. Number of giraffe trapped in snares significantly reduced	i) Identify trends in the distribution and abundance of snares ii) Conduct targeted snare recovery patrols iii) Sensitise communities about the effects of snares on wildlife	Ongoing	UWA	18,000 annually
1.6. Death of giraffe by snares significantly abated to almost zero	i) Procure and have in stock drugs and equipment for giraffe capture ii) Conduct timely rescue and treatment of snared giraffe iii) Collect and analyse data from snared animals	Ongoing	UWA, UWEC, GCF, UCF	65,000 annually
1.7. Poaching hotspots identified and targeted patrols conducted	i) Establish threat maps with highlighted poaching hotspots ii) Analyse data for poaching trends to guide decision making on patrol deployments	Ongoing	UWA, GCF, UCF, WCS, AWF, MAK, UWRTI, MSU	13,000 annually
1.8. DNA database established to provide evidence for prosecution	i) Establish a Forensic DNA database ii) Train personnel iii) Secure and record convictions	Year 4	UWA, UWEC, MAK, UPF, Judiciary	50,000



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## 4.2.2 Strategic Objective 2: To promote the use of sound scientific and evidence-based data in the management of giraffe populations

Target: To enhance the research and monitoring of different parameters of giraffe ecology

Action	Outputs	Time Frame	Actors	Estimated Cost (USD)
2.1. Giraffe monitoring protocols in place in all key sites	i) Develop protocols/methods for monitoring giraffe ii) Disseminate monitoring protocols in all key areas	Year 1-2	UWA, GCF, WCS, MAK	2,000
2.2 Critical human and logistical capacity for the effective management of giraffe developed	i) Train staff on how to identify and monitor giraffe in all key areas ii) Procure equipment for giraffe monitoring	Year 1-10	UWA, GCF, WCS, MAK	16,000 annually
2.3. Giraffe population status and demography regularly updated	i) Conduct surveys and disseminate reports ii) Conduct studies on mortality and natality iii) Establish a giraffe database for all sites iv) Conduct studies on the genetic diversity of giraffe populations	Year 1-2	UUWA, GCF, WCS, FFI, DETRA, RI	15,000 annually
2.4. Ranging patterns of giraffe mapped	i) Map giraffe habitat preferences ii) Map and analyse ranging patterns iii) Conduct habitat suitability studies iv) Conduct habitat evaluation and population viability analyses for all giraffe populations	Year 3-10	UWA, GCF, WCS, RI	60,000
2.5. Diseases affecting giraffe and other related wildlife detected and sufficiently managed	i) Identify, quantify and manage diseases affecting giraffe and related wildlife ii) Determine the vectors that spread the diseases iii) Monitor and record stress levels in giraffe	Ongoing	UWA, GCF, WCS, UWEC, MAAIF, RI, Zoos, MAK-CoVAB	7,000 annually
2.6. Research on giraffe sustained across all sites	i) Provide and source funding for giraffe-related research across all sites ii) Set research priorities of giraffe iii) Publish giraffe research iv) Conduct a research and conservation symposium	Ongoing	UWA, AWF, WCS, GCF, RI	5,000 annually

### 4.2.3 Strategic Objective 3: To enhance the resilience of giraffe populations

Target: To increase the population of giraffe by 50% across their ranges in Uganda in 10 years

Outputs	Actions	Time Frame	Actors	Estimated Cost (USD)
3.1 New suitable areas for expansion of giraffe range secured	<ul style="list-style-type: none"> <li>i) Conduct habitat suitability studies and disease risk assessments</li> <li>ii) Conduct translocation assessments (following IUCN and other national guidelines)</li> <li>iii) Identify existing giraffe populations that require reinforcement or augmentation</li> <li>iv) Conduct environmental and social impact assessments for the sites recommended for giraffe translocation</li> <li>v) Appraise donor populations where translocation candidates will be selected</li> <li>vi) Conduct a sensitisation programme and a community attitudes survey among local communities in areas earmarked for giraffe re/introductions</li> </ul>	Year 1-10	UWA, GCF, WCS, MAK	10,000 annually
3.2 Giraffe translocated to approved areas	<ul style="list-style-type: none"> <li>i) Capture and translocate giraffe to selected areas</li> <li>ii) Monitor and record the adaptation of animals after translocation</li> </ul>	As appropriate	UWA, GCF	36,000 annually
3.3 Genetic diversity of established populations conducted to guide population management	<ul style="list-style-type: none"> <li>i) Conduct genetic assessments</li> <li>ii) Record and recommend populations in need of reinforcement</li> </ul>	Year 4-10	UWA, GCF, UWEC, MTWA	25,000
3.4 Giraffe movement and potential habitat connectivity assessed	<ul style="list-style-type: none"> <li>i) Map giraffe movements</li> <li>ii) Identify and map potential corridors</li> <li>iii) Develop management plans</li> <li>iv) Effectively mark the boundaries for protected areas</li> </ul>	Year 3-10	UWA, GCF, WCS, RI	30,000 annually
3.6 Economic benefit of giraffe assessed in key giraffe areas where giraffe have been translocated	<ul style="list-style-type: none"> <li>i) Conduct tourism impact assessments at relevant sites</li> <li>ii) Conduct baseline surveys and collect tourism data at the sites where giraffe have been translocated</li> </ul>	Year 1-5	UWA, WCS, GCF, MAK-CoVAB, School of Forestry	8,000 annually

## 4.2.4 Strategic Objective 4: To arrest and reverse the current decline in the quality and size of giraffe habitats

Targets:

- a) To secure new areas for giraffe conservation
- b) To reduce habitat destruction through alternative livelihoods in giraffe areas
- c) To control invasive species in affected areas
- d) To mitigate the impacts of climate change on giraffe conservation
- e) To identify the impacts of human development and initiate mitigation measures

Action	Outputs	Time Frame	Actors	Estimated Cost (USD)
4.1. Habitat suitability assessment	i) Produce and disseminate a habitat suitability assessment report for each site	Year 1-2	UWA, GCF, WCS, MAK	2,000
4.2 Extent of invasive species and effectiveness of their control in giraffe habitats assessed	i) Map the extent of coverage of invasive species i) Restore the affected areas ii) Monitor and determine the frequency of use of the habitats by giraffe iii) Manage areas after the removal of invasive species	Year 1-8	UWA, WCS, RI	98,200 annually
4.3 Impacts of fire on giraffe habitats assessed	i) Review or develop and implement Protected Area Fire Management Plans ii) Conduct a study on space utilisation where fire is used for range management iii) Conduct a study on the impact of fire on giraffe and other wildlife	Year 4-5	UWA, RI	25,000
4.4 Impacts of climate change monitored and mitigated	i) Establish meteorological stations at new sites, as appropriate ii) Collect, analyse and disseminate meteorological data from all sites iii) Establish the required number of water points in water stressed parts of giraffe ranges	Year 3-10	UWA, WCS, RI	30,000
4.5 Potential impacts of infrastructure development on giraffe assessed and mitigation measures initiated	i) Identify and mitigate the impacts of infrastructure development across giraffe ranges ii) Monitor compliance of developments with national and international best practices (such as IFC PS6, EIAs, and ESIAAs)	Year 1-10	UWA, Met. Department, GCF	50,000

## 4.2.5 Strategic Objective 5: To enhance community involvement in giraffe conservation to facilitate education and awareness

Targets:

- a) To increase the number of people supporting giraffe conservation initiatives
- b) To enhance ex situ giraffe conservation for public education and awareness
- c) To increase public awareness about giraffe conservation efforts

Action	Outputs	Time Frame	Actors	Estimated Cost (USD)
5.1 Knowledge, Attitudes and Perceptions (KAP) study on giraffe conservation assessed	<ol style="list-style-type: none"> <li>i) Conduct KAP study and disseminate findings</li> <li>ii) Conduct social surveys and disseminate the results</li> <li>iii) Identify and address local cultural issues, as appropriate</li> </ol>	Year 2-3	UWA, UWEC, RI	15,000
5.2 Education and awareness programmes enhanced	<ol style="list-style-type: none"> <li>i) Develop the required number of training modules for each category of the target audiences</li> <li>ii) Compile a list of the institutions/ individuals and communities that have been reached around the giraffe protected areas</li> <li>iii) Sensitise communities about giraffe conservation</li> <li>iv) Enhance school outreach programmes</li> <li>v) Promote giraffe conservation awareness through media (print, video, social media, etc.)</li> <li>vi) Celebrate World Giraffe Day</li> </ol>	Year 1-4	UWEC, UWA, CTPH, UWRTI, WCU	10,000
5.3 Harmonious coexistence and increased appreciation of the value of wildlife conservation across the giraffe range	<ol style="list-style-type: none"> <li>i) Initiate the required number of community livelihood programmes</li> <li>ii) Identify areas of current and potential future human-giraffe conflict</li> <li>iii) Identify, map and mitigate human-giraffe conflicts</li> </ol>	Year 4-5	UWA, GCF, UWEC, Tourism Association, LG, Local communities	14,500
5.4 Improved public perceptions of zoo animals through education and awareness	<ol style="list-style-type: none"> <li>i) Promote giraffe conservation through specialised zoo events</li> <li>ii) Evaluate the potential for expanding visitor experience to enhance guest connections to giraffe</li> <li>iii) Record the number of people visiting the zoos</li> </ol>	Ongoing	UWEC, AZA-SAFE, Chester Zoo, other zoos	5,000 annually
5.5 Breeding of giraffe in ex situ settings promoted	<ol style="list-style-type: none"> <li>i) Compile giraffe-related data for zoos</li> <li>ii) Monitor and record the number of giraffe in zoos in Uganda</li> <li>iii) Monitor and record the number of giraffe born in zoos in Uganda</li> <li>iv) Contribute to the international giraffe database</li> <li>v) Conduct research on giraffe in zoos</li> </ol>	Year 1-10	UWEC, AZA-SAFE, Chester Zoo PAZA, other zoos	10,000



## 5. Implementation of the National Giraffe Conservation Strategy and Action Plan

The National Giraffe Conservation Strategy and Action Plan is only a tool and the implementation of actions on the ground are key to achieving the objectives. Therefore, there is a need for an appropriate structure to oversee this implementation and to monitor progress. Once the Strategy and Action Plan is approved by the UWA Board of Trustees and the Ministry of Wildlife Tourism and Antiquities, it will be officially launched in the presence of stakeholders who will be invited to support its implementation. The successful implementation of this Strategy and Action Plan will require a financial investment of about US\$4,026,000, as shown in Appendix IV. A Giraffe Conservation Technical Working Group will be established, specifically to oversee the implementation of the Strategy and Action Plan. The Working Group will comprise experts from the following institutions: two will be drawn from the UWA, where one will function as the designated Chairperson; two scientists will be drawn from the Giraffe Conservation Foundation (GCF); and one representative will be drawn from the Ministry of Tourism Wildlife and Antiquities, the Uganda Wildlife Conservation Centre, and the College of Veterinary Medicine Animal Resources and Biosecurity, Makerere University. The Terms of Reference for the Giraffe Conservation Technical Working Group are attached as Appendix II. It is expected that the Working Group will develop an annual work schedule, as well as budget outlines to help with sourcing funds from various stakeholders and partners in order to implement this Strategy and Action Plan.





## 6. Conclusion

The emphasis of this National Giraffe Conservation Strategy and Action Plan for Uganda is on the implementation of the identified actions in order to ensure that the objectives set forth in the Plan are realised. Prior to the development of this Strategy and Action Plan, giraffe conservation activities were being implemented in an ad hoc manner. With this Strategy and Action Plan in place, the implementation of giraffe conservation activities will be better streamlined, which will require additional funding. For too long giraffe and their habitats have attracted little attention, but with this Strategy and Action Plan there is now an opportunity to increase focus and support.

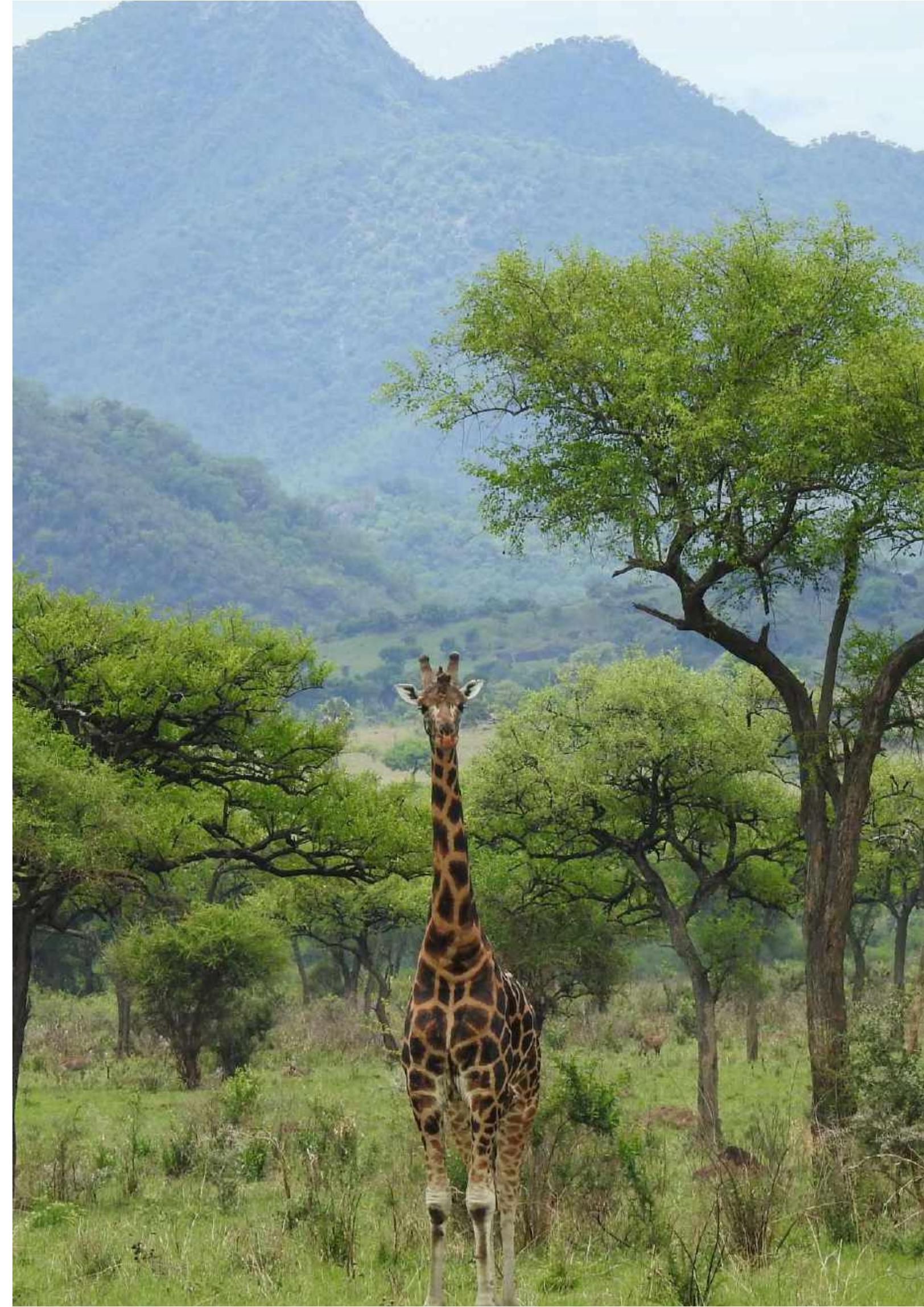
The future and survival of giraffe in Uganda cannot depend on the UWA's efforts alone. It is hoped that conservation and development partners will contribute greatly to the implementation of this Strategy and Action Plan. Importantly, the communities that neighbour key giraffe protected areas will always play a key role in giraffe conservation. Local communities are key partners, and this Strategy and Action Plan proposes incentives to encourage these stakeholders to participate in the conservation of giraffe in order to achieve larger and more viable populations across various ranges in Uganda.



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## 8. Appendices

**Appendix I:** Attendees list for the consultative workshop for the development of the National Giraffe Conservation Strategy and Action Plan for Uganda, 13–15 June 2017, Entebbe, Kampala

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## Appendix II: Terms of Reference for the Giraffe Conservation Technical Working Group

### Introduction

The Giraffe Conservation Technical Working Group (GCTWG) is a multi-stakeholder voluntary technical advisory group. In order to realise the goal of this Strategy and Action Plan, there is a need for leadership to provide technical support through the work group to guide and monitor the progress of implementation of the actions.

### The role of the Giraffe Conservation Technical Working Group

The primary function of the Giraffe Conservation Technical Working Group (GCTWG) is to provide technical and logistical advice on the implementation of key action items, as outlined in the National Giraffe Conservation Strategy and Action Plan. In pursuit of this, the GCTWG will:

- Contribute technical information for the development of the National Giraffe Conservation Action Plan, including species and population assessments
- Monitor the progress of the implementation of actions listed in the National Giraffe Conservation Strategy and Action Plan
- Contribute expert knowledge, skills and experience to the implantation of key action items
- Identify emerging conservation issues and opportunities that pertain to giraffe conservation
- Provide innovative solutions to broad issues that may have an impact on giraffe conservation
- Meet annually with the primary purpose of developing and assessing activity plans for giraffe conservation
- Conduct a mid-term review of the Strategy and Action Plan
- Regularly update giraffe conservation information with regard to advances in science
- Compile and circulate reports that outline progress and needs assessments for the National Giraffe Conservation Strategy and Action Plan
- Source additional funding for the implementation of the National Giraffe Conservation Strategy and Action Plan

### Governance of the Giraffe Conservation Technical Working Group

The Giraffe Conservation Technical Working Group (GCTWG) will report to the Executive Director. The GCTWG shall have a Chairperson and Secretary. The Chairperson and Secretary shall be responsible for convening and keeping a record of the proceedings of all meetings respectively. The Chairperson will be responsible for submitting annual work plans and reports on the implementation status of the National Giraffe Strategy and Action Plan to the Executive Director of the Uganda Wildlife Authority.

#### Appointment of members of Giraffe Conservation Technical Working Group and Terms of Representation

The Executive Director of the Uganda Wildlife Authority will identify (or will request relevant institutions to nominate individuals) and appoint a balanced group of experts who have the appropriate technical knowledge and interest in giraffe conservation. Service on the GCTWG will be voluntary. The Working Group will comprise experts from the following institutions: two will be drawn from the UWA, where one will function as the designated Chairperson; two scientists will be drawn from the Giraffe Conservation Foundation (GCF); and one representative will be drawn from the Ministry of Tourism Wildlife and Antiquities, the Uganda Wildlife Conservation Centre, and the College of Veterinary Medicine Animal Resources and Biosecurity, Makerere University. Once appointed, a member will serve on the GCTWG for a period of four years, with the possibility of extension pending review at the end of the term.

### Responsibilities of representatives

All GCTWG members, including those on working groups, shall:

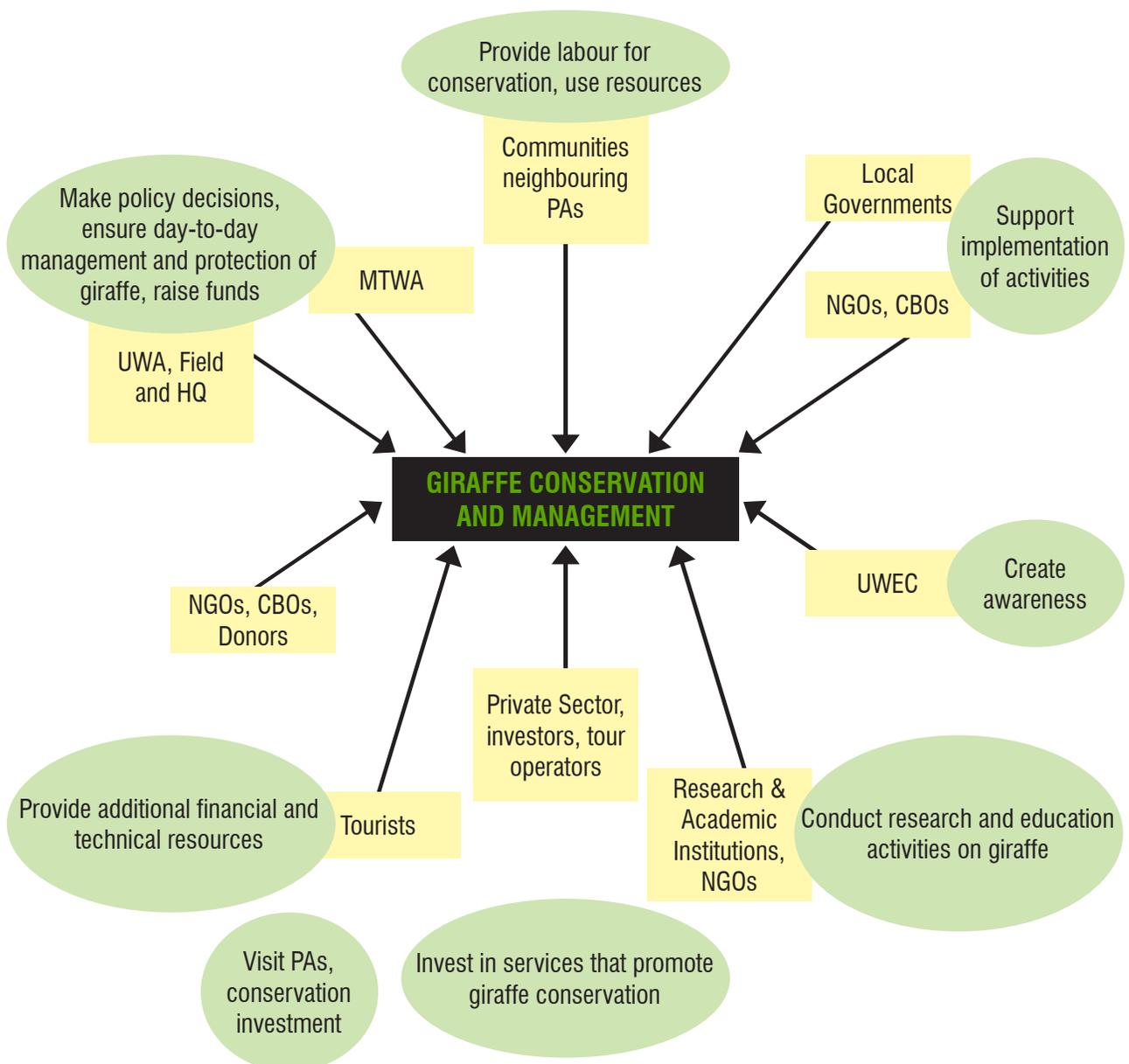
- Regularly attend annual meetings or nominate alternative representatives of their organisation to attend;
- Report back, as necessary, to their nominating organisation and members to encourage wide dissemination and sharing of knowledge about progress and issues;
- Inform the GCTWG of any issues/recent information which should be discussed, noted or acted upon;
- Identify gaps in the knowledge relevant to the GCTWG; and
- Make available relevant information held by the organisations they represent to assist and guide the implementation of the National Giraffe Conservation Strategy and Action Plan.

### Appendix III: Stakeholder Analysis

The stakeholder consultations for the National Giraffe Conservation Strategy and Action Plan (NGCSAP) identified the key partners and their roles in the conservation and management of giraffe in Uganda. Some of the stakeholders will fulfil very important day-to-day roles, while others will fulfil more strategic and/or supportive roles, be they local or international. Although the stakeholder consultations noted that the Ministry of Tourism, Wildlife and Antiquities (MTWA) and the Uganda Wildlife Authority (UWA) are the primary partners in the development and implementation of the Strategy and Action Plan, the UWEC, various other line ministries, non-governmental organisations (NGOs), research and academic institutions, donors, and the private sector were also recognised as key partners. Additionally, the local governments, tourists and communities that neighbour giraffe ranges are also key stakeholders in the conservation and management of giraffe in Uganda.

The following flowchart indicates the roles and responsibilities of the identified stakeholders:

**Flowchart 1:** Roles and responsibilities of identified stakeholders



**Appendix IV:** Summary Budget for the Implementation of the National Giraffe Conservation Strategy and Action Plan (USD)

Strategic Objectives	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
1. To maintain viable populations of giraffe in Uganda	96,000	131,000	83,000	146,000	96,000	131,000	117,900	96,000	96,000	83,000	1,075,900
2. To promote the use of sound scientific and evidence-based data in the management of giraffe populations	45,000	45,000	73,000	78,000	73,000	78,000	78,000	78,000	40,000	45,000	633,000
3. To enhance the resilience of giraffe populations	54,000	54,000	92,000	117,000	54,000	92,000	117,000	54,000	92,000	117,000	843,000
4. To arrest and reverse the current decline in the quality and size of giraffe habitats	98,000	98,000	128,000	153,000	153,000	128,000	126,000	126,000	112,800	87,800	1,210,600
5. To enhance community involvement in giraffe conservation to facilitate education and awareness	25,000	40,000	60,000	39,500	24,500	15,000	15,000	15,000	15,000	15,000	264,000
<b>Total</b>	<b>318,000</b>	<b>368,000</b>	<b>436,000</b>	<b>533,500</b>	<b>400,500</b>	<b>444,000</b>	<b>453,900</b>	<b>369,000</b>	<b>355,800</b>	<b>347,800</b>	<b>4,026,500</b>





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