

Country Profile

Federal Republic of Nigeria



Giraffe Conservation Status Report

September 2019

General statistics

Size of country: 923, 768 km²

Size of protected areas / percentage protected area coverage: 13.9%

Species and subspecies

In 2016 the International Union for the Conservation of Nature (IUCN) completed the first detailed assessment of the conservation status of giraffe, revealing that their numbers are in peril. This was further emphasised when the majority of the IUCN recognised subspecies were assessed in 2018 – some as *Critically Endangered*. While this update further confirms the real threat to one of Africa's most charismatic megafauna, it also highlights a rather confusing aspect of giraffe conservation: how many species/subspecies of giraffe are there? The IUCN currently recognises one species (*Giraffa camelopardalis*) and nine subspecies of giraffe (Muller *et al.* 2016) historically based on outdated assessments of their morphological features and geographic ranges. 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, GCF together with their partner Senckenberg Biodiversity and Climate Research Centre (BiK-F) have performed the first-ever comprehensive DNA sampling and analysis (genomic, nuclear and mitochondrial) of all major natural populations of giraffe throughout their range in Africa. As a result, an update of the traditional taxonomy now exists. This study revealed that there are four distinct species of giraffe and likely six subspecies (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*), 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. Rothschild's giraffe is genetically identical to the Nubian giraffe, and thus subsumed into it. Similarly, Thornicroft's giraffe is genetically similar to the Masai giraffe, and as such considered a separate subspecies of the Masai giraffe (*G. t. thornicrofti*) (Winter *et al.* 2018). Based on this research, GCF in all publications refers to the updated giraffe taxonomy of four species, while a taxonomy review by the IUCN is ongoing.

The following species and subspecies of giraffe occur in Niger:

- Species:**
- Northern Giraffe (*Giraffa camelopardalis*)
 - Southern Giraffe (*Giraffa giraffa* -Introduced)
- Subspecies:**
- West African Giraffe (*Giraffa camelopardalis peralta*)
 - Kordofan Giraffe (*Giraffa camelopardalis antiquorum*)
 - Angolan giraffe (*Giraffa giraffa angolensis* - Introduced)

Conservation Status

IUCN Red List (IUCN 2018):

Giraffa camelopardalis (as a species, old taxonomy) – Vulnerable (Muller *et al.* 2016)

Giraffa camelopardalis peralta – Vulnerable (Fennessy *et al.* 2018)

Giraffa camelopardalis antiquorum – Critically Endangered (Fennessy and Marais 2018)

Giraffa giraffa (as a species) – Not assessed

Giraffa camelopardalis angolensis – Least Concern (Marais *et al.* 2018)

In the Federal Republic of Nigeria

Naturally occurring giraffe populations are considered extinct in the Federal Republic of Nigeria (referred to as Nigeria in this report). In 2006 an extralimital population of Angolan giraffe (*G. g. angolensis*) was introduced to the Sumu Wildlife Reserve in the northern part of the country. Giraffe in Nigeria fall under the category in the Wild Animals Law 1965 that may not be hunted without explicit written permission given by the Minister and only for important scientific purposes or essential administrative reasons.

Issues/threats

Nigeria is the largest country in West Africa and has the largest human population of any African nation (CIA 2019; East 1999). Despite Nigeria hosting sub-Saharan Africa's largest economy due to the oil industry, the country suffers an extreme wealth disparity (CIA 2019; AWF 2018). Due to rapid urbanization, significant overpopulation, and a historical lack of priority given to wildlife and environmental conservation, a dramatic decline in wildlife populations has resulted making Nigeria a veritable 'faunal desert' for large mammals (CIA 2019, East 1999). While the establishment of eight national parks beginning in the 1970's and improved collaboration of NGO's with the government has resulted in increased conservation efforts over the past few decades, wildlife is still under severe persecution from large scale habitat destruction, overhunting, poaching, climate change, and civil unrest from terrorist groups (CIA 2019; Sawe 2019; Idowu & Morkenikeji 2015; Ejidike and Ajayi 2012; Aruofor 2001). It is estimated that over the last 25 years, Nigeria has experienced a decline of over 40% in their wildlife and habitats directly related to human activities (Ihua-Maduenyi 2018).

The Nigerian government has a history of demonstrating apathy towards wildlife conservation efforts, evidenced by resting on the erroneous idea that wildlife numbers were plentiful and under no threat of extinction combined with inadequate funding and support of law enforcement (Ihua-Maduenyi 2018; East 1999). Indeed, despite development of new policies, inadequate funding and resulting lack of manpower remains a large impediment to overall implementation and enforcement of conservation initiatives (WCS 2019; AWF 2018). To further undermine any increased conservation efforts, there is evidence of corruption within the ranger forces of many national parks (AWF 2018).

Not only has the lack of governmental enforcement contributed to the dramatic decline of Nigeria's wildlife populations, but the high level of illiteracy and lack of awareness amongst Nigeria's general population perpetuate the ongoing decline (Ejudike and Ajayi 2012). Most inhabitants around national parks and protected areas still do not view poaching as a crime but rather believe wildlife and natural resources are gifts to be used by the people (Ejudike and Ajayi 2012). Little regard is given to sustainable use of natural resources and due to the high unemployment rate of communities surrounding protected areas many families rely on harvesting/exploiting wildlife and the natural habitats of protected areas as their main occupation (Ejudike and Ajayi 2012).

Northern Nigeria has also been the main operating base for the Boko Haram terrorist group since the late 1990's (CNN 2019). The Boko Haram insurgency has been responsible for hundreds of deaths and more than



one thousand kidnappings, rendering northern Nigeria a veritable war zone (CNN 2019). The group is known to mainly inhabit the northern states of Yobe, Kano, Bauchi, Borno, and Kaduna, which is not only where three major national parks are located but also constitutes the majority of the historic range of giraffe in country (Sawe 2019; CNN 2019; East 1999, ZSL 1965; Hapold 1969). By being located in the northern sector of Nigeria, Boko Haram poses a significant threat to giraffe conservation efforts not just in Nigeria but also to Cameroon and Niger.

Estimate population abundance and trends

Taxonomic confusion has surrounded the (sub)species occurrence of giraffe in West and Central Africa. The West African giraffe (*G. c. peralta*) has historically ranged across Nigeria with occasional vagrants from Waza National Park in Cameroon reported (Shorrocks 2016; East 1999). The giraffe population of Cameroon were formerly thought to also be West African giraffe (Dagg 1962), but genetic work undertaken by Hassanin *et al.* (2007) and recently supported by Fennessy *et al.* (2016) suggests that giraffe in Cameroon are the Kordofan giraffe (*G. c. antiquorum*). Therefore, Nigeria may have had both West African and Kordofan giraffe subspecies, however further research is required.

Historic

Historically, West African giraffe were found all over the region now covered in many areas by the Sahara Desert (Dagg & Foster 1976; Dekeyser 1955). In Nigeria, the first recorded sighting of giraffe was a specimen reportedly shot to the south-east of the junction of the Niger and Benue Rivers (East 1999). However there is doubt as to the validity of the location as West African giraffe were thought to be mainly distributed in scattered populations to the north of the Niger and Benue Rivers with this river system and the forests of the Cameroons and Liberia regarded as effective barriers to the extension of giraffe's geographical range southwards into the apparent suitable savanna woodland habitat (East 1999). Therefore, it is generally accepted giraffe were not located south of the Niger and Benue Rivers (ZSL 1965; Hapold 1969). Although giraffe were still widely distributed throughout West Africa by the end of the nineteenth century, a substantial reduction was noted in their distribution range due to the introduction of firearms, agriculture development and deforestation, was reported by the beginning of the twentieth century (Leroy *et al.* 2009; Ciofolo 1995; Sidney 1965; Mauny 1957).

By 1965 giraffe were considered rare and isolated in small populations in northern Nigeria (Sidney 1965). A survey of Yankari National Park in 1964 estimated only 40-50 giraffe within the entire park (Hapold 1969). By 1998 giraffe were determined to be extinct in the country (East 1999; Hapold 1969, ZSL 1965).

Current

There have been sporadic accounts of occasional vagrants crossing over from both Niger and Cameroon, but no natural resident populations of giraffe remain in Nigeria (Shorrocks 2016; Margulis 2008; East 1999). Seven West African giraffe were observed to cross into Nigeria from Niger in 2007, however one giraffe was immediately poached by local villagers and it is unlikely the remaining six returned to Niger (Margulis 2008). There have also been occasional reports of giraffe crossing over from Waza National Park, Cameroon into Chad Basin National Park, but no resident population has been re-established (Ezealor 2011).

In 2006 the Namibian government donated over 250 animals of varying species, including 10 Angolan giraffe *G. g. angolensis*, to the Nigerian government to support Nigeria's re-wilding of its northern National Parks as well as boosting the tourist sector (Garba 2006). The Angolan giraffe are restricted to the 8 km² fenced Sumu Wildlife Park, located within the Lame Burra Reserve in Bauchi state, Nigeria (Adeleke 2017; Esievoidje 2017). Of the 10 giraffe moved, one unfortunately died during the translocation and another died shortly thereafter from an unknown cause (A. Dunn pers. comms.). The remaining eight giraffe adapted well to the park and the population has grown to over 30 individuals (A. Dunn pers. comms.).



Future Conservation Management

The following are proposed conservation management options for giraffe in Nigeria:

- Development of National Giraffe Strategy and Action Plan;
- Evaluation of historic ranges of giraffe and assessment for conservation translocations;
- Support to dedicated giraffe conservation, habitat protection, education and awareness initiatives (government, NGO and academic); and
- Assess transboundary giraffe conservation and management initiatives with neighbouring countries if giraffe are expanding i.e. Niger and Cameroon.

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Citation

Map

