**Country Profile** 



# **Federal Republic of Somalia**

Giraffe Conservation Status Report March 2016

## **General statistics**

Size of country: 637,660 km<sup>2</sup>

Size of protected areas / percentage protected area coverage: 0.56%

## **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 where 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one species (*Giraffa camelopardalis*) and nine subspecies of giraffe (Muller *et al.* 2016) historically based on outdated assessments of their morphological features and geographic ranges.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. 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, over the past decade 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) from all major natural populations of giraffe throughout their range in Africa. As a result, an update to the traditional taxonomy now exists. This study revealed that there are four distinct species of giraffe and likely five 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, preliminary data suggests that the Thornicroft's giraffe is genetically identical or should be considered a subspecies of Masai giraffe (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 the Federal Republic of Somalia:

**Species:** Reticulated giraffe (*Giraffa camelopardalis reticulata*)

#### **Conservation Status**

#### IUCN Red List (IUCN 2012):

*Giraffa camelopardalis* (as a species) – least concern *Giraffa camelopardalis reticulata* – not assessed

#### In Somalia:

Giraffe are not specially protected in the Federal Republic of Somalia.

#### **Issues/threats**

On-going instability in the Federal Republic of Somalia (referred to as Somalia in this report) has made conservation assessment work virtually impossible (Blanc *et al.* 2007). In 1969, the democratic government that ruled Somalia since its independence from British Somaliland and Italian Somaliland in 1960 was overthrown and an oppressive military dictatorship established (Leeson 2007). The brutal and highly predatory political regime that followed systematically exploited Somalis until 1991, when Somalia's government collapsed and statelessness ensued (Leeson 2007). Currently, Somalia is in a state of anarchy, and there is no official government structure in place (Statoids 2013). While national parks officially still exist, there are no functioning protected areas in Somalia, and wildlife conservation is basically non-existent (Amir 2006).

The indiscriminate exploitation of Somalia's natural resources is one of the biggest environmental threats facing the country (Parks.it 2013; SES 2013; Amir 2006). Environmental degradation and desertification is widespread and many flora and fauna species in Somalia face extinction (SES 2013; Funaioli & Simonetta 1966). The main causes of environmental degradation in Somalia include clearing of vegetation (habitat loss), illegal charcoal trade, deforestation, overgrazing and soil erosion (SES 2013; Ibrahim 2010; Abel & Kille 1976a).

Illegal hunting of wildlife is rampant due to civil unrest in the country, resulting, in the local extinction of some large mammal species (SES 2013; Ibrahim 2010; Amir 2006; Abel & Kille 1976b; Funaioli & Simonetta 1966).

#### Estimate population abundance and trends

#### **Historic**

By the early 1900s, giraffe were rarely encountered north of the Juba River in southern Somalia (Funaioli & Simonetta 1966). Before the onset of World War II, the species became extinct in northern and central Somalia due to habitat alteration and overexploitation (Amir 2006).

By the mid-1960s, giraffe were still numerous in the area west of the Juba River, between the river and the Kenyan border, but were very rarely seen between the Juba and Shebelle Rivers (ASG 2012; East 1999; Funaioli & Simonetta 1966; Dagg 1962). In 1964, 500 giraffe were estimated to occur in the Bubashi Reserve and another 1,000 were further estimated to occur in the area between Afmadow and the Bubashi Reserve (Funaioli & Simonetta 1966).

Aerial sample counts of the Central and Lower Juba Regions, were conducted in 1974 and 1975 (ASG 2012; Abel & Kille 1976a). There were assumed to be north-south seasonal movements of giraffe in and out of the regions, more widely distributed in the dry season and more concentrated in the rainy season (Abel & Kille 1976a). Density figures were used to make comparison between different areas, but did not show true densities of species due to uncontrolled biases in the survey (Abel & Kille 1976). The results could therefore not be used to make population estimates (Abel & Kille 1976a).

By the early 1980s, numbers of reticulated giraffe in Somalia had been greatly reduced by illegal hunting (East 1999). At the time, the species survived locally in declining numbers within its former range. By the late 1990s, giraffe were still observed in Bushbush (Lag Badana) National Park and in a few other areas in the south of the country (East 1999). Population numbers at the time were unknown (East 1999).

## Recent

Very few wildlife surveys have taken place in Somalia during the last three decades due to instability and armed conflict (ASG 2012). Therefore, most of the information available is anecdotal from herders in the area, including giraffe numbers plummeting because of illegal local and commercial hunting (Hussein pers. comm.), and as such no reliable data on recent numbers and distribution of giraffe in the country.

#### **Current**

It is doubtful whether any giraffe still survive in Somalia (Heckel pers. comm.). The last known giraffe population was reported to be in the former Bushbush National Park and surrounding areas in the Lower Juba Region, far southern corner of the country bordering with Kenya (Heckel & Ali pers. comm.). However, no current data exist but likely the majority of giraffe have moved south into Kenya (Ali pers. comm.).

## **Future Conservation Management**

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

- Greater understanding of *G. c. reticulata* population numbers, range and conservation status across the country if any are still remaining;
- Anti-poaching efforts to conserve any remaining populations;
- Re-establishing priority conservation areas such as Bushbush National Park; and
- If giraffe are still present, support to dedicated giraffe conservation, habitat protection, education and awareness initiatives (government, NGO and academic).

# Acknowledgements

We would like to thank Dr. Jens-Ove Heckel and Abdullahi Hussein Ali for their valuable input. This study was financially supported by the Giraffe Conservation Foundation, the Mohamed bin Zayed Species Conservation Fund and Blank Park Zoo.

#### References

Abel, N.O.J. & Kille, M.E. 1976a. Seasonal distribution of wildlife and livestock in relation to development and human resettlement in the southern Tans-Juba area of Somalia. Mogadishu. United Nations Development Programme. Food and Agriculture Organization of the United Nations. FO:DP SOM/72/012 Field Document 4. 105 pp.

Abel, N.O.J. & Kille, M.E. 1976b. *Conservation and exploitation of the wildlife of south-eastern Somalia*. Mogadishu. United Nations Development Programme. Food and Agriculture Organization of the United Nations. FO:DP SOM/72/012 Field Document 5. 51pp.

Amir, O. G. 2006. *Wildlife trade in Somalia*. A report to the IUCN/SSC/Antelope Specialist Group – Northeast African Subgroup.

ASG 2012. *Antelopes in Southern Somalia, 1974-1975.* IUCN/SSC/Antelope Specialist Group. *Gnusletter* **30(1)**: 5-7.

Blanc, J.J., Barnes, R.F.W., Craig, G.C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I. & Hart, J.A. 2007. *African Elephant Status Report 2007: an update from the African Elephant Database.* Occasional Paper Series of the IUCN Species Survival Commission, No. 33. IUCN/SSC African Elephant Specialist Group. IUCN, Gland, Switzerland.

Dagg, A.I. 1962. *The distribution of the giraffe in Africa*. School of Graduate Studies, University of Waterloo, Waterloo, Ontario, Canada.

East, R. 1999. *African Antelope Database 1998.* IUCN/SSC Antelope Specialist Group. IUCN, Gland, Switzerland and Cambridge, UK.

Funaioli, U. & Simonetta, A.M. 1966. The mammalian fauna of the Somali Republic: status and conservation problems. *Monitore Zoologico Italiano* Supplement to vol. **74**.

Ibrahim, M.O. 2010. *Current status of forests and woodlands in Somaliland: Threats and Opportunities*. SES Fact-finding mission to Somaliland. Somali Ecological Society.

IUCN 2012. *The IUCN Red List of Threatened Species. Version 2012.1*. http://www.iucnredlist.org Downloaded on 24 August 2012.

Leeson, P.T. 2007. Better off stateless: Somalia before and after government collapse. *Journal of Comparative Economics* **35**: 689–710.

Parks.it. 2013. *Parks, Reserves and Other Protected Areas in Somalia.* http://www.parks.it/world/SO/ Eindex.html (Accessed 16 August 2013).

SES 2013. *Somali Ecological Society.* http://somaliecologicalsociety.org/homewelcome.php (Accessed 28 August 2013).

Statoids. 2013. Regions of Somalia. http://www.statoids.com/uso.html (Accessed 18 August 2013).

# Citation

Marais, A.J., Fennessy, S. & Fennessy, J. 2013. *Country Profile: A rapid assessment of the giraffe conservation status in the Federal Republic of Somalia*. Giraffe Conservation Foundation, Windhoek, Namibia.

Мар

