

Conservation of Desert-Dwelling Elephants in Namibia

Status and Challenges

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The north-west of Namibia has a small population of the desert-dwelling elephants (*Loxodonta africana africana*), 357 were identified in 1983 (Viljoen, 1987) and 600 were reported in 2014 (MET, 2014).

Desert-dwelling elephants, in Namibia's hyper-arid northwest region, are considered very special due to their adaptations that help them survive a difficult existence in the world's oldest desert (Figure 1,2). They are vulnerable to many factors. Water and food shortages, extreme weather conditions and high resource competition with human inhabitants in the pro-Namib Desert are some of their daily challenges (Figure 3).

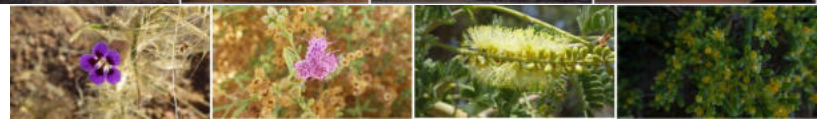


Figure 1. Landscape and small wonders.

They may consume more of green bush during summer and few of limited available grass while winter time. When everything is dry, they rely on acacia species (such as *Acacia erioloba*) and other plants such as *Colophospermum mopane*, *Faidherbia albida*, *Tamarix usneoides* and *Salvadora persica*.

Situations such as infant mortality or loss of life because of human-elephant conflicts and below average rainfall are key factors contributing to this population's low growth rate.



Sharing water with local people and food resources with a large number of livestock appeared the main drivers of conflict (Figure 3).



Figures 2. Activities: Feeding, drinking (ephemeral river bed and springs) and social activities, resting and walking.



Figure 3. Communal conservancies, rural people, livestock and water tanks.

Overcoming human-elephant-conflict requires multidimensional approaches as no single solution might halt the situation. The problem require both scientific and social approaches, integrated effort between conservationists, community development experts and lawmakers for a solutions that can contribute to human socioeconomic development and elephants conservation. It appears that much effort is required in dealing more with farmers than elephants as solving their problem as water protection directly reduces harm to the elephants. However, the need for elephants should not be overlooked.

Remarks

Unique and small population;

Adapted to the desert;

High economic impact due to the revenues from ecotourism/nature-based tourism;

Facing challenges imposed by climate change and its impact on food quality and quantity and available water at surface and underground;

Under several threats induced by available food, and conflict with farmers due to common water use;

Environmental education, conflict management and scientific based resources management are needed.

References

- Croal, P., 2014. Beauty and adaptation – the marvels of Namibia's dryland habitat. *Biodiversity, Drylands Special Issue*, 15(2-3): 229-230. <https://doi.org/10.1080/14888386.2014.931250>
- MET (Ministry of Environment and Tourism) 2014. Press release on Desert Elephants. Accessed on 16 October 2019. Retrieved from: http://www.met.gov.na/files/downloads/e88_Desert%20elephant%20%20press%20release.pdf
- Viljoen, J.P., 1987. Status and past and present distribution of elephants in the Kaokoveld, South West Africa/Namibia. *South African Journal of Zoology*, 22(4): 247-257. <https://doi.org/10.1080/02541858.1987.11448054>