Highland Elephants Keeping a Low Profile in Namibia

The desert elephants and other desert-adapted species get the attention in northwest Namibia, but there is also a unique population of elephants living

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The Kaokoveld

Northwest Namibia has traditionally been known as the Kaokoveld, which has a few translations in local language, one of which is "coast of loneliness.The word Kaokoveld is used to refer to not just the coast itself, but the extremely arid and remote landscape stretching about 200km inland from the Skeleton Coast. The total area of the Kaokoveld is about 100,000km^2. Before the 1960s, much of the Kaokoveld was unexplored by "Western" people and until 1978 permission was needed for visitors to enter the area. The first overland attempt to explore the Kaokoveld is thought to have been in 1858, an expedition led by Charles Andersson, an explorer from Sweden. Records indicate that, after travelling across the basalt plains of Damaraland, they tried to enter an area of arid mountains that were so steep and rugged that they were prevented from moving further north[1]. Those mountains are likely to have been an area now referred to as the Northern Highlands, about 12,000km^2 of landscape with steep valleys and peaks up to 1,800m above sea level. The Northern Highlands is located between Etosha National Park and the Namib Desert areas bordering the Skeleton Coast to the west. The Kaokoveld has low rainfall, typically 50 to 250mm per year, but in many years some areas have no rain. River valleys in the Northern Highlands are dry, tending to flow for only a few days each year. But there are several springs in the area, and these springs provide a lifeline for the surprisingly diverse wildlife.

Figure 1: Highland elephants, Orupupa Conservancy, (there had been recent rains in the area after several years of drought).

Desert-adapted animals taking the profile

In the Kaokoveld, it is the desert-adapted species in the western areas that have a high profile, including detailed monitoring and research. The desert-adapted elephants (*Loxodonta africana*) have also had much attention through several wildlife documentaries and books. This small population of about 80 elephants is particularly vulnerable, and monitoring has been so detailed that every elephant in the population has been identified. These elephants tend to migrate up and down (and sometimes between) the lower Hoanib and Hoarusib river catchments. The desertadapted elephants have generated some important revenues for local communities through wildlife tourism. In the areas around the western Kaokoveld the desert lions (*Panthera leo*) and desert giraffe (*Giraffa giraffa*) have also had much research and attention. These populations are not unique species genetically but have adapted in different ways to their harsh desert environment. Further south, community-based conservation efforts to protect the black rhino (*Diceros bicornis*) in Damaraland in the southern Kaokoveld have been particularly successful.

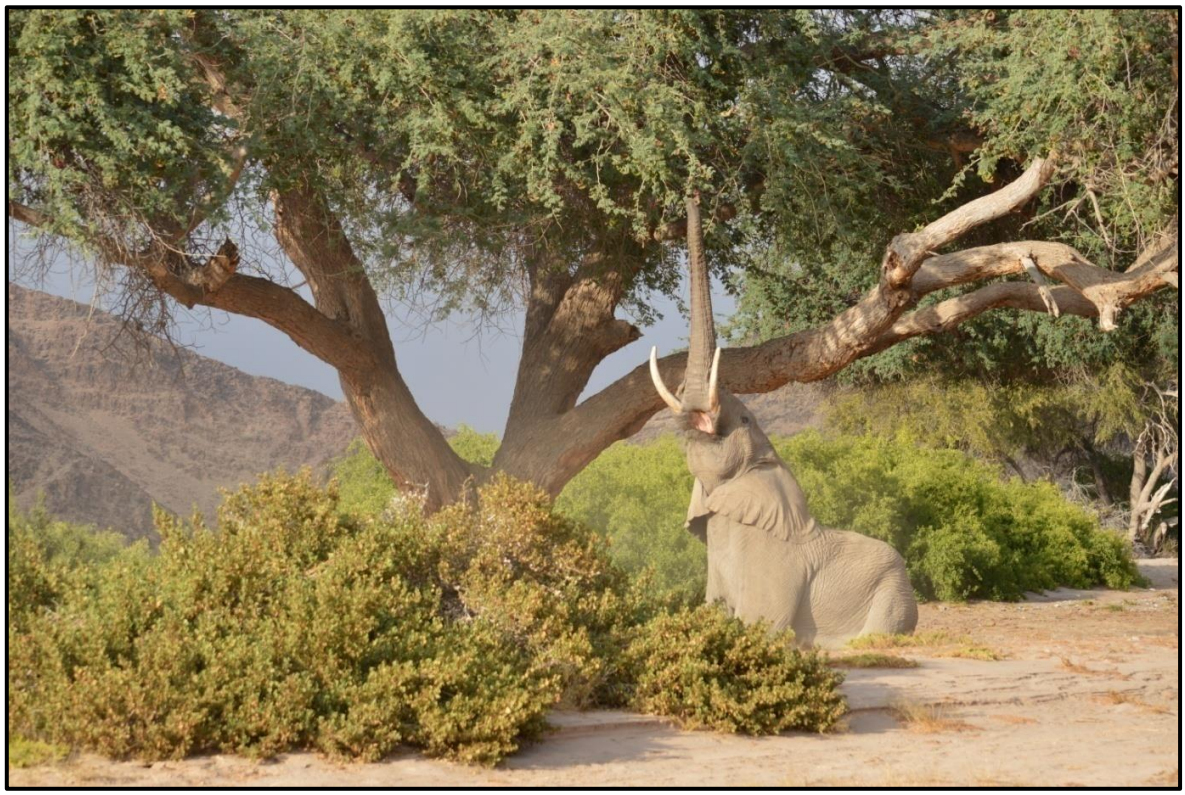

Figure 2: Desert-adapted elephant, Hoanib River, in an area to the west of the Northern Highlands.

The highland elephants

In the Northern Highlands, there is a population of elephants living alongside the local communities. Based on discussions with local people, and studies on the typical density of elephants in their range elsewhere in the Kaokoveld[2], there are between 100 and 300 elephants in the Highlands. Local feedback indicates that the number of elephants has been growing in recent years. They tend to visit the villages at night during the dry season to drink from the water points, and during the day spend time in the mountains, where their preferred vegetation is growing. Local people say that these elephants have a surprising ability to move easily up and down steep slopes. They have become known in Namibia as the “Highland elephants” but, unlike the Desert elephants to the west, very

little is known outside the Kaokoveld on the Highland elephants and there has been no published research on these populations. A considerable amount of research on the desert-adapted elephants has concluded that the elephants drink less often than elephants in other range areas in Africa, and also some features might be different. For example, it has been suggested that Desert elephants have larger feet to help them to walk in the sand. GPS collar studies have concluded that some male elephants in the Kaokoveld have some of the highest recorded movement ranges in Africa and therefore the Desert elephants are unlikely to have been cut off from other populations from a genetic perspective[3]. Research to compare dung, blood and tissue samples between the Desert elephants and elephants in other parts of Namibia has also concluded that there is no genetic difference[4]. Although there has been no research or media attention on the Highland elephants, they are very interesting due to their skills and confidence to move quickly up and down steep slopes, which is unusual for the African savannah elephants. During visits to the Northern Highlands, we observed elephant dung on high mountain tracks, and we often identified elephant damage on trees up steep slopes. Some local people can identify elephants from different areas by their footprints. The prints of the Highland elephants tend to have few cracks because their feet have been worn smooth by the rocky terrain of the mountains, whilst the tracks of elephants from other more sandy areas tend to show more cracks in the feet.

Figure 3: Highland elephants climb steep slopes to take advantage of the many natural springs in the Northern Highlands.

Local communities

The human population density in the Northern Highlands is very low (on average less than one person/km^2). The local communities in the Northern Highlands are some of the poorest in Namibia. Formal employment is low. Livestock farming (cows and goats) is a core part of local culture and has been the main livelihood for the Herero and Himba communities in the area. The high loss of

livestock in 2018-2019 due to drought pushed many families further into poverty. Local people in the Northern Highlands generally tolerate the elephants, and the Namibian government's leading approach to community-based wildlife conservation through the community conservancies has fostered such tolerance. However, with recent drought years increasing the competition between people and wildlife for local resources[5], local people are beginning to lose patience because of the challenges of co-existing with the elephants. Human-elephant conflict is a growing problem. Damage by elephants to water points in the Kaokoveld takes much time to repair, partly because of the costs and partly because of the practicalities of bringing spare parts long distances to the area. Vegetable gardens have become more common since the loss of livestock in recent drought years, and, although elephants tended to stay away during rains, they now occasionally return to the villages for the vegetables, causing damage and loss of an important source of food for the community. Climate change will potentially increase the severity and/or frequency of droughts and the competition for resources between humans and wildlife in the Kaokoveld is likely to worsen. Southern Africa is predicted to warm twice as fast as the global average. As with the Desert elephants, the small population size of the Highland elephants means that they are vulnerable.

Figure 4: Highland elephants observed descending steep slope, Ehi-Rovipuka Conservancy, Northern Highlands. They walk down slopes with surprising ease.

Tourism opportunity

The Kaokoveld area has been seriously affected by over-grazing by livestock. Diversifying livelihoods away from livestock farming has for some time been a development objective of the government of Namibia. Wildlife tourism, planned in a controlled manner to protect habitats and wildlife, has been identified by the government as an opportunity to benefit the communities in the region. The

Highland elephants could be a core driver of tourism, including the important aspect of local employment as guides and in campsites and lodges.

Conclusion

The African savannah elephant is classified as Endangered in the IUCN Red List of Threatened Species. Protection of the unique population of Highland elephants is a priority, including addressing the conflict between elephants and communities over water points and other resources. There are likely to be similar challenges in dry habitats in rural areas of Kenya and Tanzania, where there are communities living alongside elephants. Monitoring and research on the Highland elephants is needed to inform the development of local plans to protect the elephants. An important component will be research to determine the factors affecting elephant movements and to identify corridors used by the elephants. Aerial surveys are difficult in mountainous terrain and expensive for monitoring populations with such low density. It would be more efficient to start by collating the considerable knowledge of the communities on the elephants, particularly from the experienced game guards that operate under Namibia's successful community conservancy policy. A combination of monitoring and research, and promoting community-based wildlife tourism in the area is needed to ensure that communities continue to tolerate and live alongside this important population of elephants in the highly scenic mountains and valleys of the Northern Highlands.

References

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