Cape Fox *Vulpes chama*

© A Denker

Namibian conservation status	Least Concern
Global IUCN status	Least Concern since 1996
Namibian range	~614,000 km^2
Global range	~2,143,900 km^2 with range extension over recent decades
Population estimate	Common to fairly abundant across its range Namibian population not estimated
Population trend	Stable
Habitat	Open country including grassland with scattered thickets and lightly wooded areas Makes use of extensive agricultural lands
Threats	▸ No major threats ▸ Indiscriminate use of agricultural poisons

DISTINGUISHING FEATURES

Cape foxes are small canids with a slender build, a bushy black-tipped tail and a grizzled silver-grey coat. They are unlikely to be confused with other species; the small size, delicate appearance, pale colouration and ears (much smaller than a bat-eared fox's) are unlike other species in the same range.

DISTRIBUTION

The species is widespread in the central and western parts of southern Africa (Hoffmann 2014a, Dalerum *et al*. 2016). Cape foxes are found in grassland with scattered thickets and lightly wooded areas across Namibia, and occur in similar habitats as well as fynbos, *Acacia* scrubland and thorn bushveld in South Africa and Botswana (Sillero-Zuberi 2009b, Hoffmann 2014a, Kamler *et al*. 2016).

In Namibia, Cape foxes are distributed throughout the country except in the central Namib Sand Sea and the far north-east. There are many records from the southern Namib, including at the coast, and one from the Skeleton Coast, but none from the main sand sea except on its margins. Recent camera trap records from Khaudum National Park suggest they might also occupy other parts of the Kavango although it is likely that they avoid settled rural areas, where they would come into conflict with domestic dogs. There are distribution records from the eastern, southern and western sides of Etosha National Park, but none to the north of it.

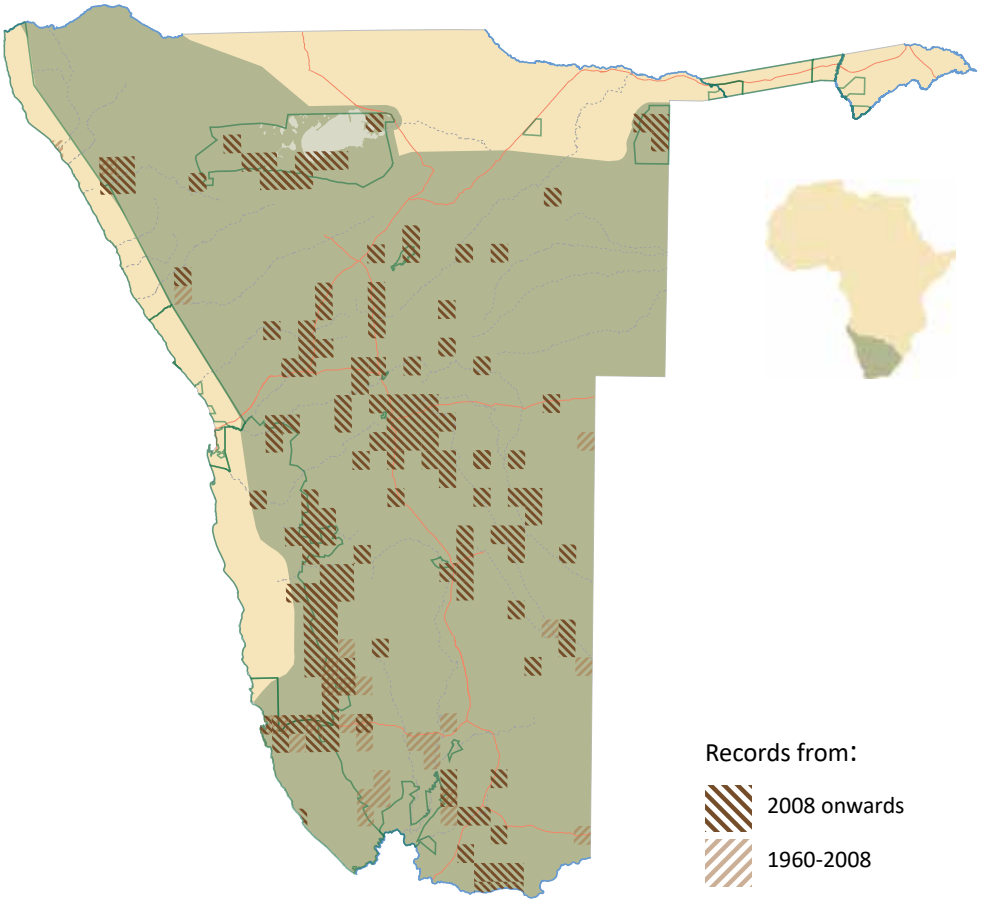
POPULATION ESTIMATE AND TREND

Cape foxes are common both within and outside protected areas. They have only been extensively studied in the Free State and Northern Cape provinces of South Africa where estimated densities of 3 to 14 foxes/100 km^2 (Kamler *et al*. 2012b, 2013) and 30 foxes/100 km^2 (Bester 1982) were recorded. In Namibia, this species is data-deficient and we cannot make reliable estimates of density and population size.

Distribution records of Cape fox, and present estimated area of distribution in Namibia.

Inset: African distribution of Cape fox according to IUCN (Hoffmann 2014a).

The Namibian distribution in the main map is more up to date and does not necessarily agree with the distribution shown in the inset.



ECOLOGY

The only detailed information about Cape foxes comes from a few studies in South Africa and further research is necessary to better understand their ecology and behaviour.

Cape foxes are almost exclusively nocturnal and live in monogamous pairs with occasional helpers (Bester 1982, Kamler & Macdonald 2014). Pairs share and defend their territories that are stable through the years (9–28 km^2, Kamler *et al.* 2012b, 2013). They breed annually, with the majority of births occurring between August and October (Kamler & Macdonald 2014).

Cape foxes forage alone and feed on a wide range of items including small rodents, reptiles, insects, birds, invertebrates and wild fruits (Kamler *et al.* 2012b, Klare *et al.* 2014). A single individual can consume nearly 4,000 rodents per year (Klare *et al.* 2014). They are also known to scavenge (Bester 1982, J Pallett pers. obs.).

Larger carnivores, especially black-backed jackals, seem to be responsible for the majority of recorded natural mortality (Kamler & Macdonald 2014, Kamler *et al.* 2016). Consequently, Cape foxes were found to spatially avoid areas of high black-backed jackal activity when foraging and establishing den sites.

THREATS

Although humans are probably their main cause of death on farmlands, heavy direct or indirect removal of Cape foxes does not seem to affect their populations (Hoffmann 2014a). However, the widespread use of agricultural poison to control rodents and insects populations poses the highest threats (Stuart & Stuart 2013b) and could probably cause local population decline.

The practice of putting extensive areas under mesh "jackal-proof" fencing in freehold small-stock farming areas also poses a threat, as the movements and dispersals of foxes could become restricted.

The growing need for land for livestock production might have a negative impact on Cape fox populations as well. This effect will most probably manifest itself in the increase of direct and indirect killing as farmers increase their predator removal practices. However, a local decrease of black-backed jackals through active removal could benefit Cape foxes (Blaum *et al.* 2009b, Kamler *et al.* 2013, Kamler & Macdonald 2014), so the overall impacts of livestock production on Cape fox populations are not clear, and probably are site specific.

LEAST CONCERN

© K Prediger

Desertification and changes in agricultural practises have resulted in some extensions of Cape fox range in South Africa, but it is not known if this has occurred in Namibia. Here, areas that have become desertified (particularly north-central Namibia) have also become more heavily settled, which would not facilitate expansion of Cape fox distribution.

CONSERVATION STATUS

Cape foxes are listed as Least Concern on the IUCN Red List (Hoffmann 2014a) and they have been so categorised since their first assessment in 1996. They are not included in the CITES Appendices.

ACTIONS

These small foxes prey minimally, if at all, on livestock and should therefore not be considered as a problem species. On the contrary, Cape foxes can be highly beneficial on farmlands as they help to control rodent populations (Klare *et al*. 2014).

The use of agricultural poisons (for insects and rodents) is likely to have a negative impact on Cape fox populations and should therefore be done sparingly and with careful targeting, paying attention to avoid unintended impacts on other species. Similarly, banning the use of gin traps would also help to decrease human-caused mortalities in Cape fox populations. Less harmful and more holistic approaches to dealing with damage-causing animals, such as using livestock-guarding dogs and bringing livestock in to kraals at night, would greatly reduce livestock losses, and would benefit Cape foxes and the farmers themselves.

It is important for farmers to identify this species correctly in order to stop targeting them during predator control operations. Such information could be disseminated through AgriForum for instance.

There is virtually no available data on Cape fox populations and ecology in Namibia and more research and monitoring is needed in order to provide reliable recommendations. Promoting citizen science participation in online reporting platforms (e.g. EIS), and targeting private camera trap owners and farmers (e.g. via NNFU, NECFU and NAU), would help with data gathering at a large scale.

Assessor: Stéphanie Périquet
Reviewer: Jan Kamler

Suggested citation: Périquet S 2022. A conservation assessment of Cape Fox *Vulpes chama*. In: NCE, LCMAN, MEFT (eds) 2022. Conservation Status and Red List of the Terrestrial Carnivores of Namibia. Pp 97-99. MEFT, LCMAN & NCE, Windhoek, Namibia