

# Mozambique: Preliminary Assessment of the Status and Distribution of Cheetah

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Historically cheetah were relatively widespread in Mozambique with records from the north, west and southern parts of the country. More recently significant populations were only known to exist in the north west corner of Tete Province, and within and on the periphery of the Limpopo Valley and Bauhine National Parks. Previous assessments of population concluded that hunting cheetahs for skins had reduced its ranged within the country, as well as a reduction in prey populations. This assessment indicates that the population of cheetahs appears to have further declined, with recent records only reported from the north west of Tete Province. However, given the historical distribution of cheetahs and the potential for the threats of poaching and reduction in prey to be alleviated there are areas where natural recolonisation may occur.

The distribution of cheetahs in Mozambique appears to have changed substantially during the last 30 years according to published literature. Smithers & Labao Tello (1976) reporting on field data collected up to 1970, that cheetahs had been seen in the Niassa and Cabo Delgado provinces (Fig. 1) with four confirmed visual records. The same paper reported that cheetahs were seen in the Zambezi delta area and in an almost continuous band from the north west part of Tete Province (south of the Zambezi river) down to the Limpopo Valley National Park (Fig. 1). Cheetahs were not reported from the north of the Zambezi river in Tete Province, but the authors felt that this was due to a lack of records rather than true absence. The distribution of cheetahs at this time correlated to the distribution of Eastern Miombo and ZambezianMopane woodlands (Fig. 2).

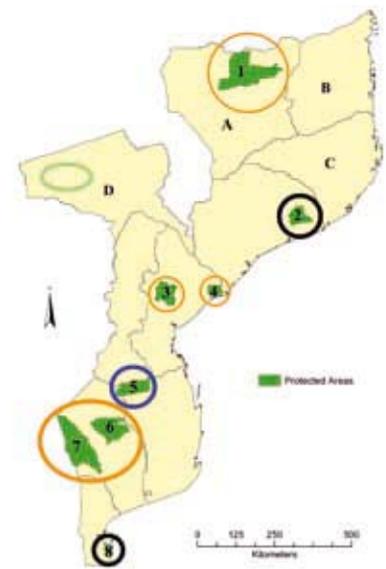
In a contemporary report by Myers (1975) based on more recent information, the author argued that cheetahs were only present in Mozambique in three areas: south of the Zambezi river extending westward towards Cabora Bassa (the central and southern areas of Tete Province); between the Gorongosa National Park and the headwaters of the Pungwe river, and in the Limpopo Valley National Park and peripheral areas (Fig. 1). The author goes onto argue that although cheetah may have been recorded in other areas of Mozambique, by 1975 they were no longer present. The total population for the country

was estimated to be around 200 at that time (Myers 1975). Myers argued that hunting for skins was a major factor in the decline of cheetah, with cheetah often being hunted to “console the disappointed hunter who fails to bag [a leopard]” (Myer 1975, p. 32).

In a more recent report, Skinner & Smithers (1990) included the area incorporating the Limpopo Valley and Bauhine National Parks in their distribution map for cheetahs, as well as parts of Tete Province. However, the most northern part of Tete province was excluded from the distribution, corresponding to the absence of cheetah reported in the Lower Zambezi valley in Zambia (Ansell 1978). More recent literature shows cheetahs in Mozambique as also being present in the north west corner of Tete Province on both sides of the Zambezi river (Nowell & Jackson 1996, Skinner & Chimimba 2005). All these sources of information reported that cheetah were only present in Mozambique in these two localities (Tete Province and in the area incorporating Limpopo Valley and Bauhine National Parks).

Cheetahs are now protected in Mozambique and cannot be hunted or exported. However, the effectiveness of this protection was limited until recently due to civil war. Anecdotal reports (C. Stockil, pers. comm.) indicate that poaching both of cheetah and their prey was intense during the civil war, possibly reducing populations. In addition, the large packs of domestic dogs

that were reported to have formed in many areas of Mozambique when villages were abandoned during the war years (Fuller 2006) could have had a large adverse effect on the cheetah population as dogs are known to tree and kill cheetahs on farmland in Zimbabwe



**Fig. 1.** Provinces and Protected areas of Mozambique (Source: WDPA Consortium, 2006). A = Niassa Province, B = Cabo Delgado, C = Nampula, D = Tete; 1 = Niassa Game Reserve, 2 = Gile Game Reserve, 3 = Gorongosa National Park, 4 = Marromeu Game Reserve, 5 =Zinave National Park, 6 = Bauhine National Park, 7 = Limpopo Valley National Park and 8 = Maputo Game Reserve. Green circle = currently present; blue circle = possibly currently present; orange circle = currently extirpated; black circle = no data.

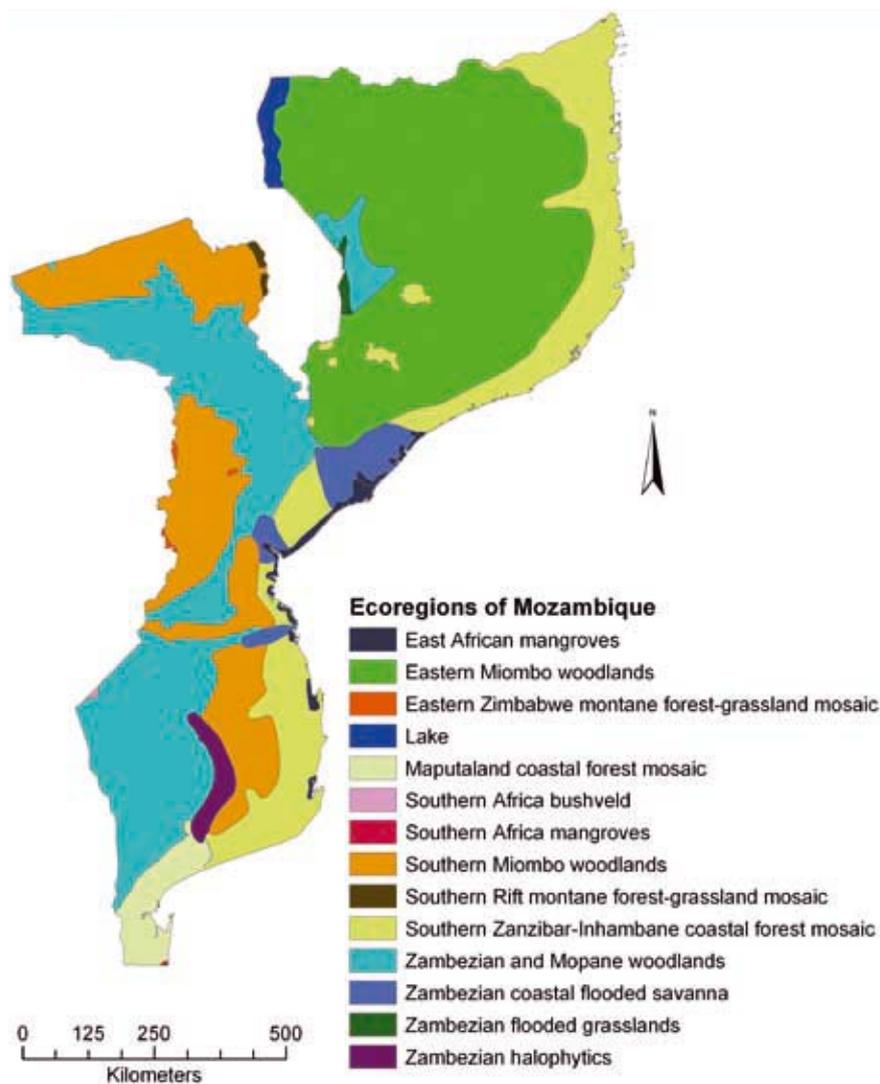


Fig. 2. Ecoregions of Mozambique.

(B. Leatham, pers. comm., R. Peek, pers. comm.). The effect of the civil war on prey populations, poaching of cheetahs and the potential impact of domestic dogs probably further depleted the population from the estimate reported by Myer (1975).

#### Review of available information

Here we present information regarding the current status of cheetahs within Mozambique. This information was obtained through open interviews with the Ministry of Tourism, and with individuals known to be currently working in the field, or who had worked in the field since the year 2000. In addition, a literature search was conducted to identify recent published data regarding the status of cheetahs since 2000.

Given the problems with differences in language, individuals were contacted in person and information gathered using a modification of the open interview approach.

#### Protected Areas

##### *Niassa Game Reserve (No 1, Fig. 1)*

An intensive survey to detect large carnivores and estimate numbers was carried out in a representative area of the reserve by C. Begg in 2003. During this survey no signs of cheetah were found, and the study concluded that cheetahs are absent from the Reserve. He feels that cheetahs were probably never found in this area, or at least, if they were, at low densities (C. Begg, pers. comm.). The other large species of carnivore were all detected during the sur-

vey, suggesting that protection has been sufficient. As cheetahs were reported as being present by Smithers & Tello (1976) in these northern provinces it appears that they may have become locally extinct or now occur at such low densities as to difficult to detect during surveys.

##### *Gile Game Reserve (No 2, Fig. 1) and Maputo Game Reserve (No 8, Fig. 1)*

No data was available from these areas, and the status of cheetah is still unknown. However, given that all these areas fall outside the distribution of cheetahs reported by Skinner & Chimimba (2005) it can be assumed that cheetahs are absent.

##### *Marromeu Game Reserve (No 4, Fig. 1)*

No cheetah have been observed recently in Marromeu Game Reserve (A. Marc, pers. comm.) or in the neighbouring hunting coutadas (areas).

##### *Zinave National Park (No 5, Fig. 1)*

There is a possibility that cheetahs exist in Zinave based on the confiscation of a skin that has yet to be confirmed to be cheetah (Fig. 3). The skin was confiscated early in 2007 from a villager living within the Park.

##### *Gorongosa National Park (No 3, Fig. 1)*

##### *(Fig. 1)*

Six cheetah were introduced into an area north of this Park in 1973 (reasons for this introduction are not known) and as a result cheetahs were seen in Gorongosa during 1973 for a short period of time. However, in 2004 during an extensive survey for large mammal species no signs of cheetah were found and it is assumed that they have now become locally extinct (Anderson *et al.* 2006).

##### *Bauhine National Park (No 6, Fig. 1)*

It appears that although cheetahs were present in Bauhine National Park in the 1970's (Natural History Museum, Bulawayo; C. Stockil, pers. comm.), and later distribution maps of cheetah included the park (Skinner & Chimimba, 2005), there have been no sightings reported for a number of years. Excessive hunting of the prey base is assumed to be the reason for their disappearance (B. Soto, C. Lopez Pereira, both pers. comm.).

*Limpopo valley National Park (No 7, Fig. 1)*

It appears that although cheetah were present in this area in the 1970s there are no recent records of sightings or signs (B. Soto, pers. comm.; C. Lopez Perreira, pers. comm.). It is assumed that they have become locally extinct due to a combination of excessive hunting of their prey and poaching for their skins. However, this protected area has now become contiguous with Kruger National Park (KNP) as part of the Great Limpopo Transfrontier National Park. Cheetah are present in KNP in relatively high numbers and natural recolonisation may occur.

#### **Outside protected areas**

The Ministry of Tourism reported that cheetahs are rarely seen in Mozambique both within and outside of Protected Areas (B. Soto, pers. comm.; C. Lopez Perreira, pers. comm.). However, two confirmed reports from the communities living in the Zumbo district of Tete province indicate that cheetahs do still occur in the area around Caborra Bassa, but are seen sporadically and in very low numbers (Area A in Fig. 3; J. P. Valente Valente, pers. comm.). The presence of cheetah in this area was in question in the available literature with Ansell (1978) and Skinner & Smithers (1990) reporting that cheetah were not found in the Lower Zambezi valley, but Nowell & Jackson (1996) and Skinner & Chimimba (2005) include this area as part of the range of cheetahs. The two confirmed sightings reported during this study indicate that cheetah do persist in this part of Mozambique but the population is likely to be small and may depend on linkages to the population in the north-east of Zimbabwe, where reports of cheetah are infrequent.

#### **Recommendations**

There is still a lack of data regarding the status, distribution and threats to cheetah in Mozambique, with large areas of the country unsurveyed. The comparison between historical distribution and current suggests that there has been a significant reduction in range, and hence in population of cheetahs in Mozambique, such that their current range can be confirmed in only a single area within their historical range. This status



**Fig. 3.** Photograph of a partial skin confiscated in Zinave National Park in early 2007. It is not yet confirmed that the skin is from a cheetah (Photo C. Begg).

may change with more detailed information. Given that cheetahs occurred historically throughout much of the country, there is a need to identify potential corridors between the area where cheetahs are known to persist, and other potentially suitable habitat for cheetah to help guide planning for the conservation of the species in Mozambique.

With the Limpopo Valley National Park becoming contiguous with the Kruger National Park as a result of the removal of boundary fences, cheetah from Kruger may naturally recolonise this area of Mozambique. Cheetahs are also present in the Gona-re-Zhou National Park in Zimbabwe which is now part of this TFCA, and recolonisation may occur naturally from here as well, although human settlements may be a barrier to movement.

#### **Acknowledgements**

The Zambezi Society provided the financial support to carry out the preliminary assessment. I am very grateful for the feedback from Dr Colleen Begg (Niassa), Jorge Pedro Valente Valente (Tete Province), Bartolomeu Soto (Ministry of Tourism), Dr Carlos Lopez Perreira, Clive Stockil, Jean Andre Marc (Marromeu), Blondie Leatham, Richard Peek and Woody Cotterill (Natural History Museum, Bulawayo).

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