

CAPTIVE BREEDING OF NORTH AFRICAN CHEETAH, *ACINONYX JUBATUS SOEMMERINGII*

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Introduction

The Cheetah, *Acinonyx jubatus*, had one of the most extensive distributions of any living carnivore, ranging from Africa through the Middle East to Asia. Myers, (1976) estimated that in 1900 there were more than 100,000 cheetahs throughout Africa and Asia. Today this number has fallen to less than 12,000 and the population is now mainly confined to Southern Africa with smaller numbers in North and East Africa and Iran.

The Cheetah's prime habitat is open grassland plains with large populations of smaller ungulates. However this habitat is also the focus for human agriculture and in the resulting conflict the cheetah has always lost. In protected areas cheetahs also suffer with competition from other large carnivores and consequently they are usually found in lower densities. Currently cheetahs are found as small populations in marginal habitat in northern Africa and Iran. The continued survival of these small populations is precarious, although essential not only for the biodiversity of these regions, but also for the genetic diversity of the Cheetah globally.

Captive Status

Cheetahs in the past have been difficult to breed in captivity with the first captive birth in 1956 at Philadelphia Zoo, USA. During the 1970's and 1980's cheetahs bred with some regularity in a handful of zoological collections, but only in the past 6 to 7 years have they reproduced well, particularly within European Regional Zoos. In January 2003, the most recent edition of the International Studbook for Cheetah stated that there were 1385 living captive cheetah (Marker 2004). With the exception of animals listed in UAE, all of these captive cheetahs originated from Southern Africa cheetahs, (*Acinonyx j. jubatus*). Those listed from the UAE are of Northern Africa origin (*Acinonyx j. soemmeringii*) and the founder animals came mainly from confiscated cheetahs that were being illegally imported into the UAE. These cheetahs originated from Ethiopia, Somalia, Sudan and Chad and represent an important part of the global cheetah population's genetic diversity both in-situ and ex-situ. As a result, the North African Cheetah are managed as a separate population within the European Association of Zoos and Aquaria's (EAZA) European Endangered Species Programme (EEP) for Cheetah. There are 365 cheetahs within the Cheetah EEP Species Programme of which 84 are *Acinonyx j. soemmeringii*. The first collection to breed cheetahs in the Middle East was H.E. Sheikh Butti Maktoum's Wildlife Center in March 1994 followed by the Breeding Centre for Endangered Arabian Wildlife, Sharjah in December 2002.

Table 1 lists the institutions known to have bred North African cheetah and the number of cubs born (McKeown 2006). Captive-bred North African cheetahs from the UAE have been sent to two Zoological collections in Europe, Beekse Bergen Safari Park, The Netherlands and Landau Zoo, Germany. Another group will be sent to La Palmyre Zoo, France within the next 6 months. The Cheetahs sent to Beekse Bergen Safari Park have already produced their first litter.

Table 1. Institutions known to have bred North African cheetah and the number of cubs born.

Institution (ISIS mnemonic)	No of cubs born	Managed programme
H.E Sheikh Butti Maktoum's Wildlife Centre, Dubai (Maktoum)	77 (34.33.10)	Yes
Breeding Centre Endangered Arabian Wildlife, Sharjah (BCEAW)	23 (12.11.0)	Yes
Wadi al Safa Wildlife Centre, Dubai (Safa Wild)	6 (4.0.2)	Yes
Nakelee Wildlife Centre, Dubai	Unknown number	No
Al Dhaid Wildlife Centre, Sharjah	Unknown number	No
Beekse Bergen Safari Park, The Netherlands (Hilvarenbeck)	2	Yes
Découvrir et Aider la Nature, Djibouti	3	No

Wild V Captive bred *Acinonyx j. soemmeringii*

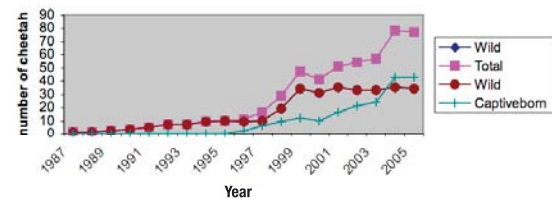


Fig 1. Population growth in the EEP programme for wild V caught versus captive bred cheetah, *A. j. soemmeringii*.

There are presently 25 founders to the North African cheetah captive population with a potential for 13 additional founders within the present managed programme. Figure 1 presents the population growth of wild V captive-bred Cheetah, *Acinonyx j. soemmeringii*, in the EEP programme. The population of North African Cheetah, *Acinonyx j. soemmeringii* continues to grow exponentially and presently the only limiting factor is the availability of suitable holding facilities or enclosures.

Future Prospects

Cheetahs have historically been regarded as having low genetic diversity and are difficult to breed in captivity (O' Brien, 1986). However, recent work by Claro (per comm.) and Worley (per comm.) confirms the results of Freeman *et al* (2001) that there are considerable genetic differences between North African Cheetah and South African Cheetah. Further research on the genetic and morphological diversity of cheetahs is required before any reintroduction of cheetah to the Arabian Peninsula can be considered so as to ensure the IUCN guidelines on reintroductions are adhered to in regard to the nearest suitable subspecies. The last recorded wild cheetah in Arabia was shot near Jibjat, Dhofar, Oman, in 1977 (Harrison 1983) and it should be feasible to have cheetah back in some of the reserves in Arabia before 2010 given the growth of the captive population.

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