

FIRST KING CHEETAH (*ACINONYX JUBATUS JUBATUS*) BIRTHS IN THE UAE

Meyer E. de Kock

Al Bustan Zoological Centre, PO Box 12964, Al Maliha, SHJ, UAE. bustan55@eim.ae

Al Bustan Zoological Centre is a privately owned zoo, located in Al Maliha Village in the Sharjah Emirate, U.A.E. With a total size of 17 ha for the main zoo, it houses more than 1,200 animals of 130 species in the onsite exhibits and offsite breeding enclosures. The Zoo was started in the early 1980's, however, most of the animals were only added to the collection in the last ten years.

Al Bustan Zoological Centre started a cheetah (*Acinonyx jubatus jubatus*) breeding programme in 2004 with a CITES approved endorsement. In 2005 a small population of 17 animals, made up the breeding stock. Al Bustan Zoological Centre currently has 59 cheetahs, making this the 3rd largest cheetah breeding centre in the world according to 2009 studbook information. No less than 68 births have been recorded since the start of the breeding programme.

The king cheetah is a rare mutation characterized by a distinct fur pattern appearing as longitudinal black stripes on the lower back of the cheetah. The first sighting of a king cheetah was noted in Zimbabwe (Southern Rhodesia) in 1926 and the first captive bred king cheetah was born at the De Wildt Cheetah and Wildlife Centre (South Africa) in 1981.

The lack of gene diversity may be one of the biggest threats faced by the cheetah population. Therefore, only specific breeding is done to ensure the best possible gene diversity is maintained. Population data are regularly analyzed by a population analyst applying future projection software. This ensures that all information is on hand to make the necessary management decisions for a healthy breeding project.

The breeding process involves crossing king cheetah with normal color cheetah of which the offspring will bare the recessive gene, although not visible. These cubs are called "splits" (split cheetah / king cheetah). The splits are introduced to an unrelated king cheetah after 4-6 years. Progeny is expected to represent a 25% to 100% "king" variation if breeding is successful.

On 29th January 2011, three cubs were born of which two were kings. On 9th February, two cubs were delivered (1 king cub) by caesarian. The cubs only survived for a few hours due to trauma and complications during birth. On 16 March 2011 a regular color split cheetah gave birth to four cubs and all were kings. A total of 100% king cubs is extremely rare, and probably only the second documented occurrence. Unfortunately, one of the cubs died shortly after birth.

The King cub bearing females all bred naturally without the use of any hormone treatment. All three females were first time mothers and this may have contributed to the complication with the birth of the cubs with two of the females. The ages of the females are between 5-8 years. All the "split" cheetahs were bred as part of the breeding program at Al Bustan Zoological Centre.

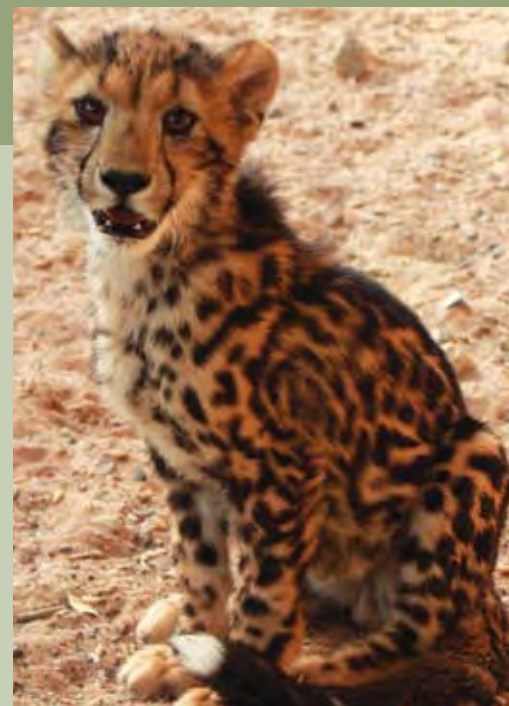


Fig 1. Al Bustan Zoological Centre King Cheetah Offspring, August 2011 (M de Kock)



Fig 3. Al Bustan Zoological Centre King Cheetah Offspring, August 2011 (M de Kock)

Acknowledgments

We thank H.E. Mr. Abdul Jaleel al Blouki for his dedicated support in the breeding project. We also thank R. de Kock, the current carnivore curator, Dr. C. Lloyd for his Veterinary expertise and guidance and all Al Bustan Zoological staff members related to the project.

References:

Van Aarde, R.J., Van Dyk, A. (1986). Inheritance of king coat colour pattern in cheetahs *Acinonyx jubatus*. *Journal of Zoology*, London. 209: 573-578
 Kleiman D.G., Allen D.G., Thompson K.V., Lumkin S., Harris H.: (1996). *Wild Mammals in Captivity*. The University of Chicago Press. Marker L. Cheetah Conservation Fund. (2009) *Cheetah Studbook 2009*. Retrieved 25 July 2011 from: http://www.cheetah.org/?nd=international_cheetah_studbooks
 Wikipedia (ND). Cheetah. Retrieved 25 July 2011 form: <http://en.wikipedia.org/wiki/Cheetah>



Fig 2. Selective breeding of the King Cheetah colour variety at Al Bustan Zoological Centre