King Cheetahs are Tabbies

The striking blotched and striped coat of the rare king cheetah *Acinonyx jubatus rex* is now believed to be a mutation of the tabby gene in the cheetah species.

Dr Donald Lindburgh, a research scientist at San Diego Wild Animal Park, says that all cat species, domestic and wild, have only about 10 genes whose mutations account for the great variability in coat patterns. A mutation of one known as the "tabby gene" is responsible for the blotching of the striped tabby pattern in domestic cats. The same mutation of the the tabby gene is now believed to produce the king cheetah's coat.

Dr Lindburgh, writing in the March issue of ZOONOOZ, magazine of the Zoological Society of San Diego, says that other kinds of mutant cheetahs have been recorded. They include a white cheetah with blue spots and a bluish cast to the white background described by the Moghul Emperor Jehangir in the 17th century (attributed to the deep pigmentation gene), and a cheetah reported in 1877 as seen in Cape Province of South Africa covered with "dark fulvous blotches" on a "pale isabelline" (brownish yellow) background. This cheetah lacked the charac-

teristic tear line on a cheetah's face. A shot cheetah photographed in Tanzania in 1921 had virtually no spots on the neck.

Captive births at the DeWildt Cheetah Breeding and Research Centre in South Africa have established unequivocally that the king cheetah is merely a variant form of the common cheetah. Pedigree analysis has shown the king coat pattern is controlled by a single gene occurring in recessive form.

Dr Lindburgh writes that both parents must have the recessive gene to produce the king pattern in young, which should appear by chance 25% of the time on average. At DeWildt all parents of king cheetahs had normal coats. They gave birth to 26 cubs of which nine had the king pattern, which is close enough in a small sample to accord with the rules of inheritance.

The king cheetah was first given specific status as *Acinonyx* rex by Reginald Pocock, Curator of Mammals at the British Museum of Natural History in 1927, but he later withdrew the claim. and accepted it as an unusual variant. All evidence confines the king cheetah form to adjoining portions of Zimbabwe, eastern Botswana and South Africa.