

Cheetah Problems in the Wild

Cheetah cubs have only a six per cent chance of reaching independence at the age of 18 months in areas dominated by lions, according to the findings of Karen Laurenson, Tim Caro and Markus Borner (1992) in a long-term study of cheetah in the Serengeti.

Lions kill cheetah cubs, often locating them by spotting the mother sitting up in the marsh or bush where she has cubs. Cheetah mothers sometimes abandon their litters when prey is scarce. Earlier research showed that almost half the male cheetah cubs that left their mothers died before reaching adulthood, almost certainly from fighting with other male cheetahs. But lions too suffer heavy cub losses: two thirds dying between emerging from the den and one year of age in the Serengeti, and one third in the nearby Ngorongoro Crater.

The team believes that low cub survival explains the low population density of cheetah in the Serengeti. Although adult cheetah probably replace themselves, they cannot do more than this. After independence, a further 50% of male cheetah are lost primarily through territorial competition. Data are lacking on female mortality, making it impossible to assess whether cub or adult mortality is numerically more important

in limiting numbers of cheetah in the wild.

Noting that increasing human population pressure and agriculture are already restricting large predators to protected areas, the team remarks on the paradox that cheetahs may fare better in areas that are not protected, provided they are not given over to agriculture and that cheetahs are tolerated by pastoralists.

Although there are heavy cub losses, female cheetahs readily conceive after losing a litter, on average within three weeks. Dealing with the problems of cheetah breeding in captivity, the team says that the limited data indicate that inability to conceive is the result of captivity. Poor mothering in captivity is often related to excessive human interference or loud noise, while in the wild it is related to food intake. Laurenson suggests that solutions to cub mortality in captivity should be sought within the husbandry system and not from the natural situation.

Laurenson, K., T. Caro and M. Borner. 1992. Female Cheetah Reproduction. *National Geographic Research and Exploration* 8(1): 64-75.