

Reproduction and the problem with infanticide

During modern time there have been many problems to breed different species of canines in zoos and other captive environments. One of the problems reported is the killing (i.e. **infanticide**) of offspring.

This has also been the case for the African wild dog (*Lycaon pictus*) and as for other canines the **reasons for infanticides are not known**. There have been speculations of the proximity of the male, since captive environments usually are small, but also about how the dens should be constructed and if stress was inflicted by humans. Recently two births from young *L. pictus* females went wrong in Kolmården, but events before and after deliveries may help to explain why infanticide occurred.

The omega (i.e. lowest in rank) female in the group was during the period before delivery mobbed by the other dogs and the leader (alpha) female showed a remarkably high activity for an soon-to-be mother of eight cubs and there was an **increased intra-pack aggression**. The first infanticide (alpha's litter) happened ca 24 hours after birth and the immediate explanation was that the cubs for some reason had not received any milk and was disposed of. Shortly after the birth of the omega female's litter, the alpha sneaked in and **killed the omega's one and only cub**.

This suggested that the omega should not be allowed to have cubs at the same time as the alpha since she obviously could not tolerate any competition. Also modifications were made to the dens and now only time will tell if further matings at Kolmården zoo will result in surviving litters. The first answer may already come this summer (2005)!

Environmental and reproductive enrichment for **African wild dogs** in human care



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For more information about African wild dogs

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The African Wild Dog



Class: Mammalia (mammals)
Order: Carnivora (carnivores)
Family: Canidae (canids)
Gender: Lycaon
Species: *Lycaon pictus*

The recent history of many mammals is intimately connected with our own. The African wild dog (*Lycaon pictus*) is no exception. Karen Blixen, in her books from the beginning of the 20th century, described meeting groups of wild dogs consisting of 500 animals in the Masai area in Eastern Africa, but those days are forever gone. Today *L. pictus* is a highly endangered species, with an estimated total population of only 3000-5500 animals in 1997 and new estimates in 2004 indicating only 2000 individuals remaining in the wild.



In 1993 an European Endangered species Programme (EEP) for the African wild dog was initiated. EEPs have a goal to increase and keep a watchful eye over the health of the European zoo populations of different threatened species. Today over 60 zoos participate in this particular programme, including the Kolmården Zoo, and the status of the “European wild dogs” is regarded as self-sustaining and genetically healthy.

The concept of Environmental enrichment

During recent years the concept and theoretical framework of environmental enrichment have been developing at an increasing rate, being identified as a very important aspect of animal welfare in the zoo world. The basic idea is that zoo animals should be motivated and stimulated to perform species specific behaviours.



Environmental enrichment in Kolmården

A recent thesis project at Kolmården actually managed to increase the explorative behaviours of the wild dog pack, making the environment in the enclosure more interesting. The intention was to install a new pool which was a novel object, but the result of the installation was quite different than what was expected. Also A rain/sun shelter was built to improve the welfare of the dogs, but also to lure them closer to visitors. They did become more visible since the pack used the shelter and reduced their resting in other areas. In fact they spent between 59-96% more of their inactive time in the immediate vicinity of the shelter!