

Cheetah and Leopard Cat Cubs Born from Artificial Insemination

The first cheetah *Acinonyx jubatus* cub resulting from artificial insemination was born at Caldwell Zoo, Tyler, Texas, on 1 September 1991. The eight-year-old mother carried to full term and began to nurse the cub. But about 24 hours later a violent thunderstorm upset her and she killed the cub.

The artificial insemination technique was developed at the US National Zoo's New Opportunities in Animal Health Sciences (NOAHS) Centre. Dr JoGayle Howard, head of the zoo's Mobile Laboratory Research Team performed the artificial insemination at Caldwell Zoo, using freshly-collected sperm from a male at Fossil Rim Wildlife Center. The sperm was deposited into the uterus with a laparoscope (a fiberoptic telescope) of the type used in human infertility clinics.

Howard also collaborated with scientists at the Bronx Zoo in New York in artificially inseminating a leopard cat *Felis bengalensis*, which subsequently gave birth to two young. This was the first time a non-domestic cat had been successfully impregnated with semen that had been frozen and thawed immediately prior to the insemination.

It has taken 10-15 years research to perfect artificial insemination of non-domestic cats because their sperm dies extremely fast and the semen cannot be frozen by the same technique used for cattle.

Howard said that the ability to use frozen sperm meant that other rare cats could be inseminated with sperm from animals at different zoos or even from cats living in the wild.