

Frame GW, Frame LH. Cheetah Research: Progress Report.

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Abstract: Frame & Frame describe their observations and progresses they made with their cheetah observation of one year now. Their file is still growing steadily, indicating that far more cheetahs use the Seronera area than suspected. They are continually refining their criteria for estimating the age of wild cheetahs in the field. Data collected during the past year are now being analyzed.

CHEETAH RESEARCH: PROGRESS REPORT

FIELDWORK is progressing well with the aid of a new Toyota Land Cruiser provided by the East African Wildlife Society.

The cheetah recognition file now contains data on 90 individuals, compared to 25 when we began a year ago. The known life histories of two cheetahs cover more than eight years, or four generations. And for several others, life history data cover six to seven years. The file is still growing steadily, indicating that far more cheetahs use the Seronera area than anyone had suspected.

Male cheetahs born and raised around the Seronera River area appear to disperse. All the females raised in six litters have been seen regularly since leaving their mother, but none of the males have been seen after attaining adulthood. However, there are other mature males which we do see regularly, which leads us to believe that males are not in general more secretive than females, and if those young males were in the area we would see them. In one litter two young males, who have not been seen near Seronera since 1971 when they separated from their mother, were sighted on the short grass plains at the Gol Kopjes (about 40 kilometres southeast of Seronera) this past rainy season.

In September a cheetah which we know as Malaika had three cubs at the Maasai Kopjes, along the Seronera River. She chose to have the cubs in an area of abundant gazelles. During their first two weeks of life the cubs were moved several times, covering an area of roughly one square kilometre. The mother was able to find sufficient prey for herself without leaving an area of about 10 square kilometres.

We are continually refining our criteria for estimating the age of wild cheetahs in the field. With the aid of photographs and written descriptions of known-age cheetahs, we will soon be able to fairly accurately estimate the ages of litters and even adults. This is an important step in studying the dynamics of the population.

Cheetah cub mortality appears to be about 65-70 percent, most of this occurring during the first three months of life. Entire litters tend to be lost; this is particularly true with inexperienced mothers. The main causes of cub mortality may be predation and exposure.

Data collected during the past year are now being analyzed. These include movements, spacing, marking, activities, survival in each age class, and probable causes of mortality.

A pack of eight wild dogs, the Seronera Pack, was observed at a den in July. There were three pups, about four weeks old, when we found them. Their den was in the grasslands, about 10 kilometres southeast of the Seronera River. Because conditions were dry and prey scarce, the dogs had to travel a round trip of about 20 to 30 kilometres each day to hunt. Some days the mother stayed with the pups at the den, but the returning dogs did not seem to feed her adequately. On other days she accompanied the pack, and left the pups alone in the den. Her milk seemed to be drying up, and the pups looked undernourished. Very suddenly the pack disappeared from the area altogether, and in September they were seen again, minus the pups, which had apparently died.

The Southeast Pack, in which we have two operating radio-collars, was relocated several times on the short grass plains within four miles of each side of Naabi Hill. The radio-collars are on each of two subgroups within the pack: One group consists of three mature males and four subadults from the former Genghis Pack, and the other group consists of three young adult females which emigrated from the Semetu Pack last year and joined these males.

The Olobaiye Pack, which had 12 pups born in December 1974, had only 9 pups left by the end of April, and 7 by the end of May. Also by May the breeding female and one of the adult males had disappeared.

From our limited data a pattern is emerging in which one or several young adult females, probably siblings, leave the pack of their birth and join a new pack of adult males. Sometimes the pack of males includes large pups, but in none of five instances was there an adult female in the pack at the time. Very soon one of these new females produces pups. Then within one or two years, the siblings of this female begin leaving the pack until only one breeding female remains.

We wish to discover the direct causes of female emigration from packs, and are especially interested in the fate of the females which leave. Also we hope to discover whether new pack members have a significant effect on the range of the pack.

George W. Frame
Lory Herbison Frame