

Caro TM. The Serengeti Cheetahs.

Keywords: 1Afr/Acinonyx jubatus/cheetah/population/radio collar/Serengeti/social organisation/speed

Abstract: Information about the cheetahs speed, the population and the social organisation. Description about radio collars and their effect on cheetahs. People in the Serengeti are asked to note exact places where collared animals have been seen to support researches in the Park.

THE SERENGETI CHEETAHS

THE CHEETAH is the fastest land animal on earth and no visitor wants to miss the spectacle of a cheetah chasing down its prey at 90 km/hour. About 300 adult cheetahs live on the Serengeti Plains and an unknown number in the woodlands. About 2/3 of adult cheetahs are females, who have enormous pear-shaped annual home ranges stretching from the woodlands around Seronera eastwards to the Park boundary and beyond (800 sq kms). Cheetahs' main prey are Thomson's gazelles, which they hunt using a concealed approach followed by a sprint; these sprints are usually successful only if started from less than 30 metres from the quarry, and young cheetahs take 3 years to become good hunters. You can help scientists at the Serengeti Wildlife Research Institute to conserve this species, now numbering less than 20,000 in the wild, by noting where you have seen them in the Park, their sex and distinguishing characteristics.

THE CHEETAH POPULATION is low compared to the other main predators, lions and spotted hyaenas (1 cheetah/10 sq kms). There are three reasons for this: first, young cubs are killed by predators; second, there are few adult males in the population; and third, cheetahs may have genetic problems. While high cub mortality is inevitable in an ecosystem full of lions and hyaenas, the scarcity of adult males is more puzzling. To determine the fate of males, we have put a small number of radio collars on individually known animals to monitor their movements. We suspect that males are forced to emigrate because they are unable to find vacant territories inside the safety of the Park. Others may be killed in territorial disputes. Although it is impossible to follow male cheetahs continuously over several days because they move such long distances at night, radio tracking from the air (40 kms range) and from the ground (4 kms range) enables us to relocate animals and so determine whether males are forced outside the Park, and their fate in these marginal habitats. In the short time that radio tracking has been used, we have found non-territorial males move vast distances, up to 50 kms in 48 hours, and that territorial males often vacate their territories temporarily in search of females. A few females have also been collared and are found to spend long periods feeding on resident prey in the woodlands, something we never suspected. While fitting radio collars to cheetahs, we have had a unique opportunity to study the genetics and physiology of this population, and make comparisons with other populations and captive animals.

CHEETAH SOCIAL ORGANIZATION. By recognizing cheetahs individually using their unique pattern of spots and banding on the tail, we have found that females live alone or with their cubs. After leaving their mothers at 18 months of age, cubs remain together as a 'sibling group' until sisters separate when they come into oestrus. Males live alone or in permanent coalitions of 2 or 3 animals. About 1/6th of these coalitions are composed of unrelated animals that have joined up since leaving their mothers. Coalitions of males are better able to set up a territory and can hold it for longer than single males, and we suspect that they also live longer than singletons.

RADIO COLLARS have no effect on cheetahs: they are extremely light (1/2 kg) which is less than 1.5% of the cheetah's body weight, and we know they have no effect on hunting success. A blowpipe which does not harm the animals and a safe anaesthetic which causes amnesia are used for putting collars on. The collars do not rub or irritate the animal. Because radio collared animals are found more regularly by us, we do tourists an unplanned service because they quickly become extremely tame towards vehicles.

YOU CAN HELP scientists in the Serengeti by writing where you see radio collared cheetahs on the notice board at the Seronera Wildlife Lodge. There are about a dozen animals collared in the Park but you will be extremely lucky to see one, given the size of the population without collars, and the enormous size of these carnivores' home ranges. Although there are a number of places in the world where wild animals are now radio tracked for conservation and scientific purposes, Serengeti is the only place in Africa where detailed information is being collected on the personal lives of these secretive cats. Please ask your driver, who knows the Serengeti well, to make a note of the exact place where you saw a collared animal. In this way you can help contribute to the conservation and understanding of this endangered species. Please also remember that visitors who not drive fast, nor in convoy, nor directly at the animals will be especially rewarded, particularly if they make as little noise as possible in the presence of any cheetah.

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