Abstract: The main question, "Is there really a decline of cheetah in Kenya?" was the reason for initiating a CCF project in Kenya (CCF-K). While there have been reports of reduced sightings since 1990, we do not know how accurate past estimates have been as they have mainly focused on populations inside the National Parks and used calibration. In all previously documented studies it is estimated that as much as 90% of cheetahs live outside of protected parks and reserves. For this reason the CCF Kenya project was launched in December 2001.
The cheetah (*Acinonyx jubatus*) has a long history with man. Today the cheetah is running a race for survival. The Cheetah Conservation Fund (CCF) relies on individuals and organizations for assistance in developing programs, which will ensure the survival of cheetah. Partnerships with Governmental and Non-Governmental organizations are necessary to secure assistance, support and cooperative efforts.

At two points in history cheetahs were reduced to very small numbers, resulting in a genetic bottleneck that today threatens the survival of the remaining cheetah populations. During the Ice Age, when many species became extinct, it is estimated that cheetah numbers were reduced to as few as 50 individuals. From that small population, the early ancestor of the cheetah populated most of what today is known as Europe, Asia and Africa. In the 1500’s the cheetah was worshiped as symbols of speed and excellence cheetahs were used for sport and kept as royal pets. They were loved to near extinctions as many Czars, Caesars and other royalty removed cheetah cubs from the wild to tame them as pets or in a sport known as coursing.

While it is difficult to identify actual numbers, records and research calibrations have been able to estimate past and present cheetah numbers. In the 1900’s it is estimated that as many as 100,000 cheetahs ranged across Africa, Asia and India. By 1975 the estimated cheetah population was reduced to around 30,000 in Africa, less than 500 in Iran and the Indian population was eradicated. This was a result of agricultural development, habitat destruction and an increasing intolerance for predators in areas of human settlement. Threats posed by cheetah were both real and perceived. An increased demand for meat products meant that predators threatened livestock numbers. As a large predator, the cheetah is often confused with the other spotted cats and becomes the “scape-cat” due to its diurnal behavior.

Through the 1980’s the cheetah population was reduced even further with an estimated 15,000 cheetahs in Africa and as few as 100 in Iran. Although the rate of decline has slowed, the 2000 estimate was approximately 12,500 in Africa and 50 cheetahs in Iran. It is believed that the African numbers continue to decline in most of the range states. Eastern and southern Africa holds the strongest populations of cheetah today. Focused research provides us with information that can be used in management decisions on both *in-situ* and *ex-situ* conservation efforts.

At the current rate of decline the cheetah could become extinct in the next 20 years. With concentrated efforts in cheetah conservation in many of the countries with strongholds in cheetah numbers, it is hoped that cheetah numbers can stabilize and in some areas increase. The Cheetah Conservation Fund (CCF) was founded in 1990 by Dr. Laurie Marker. From its base in Namibia, CCF aims to provide baseline data to understand the factors affecting cheetah survival on Namibian farmlands. Through CCF’s scientifically-based studies, it assists in the development of policies and programs to sustain the current Namibian cheetah population. Successful programs can be used as models in developing similar programs in other cheetah range states. CCF works in cooperation with other researchers and organizations to develop systematic and scientific based approaches to cheetah conservation.
A systematic and scientific approach to conservation requires the ability to quantify threats and set priorities. It also allows for conservation actions to be guided by monitoring and evaluating programs. CCF’s Namibia research programs provide information for conservation-based on population ecology and demographic studies which evaluate the role of the cheetah in its environment. Health, genetic, and reproductive programs use biomedical collections (blood, hair, skin, sperm...) to understand the overall health of the wild cheetah population.

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The KWS launched cheetah studies in the Masai Mara National Reserve in September 2001. While CCF participates in this program, the Mara project is a KWS-initiated and operated project. The aim of the Mara project was to evaluate the effect of tourism on cheetahs and to identify individual cheetahs for census purposes. Ongoing studies have identified 42 cheetahs using photographs. Cheetahs are often seen lying down upon the approach of tour vehicles, most of which drive off road for a better view of the cheetah. While tour drivers frequently view this behavior as a sign of comfort, two-hour monitoring periods by researchers show signs of irritation (ear and tail twitching) by the cheetahs. Some cheetahs have learned to use the tour vehicles as a vantage point by climbing onto the roof for a better view of prey species; others walk along moving vehicles to get closer to the prey. Cheetahs have made some adaptations to their hunting behaviors by hunting during the early morning, late evening and lunch periods while tourists are in the lodges. Ongoing KWS projects continue to evaluate tourism impacts, but have added disease and predator interaction studies into their program.

The Kenya cheetah population was estimated to be between 500 and 1000 in the year 2000. This number is based on past studies and calibrations, however most studies were focused on habituated populations inside National Parks and reserves. CCF-K study focuses have been based on information from the past published studies. Initial studies focused in the Nakuru Wildlife Forum in the central Rift Valley. Conducting interviews with farmers and ground evaluation prompted an extension of the study into the Machakos and Laikipia Wildlife Forums. While cheetah populations still exist in many locations identified in past studies, these populations are pocketed into groups of 10-50 cheetahs. Pocketed populations are separated by dense human populations in the form of villages and low wildlife-tolerant commercial and group ranches.

Most farmers recognize that predators play a critical role in the health of the ecosystem by maintaining balance. The cheetah makes a kill every 1-4 days and eats a small portion, leaving the remainder for the scavengers and decomposers. The cheetah has a 50% success rate in making its kills, but as many as 50% of the kills are stolen by other predators. Competition for prey and loss of cubs to other predators causes the cheetah to move over 1000 km sq home ranges. The cheetah is built for speed, thus is not strong enough to defend itself from competition.
CCF-K aims to reduce conflict between farmers and cheetahs by working with local communities to find effective solutions through evaluating predator problems, farmer attitudes and livestock losses. Research in prey distribution and changes in vegetation assist in developing solutions based on scientifically-based evaluation and monitoring. Cheetahs are capable of recovery when left on their own, however conservation is a complex social and political process. It is the people who live with wildlife on a daily basis who will ultimately save the cheetah. While government officials develop the policies, it is the people who make the decisions on land and wildlife management. In order to be effective, conservation must address human needs. As human populations continue to grow, so do the requirements for housing, food, health care and education.

Livestock farmers have developed techniques for protecting their animals from predators. Tolerance for predators involves integrated and mixed land and wildlife management and monitoring systems. Livestock loss is an economic and emotional issue. CCF-K’s ability to listen and share information with farmers assists in data collection and in the decisions made by farm managers.

Due to perceived and actual threats, farmers have traditionally seen eradication as the only means of conflict resolution. This treats the symptom but not the cause. Today, alternative solutions must be identified and implemented to prevent the loss of biodiversity. CCF-K aims to increase awareness about cheetah and to share ways that farmers can improve livestock management to allow them to live peacefully with the cheetah. Improved livestock management includes good herders, healthy guard animals, good recordkeeping, precautions during birthing times, and secure night holding. Using donkeys and specialized dog breeds (i.e. the Anatolian Sheperd as used in Namibia) are methods that are shared with Kenyan farmers.

Farmers rely on the land and livestock for survival, thus they frequently have the “if it pays- it stays” attitude. In order to increase tolerance for wildlife, today’s conservationists must work with the land owners to develop alternative sources of income that supplement or replace traditional farming. These alternatives include ecotourism and guest farms which require large land plots in order to be successful. Hunting and sustainable utilization are other means of providing income for large commercial or group ranches with diverse habitats and a diversity of wildlife. New concepts in promoting wildlife-friendly products have been successful in many regions with wildlife and can be developed in Kenya. In promoting sustainability, predators can become a national treasure. In Otjiwarongo, the Namibia CCF base city, a sign now welcomes their visitors to “the Cheetah Capitol of the World.”

CCF has focused its efforts in Wildlife Forums where free game movement is encouraged between farms and ranches. Forums manage wild game which provide a prey base and manage predators as a part of a healthy ecosystem. Forums emphasize sustainability through both consumptive and non-consumptive use. Ideas from established forums can be used in promoting conservation in group managed ranches. Human-carnivore co-existence is possible when human needs and local problems are addressed in programs that meet those needs. Step-by-step actions and education programs are essential in the development of successful education efforts.

Students and volunteers assist in all aspects of CCF work both in Namibia and in Kenya. In addition to assisting in farmer interviews and habitat monitoring, the volunteers also aid in education work. Education activities include tourism presentations, community meetings and school programs. Specific projects include “The Great Cheetah Census” requesting tourists and individuals to submit photographs to be included into the database for identifying the density of cheetah populations. “The Snap-A-Cheetah” project is distributing 500 one-time-use cameras to allow rural farmers and rangers the opportunity to photograph the animals and habitat where they report cheetah sightings. The Snap-A-Cheetah cameras will not likely provide individual ID photos, but they will aid us in identifying areas of high cheetah densities for future conservation work. In both of the above projects the awareness of the plight of the cheetah is promoted and shared within communities and social groups.

Community development includes promotion of conservation actions and crafts through CCF international connections. School presentation share information on the balance of nature and discuss human-wildlife conflict issues. Activity pages and teacher resource guides are left with the schools
so the recipients of the program can share what they learn with others. Teacher workshops are being
developed. An art and creative writing contest was held with winning submissions available for a
traveling display in the US, UK and Kenya.

Volunteers are the backbone of CCF, locally and internationally. Student attachments require college
or university affiliation and a proposal that fits into the mission of CCF. Kenya students are required
to fund the inclusion of a local student or intern to increase capacity building on a local level. Interns affiliated with colleges, zoos or universities assist in all aspects of CCF daily activities. General volunteers can also join CCF for a period of one week to three months. Many zoos encourage their staff to participate in in-situ activities and will support projects under which their staff is involved. CCF invites volunteers and students of all levels to join our efforts through fundraising activities and international volunteering.

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following donors: CCF Namibia, Delamere Estates, East African Wildlife Society, Park East Tours/
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For more information on Namibia and Kenya programs and on how individuals and institutions can assist, please contact CCF through www.cheetah.org<

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