

O V E R V I E W
2004 year-end

Cheetah Conservation and Human Impact in Kenya
Mary Wykstra
Cheetah Conservation Fund, Kenya Representative

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INTRODUCTION

The Kenya cheetah project was launched in December 2001. The project team is based on the Delamere Estates (DE) and works in affiliation with the Kenya Wildlife Services (KWS) under a permit through the Ministry of Education and Technology through 2007. Kenya Representative, Mary Wykstra, and Research Assistant, Cosmas Wambua, represent the Cheetah Conservation Fund (CCF) in conducting research and education projects. Lumumba Mutiso works for CCF-Kenya (CCFK) as the Community Liaison Officer in the Machakos Wildlife Forum.

The main focus of the Kenya study in 2002 was the Nakuru/Naivasha region. Education programs and game monitoring continued in the Nakuru Wildlife Forum (NWF) through 2004. In 2003, comparative evaluations were made in areas of more frequent cheetah sightings in the Machakos and Laikipia Wildlife Forum districts.

A case study in the Machakos Wildlife Forum (MWF) was launched in January 2004. Other areas of evaluation include ranchland around the Tsavo Parks and Samburu Reserve in cooperation with private individuals and NGO's. A nation-wide cheetah census was launched in cooperation with KWS and East African Wild Life Society (EAWLS) in July 2004. Cooperative studies with KWS evaluate Masai Mara and Kajiado districts.

ORGANIZATIONAL STRUCTURE

Under the umbrella of CCF Namibia and Dr. Laurie Marker, Mary works in cooperation with Kenya Wildlife Service (KWS) and under advisement of CCF. Grants and donations specifically designated for Kenya are channeled through the General Operating Budget of CCF Namibia by the Cincinnati CCF administration offices for Kenya designation.

BASE OF OPERATIONS

CCFK operations are based at the Delamere Camp Manager's house on the Delamere Estates, Soysambu farm near Nakuru Town on the shore of Lake Elementaita. CCFK staff spends a lot of their time on the road and in the field, hence the base location is occupied less than 50% of the time.

ACCOMPLISHMENTS

The list of accomplishments from January - December 2004 for the Kenya project includes:

- Final report completed for Nakuru Wildlife Forum and CCF game counts on the Congreve section of the Soysambu Farm.
- Initial analysis from comparative interviews and habitat analysis in the Machakos Wildlife Forum (MWF) and Laikipia Wildlife Forum (LWF).
- Implementation of Nationwide census and awareness programs in collaboration with KWS and EAWLS based on Tanzania workshop for Global Cheetah Master Plan Census Committee
- Strengthen inter-Africa links through attending the Census Workshop with EAWLS and KWS representatives.
- Environmental Education Program development through several programs, presentations and event participation.
- Initiation of Great Cheetah Census, Snap-A-Cheetah and Cheetah Expressions programs.
- Ten presentations to tourists through local and international tour operators.
- Ongoing case study of problem cheetah in the MWF.

RESEARCH

Biomedical sampling

In cooperation with the KWS a protocol for biomedical sampling (blood, hair, skin), knock down (tranquilizing) procedure, necropsy procedure and measurements of cheetah has been developed. Sampling in the Masai Mara was conducted in April 2003. The procedure is available to all KWS and private veterinary practices to encourage the correct sampling for ongoing biomedical research. A second shipment of blood samples from KWS Mara cheetah sampling was sent to South Africa in June 2004. Additional samples collected from KWS are held at Nairobi Veterinary facilities. Calibration of Nairobi lab and South African lab will allow on site evaluation.

Ecosystem Research

The main focus of CCFK's research in Kenya is the assessment of farmland ecosystems for the long-term habitat viability for the cheetah. Final reports from MSc students Meredith Evans, Sarah Brooke and Bernadette Higgins are now available and included in findings for CCFK added to the completed analysis for the phase-one report at the end of CCFK's initial three-year study permit.

Strip count results from two years of data collection on the Soysambu farm on Delamere Estates shows the ungulate distribution over different vegetation densities. The count was set in an area of low human disturbance where a new tourism venture is now established. Results have been given to Delamere Estates and potential students for future ecological monitoring on the farm.

Human Impacts on Cheetah

Land use changes and an increase in human population and activity levels through out Kenya continue to cause disruption in migratory routes and land use by wildlife. While pocketed populations of game are still strong on large commercial farms and on unsettled public land, these populations are changing over time. Subdivision of land, disease, human-wildlife conflict and poaching has reduced prey base throughout unmanaged ranchland. Livestock loss to cheetah is typically viewed as a minimal threat compared to that of lion, leopard, jackal and hyena.

The case study in the Kiu region of the MWF allows the opportunity to identify the pattern of cheetah movement and livestock losses due to three cheetahs in the region that have been opportunistically killing goats and sheep since August 2002. This problem provides CCFK with the opportunity to involve community members in research and awareness of cheetah. Herders and managers assist in recording cheetah sightings. Groundwork has been laid and permission granted by KWS for telemetry studies of cheetah in MWF.

National Census

The current status of cheetah in Kenya is still of question. While information on behavior and demographics is interesting and necessary for cheetah survival, we cannot apply results until we know cheetah numbers and where our efforts will have the most impact on the future of cheetah survival. Phase I of the Nation-wide cheetah census project, in affiliation with KWS and EAWLS, includes interviews from the NWF and MWF. Cheetah census protocol involve transects in 20 km square divisions from the Masai Mara Reserve to Amboseli, Tsavo West, Chyulu Hills, Nairobi Park and Nakuru Park. Habitat evaluations include recording human and wildlife activities and vegetation changes as well as interviews and KWS incident record searches. The field work for this project is to be completed in January 2005 and analysis completed by May 2005. Additional focused census studies will continue as funding is secured.

Two awareness programs assist in determining cheetah distribution:

GREAT CHEETAH CENSUS requests tourists to submit photos of cheetah to assist with individual identification. Initially 2000 brochures were printed for dispersal into lodges and 2000 laminated brochures into vehicles. The main area of focus was the Mara as it is the most frequently visited tourist destination. The large amount of interest in this project has prompted the need to print additional hotel and vehicle cards for dispersal into a larger audience including Parks and surrounding areas of Laikipia, Samburu, Tsavo, Amboseli, Nairobi and Maralel. Funding for the second printing and an email site capable of receiving large photos was provided by Vintage Africa in Nairobi.

SNAP-A-CHEETAH requests participation from community individuals in remote areas. Throughout CCFK studies it has been difficult to know if people have seen cheetah or leopard. While questions about the animal behavior have frequently assisted in determining what cat has been seen, it often leaves CCFK with undetermined results. Many people say that if they had a camera they could show us the animal. CCFK initiated the distribution of 500 one-time use cameras into rural areas and requests the submission of photos including cheetahs, other wildlife, livestock losses and general habitat. Prizes for participation will encourage the return of the cameras and prizes for best photos of cheetahs will aid in awareness of cheetah presence.

Predator Conflict with Cheetah

In other studies throughout Africa it is known that cheetah are negatively affected by conflict with other predators. Interviews show that there are perceived to be problems with large numbers of hyena and leopard in the NWF and MWF and large populations of lion, leopard and hyena in LWF. Trapping and relocation of problem leopard and problem animal control of lion and hyena create an activity level across farms, in an attempt to eliminate the problem. In order to understand the impact of these activities it would benefit the cheetah project to encourage a better understanding of these activities, and their impact on the ecosystem.

Education

Eco-tourism

CCFK has given presentations to a number of tourism organizations including US operators Classic Expeditions, FunSafaris and Park East Tours, and Kenya operators JH Safari, Origin Safaris and Vintage Africa. CCFK staff remain members of the Kenya Professional Tour Guides Association as bronze members in the organization. Ongoing work with tour groups and the association raise the awareness of the plight of cheetah in Kenya.

School Education

Cheetah Expressions: Living in Harmony with the Cheetah was an art and creative writing competition held in the second school term. Representatives from eight regions (Nakuru, Bagoria, Laikipia, Samburu, Wajir, Tsavo West, Machakos and the Masai Mara) requested varying numbers of schools to submit for the competition. Over 400 entries were received and judges from Kenya's art and writing arena chose 80 top pieces. These pieces were divided for a display in the USA, UK and Kenya. The Expressions display will remain "on-tour" throughout 2005.

Local volunteers have assisted in developing a draft of a Kenya teaching workbook and activity pamphlet for Kenyan schools. Editing and evaluation of the book will continue in 2005.

Community Development

CCFK works with the Kiu community in tracking and identifying cheetah in the southern region of the Machakos Wildlife Forum. Community meetings are held to discuss dealing with the problem cheetah in the area. Proposals for programs dealing with livestock dips, insurance/compensation, crafts and water issues are being developed with the CCFK Community Liaison Officer.

Through interaction in a large number of communities craft persons have initiated a program in *Cheetah Country Kenya Crafts*. Developing styles, colors and patterns for these crafts we have developed a line of crafts specifically for raising funds for cheetah research in Kenya. The products were well received at the American Zoo and Aquarium Association and American Association of Zoo Keepers annual conferences in 2004 leading to further development of the program. This program will be formalized in 2005.

Higher Education

CCFK continues its relationship with the St. Lawrence University programme in Kenya. Monica Phillips conducted a four week Independent Field Study by assisting CCFK with game count analysis, education material development and community relations activities. Communications with Michigan State University in America and with the University of Erlangen-Nürnberg in Germany are developing an internship program for undergraduates.

Media

A strong communication remains with SWARA and TRAVEL NEWS Magazines. National Geographic and BBC interest in Kenya cheetah resulted in filming in the Mara and at Oserian Sanctuary in Naivasha.

Volunteer Programme

Heightened Travel Warnings in early 2004 limited unnecessary travel in Kenya. From the US, Susanne Garrison and Kayla Grams volunteered six weeks respectively. From Canada, Jokoba Klinger volunteered for two weeks. Local Kenya residents Amanda Perret, Alex Joji and Cheryle Robinson have been assisting with education materials, program development and fundraising activities. Interns, Milkah Njoki Kahiu and Wallace Isaboke, from East African Wildlife Society are assisting with the census project. Improving travel conditions by the end of the year resulted in a large number of volunteer applicants for 2005.

Fund/Awareness raising

Mary Wykstra promoted the Kenya programs on a visit to the US. Mary gave presentations at Binder Park Zoo, Michigan State University, Kalamazoo Christian High School, the American Association of Zoo Keeper's (AAZK) annual conference and Utah's Hogle Zoo. She promoted the craft project at AAZK and the American Zoo and Aquarium Association conference. She also participated in Utah's Hogle Zoo annual "Cheetah cha-cha" event.

BENEFITS TO KENYA

The evaluation of interview data collected in the first phase of CCFK work in Kenya is showing a clear distinction in predator attitudes in the three different Wildlife Forums. The number of research programs and education activities varies within the forums, hence it is clear to see what awareness can do for conservation. Human activity levels also vary between the forums in the form of land use and land fragmentation also giving a clear picture of the need for land use policies. Game numbers vary within each forum and do not appear to be as strong of a limiting factor in cheetah presence as the human

activity levels. The data and reports that are available to the Forums and KWS can be used in policy decisions.

The launch of the cheetah census program with EAWLS and KWS promotes a stronger background for claims of declining cheetah populations. The census will not only result in identifying areas for long-term cheetah conservation programs, but can also be used in policy decisions on translocation and problem predator control.

The development of programmes for schools and tourists directly benefit the recipients, but will also indirectly benefit those with whom the recipient shares the information. The success of the *Expressions* contest has resulted in increased interest on cheetahs in the areas of participation and a general international awareness through the traveling display.

Tourism is one of the largest revenue generators in Kenya, and cheetah are one of the key species that people come to see. The people of Kenya will only benefit from their relationship with tourists if the key animals continue to thrive.

PLANNED KENYA ACTIVITIES - 2005

CCF Kenya will:

- Use the results of the three Forum evaluations a comparison can be made using livestock, wildlife and program evaluation. This final report will be generated in 2005.
- Continue the development education and awareness programs for primary, secondary, adult and tourism sectors.
- Continue development of local and international student intern programmes.
- Complete Phase I of the census with KWS and East African Wildlife Society and generate report.
- Seek funding for and conduct Phase II and III census activities.
- Collect information on cheetah sightings throughout Kenya through the “Great Cheetah Census” and “Snap-A-Cheetah” campaigns.
- Organize photo census database for program analysis.
- Assist with biomedical sampling and measurement protocols for nation-wide use.
- Participate in workshops and programs that link cheetah and other predator projects together in Kenya for the benefit of ecosystem preservation.
- Continue linking Kenya research with the goals of the Global Cheetah Master Plan.
- Monitor case study cheetahs in the Machakos Wildlife Forum and link monitoring program with Global Satellite to Mobile network technology.

CCF KENYA RESEARCHERS

MARY WYKSTRA – CCF Kenya Representative

Mary has been working with wildlife her whole life. After studying pre-veterinary medicine at Calvin College in Grand Rapids, Michigan from 1982 to 1984, she received a B.S. in Zoology with a concentration in Animal Behavior from Michigan State University in 1987. After college, Mary worked as a Zoo Keeper at Binder Park Zoo in Battle Creek, Michigan. In 1989, she moved to Salt Lake City and worked at Utah’s Hogle Zoo as an Exhibit Technician responsible for fabrication of enclosures for a large variety of animals ranging from insects to elephants. In 1992, she was promoted to Exhibits Curator and duties were expanded to design the enclosures and supervise construction and renovations.

In 1998, Mary became involved with the Cheetah Conservation Fund (CCF), chairing a zoo keeper initiated fundraiser event. This event (the Cheetah Cha-cha) is now an annual event at Utah’s Hogle Zoo. In 2000, Mary moved to Namibia for six months to work as coordinator for the design and

construction team of CCF Namibia's Education Centre. In 2001, she returned to Namibia and spent another six months as a Research Assistant assisting in all aspects of cheetah care and research at the facility.

In December, 2001, Mary was appointed the CCF Representative in Kenya and launched a study of farmland issues affecting cheetah in Kenya. Utilizing information gathered from interviews with farmers and land managers in the Rift Valley region, this project aims to develop solutions to cheetah-human conflict issues. Mary is in close communication with both CCF Namibia and the Kenya Wildlife Service, in the attempt to establish cooperation in understanding cheetah status in Kenya and developing programs in conservation and education.

COSMAS M. WAMBUA – Research Assistant, CCF Kenya

Cosmas was born in April 1975 in Machakos, Kenya. After graduating with a Bachelor of Science degree in Biology from Dr. B R Amedkar University (Agra) in India, Cosmas volunteered with the Kenya Wildlife Service (KWS) for two years. His main duties involved mapping (GIS), vegetation mapping and animal census in various parks throughout Kenya.

In February 2002, Cosmas joined the Cheetah Conservation Fund (CCF) - Kenya team as a research assistant. He now assists with data collection, data entry and analysis, and the development of education programs. He continues to utilize his knowledge of mapping to assist the Nakuru Wildlife Forum and CCF through mapping and vegetation analysis to aid in understanding the status of cheetah habitat outside of protected parks.