

## CHEETAH CONSERVATION FUND - KENYA

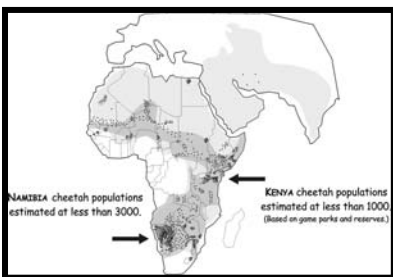
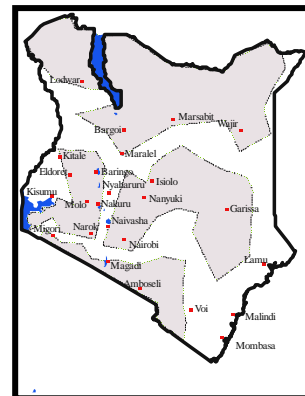
Newsletter

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***KARIBUNI – welcome to the first official newsletter dedicated to sharing information about Cheetah Conservation Fund efforts in Kenya.***

It is believed that the cheetah (*Acynonyx jubatus*) is declining in both numbers and ranges throughout Africa. It is estimated that cheetah numbers in Kenya are less than 1000 and that the range of cheetah habitat is reduced by more than 25% of its historical range. The Cheetah Conservation Fund - Kenya (CCFK) project was initiated in 2001 with the goal of understanding the issues facing the survival of cheetahs in Kenya. CCFK works in affiliation with the Kenya Wildlife Service (KWS) under a permit through the Ministry of Education, Science and Technology which is valid through August 2010.

*Estimated Kenya cheetah distribution based on studies conducted through 1998.*



***Historic range reduced from 100,000 cheetahs in 1900 to fewer than 15,000 in 2000.***

A case study in the Machakos Wildlife Forum (MWF) was launched in January 2004 utilizing community participation in cheetah monitoring. Lumumba Mutiso works with CCFK as a Community Liaison Officer in the MWF collecting information on livestock losses and cheetah movements in the Makueni region. As of March 2005, a MWF case study includes telemetry monitoring of a female cheetah and her cubs. Community development has been an integral part of CCFK programmes in the region.

In 2004, a nation-wide cheetah census was launched in cooperation with KWS and East African Wildlife Society (EAWLS). The census work includes identifying regions with reported conflicts with cheetah and the presence of cheetahs is confirmed through field work. The goal of the project is to assist KWS in identifying sustainable and unique populations of cheetahs for future studies and programmes. A report was generated in 2005 analyzing the first Priority regions and the ground work was laid for continuation of the study in 2006. The second phase of the census was initiated in May 2006 through funding from the Cincinnati Zoo Angel Fund and additional support from EAWLS Stichting Netherlands.

Supplemental programs in cheetah education and awareness are given in school, community and tourism sectors by request. Materials are developed with new information added as research findings support. Awareness and educational programs offer participatory involvement for mutual information sharing. Local and International volunteers and student interns assist in program development and activity participation where possible.

### KENYA STAFF

Mary Wykstra                      Programme Coordinator

Mary has a Bachelor of Science diploma in Zoology with a concentration in Animal Behaviour from Michigan State University. In 2000-1, she worked in Namibia 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. As the programme coordinator in Kenya she supervises staff, develops programmes and conducts research on cheetah ranges and on human wildlife conflict issues involving cheetah.

Since July 2005, the CCFK base of operations has been from a rented home north of Nairobi. The CCF Kenya Staff develop research and education programs under the support and mission of the Cheetah Conservation Fund.

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# RESEARCH

Research is the backbone on which policies and wildlife management decisions are made. CCFK research works with stakeholders to gather and analyze information on cheetahs and the issues that face their survival in Kenya. Since 2004 CCFK research has had two focus areas: 1) Nationwide mapping of cheetah distribution and 2) A case study in the Salama area of the Machakos Wildlife forum.

## Nation Wide Census

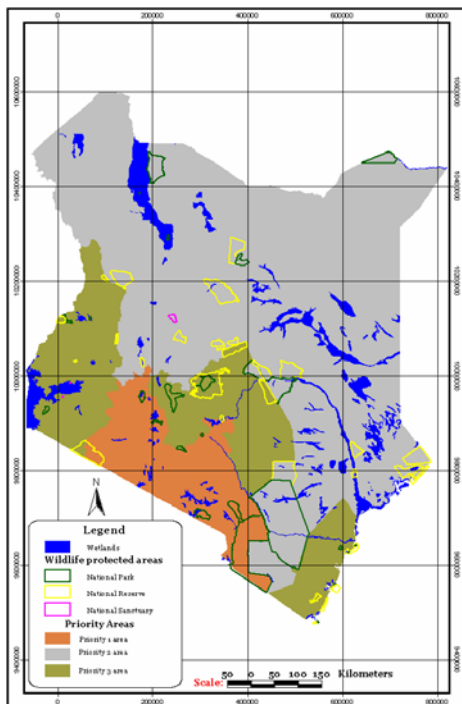
By Mary Wykstra, Programme Coordinator

The current status of cheetah in Kenya is believed to be on a continuing decline. Past population estimates are based on calculations from studies mainly focused within Parks and Reserves. The base of this project is through the EAWLS office in Nairobi using a team of two EAWLS staff. While information on behaviour and demographics is interesting and necessary for cheetah survival, we cannot apply conservation actions until we estimate cheetah numbers and determine where our efforts will have the most impact on future cheetah survival. Current population estimate studies were initiated in 2004, in affiliation with KWS and EAWLS, with the aims of 1) mapping conflict through analysis of KWS predator conflict reports; 2) evaluating cheetah presence through field data collection; 3) identifying areas of cheetah sustainability or unique situations in assisting KWS in identifying areas for further studies.

Phase one, completed in 2005, tested methodology where there was a higher degree of infrastructure in conservation, road network and security. Background work includes evaluation of KWS predator conflict records and reviewing reports from the areas targeted. Field work is dependant on the collection of KWS conflict data. Field work includes interview and observation based data collection for analysis through GIS mapping. Information on cheetah presence and areas of highest density are used as justification for long-term program development.

Weather and tribal clashes prevented field work in some of the northern and eastern regions in 2006. The remainder of the Priority 2 areas will be completed as soon as possible in 2007. Partnerships are essential for the completion of the project.

Areas targeted for the Nation-wide census include:



Target Priorities for Nation Wide Census

**Priority 1** (completed 2005) – Establish a map of presence, absence and baseline population estimates to fill in the gaps where focused studies had already been done (KWS or CCFK). This phase evaluated selected areas in Narok, Kajiado, Nakuru and Transmara districts including: Masai Mara National Reserve, Nairobi National Park, Amboseli National Park, Tsavo West National Park, Lake Magadi and their adjacent wildlife dispersal areas.

**Priority 2** – This area has less infrastructure and fewer past studies, but there is still a high need for data on presence, absence, and baseline estimates. It includes: Laikipia (report completed 2006), Tsavo East (field work completed 2006), Samburu (field work completed 2006), Isiolo (field work completed 2006), Meru Conservation Area (field work completed 2006), Marsabit, Nasolot, South Turkana, Kamnarok, Baringo, Bogoria, Wajir, Mandera, Turkana, Kora, Rahole, Tana river, Ijara, Lamu, Garissa.

**Priority 3** – This area has little past records of cheetah and has high human numbers. It includes: Ruma (from Masai Mara), the area from Nairobi (Thika) to Tsavo East, Shimba Hills (South of Tsavo).



Cosmas Wambua (CCF), Mary Wykstra (CCF), Ernest Ekeno (Samburu Reserve), Milkah Njoke (EAWLS) and Abdi Sukuna during Isiolo District Census field work August 2006.





# HUMAN WILDLIFE CONFLICT

By Sarah Brooke, Research Assistant



The cheetah is a species that is considered to be a source of conflict affecting the livelihood of people when it attacks and kills livestock. To better understand the impact that cheetahs have on farmers outside of Protected Areas, CCFK launched a case study in the Machakos Wildlife Forum in the south eastern region of the Makueni District in 2003. The area has a high human density with the majority of the farming being subsistence and only three commercial cattle ranches. Recent subdivision of commercial share holder ranches means that there is increased fragmentation of the landscape as people settle and cultivate plots of 5-27 acres. Extension of settlements and cultivation into areas historically only inhabited by wildlife often results in increased conflicts. Like the majority of rural communities in Africa, the residents in the study area suffer conflict from a variety of animals including; baboons, buffalo, cheetah, hyena, lions, jackals, leopard, pythons, serval cat, vervet monkeys and occasionally wild dogs.

An increase in human density and decrease of natural prey in the area results in cheetah, leopard and spotted hyena being the only resident predators. Cheetah are reportedly responsible for the majority of conflicts in the area. There is an estimated cheetah population of between 14 – 20 including lone females, males, sub-adults, male coalitions and females with cubs. In 2005-6, the Community Liaison Officer (CLO) conducted interviews with herders or owners who lost livestock. The CLO asks questions about livestock husbandry, the events at the time of the loss and about cheetah and other predator issues in the region. Where possible the site of the conflict is visited and the carcass is verified.

Results of 35 cheetah livestock loss verification interviews conducted in 2005-6 include:

- An average of 3.6 conflicts recorded per month,
- An average of 5.8 livestock were killed per month,
- 60% of the herds had only one case reported,
- 60% of the losses occurred in the afternoon and 20% in the morning where goats and sheep are usually killed by cheetah in the grazing area,
- Over 50% of livestock losses were in herds being tended by herders under the age of 18,
- The economic value of livestock lost to cheetah was 464,793Ksh (US\$7,200) in two years,
- More than 50% of the losses occurred in herds of less than 50,
- Losses appear to decrease during dry seasons,

A multitude of factors can account for livestock losses; predation, disease, drought, birth defects, injury, poison, natural causes and theft. Predation receives the most publicity both locally and nationally. It is important to put depredation of livestock into context with loss through disease and other factors. In further evaluation in this area, interviews are being conducted with both ranchers who have and who have not had losses to predators in order to compare livestock husbandry practices.

The area of Salama provides a unique opportunity to study a relatively large population of resident cheetah within a densely populated and fragmented landscape. The lessons that can be learnt on the spatial distribution, conflict and ecology of these cheetahs could be vital in ensuring the survival of cheetah populations outside of Protected Areas in Kenya and potentially provides a model whereby communities learn to be tolerant of cheetah.

*Photos: Above left – cheetah conflict occurs when they kill livestock. Above Right: Lumumba Mutiso discusses CCF activities with the Kiu Community. Below: livestock losses in the area are occurring during the day.*



**NEXT ISSUE: Correlation of case study female cheetah and her cubs with livestock loss.**

## KENYA STAFF

Sarah Brooke

Research Assistant

In 2003, Sarah worked with CCFK and the Delamere Estate to conduct her Master's research in the Nakuru Wildlife Forum through Manchester Metropolitan University. She returned to Kenya in August 2006 and has been volunteering to assist with the research and programme development. Her key interests are in Human-wildlife conflict resolution and community development. Her skills in data analysis and mapping have been a great assistance to the Kenya project. She also has strong skills in community relations and is greatly respected by the communities where CCF conducts research.



*Sarah pictured here with cheetah from the Nairobi KWS orphanage.*



## COMMUNITY



### Building A Dip

By Mary Wykstra,  
Programme Coordinator

Photos: The Marwa Dip – before and after. On opening Day, 20 January 2006, over 300 livestock are protected from ticks.



CCFK works with the Kiu community in tracking and identifying cheetah in the southern region of the Machakos Wildlife Forum. Through evaluation of community needs, CCFK chose improvements of livestock dips as a target community project. A livestock dip uses a short acting chemical bath to aid in the control of disease by treating livestock to kill and repel ticks, mosquitoes and tse-tse flies.

The renovations of four livestock dips (Kima, Mwanyani, N'gaamba and Marwa) occurred in October – December 2006. The dips were chosen based on their area in relation to cheetah conflict and by meeting criteria essential for accountability within the community. Renovations included resurfacing the concrete entry and exit paths, sealing of water tanks, replacing posts and rails and removal and replacing roofing. Three dips selected pyretheroid based chemical while one chose an amatraz based chemical. The dip management committees manage accounts, operate and maintain the

dips and purchase acaricide. CCFK seeks funding to purchase acaricide on a monthly provision equal to that of ¼ of their overall usage.

CCFK encourages better livestock management through workshops and community meetings where country experts will assist in bringing information on livestock production and management capacity to the people. This project aims to develop a sustainable community project through a three year plan whereby CCFK will collect data on livestock husbandry and predator tolerance issues.

The project was made possible through sponsorship from Cheetah Friends Europe (Netherlands), NK Brothers (Kenya), Rudy Neilson and Peter Barber (Canada) and Unga Feeds (Kenya). Constituency Development Fund money from the government was granted to the project community dip management committees to aid in the renovation costs.



*Peter Barber (volunteer) receives thank you gift from the Kima Dip Management Committee for his generosity and assistance in the dip renovations.*

### KENYA STAFF

*P. Lumumba Mutiso*

*Community Liaison Officer*



Lumumba is a small scale farmer in the Kiu/Salama area. In 2003 his livestock were being killed by cheetah and leopard, but he became interested in the predators after meeting CCFK staff. Lumumba was hired as the Community Liaison Officer in 2004. Using motorcycle, bicycle and foot travel he collects data on livestock losses, cheetah sightings and is the relay for information to and from the people of his community.



## Volunteers – 2006

CCFK accepts local and international volunteers to assist with research, education and community development. Volunteers provide support for the programmes conducted in Kenya and bring fresh ideas into the project. We would like to thank everyone who assists CCFK in even the smallest capacity!

Local Kenya residents Amanda Perret, Cheryle Robinson and Alex Joji (Knowledge is Power) continue assisting with education materials, program development and fundraising activities. Naomi Summerville-Large (Kenya) was an intern with CCFK as a part of her application for the President's Award from Greensteds Secondary School. Christian Pilard of Eco-Sys (Hong Kong) assisted CCFK with project planning in the Craft Programme in April. CCF US staff person, Patricia Tricorache (USA) visited CCFK to assist Mary and Dr. Marker in programme planning in June. Divyan Khoda (UK/Kenya) joined in field work and community meetings in August. Sandy Ball (USA) visited Kenya in September to assist with the education material and programme development, while Nicole Winterwood (USA) assisted with field work. Peter Barber joined the project for 6 weeks to assist with the livestock Dip renovation in October-November. Sarah Brooke (UK) returned to Kenya in December 2006, after completing her Masters with CCF in 2004, to volunteer for 3 months. Chifuyu Horikoshi-Beckett (Japan/USA) visited in December to evaluate the feasibility of conducting her PhD research on cheetah habitat and social structure in affiliation with CCFK and KWS. Cherie Schroff (USA) is also evaluating feasibility for testing spoor counts as a means of determining cheetah population density in the Tsavo National Park.



*Left: Susanne Garrison, Cosmas Wambua and Mary Wykstra. Right: Mary Wykstra (far left), Lumumba Mutiso (third) and Cosmas Wambua (far Right) with Lapidaire family.*

Susanne Garrison volunteers her time to raise awareness of cheetahs in the US and visits Kenya each year to assist in the development of the project. The Lapidaire Family from the Netherlands provide ongoing support for facility and community development through funding with the Netherlands based Cheetah Friends Europe, and through physical assistance in the field.

## Capacity Building

*Cosmas M. Wambua - Research Assistant*

Cosmas was accepted into a Master's course at Addis Ababa University in Ethiopia. His coursework in the Biology department will focus on Ecology and Systematic Zoology. His field work will begin in September 2007 to evaluate the ecological impact of the subdivision on the habitat and prey base of the Salama area of the Kiu region. His studies will compliment the existing CCFK work in the region and provide a platform on which policy recommendations can be based for the land use in the area.



Cosmas was born and raised in 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. In February 2002, Cosmas joined the Cheetah Conservation Fund Kenya team as a research assistant. He assists with data collection, data entry and analysis, and the development of education programs. He has ESRI/GIS training in mapping and the Masters studies will further develop his skills in ecological monitoring.



*Top: Cosmas presenting school children with information on the cheetah. Bottom: Cosmas assists the KWS Mara Cheetah Project with cheetah measurements.*



The first 5 years of research in Kenya have been made possible by these donors and partners

**THANK YOU!**

Amanda and John Perret  
Bay Foundation  
Cheetah Conservation Fund  
Cheetah Friends Europe  
Cheryle and Anthony Robinson  
Cincinnati Zoo Angel Fund  
Cleveland Metroparks Zoo  
Classic Escapes  
Columbus Zoo  
East African Wild Life Society  
Hein Lapidaire  
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Nakuru Wildlife Forum  
Nancy Lapidaire  
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Vintage Africa Safaris  
Walt Disney World – Conservation Initiative

***Cheetah Conservation Fund  
PO Box 1611 Sarit Centre  
00606 Nairobi Kenya***

**We need your Help!  
Support CCF**

Visit the Cheetah Conservation Fund web site: [www.cheetah.org](http://www.cheetah.org) for more information on worldwide efforts in cheetah conservation. In Kenya you can assist through wiring funds to:

Mary Wykstra-Ross - Cheetah Conservation Fund OR

By Check: Cheetah Conservation Fund

Bank: Barclays Bank of Kenya LTD

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- **A day of Radio Tracking - \$20 (1400ksh)**
- **Sponsor a School Presentation - \$50 (3500ksh)**
- **Census Field Trip (1 day) - \$75 (5000ksh)**
- **Adopt-a-Dip (1 month) - \$100 (7000ksh)**
- **Become a CCF Member - \$250 (17500ksh) - \$1000 – (70000 ksh)**

