What does TGT say?

By John Stewart

The Friedkin Conservation Fund(FCF) is an NGO affiliated with Tanzania Game Tracker(TGT) and Wengert Windrose Safaris(WWS). FCF undertakes anti-poaching and monitoring work in all areas where TGTS and WWS operate, as well as community development projects in adjacent communities. The FCF also aims to increase its involvement with other NGOs and wildlife initiatives in Tanzania. To this end, FCF has under-taken to support the Tanzania Carnivore Project. All TGTS/WWS hunting areas now have full time camp managers/anti-poaching coordinators. These individuals have been supplied with data sheets and explanatory notes from TCP and, it is hoped, will be able to provide the TCP with a great deal of useful information. Because of the year-round nature of the work of TGTS/WWS camp managers, and the variety and size of areas in which they work throughout Tanzania, they are extremely well-placed to do so. In addition to gathering written information, camp managers also carry digital cameras at all times. Whenever possible, significant carnivore sightings can be recorded with photographs linked to GPS positions. FCF wishes the Tanzania Carnivore Project the very best of luck and looks forward to a productive involvement in its activities.

Views and Comments

By Jeroma Kimaro Editor, Designer, Artist

Dear readers, it is our hope that you enjoyed our first issue of the Carnivore Bites. In this 2nd issue we have tried to improve it so that you can grasp as much as possible about the Carnivore project in Tanzania. However, much depends on you. Carnivore News Bites welcomes articles, photos or drawings of carnivores for publication. We shall respond to you immediately by all communication. Furthermore, we would like to thank all individuals who have already contributed to our activities. Although it is difficult to thank every one individually, we are especially grateful to Tour and Safari companies who are greatly helping us in sending information and distribution of Leaflets to tourists who send back information and photographs of carnivores. We shall keep all of our contributors informed on the project progress. We welcome views and comments from readers.

Tell us TODAY!



Carnivore sighting of the month

The carnivore sighting of the month goes to Daudi Peterson of Dorobo Safaris who saw, not one, but THREE striped weasels!

As well as a zorilla and a white tailed mongoose, among others



The use of 'GIS' in Carnivore monitoring

By Alex Lobora

For wildlife monitoring, the ability to model spatial distribution and changes in distribution of wildlife is of considerable importance. Once spatial distribution can be adequately modelled, the distribution and abundance can be monitored efficiently over time, and future changes can be predicted. These spatial characteristics and relationship are often cumbersome to identify and difficult to display with traditional ground surveys or statistical models. Thus, using Geographic Information System (GIS) has become an invaluable tool in ecology studies and developing wildlife habitat model. The description of spatial analysis and spatial display of GIS not only provides efficient way of data handling, storage, and analysing, more importantly, it also enables mapping of wildlife distribution, identification of patterns, and generation of habitat spatial characteristics, hence, a useful tool in decision making for wildlife conservation including sustainable utilization of wildlife resources. Mapping distribution of carnivores gives a clear understanding of carnivore distribution pattern that otherwise difficult to see. Further studies such as Biological identification, habitat requirements, and habitat survey and mapping are needed to examine possible causes for distribution patterns of carnivores in some areas.

TAWIRI Annual Scientific Conference Dec 2003

By Sarah Durant

The Annual TAWIRI Scientific Conference was bigger than ever this year, covering 3 days with 48 talks from a wide variety of researchers across Tanzania. The first day was taken up with ten talks about long term studies conducted in Tanzania, including three talks specifically about carnivores. Craig Packer of the Serengeti Lion Project talked about the impressive long term data collected on lions in the Serengeti. He showed that the migratory wildebeest were the most important factor regulating lion numbers in the Serengeti. The increase of the wildebeest since the rindepest epidemic, throughout the 70s and

80s, drove an increase in the lion population. However lion numbers are far from stable. The canine distemper epidemic in the lion population in 1994 had a major impact, killing a third of the population. Since then lions have shown a rapid recovery, and the population is

now booming, with numbers above pre-distemper levels. In contrast, the Ngorongoro lion population has been held low, probably due to repeated disease outbreaks.

In my talk, I presented information from the Serengeti Cheetah Project. This 30 year study has shown that cheetahs in protected areas suffer high predation rates from other large carnivores such as lions and spotted hyaenas, and hence areas without full protection, where lion and spotted hyaena densities are low, are likely to be important for cheetah conservation. The cheetah's low population size makes them particularly vulnerable to fragmentation and isolation. They also have large home ranges, and are likely to range outside even the largest protected areas, making them vulnerable to edge effects. The long term survival of cheetahs therefore relies on the maintenance of healthy populations outside the protected area system. Such a strategy may be relatively easy to implement in Tanzania, where land use is

dominated by traditional pastoralism, a form of use that is largely compatible with wildlife conservation. Finally, Sarah Cleaveland, from the Serengeti Carnivore Disease project, told us about the way diseases affect carnivore populations. She pointed out that pathogens are integral components of natural ecosystems and play an important role in the evolution and ecology of carnivores. However, diseases have important impacts on populations, as illustrated by the canine distemper outbreak in lions in 1994, and the eradication of wild dogs from

the ecosystem in the early 90s. In the following two days there were further talks of relevance to carnivores, including one given by Grant Hopcraft from the Serengeti Lion Project, which showed that lions need areas of cover in order to hunt successfully, and that



Some of senior research scientist who attended the TAWIRI conference Dec 2003 with Permanent Secretary - Minisrty of Natural Resources and Tourism and Director General - TAWIRI

this is more important than prey densities in governing their distribution. Other talks did not specifically address carnivore issues, but many were still relevant. For example, Tim Caro's talk about changes in large herbivore numbers across protected areas in Tanzania is pertinent to large carnivores who depend on these species for prey, and Jon Fjeldså's fascinating talk on biodiversity across Africa has implications for carnivore biodiversity. Overall, however there was limited information about carnivores outside the Serengeti, and it would be extremely useful to have more data from carnivores else where in Tanzania. Nonetheless, the conference provided fascinating insights into the variety of different studies and research going on in Tanzania, all contributing to building an understanding of Tanzania's biodiversity and the threats to it's long term conservation.



NGORONGORO LION CONSERVATION RESEARCH Dennis K. Ikanda

The Ngorongoro Lion Project is a part of the wider Serengeti Lion Project that is committed to the conservation of the African lion (Panthera leo) in the Ngorongoro Conservation Area through long-term research. The lions of the area have attracted much international research interest and have been studied for over 30 years, because they live in co-existence with humans in the same natural environment. The lions can loosely be divided into two main populations that live in the Ngorongoro Crater and across the Ngorongoro Maasailand, The Ngorongoro Crater is an isolated, but suitable lion habitat of which resident prides of lions have a stable prey base and benefit from better habitat management and improved anti-poaching programs, while those else where must endure a fluctuating prey base and the risks associated with livestock predation. Today the Ngorongoro Crater lions suffer from disease outbreaks and inbreeding, while those else where remain vulnerable to traditional Maasai lion hunting . Until recently little was known of lions in Maasailand, Lions in Maasai land occasionally predate on livestock and injure the Maasai inevitably bringing the two into conflict. The area is currently the focus of study. We are currently trying to understand the tempo-spatial abundance of lions in this area. Furthermore, we are assessing human caused mortality factors for the lions and livestock depredation and losses for the Maasai. Findings will enable the improvement of traditional Maasai livestock management and the development of a lion management policy for the Ngorongoro Maasailand. It is hoped this will increase tolerance for the lions and enhance their traditional co-existence with the Maasai in the wider Ngorongoro Conservation Area.

News from the Serengeti Cheetah Project

Sarah Durant

The rains have come to the Serengeti and the Thomson's gazelle have moved in large numbers out on to the short grass plains. The cheetahs are following the gazelle, a few weeks behind, finally waking up to the mass emigration of their favourite prey item. Now, with fawns dotted over the short grass plains, those cheetahs who have made the move are very well fed. With the beginning of the wildebeest calving in January as well, their lives can only get better. It doesn't get much better than Ndutu right now, as it fills up with gazelle and wildebeest calves, and many different cheetahs are being seen close to the lodge and campsites, including the two groups of territorial males, Colin, Owen and Mr Paul, and Mick and Jagger. We have had some new cheetah cub arrivals, as Amanda has emerged with three delightful new cubs. Whilst Amarula's four adolescent cubs have just gone independent. They have been entertaining visitors on the Seronera circuit in January, but have since moved south following the gazelle herds. However the hottest news of the month is the dissolution of the Gol and Naabi territorial male coalitions. Ben, of Ben and Jerry, who used to hold Gol territory (with their third brother Haagendaz until the beginning of 2003) has disappeared, as has Bowmore, of Ardbeg and Bowmore, who together held Naabi territory. At the beginning of January, Jerry teamed up with Ardbeg, and both males have since been seen together at Gol and Naabi. We have yet to see them scentmark. For more information on the Serengeti cheetahs please visit:

www.wcs.org/meetthecheetahs.

