RCP helps to save a rare ground pangolin

by Michael Kimaro, Mathew Bajuta, Zakayo Ngalowoka and Alphonce Constantine

Recently RCP team members, Michael, Mathew, Zakayo and Alphonce had an interesting encounter with a ground pangolin, which had wandered into the house compound of a local pastoralist. The villager had kept the pangolin for a month before RCP became aware of it, believing – according to local traditions - that pangolins have magical powers to predict the future and bring blessings if kept in the home. In Tanzania, ground pangolins are sometimes referred to as Bwana mganga (the doctor) because every body part is believed to have some medicinal value. Locals believe that burning pangolin scales will keep away lions and improve the health of cattle, and, if kept, will bring good luck and rain. In some parts of Africa, it is also considered good luck to catch pangolins and give them to important people, such as local chiefs, as gifts.
The rescued ground (Cape) pangolin survived on a diet which, according to the villager, apparently included watermelon and flour. The species is listed as vulnerable on the IUCN Red List because the species has declined by nearly 40% in less than 30 years due to over-exploitation for bushmeat and because people have many traditional uses for them. Pangolins are extraordinary creatures - their tongues can be longer than their bodies, and they are the only mammal covered in scales. Unfortunately, these scales can sell for $3000 per kg and pangolins are recorded as the most poached mammal on the planet. However, all pangolins have now been listed on Appendix 1 of CITES which should hopefully limit further trade.

Initially the pastoralist believed that by keeping the pangolin his livestock would increase dramatically, but then he was told by his friends that this species is very important and he could sell it for a lot of money. He started looking for people who would buy it, including witch-doctors. He was given the contact number for the Ruaha Carnivore Project by a villager in Kitisi who thought that RCP might want to buy it. The pastoralist contacted Mathew Bajuta, the Lion Defender programme coordinator, who discussed the issue of how to secure the pangolin with Dr Amy Dickman and other members of the RCP staff.

Mathew explained to the villager that it is an illegal act to sell a pangolin in Tanzania, and educated him about the conservation status and the species and the importance of every individual pangolin. After learning more about pangolins, the villager agreed to show the pangolin to other members of the RCP staff Mathew Bajuta, Alphonse Constantine and Zakayo Ngalowoka who visited him at his home. The staff met with the village leaders, and an agreement was reached that RCP staff could collect the pangolin for release back into the wild.
There was concern that if the pangolin was released back into the village it might be recaptured and sold, so it was agreed to release it back into the nearby Ruaha National Park. Therefore, on the 23rd of November Michael and Zakayo handed the pangolin over to Mr Moronda, Head of Community Conservation Services, and Park Ecologist, Mrs Halima, who were both very happy with the rescue of such a rare and amazing animal. This is a rare happy ending for a pangolin story, and the whole team were really pleased. ‘We were thrilled we could all help release this amazing animal back into the wild and save at least one from being used for medicinal or bushmeat purposes,’ say Michael, Mathew, Zakayo and Alphonse, who were instrumental in the rescue.
Photo: Michael Kimaro: handling over the Pangolin to the Acting Chief Park Warden, Mr. Moronda, surrounded by villagers from Isele village who were there on an RCP Park trip, organised by Fenrick Msigwa, Rashid Jumbe and Amry, our Isele village human-carnivore conflict officer.

Photo credit: Zakayo Ngalowoka, Ruaha National Park staff photographer

Dr Amy Dickman wins Saint Louis Conservation Award

Congratulations to our Director, Dr Amy Dickman, Pembroke’s Kaplan Senior Research Fellow in Wild Felid Conservation, who was recently honoured for her work, receiving the 2016 St Louis Zoo Conservation Award on 17th November.

She was recognised for RCP’s work to develop effective conservation strategies for large carnivores in Tanzania’s remote Ruaha landscape where she and the team have been researching carnivore ecology and reducing human-carnivore conflict in Ruaha, Tanzania— one of Africa’s remaining great wildernesses - for the past 12 years.

Dr Jeffrey P. Bonner and Dana Brown, President and CEO of St Louis Zoo commented on her accomplishments as a Conservationist and her ‘remarkable progress through her tireless commitment to saving wild things and wild places.

Dr Dickman said: ‘Receiving this award has been a huge honour, and it reflects the incredible hard work and dedication of our entire Ruaha Carnivore Project team in Tanzania, who work tirelessly to protect local communities, improve livelihoods and reduce carnivore killings.’

She continued: ‘St Louis Zoo’s WildCare Institute has been our longest-standing supporter, and with the help of them and other partners, we have produced the first scientific data on Ruaha’s globally important carnivore populations, and helped reduce the pressing threat of human-carnivore conflict. This has had significant benefits for both people and predators in the Ruaha landscape, and we are extremely grateful for this recognition, and for all the support we have received to make this conservation work possible.’

Dr Dickman has spent the past eighteen years working to save carnivores in Africa; she
was first based in Namibia with the Cheetah Conservation Fund, and has been in Tanzania for the past twelve years.

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**An investment in Ruaha’s local youth**

When the local communities were asked, which benefits they would most appreciate from carnivore presence, education was one of the top priorities. Therefore, RCP has developed two very successful education programmes, namely **Kids 4 Cats** and **Simba Scholars**, which provide local village children with improved educational opportunities.

**Kids 4 Cats** is a programme which links local schools with international schools who partner with them, and effectively ‘adopt a school’. Through the relationship, the local
school children are provided with basic educational tools such as desks, books and pens, while the international students learn more about what schools are like in a very different setting from theirs.

**Simba Scholarships** are awarded to promising local village children, who would otherwise never have the opportunity to attend secondary school. The programme is very competitive and the chosen candidates are awarded 4-year scholarships valued at US$2000 each. This year 6 children were chosen, and RCP is keen to develop the programme to include more children.

*Photo*:
*During a recent visit to the RCP camp, renowned photographer, Billy Dodson accompanied Fenrick on a visit to the Idodi Secondary School and caught him and the class on camera.*

*Photo credit: Billy Dodson*

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**Portraits of our Ruaha lions**

For the holidays, we’re celebrating with some up-close portraits of Ruaha lions from a recent Park trip. This all-important outreach RCP activity takes villagers and school children to the Park on educational and awareness trips where they get to see carnivores and other animals in non-threatening environments.

On one such trip with pastoralists from Mapogoro village, the group came upon a majestic male lion (in photo), estimated to be about six years old, from the known Bushbuck Pride, resting in the shade. They are asked several questions about the lion and were impressed by its size, as generally the lions they see on village land are much smaller. This lion belongs to a pride that moves between the Mwagusi Bridge and Confluence Point. The lion was photographed near the Mwagusi Confluence where the Great Ruaha River and the Mwagusi River meet.
Photo: The majestic 6-year-old male which captivated the villagers on the recent Park visit.
Photo credit: Fenrick Msigwa

Photos: On the same trip the group spotted these lions from the Mbagi Pride in Mwagusi River area. The pride currently has 5 cubs which are 6-7 months old. The lions had mud dripping from their lower jaws due to the muddy water in the place where they were drinking.
Meet the Team: "Hi! I’m Fenrick Msigwa…"

I’m a Junior Research Assistant at RCP. My family is based in Njombe which is an area well known for its large commercial wood plantations. My parents are farmers and grow food crops such as beans and sunflowers.

Growing up, I would assist my parents with farming activities and would spend weekends attending Sunday school learning the Bible and related religious activities such as singing. This has remained with me as I still enjoy music and listening to gospel. Reading on a variety of subjects gives me motivation, ideas and a certain wisdom which I would not receive, unless I read.
After my studies in tourism management and during my internship at the world-famous Serengeti national park, I heard about the Ruaha Carnivore Project through a colleague and I was immediately interested in their work, especially with the local communities. I later went online to learn more and decided to send them my CV.

To my disbelief, I had an instant reply, inviting me for an interview! I made the journey to Iringa and later that evening was given the news that I would be working with Ruaha Carnivore Project’s community programmes.

Today, I am in charge of several of the programmes involving the education of village children which include -

Kids4Cats is a “twinning” programme. It pairs local schools with international schools,
for example in the US and UK. The international schools raise funds for the village schools which provide vital benefits such as books, pens, desks and even sometimes computers. When I interview school staff and students, I assess their needs and ensure that the school is able to continue providing education to the students. I also make the purchase of necessary items such as books or desks and hand them over to the school. In addition, we have the Simba Scholars programme which offers local communities the opportunity to continue educating their children by providing them financial assistance by paying school fees for the most promising students, as well as extra tuition in subjects where the students are suffering. As you know... children are the same everywhere! This means that I have to regularly monitor their progress and ensure that they are making the most of this opportunity presented to them.

One of my favourite programmes remains Park Visitation. Local villagers are given the opportunity to visit Ruaha National Park on whose periphery they live. It allows them to appreciate the wildlife and its benefits while receiving education on the importance of preserving the environment. My other duties include the supervision of programmes such as School Feeding and assisting my colleagues wherever required.

What I love about working with Ruaha Carnivore Project is the commitment to capacity building in all the employees and the techniques in working with local communities and involving them in conserving their natural heritage. I would like to remind my fellow Tanzanians and community members that the wildlife we see today is because of the foresight of our grandfathers and elders. They were wise and understood the importance of balance between need and greed. Without conserving what we have, our children shall be bereft of the opportunity to benefit from and enjoy our beautiful natural heritage. It is our duty to ensure that we leave them a world which includes what was left to us by our ancestors.”

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**Busara carries the seed of hope for Ruaha guarding dogs**

One of the main threats to large carnivores in this area is human-carnivore conflict, mainly over attacks on stock. In southern Africa, particularly Namibia, specialised breeds of livestock guarding have proved successful at reducing carnivore attacks and therefore conflict. There had been no trials of such dogs in East Africa until RCP brought in 10 Anatolian Shepherds from the Cheetah Conservation Fund in Namibia. Those dogs were able to work well (one dog even chased two lions away from a livestock enclosure!), but they proved too large for pastoralist families to feed easily.

Therefore, we are now trialling the placement of crossbreed Anatolian-village dogs, in the hope that these dogs will retain the protective nature of the Anatolians but be easier for local families to maintain. This month, Busara came into her second season and was mated with a large local dog. We don’t yet know if she is pregnant, but hope that she will produce the next generation of guarding dogs for livestock around Ruaha.
Changes in land usage: a disturbing trend

Habitat loss is one of the major global threats to large carnivores and many other wildlife species, and even amazing landscapes such as Ruaha are not immune to this threat. The landscape in which RCP works is a mixed-use landscape comprising protected areas, villages, bushland and agriculture. Over the past year, however, there has been a noticeable change in land use in the Kitisi village area, where our RCP camp is based, with more and more of the bushland being converted to shambas (farms). Bushland supports both pastoralist grazing activities as well as providing habitat for wildlife, and its conversion to open farm land is a concern for both pastoralists and conservation. Recently, we responded to a call from our Lion Defender Darem Philipo. He had found the tracks of a male lion in an area known as Nyamnango - a rich habitat for lions due to the presence of prey species and river.
This area, which only a year ago, had been dense bushland, had recently been cut and burnt for agriculture. The spoor (prints) of the lion were found in the middle of this desolate space - he had left the protection of the Wildlife Management Area and walked across the open farms to drink from the river. This can be risky for the lions themselves, and it also reduces the habitat for their prey and their chance of successfully hunting in an area with little cover.

Pastoralist areas are often not prioritised in land-use plans, as they can appear ‘wasteful’ because extensive areas are needed over the year to maintain livestock, and often only part of the area is being used at any one time. However, this kind of extensive rangeland provides invaluable habitat for prey and carnivores, so developing conservation-minded land use plans would be very valuable in these kinds of landscapes.
Photo: The Lion Defender Darem Philipo surveys what was previously rich bushland in Nyamnango
Photo credit: Billy Dodson

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**Tusk Award Winners 2016 announced!**

As a previous winner of a Tusk Award, Dr Amy Dickman and the RCP team congratulate the 2016 winners and applaud them for their achievements. The Duke of Cambridge presented the Tusk Conservation Awards, recognising three unsung heroes - Manuel Sacaia, Cathy Dreyer and John Kahekwa - each of whom has dedicated their lives to saving Africa’s wildlife. Sir David Attenborough was also honoured for his services to conservation.

[https://www.youtube.com/watch?v=f68zNoVYDsc](https://www.youtube.com/watch?v=f68zNoVYDsc)
Photo: Amy was lucky enough to attend the Awards again this year, and was particularly thrilled to meet a lifelong hero in the form of David Attenborough! (from left) Amy, David Attenborough and Sarah Watson from Tusk
Photo credit: Kate Silverton

Photo: The Prince William Award for Conservation in Africa was awarded to John Kahekwa and will enable him to create real and tangible change in the lives of people and wildlife in the DRC
Photo credit: 2016 Getty Images/Chris Jack
Wildlife spotted in the local villages and the Park

Despite the global importance of Ruaha for carnivores and other wildlife, it has been extremely poorly studied. RCP is working with students and communities to place camera-traps across different land use zones to better understand the diversity and distribution of wildlife in this amazing place.

Photo: Camera-trapped buffaloes in Mahuninga village

African buffalo are listed as a species of Least Concern on the IUCN Red List. Despite this relatively low status on the list, in 2015 the Wildlife Health Center at the University of California, Davis (WHC) and partners began an investigation into the decline of African buffalo in Ruaha National Park (RNP), Tanzania. The extent of the decline is not yet understood. Monitoring health and movement of collared buffalo throughout the year will hopefully help researchers identify areas of increased risk of disease, poaching and other factors that could cause a decline. The buffalo are being tested for several diseases, including bovine tuberculosis (bTB), a bacterial disease often found in cattle.
Photo: Camera-trapped leopard in the Park

The growing threat facing these iconic animals in the wild resulted in their conservation status declining from Near Threatened to Vulnerable in the June 2016 update of The IUCN Red List of Threatened Species. Whist it is the most resilient and adaptable of big cats, it has nevertheless seen its historic range decline by up to 67% in Africa and 87% in Asia, due in no small part to pressures exerted by rapidly expanding human populations. This has contributed to extinction of the leopard in 23 of its 85 original range countries. The distribution of leopards in East Africa has been reduced, in particular in Somalia, Kenya, Ethiopia and central Tanzania.
The lesser kudu is a forest antelope, while the greater kudu is found in woodlands and bushlands. A pure browser, the lesser kudu feeds on foliage from bushes and trees, shoots, twigs, and herbs. The total population of the lesser kudu has been estimated to be nearly 118,000, with a decreasing trend in populations. One-third of the populations survive in protected areas. The lesser kudu is listed as Near Threatened on the IUCN Red List.
African wild dogs are one of the most interesting and unique species in the animal kingdom, not least of all because, unlike other dogs that have 5 toes on each foot, they only have four. These engaging pack animals are one of Africa’s most endangered carnivores and hold IUCN priority status for conservation of canid species in Africa, second only to the Ethiopian wolf.

African Wild Dogs have disappeared from much of their former range and the population is currently estimated at approximately 6,600 adults in 39 subpopulations, of which only 1,400 are mature individuals. Population size is continuing to decline as a result of ongoing habitat fragmentation, conflict with human activities, and infectious disease. Given uncertainty surrounding population estimates, and the species’ tendency to population fluctuations, the largest subpopulations might well number less than 250 mature individuals, thereby warranting listing as Endangered.

Hyenas are commonly mistaken for African Wild Dogs, but there are many differences, both physically and behaviorally. The most important being that hyenas are not dogs and are more closely related to mongooses and cats. The females of these slope-backed animals look externally very like males, so much so that people used to believe that spotted hyaenas were hermaphrodites. Hyenas have long been associated with witchcraft, and are often killed due to these false negative beliefs.

The spotted hyaena is listed as Least Concern on the IUCN Red List as the species remains widespread in Africa, and the total world population well exceeds 10,000 mature individuals, however, there is a continuing decline in populations outside protected areas (and even within some protected areas) due to persecution and habitat loss, although this is not sufficient to warrant listing in a threatened category.
Giraffes are among the most awe-inspiring creatures on the planet. With their powerful legs ending in sharp 30-centimetre (12 in) hooves, they’re a match for any lion and generally lions will only attack a giraffe in a large group. They’re the ninjas of the wild and can kick in any direction and in a manner of ways - their kick can not only kill a lion, but can actually decapitate it.

Giraffes are great water-savers and only need to drink once a day as they absorb almost all the water they need from the plants they eat. They don’t sweat or pant to cool down, like most mammals, instead, they allow their body temperature to fluctuate with the temperature around them, enabling them to conserve water and to keep cool in any situation.

In 2015 the IUCN Red List revised the status of giraffes from Least Concern to Vulnerable due to a dramatic 36-40% decline from about 160 000 individuals in 1985 to just under 98 000 in 2015. The growing human population is having a negative impact on many giraffe subpopulations. Illegal hunting, habitat loss and changes through expanding agriculture and mining, increasing human-wildlife conflict, and civil unrest are all pushing the species towards extinction.

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**4 December - International Cheetah Day**

RCP joined thousands of people around the world to celebrate cheetahs on this day in the calendar where a spotlight is brought to bear on the imperilled state of the species in the wild. The Ruaha Carnivore Project, assisted by the Cheetah SSP and other partners, has developed a sightings programme where Park drivers and tourists record sightings of cheetahs, which has helped one of our PhD students, Leandro Abade, build the first predictive cheetah distribution map for this landscape.

Cheetahs have disappeared from vast tracts of their historic range and are listed as Vulnerable on the IUCN Red List. In Africa they are now known to persist in only 10% of
their historic range. Southern and Eastern Africa are the species' strongholds in Africa, but there has been significant range loss across all regions. In Eastern Africa Cheetahs are known to occur in only 6% of their historical range.

The Eastern Africa Cheetah population is estimated at just over 2,500 adults and independent adolescents distributed across 15 subpopulations (IUCN SSC 2007a). Only four of these subpopulations are estimated to number 200 animals or more, including the Ruaha landscape with an estimated population of 200. However, the cheetah population in Ruaha landscape has never been studied and we are collecting the first scientific data on their population in the area.

RCP works hard to reduce human-cheetah conflict and ensure local communities see benefits from living alongside this incredible species. With your continued support of the Ruaha Carnivore Project, we can help secure one of the most significant cheetah populations in East Africa, and to produce benefits for both cheetahs and local communities.

Photo: A map of the areas which are likely to have most suitable habitat for cheetahs in the Ruaha landscape.
Photo credit: Leandro Abade

THANK YOU ~ ASANTE SANA

As always, we thank all our donors for their generous and committed support.

RCP has numerous programmes which require funding in the following areas -

Ecological research - RCP provides vital data on Ruaha’s little-known carnivore populations through camera-trapping and recording carnivore sightings. 22 drivers from 8 lodges are engaged in the sightings programme, with more than 9,000 carnivore sightings recorded to date. Research is an important pillar of the RCP and local and international scholars are associated with the project via WildCRU and the Oxford University. Engaging citizen scientists in this research is something we intend to explore more in 2017.
In addition, we engage local villagers through our **Community camera-trapping**, where the villagers themselves are trained and employed to put the camera-traps out on village land. They receive points for each wild animal camera-trapped, and those points are converted into vital community benefits such as healthcare, educational and veterinary supplies.

An important element of RCP’s work is around **protecting the livelihoods** of villagers living in proximity to carnivores, which leads to reducing conflict between carnivores and villagers. This includes securing livestock enclosures, whereby hundreds of bomas are fortified annually using local methods.

Where **guarding dogs** are placed with villagers, attacks on livestock are dramatically reduced. The current focus is on **breeding resilient guarding dogs** and maintaining the existing guarding dogs placed with villagers.

The RCP **Lion Defenders** programme works closely with the Lion Guardians organisation in Kenya and has adopted their model for the Ruaha landscape. Influential local villagers are selected and trained to become Lion Defenders, who actively preventing and stop lion hunts.

**Outreach & Education** - **Kids 4 Cats** is a school-twinning programme where local schools are 'adopted' by international schools at around US$500, which is used to buy much needed education material and equipment.

**Simba Scholars** are supported through their secondary schooling, providing benefit for the individual scholars, their families and their villages. The cost to US$2,000 per student and RCP is keen to expand the programme to more students.

**DVD nights and Park trips** provide insights into conservation and species in a fun, no-threatenining environment. To date more than 20,000 attendees have enjoyed DVD nights and more than 650 people have been on Park trips.

Should you wish to know more about individual programmes we will happily send you more information. Please contact our communications manager, Margaret Roestorf at margaretroestorf.rcp@gmail.com. Should you wish to speak directly to the Director, Dr. Amy Dickman, please contact her at amy.dickman@zoo.ox.ac.uk.

**To donate to RCP you can use one of the following channels:**
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To pay via **cheque** please contact Amy Dickman at amy.dickman@zoo.ox.ac.uk
We close this year’s final newsletter with one of the most unusual photos (above) to come from Billy Dodson’s recent trip to Ruaha, with an oxpecker apparently being licked by a giraffe! We look forward to continuing to share our news from the field with you via these newsletters, our Facebook page and the project website www.ruahacarnivore.com

Until 2017… kwenda vizuri and asante sana ~ go well and thank you very much!
The Development and Alumni Relations System (DARS) provides a common source of data on all alumni, donors, students, staff and friends of the collegiate University. Our long-term intention behind this shared resource is to improve mutual understanding, by enhancing the quality of our communication at all levels and developing a better appreciation of our relationship with alumni, donors and friends.

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