

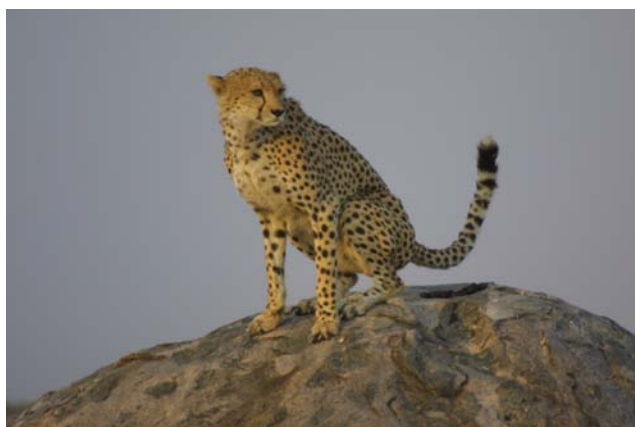
## Africa Dream Safaris

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### **The Serengeti Cheetah Research Project**

#### **The importance of being a glorified Pooper Scooper!**

Every job has a messy side to it, and being a field researcher for the Serengeti Cheetah Project is without doubt, no exception. Apart from collecting demography data, we are also responsible for collecting genetic material from as many cheetah individuals as possible. In our case the genetic material from cheetah individuals is collected in the form of scat, a messy procedure which is not as easy as it sounds, and can take ALL day to collect. Let me explain.



Once a cheetah sighting has been found, it is important to try and ID it whilst in the field with the help of the ID cards. If we have genetic material from that individual that standard procedure is to give a sigh of relief, collect the necessary data and continue looking for other cheetahs. If you have ID'd the cheetah and found that we do not have genetic material, it is important to hang around until scat

is produced and can be collected. This is what we call Sh\*t watch. There are of course other ways one can collect genetic material such as getting samples of skin, blood, saliva or tissue, but no one is that brave! Collecting scat sounds easy enough but there are a number of obstacles that one might come across making it quite difficult. Let me explain. First of all it has happened in the past that you wait all day (my record is 11 hours) and still go home empty handed. It is a true test of patience. My worst experience was waiting for 11 hours with Taurus, who did nothing to help me out. I went home frustrated, and hungry only to find that the baboons had been dining on some sort of laxative berry and had made a complete mess on my verandah! However the day doesn't always end in this way. When the deed is done, the next challenge is to find it, which can be very difficult especially when the grass is long and thick. Once the cheetah gets into its squatting position, it is most important to keep an eye on where he/she is, and to drive towards that bit of vegetation as soon as he/she moves off. Once you get to the area you think the deed was done, you park the car between yourself and the cheetah. It is very important that the cats don't see you get out of the car as this can cause them stress, which is the last thing we want to inflict on them. Once out of the



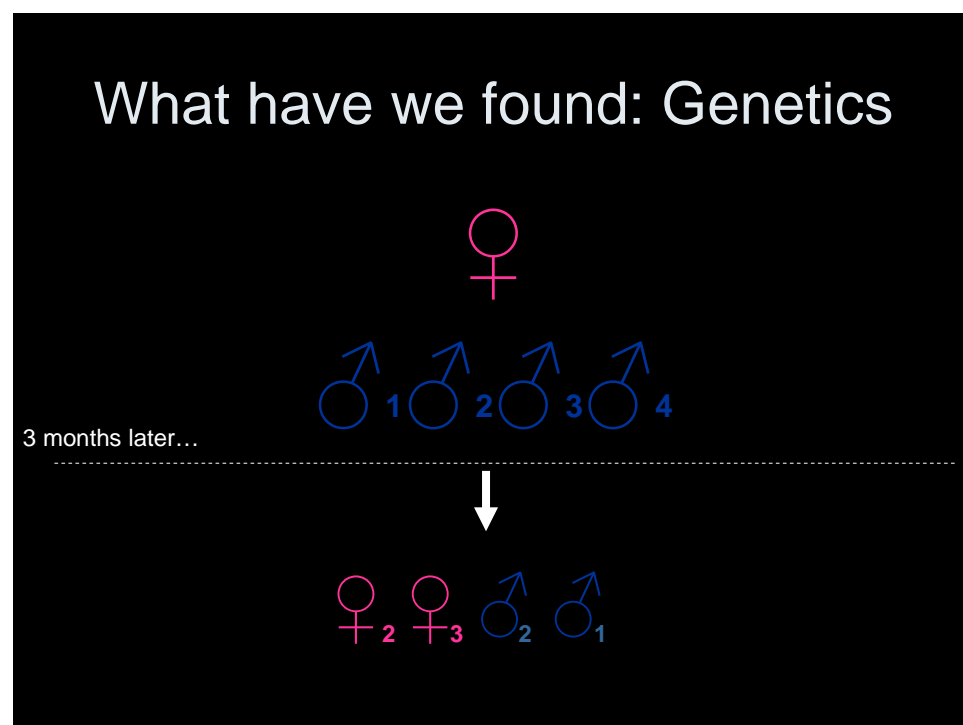
car, especially if the grass is long, it is difficult to see where the scat is, so it is important to rely on our other senses, in this case our sense of smell can be quite helpful. So, ladies and gentlemen, if you are out on safari and you see a field researcher bent over 90 degrees smelling around in the grass, they are not crazy! They are just doing their job.

Once the scat has been found, life becomes easy again. Two small samples are collected in little plastic tubes and filled with 96% ethanol. This is then shipped to the UK, in these days of high security, in checked in luggage which can be quite risky, for analysis.

### **Why is collecting genetic material so important?**

We use the genetic material to find out paternity. We usually know who the mother of cubs are because cubs stay with their mothers for the first 18-24 months, however what we don't know is who is fathering them? Are just a couple of males responsible for fathering all the cubs, or is the genetic diversity higher? Are territorial males more likely to mate with females than non-territorial males? Collecting DNA samples from as many individuals as possible, with male cheetahs being the highest priority, can help to answer all sorts of questions.

So far the results have been very interesting. We have found that females are highly promiscuous and that nearly half of all litters with more than one cub have multiple paternities!!!



*The diagram above shows that a mature female will mate with more than one male, and three months later when her cubs are born, they are from multiple fathers.*

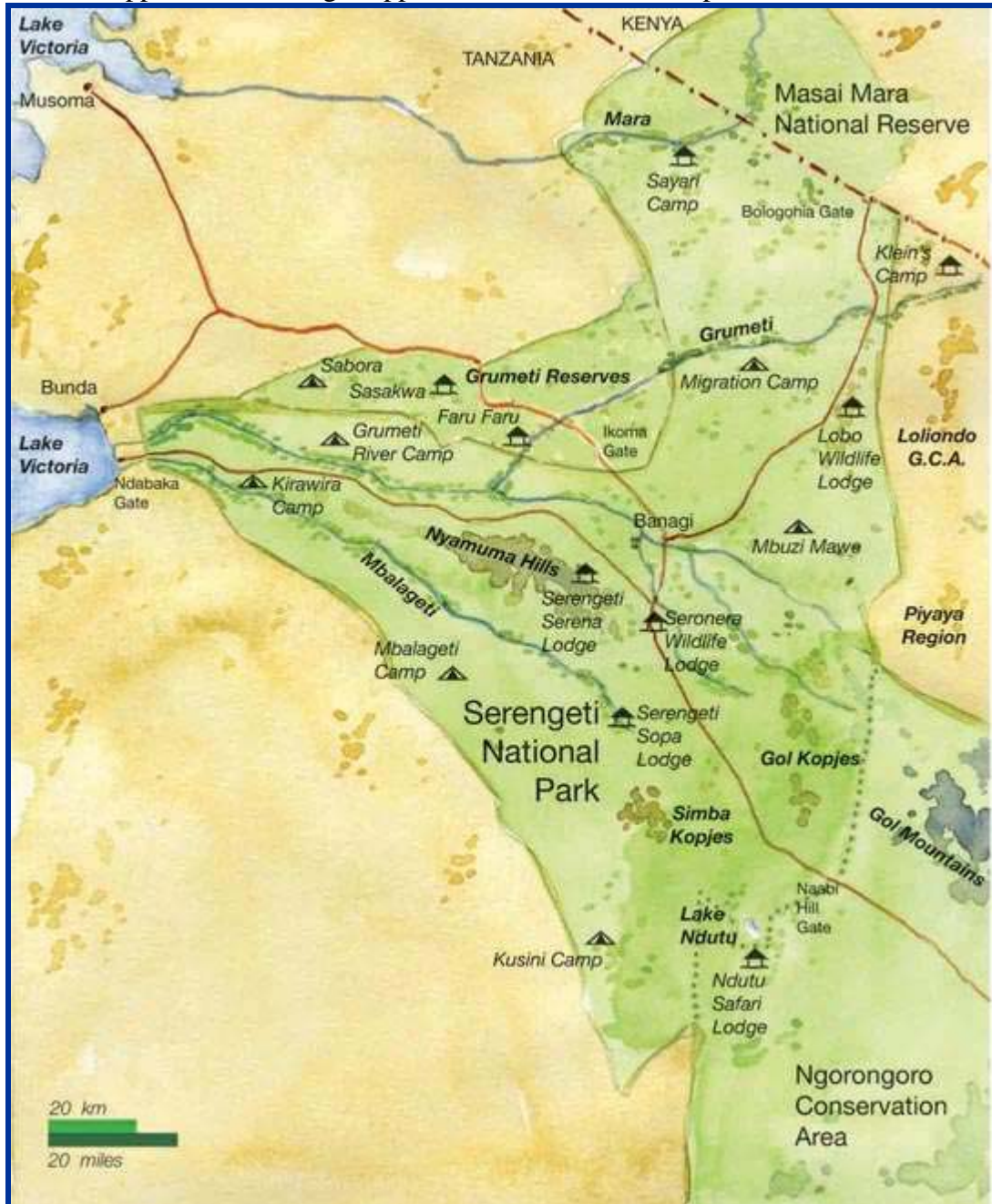
The fact that females show no mate loyalty, allows paternity to be reasonably well mixed. This is not the case for maternity though. The data suggests that only a few females contribute to the next generation, because most females do not produce surviving cubs. The females that are more successful at raising cubs are usually from

mothers and grandmothers who were successful at raising cubs, thus most females in the study area are descended from very few lineages.

In conclusion although collecting scat can be frustrating and messy, but its importance far outweighs the effort!!

**Kwaheri Cheetahs of the wet season, Karibu Cheetahs of the dry season.**

During the months of June, July, August, the transition of the wet season into dry season clearly takes place. The plains go from being bright green to being a dry yellow. The dust picks up. The great herds travel north. And with all that change, the wet season cheetahs become more and more difficult to see, and the dry season cheetahs appear after having dropped off the radar for a couple of months.



*The blue area shows where cheetahs are more likely to be found in the wet season  
The yellow area shows where cheetahs are more likely to be found in the dry season*

In the wet season cheetahs are mostly seen on the short grass plain which is where the gazelles migrate too. Good places to find them include Gol Kopjes, and the Ndotu area, which is thriving with cheetahs during the rains. In the dry season, the gazelles migrate back to the north, and so the cheetahs follow. Good places to find cheetahs in the dry season include Makoma hill, Rongai and Simba Kopjes. For this reason I will update you on some of the known cheetahs, but also introduce you to some of the new cheetahs that I have been reunited with over the past three months.

### **Update on known cheetahs**

#### **Loopy Lou's Boys**

Although Loopy Lou hasn't been spotted in the last three months, her male cubs have been quite the travellers! Last month they were being good brothers and looking after their slightly younger adopted sister for a couple of days in the Ndotu area. Since then, they have been seen further and further away from home. By the end of May they were seen around Naabi Gate, which is about 30 km from 'home', and by the beginning of July they were seen on the five hill track very close to Seronera, which is about 60 km from 'home' as the crow flies. The boys were not looking too good, they were both suffering from mange. Mange is a skin disease caused by mites and is usually an indication that the cheetah is suffering from stress. It should not be a surprise that Loopy Lou's boys were suffering from stress, as in the weeks prior to being seen close to Seronera, they were also seen around Semetu Kopjes, and Boma Kopjes. Both of these areas are the territories of other Cheetah males. The brothers must have known that had they come in contact with the other males, there would have been punch up, so unless the boys were confident enough to want to take over the territory, it would have been important for them to duck and dive between territories.



*The boys in June looking healthy, compared to one month later where they can be seen suffering from mange.*

Loopy Lou's non-adopted female cub, has not wandered as far as her brothers. She was last seen on Caracal plateau around Ndotu peeing up a tree. Its possible that she is advertising that she's in season, and that she's ready to become a mother!

#### **Eleanor and her two new boys**

Eleanor was last seen in April by herself. She had just completed a tremendous job of raising 5 cubs to independence, an amazing achievement considering it was her first litter. Instead of taking some time to catch up on rest, she had swollen nipples meaning that she was again pregnant. In fact there is some speculation that the Koffie

boys could be responsible for this. On the 20th of January 2009, Eleanor was seen with the Koffie boys by an African Dream Safari Alumni whom had taken pictures and sent them to the cheetah watch campaign to be ID'd. On the 18<sup>th</sup> of August, driving back to Ndotu from the Kusini area, Eleanor was sitting close to the Korongo that leads up to two trees with her 2 new male cubs! The cubs were in great condition and looked to be about 4 months old. It was truly great to see this amazing mum again. Now the big question is, are the Koffie boys fathering the cubs? And if so, who? Biologically speaking this could be possible. If Eleanor was in a courtship with the boys by the end of January 2009, the gestation period for cheetahs is about 3 months which means the cubs would have been born by the end of April. This would explain why Eleanor was seen in April with swollen nipples. Although she was not seen with cubs in April, cubs are usually hidden in a den, usually in a marshy area, for the first 6 weeks of their lives. This meant the cubs would have been introduced to the outside world by about mid June and means they would have been about 4 months by August. It all matches up! All that remains to be done is to collect DNA from the cubs and find out if Mocha, Latte or Espresso are the fathers. In any case, fingers crossed she does as well with her second litter as she did with her first!

Eleanor's five cubs from her last litter are now all independent. The two males have formed a coalition and are the only ones that I have seen in the last three months. They were hanging around the first tree line at Kusini. The boys are still very habituated and one of them decided to have a rest on the roof of my car, and although we don't encourage this sort of behaviour, I was stuck in one place for a quite a while! Although I have not seen her female cubs, I am not too alarmed. With the shift from wet season to dry season we can assume that they have moved off and are still doing fine. Hopefully they'll show up in the Ndotu area around Christmas time.

### **Squeak and co. versus the Lioness**

One cheetah mother I would like to introduce to you all is Squeak. Squeak and her sister Bubble, were first seen as little cubs in April 2005 with their mother Paprika. In September 2008, Squeak introduced us to her own 4 six month old cubs, and she has been in the public eye ever since. As she has been seen by so many tourists, including some of the Africa Dream Alumni, I thought it might be fun to give a detailed account on what she has been up to. Over the last 3 months I have spent quite a lot of time with them as I was hoping to collect scat samples from the cubs. Over the three full days that I was with them, I only managed to collect scat from the male cub, who did the deed on a daily basis, his three sisters on the other hand were very lady like and were clearly concerned with their privacy. In any case, on the early morning of the 21<sup>st</sup> of July, I witnessed an event that made my heart beat a little faster than usual. I was with the 5 cheetahs, when all of a sudden in the distance I saw a lioness walking straight towards them! Lions kill cheetahs! In fact 60% of cheetah cubs that die in their first two months are killed by lions. All sorts of doomed thoughts entered my head. The lion stopped and focussed on the cheetahs. The cheetahs had all stopped and kept their eyes on her. I had expected the cheetahs to skulk off which is what usually happens but instead one of the cubs started walking straight towards her! I had never seen this before and I couldn't believe it...what was going on? After scanning more closely it was clear that the lioness had cubs of her own. The lioness and the one curious cheetah cub were heading straight towards each other. When all of a sudden, the lioness went for the cub!! My heart was doing overtime, but I was amazed at what I saw next. As the lioness went for the cheetah cub, the remaining 4

cheetahs positioned themselves in a circle around the lioness, making these calling noises. The cheetah calls would distract the lioness and she would go from chasing one cheetah, to chasing another! Whilst she was chasing one, the rest would run towards her calling, tempting her to chase them instead. It was as if they were trying to tease her in such a way that she would want to go for one of them, but couldn't decide on which one to go for. This went on for about 30 minutes, all through which I was anxious for it all to be finished. Finally the lioness gave up being teased and went back towards the river to find where she had left her little cubs.



*Squeak with her four cubs, relaxing on a termite mound at the Seronera River*

Apart from teasing lions the cubs are now also at the stage where they are learning to hunt by themselves. On the 20<sup>th</sup> of July I saw them resting under the shade of a tree at Makoma hill. They were close to the road meaning that they could be admired by lots of passing by tourists. All of a sudden, a Thomson gazelle fawn who had clearly lost his way appeared right in front of them. One of the cubs spotted this, and determined not to let his little snack get away, she went for it. Chasing the fawn was not a problem... but then what do you do with it after you've caught it? Clearly the cubs had no idea! They chased the fawn, knocked it down, and then sat around. The little fawn, clearly a fighter, took every chance it could to try and get away. As soon as it began to run, the cubs took off after it, knocked it down, and waited. This went on and on for about 15 minutes, during which time the number of tourist vehicles and increased, by the end of it 30 vehicles full of tourists were getting a look at what was going on. They all got a very up close and personal experience because the fawn tried to get away by weaving in and out between vehicles, and of course where the fawn goes, the cubs follow! Clearly some people were affected at the cruelty of nature, however learning how to hunt is one of the most important lessons a cheetah cub needs to learn, it is essential for its survival once it becomes independent. After about a quarter of an hour, Squeak took control of the situation. She put the fawn out of its misery.

If you think you might have seen Squeak and her four cubs, get your pictures out and see if you can match up her spots, to her ID shots below. If you've got a match, let us know! If you don't have a match, send in your pictures to the cheetah watch campaign and we can let you know who it is that you have seen and a little bit about them!



*ID pictures of Squeak*

### **2009, the summer of Love!**

July 15<sup>th</sup>, started out as just an ordinary day. I was driving around in the area around Masai Kopjes when I spotted Taurus. Although he has lost his brother, Taurus is a strapping large male who has managed to hold a territory between Boma and Masai Kopjes. As I was getting my ID pictures, I noticed he was focussed on something. I scanned in the direction he was looking in and sure enough, he had his eye on a lady. Her name is Bailey, a young female, who was the cub of Amarula. She was minding her own business on a termite mound, but was giving him the eye every now and then. They just sat and watched each other for about half an hour, he was very focused, she was very aloof. After about 30 minutes of watching he decided it was time to make a move. He stalked over towards the termite mound, and although I'm sure she must have seen him coming, she continued minding her own business. It took him about 8-9 minutes to stalk the 100 meters towards her until finally they got acquainted.



*Hes checking her out*



*Shes checking him out*



*He makes a move*



*They get acquainted*

As I mentioned before, females show no mate loyalty and so its not surprising that cheetah romance is never very romantic. Generally with consort pairs the male will ‘kidnap’ the female and will hassle her until they are ready to move on. Lots of hissing and snarling goes on, as was the case. As can be seen from the last picture, many tourists were lucky enough to see the whole event take place, which is great! The second couple that I saw was on the 1<sup>st</sup> of August at Simba Kopjes. Lady Godiva was being courted by the territorial males of the area, Maurus and Jerome. Maurus & Jerome (named after two of the senior staff at the Tanzania Wildlife Research Intstitute, TAWIRI) are two remarkable males whom were first seen with their mother, Amarula, in August 2002. On average males live to be about 3-4 years old, however these strapping boys have just hit their seventh year. Not only have they looked after themselves extremely well, but they have been territorial since 2005. In the dry season they are they kings of Simba Kopjes, and in the wet season they rule the area around Gol. Maurus suffers from a bit of mange, but that doesn’t seem to stop the dynamic duo from keeping their territory.

Lady Godiva, whom was mentioned briefly in the first newsletter, has proven to be quite successful at raising cubs to adulthood. She is the proud mother of the Koffie boys, Espresso, Latte, and Mocha whom are still territorial of the two trees area around Ndotu, and Madeline who, as far as we know, has raised 5 cubs from two different litters to independence, thus also proving to be a great mum.





*Lady Godiva with Maurus & Jerome at Simba Kopjes*

The three were seen sitting in the shade of a small tree at Simba Kopjes. They all seemed very calm until Lady Godiva would get up and take a couple of steps in a random direction. Within no time the boys would be on their feet, hissing, snarling, and growling at her, until she gave in, and sat back down. It was clear that the boys were not finished with her yet... like I said, there is nothing romantic about cheetah consort pairs, but then again, as the females are highly promiscuous, maybe we shouldn't wonder why!

### **Cheetah's you can ID on sight**

There are only two cheetahs that I can ID on the spot, both of whom I would like to introduce to you. The first one is Tiramisu. Tiramisu is an older female whom was



first seen as a cub with her mother Cocoa in June 1999. Cocoa was one of the best mothers the project has ever seen, and Tiramisu grew up with 5 siblings, two sisters namely Profiterole & Eclair, and three brothers; Ben, Jerry & Haagendaz. However, as far as we know she is the only one from that litter who is still around, Tiramisu can be identified by a scar that she has on her

right side. How the scar got there I am not quite sure, it was there already when she was quite young. Chances are it was lions.

Tiramisu is one of my favourite! Whenever the pressure is on to find cheetahs, either because I am running out of time to find my quota of 20 different sightings per month, or donors are visiting and have an afternoon to go and look for cheetahs, I always end up finding her!

She has raised cubs from two litters to independence, from her first litter she raised a female cub, Pannacotta, whom hasn't been seen in almost a year. From her second litter she raised two cubs, Strudel & Banofi to independence whom are often seen hanging around the Makoma/Seronera area.

The second cheetah that is rather distinguished from other fellow cheetahs is Peregrine. Peregrine is a large male cheetah whom was first seen with his mother Carrie (named after Carrie Bradshaw from the famous sex in the city series) in August 2003. Recently it appears that he has been in some sort of a fight because one third of his tail has gone missing!! How this has happened one can only speculate!



As far as I know Peregrine does not have a territory. Last year he was seen scent marking around Seronera airstrip and along the Seronera River, however he was not seen there for very long. Since then he has been seen in all sorts of places from Ndotu, to Gol to Seronera. In fact last year he was recorded to have travelled 28.5 km within a day and a half. One afternoon he was seen around Simba Kopjes, and two days later in the morning he was seen around Ndotu!! Being quite the traveller it's not surprising that he runs into a bit of trouble every now and then, but it's good to see he's still around!

Ladies and Gents of the Africa Dream Safaris Alumni before I finish off the second edition of the Serengeti cheetah project newsletter I would just like to thank all of you who have sent in pictures to the cheetah watch campaign! And for those of you whom have just returned from a no doubt wonderful safari, if you were lucky enough to have seen cheetahs, I would like to invite you to send in your best side-view pictures (of about 400kb) to the cheetah watch campaign. We will try to ID them for you and get back to you to let you know whom you have seen and a little bit about them!

Asante sana  
Laura