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Abstract: A new organization called Cheetah Conservation Botswana was looking for volunteers for a minimum one-month time period. Botswana has one of the largest free-ranging cheetah populations remaining, but local farmers still persecute them and consider them pests. This paper is a diary and describes the work of a volunteer.

Cheetah Conservation Botswana

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My fourth trip to Africa, in November 2003, began with an email to the wildcats mail list. A new organization called Cheetah Conservation Botswana was looking for volunteers for a minimum one-month time period. The cost (which goes directly to the project and also covers lodging, meals, and local transportation costs) was extremely reasonable. Other similar volunteer opportunities are much pricier. Botswana has one of the largest free-ranging cheetah populations remaining, but local farmers still persecute them and consider them pests.

Rebecca Klein, the CCB project coordinator, met us at the airport in Gaborone. We were to spend the first night at Mokolodi Nature Reserve. The CCB office is located at Mokolodi, which is just outside of Gaborone ('Gabs'). In the morning, the project veterinarian Kyle Good picked us up for a visit to Mokolodi's two tame cheetahs, Duma and Letotse. They were orphaned as cubs. We then met the field biologist Ann Marie Houser whom we would be working with for the next month. We then headed off to Jwaneng, a town about 150km from Gabs where the field project is located. A very large diamond mine run by Debswana Mining Company (part of DeBeers) is located there, and they have established the Jwana Game Reserve around the mine itself.

Many animals have been introduced into the reserve - kudu, impala, springbok, eland, gemsbok (oryx), zebra, wildebeest, duiker, steenbok, giraffe, and red hartebeest - and are doing well. The only predators are small ones - brown hyena, cheetah, and jackals mainly, with a few leopards. Warthogs dig holes under the fence around the reserve, and the farmers around the reserve claim that the mine's cheetahs are killing their goats and cattle. The project is radio-collaring cheetahs in the reserve and collecting other data to determine if this is true. They also talk to local farmers about ways to protect their animals, such as timing the births of their animals to coincide with the births of the wild game animals, redesigning their corrals ("kraals") to keep cheetah out, or keeping an aggressive mother donkey with their herds.

On arriving at the game reserve, Ann Marie stopped at a 'crime scene' on the way in. A hartebeest lay under a tree - was it a cheetah kill? She told us how to read the signs and tracks. A cheetah kill will usually have its neck twisted back from the cheetah lying across the animal's body to strangle it, and you may be able to find the mark made by the cheetah's dewclaw when it pulled the animal down. This kill had been made by several cheetahs, either a mother with cubs or a coalition. We then settled into the volunteer housing which turned out to be a small "A" frame building with two comfortable beds and a table. Ann Marie lived in a trailer a short walk down the road, past the transfer pens used for temporarily holding cheetahs. She had worked in Namibia before with the Cheetah Conservation project there, learning pen design and all about cheetah research. The pens have shade cloth on the walls so the cats can't see humans, as even wild adult cheetahs will become habituated to humans quickly in captivity.



Biologist Ann Marie Houser releasing a collared cheetah.

We were ready to start work at 0700hrs the next day. We learned how to tell cheetah tracks from

brown hyena and jackal and baboon tracks, and heard how a leopard track would look different. Part of our job for the next month would be to note cheetah, hyena, and leopard tracks on a map of the park. If fresh cheetah tracks were found, we would set up a trap to try to catch and radio-collar it. They had caught and collared a female with five cubs the previous month (the first month of research). We also looked for playtrees, which are trees or tall termite mounds of a certain shape that cheetahs use as communication stations, marking them with scat to tell other cheetahs who is in the area. We would also be mapping roads in the park, as the maps supplied by the mine were very outdated.

We found many kills by following the ‘smell of death’. We found many hartebeest kills, as well as a young eland and female kudu, all larger than normal cheetah prey - is it because they are the top predator here? We also saw many birds - the camp birds were sparrow weavers and masked weavers, as well as a vulture family across the road. Black-winged korhaans were ubiquitous while driving around the park, and we also saw several pairs of secretary birds, a martial eagle, various smaller raptors, a woodpecker, yellow-billed hornbills, turico sunbird, and several kori bustard, Africa’s largest flying bird.

We went on a night drive with a spotlight and saw jackals, an armadillo, springhare, and ..glowing green eyes.. Cheetahs! Probably the collared female and a few of her cubs. We looked at her tracks that night and the next morning to see how they aged. We worked on the cheetah pens, picking up endless bits of wire the workmen had left in the pens. We used extra shade cloth in the area for various projects, such as a hammock and a screen door for the chalet, and a shade tarp for the back of Ann Marie’s truck. We would be driving to Maun, a nine-hour drive, and with the tarp one person could sit in the back with four in the cab. The back of the truck turned out to be the most comfortable position! It was a VERY hot drive. The TransKalahari Highway had just been completed a few years earlier; it used to take two to three days to drive to Maun. In Maun we met with Chris Kruger of Okavango Wilderness Safaris. He owns a farm outside of Gumare that he is developing into a



Volunteers assisting with cheetah exam.

tourist property, and has indicated we can release problem cheetah there so Ann Marie needed to check it out. After spending a night at his Maun worker’s compound, we made the long drive to his place, arriving just before a beautiful sunset. We saw tracks of several leopards along the way. It’s a magical moment when nine wild dogs (pair plus seven large pups) arrive at the waterhole and stay until dark. After dark we were visited by zebra, wildebeest, and an elephant at 0300hrs. There are no fences allowed in this area as it’s an elephant migration route. We were close to the border of Namibia.

On the drive back we had to pick up a cheetah trap, and all were grateful to spend the night at a farm outside of Ghanzi. The next day we visit

another farmer and talked about nonlethal predator control, such as the swing gates he installed to keep warthogs from digging under the fences. The farmers in this area think cheetahs are very common, and more of a problem than leopards because they kill more often. A second research camp has been established in Ghanzi since my visit. The next day there is a predator control talk in Jwaneng that Ann Marie, Rebecca, and Kyle went to, while the volunteers got a chance to relax. As we were about to leave for a picnic, we heard that a cheetah had been killed by a car the previous week. We split up and looked for cheetah tracks. We found a wonderful fresh set of tracks (adult plus at least two cubs) near a waterhole less than 2km from camp! We went to look at the body and I found it to be a young cat, maybe 18 months old. We were relieved it’s not the collared mother.

Kyle and Ann Marie collected bones for further studies. The next day while looking for tracks again, we saw two young (about six month-old) cheetah cubs running away from us! We set up a trap near the waterhole. We caught a baboon that night, and another the next day. We needed better bait than the guinea fowl we were using!

The next day we drove roads mapping the west half of the park, using GPS because the Landrover® has no odometer. At 1615hrs we decided to call it a day and head in by a scenic route. What's that crossing the road in front of us? A cheetah! I climbed on the roof and saw three more to our right, which rejoin the fourth one behind us. All were similar sized - is it a coalition of adults, or a mom with three large cubs? We headed in to tell the others, going a little too fast approaching the gate, when - another cheetah ran across the road in front of us! We slowed down, looked to our right, and there's ANOTHER cheetah, very young and terrified of us! We kept driving, as we didn't want it to cross the main mine road again which they had both just crossed.

In the meantime, Ann Marie had borrowed a young goat from a local farmer and put it behind the cheetah trap. Our trap setup had the bait in a small cage, the large cage right next to it, with acacia branches blocking access except through the open doors on each end. A pressure plate in the middle then releases doors on each end when the animal steps on it. The bait was unharmed. The next morning, we all drove out to check the trap. We stopped some distance away and observed with binoculars. The trap gates were down, but was anything in it? I looked to our left, and there behind a bush was a cheetah! In the trap was another one. In fact there were two to our left, both then walked over to the trap and visited the captive one. All were adults, so we assumed it's a coalition of three males. Cheetahs in the wild are known to form coalitions of adult males, while adult females live alone. We transferred the captive cat to a squeeze box, then to a holding cage that we replaced the goat cage with. Now instead of using goats for bait we used the cheetah itself - its friends would come to visit, and the only way to get next to their friend was to enter the trap cage. I reset the trap cage, getting hissed at by the captive as I did so. We returned the goat to the farmer, it had done its job. We then went off to track the collared female (named Jenny). That afternoon a second cheetah was caught! It was transferred to the holding cage, while the first was released into the large cheetah pen we spent a lot of time working on. The next morning we were all confused at what we found at the trap - the third cheetah had been caught, but an adult female with two cubs was also visiting outside the traps. We moved the second cat to the pen, the third to the holding cage, to see if we would trap yet another cheetah. Kyle the vet was coming the next morning to perform physicals and place a radio collar on one cat. The project would like to use satellite collars, but they are very expensive. The project has since obtained an ultralight aircraft, so they can track multiple cats without spending all day driving around the reserve. Also, when other research areas are established in Ghanzi, Maun, and the Tuli block, the project will have to have a plane to monitor all four areas regularly. In the afternoon we tracked Jenny again, mapped more roads, and built an examination area near the cheetah pens.



Volunteer releasing a cheetah.

Ann Marie explained the different jobs we would be assisting with (health chart, medicine chart, measurements). Blood, fur, and skin samples would be collected. Kyle used Telezol®, and the cat went down fast. We had overestimated its weight, thinking it was male. Surprise, it's a female. She weighed 37 kg. Females got ear tags and transponders on the left side. We took pictures of her spot patterns for future field identification. This female didn't get the collar, as we are hoping to put that on a male. The other two were together in the pen, and we had to get one in the small pen. The transfer system worked smoothly, and this one was soon in the squeeze box. Another surprise - not

only was this one female too, but she's was very far along in a pregnancy. They were both four to five years old - what were adult females doing hanging out together? This had never been seen before in cheetah studies in other countries, such as Namibia, South Africa, Kenya, and Tanzania. They decided to collar the pregnant one. The third one turned out to be another female of about the same age, possibly pregnant as well but not very far along. DNA testing will determine if they are related, and hopefully the collar will tell us if they stay together as a female coalition. Could the other female with the two cubs have been part of the group, and left when she had cubs? CCB has picked a great place in which to start their research!

We tracked Jenny again that evening with Kyle; they spent the night to see us release the cats. The cats ran out of the cages very fast, but we got a few good pictures. That afternoon we found the signal from the new collar. On another night drive, we saw giraffe, a genet and then spot six pairs of eyes in the grass - it was Jenny and the cubs! It was our last day in camp. We walked to a nearby tower for the sunset, and found fresh cheetah tracks of an adult and two cubs. If we were staying, we would have tried to trap them. Thursday morning the volunteers went to find Jenny and it took four hours! It was satisfying, but sad to hear our final "beeps".

The CCB website is

<http://cheetahbotswana.com/>, for more information or to start planning your own volunteer adventure! Since my month there they have established a second camp, obtained a microlight aircraft for tracking, relocated problem cheetah, hired a community development officer, and determined that over 20 cheetah use Jwana Game Reserve as part of their range.

All photos by the author.