



**CHEETAH OUTREACH TRUST CONSERVATION
PROJECTS
PROGRESS REPORT JULY 2023**



(COMPILED BY DEON CILLIERS AND CYRIL STANNARD)

JULY 2023

INTRODUCTION:

The Cheetah Outreach Trust has been actively involved in various conservation initiatives aimed at reducing livestock losses on farms within the cheetah range and promoting the conservation of free-ranging cheetahs in South Africa. One of their key projects is the Livestock Guarding Dog Project, which was initiated in 2005. Over the span of 19 years, the Trust has placed a total of 379 individual livestock guarding dogs, primarily within the cheetah distribution range in South Africa. These dogs help protect livestock from predation, thereby reducing conflicts between farmers and cheetahs.

In 2013, the Cheetah Outreach Trust established a partnership with Green Dog Conservation to manage the Irwin's Guardian Livestock Guarding Dog Stud. This collaboration focuses on breeding livestock guarding dog puppies for placement on farms by the Cheetah Outreach Trust.

In addition to the Livestock Guarding Dog Project, the Cheetah Outreach Trust has expanded its conservation efforts by undertaking other projects related to free-roaming cheetah conservation. One such initiative involves camera-trapping on farmland areas to monitor the presence and absence of cheetahs and other predator species like brown hyenas, leopards, spotted hyenas, and African wild dogs. The Trust also assists in the relocation of predators, such as cheetahs, leopards, and brown hyenas, in areas where tolerance levels are not yet conducive to their presence. These relocations open up opportunities for discussions with farmers regarding long-term predator and livestock management strategies, including the use of livestock guarding dogs.

To gain a better understanding of free-roaming cheetahs and their interactions with livestock guarding dogs and livestock herds, the Cheetah Outreach Trust has started collaring cheetahs in areas where they occur. This enables the tracking of their natural movements on farmland areas, including across international borders. The gathered information is shared with the farming community, other cheetah conservation organizations, and conservation authorities, contributing to a greater understanding of cheetahs living on farmland.

The Trust has also embarked on the first Free Roaming Cheetah Census in South Africa, in partnership with the Ashia Cheetah Conservation Project, the University of Stellenbosch, and Groningen University. This census project, supported by various organizations such as the SA Hunters, provincial Conservation Authorities, and Farmer Associations, aims to collect data on free-roaming cheetah populations. The information gathered through the census will provide valuable insights into cheetah distribution and aid in the development of effective conservation strategies.

The long-term goal of the Cheetah Outreach Trust's work with farmers is to foster tolerance towards predators, including cheetahs, and secure predator-tolerant habitat for these animals outside of protected areas on farmland. By introducing farmers to non-lethal predation management options, such as the use of livestock guarding dogs, the Trust aims to minimise conflicts between farmers and predators. It is worth noting that recent studies have revealed that 77 percent of the current cheetah distribution range occurs outside of protected areas, and cheetahs now occupy only 10 percent of their historical distribution range. Therefore, in-depth studies focused on predators on farmland areas are essential to provide updated and relevant information to farming communities, fostering better understanding and coexistence with these predators.

LIVESTOCK GUARDIAN DOG PROJECT

PLACEMENT AND MONITORING OF LIVESTOCK GUARDING DOGS:

Since the initiation of the Livestock Guarding Dog Project in 2005, the Cheetah Outreach Trust has been actively monitoring the progress and working abilities of livestock guarding dogs. This monitoring process has involved regular visitations, telephonic discussions, and questionnaires with the farmers who have received these dogs. This continuous monitoring has been crucial to the overall success of the project, allowing the Trust to assess the effectiveness of the dogs in reducing livestock losses and mitigating conflicts between farmers and predators.

In the first half of 2023, the Cheetah Outreach Trust placed six new livestock guardian dog puppies that were born at the Irwin's Guardian Stud. Out of these placements, four were made in the Western Territory and two in the Eastern Territory of South Africa. For the remainder of 2023, there are still eight placements planned for the Eastern Territory and six placements planned for the Western Territory. It is worth mentioning that all of these puppies have been sterilised, ensuring responsible breeding practices, and their vaccinations are up to date.

In the second half of 2023, snake aversion training will be conducted for these puppies. This training is important to teach them to avoid snakes.

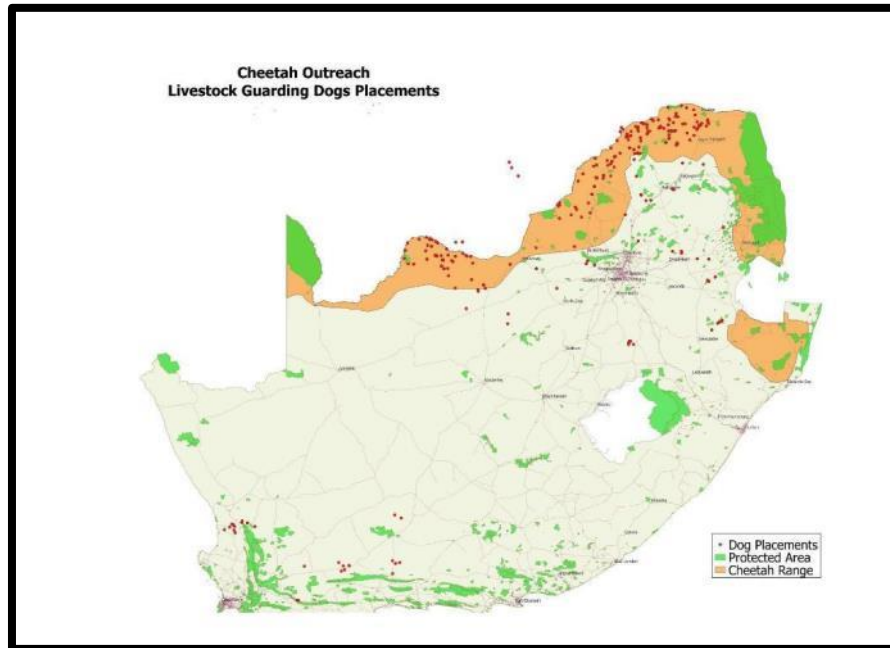


Figure 1: Placement of all LGD's from 2005 to July 2023

CURRENT STATUS OF ALL LIVESTOCK GUARDING DOGS PLACED.

The Cheetah Outreach Trust maintains ongoing monitoring of all livestock guarding dog placements to ensure their effectiveness and address any issues that may arise. For the first 12 months after placement, monthly visits are conducted to closely monitor the dogs and promptly address any problems that may arise through effective corrective methods. After the initial 12-month period, dogs under 2 years of age are visited and monitored twice a year, while older dogs are visited once a year. This allows the trust to maintain regular contact with the farmers and the livestock guarding dogs.

Up until the end of July 2023, the Cheetah Outreach Trust has successfully placed a total of 379 Livestock Guarding Dogs. Out of these placements, 317 have been considered successful, with the dogs actively working and guarding livestock. However, 62 dogs had to be removed due to behavioural problems. This represents an 84% successful placement rate, which has shown improvement compared to the previous report.

Among the 317 successful placements, the breakdown of their current status is as follows: 38% are still actively working and guarding livestock, 10% have been retired, 49% have either passed away while in service or due to old age, and 3% have been moved out of the cheetah range. The continuous monitoring and evaluation of the livestock guarding dog placements help ensure the project's effectiveness in mitigating livestock losses and fostering coexistence between farmers and predators within the cheetah range.



Figure 2: A farmer receiving his livestock guardian dog

IRWIN'S GUARDIAN STUD BREEDING FACILITY

The Irwin's Guardian Livestock Guarding Dog Breeding Facility, located at the Green Dogs Conservation property near Alldays in Limpopo Province, has been operating successfully for several years. This partnership will be coming to an end at the end of August 2023 and the Irwin's Guardian Stud will be moved to a new site and the breeding dogs will be managed on behalf of the Cheetah Outreach Trust by a new conservation partner. The breeding dogs at the Irwin's Guardian Stud receive regular vaccinations, which are sponsored by Virbac, a company specialising in animal health. The food for all the dogs involved in the breeding project is proudly sponsored by Ultrapet, and the Cheetah Outreach Trust considers Ultrapet as a key partner in this endeavour.

In terms of the breeding program, two new breeding dogs have joined the Irwin's Guardian Stud and are currently at the Cheetah Outreach facility where they are used to educate visitors until they are old enough to be taken to the Irwin's Guardian Stud for breeding purposes. This ensures the continuation of the breeding program and maintains the lineage and genetic diversity of the breeding dogs involved.

The Cheetah Outreach Trust values the partnerships and sponsorships it has established with companies like Virbac and Ultrapet, as they contribute to the success and sustainability of the Livestock Guarding Dog Project and the Irwin's Guardian Livestock Guarding Dog Breeding Facility. We are very grateful towards Green Dogs Conservation who have done an exceptional job by hosting and managing the Irwin's Guardian Stud for the past several years. We hope to continue to build on our established relationship with Green Dogs Conservation in the future.



Figure 3: Irwin's Guardian Ester with her new pups born in July 2023

PREDATOR CONFLICT WORK:

Since December 2020 14 leopards have been managed as part of conflict mitigation with farmers in Limpopo. One young leopard sub-adult female that underwent rewilding was released successfully. During the same period 25 cheetahs were received from farmland areas where they were caught by farmers or where we were able to capture them for the purpose of collaring and release. 17 of these cheetahs have been released back onto farmland areas after they were collared with satellite collars. 7 of the cheetah received were released into the Cheetah meta-population in protected areas in South Africa as they were not suitable to be released back onto farmland areas due to their age or period they had to be kept in holding.

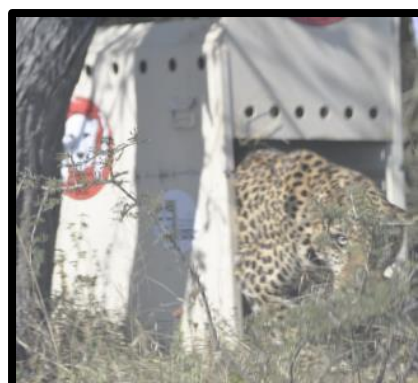


Figure 4: Leopard relocated after rescued from a trap cage

One non-releasable cheetah remains at the Ann van Dyk Cheetah Centre and will be used to supplement the captive population genetic diversity. A report of cheetah in the Namakwaland area was received and together with the Northern Cape Authorities, SANPARKS and SA Hunters, a task team was established to deal with any conflict that may arise. The Trust presented a training session for role players at the Goegap Nature Reserve in Namakwaland. The cheetahs will be captured and relocated to the Kgalagadi Transfrontier Park once their movements are established and capture cages can be set to capture them.



Figure 5: Camera Trap photo of cheetah in Namakwa National Park (credits SANPARKS)

FREE ROAMING CHEETAH CENSUS PROJECT

The Free Roaming Cheetah Census (FRCCP) project was initiated by Cheetah Outreach Trust and partner organisation Ashia Cheetah Conservation to assist the Cheetah Outreach Trust to expand their efforts across the landscape where cheetah occur on farmlands (which is enormous). Stellenbosch University and Groningen University with PhD students were brought on board to deal with the mass of incoming data and formalise the outputs from the work. The FRCCP is the biggest and most comprehensive survey of cheetah presence and costs to landowners across all free-roaming cheetah range in South Africa ever done. With adequate support and resources to see it through properly the status of the free roaming cheetah in South Africa can be scientifically determined across the natural range and conservation focused policies taking in consideration the co-existence needs of the farming communities can be developed to ensure the long term conservation of cheetah on farmlands in South Africa. There is currently not enough information available about the current status of cheetah on farmlands and previous studies only provided a rough estimate of what is thought to be the status of free roaming cheetah in South Africa. Very little scientifically based data is available highlighting the impact these cheetahs have on farming practices and once again this is part of what the FRCCP is aiming at addressing. The survey will take place over a fixed schedule of 3 years with regular and summary feedback to landowners and partners. The Cheetah Outreach Trust will have a much stronger relationship with landowners for the conflict mitigation and intervention work and will have adequate data to lobby policy change with Conservation Authorities where required.

The following is a summary of the current status quo of the FRCCP as from the May 2023 FRCCP monthly report:

- The priority area of the FRCCP is the published IUCN cheetah range. This area consists of 264 grid cells (25km x 25km). 107 of these are whole cells and 157 are partial cells. When taking out protected areas, this translates to 200 cells total (whole and partial).

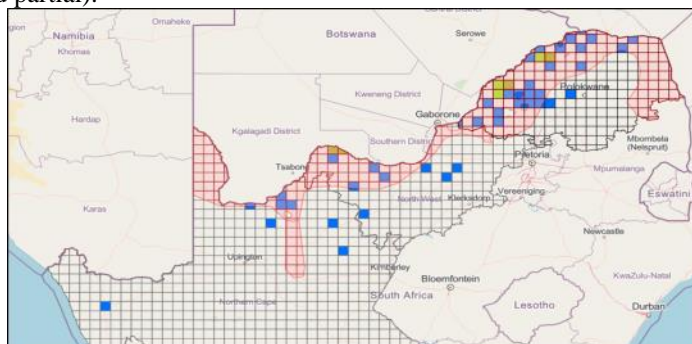


Figure 6: Free Roaming Cheetah Census fieldwork and data collection progress to date (Taken from FRCC May 2023 report)

- QUESTIONNAIRE SURVEYS: There have been 66 successful surveys in 46 different grid cells: 37 Limpopo, 12 North West, 13 Northern Cape, 1 KZN and 3 Botswana. Of these 46 cells, 37 are within the IUCN priority area. This amounts to 18.5% of the priority area covered by these successful surveys.

- **CAMERA TRAPPING:** There are currently 30 camera trapping sites up. North West province has 6 camera trapping sites while Limpopo has 23 camera trapping sites. Some of the camera trapping sites are recce sites to determine best placement of permanent sites. The ideal is to have three permanent camera trapping sites with two cameras each in each grid as per map above within the IUCN cheetah distribution range for the purpose of the FRCCP and thereafter to continue with long term monitoring at key hotspot areas. Students of the Universities as well as field workers from Ashia Cheetah Conservation together with the Trust staff are systematically moving through the grids to identify suitable recce and hereafter long term camera trap monitoring sites.



Figure 7: Cheetah on camera trap

- **PRESENCE AND SUITABLE HABITAT:** Data from the questionnaire surveys are used to determine presence of cheetahs and the availability of suitable habitat. The data consists of 1) spoor, faeces, sightings, and markings from the questionnaire; 2) camera trap sightings and 3) current sightings data from farmers. All this data will form part of the larger habitat suitability model which is currently being developed by the respective student and will continue to assist in guiding where free-roaming cheetah are most likely to occur.
- **TOLERANCE LANDSCAPES:** Data collected from the surveys are used to analyse the tolerance levels of landowners and farmers towards the presence of cheetah on their properties. Out of the 61 interviewed farmers, 25 do not tolerate cheetah on their farm. This results in a 41% intolerance.
- **TELEMETRY DATA:** Data from cheetah that were opportunistically collared by the Trust from October 2019 to current and ongoing is used to determine range sizes, cross border movement as well as for possible conflict prediction and mitigation purposes. Data of the 13 collared cheetahs consisting of 9 groups (1 single male; 3 single females; 2 coalition groups of 2 males; 2 groups of females with cubs who are also collared) have been used so far. 7 of these individuals were collared and released in the North West Province while 6 individual cheetah were collared and released in the Limpopo Province. Of these collared cheetahs, only four cheetah still remain collared, 1 in the North West Province and 3 in the Limpopo Province.

Capture and collaring will be continued on an ongoing basis at active scent marking trees especially in areas of the distribution range where no telemetry data for cheetahs has been collected yet. The collaring is dependent on the availability of satellite collars.



Figure 8: Cheetah female collared

- **DIET AND FEEDING ECOLOGY:** Cheetah scats are collected opportunistically by field staff during the checking of camera traps and other field work. So far only 9 samples have been collected for analysis. Ashia Cheetah Conservation has now had a scat detection dog trained and this will make the finding of cheetah scats more effective. Analysis of the samples will be done once enough scat samples are available. Information of predation with proof thereof is provided by farmers on an ongoing basis and this data will also be incorporated by the student.
- **GENETICS AND CONNECTIVITY:** The responsible Phd student has obtained historical and current genetic data from SANBI and the Trust. The database consists of 46 individuals, divided into three populations: 10 Kalahari, 11 Limpopo and 25 Waterberg. Data from this database prior to April 2021 has been analyzed and is represented below along with their relevant location in the landscape. These will be updated with the new data received from SANBI.
- **MORTALITY AND THREAT ASSESSMENT:** So far the Phd student could locate 21 records of cheetah mortalities, sourced from the Trust, EWT, literature, and independent events. Of these, 14 were male and 6 females. All records indicated they were adult cheetah. There are currently 6 different causes of mortality, with “shot” being the biggest contributing factor (28%).

VISITORS TO THE PROJECT

- A talk on the Cheetah Outreach Trusts’ project was given to Wild Wonders and guests in Hoedspruit.



Figure 9: Deon presenting to Wild Wonders Safari guests at Warthogs Rest, Hoedspruit

LONG TERM PROJECT SPONSORS

