

Final Evaluation Report

Your Details	
Full Name	Lovemore Sibanda
Project Title	A Community Led Cheetah Conservation Project in Zimbabwe
Application ID	40120-2
Date of this Report	Aug 2024

1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
<p>Objective 1: To continue to raise awareness and inspire young children to help conserve the cheetah</p>				<p>We conducted awareness and educational programme in 11 primary schools and distributed over 1500 educational comic booklets (10 boxes, each with 150 books). Overall, we are fast gaining traction and people (including school children) around the area now know us well. However, we could not visit 3 schools because the relevant authorities in the area took long to give us a convenient date to visit the schools. This was however not our fault as we tried all means to engage the school heads without success.</p>
<p>Objective 2: To continue to inspire, build skills, collaborate and directly engage local safari guides, national parks rangers, farmers and tourists in data collection and cheetah population monitoring and positive conservation action.</p>				<p>We currently have over 91 active participants in our cheetah citizen science programme (more than 8,000 followers on Facebook). Citizen scientists consists of safari guides, national parks rangers and farmers. Safari guides make up a large proportion.</p> <p>For the period 2023-August 2024 we received over 345 photographs from 64 sightings (Mean- 5.4 photographs per sighting).</p> <p>Since the start of the project in 2021-2022, we have received over 1500 photographs, and we</p>

			<p>have been able to identify 134-143 cheetahs the whole of Zimbabwe (see <i>second progress report</i>).</p> <p>To encourage citizen scientist to share their sightings and photographs with us, we gave regular updates on Facebook and via our WhatsApp hotline. We also made sure to tell citizen scientists who send us sightings a bit more history on the animals that they may have photographed. This was well received and encouraged people to continue to send us sightings.</p> <p>We also gave talks during workshops and meetings such the during the WEZ 24-hour water counts dinner on 18 Sept 2023. This has helped build rapport with different stakeholders including local communities.</p>
<p>Objective 3: To explore routes/ corridors that cheetahs utilise when they disperse. This is particularly important as it will help us assess if and how connected our cheetah populations are, and how permeable the corridors are.</p>			<p>While we managed to have an idea of the potential biological corridors that cheetahs use, more needs to be done. Via the citizen science programme, we have been able to follow 6 animals that dispersed during the course of the study.</p> <p>Two of Cindy's offsprings managed to disperse from their natal range to an area near Sable valley, outside Hwange National Park (read the story here).</p> <p>Crusius cheetah HNP059 moved from his natal range near Robins</p>

			<p>and was sighted new Ngweshla in June 2023. This is surprising because Crusius is over 8 years, and we suspect he was pushed out of his natal range by the cheetah coalition of 3 males (offspring's of cheetah VF009)</p>
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2. Describe the three most important outcomes of your project.

a). Cheetah Citizen Science Programme: Thanks to two years of funding from RSG, we **successfully** implemented a cheetah citizen science programme in northwestern Zimbabwe. The programme is currently up and running with **91 active participants**. The citizen science programme consists of different rightsholders (also known as stakeholders), including rangers, safari guides, tour operators, and local villagers. Citizen scientists aim to inform us when they see cheetahs anywhere in Zimbabwe. Consequently, we can continue monitoring the cheetah population estimates nationwide (see **Supplementary** Figure **S1**: for a typical message citizen scientists send us).



Figure 2: three offsprings of cheetah VF009 making a signpost in Hwange National Park © Washington Ndlovu

b). Cheetah population estimates for Zimbabwe: One of the key objectives of this project was to ascertain the current cheetah population estimates in Zimbabwe using the citizen science method. Data collected over 24 months show a 17% decline in population from 150-170 animals in 2015 to about 134-143 animals. Perhaps the most significant threat is high cub mortality; in the two years, we monitored over six females and six with cubs (range 1-4 cubs). From those, only one raised all cubs that later became adults successfully. The greatest enemy of cheetahs is lions and baboons. We have submitted the information to the Zimbabwe Parks and Wildlife Management Authority, which has since submitted the information to CMS in March 2024. **Supplementary Table S1** provides a summary of the cheetah population estimates.

c). Exposure and engagement with other potential funders: In January, we attended the Cheetah Summit in Ethiopia (Figure 3), where several researchers from across the globe gathered to discuss the future of cheetahs. We managed to meet Panthera's head, Dr Fred Luenay, who was interested in learning more about the project and hoping to contribute to/fund it. We are grateful to RSG for helping us be visible to other funders who would have found it harder to grab their attention. We are currently speaking to Panthera about possibly funding our research project in the future.



Figure 3: Dr Sibanda (left back) and other members from WildCRU at the Global Cheetah Summit in Addis Ababa, Ethiopia © CCF.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

- Our website is currently down, and we are trying to get the web developer to get back up again. We have researched the web developer; apparently, the web company thinks he needs to update the domain servers. To avoid this challenge in the future, Dr Sibanda will sign up for some online courses on web development because our website is essential for disseminating information. While our website has been down, we have relied on our Facebook page to communicate information.
- Fluctuation in fuel prices: The diesel price fluctuated between US\$1.83 to US\$1.79 per liter. Though not a big problem, it could have been had we not already paid for our fuel in bulk.
- In September 2024, one of the cheetahs was seriously injured by lions because she was trying to defend her cubs. She sustained life-threatening wounds that forced us to bring in a vet doctor to come and stitch her up and give her some antibiotics. Therefore, the RSG funds were used to cover this

unforeseen cost. Fortunately, we had asked for £500 to cover these unforeseen costs.

- Our research truck needed a new front suspension because of the nature of our roads (rough and sandy). Therefore, some of the RSG funds were used to cover this unforeseen cost. Fortunately, we had asked for £500 to cover these unforeseen costs.



Figure 4: The CCPZ research truck getting some wheels and suspension fixed © CCPZ

4. Describe the involvement of local communities and how they have benefited from the project.

Engagement: Local people collect data (cheetah sightings and photographs). In return, we send them regular updates so they are kept informed, and we have a conflict hotline where they can submit sightings and any problems with cheetahs, for

example, if they are unsure whether the animal/spoor they encountered was that of a cheetah.

Skills transfer and mentorship: Since 2021, we have trained three local students from a local university. In 2022, Tamar Ndlovu and Cynthia Ndlovu both passed their final undergraduate degrees with flying colours. In 2023-2024, we had Malcolm Ngwenya join our project. He was there for 12 months and has since finished his work-related learning in June 2024. His research project was on the population viability of cheetah populations in Zimbabwe, and he is currently writing up his results.

Employment: The project permanently employs two locals, Mkhululi Moyo and Cleopatra Nkomo, from neighbouring communities. Cleopatra Nkomo is from Dete, just outside Hwange National Park, and Mkhululi is from the Insuza/Tsholotsho districts.

5. Are there any plans to continue this work?

We would like to:

- (a) Conduct a cheetah-focused camera-trap-based study in Hwange, the Zambezi and the Lowveld. The reason for doing this is because citizen science methods, which are convenient and suitable for studying species that occur in low densities over large areas, such as the cheetah, have some limitations. One of the major limitations is that tourists and safari guides, who make up most of our citizen scientists, only visit places where they are more likely to see more wild animals. Normally, these are places with abundant water. However, are there any cheetahs in the study area's drier parts, e.g., Hwange NP? Camera traps will be deployed strategically in known cheetah marking stations, including in drier areas of the park where guides and tourists do not visit frequently. This survey will be carried out in three phases and in close collaboration with other research projects, e.g., AWF. For the first year, we will focus on the Hwange-Matetsi-Victoria Falls Protected area complex, expanding to the Zambezi region during the second year. Finally, in the third year, we will conduct a camera trap in the Lowveld, completing our comprehensive assessment of cheetahs across these
- (b) We would like to deploy satellite collars on selected cheetah individuals (n=4). Collars will allow us to track cheetah movements in real-time and

provide invaluable insights into their behaviour, home range, and interactions with their environment. Information from collars will complement information from citizen scientists.

We would like to continue to:

- Train and recruit more citizen scientists (guides, rangers, and local community representatives)
- directly involve local communities in cheetah research by sending them news on social media on recent cheetahs sighted in different areas
- and distributing the remaining comic booklets to local schools
- We want to work with local communities to develop a grazing plan for their communities. The aim is to slow the rate of habitat loss.

Skills development:

We want to raise funds for Mkhululi to take driving lessons driving test. This will allow us to cover more areas and get a lot done.

6. How do you plan to share the results of your work with others?

- We will publish the results and submit a manuscript for publication with Oryx or the Journal of Conservation Letters. RSG's contribution will be listed in the acknowledgement section.
- We will present the results at the Oppenheimer conference (RSA) in October 2024. This opportunity will allow us to share our research results with the world.
- We will also publish our results on our webpage, WhatsApp, and Facebook pages, which will allow others to see our work.

7. Looking ahead, what do you feel are the important next steps?

- Fundraising to continue the research on cheetahs
- Writing up publications and publishing data
- Develop an infographic and short video summarising our work/ results. The video/mp3 audio will be in the local language as well as English.

8. Did you use The Rufford Foundation logo in any materials produced in relation to this project?

Yes, in our comic booklets, uniforms, and reports to CMS. We use the RSG logo during all four presentations.

Did the Foundation receive any publicity during the course of your work?

Yes, we always include the RSG in our Facebook posts, which gives it the publicity it deserves.

9. Provide a full list of all the members of your team and their role in the project.

Dr Lovemore Sibanda (Project led)

Mkhululi Moyo (Research Assistant)

Malcolm Ngwenya (Research Student)

Cleopatra Nkomo (Housekeeping)

Project advisors

Prof. David Macdonald- large carnivore expert

Prof. Andy Loveridge – large carnivore expert

Dr Courtney Hughes- social science expert

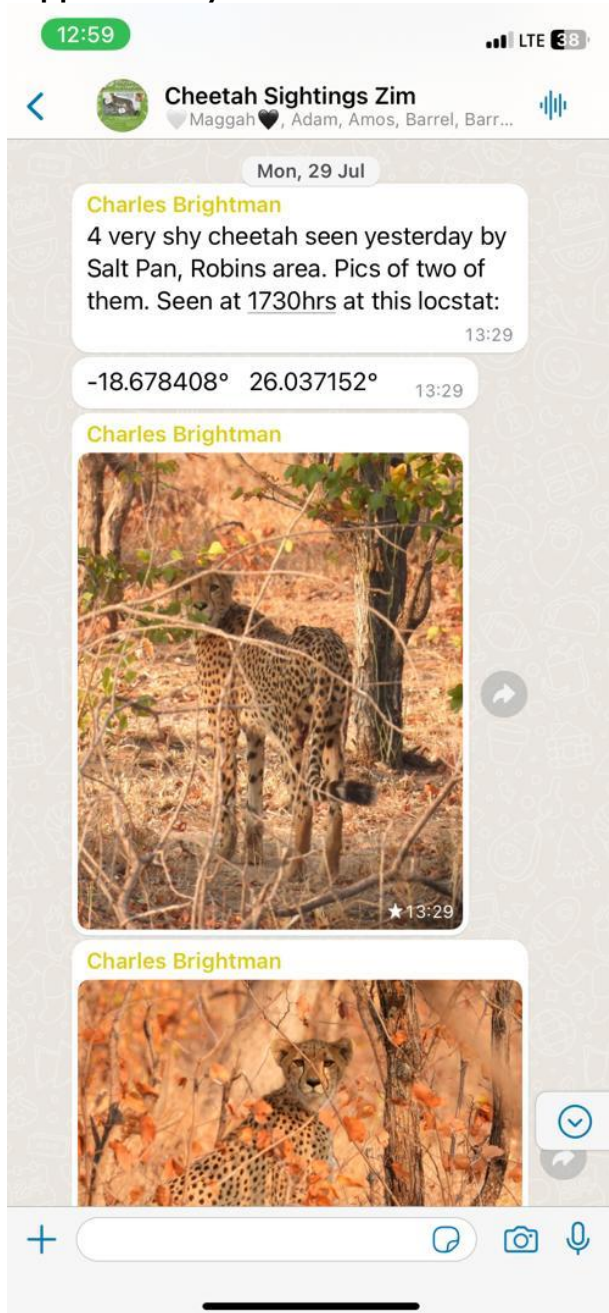
Dr Ewan Macdonald – social marketing expert

Dr Esther van der Meer- founded the Cheetah Project in 2012

10. Any other comments?

None. We want to thank the RSG Foundation for supporting our work. We hope to continue to develop some long-term relations with the RSG Foundation.

Supplementary material



Supplementary Figure S5: A screenshot of a typical cheetah sighting message and photograph that we received from a citizen scientist

Supplementary Table S2: Current cheetah population estimates in Zimbabwe based on and citizen science data

(see below)

REGION	Description	2015 Estimates	2024 Estimates	Population trend	Reason for decline
Mat North	Hwange National Park and buffer zone along Eastern boundary (Gwaai ICA, Sikumi, Ngamo)	ca. 25	ca. 25-27	Stable	Competition with other predators
	Matetsi unit 1-5 and buffer zone along eastern boundary (Matetsi ICA, Deka)	ca. 10	ca. 9	Decreasing	Competition with other predators, poaching of cheetah and their prey
	Victoria Falls Area (Zambezi National Park, Matetsi unit 6-7, Panda Masuwe, Kazuma, Kazuma Pan, Fuller)	ca. 5-7	ca. 9	Stable	Competition with other predators, poaching of cheetah and their prey
Subtotal		40-42	43-45	Stable	
Mash west	Chizarira National Park, Chirisa SA, Sengwa	No record	Transient population of ca. 2-3	Unknown	Unknown
	Matusadonha National Park	ca. 3	ca. 4	Remained low	Unknown
	Dande, Omay, Chewore North Hurungwe (Nyakasanga & Rifa) Mana Pools National Park and shoreline along the northern boundary of Hurungwe and Sapi	ca. 12	ca. 8	Decreased	Unknown
Subtotal		ca. 15	ca. 14-15		
Masvingo	Gonarezhou National Park	ca. 15-17	ca. 17	Stable	Competition with other predators
	Nuanetsi Ranch cattle and wildlife section	ca. 15-17	ca. 15	Stable	No competition with lion
	Malilangwe	ca. 12	ca. 14	Stable	Influx from surrounding areas as people encroached on the land, less competition with other carnivores (decrease in lion population)
	Save Valley Conservancy	ca. 10	ca.8-11	Stable	Competition with other predators, poaching of cheetah and their prey
	Bubye Valley	20-22	15-17	Decreased	Vehicular collusion,

	Debshan Ranch/De Beers Cattle Section and neighbouring farms (Magholo Farm, Jabulani Safaris, Phezulu Ranch)	ca. 3-5	ca. 1	Decreased	competition from other predators Human encroachment, poaching of cheetah and their prey, habitat destruction by people
	Farms and communal land southwest of Buby Valley Conservancy (Den Linian Ranch, Bishopstone Farm, Maramani Communal Land, River Ranch, Sentinel Ranch)	ca. 5-7	No sightings received	No sightings received for this location	Human encroachment, poaching of cheetah and their prey, habitat destruction by people
Mat. South	Bubiana and farms West of Bubiana (Jonsyl Ranch, Chipize Ranch, Reata Farm, Pepeluza Farm, Inhlaba, Lucknow, Mashura Ranch Rooiberg, Li farm, Mkashi, Muko Farm)	ca. 3-5	ca. 1	Decreased	Human encroachment, poaching of cheetah and their prey, habitat destruction by people
	Tuli Circle (part of a Botswana's Northern Tuli Game Reserve Population)	ca. 3	No sighting received	Unknown	
	Additional single cheetah sightings outside resident cheetah range	ca. 6-10	ca. 7	NA	Transient population
Subtotal			ca. 77-83		
TOTAL			134-143		Decreasing

Photos



Figure 6: Pair of GPS units bought using funding from RSG © CCPZ