

Project Update: August 2022



Figure 1: Cheetah male coalition HNP101 and HNP102 (both 18 months olds) grooming. The picture was sent to CCPZ as part of the cheetah citizen science program that seeks to assess the current cheetah population estimates in Zimbabwe. The photo was taken by a local safari operator in Hwange National Park, Zimbabwe (c) Invelo Safari Lodges

Introduction

Cheetah Conservation Project (CCPZ) is a collaborative programme between us and the Zimbabwe Parks and Wildlife Management Authority. Our objective is to work closely with local communities to determine and collect information on cheetah occurrence in Zimbabwe, including the population (i.e., individuals) and the extent to which metapopulations are connected. We also work with communities to understand their perceptions, knowledge and practices relative to cheetahs, their habitat, and conservation needs, to stress the connection between human wellbeing and livelihoods and cheetah conservation objectives. This report details the activities of the CCPZ for April to August 2022. We would like to express our sincere gratitude to The Rufford Foundation for supporting our work to assess the current cheetah population estimates in Zimbabwe.

Objective 1: to engage the general public in collecting data to determine the latest state of the cheetah populations in Zimbabwe

Since April 2022, we visited and distributed posters across 59 villages (108 posters), 12 safari camps (24 posters), 15 clinics (30 posters) and 32 schools (96 posters) along the Hwange-Matetsi-Victoria Protected Area Complex (HMPAC) (see Figure 2). The HMPAC is particularly important because it harbours the largest cheetah population in Zimbabwe. Moreover, villages alongside the protected area complex are important wildlife corridors that link the HMPAC and Zambezi Valley cheetah populations.



Figure 2: A pupil at Ndangababi Secondary School looks at a cheetah poster © CCPZ Since January, CCPZ embarked on a huge exercise putting up posters in key public areas such as national parks tourist offices, local shops, clinics and schools. The aim is to encourage and educate the general public on the plight of cheetahs in Zimbabwe and to give citizens information on the type of data to be collected and where exactly to send it.

During the same time, we engaged the public in nine posts on our [Facebook page](#) which now has over 7,500 followers. Moreover, we also gave five talks to different groups of people (see list of talks in Table 1) Below is a picture showing the project director giving a talk to a group of people in Bulawayo on 27th August 2022.



Figure 3: Lovemore Sibanda giving a talk to Wildlife and Environment Zimbabwe (WEZ) members at Bulawayo Country Club on the 27th of August 2022 where he was invited to give on talk on his cheetah research

Objective 2: To use citizen science collected data to estimate the cheetah population in Zimbabwe

Photographs (such as that shown in Figure 4) enable us to possibly identify individual cheetahs and monitor their movement. So far, we have received more photographs from HMPAC than elsewhere in the country. Most of these photographs are from safari guides/operators, though we have received some from community members in the past. Between April-August 2022, we received a total of 532 photographs in 47 sightings (an average of 11 per sighting). From these 532 images, we identified a total of 21 cheetahs in the whole of HMPAC. This number is far less compared to what van der Meer (2016) found 2 years into their survey ($n=42$). Our findings suggest there could be far fewer cheetahs in the HMPAC than assumed.



Figure 4: Cheetah HNP052 seen at Hwange National Park © Mark Butcher

Objective 3: Capacity building

In August 2021, we received two undergraduate students, Miss Tamar Ndlovu and Miss Cynthia Moyo. They were from Lupane State University studying for an honour's degree in wildlife conservation. In July 2022, Tamar and Cynthia successfully completed their work-related learning and have since returned to school. In August 2022, we welcomed Mr Mkhululi Moyo, a prospective student at Lupane State University. Mkhululi will be with us up to December 2022 and has so far been of great help in assisting with the distribution of posters and other research materials.

In other news, we recorded the first long distance (ca. 200 km) dispersal of cheetahs between two protected areas, i.e., Hwange and Chizarira National Parks. It is common for large carnivores to travel great distances through human-dominated landscapes looking for suitable territories; for cheetahs, there are few such documented cases. Cheetah coalition (males HNP052 & HNP053) were born east of Hwange National Park in March 2017 to female HNP038. In early 2019, the two boys dispersed from their natal range in Hwange NP and travelled almost 200km to Chizarira National Park (mid-Zambezi valley).

In June 2019, the two cheetahs were seen in the Sengwa research area, making it a very rare and special sighting, and that was the last time we had about them. We feared for the worst! On 17th June 2022, 2 years since the male coalition HNP052 and HNP053 left Hwange National Park, CCPZ staff received a report of a calf killed by a cheetah 10km north of Lupane Business centre and local hunters in the area confirmed this to be true. This was somewhat surprising given there were no known cheetahs in this particular area - unless there were transient males. This was highly likely because the area where the cheetahs killed a calf is part of an important wildlife corridor that connects Hwange National Park and the Zambezi Valley through the Mzola Forest. A few days after the incident, two unknown male cheetahs appeared in the Ngamo area in Hwange National Park and were seen by guides and tourists on a game drive, who then sent us the sighting and the photographs to ID. To our surprise, we were able to confirm the identity of the two cheetahs using their unique spot pattern - it was indeed the cheetah male coalition HNP052 & HNP053. The two notorious boys had been to the Zambezi valley and back (200 km to and from) - this is incredible!

This is the first time they have recorded such long-distance movements for this species. The corridor between the two protected areas is largely dominated by human settlements and it is too risky for cheetahs to utilise. That said, from the pictures, one of the males (HNP053) has a huge scar on his right side from a suspected poacher's snare. Indeed, poacher snares are a huge threat to cheetah populations throughout their range. What an incredible journey! We are so happy to see those two males back again. We are so grateful to The Rufford Foundation, for funding our ongoing cheetah research in Zimbabwe, and all citizen scientists that are part of our cheetah

programme, without whom this research would not be easy. Below is a picture of the coalition aggressively making their old territory in Hwange National Park.



Figure 5: Male cheetah coalition HNP052 (right) and HNP053 (left) making a territory in Hwange National Park a few days after they arrived from the Chizarira National Park.

Table 1: List of talks (and dates) given by CCPZ to the general public

Group of people	In attendance	Dates
CNRS/ CIRAD Research Group Meeting	21	15 June 2022
Wolfgang (Germany)	7	3 August 2022
Painted Dog Research Trust	18	25 th -30 th of July 2022
Wildlife and Environment Zimbabwe (WEZ)	23	27 August 2022

