Update from the field: Black-footed Cat Working Group, South Africa

Research / Narvorsing



December 2023, Michelle Swanepoel, field technician

These are notes from the field by the Black-footed Cat Working Group (BFCWG) technician at the Benfontein Nature Reserve study site near Kimberley, South Africa. Black-footed cats (Felis nigripes) are fitted with radio collars and monitored as part of a long-term study on the ecology and demography of this elusive little felid. This update will focus on the radiocollared cats' behaviour post-fire and pay tribute to "Ember", a confident and fierce female that was first collared in November 2022.

Special thanks to Hannes Mans and DeBeers Consolidated Mines for study site access and long-term support of the BFCWG at Benfontein Nature Reserve.



Figure 1- Top of the South-East koppie two days post wildfire.



Figure 2 – Top of the South-east koppie two months post wildfire.

Ember:



Figure 3 –(Left) Ember prowling in thought (Photo credit: Dr. Alexander Sliwa). Figure 4- (Right), Ember emerging from her den.

This adult female was first collared in November 2022. She was named Ember due to her feisty nature. Capturing her posed quite the challenge, skirting back and forth over ditches and rises with ease and even fighting off the injected drug. Her encounters with black-backed jackal (*Canis mesomelas*) were a testament to her confidence. Time and again, she astounded me, by holding her ground, refusing to yield. Her raised hackles, menacing snarls and even her daring swipe across the jackal's face with her claws showcased her unyielding spirit.



Figure 5 – (Left) Ember perched atop of a termite mound, surveying her surroundings (Photo credit: Abigail Hehmeyer). **Figure 6** – (Right) Ember's gaze trailing a parting bird (Photo credit: Dr. Alexander Sliwa).

Every moment spent with her, is a cherished gift, constantly surprising me, from her knack of navigating tricky paths, to discovering her in the same den as a female aardwolf (*Proteles cristatus*) and on another occasion two Cape porcupines (*Hystrix africaeaustralis*). Her affinity for making termite mounds her vantage point, perched atop, surveying her surroundings, perhaps seeking out potential prey, to her ability to take down a white-quilled bustard (*Eupodotis afraoides*).

After the wildfire in September, she initially moved further away from the burnt area, however a few weeks later she began venturing into the scorched area, exploring previously uncharted territories within it.

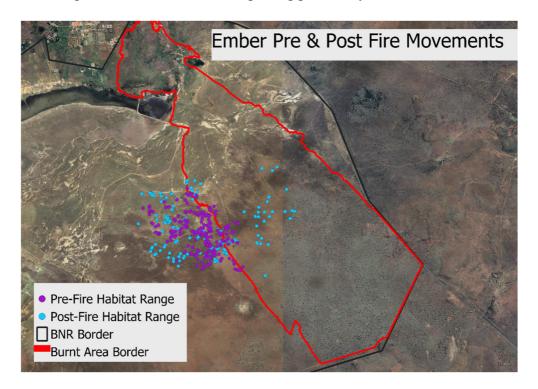


Figure 7 – Ember's movements pre and post fire.

During den locations on the third of December, I had not anticipated stumbling upon Ember's collar, with signs of predation by black-backed jackal. Before the wildfire, I had observed multiple interactions between her and black-backed jackal, unfortunately the aftermath of the wildfire in September exacerbated the vulnerability of our cats. The loss of natural cover contributed to increased exposure to predation.

Shongo:



Figure 8 – (Left) Shongo deep in concentration on the prowl (Photo credit: Dr. Alexander Sliwa). Figure 9 – (Right) Shongo minutes after exiting his den a couple of weeks after the wildfire.

After the wildfire, Shongo's remarkable resilience shines through, as he persists within the scorched landscape, adapting to the altered environment. I've yet to witness him venturing beyond this area, his usual routine involves utilizing a new den each night, but occasionally, I've found him revisiting the same den for two or three consecutive nights. The lack of vegetation provides the perfect environment for indulging in the abundance of rodents within the den systems, occasionally adding small birds to his menu. Unfortunately, with minimal rainfall after the fire, the vegetation has yet to recover, leaving him vulnerable to black-backed jackal within the area.



Figure 10 – (Left) Shongo emerging from his den at 18:40 on the 19^{th} of September. **Figure 11** – (Right) Shongo can be seen re-entering the same den at 05:40 on the 20^{th} .

Kazi:

Kazi is the epitome of feline determination; her relentless dedication has yielded remarkable results. This was once again highlighted during Dr. Alexander Sliwa's visit in August. She enthralled us by successfully capturing a double-banded courser (*Rhinoptilus africanus*). This is a rare sighting as these birds are only seldomly caught by the cats, showcasing her prowess with captivating finesse.



Figure 12- (Left) Kazi proudly carrying off her prey known as the double-banded courser (Photo credit: Dr. Alexander Sliwa). **Figure 13** – (Right) Kazi pausing, before continuing her hunt. (Photo credit: Dr. Alexander Sliwa).

She occasionally encounters aardvark (*Orycteropus afer*) and bat-eared foxes (*Otocyon megalotis*), showcasing little concern as both species carry on with their routines. Seldomly, I have observed her detecting movement in the vegetation, crouching down and cautiously moving forward ready to pounce upon the unsuspecting prey, only to pause once she identifies the movement as a Southern African hedgehog (*Atelerix frontalis*), and both species moves along in opposite directions.



Figure 14 – (Left) Kazi observing quietly, positioned only a few meters behind a bat-eared Fox (Photo credit: Dr. Alexander Sliwa).

Figure 15 – (Right) While observing Kazi, luck was on our side as we caught sight of an aardvark (Photo credit: Dr. Alexander Sliwa).

May the holiday season wrap you in joy, just like your support has embraced us throughout the year. Happy Holidays!!



Best regards from the veld,

Michelle Swanepoel