Black-footed Cat Working Group Quarterly Report May 2025

Website link: https://www.blackfootedcat.com/

Research / Narvorsing

Black-footed Cat

Working Group

(Miershooptier Werkgroep)

Cover image: Black-footed cat ‘Ember’ on Benfontein.
Photo: Alex Sliwa

Ultro:

Figure 1: Ultro sitting outside of his den

Ultro, a male black-footed cat (*Felis nigripes*), was first radio-collared on 4 June 2024 and remains the only VHF-collared individual on Benfontein Game Farm entering 2025—truly living up to his name as 'the ultimate cat.' Despite his shy nature, he has demonstrated remarkable adaptability and intelligence, surviving in an area with an unusually high density of black-backed jackals (*Lupulella mesomelas*), a known predator and competitor of these small wild cats.

Interestingly, he habituated rapidly to camera traps, yielding high-quality photographic records. As winter approaches, a behavioral shift has been observed: he now rarely uses den sites during daylight hours. Instead, he rests well-concealed in dense vegetation while still exposed to warm sunlight.

Figure 2:Ultro investigating the camera trap

Figure 3: Ultro resting outside his den

To date, Ultro has remained within the boundaries of Benfontein, maintaining a stable home range. His continued survival and behavioural patterns offer valuable insights into the spatial ecology and predator avoidance strategies of *Felis nigripes* in high-risk environments.

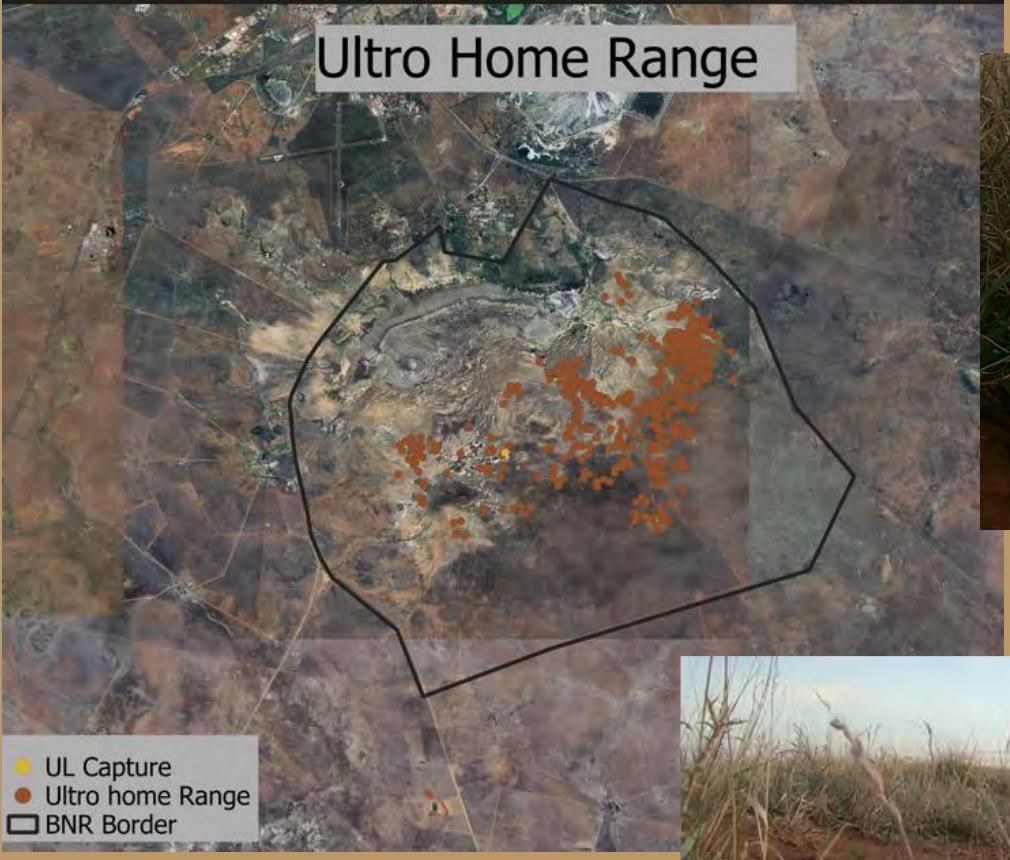

Figure 4: Ultro's Home Range on Benfontein Nature Reserve

Figure 5: Ultro stretching as he exits his den

Figure 6: Ultro grooming himself outside his den

Figure 7: Ultro exiting his den

Figure 8: Ultro sitting outside his den

Figure 9: Ultro basking in the sun outside of his den

Figure 10: Ultro scans the environment under a pastel sky

Carnivore Survey

Objective:

To conduct systematic driving transects on Benfontein Nature Reserve with a primary focus on detecting black-footed cats (*Felis nigripes*), while concurrently implementing a broader carnivore survey to monitor population dynamics, spatial distribution, and species presence across the reserve.

Spotlight surveys were conducted over nine non-consecutive nights between the period of 29-10-2024 until 20-03-2025, when the region started experiencing rain almost every day. The surveys usually occurred between 19:00 and 23:00, with one person driving and another was shining a lightforce spotlamp (100W) while standing on the loading platform of the pickup vehicle. A total of 104 independent carnivore detections were recorded. These detections comprised of Black-footed cats, caracal (*Caracal caracal*), and black-backed jackal, with black-backed jackal being the most frequently observed. From the six black-footed cats that were spotted two of the visuals were of our VHF radio-collared male Ultro, two of the sightings on different nights consisted of a female with a kitten, and the other two were uncollared cats.

The average detection rate per species per night was 0.67 for black-footed cats, 10,33 for black-backed jackals, and 0.33 for caracals.

Species	Total Detections	Average Detections per Night
Black-footed cat	6	$\frac{6}{9} = 0.67$
Black-backed jackal	93	$\frac{93}{9} = 10.33$
Caracal	3	$\frac{3}{9} = 0.33$

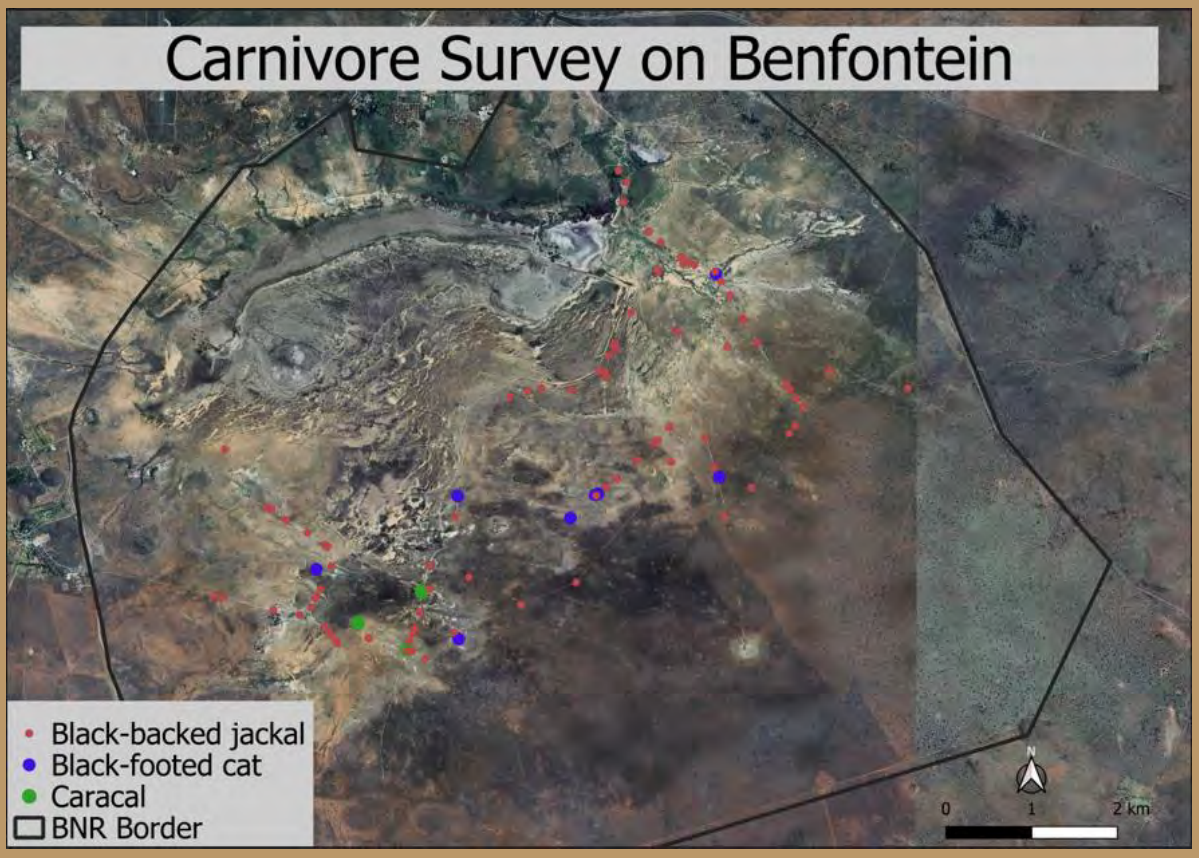

Figure 11: carnivore detections on Benfontein Nature Reserve over 9 non-consecutive nights

Captures:

In the weeks leading up to the capture effort, the Kimberley region experienced significant rainfall, resulting in extremely muddy conditions and posing a major logistical challenge. However the entire field team—comprising Dr. Alex Sliwa, Dr. Arne Lawrenz, and Beryl Wilson Hartmann—travelled extensively to make the black-footed cat captures possible. We were also fortunate to have the assistance of Dr. Laurie Aucamp, a veterinarian based in Kimberley, and Firas Hayder, a post-doc student at Sol Plaatje University, who supported the effort before beginning his research on polecats in the coming weeks.

Figure 12: Roads on Benfontein Nature Reserve

Figure 13: our pan experience

The team assembled on 21 April and we started our search. On the second evening of fieldwork, our search had to be paused after just one hour due to renewed rain. Although we waited for the weather to clear, we soon discovered a malfunction with the vehicle's 4x4 system. The following morning, on 22 April, the vehicle was taken in for repairs. Unfortunately, the required parts had to be ordered from Cape Town, causing a delay. On 23 April, we attempted to continue our search without the use of 4x4, but quickly became seriously stuck in the mud. With no assistance available, we managed to free the vehicle by collecting rocks from the surrounding veld and placing them under the tyres for traction.

Figure 14: Arne jacking up the vehicle to place rocks under the tyres, attempting to gain traction and free it from the mud.

Figure 15: Arne digging in an effort to free the vehicle from thick mud after becoming stuck during fieldwork.

Not long after resuming the search, the vehicle became stuck again—this time more severely. As we worked to free it, it started raining again. The usual method of packing rocks proved ineffective, so we resorted to digging a path beneath the tyres and physically pushing the vehicle free. By the time we succeeded, the rain had intensified and we were forced to abandon the night's search.

Figure 16: Arne the Aardvark" in action – digging tirelessly after our second time getting stuck in the mud, determined to free the vehicle.

Figure 17: Rocks were placed beneath and in front of the tyres in an attempt to gain traction and free the vehicle from the mud.

On 24 April, the replacement parts (including the prop shaft CV joints) arrived and were installed by the mechanics. Additionally, we replaced the vehicle's tyres, as the previous ones were ineffective in muddy conditions—mud would accumulate on the treads, causing a complete loss of grip. That evening, equipped with a functional 4x4 and new tyres, we resumed the survey, and the improved traction made a significant difference to vehicle performance and access.

Figure 18: Newly fitted tyres designed for improved traction, offering excellent grip in muddy field conditions.

Figure 19: Arne and Alex examining various tyre options to identify the most suitable choice for navigating challenging muddy conditions during fieldwork.

While the vehicle was in for new tyres, the mechanics also identified that the control arms required replacement. As a result, on 25 April, the control arms and shocks were repaired to ensure the vehicle was fully operational and safe for continued fieldwork. Unfortunately, on the same day, I sustained an injury to my hand that required stitches. Despite the setback, we were able to proceed with the survey efforts, though no black-footed cats were detected on either 25 or 26 April.

Figure 20: The field technician's hand injury post-treatment, with stitches covered by bandages—an unfortunate incident

Figure 21: Dr. Aucamp administering anaesthesia prior to the collaring procedure, ensuring the animal's safety and comfort during capture.

Figure 22: Magnum with a full belly, captured shortly after a successful hunt, weighing 2.71 kg at the time of collaring.

Due to increasing pain from the injury, it was decided that I would remain at base on 27 April to rest and recover.
The team decided to start their search on Marrick Safari and spotted a spectacular male black-footed cat within just 20 minutes of beginning the search on Marrick. After a brief pursuit, the cat retreated into a shallow den. Following approximately 30 minutes of careful digging, the team successfully captured and radio-collared the individual— with a visibly full stomach. He weighed a whopping 2.71 kg (600g at least was food) and was subsequently named Magnum.

Figure 23: (left to right) Beryl Wilson, Firas Hayder, Laurie Aucamp, Arne Lawrence & Alex Sliwa

By 28 April, I had rejoined the field team. Despite renewed efforts on Benfontein that evening, no black-footed cats were detected. On 29 April, during our final night in the field, we decided to do a search on Marrick Safari again where we were off to a rough start, we suddenly heard a strange noise on the vehicle and the vehicle's body plate came loose and dug into the ground. Alex went off to collect rocks to place under the tyres while Arne used the spade to dig right in front of the body plate so that Beryl could drive over the rocks to provide height and Arne and Alex could guide the body plate back into place as she very slowly and carefully drove forward, we returned to base where we used cable ties to fasten the body plate back into place for the time being.

Figure 24: Arne using a spade to dig in front of the body plate, creating space to drive it forward and guide the plate back into place.

Figure 25: Arne and Alex securing the body plate back into place using cable ties during field repairs.

We were then able to continue our search, and we successfully located and collared a second male following a short chase. He has since been named *Felix*.

Figure 26: (left to right) Beryl Wilson Hartmann, Firas Hayder, Arne' Lawrenz, Michelle Swanepoel, Laurie Aucamp, Alex Sliwa.

So for seven consecutive survey nights on Benfontein, no black-footed cats were sighted—likely due to the unusually high density of black-backed jackals in the area.

Despite initial setbacks, the collaboration and persistence of the team yielded two successful captures, contributing valuable data toward ongoing black-footed cat research and conservation.

Magnum:

Magnum, the first black-footed cat collared on Marrick Safari on 27 April, initially remained within the Marrick property. We were even able to track him with good sightings on 29 April, shortly after collaring Felix. However, on 1 May, during a routine tracking session, I detected his signal approximately 1 km northeast of the Marrick boundary.

Unfortunately, we were unable to gain access to the neighbouring property at that time. The following day (2 May), I returned and was still able to hear his signal from the same location. On 3 May, however, the signal could no longer be detected. Determined to relocate him, I spent both day and night climbing nearby hills and, after eventually securing access to the neighbouring farm where the signal was last detected, climbed several hills there as well—but without success.

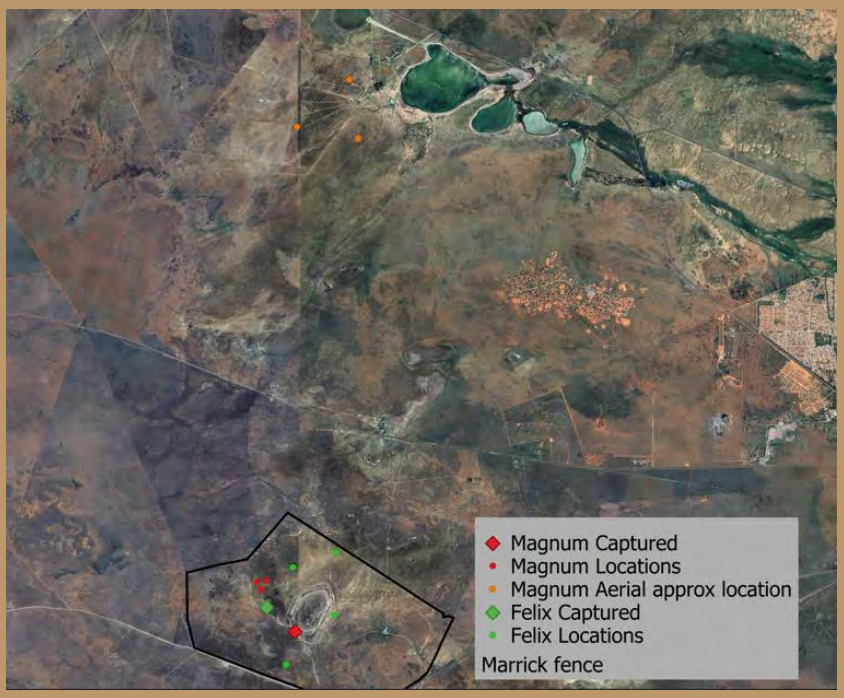

Figure 27: Felix and Magnums movement on Marrick Safari, Magnums aerial approximate location was between the orange 3 points on Platfontein.

Figure 28: Field Technician post flight after successfully locating both cats

Concerned about his whereabouts, I reached out to Andrew Conroy, whom I had previously met through The Bateleurs. He generously agreed to assist with an aerial search. On the morning of 10 May, just after sunrise, Andrew conducted a flight, and we successfully picked up Magnum's signal approximately 10 km north of Marrick Safari.

Figure 29: Ready for take off to locate Magnum

Figure 30: Pilot Andrew Conroy & field technician Michelle Swanepoel post flight after successfully locating Magnum

Felix

Felix was radio-collared on the final night of captures and has since remained within the boundaries of Marrick Safari. On 7 May, his signal could not be detected during either the day or night, raising concern about a possible movement beyond the property. However, during the aerial search for *Magnum* on 10 May, Felix's signal was once again detected on Marrick.

To better understand his spatial use and potential movements beyond Marrick, we are currently working—alongside the property owner—to establish contact with neighbouring landowners. This will allow us to expand our tracking area in case Felix utilizes multiple properties as part of his home range. This represents an exciting new challenge and an important opportunity to study how black-footed cats navigate and utilise smaller farms, a more fence fragmented landscape in the area northeast of Kimberley.

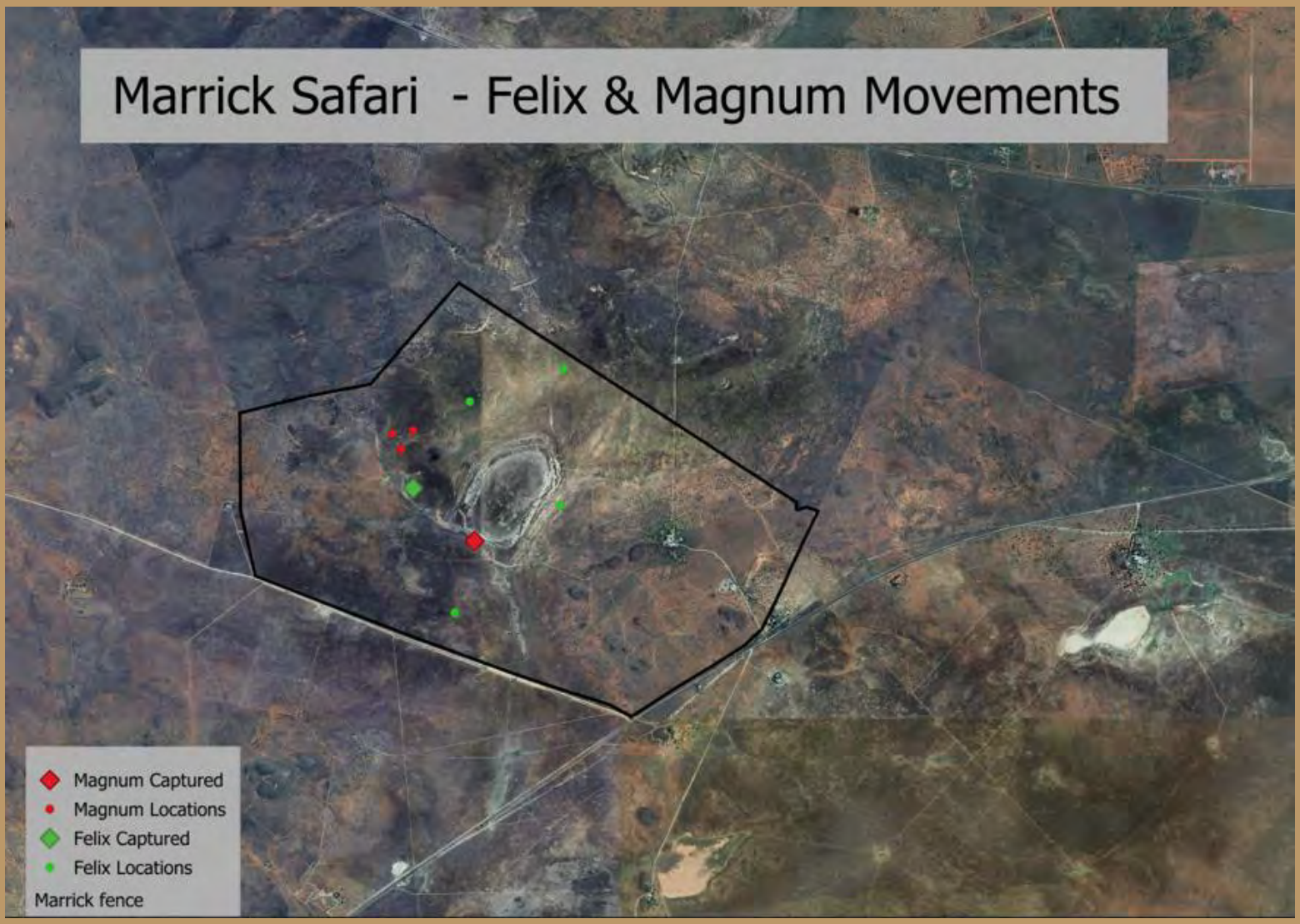

Figure 31: Felix and Magnum's Movements on Marrick Safari

Sailing on waves of gratitude:

As we embark on our quest for new discoveries, your support and sponsorship have been the wind in our sails. We are thankful for your continued support, helping us make significant breakthroughs.

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(Miershooptier Werkgroep)

Best regards from the veld,

Michelle Swanepoel