

## Black-footed cat Research Project Namibia

miershooptier · klein gekolde kat · Schwarzfusskatze · #Nu#aibeb · lkoirus · *Felis nigripes*

**The Black-footed Cat Research Project Namibia** was initiated in 2012 to 1) collect more fine-scale distribution records of black-footed cats in Namibia, specifically on farmland and protected areas in Namibia; 2) educate & raise awareness for this little known wild cat species; 3) investigate & identify threats and to establish its conservation status; 4) find strongholds for its conservation and 5) study the distribution, biology and ecology of this species in Namibia. Large parts of the species' distribution range falls within private farmland, therefore landowner efforts and co-operation are important to conserve the species regionally. This rare species of wild cat should be seen as a flagship species of our unique arid southern Namibia. This project is a collaborative effort between the Black-Footed Cat Working Group (BFCWG), the Namibia University of Science and Technology (NUST) Biodiversity Research Centre (BRC) and the Ministry of Environment, Forestry & Tourism.

Four female black-footed cats, the first ever to be studied in Namibia, were captured and collared by the members of the BFCWG on farmland near Grünau in February 2020. Ndele Shipala, the field technician and NUST Masters student, has been competently monitoring all the collared cats since capture and collecting data on home range (Figure 7). Shipala returned to Windhoek at the end of June and was unable to return until the end of September due to Covid-19 travel restrictions. This left the cats un-monitored for two and a half months. As soon as restrictions were lifted, Shipala raced down to check on the cats. Auas and Kara were quickly located and visual sightings confirmed that they were healthy and well. Worryingly, Lace and Prima could not be located and Shipala searched the surrounding areas extensively, climbed all possible mountains and contacted all the neighbouring farmers for permission to access their property to search. His dedication, passion and patience clearly showed and he never gave up. He has good relations with all the farmers and makes great effort to keep them informed and involved. Martina then joined him in October to help in the search, and together Prima and Lace were found to be healthy and well. We saw three un-collared black-footed cats as well, an indication that there is a healthy and viable population in the area.

Please see below updates from the field written by Shipala on his work, experiences and on the life of the Namibian black-footed cats (bfc).

### Return to the black-footed cats after lock-down

by Ndele Shipala



Figure 1 Ndele Shipala listening for Lace's signal from a mountain top near Grünau.

Finally the Covid-19 travel restrictions were lifted in September and I could return to the bfc's on the farmlands in southern Namibia. First ever kittens recorded, second ever cat in a tree, first ever male and female interaction observed in Namibia and cats exploring new areas.

Fortunately, there were many rodents (large-eared mice, hairy footed and short-tailed gerbils) and ground-roosting birds observed at night in October, suggesting adequate prey and food for the cats (Figures 2). This also important for the females who already have kittens, are gravid (pregnant) or may give birth soon. Here is the inside update on the radio-collared bfc's monitored in Namibia.



Figure 2: An abundance of potential prey was observed at night, including large-eared mice (left) and groups of grey-backed sparrow larks (right).

### Prima

We have found Prima again in the area she relocated to in May and it seems she just found herself a new territory on Quartzdrift farm, 10km north-east of Grünau. She may have wandered some distance to the west, so the signal could not be picked up. However, the coax cable of the antenna was faulty, so we may have not heard the signal. Not only does the farm have suitable grass biomass and good flat terrain, but it is also has lots of food for the cats (birds and rodent species). Prima was the first bfc to be collared in Namibia to have given birth (visual confirmation of one kitten: Figure 3, left). The one night we tracked her on foot and saw eye-shine in a 2.5m high tree in the distance. As we approached closer, there were another set of eyes at the base of the tree. It was another bfc, loudly meowing and looking up into the tree at Prima (Figure 3, right). This cat looked larger in size and we assumed that this was a male, who after relentless pestering had made Prima climb the tree to escape. This behaviour has only been seen by Dr Alex Sliwa once before (in over 30 years of studying bfc's) and is likely only to happen under extreme duress.



Photo: Martina Küsters 🐾 Black-footed Cat Research Project Namibia



Figure 3: Prima's tiny kitten, estimated at less than 7 days old (left). Prima in a Kamelthorn tree (right) (M. Küsters).

### Lace

After a few weeks of not picking up Lace's VHF signal, I finally heard the signal from atop a mountain near Grünau. I searched the area in the direction of the signal and never heard the signal from the ground. The flat terrain of the study area makes locating signals difficult and the mountains are all far away. From none of the other mountains was the signal heard so we continued to search in the area in the direction of the signal source (i.e. the bearing line from atop the mountain). Many hours we searched and could not find her. I say 'Today's tears water tomorrow's gardens'. It always pays to not give up and try again. After climbing koppies without success, just as a dream we were surprised to hear the signal from a neighbouring farm to the south-east of her previously known home range. The farm has undulating gravel plains, resulting in the signal either bouncing off the undulations or dissipating in blind-spots. The area has little vegetation cover for her to use while she hunts, but there are many rodent holes, suggesting a good prey base. Why would she wander out of her seemingly stable home range to a less than ideal habitat? She is however doing very well, grooming, stalking and from the camera trap footage she looks gravid. Visual observations confirm that her belly looks rounder (Figure 4, right). Would it be a coincidence that she is living near the water point? We hope that she is not drinking water, a symptom of AA amyloidosis, a fatal disease that causes kidney failure. Bfc's don't usually drink water. If she is gravid, she will most likely give birth within the next 2-3 weeks.



Figure 4: Lace emerging from a den after sunset (BFCWG). Lace hunting around dens, her round belly is visible (right) (M. Küsters).

### Kara

Kara has never really wandered far from the area she was captured in and it appears she has the most stable home range. Continued monitoring will reveal the extent of her range. She is a very energetic hunter and very amusing to watch (Figures 5). She has never been recorded on a camera trap, despite many attempts at setting the camera. Is she too sneaky and just leaves the den very fast and the camera cannot trigger quickly enough? Or it may be because she prefers using communal dens (a large system of dens used by various species with many exits/ entrances) and she just exits the den from the other end? Very interesting, we will find out soon.



Figure 5: The energetic Kara peering out of a den system in which she was searching for food (left). Kara listening for prey and grooming (right) (M. Küsters).

### Auas

Auas often wanders from her home range, exploring new areas. She crossed the B1 tar road east of her usual territory. She is one of the cats that often ventures to areas with thicker and taller vegetation (Figure 6, right). Visual observations confirm she is in good condition, grooms regularly, stalks and hunts, then rests. We also observed her rolling on her back.



Figure 6: The beautiful Auas emerges from her den (left). Auas hunting in dense grass (right) (M. Küsters).

My heartfelt gratitude to Martina Küsters for her determination and support in the field, Dr Morgan Hauptfleisch for tracking suggestions, co-operating farmers, Auas Motors, Tren Tyres and all the members of the Black-footed Cat Working Group. Ndele Shipala

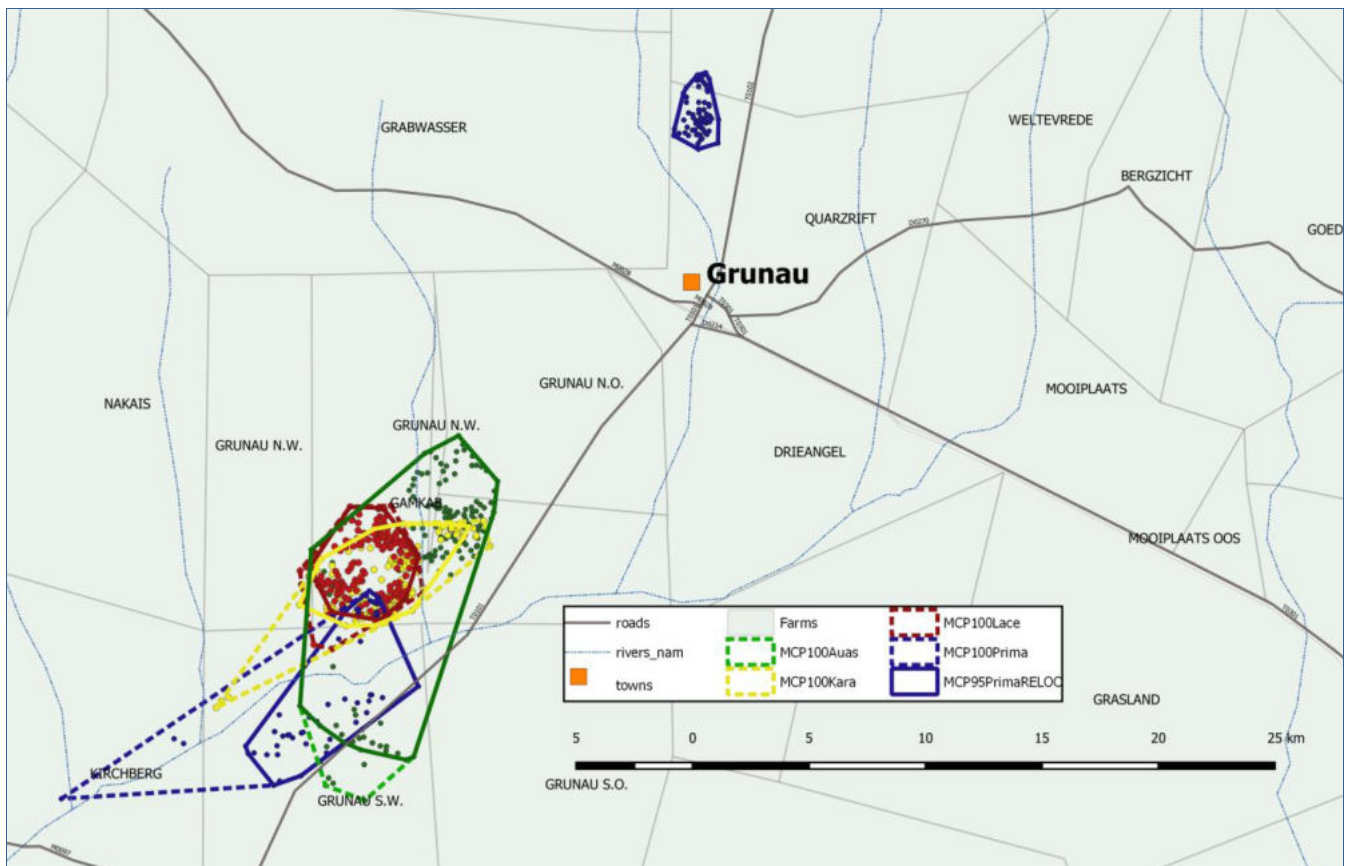


Figure 7: A map of the study area and the home ranges computed by Minimum Convex Polygon (MCP) of the data collected by Shipala from March – June 2020. The size of the home ranges are much larger compared to the sizes of females in the dry Karoo, Northern Cape, South Africa. These data represent important new information on the species in a unique habitat.



A special thank you to all the farmers in the Grünau area for supporting, helping and allowing access to their properties in order to undertake this research: **Kobus & Margaret van der Merwe; Johandre & Anri van der Merwe; Marisa & Phillipus Fourie; Alwyn Smith; Dolf & Kinna de Wet; Rean Steenkamp & Barend Matheus Swartz.** Francois Swartz is thanked for assistance in the field.

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If you wish to support the project, contact us at [bfootedcat@gmail.com](mailto:bfootedcat@gmail.com) or **+264 81 403 0654**.

**We wish to thank all our collaborators, supporters and funders and all farmers for contributing to the research and conservation of the unique black-footed cat!!**

**Auas Motors** is thanked for the sponsorship and maintenance of a field vehicle.

**Tren Tyre Namibia** has also committed to supply new tyres for the field vehicle, whenever needed.

