by Martina Küsters, Dr Morgan Hauptfleisch, Dr Alex Sliwa & Ndele Shipala (Field Technician)



Figure 1: Auas leaving her den site at sunset, cautious of the camera.

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.

One year after the first ever captures and collaring of black-footed cats (hereafter bfc) in Namibia, all female cats are well and have given us the opportunity to study their home range movements. Ndele Shipala, the field technician and NUST Masters student, regularly monitored all the females by telemetry, some camera trap footage (Figure 1) and visual observations throughout 2020 and into 2021. It takes a lot of patience, diligence and passion to work on these secretive nocturnal animals. The landowners' support and co-operation is vital for the success of the project and for the long-term conservation of this unique species in southern Namibia.

We plan to replace the collars of the four females and hopefully catch new cats in early June and hope to continue this project with continued support and trust of our collaborators and funders.



Dr Alex Sliwa joined Shipala in the field in November 2020 and was able to take good photos and observe all the females well.

Naples Zoo is sincerely thanked for their financial support throughout 2020, without these the monitoring of the collared animals would not be possible. The funds supported the field technician and paid for the fuel for field work.

Please see below updates from the field written by Ndele Shipala from October 2020 to March 2021.

Update on the black-footed cats of Grünau

by Ndele Shipala

Prima

It seems that Prima has established her new home range in the area she relocated to in May 2020, and she is doing well in her new home. It is unfortunate that we were not able to get camera trap footage of her and the kitten after seeing it when less than 7 days of age on 17 October 2020. But I did see the kitten once on 7 December very briefly while tracking Prima and recording the den during the day. This confirms that the kitten had at least survived until the age of almost two months (estimate of 58 days), but was not seen again after that. Prima seems to prefer using community dens (den systems with many entrances), and we assume that she leaves the den from the other end making it difficult to get her on camera. The cameras are also triggered by moving grass in the wind and by ground squirrels leaving or entering the den. Activities such as grooming, resting and hunting are most recorded during tracking (Figure 2).



Figure 2: Prima in early December during her search for food (A. Sliwa). The black-footed cats in southern Namibia have a paler and more brownish coat pattern compared to the dark and bold black markings of cats for example in the Karoo.

Lace

Lace relocated to the neighbouring farm to the east in October 2020 and we were concerned because her new range is barren and she was consistently hunting and resting around a water point. Previous observations of bfcs around water, later confirmed that regular drinking indicates kidney failure, a condition caused by amyloidosis. Monitoring of affected individuals usually lead to the death of the bfc, confirmed by evaluating presence of amyloid proteins in tissue samples collected shortly after death (Küsters, pers. obs). Fortunately, it was never observed that Lace drank water or lost condition and she selected that area for other reasons. The habitat is heavily overgrazed with little vegetation cover, making visual observations difficult since she feels shy and unsafe, and always seeks refuge in the closest den (Figure 3, top). She is still in that area but with some rain, the vegetation has recovered a little. She too, is observed hunting, grooming and resting in and around the dens (Figure 3, bottom). No kittens have been recorded yet for Lace.



Figures 3: The shy and timid Lace peeps out of a den system in which she was hunting (top). Lace hunting around dens (bottom) (A. Sliwa).

Kara

Kara has never crossed the tarred national road to the east and is has always remained in the area in which she was captured. She has a small home-range compared to the other collared females in Grünau. Just like the other cats, she is usually observed resting (Figure 4, top), hunting (Figure 4, bottom) and grooming. The prey density in her may be the reason for the stable and small home range size, as many rodents, birds, lizards and geckos are seen while tracking her at night.



Figures 4: The energetic Kara takes a few minutes rest (left). Kara stalking prey (right) (A. Sliwa).

Auas

The vegetation in the eastern part of Auas' home range is dense with a thick cover of grass. Auas is one of the more relaxed study animals, and very easy to track and observe and has habituated well to monitoring (Figure 5). She is so used to the vehicle's lights and occasionally uses them to her advantage, catching moths and insects that are attracted to the lights. Unfortunately, no kittens have been recorded for Auas either. The size of her home range is larger than any of the other females (Figure 6).



Figure 5: Adult female Auas is healthy and in good condition. Picture taken on 2/12/2020 during monitoring (A. Sliwa).



Figure 6: A map of the study area and the home ranges of the movement data collected by Shipala during 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 seasonal home range shifts and habitat requirements of the species in an arid environment.

We acknowledge the profound support from the Black-footed Cat Working Group. Our sponsors, Auas Motors and Tren Tyre Namibia of the Nictus Group are thanked for their commitment to the project. Martina Küsters for her endless support, field advices and tracking suggestions.

Dr Morgan Hauptfleisch is thanked for co-ordinating the vehicle services and field visits by Shipala. We thank **Dr Alex Sliwa** for his unconditional support and advice on the project.

Shipala

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If you wish to support the project, please contact us at 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!!

