Urban Hyaena Translocation Project Report

Hyænas in Transit
May 2015

A collaborative project between Carnivore Research Malawi, Lilongwe Wildlife Trust and the Department of National Parks and Wildlife Malawi
We would like to thank the following funders and supporters of the Hyaena Translocation Project:

- Central African Wilderness Safaris
- Nottingham Trent University
- AGS Frasers
- Airtel
SUMMARY
A collaborative project between Carnivore Research Malawi (CRM) and the Lilongwe Wildlife Trust (LWT) resulted in the successful capture of four spotted hyaenas’ (*Crocuta crocuta*) between July 2014 and December 2014 from Lilongwe City, the capital of Malawi. The animals were captured and housed temporarily in Lilongwe Wildlife Centre to mitigate human wildlife conflict in the city, in partnership with the Department of National Parks and Wildlife (DNPW).

The aim of the capture was to relocate the animals into Liwonde National Park (LNP), away from potential human conflict. The initial release in January 2015 was postponed due to severe weather, and was rescheduled for early April 2015. With support from Central African Wilderness Safaris (CAWS), Airtel, Nottingham Trent University (NTU), the Wildlife Emergency Response Unit (WERU, a joint initiative between LWT and DNPW) and AGS Movers the animals were released into LNP on Monday 13\textsuperscript{th} April 2015. The transport and relocation was a great success with all animals arriving safely on the evening of the 13\textsuperscript{th}. After a few hours in the temporary holding boma the animals were released and have subsequently been closely monitored by the CRM scientists, using VHF and satellite tracking to monitor their progress post-release.
**Release Clan**

**RC1** – RC1 was caught on the 28\textsuperscript{th} July 2014. A large female, she spent almost 9 months in aptivity waiting to be released. She was fitted with a VHF collar on 13\textsuperscript{th} April ready for release.

**RC2** – RC2 was the caught on the 22\textsuperscript{nd} August 2014. Another large female standing 76cm at the shoulder, she was successfully fitted with a VHF collar at the first release attempt in January.

**RC3** – RC3 was caught on the 8\textsuperscript{th} December 2014. As a sub-adult it was decided that this animal would not be collared for ethical reasons, as continued growth would mean there could be a risk of mortality from the collar.

**RC4** – RC4 was the final hyaena caught and also the largest, standing 83cm at the should, she is a large breeding female. At the time of capture (December 10\textsuperscript{th} 2014) she was lactating and it is highly likely that she was still lactating for RC3. RC4 was the dominant female of the clan and was therefore fitted with a Followit Satellite collar, giving us regular and accurate satellite data on her spatial movements.
**RELEASE PROGRESS**

**Monday 13th April 2015**

The release day began at 4am on Monday morning when the four hyaenas were darted by WERU vet Dr Amanda Salb and moved to their individual crates ready for transportation. One final collar was fitted to the release clan, with two already collared at the first attempt to release in January this now brought the number of collared individuals to 3 out of the 4 hyaenas, and final preparations for the journey down to Liwonde were made.

After the long journey down, which involved travelling to the other side of Liwonde National Park and entering through the Masanje Gate, the hyaenas’ arrived at the airstrip for the final stage of their journey at around 11pm.
With the assistance of CAWS staff and the rhino tracking and Malawian Rhinos research team in LNP the crates were moved individually from the airstrip to the holding boma in the rhino sanctuary.

After a couple of hours in the boma to recover from their long journey the animals were then released in the early hours of the morning and subsequently tracked through the night by CRM researchers. As the sun began to rise the four hyaenas were left resting within the confines of the sanctuary.
POST RELEASE MONITORING

The following weeks were both challenging and exciting as the hyaenas dispersed throughout the park. Unfortunately, after release the clan did not stick together; with the three collared hyaenas all going in different directions. RC1 was found in the northern region of the park, close to Livingstone's Baobab, RC2 stayed close to the northern end of the sanctuary and RC4’s moved to the eastern boundary of the park before also heading north.

Although the sub adult RC3 was not collared, it was located on camera traps set by CRM to monitor the hyaena movements; showing that it had moved north around Livingstone’s Baobab. Despite being observed feeding on the remains of an impala only an hour after RC1 had also visited the site, RC3 and RC1 have not been observed together.
**POST RELEASE MONITORING**

RC1 has given the CRM team the most success over recent weeks with some exciting encounters and close behavioural observations. She has spent most of her time hunting on the floodplains that border the Shire River and has proven to be very curious around the CRM research vehicle. From these close observations the CRM team has been able to confirm that she is in good condition; although she has not been observed successfully hunting this is partly due to the long grass that still remains in the park.

Over the coming weeks and with improved habituation it is hoped that significant progress and data can be gathered from RC1. Camera trapping has also been useful, with pictures showing her utilizing the full extent of the park providing additional spatial data.
POST RELEASE MONITORING

RC2 has unfortunately proved extremely difficult to find and has not been located since the first week of the release. During the first week RC2 could be found in the north east section of the rhino sanctuary, however, since then her signal has disappeared and all attempts to find her have failed. The CRM team has visited all vantage points across the park to try and locate her but none of these attempts have resulted in a signal. Since the re-opening of the Chinguni Road the CRM team has also covered the southern section of the park and climbed Chinguni Hill, the highest peak in the park, but still no signal has been picked up. With a limited road network, the highly transient nature of these hyaenas' and the restricted range of VHF collars it is unsure whether or not she will be located again soon.

RC4’s satellite collar data has shown that after a period of two weeks on the northern edges of the park, she left the park and headed north. She is slowly making her way back towards LNP and so CRM will maintain a close eye on her movements to see how she progresses.
PLANS FOR FUTURE MONITORING

CRM will continue the search for RC2 and hopefully locate her within the park. This will be done through continued sweeps of all the roads in the park, foot transects and opportunistic scans when tracking other hyaenas’. Identification sheets and glovebox kits for all released and resident LNP hyaenas will soon be given to CAWS staff to aid the search and help us with data collection for the spatial movements of hyaenas within the park and facilitate game viewing for CAWS clients. To aid the search for RC2 and home range data for the released hyaenas’, a more substantial camera trapping survey will be established in June 2015.

Post-release monitoring and habituation of RC1 will continue to facilitate the collection of behavioural data. RC1 is already habituated to the presence of the CRM research vehicle so the next stage is to habituate her to being followed in the vehicle as she moves through the park. As we go into the dry season the loss of vegetation and greater access to roads will no doubt increase our habituation efforts. The movements of RC4 will also be closely monitored and it is hoped she will make her way back to the park in the near future.
CRM FUNDERS AND SUPPORTERS
CRM would like to thank all our funders and supporters.

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