

# The Meerkatter

The Friends of the Kalahari Meerkat Project Report - www.kalahari-

meerkats.com - August 2024					
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# **Cape Cruising**

The Kalahari Meerkat Project is currently studying 18 meerkat groups, 5 of which are classed as "habituation groups." A group is considered a "habituation group" when their overall behaviour is affected by the presence of an observer. Habituation levels can differ, especially if there are already some familiar, previously habituated meerkats in the group. Sometimes groups are found to be entirely made up of wild individuals, such as the case of Phoenix, which had infrequent exposure to observers over several years and the comfort zone defined as distance before the group moves away, can stretch up to 80 m. On the other hand, other groups, like Hogwarts, consist of previously habituated individuals and are much more comfortable and allow human presence within few meters.

Cape Crusaders was formed by three previously habituated meerkats, all of whom came from Side Quest. Back in June 2022, dominant female Pumba (VZUF048) evicted her littermate, adult subordinate female Timon (VZUF049), who tried re-joining the group multiple times. Two other adult subordinate females at Side Quest were reportedly evicted in July that year - having not been found with Side Quest on the same day. They were not seen for a few months before eventually being found in a new group. The presence of juveniles and pups confirmed reproduction, at which point the group was successfully radio-collared and became an official habituation group. Thus began the story of Cape Crusaders.

Up until the end of February this year, habituation of the group was in progress, and steadily improving, as the group was mainly made up of previously habituated females and young meerkats. Suddenly, we were no longer able to locate the group using the radio receiver. The possibility of a faulty radio collar, emigration, or predation of the dominant female Rosetta (VCCF004) were likely explanations. Little was known about the territory of Cape Crusaders, and efforts were put into burrow sweeping in an attempt to find the group. To date, they have not been found. One fact is certain, Cape Crusaders were known to share a territory with Side Quest and regularly use their sleeping burrows. Unfortunately, most individuals at Cape Crusaders were not habituated enough to be fitted with a transponder and the only individual currently fitted with one is Rosetta, who has not been seen since the group disappeared.

Throughout the majority of the month of July, Side Quest have been having encounters with a group of unknown adult meerkats. A clash between Side Quest and the unknown individuals was unfolding, most notably on the morning of the 27th of July when an unknown male appeared at their sleeping burrow along with six unknown adults. Although, they were repeatedly chased away by Side Quest, they would not leave the group alone for the entire morning session. The total number of unknown meerkats is not certain as observers have been reporting a group size ranging from 5 to 7. One thing that was noted consistently was the individuals who would stay around Side Quest when the group left to forage, were adult males. Surprisingly, they were comfortable around observers at a distance of 3m but would not drink water or eat egg when presented with it.



Side Quest group on the 29<sup>th</sup> of August. Photo credit: Sofya Melnikova, Life History Coordinator.

Pumba has given birth this month, and on the morning of the 20<sup>th</sup> of August, the group reacted to three unknown males, and one unknown adult wearing a radio collar, appearing at their current babysitting burrow. Side Quest immediately chased the meerkats away, and a fight broke out between yearling subordinate male Toph (VSIM024) and an unknown male. The observer following the group was not able to tell whether the collared individual was male or female. However, the collared meerkat was seen again on the 24<sup>th</sup>, when a group of meerkats was approaching the babysitting burrow and were chased away in a similar manner as before.

It was later discussed that this individual was highly likely to be Rosetta, whose collar has most likely malfunctioned. This suggests Cape Crusaders have been crossing paths with Side Quest over the past two months. The question remains, whether Cape Crusaders is competing with Side Quest for territory, in which case, we are worried about Side Quest's new-born pups who have not yet emerged. Another possibility is that they may be trying to join the group? We will continue reporting on the encounters between the groups and hopefully fit Rosetta with a new radio collar in the coming months in order to resume habituation of the group.

#### Succession

Every day our observers venture into the field expecting the unexpected, and reporting on the activities of our current groups. Typically, they will record submissions and dominance assertive behaviours, but when they observe a particularly unusual behaviour - such as a dominant submitting to a subordinate - this is reported to the Life History Coordinator. The behaviours are then closely monitored in the event of a dominance change within the group.

This was the case on the 8<sup>th</sup> of November 2023, in the group of Jaxx. Our observer witnessed submissions from the dominant female at the time, Baloo (VJXF080), to her eldest daughter Jub Jub (VJXF160), a subordinate who repeatedly chinned, hip slammed, glared, and even sat on her mother. This was a clear indication that Baloo's status had changed, and she was no longer the dominant.



Dominant female Jub Jub at her home group Jaxx. Photo credit: Sofya Melnikova, Life History Coordinator.

Mother and daughters – the question of succession within a group is often an interesting one for our observers. The expected line for female succession would most often be the eldest daughter inheriting the dominance position, however, this is not always the case. This article follows up on the previously written article "Snakes on a Plain – Part 1 and 2 "from the November 2023 Meerkatter, and attempt to answer the questions previously asked concerning Baloo's loss of dominance.



Adult subordinate Baloo at her home group Jaxx, photo taken before the puff adder bite. Photo credit: Maahir Jusabani, Zurich Manager

Baloo had been dominant at Jaxx from December 2016 and her path to dominance was a direct when previous dominant female ascension Teahupo'o (VJXF058) was found predated in the previous month of November. At the time, Baloo was thought to be evicted as she was not seen with the group, but appeared to be foraging at a distance from the group. Her daughters: adult subordinate female littermates Nezumi (VJXF094) and Balbina (VJXF096) competed over dominance and Balbina did gain short-term dominance at Jaxx, until her mother returned and claimed it for herself. At present, Baloo's seven-year reign, alongside former dominant male Leonard (VLM221), has been the longest at Jaxx. During her time, she was a successful breeder and has delivered 19 litters thus far. She also had a reputation for evicting subordinate females during her pregnancies, such as her eviction of Jub Jub around a year ago. This came to an end with the puff adder bite in November 2023 when she lost her dominance to Jub Jub.

As mentioned in the previous article, her story echoes that of former Whiskers dominant female Swift (VWF176), who also sustained injuries after a snake bite and subsequently lost her dominance for a short period in 2020. A competition broke out involving three of her daughters but was quickly settled as Swift was seen repeatedly asserting her dominance over subordinate females at Whiskers. With all this said, the question still remains as to why Baloo did not attempt to claim it back from Jub Jub as soon as her injuries healed.

While the stories of the dominant females resemble one another; they are not mirror images. In Whiskers' case, Swift continued competing against her three daughters despite her injuries. Baloo, however, having spent the night in a bolt hole by herself, submitted to Jub Jub as soon as she re-joined the group the next morning. Baloo's reluctancy to challenge Jub Jub and Jub Jub's guickly found and secured dominance were both surprising to see for our observers. That said, there might be an explanation: "The low frequency with which displacement occurs probably reflects the potential costs associated with challenging for status and the low probability of success".<sup>1</sup> The risk associated with challenging Jub Jub would likely be eviction since she was confirmed dominant not only by asserting it with Baloo, but other females at Jaxx as well. In contrast with Whiskers, competition for dominance was still open, which might have given Swift enough time to heal and start competing again. Looking back, Baloo regained her weight following the bite, but did she regain her strength or was the "cost to benefit" ratio not in her favour to successfully challenge her daughter?

Since Jub Jub gained dominance, and throughout the months of July and the beginning of August, she has been seen asserting her dominance repeatedly over her mother. Curiously though, Baloo was still able to deliver a litter and was not evicted during her pregnancy - the latest Jaxx litter belonging to her. Sub-adult subordinate male Gobi (VJXM194) is the only individual still present from this litter.

Sadly, Baloo has not been seen since the 10<sup>th</sup> of this month. Observers are eager to see her again as she remains a beloved and stand-out female meerkat. We are hoping that her story does not end here, but in case it does, she most certainly will be remembered as a fierce dominant female and a successful breeder.

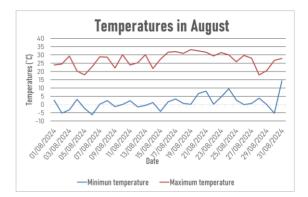
#### **References**

<sup>1</sup> Sharp & Clutton Brock, 2011. Reluctant challengers: why do subordinate female meerkats rarely displace their dominant mothers?

Females pregnant in August	2
Females who aborted	0
Females who gave birth, litters lost	0
Females who gave birth, litter emerged	0
Females who gave birth, unknown outcome	1
Females still pregnant at the end of the month	1

# Pregnancies in August 2024

# Weather at the KMP



Temperatures have started to slightly warm this month. The average minimum temperature was 1.2°C and the average maximum temperature was 26.5°C. The hottest day was on the 19<sup>th</sup> of August, at 33.2°C. The coldest day was on the 6<sup>th</sup> with a temperature of - 6.2°C. It did not rain throughout this month.

### August 2024 Life History Details

Due to the large number of groups we are covering, we have made some changes to the way we are collecting data at the KMP. There are four different levels of data collection, that we will briefly introduce here.

#### Full data collection group (FDC)

We collect LH data at the group and regularly visit the group for full adlib and weights sessions.

#### Life History monitoring group (LHM)

Observers tend to visit these groups for shorter amounts of time. We collect LH data and increase our visits when new pups need to be habituated. We do not collect adlib data at these groups but collect morning and evening weights a few times per week.

#### Habituation group (HAB)

Habituating meerkats to our presence is the main goal at these groups. As the group's habituation progresses, we start collecting LH and weights data as well. In a later stage, we try to follow the group after morning weights, introduce lunch weights and start approaching the group in the afternoon.

## Sub-group (SUB)

The amount of data we can collect at these groups depends mainly on whether a radio-collared individual is present. If that is the case, we try to collect LH, weights and adlib data, as it is very interesting to witness group dynamics within these newly formed groups. However, we do not always have a radio collar at these groups. In these cases, we focus on collecting LH data during opportunistic sightings.

# **Full Data Collection Groups:**

# Alba (FDC):

- All 11 individuals were present at the end of August.
- Adult subordinate male Ozzie (VECM033) was given his Last Seen this month after not waking up with the group on the 29<sup>th</sup> of June. He was seen away from the group on 8<sup>th</sup> of July and has not been seen since.
- Alba had no group splits, encounters or intergroup interactions observed this month.
- All individuals appeared healthy at the end of the month.

### **Brussels Sprouts (FDC):**

- All 5 members of the group were present at the end of the month.
- Adult subordinate male Gurke (VHMM036) left the group on the 6<sup>th</sup> and returned to the group the same day. He also left in the afternoon of the 31<sup>st</sup> and returned to the sleeping burrow the same evening.
- There were no encounters, group splits or intergroup interactions this month.
- All members of the group appeared to be in good health.

### Elrond's Council (FDC):

- All 13 members of the group were present at the end of August.
- Male dominance remained unconfirmed at Elrond's Council.
- Elrond's Council had 20 encounters with unknown adult males this month. On the 2<sup>nd</sup>, the group war danced and chased away two unknown adult males who approached the group. On the 20<sup>th</sup> and 21<sup>st</sup>, the group war danced and chased away two unknown adult males' multiple times who retreated and remained foraging at a 30m distance from the group. On the 25<sup>th</sup>, yearling subordinate male Croqueta (VECM052) fought an unknown adult male, and yearling subordinate male Fiufiu (VECM053) chased an unknown adult male away from the group. The two unknown adult males retreated and returned to forage near the group.
- There were no group splits or inter-group interactions this month.
- All members of the group appeared to be in good health.

#### Gold Diggers (FDC):

- All 14 members of the group were present at the end of August.
- There were no encounters, inter-group interactions or group splits this month.
- All members of the group appeared to be in good health.

# Jaxx (FDC):

- 13 out of 14 individuals were present at Jaxx at the end of August.
- Male dominance remained unconfirmed at Jaxx.

- Adult subordinate female Baloo (VJXF080) was not seen with the group in the afternoon of the 13<sup>th</sup>. Yearling subordinate male Hlumelo (VJXM176) left on the 14<sup>th</sup> and woke up in a bolt hole 25m away from the group on the next morning after which he was accepted back to the group.
- Baloo is yet to return to the group by the end of the month.
- There were no encounters, inter-group interactions or group splits this month.
- Habituation is in Advanced Progress, adult subordinate male Sneaky (VJXM170) was made a habituation individual last month due to being very skittish around observers. He can be followed at a distance of 2m, is interested in water but has not eaten egg so far.
- All individuals appeared to be in good health.

### Lazuli (FDC):

- 21 out of 22 individuals were present at the end of August.
- Adult subordinate male Subigubi (VUBM050) and adult subordinate male Vegeta (VGDM038) both left on the 26<sup>th</sup>, Subigubi was seen returning to the group later that day.
- Vegeta is yet to return to the group by the end of the month.
- Lazuli had no group splits, encounters or intergroup interactions recorded this month.
- All individuals seemed to be in good health.

#### Side Quest (FDC):

- All 15 members were present at the end of August.
- Dominant female Pumba (VZUF048) was found to have given birth on the 17<sup>th</sup>. With lactations present and babysitting evident, she has most likely successfully given birth.
- Sub-adult subordinate female Granita (VSIF031) was given her Last Seen this month after not waking up with the group on the 15<sup>th</sup> of July.
- Side Quest had eight encounters with unknown adult males and one encounter with an unknown adult this month. On the 20th the group war danced and chased away an unknown adult male - yearling subordinate male Toph (VSIM024) was seen fighting and repeatedly chasing an unknown adult male away from the group. On the 24<sup>th</sup> three unknown adult males were chased away and returned repeatedly to the group. One unknown adult male stayed at 15m from the group. The same evening, an unknown adult male was seen going below Side Quest's current babysitting burrow. On the evening of the 25<sup>th</sup>, an unknown adult stayed at 80m from the group as the group returned to the burrow.
- The group had two inter-group interactions this month. On the 20<sup>th</sup> the group had a physical inter-group interaction with a group of three unknown adult males and an unknown adult female with a radio collar, we suspect it to be Cape Crusaders. The group war danced, fought,

and chased the unknown individuals away who retreated and returned twice. On the 24<sup>th</sup> the group had an inter-group interaction with an unknown group. Side Quest war danced and chased the group who retreated and returned three times.

- The group had no group splits, or inter-group interactions this month.
- All individuals appeared in good health.

# Trackie-Daks (FDC):

- All 12 individuals were present at the end of the month.
- Dominant male Coquillette (VTSM014) left the group on the 22<sup>nd</sup> and returned the same evening. Adult subordinate males Guardy (VTDM012) McGuardface and Kroket (VTDM022) left the group on the 3<sup>rd</sup> during an inter-group interaction with Ubuntu. Guardy McGuardface was back with the group later the same day and Kroket woke up with the group on the 7<sup>th</sup>. On the 21<sup>st</sup> Kroket and sub-adult subordinate male Johto (VTDM039) did not wake up with the group, they were seen roving at Ubuntu and returned to Trackie-Daks in the evening the same day. On the afternoon of the 23<sup>rd</sup> Kroket and Guardy McGuardface were seen roving at Ubuntu, they woke up with the group on the 26<sup>th</sup>.
- Trackie-Daks had two inter-group interactions with Ubuntu this month. On the 3<sup>rd</sup> and the 22<sup>nd</sup> the group war danced at Ubuntu who retreated but then in both situations, returned to chase away Trackie-Daks.
- Trackie-Daks had no group splits this month.
- The habituation level is currently Advanced *Progress.* Coquillette still remains vigilant and jumpy when followed closer than 2m.
- All individuals appeared to be healthy.

# Ubuntu (FDC):

- 18 out of 19 individuals were present at the end of the month.
- Yearling subordinate female Scallywag (VUBF067) did not wake up with the group on the 6<sup>th</sup>. Yearling subordinate male Flibbertijibbet (VUBM066) was not with the group in the afternoon of the 23<sup>rd</sup>, he was back with the group later the same day.
- Scallywag is yet to return to the group by the end of the month.
- The group had 12 encounters this month with Trackie-Daks male individuals. On the 3<sup>rd</sup> adult subordinate male Kroket (VTDM022) was chased by the group who repeatedly returned. On the 21<sup>st</sup> Kroket and sub-adult subordinate male Johto (VTDM039) were roving at Ubuntu. They were war danced and chased away by Ubuntu individuals and stayed at a distance of 15m from the group. On the 23<sup>rd</sup>

Kroket and adult subordinate male Guardy McGuardface (VTDM012) were roving at Ubuntu when Ubuntu's yearling subordinate female Tiddlywink (VUBF069) was seen approaching Guardy McGuardface and engaging in physical contact, the group war danced and then chased the individuals away.

- Ubuntu had two inter-group interactions with Trackie-Daks this month. On the 3<sup>rd</sup> and the 22<sup>nd</sup> the group war danced at Ubuntu who retreated but then in both situations, returned to chase away Trackie-Daks.
- Ubuntu had no group splits this month.
- The group appeared to be in good health at the end of the month.

# Zulus (FDC):

- All 6 individuals were present at the end of August.
- Adult subordinate male Rain (VZUM067) left the group in the morning of the 2<sup>nd</sup> and returned to the group later in the same day.
- Zulus had no encounters, inter-group interactions or group splits this month.
- All individuals in Zulus appeared to be healthy.

# Life History Monitoring Groups:

### Dik-Diks (LHM):

- All 10 individuals were present at the end of the August.
- Dik-Diks had no encounters, inter-group interactions or group splits this month.
- Habituation of the group remains in *Advanced progress* at the end of the month.
- All members of the group appeared to be in good health at the end of the month.

# Nightwatch (LHM)

- All 8 individuals were present at the end of the month.
- Male dominance at this group remains unknown.
- No encounters, inter-group interactions or group splits were observed this month.
- Habituation of the group is in *Advanced Progress* as of the end of the month.
- All members appeared to be in good health and the end of the month.

#### Vetkoeks (LHM):

- All 4 individuals were present at the end of the month.
- Vetkoeks had no recorded encounters, intergroup interactions or group splits this month.
- All individuals appeared healthy at the end of the month.

# Habituation Groups:

# Cape Crusaders (HAB):

 The group was not searched for this month as previous searches were unsuccessful. However, during an inter-group interaction at Side Quest on the 20<sup>th</sup>, a group of four unknown individuals were seen - one of which was wearing a radio-collar. Cape Crusaders were formerly known to use the current babysitting burrow of Side Quest and dominant female Rosetta (VCCP004) is outfitted with a radio collar. Due to the distance, the individual wearing the radio collar was not confirmed to be female. However, since observers have not been able to find Cape Crusaders since February, this makes us think the radio collar worn by Rosetta is no longer functional.

### Hogwarts (HAB):

- All 4 individuals and an unknown male were present at the end of the month.
- Female dominance at the group remains unknown.
- Adult female Helga (VZUF052) has been officially made pregnant this month.
- The group had no encounters, inter-group interactions of group splits this month.
- Hogwarts were visited 11 times this month. The group's habituation is classed as In Progress. Both adult females Salazar (VZUF051) and Helga (VZUF052) and sub-adult male Nkosana (VHWM001) are comfortable with hands, observers sitting and moving next to them, are interested in both egg and water and are easy weigh. Sub-adult male Buckbeak to (VHWM002) drinks water and is curious about egg, he has not been weighed yet. He allows to be hand groomed and is comfortable with observers sitting at 2m, he still remains jumpy The habituation of the with movement. unknown adult male is more difficult. The individual is comfortable with observers sitting at a 3m distance. He has not shown any interest in egg or water and does not approach the scale.
- All members of the group appeared in good health at the end of the month.

#### Mandalore (HAB):

- The group was visited 9 times this month, the group were only found on Heights once this month.
- Habituation is classed as *In Progress*. The group seems to be made up of five individuals - adult male Floki (VWM241), one unknown adult female, one unknown adult male, one unknown adult and one unknown sub-adult. But the exact group composition remains unknown. Floki and one unknown adult male are comfortable with less than a metre sit, and one adult female was seen eating egg at a 5m distance. The rest of the group stay up at a 35m sit but go below when observers get closer. All individuals were seen to eat egg during egg frenzies but were not interested in water.
- We will continue visiting the group to get them used to observers sitting and moving at a closer distance.

#### Phoenix (HAB):

- The group was visited 5 times this month.
- A group of four adults and three sub-adults have been using a sleeping burrow formerly used by Phoenix.
- Habituation is *In Progress*. The group has changed sleeping burrows this month and observers were able to get as close as 40m to

the group. The individuals stayed up at a 40m sit but went below as soon as they stood up or with movement. None of the individuals were seen eating egg during egg frenzying.

• We will continue visiting the group to attempt moving closer to the group and increasing their comfort distance.

## Whiskers (HAB) :

- All 9 individuals were present at the end of the month.
- Female and male dominance remains unsettled at Whiskers.
- Yearling female Medusa (VWF263) was given her Last Seen.
- Whiskers had no encounters, inter-group interactions or group splits observed this month.
- The group's habituation is classed as In Progress. Habituation of adult males Guido (VWM275) and Gojo Satoru (VWM274) is going well as both drink water and can be groomed. Neither have eaten egg but are comfortable with observers sitting at a 5m distance and have approached the scale. Habituation of the unknown adult male is slower as he still barks at observers upon emerging from the sleeping burrow. He is comfortable sunning at 5m distance from observers. We will continue visiting the group and increasing their comfort distance as well as potentially get their weights.
- All members of the group appeared in good health.

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