

The Friends of the Kalahari Meerkat Project Report - www.kalaharimeerkats.com - April 2022

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## **Tragedy at Elrond's Council**

Back in February we were excited for the emergence of dominant female Galadriel's (VECF032) litter. On the 27th we caught a glimpse in the babysitting burrow of one tiny pup in the mouth of an adult. The group was doing well, however, this was not to last. On the 4th of March the observer arrived at the group to find Galadriel missing. Sometimes the dominant male does leave the group but almost never the dominant female. This is because it would be costly to establish a new group or to have to fight to reclaim their old dominant position within the group. We knew this probably meant the worst, especially when she did not return in the subsequent sessions. After not being seen for a whole month Galadriel was given her last seen on the 4th of April.

Sadly, this spelt the end for her litter. In March, Galadriel was the only female lactating for the pups. It would also be in subordinate yearling female Calypso's (VECF027) best interest to let the litter die, as she was heavily pregnant and Galadriel's older pups would have created competition for her litter. This is because with the absence of this competing litter, the helper ratio would increase and the competition for food, from Galadriel's older pups, would decrease (helpers do not discriminate between litters when choosing who to help). Helpers have a crucial role in the survival of offspring as parents contribute relatively little to the initial protection of young. Moreover, where predators are abundant offspring survival rates increase in relation to number of helpers. Also, a study found that when there are multiple litters being raised at the same time in a group, the pups are lighter when they reach independence. Low pup weight at this age is associated with reduced rates of surviving to adulthood and a reduction in future breeding success. After six days of no individuals lactating for the litter, the group changed burrows on the 10th and the litter was declared abandoned.

But life goes on. On the 25<sup>th</sup> of March Calypso received direct submissions from the two other females in the group and became the new dominant female. The observer team were very happy about this as Calypso is a favorite at Elrond's Council. She is very easy to work with, going bipedal for water

when you need to do pregnancy/lactation checks and is keen for her egg reward at the scale. She is also fantastic at lactating for other litters which have been born at the group and probably contributed a lot to the survival of subordinate sub-adult male Survivor (VECM042). But that is a story for another article.



Dominant female Calypso (VECF027) suckling dominant female Galadriel's (VECF032) litter VEC2103. Photo credit: Meerkat Manager Laurie Johnson.

However, tragedy struck! On the morning of the 22<sup>nd</sup> of March, the observer witnessed Calypso giving birth to one stillborn pup. This was very troubling, as it is very rare to see this behaviour happening above ground. For the rest of the session she was very tired. She did not leave with the group and stayed behind at the sleeping burrow. Luckily the group foraged close by which meant she was not left behind. In the afternoon session the observer witnessed her giving birth to two more stillborn pups, one of which she took below with her. Despite witnessing three stillbirths we continued to monitor babysitting at the group, just in case she had managed to give birth to any live pups out of sight in the sleeping burrow. However, no induvial started lactating and no babysitters were left. On the 24th the group changed sleeping burrow and with these three pieces of evidence we felt certain there were no surviving pups. We were devastated at this news. The whole team were all really excited for Calypso to have pups of her own, after helping to raise so many others. However the bad news did not stop there. Six days later, the toll of the stillbirths began to show as observers noticed she had an array of injuries. She was skinny with a swollen nose and her genitals were swollen and torn. In the observer's opinion, it looked like her uterus had prolapsed. She was also acting very lethargic. She continued to get worse over subsequent days and on the 6th of April, she did not wake up with the group. Calypso has not returned to the group this month and considering she left with such horrific injuries it is unlikely she is alive. The litter Calypso was carrying would have been her first one, that we have recorded. First pregnancies are generally risky across many species so this could be one reason why her pregnancy ended in such tragedy.

With Calypso's disappearance, this dominance at Elrond's Council in a bit of a pickle. Currently the last two females at the group, subordinate sub-adults Mojo Jojo (VECF038) and Snoop Kat (VECF039) have started displaying dominance competition behaviour. However they are related to the current dominant male Palestrina (VLM211), as they are most likely his daughters. Palestrina used to be the dominant male at Zulus, but he left after his dominant female died, as he was related to all the other females in the group. When he left, he was 5.8 years old, already getting on in years for a meerkat. He is currently 8.4 years old. So, leaving the group, roving around solo until he finds a new group and then competing for dominance, all in winter, would be very costly and risky even for a young meerkat. We do not expect him to leave the group. It will be interesting to see how events unfold and hopefully Elrond's Council does not disband as a result of the dominance turmoil. As always, we will keep you updated as events unfold.

# Lost boys found!

And now for some good news, the other half of Brussels Sprouts has been found!

On the 29th of April, observes were driving back from a session at Zulus, when passing the Water Pump House, on the Eastern boundary of the reserve just North of East Gate, they saw a meerkat on guard on the fence. Thinking it was Namaqua they got out to investigate. To their surprise there were only two undyed males and a juvenile. It was then that they wondered: "could this be the Brussels Sprouts males and a surviving pup?" They put out a radio call and another team of observers came with a transponder reader to identify the males. The transponder number confirmed the two males were dominant male Shandy (VHMM023) and adult subordinate male Gurke (VHMM036). Once we had confirmed the males' identities, we could deduce that the juvenile, which still had a faded dye mark, was female juvenile Lyra (VBSF002).

This second team of observers split in to two: the first group staying with the meerkats, so we did not lose them and the second going back to collect the equipment needed to collect DNA samples and supplies to stay with the group for the rest of the day. Whilst the equipment was being collected the group returned to a burrow system, where the first team was delighted to find, there were two other juveniles: female juvenile Totoro (VBSF001) and male juvenile

Love (VBSM003). Shandy and Gurke had managed to keep all three pups alive. DNA samples were collected from the juveniles and the group was followed so their sleeping burrow could be ascertained. The next morning a radio collar was placed on Shandy.

This little group is now a sub-group called Brussels Sprouts 2 and we will be visiting them for life history stops, and to work on the juveniles' habituation. Hopefully this will also enable us to catch the moment when they rejoin the females at Brussels Sprouts, if they do at all, as it would be very interesting to see how they behave towards each other. Fingers crossed it happens soon.



Dominant male Shandy (VHMM023) on guard with male juvenile Love (VBSM003). Photo credit: Life History Coordinator Lila Chillingworth.

## Welcome Alba

At the beginning of February Alba (formerly Elrond's Council 2) had been together for more than 2 months and had successfully bred, meaning they could become a group and receive their own unique name. Group names are decided by a vote amongst the current observers. Alba was decided as it means sunrise in Italian, which is very fitting for the meerkats who live their lives by the sunrise and sunset, being a diurnal species. It also means Scotland in Scottish Gaelic. These multiple meanings across different languages are very fitting for our multicultural observer team.

Alba has doubled in size since forming with the arrival of six pups in February. First to emerge was the considerably larger female pup Tuktuk (VALF001) on the 26th of February. Tuktuk's emergence was shortly followed six days later by the much smaller female pups Rani (VALF002), Maya (VALF003), Ganga (VALF005), Madhubala (VALF006) and male



pup Nigoni (VALM004). Tuktuk did make us laugh as, being older than her siblings she should have left to go foraging with the group earlier than them. However, she stayed in the burrow with her younger siblings until they began to forage with the group, whilst in the meantime, much to our exasperation, getting the adults to pup feed her inside the burrow.

Things at Alba have been quite uneventful. However, we have always been quite concerned that they would have an inter-group interaction with Elrond's Council (known as Elrond's for short) as they use the bottom part of Elrond's territory. Back on the 21st of February, when the pups were still in the burrow, Elrond's came very close to the babysitting burrow. The observer was fearing the worst as usually if a group comes across another group's babysitting burrow, they would likely chase off the babysitter and kill any pups inside. But at the last-minute Elrond's turned round and headed back in the direction they came in.

However, Alba has not managed to completely avoid having an inter-group interaction with Elrond's as on the 19th of April the observer at Elrond's realised the group was heading for Alba's last known location. As far as inter-group interactions go this was quite a bizarre one. Due to the long grass, both groups spent a fair amount of time foraging next to each other before they realised their nearest neighbors were not in fact from their group! Then the inter-group interaction began. Alba began the approach by war dancing at Elrond's, much to the surprise of the observer as they are a much smaller group mostly comprising of pups. Elrond's responded by retreating then gathering up to war dance back at Alba. With this approach Alba decided to retreat and the older half of Elrond's gave pursuit, chasing them, whilst the younger half retreated. We were lucky with this intergroup interaction as there were no casualties or injuries in either group. Since the time of writing this Alba have had no further inter-group interaction or individual encounters and their peaceful life in the northern corner of the reserve continues.

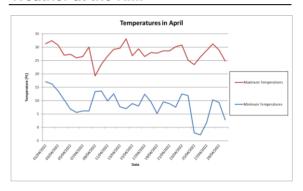


Dominant male Jay-a-Rod (VWM216) with male pup Nigoni (VALM004). Photo credit: Life History Coordinator Lila Chillingworth.

# **Pregnancies in April 2022**

Females pregnant in April	9
Females who aborted	1
Females who gave birth, litters lost	3
Females who gave birth, litter emerged	0
Females who gave birth, unknown outcome	4
Females still pregnant at the end of the month	1

## Weather at the KMP



The average maximum temperature was 27.9 °C and the average minimum temperature was 8.7 °C. On the  $14^{\text{th}}$  temperatures rose to the highest recorded temperature this month of 33.1 °C. The coldest morning was on the  $26^{\text{th}}$ , with temperatures dropping to -2.8 °C. We had very little rain in April. The majority, 31.4 mm, fell on the  $1^{\text{st}}$ . Then it rained only a small amount on three other occasions: on the  $2^{\text{nd}}$  (0.8mm),  $9^{\text{th}}$  (7.6mm) and  $17^{\text{th}}$  (0.4mm).

## **April 2022 Life History Details**

## Alba:

- All 12 members were present at the end of the month
- No pregnancies were observed this month.
- On the 19<sup>th</sup> Alba had an inter-group interaction with Elrond's Council in which they saw Elrond's Council, approached them, war danced and then retreated.
- No encounters or group splits were observed in April.
- Now that dominant female Pippin (VECF003) is no longer considered a habituation individual, habituation at the group is Complete. Pippin has improved enough that we can comfortably record adlib behaviour and do sound recordings of her. However, she can still be a bit nervous around the scale and with hands so we are still monitoring this.
- All individuals appear healthy.



#### **Brussels Sprouts:**

- The males and 3 juveniles did not return to the group this month. The group now consists of just dominant female Arabella (VMPF035), subordinate adult female Vivienne (VMPF038), juvenile female Minnow (VBSF004) and juvenile male Chilli (VBSM005). All 4 of these members were present at the end of April.
- No pregnancies were observed this month.
- No individual encounters, inter-group interactions or group splits were seen this month
- All individuals at Brussels Sprouts seem to be in good health.

## **Brussels Sprouts 2:**

- On the 29<sup>th</sup> dominant male Shandy (VHMM023), adult subordinate male Gurke (VHMM036) and juvenile females Totoro (VBSF001) and Lyra (VBSF002) and juvenile male Love (VBSM003) were sighted. Having been together for longer than one month they could become their own sub-group: Brussels Sprouts 2.
- All 5 members were present at the end of the month
- Shandy was given a radio collar on the 30<sup>th</sup> so the group can now be tracked and followed.
- On the 30<sup>th</sup> Shandy was made dominant male as a direct submission from Gurke was observed.
- As there are no mature females in this subgroup, no pregnancies were observed this month.
- No individual encounters, inter-group interactions or group splits were seen this month.
- All individuals at Brussels Sprouts 2 seem to be in good health.

## **Elrond's Council:**

- There were 16 out of 18 meerkats present at the end of the month.
- Dominant female Calypso (VECF027), disappeared from the group on the 2<sup>nd</sup>, remaining absent at the end of the month. When she was last seen she still had her serious injuries (substantial weight loss, lethargic, apparent genital prolapse).
- This has left female dominance unsettled at Elrond's Council. Subordinate sub-adult females Mojo Jojo (VECF038) and Snoop Kat (VECF039) have been displaying dominance competition and dominance behaviours. However, neither has directly submitted to the other. Until this happens neither can be made the new dominant female.
- Dominant female Galadriel (VECF032) was given her Last Seen.
- No pregnancies were observed this month.
- On the 19<sup>th</sup> they had an inter-group interaction with Alba in which they saw Alba, first retreated then approached Alba, attacked them, chased them and then retreated.
- No encounters or group splits were observed this month.

- With Galadriel getting her Last Seen, habituation is considered Complete at Elrond's Council as the rest of the individuals are fully habituated.
- All present individuals at Elrond's Council seem to be in good health

## **Gold Diggers:**

- 20 out of the 21 members were present at Gold Diggers at the end March.
- Yearling subordinate female Shelby's (VGDF022) two pups emerged on 12<sup>th</sup> bringing the group's total number of individuals up to 21.
- Only subordinate adult female Goldeneye (VGDF007) left this month, on the 30<sup>th</sup>.
- Yearling subordinate males Uncle Hec (VGDM030) and Yoshi (VGDM034) were given their Last Seen this month.
- No individual encounters, inter-group interactions or group splits were observed.
- Habituation at Gold Diggers is considered Advanced Progress as habituation work is being done on subordinate adult female Fleabag (VGDF005), Shelby (VGDF022) and subordinate adult male Jack (VGDM010). At the end of this month Fleabag and Jack could be followed at one meter and were good at the scale. Shelby could be followed at two to three meters but only with the safety of a bolt hole nearby.
- All individuals seem to be healthy.

## Hakuna Matata:

Hakuna Matata were not seen at all this month.

## Jaxx:

- There were 23 out of 24 meerkats present at Jaxx at the end of March.
- Three pups emerged this month from dominant female Baloo's litter (VJX2201). A pregnancy for Baloo was created this month but sadly she aborted the litter (VJX2201A) on the 11<sup>th</sup>. However, observers noticed she was pregnant again on the 19<sup>th</sup> and we hope she is able to carry this litter to term.
- Adult subordinate male Rincewind (VJXM131) left the group briefly this month on the 12<sup>th</sup>, returning by the next session on the 13<sup>th</sup>. Yearling subordinate female Gray (VJXF150) also left and returned this month, leaving on the 15<sup>th</sup> and returned on the 17<sup>th</sup>.
- Sub-adult male Johanna (VJXM157) left on the 14<sup>th</sup> and has not returned this month.
- On the 12<sup>th</sup> Jaxx had an inter-group interaction with an unknown group of meerkats. This group was over thirty meters away so were hard to observe. The observer thought they saw five to seven meerkats and did not catch their reaction to Jaxx. Jaxx, when spotting this group went bipedal to observe them, did terrestrial alarm calls and war danced from side to side a little.
- No encounters or group splits were observed this month.
- All individuals at Jaxx seem to be in good health.

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#### Lazuli:

- All 19 members of Lazuli where present at the end of this month.
- Dominant male Odin (VLM266) briefly left the group on the 25<sup>th</sup>, leaving at 15:15 and returning at 17:40.
- No individual encounters, inter-group interactions or group splits were seen this month.
- · All individuals seem to be in good health.

## Make-e-Plan:

- All 18 meerkats were present at the end of March.
- Dominant female Bridget (VQLF011) and subordinate yearling females Cassie (VMPF050), Bonxie (VMPF054) and Sophie (VMPF055) all gave birth this month. There is a possibility that Sophie aborted her litter (VMP2205) as she gave birth very early, but not early enough to classify the litter as aborted with certainty. So far this month 3 pups have emerged on the 26th.
- The group had an encounter with former group member subordinate yearling female Millewa (VMPF048) on the 29th. She woke up after the group and followed them at round ten meters. She has also been seen multiple times this month usually by the same sleeping burrow that the group are using, waking up either before or after them. She has also suffered a nasty wound on her tail which has led to the tip of her tail falling off and her having raw skin at her tail base.
- No other individual encounters, inter-group interactions or group splits were seen this month.
- Habituation work continues on adult male Sketchy Bongo (VTSM019). He will wake up quite close to observers, at one to three meters. However when the group leaves to forage he will only tolerate distances of around twelve meters.
- All individuals appear to be in good health.

## Namaqua:

- 12 of 13 individuals were present at the end of April.
- No pregnancies were observed this month.
- Juvenile females VNQF032 and VNQF033 did not return to the group and were given their Last Seen.
- Yearling subordinate female Megara (VNQF020) was still showing signs of tuberculosis, with small submandibular lumps on both sides, protruding collarbones and hips and lethargic behaviour this month. She was left behind by the group on the 4<sup>th</sup> but arrived at the group's sleeping burrow the next day and went bellow with them. Then on the 8<sup>th</sup> she was not found with the group and has subsequently not been seen since.
- No encounters, inter-group interactions or group splits were observed in April.
- Megara was the only individual showing signs of tuberculosis, and all other Namaqua meerkats seem to be healthy and showing no signs of TB.

#### **Phoenix**

- 15 unmarked individuals were present at the end of the month, which still includes the 4 juveniles.
- No encounters or interactions were witnessed this month.
- The group's habituation status is still *In Progress*. At the beginning of this month we struggled to find the group a lot. However on the 19<sup>th</sup> they were found again and this break in visits has not hampered the habituation of the group. We have one juvenile consistently eating egg, which is fantastic. The closest observers can get to individuals is between two to three meters. The group wakes up and leaves when the observer is about fifteen meters away.
- All individuals at Phoenix appear to be healthy.

## Runaways:

- All 16 members were present at the end of the month.
- There were no pregnancies or births this month.
- No individual encounters, inter-group interactions or group splits were seen this month.
- All individuals seem to be in good health.

## **Side Quest:**

- 13 of 14 individuals were present at the end of April.
- On the 4<sup>th</sup>, juvenile female Papaya (VSIF011) went missing from the group and has not been seen since.
- There were no pregnancies or births this month.
- Dominant female Pumba's (VZUF048) litter are all foraging with the group and she has three healthy pups, one female and two males.
- Sadly, the group stopped leaving babysitters for subordinate adult female Timon's (VZUF049) litter meaning, for an unknown reason, they were born and lost before emergence.
- There were no individual encounters, inter-group interactions, or group splits observed during the month.
- All individuals appear to be healthy.

## **Trackie-Daks:**

- All 19 members were present at the end of the month.
- There were no pregnancies or births this month.
- There were no individual encounters, inter-group interactions, or group splits observed this month.
- The habituation level is currently *In Progress*. In the second half of the month the juveniles' habituation had improved enough that we were able to return our focus back on dominant male Coquilette (VTSM014). At the end of the month observers have been able to approach him to distances of between half a meter and two meters. Here, he sometimes barks at the observer and does not like quick hand movements. He sniffs the water bottle but does not drink from it. All the juveniles eat egg and are weighable except VTDF016. She has become our focus amongst the juveniles.
- All individuals appear to be healthy.



#### April 2022

#### **Ubuntu:**

- All 20 individuals were present at the end of the month.
- No pregnancies were observed this month.
- On the 10<sup>th</sup>, 12<sup>th</sup> and 27<sup>th</sup> pups VUBU057, VUBM054 and VUBU056, were given their Last Seen respectively, as they were each absent from the group for more than ten days.
- Sadly, on the 14<sup>th</sup> dominant male Jumper (VTSM017) was hit by a car on the main road and died.
- On the 26<sup>th</sup> we felt certain enough that adult male Captain Barbosa (VLM265) had reclaimed dominance in the absence of Jumper.
- No encounters, inter-group interactions or group splits were observed this month.
- Habituation is still considered to be *Incomplete*. The habituation of Captain Barbosa has improved considerably since the death of Jumper. At the sleeping burrow you can interact with him at one to two meters. He has his good and bad days at the scale. On good days he will allow you to weigh him with no problems and is interested in his egg reward. On bad days he shows no interest. He is now fine with the presence of two observers. Whist foraging you can follow him between two to three meters.
- All individuals appear to be in good health.

# Whiskers:

- All 19 individuals were present at the end of the month.
- No pregnancies were observed this month.
- On the 9<sup>th</sup> male pup Battleship (VWM257) did not wake up with the group. However, he did return the next morning.
- On the 16<sup>th</sup> and 30<sup>th</sup> pup Hungry Hungry Hippos (VWP252) and male pup Chess (VWM254) were given their Last Seen respectively, as they were each absent from the group for more than ten days.
- No encounters, inter-group interactions or group splits were observed this month.
- All individuals at Whiskers seem to be healthy.

## Zulus:

- All 12 individuals were present at the end of the month.
- On the 6<sup>th</sup>, 17<sup>th</sup> and 21<sup>st</sup> dominant female Spruddel (VZUF028) and adult subordinate females Rowena (VZUF054) and Helga (VZUF052) lost their litters, respectively.
- Adult subordinate female Salazar (VZUF028) is pregnant.
- On the 11<sup>th</sup> subordinate yearling male Zuma (VZUM059) left the group but returned later that day.
- No individual encounters, inter-group interactions or group splits were seen this month
- All individuals at Zulus appear to be healthy.

## The following author contributed to this report:

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