



The Meerkatter

The Friends of the Kalahari Meerkat Project Report - www.kalahari-meerkats.com - August 2022

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Small Pups in a Big World

Meerkat pups are very vulnerable creatures and are susceptible to the harsh elements of the Kalahari Desert, the place they call home. They are reliant on their natal groups to protect and feed them in order to survive to adulthood. Yet, despite the collective efforts of all the individuals within the groups, at the KMP we have seen a mortality rate of approximately one in four pups not making it to adulthood. While it usually takes a month for a missing meerkat to be given its Last Seen, a pup only requires ten days after it goes missing to be given its Last Seen. This is because pups without their groups to protect them cannot survive in the wild and usually perish. However, in the past month, we have seen a few instances of pups getting separated from the main group yet making it back alive, though always with some help!

The best way for a pup to get separated is with a lot of helpers of course! On the 10th of October, one brave Whiskers pup went out for its first ever foraging session while the rest of its litter stayed at the sleeping burrow. Pup VWP261 tried its very best but just could not keep up with the group. As the rest of the group moved further away, VWP261 got left behind with yearling subordinate female littermates Emily Bronte (VWF243) and Virginia Woolf (VWF243), yearling subordinate male KitKat (VWM249) and sub-adult subordinate male Clue (VWM255) all keeping it company, resulting in a group split of uncertain duration, with the adults all seen the next day, and VWP261 spotted the day after on the 12th, safely back at the burrow with the rest of its litter.

Some absences from the group last a bit longer than a couple of days. On the 1st of October at Gold Diggers, adult subordinate female Juliet (VGDF009), adult subordinate male Beatrice (VDGM014) and yearling subordinate female Tuna Fish II (VGDF026) were not found with the group along with pups VGDM043 and VGDF046. Beatrice returned within the day and Tuna Fish II returned the next day, yet Juliet remained missing with the pups. The trio were gone for a total of 10 days before finally returning to the group on the 10th, with Juliet having kept both pups alive, though not without some help. The tiny

trio were seen just once during the ten-day period, with an undyed female foraging with them, with the most likely candidate being yearling subordinate female Shelby (VGDF022), who is notoriously skittish around observers and is hard to dye. The observer team at the KMP liked to joke that the whole ordeal was just a failed pup-napping attempt by Juliet, but the most likely explanation is that the pups probably fell behind while foraging, and Juliet did her absolute best to keep her littermate's pups alive. An actual pup-napping on the other hand, happened at nearby group Lazuli.



Gold Diggers Pups on the day of their first emergence on the 13th of September. Photo credit: Life History Coordinator Maahir Jusabani.

It was the 16th of October, and this observer was heading to Lazuli for a standard evening weights session. Upon approach of the group, the familiar sounds of pups were heard. However, when the group came into sight, two undyed pups, tinier than the pups already at the group, were found. The pups were being groomed, carried, and snuggled by the rest of the group. No female at the group had been pregnant so they were definitely not born into the group. An observer had been at the group in the morning for morning weights, and not seen the pups, so those pups joined Lazuli that day. Lazuli was seen foraging in the direction of the Heights farm, which is the territory of groups such as Vetkoeks and Hakuna Matata. As we do not have access to that farm and have very little information about these two groups, we cannot be sure if the pups came from them, but it is very possible they had new pups we did not yet know about. Thus, the observer team's best guess for how those pups joined the group is that they were



adopted by Lazuli after Lazuli ran into the pups' natal group and had an inter-group interaction, with the pups left behind by their group. Since that date though, the pups have been accepted as part of the group and have been foraging happily since.



New Lazuli pup snuggling with yearling subordinate female Ma Di Tau (VLF278) days after joining Lazuli. Photo credit: Former Life History Coordinator Lila Chillingworth.

And these are all the instances this month of pups leaving their group, either finding their way back to the group after one big adventure, or finding a new caring group, who may have inadvertently stolen them from their original home. Regardless, each time a pup survives to adulthood at the KMP is a cause for celebration, especially if they have some fascinating adventures for us to document!

Jaxx's Litter Confusion

Jaxx are the Kalahari Meerkat Project's current third oldest study group, introducing a total of 177 meerkats into our study population as of the time of writing. Since December 2016, this long-lived group has been ruled by dominant female Baloo (VJXF080). She was joined by dominant male Leonard (VLM221) in January 2017, and life at Jaxx has been stable ever since then. Baloo is a notorious breeder, with 18 of the current 24 Jaxx members being her offspring, the other 6 including herself and Leonard. She shows no remorse when she is pregnant, with the older females usually being evicted from the group once she reaches the middle stages of her pregnancy.

This was the situation once more as yearling subordinate female littermates Scully (VJXF149) and Gray (VJXF150) were found missing from the group on the 1st of September, with yearling subordinate female Queen Jane (VJXF158) following soon after

on the 10th of September. With Baloo having been confirmed as officially pregnant a few weeks prior, the most likely scenario is that the females were evicted from the group. This was further supported on the 10th and 14th of September, when all three females made appearances at Jaxx and were promptly war danced away by the group. Interestingly, the two observers present for those two sessions both noted that Scully and Gray were pregnant themselves, which could explain why they were potentially evicted from the group, as meerkat females may kill the pups of other females within the group to increase the likelihood of survival for their own pups.

There were further sporadic sightings of the three females throughout September, until they all finally rejoined the group on the 3rd of October, the same day that Baloo was reported to have ended her pregnancy. Scully and Gray were still reported as looking pregnant, which acted as an indicator that Baloo's litter sadly did not survive, otherwise why else would Baloo let threats to her pups rejoin the group? With this piece of information, alongside the fact that none of the females were lactating, no babysitters were left behind, and the group moving burrows on the 7th of October, it was determined that Baloo's pups were lost before emergence.

The burrow move added a new twist to the pregnancy saga at Jaxx. An observer made their way to their babysitting burrow on the morning of the 7th. After determining that the group were not at the babysitting burrow, the observer prepared to set out to search for them. Before leaving though, Scully emerged from the burrow looking noticeably slimmer, having potentially given birth. The observer could not properly check for lactations due to her lower half of the body being damp with blood. It would prove to be their only chance to check as she did not rejoin the group that day, who were found foraging far away from the babysitting burrow before returning there for the evening. She was not the only female missing, as Gray and Queen Jane had not been seen with the group the previous day.

The females remained missing again until they all rejoined the group once more on the 15th of October. This time it was Gray who had given birth, and her and Scully were lactating, with Baloo also starting to lactate soon after. Finally, after weeks of confusion, it was clear that Jaxx now had pups! Furthermore, it did not take the observers long to meet the new additions to the group as on the 24th of October, during an evening session, an observer found the group in the middle of a process of moving four pups to a nearby burrow. The four tiny pups were given their first markings and were officially added into our database. These pups are the first individuals born in the group to not be born to Baloo since 2016, when former dominant female Sheena (VJXF058) had a litter in May of that year!



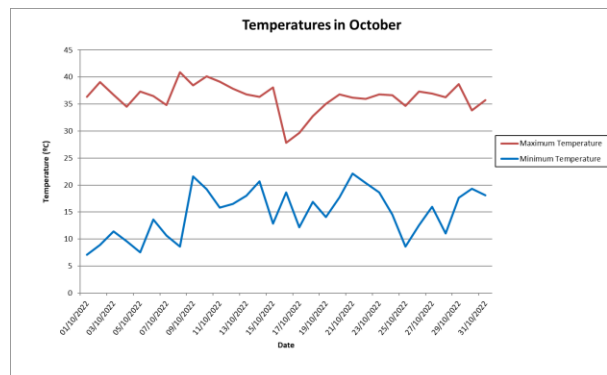
Dominant female Baloo (VJXF080) foraging next to a pup from Jaxx's newest litter. Photo credit: Life History Coordinator Maahir Jusabani.

And thus marks the end of all the Jaxx pregnancy drama over the last month. It has been a confusing month for the observers here at the KMP trying to follow who has given birth, who is still part of the group, who has left the group, whether there are any pups alive, and all the other questions that come with studying meerkats. We have done our best to keep track of the situation and hope you can appreciate the beautiful twists and turns that came with following the situation at Jaxx.

Pregnancies in October 2022

Females pregnant in October	12
Females who aborted	2
Females who gave birth, litters lost	1
Females who gave birth, litter emerged	3
Females who gave birth, unknown outcome	0
Females still pregnant at the end of the month	6

Weather at the KMP



Temperature in October have been extremely hot with an average max temperature of 36.3 °C, with the hottest day being on the 8th of October with temperatures peaking at

40.9 °C. The coldest morning was on the 1st of October with a temperature of 7.1 °C.

October 2022 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 group 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:

Elrond's Council (FDC):

- All 17 individuals were present at the end of October
- Adult subordinate male Untitled (VECM025) was given his Last Seen this month.
- There have been many departures from the group this month, though none have lasted more than a few days. Dominant male Palestrina (VLM211) along with adult subordinate males Pavlova (VECM022), Pucky (VECM023), Charlie, yearling subordinate males Milo (VECM034), Shisharka (VECM041), Survivor (VECM042), and sub-adult subordinate males Petit Di Gio (VECM046), Chabal (VECM047) and Perceval (VECM048) all left once at different points during the month and returned. Kuzco (VECM040) and Karadoc (VECM049) both left and returned twice, while Ozzie (VECM034) left and returned to the group thrice this month.
- Elrond's Council had no encounters or inter-group interactions this month.



- They had 1 daily group split this month on the 1st, with Palestrina, Pucky, Survivor, Petit Di Gio, Karadoc and yearling subordinate female Mojo Jojo (VECF038) all leaving in the morning and returning at different points throughout the evening.
- All individuals at Elrond's Council seem to be in good health.

Gold Diggers (FDC):

- All 21 members present at the end of October.
- Dominant female Goldeneye (VGDF007) became officially pregnant on the 15th of October.
- Yearling subordinate female Ricky Baker (VGDF031) left and returned to the group this month. On the 1st, adult subordinate male Beatrice (VGDM014), adult subordinate female Juliet (VGDF009) and yearling subordinate female Tuna Fish II (VGDF026) left the group with pups VGDM043 and VGDF046. Beatrice and Tuna Fish II returned to the group separately while Juliet eventually returned with the pups on 10th.
- Gold Diggers had 2 encounters with adult subordinate male Moteck (VLM261) from Lazuli on the 25th, 1 encounter with former group member yearling subordinate female Shelby (VGDF022) on the 10th, and encounters on the 25th and 26th with an unknown female and unknown adult respectively, with both encounters speculated to be with Shelby.
- There were no inter-group interactions observed this month.
- 1 daily group split occurred on the 4th.
- Habituation at Gold Diggers is considered *Advanced Progress* as habituation work is being focused on Juliet, Ricky Baker and adult subordinate female Fleabag (VGDF005). Ricky Baker is comfortable at a distance of 1m, Juliet can be approached at 2-3m and Fleabag at 2-4m. All individuals have been weighable lately which is a positive sign.
- All individuals seem to be in good health.

Jaxx (FDC):

- There were 22 out of 24 meerkats present at Jaxx at the end of October.
- Yearling subordinate females Scully (VJXF149), Gray (VJXF150) and Queen Jane (VJXF158) all returned at the start of the month, with Scully and Gray noticeably pregnant.
- Dominant female Baloo (VJXF080) gave birth on the 2nd. However, given no lactations or babysitters were observed and the group moved burrows a few days later, the pups were declared lost before emergence. On the 7th, Scully was reported as having given birth at the burrow the group had abandoned, and a week later Gray gave birth at a different burrow.
- On the 24th, 4 pups were moved to a nearby burrow.
- Juvenile female Quetzal II (VJXF171) was given her last seen this month, while yearling subordinate males Mr Jones (VJXM155) and Lucifero (VJXM156) were moved out of the group but not given their Last Seen yet due to

them being males leaving during the breeding season.

- Scully, Gray and Queen Jane all left and returned to the group once more after their initial return, with Gray also being evicted and returning. Adult subordinate male The Dude (VJXM142) left and returned to the group twice. Lucifero left at the start of the month, while juvenile male Stroganoff (VJXM168) left on the 15th, and yearling subordinate male Jack of Hearts (VJXM159) left the group on the 24th.
- Jack of Hearts and Stroganoff were both absent from the group at the end of the month.
- No encounters, inter-group interactions or group splits were observed at Jaxx this month.
- All individuals at Jaxx seem to be in good health.

Lazuli (FDC):

- 20 out of 21 individuals were present at the end of October.
- On the 16th, Lazuli was found with 2 undyed pups, who were smaller than the pups already present at the group. The group was caring for the pups, with both pups suckling from dominant female Sigma (VLF230). Our best guess is that the group had an inter-group interaction earlier that day with a nearby group, potentially Hakuna Matata or Vetkoeks, and in the confusion took 2 of the opposing group's pups.
- Sigma was made officially pregnant on the 19th.
- Adult subordinate male Moteck (VLM261) left once to go roving at Gold Diggers on the 25th before returning in the evening. Yearling subordinate female Dumpling (VLF272), sub-adult female Chicken (VLF289) and yearling subordinate male Taco (VLM273) all left and returned to the group, while sub-adult subordinate female Qtpi (VLF284) left on the 27th and is yet to return at the end of the month.
- No encounters, inter-group interactions and group splits were observed by us this month.
- All individuals seem to be in good health.

Namaqua (FDC):

- There were 8 out of 9 members present at the end of October.
- Sub-adult subordinate male Love (VBSM003) immigrated into the group on the 1st. Sub-adult female Luisa (VNQF031) left and returned to the group on the 7th before not waking up with the group on the 10th. Due to being heavily emaciated from what we suspect to be tuberculosis, it is highly likely she succumbed to her illness.
- Namaqua had encounters with Love on the 1st prior to him immigrating into the group. They also had an encounter on the 29th with an unknown male.
- No inter-group interactions or group splits were seen in October.
- We suspect that dominant female Manzai (VNQF013) has tuberculosis due to her being reported as being extremely skinny with signs of lethargy. Yearling subordinate female Mia (VNQF027) has also developed a sub-mandibular lump which has burst and has been leaking fluids.



Side Quest (FDC):

- All 12 meerkats were present at the end of the month.
- confirmed as pregnant on the 1st, and then gave birth on the 16th. 3 pups were seen on the 28th, though only one has been marked and hence officially entered into the database.
- Pup Sidecar (VSIM017) was last seen with the group on the 18th and given his Last Seen later this month.
- There were no individual encounters, inter-group interactions, or group splits observed during the month.
- All individuals appear to be healthy.

Ubuntu (FDC):

- There were 19 out of 19 individuals present at the end of the month.
- Dominant female Daisy was found dead on the 31st. Her body was mostly consumed and partially buried. For the past couple of months, she had been reported as becoming skinnier and had started losing hair on her back with skin peeling underneath. It is possible this condition left her vulnerable to predation.
- No other meerkats left the group this month.
- Ubuntu had no encounters, inter-group interactions or group splits observed this month.
- All remaining individuals in Ubuntu appear to be in good health.

Whiskers (FDC):

- All 25 members were present at the end of the month.
- 7 pups emerged on the 8th as part of both adult subordinate female Laika's (VWF236) and yearling subordinate female Flake's (VWF247) litters.
- Former dominant female Swift (VWF176) was given her Last Seen this month.
- Sub-adult male Clue (VWM255) left the group on the 18th but woke up with them the next day.
- There were no encounters or inter-group interactions observed at Whiskers this month.
- Whiskers had one daily group split on the 2nd, and 2 group splits of uncertain duration on the 10th and 24th.
- All individuals at Whiskers seem to be healthy.

Zulus (FDC):

- 8 out of 11 individuals were present at the end of October.
- Dominant female Sprudde (VZUF028) and adult subordinate female Rowena (VZUF054) were both made officially pregnant on the 6th and remained pregnant at the end of the month.
- On the 17th, Rowena was not found with the group, and was possibly evicted.
- Adult subordinate female Helga (VZUF052) has tried to rejoin the group repeatedly with little success.
- Zulus have had no encounters, inter-group interactions or group splits this month.
- All individuals in Zulus appear to be healthy.

Life History Monitoring Groups:

Alba (LHM):

- There were 10 out of 11 individuals present at the end of October.
- On the 20th, dominant female Tolkien (VECF019) was confirmed as officially pregnant, and on the 28th, sub-adult subordinate female Maya (VALF003) was made officially pregnant.
- On the 24th, yearling subordinate female Kille (VECF036) left the group. Before leaving, she had been confirmed as pregnant on the 12th. On the 28th, she woke up at the same sleeping burrow as the group, 30 minutes after they had left and had noticeably given birth. However, given the group have moved burrows since, leaving her behind, and she has not rejoined the group, this litter is not considered part of the group.
- Alba have not had any encounters, inter-group interactions or group splits this month
- All individuals appear healthy.

Brussels Sprouts (LHM):

- There were 11 out of 12 individuals present at the end of October.
- Dominant female Arabella (VMPF035) was made officially pregnant on the 11th. However, she was reported as looking noticeably slimmer from the 14th, and that information coupled with a continuous weight loss over next few weeks led to us concluding that she has aborted that litter.
- 4 pups emerged on the 9th from adult subordinate female Vivienne's (VMPF038) litter.
- Vivienne has not been with the group since the 25th. This follows a period of increasingly aggressive behaviour from Arabella who constantly attacked Vivienne.
- No encounters, inter-group interactions or group splits were seen this month.
- Habituation at Brussels Sprouts is considered *Advanced Progress*. We are focusing our habituation efforts on yearling subordinate male Jack (VGDM010). His habituation levels have improved following increased visits to the group and can now be groomed while drinking water. The main focus now is to get him used to observers approaching the group.
- All individuals at Brussels Sprouts seem to be in good health.

Hakuna Matata (LHM):

- Hakuna Matata were seen once this month on the 10th, after an observer was sent to look for Vetkoeks.
- Dominant male Finnick (VLM234) was recognizable by his radio collar, however, it was seen that the radio collar's heat shrink had worn off, and the radio collar had stopped working.
- Hakuna Matata had 6 sub-adults and 3 pups who were very suspicious of the observer, which is mainly because they aren't habituated to humans with regular visits.



Runaways (LHM):

- 14 out of 18 members were present at the end of October.
- On the 10th, Runaways moved onto the Heights farm immediately after morning weights and have remained there for the rest of the month.
- Dominant female Bigwig (VMPF022) was very close to being confirmed as officially pregnant before moving onto Heights.
- Runaways had 1 group split of uncertain duration. On the 9th, yearling subordinate female Hrairoo (VRWF008), sub-adult subordinate males Ilai (VRWM009), Adolin (VRWM012), Kaladin (VRWM015), sub-adult female Lift (VRWF014) and pup VRWF017 were not found with the group. The next morning, Ilai and Kaladin returned but as we have not seen the group since then, we don't know whether the rest have made their way back to the group.
- Yearling subordinate males Meenu (VRWM001) and Roger (VRWM005) were given their Last Seen this month.
- All individuals seem to be in good health.

Vetkoeks (LHM):

- Vetkoeks were formed on the 10th when 2 observers on their way back from Jaxx spotted adult male littermates Bear (VZUM056), Mion (VZUM057) and Zuma (VZUM059) from Zulus with adult female Lord Havelock (VHMF049) and yearling female Yasha (VHMF051) from Hakuna Matata. Given the group had been seen together 3 months prior, this was a long enough timeframe to officially dub them a new group.
- Yasha had sandy rings around her nipples, a sign of lactation, which could be an indicator that the group had bred and were raising offspring together, with yearling female Mooncake (VHMF053), who had been seen with the rest of the group in July, potentially babysitting the litter.
- The group has no radio-collared individual, and with the group heading in the direction of the Heights farm, which seems to be their main territory, it is unlikely that this group will be seen often.

Habituation Groups:

Make-e-Plan (HAB):

- There were 20 out of 20 individuals present at the end of October.
- 7 pups emerged as part of dominant female Bridget's (VQLF011) litter.
- Yearling subordinate female Hollie (VMPF058) left the group at the start of the month. Pup Lily (VMPP086) was also not seen at the start of the month, with a further 3 pups Deathgrip (VMPP085), FitzChivalry (VMPP088) and Lucifer (VMPP089) all disappearing from the 8th. Finally, sub-adult subordinate male Woozy (VMPM066), disappeared from the group from the 7th.
- Sub-adult subordinate male Ranger (VMPM073) was given his Last Seen this month, along with Hollie, Lily, Deathgrip, FitzChivalry and Lucifer.

- They had a single encounter with an unknown adult on the 11th.
- No inter-group interactions and group splits were observed in October.
- The group's habituation is classed as *In progress* with habituation work focused on certain individuals. These are dominant male Sushi (VTSM006), sub-adult males Wonky (VMPM062), Oozy (VMPM067), Shrimp (VMPM070), Jude (VMPM071), sub-adult female Stinky (VMPF063) and Bridget's newly born litter. Most of the group now responds well to yum-yum calls barr Wonky, who refuses all attempts to feed him egg or water, and Jude, who is extremely skittish around observers. Wonky can only be approached at 2m before he gets uncomfortable. Jude will only get out of a burrow once an observer is 20-40m away and will not follow the group until the observer leaves. He is extremely keen for egg though and can be lured up to 1m away from an observer with an egg trail.
- All individuals in the group appear to be healthy.

Phoenix (HAB):

- 14 unmarked individuals were present at the end of the month, including 3 pups.
- No encounters or interactions were witnessed this month.
- The group's habituation status is still *In Progress*. Due to a 3-week period when the group was not seen, their habituation levels has regressed, with the group running below when an observer approaches closer than 10m. There is currently one sub-adult female who eats egg.
- We do not have a radio collared individual at the group and are still focusing on cage habituation.
- All individuals at Phoenix appear to be healthy.

Trackie-Daks (HAB):

- All 18 individuals were present at the end of the month.
- Dominant female Fly (VWF237) was made officially pregnant on the 21st, however, she was reported as having aborted the litter 9 days later, on the 30th.
- Pup Lila (VTDP025) left the group at the start of the month and hasn't been seen since.
- Judas (VTDP024) and Lila have both been given their Last Seen this month.
- There were no encounters, inter-group interactions, or group splits observed during the month.
- The habituation level is currently *In Progress*. Habituation efforts are focused on dominant male Coquillet (VTSM014) and the youngest litter in the group which now has 2 pups. Coquillet is now getting better with the scale and has been able to be weighed sporadically throughout the month. The pups are also weighable and eager for egg. Morning follows and evening approaches are now being conducted by the observer team, with Coquillet usually keeping a close eye on the observers, but generally getting more and more comfortable with our presence.
- All individuals appear to be healthy.



The following author contributed to this report:

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