

The Friends of the Kalahari Meerkat Project Report - www.kalaharimeerkats.com - December 2020

Matriarchal Changes	1-2	Weather at the KMP	3
The Notorious Scuzi	2-3	Life History Details	3-6
Pregnancies in December	3		

Matriarchal Changes

This month observers were able to confirm that Namaqua have a new dominant female: yearling female Skirmish (VNQF009). The previous dominant female Heatherleigh (VQLF018), who was showing advanced symptoms of tuberculosis, disappeared from the group last month and has been Last Seen. Namaqua now consists of Skirmish, the relatively new dominant male Sauce (VZUM026) (he has been dominant for 2 months), three subordinate yearlings and five subordinate sub-adults. Collectively, they are an inexperienced group. This was made all too apparent this month as they have been pushing the limits of their territory, putting them at risk of encounters with rival groups.

On the 22nd Namaqua ventured further south than they ever had all year, bringing them into contact with their ancestor group, Make-e-plan. Both sides war-danced at each other before Namaqua charged and initiated a fight. Skirmish's group were quickly overwhelmed and retreated to their own territory. Namaqua's sub-adult male Zuko (VNQM012) was not fast enough to flee and was left alone to face the rivals. Make-e-plan viciously mauled him before he was able to escape. Zuko failed to return to Namaqua that night or the following day. Observers assumed he had succumbed to the injuries inflicted by Make-e-plan.



Namaqua's yearling subordinate male Zuko (VNQM012) being attacked by Make-e-plan. He suffered wounds to his front and back legs. Photo Credit: Meerkat volunteer Kirsty Venter.

To everyone's surprise, Zuko emerged with Namaqua nearly a week later. He has been reported to have a slight limp on his left hindleg and small wounds to his left forearm. Zuko has been foraging with the group and seems likely to make a full recovery. Perhaps Skirmish and the rest of Namaqua will learn from their encounter with Makee-plan and choose their future skirmishes more carefully.



Yearling female Skirmish (VNQF009), the new dominant female of Namaqua. Photo Credit: Life History Coordinator Shaz Alderton.

Elsewhere, southeast of the reserve, habituation group Tswana have also experienced a change in their hierarchy. Dominant female Britney (VTSF009) was last seen with her group mid-November. Having been absent for well over a month, she has been declared Last Seen. Unfortunately, the two other mature females in Tswana, yearlings Ocytocine (VTSF003) and Endorphine (VTSF005), disappeared around the same time. Due to the absence of the dominant female and the mix-sex composition of the remaining individuals, the rest of the group have been considered a sub-group called Tswana2. The only female in the sub-group is juvenile Fergalicious (VTSF020). As she is so young and has not displayed any dominance behaviour towards any other individuals she has not been considered dominant female by default.

December 2020

The youngest dominant female recorded in the project's history was Kinkaju (VCKF002), she was 203 days old (just under 7 months) when she became the dominant female of the now-extinct Chalibonkas group. Kinkaju was closely matched by Attenborough (VMYF005) who became dominant female of Mayans at 206 days old, and Firefly (VTYF042) who was confirmed dominant at the extinct Toyota group at 208 days old.

In comparison, Fergalicious is just over 3 months old, therefore observers are highly doubtful that she will show signs of dominance anytime soon. Without a clear matriarch and with so many mature males present, there are concerns that Tswana2 will disband. Major group movements following the loss of a dominant female are common. A group cannot maintain their numbers without a breeding female and are doomed to eventually phase out. The only hope for males is to seek out unrelated females elsewhere. Furthermore, Fergalicious is too young and light to wear a radio collar. This means only males who are likely to go roving and be absent from Tswana2 are eligible for collaring. The current collared individual is yearling male Jiminy Cricket (VTSM007). It likely will not be long until he starts prospecting for females.



Individuals from Tswana2, from left to right: adult male Coquillette (VTSM014), and juveniles Moon Moon (VTSM022), Marvin Gaye (VTSM021) and Fergalicious (VTSF020). Photo Credit: Life History Coordinator Shaz Alderton.

Observers have continued to try to locate the original Tswana group without success. Tracking and life history data collection of Tswana2 has been ongoing and will continue to be collected. There is hope that Fergalicious may surprise us yet, or that a mature female will immigrate into the group and become dominant. The events at Namaqua and the loss of Britney have been a clear reminder to all of just how significant a dominant female is, and the impact matriarchal changes may have for the future of a group.

The Notorious Scuzi

Namaqua are not the only group to experience a major skirmish this month. On the evening of the 24th at Zulus, Whiskers-born dominant male Scuzi (VWM213) launched an attack on subordinate male Jay-A-Rod (VWM216). The attack occurred as the group were returning to their burrow for the night. An unidentified individual was seen crawling around the burrow in the dark. It is assumed the intruder was either a roving male or one of Zulus' absent

yearling females, Timon (VZUF049) or Pumbaa (VZUF048), attempting to return to the group. Zulus immediately war danced and chased the individual away. It was following the chase that Scuzi turned on his littermate. Jay-A-Rod attempted to fight back but the rest of Zulus supported their dominant male.

It is unclear what caused Scuzi to attack Jay. It is possible that Jay had been mistaken for the intruder or perhaps the excitement of the chase had triggered Scuzi to attack. Jay eventually escaped and retreated below ground but sounds of an ongoing scrabble could still be heard for an additional 20 minutes. Observers can only guess how long the fighting lasted. Zulus were not visited again until four days later. Remarkably neither Jay nor Scuzi had any signs of injuries. However, Scuzi was clearly still the dominant male as he was asserting himself over Jay and receiving submissions in response.

Scuzi, Jay-A-Rod and an older Whiskers male Pixie (VWM210) immigrated into Zulus at the end of 2019 after leaving Whiskers at separate times. Scuzi and Jay-A-Rod immigrated together while Pixie spent an additional week attempting to immigrate. He was war-danced and chased away by Zulus many times. After eventually getting accepted into Zulus, Pixie became involved in dominance competitions with Jay and Scuzi.

In January 2020 Pixie emerged one morning with a deep, bloody wound to his throat. Observers assumed Scuzi was the one who inflicted the injury as he had previously been particularly aggressive towards Pixie. The wound left a large permanent scar which made Pixie easily distinguishable from other meerkats. A month later Scuzi was confirmed dominant and Pixie became regularly subjected to further aggressive dominance assertions. On two occasions he was even witnessed being attacked and evicted from the group.



Zulus back up their dominant male Scuzi (VWM213) in the attack on subordinate male Jay-A-Rod (VWM216). Photo Credit: Meerkat volunteer Tara Naeser.

Male evictions are rare compared to female evictions. The majority of males voluntarily leave their groups in search of unrelated females, rather than being forcibly kicked out by more dominant individuals. Pixie has not been sighted since the end of November. It is assumed he has emigrated from Zulus and, in doing so, finally escaped the wrath of Scuzi.

December 2020

With Pixie seemingly dispersed from Zulus, Scuzi has turned his aggression to the only rival male remaining in the group: Jay-A-Rod. Jay has been the target of Scuzi's aggression before, though never to the extent that Pixie endured. In recent months Jay has spent much of his time visiting neighbouring groups, attempting to attract unrelated females. Upon his returns to Zulus he would regularly receive aggressive and repeated dominance behaviour, such as chin-marking and hip-slamming, from Scuzi. It seemed it was only a matter of time until the assertions escalated into an attack.



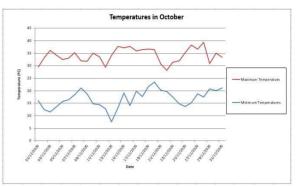
Scuzi (VWM213) the dominant male of Zulus. Photo Credit: Life History Coordinator Shaz Alderton.

Jay-A-Rod was still present at Zulus at the end of December. Unless he manages to overthrow Scuzi, it is predicated that Jay will soon emigrate just as Pixie did. Scuzi's aggression is not limited to other meerkats. He regularly asserts himself over the scales during weighing sessions and will not hesitate to anal-mark and chin-mark the research assistants. This, combined with his treatment towards rival males, has given him a reputation for being "notoriously aggressive". No one knows when (and what) he will strike next.

Pregnancies in December 2020

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

Weather at the KMP



Weather conditions have been hot and wet throughout December. The highest temperature of 39.3°C was recorded on the 28th. The coldest temperature was 11.5°C on the 3rd. The total rainfall was approximately 85.6mls, making it the highest amount of rain recorded for any month for the year.

December 2020 Life History Details

Aristokats:

 The sub-group has been disbanded as the collared individual, The Worm's Heart (VCRM010), had been absent for over a month and was sighted with individuals from Little Creatures. Furthermore, his radio collar was removed due to being too tight, making him untrackable. The females, Annie (VLF240), Weasel (VLF241) and Squelch (VLF250) have all been Last Seen.

Elrond's Council:

- There were 23 out of 24 individuals present at the end of the month with yearling male Legolas (VECM009) absent.
- Another pup, born to dominant female Tayl Baez (VBBF117) was marked this month, bringing the total number of pups to four. All the pups have had their first burrow move and started foraging with the group.
- Sub-adult male Cake (VECM030) was Last Seen
- Legolas and adult subordinate male Umfana (VZUM034) left on the 14th. Umfana had returned to Elrond's Council by the next day. Yearling subordinate male Smaug left on the 16th but was back by the following day. Subordinate adult male Langa (VZUM033) left on the 2nd and had returned by the 4th.
- On the 5th the group had an inter-groupinteraction with Namaqua. The rival group retreated. Following that, Namaqua's yearling male Zuko (VNQM012) encountered Elrond's Council. He was chased away by the group.
- Habituation Level is still considered Incomplete as the yearling subordinate female Galadriel needs further progress. This month she rarely allowed observers within 3m. This has largely been due to her protectiveness of the pups.
- All individuals appear to be healthy.

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December 2020

Fake-e-plan:

- All 6 individuals were present at the end of the month.
- Adult male Merlot (VJXM121) and yearling males Kratos (VMPM024) and Mushu (VMPM028) have been absent for more than a month. They are therefore considered emigrated.
- There is still no clear dominant female.
- The group had two encounters with adult male The Worm's Heart (VCRM010) on the 1st. They had one encounter with Jaxx yearling male Rincewind (VJXM131) on the 11th. Both males were chased away.
- All individuals appear to be in good health.

Gold Diggers:

- All 17 marked individuals were present at the end of the month.
- Five pups born to adult female Cleo (VGDF013) have all been marked, emerged and started foraging with the group.
- There is still no clear dominant female.
- Sub-adult male Elliot (VGDM016) was seen leaving on the 14th. By the next morning he had returned to the group.
- On the 10th Gold Diggers encountered Lazuli's yearling male Slop (VLM253). On the 16th the group encountered an unknown adult twice.
- Gold Diggers' habituation level is in Advanced Progress as the group can be followed for periods up to 3 hours.
- All individuals appear to be healthy.

Hakuna Matata:

- There were 13 out of 15 individuals present at the end of the month with subordinate females Munchkin (VHMF019) and Sencha (VHMF030) absent.
- Dominant female Flint (VHMF001) is pregnant.
- Sencha was evicted on the 6th and Munchkin was evicted on the 11th. Sencha appeared on the edge of the group three times over a period of four days and was chased off each time. Both females were sighted together at the end of the month.
- On the 23rd Gurke (VHMM036) was captured via camera trap roving. He was found acting as part of Hakuna Matata again the next day.
- Hakuna Matata encountered an unknown individual on the 9th. The individual was chased away.
- All individuals in Hakuna Matata appear healthy.

Jaxx:

- There were 14 out of 16 individuals present at the end of the month with subordinate females Eléa (VJXF129) and Salamander (VJXF135) absent.
- Adult subordinate female Didah (VJXF112) was Last Seen. Yearling subordinate female Nävis (VJXF128) was not sighted all month and therefore has also been given a Last Seen. John Wayne (VJXM114) also has been absent all month and, due to being a mature male, was considered emigrated.

- Salamander was absent from the group on the 18th and has not been sighted since. Eléa was evicted on the 16th and appeared on the edge of the group that same session. The female pup Tuna Fish (VJXF145) did not emerge with the group on the 24th but was present again on the 27th. Yearling subordinate male Rincewind (VJXM131) left and returned to Jaxx on three occasions. For one of his departures the subadult subordinate males Nibs (VJXM137) and Tootles (VJXM139) joined him. All three had returned to Jaxx within hours.
- On the 24th the group encountered three individuals, two adults and a possible pup, and chased them away.
- All individuals seem to be in good health.

Lazuli:

- There were 11 out of 12 individuals present at the end of the month with yearling subordinate male Squeal (VLM251) absent.
- Dominant female Sigma (VLF230) gave birth on the 4th. Two pups have emerged and started foraging with the group.
- Subordinate adult male Captain Barbosa (VLM265) was initially absent from the group on the 2nd but returned and was accepted back in that same session. He left and returned four more times during the month. Subordinate yearling male Slop (VLM253), who was absent last month, had returned to the group by the 2nd. He left and returned on four more occasions. Slop appeared on the edge of the group on the 16th. Squeal, who was absent at the end of last month, was with the group on the 13th. He was not seen again for the rest of December. Yearling subordinate male Moteck (VLM261) left on the 10th and returned 2 days later. Subordinate adult male Shandy (VHMM023) left and returned on two occasions.
- Subordinate adult females Lennon (VLF246) and Haopia (VLF244), who were both absent last month, appeared and were chased off on the 2nd. Both females had returned by the 6th. The next day Haopia was seen acting alone. On the 11th she and Lennon were sighted foraging together away from Lazuli. Both females were witnessed returning and being accepted back into the group the following day.
- Lazuli encountered an unknown adult on the 2nd and 19th. The individual was chased away both times.
- There was a group split during the day on the 12th
- Lazuli's habituation level is in Advanced Progress as habituation of Captain Barbosa and the dominant male Odin (VLM266) is ongoing. The males can be followed and weighed but are still uncomfortable with observers approaching within 1-5m when they are foraging.
- All individuals in Lazuli seem to be healthy.

(Little) Creatures:

 The number of individuals at Little Creatures at the end of the month is unknown as the radio collared subordinate female Mildred (VCRF009)

- - was still absent from the group and could not be located for most of the month.
- On the 8th yearling male Trash (VCRM008) was found acting as part of a sub-group with Mildred and Aristokats' former dominant male The Worm's Heart (VCRM010) (originally from Little Creatures). The trio were seen together again the following morning but could not be found for the rest of the month. The rest of Little Creatures were not present and have not been seen all month.
- Observers have set up camera traps and have been checking frequently used sleeping burrows for signs of activity. Attempts to locate the group are ongoing.

Make-e-Plan:

- All 16 individuals were present at the end of the
- Five pups born to dominant female Bridget (VQLF011) have emerged and started foraging with the group.
- Make-e-plan had an inter-group-interaction with Namaqua on the 22nd in which the rival group retreated. Namaqua subordinate male Zuko (VNQM012) encountered Make-e-plan following the interaction and was attacked.
- On the 9th an unknown meerkat encountered the group and was chased off. On the 28th the group encountered Captain Barbosa (VLM265), an adult subordinate male from Lazuli. He was also chased off
- No other events occurred at Make-e-plan this
- All individuals appear to be in good health.

Namaqua:

- There were 9 out of 10 individuals present at the end of the month with yearling female Manzaï (VNQF013) absent.
- The previous dominant female Heatherleigh (VQLF018) was Last Seen, she had been showing advanced symptoms of tuberculosis prior to her disappearance.
- Yearling female Skirmish (VNQF009) was confirmed to be the new dominant female.
- Zuko (VNQM012) was absent from Namagua on the 5th but had returned three days later. Following an inter-group-interaction with Makee-plan on the 22nd he was separated from Namaqua and attacked by the rival group. He had returned to Namaqua by the 27th. The day after the clash with Make-e-plan, subordinate sub-adults Hiccup (VNQF016) and Barney (VNQM018) did not emerge with the group. Hiccup returned later that day and Barney was back by the 27th. On the 26th Manzaï was sighted alone and had not returned to the group by the end of the month.
- Elrond's Council adult male Langa (VZUM033) approached Namagua on the 2nd and was chased off. Towards the end of the month Lazuli adult male Captain Barbosa (VLM265) encountered the group twice and was chased away both times. Around that time an unknown adult also approached the group and was chased off.

- Namagua had an inter-group-interaction with Elrond's Council on the 5th. Namaqua retreated.
- No individuals have shown any symptoms of tuberculosis this month. Aside from Zuko's wounds from the encounter with Make-e-plan. the group seems to be healthy.

Phoenix

- The only identified individual, the radio collared sub-adult female Pinky (VPHF001), was absent from Phoenix at the end of the month. When the rest of the group was last seen there were at least 13 wild individuals.
- Pinky was seen being chased away from Phoenix on the 27th.
- No other events were witnessed.
- All individuals in Phoenix appear to be healthy.

Tswana / Tswana2:

- There were an unknown number of members present at the end of the month. Dominant female Britney (VTSF009), radio collared subordinate yearling female Ocytocine (VTSF003) and subordinate yearling female Endorphine (VTSF005) have all been missing for over a month and are therefore considered Last Seen. However, efforts to locate the collared individual are ongoing, thus Tswana is not yet declared lost.
- Due to the absence of the dominant female and the mix-sex composition of the remaining individuals, the rest of the group have been considered a sub-group called Tswana2.
- The position of dominant male and dominant female in Tswana2 is unknown. The only female in the group, juvenile Fergalicious (VTSF020) has not displayed any dominance behaviour and therefore has not been considered dominant female by default.
- Tswana2's habituation level is in Advanced Progress as all individuals are marked and tolerate observers as close as 1m. The group cannot vet be followed.
- All individuals in Tswana2 appear to be healthy.

Ubuntu:

- Ubuntu's numbers rose to 16 this month with the addition of four pups born to dominant female Daisy (VBBF111). The pups have emerged but have not yet started foraging with the group. All individuals were present at the end of December.
- Subordinate females The Native (VUBF020) and King Julian (VUBF028) have been Last Seen.
- Yearling subordinate males Rupert Holmes (VUBM024) and Michel (VUBM025) were both sighted roving at Zulus at the start of the month but had returned to Ubuntu by the next day. Yearling subordinate male Mr Worldwide (VUBM031) was caught on camera trap away from the group on the 21st but was back with Ubuntu the following day.
- Zulus' subordinate adult male Jay-A-Rod (VWM216) approached Ubuntu on the 17th and was ignored.

December 2020

- Ubuntu had an inter-group-interaction with Zulus at the beginning of the month. The rival group retreated.
- No other events occurred at Ubuntu this month.
- All individuals seem to be healthy.

Ubuntu 3:

 The sub-group was declared lost this month as the dominant female Rick & Morty (VUBF013) and subordinate adult female Wren (VUBF017) were Last Seen. The collared individual who was last seen away from the females, dominant male Belphegor (VHMM032), could not be found this month. Attempts to locate him are ongoing.

Whiskers:

- There were 14 out of 19 individuals present at the end of the month with Mercy (VWF230), Beowolf (VWM225), A Molerat (VWM232), Meicko (VWM233) and an unnamed pup (VWP242) absent.
- Four pups born to dominant female Swift (VWF176) have emerged and started foraging with the group.
- Adult subordinate females Bones (VWF212) and Pandi (VWF222) have been Last Seen. Adult subordinate males Lilac (VWM214) and Matewis (VWM221) did not return to Whiskers this month and are considered emigrated.
- At the start of the month yearling subordinate female Bel-Hurricane (VWF231) was seen leaving the group and heading away from the babysitting burrow. She returned later in the day. Yearling subordinate female Mercy left at the start of the month and was sighted back with the group on the 10th. She has not been seen since. On the 15th sub-adult subordinate female Hachi (VWF238) left while Whiskers were chasing off an unknown adult male. She returned an hour later without the group noticing and appeared to have been in the company of the unknown male. Yearling subordinate males Meicko and Beowolf have not been seen since the 16th. Yearling subordinate male A Molerat has not been sighted since the 19th. As the group have been babysitting it is unclear when the males left.
- Whiskers have been approached by an unknown adult male six times during the month. It is unclear if it is the same individual on each occasion.
- All individuals seem to be in good health.

Zulus:

- There were 10 out of 12 individuals present at the end of the month with yearling subordinate females Timon (VZUF049) and Pumbaa (VZUF048) absent.
- Adult subordinate male Pixie (VWM210) did not return this month and has been considered emigrated. Adult subordinate females Lil G (VZUF029) and Lentil (VZUF032) have been Last Seen.
- Timon was absent from the group on the 11th. Pumbaa was absent on the 14th. Both females appeared on the 15th and were chased away by the group.

- Adult subordinate male Jay-A-Rod (VWM216) returned to Zulus on the 1st after being absent at the end of last month. He left and returned two more times in December.
- Ubuntu's yearling males Rupert Holmes (VUBM024) and Michel (VUBM025) encountered Zulus at the start of the month and were repeatedly chased away. Elrond's Council yearling male Legolas (VECM009) encountered the group twice and was chased off both times. An unknown adult encountered the group three times, on one of those occasions he was sighted in the company of Timon and Pumbaa. It is unclear if it was the same individual encountering the group on each occasion.
- Zulus had an inter-group-interaction with Ubuntu on the 4th.
- All remaining individuals in Zulus seem healthy.

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