

The

Meerkatter

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

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Tuberculosis Strikes Again

It is with sadness that I must report that the tuberculosis has resurfaced at Namagua. The last individual with signs of infection was the subordinate male Bonnie (VWM209) who was last seen in January. For months no other individuals displayed any symptoms. Suspicions first arose in July when yearling subordinate males Ambush (VNQM006) and Tussle (VNQM008) showed significant weight loss for seemingly no discernable reason. A month later their littermate Melee (VNQM007) also deteriorated in body condition, though observers weren't sure if the major weight loss was due to poor foraging or something else. The biggest indication of tuberculosis was then seen on the dominant female Heatherleigh (VQLF018). At the beginning of this month observers noticed a submandibular lump on her left side. The lump has been steadily growing since its discovery. Along with the lump Heatherleigh has been suffering from emaciation, fatigue and a right back leg limp.



Dominant female Heatherleigh (VQLF018) at the beginning of the month when her submandibular lump was starting to become noticeable. Photo Credit: Life History Coordinator Shaz Alderton

There were 12 individuals present at the end of September. Both Tussle and Melee disappeared on different days and have remained absent. Both males were emaciated and lethargic when they were last seen. Ambush, who was absent from the group at the end of last month, has not returned since. Observers assume he did not survive. The remaining male from the yearling litter, Quarrel



From left to right: subordinate male Bonnie (VWM209) with a submandibular TB lump, grooming young Melee (VNQM007) in January 2020. Photo Credit: Life History Coordinator Shaz Alderton

(VNQM010), has also recently started showing symptoms. He has become emaciated, lethargic and on some days has labored breathing. Through the use of x-rays observers determined the cause of his labored breathing to be due to tuberculosis infection in his lungs. The other surviving individual from the yearling litter, Skirmish (VNQF009), has also had labored breathing. Another individual, subadult female Manzaï (VNQF013), has been reported to be underweight. Currently the rest of the group are not showing any symptoms. As tuberculosis is transmitted via direct contact, such as through grooming or aggressive interactions, it is anticipated that the remaining individuals are likely infected and will eventually show symptoms.

Namaqua is a relatively young group, having formed in late 2018. Initially the group was called "Makeanother-plan" as they were founded by evicted Makee-plan females Heatherleigh and Megatron II (VMPF001), and evicted male Chateaubriand (VMPM005). They were joined by Lazuli males Lewie (VLM228) and Baerli (VLM238). Heatherleigh and Lewie quickly established themselves as the dominant pair. Baerli emigrated out of the group within weeks. Namaqua's first pups were a mixed litter born in February 2019 to Heatherleigh and Megatron II. Shortly after their first emergence, Whiskers roving males Bonnie, Clyde (VWM208) and Cleo (VWM205) encountered the group. At the time there was no sign of tuberculosis among the rovers. The initial meeting between the Whiskers males and the group was not aggressive, with the rovers approaching and sniffing Chateaubriand and the pups. However, the dominant pair were less tolerant.



From better days: Namaqua sunning at a burrow surrounded by flowers. Photo Credit: Meerkat Volunteer and Film-crew Assistant Tal Kleinhause.

Heatherleigh and Lewie chased and attacked the rovers, resulting in chaos. Over the following days the pups, Chateaubriand and Megatron II were all last seen. The Whiskers boys immigrated into the group and Lewie lost his position as dominant male. Dominance competitions between the males persisted for weeks. Heatherleigh was reported to regularly assert herself over the immigrated individuals, sometimes quite aggressively. The general unrest among the members grew into intense conflict, resulting in injuries such as limpings, swellings and severe facial wounds. Eventually. Lewie reclaimed dominance. Genetic testing confirmed that he sired Heatherleigh's next litter: Ambush, Tussle, Melee, Skirmish and Quarrel. For a time everything settled. But during Heatherleigh's next pregnancy the position of dominant male was challenged again when Bonnie and Clyde returned from roving and competed with Lewie. Within days Lewie reclaimed dominance once more. Clyde suffered major wounds from the fighting and disappeared. He has not been seen since.

In November 2019 Heatherleigh gave birth to four pups. Three of them. Manzaï. Mononoke-hime (VNQF014) and Zuko (VNQM012), are still alive today. Around that same time Bonnie was reported to have tuberculosis symptoms including fatigue and a submandibular lump. His lumps grew and his body condition deteriorated. He was last seen in January. His disappearance occurred right before the birth of Heatherleigh's next litter, of which only Hiccup (VNQF016) emerged. There were no further conflicts in Namaqua. The months since have been relatively peaceful. Heatherleigh has since had another litter. Four of those pups, Chandler (VNQF017), Barney (VNQM018), Cooper (VNQM019) and Megara (VNQF020) are still part of Namagua today. This litter, along with Hiccup, Mononoke-hime, Zuko and Lewie, appear to be healthy for the time being.

Just like their ancestor group, Make-e-plan, Namaqua are well liked by all at the project and have often been considered "the best group" for collecting weights due to their combined eagerness and patience. Everyone is keeping a close eye on the group to see what will become of them.

Rising from the Ashes: Phoenix!

The collective efforts of project managers and research assistants has paid off. We have acquired a new meerkat group; Phoenix! It was a year ago when a large wild group was first sighted on the western side of the reserve, although observers can't be sure it has been the same individuals occupying that area since then. Their nearest known neighbours are Gold Diggers, a group still in the process of being habituated. There are no other known groups anywhere in the area.

Attempts to collar a member of Phoenix started in earnest in July this year with observers setting up camera traps and tracking on foot. Elliot Traps were arranged around occupied burrows to allow individuals to acclimatize to them. Dead scorpions and water were used to entice the meerkats into a trap. After many failed attempts, a sub-adult female eventually took the dead scorpion bait and was captured. The team worked fast to attach a radio collar and release her back to the burrow. The young female has been named Pinky (VPHF001) by observers because of a bit of pink colouration on her nose.



A camera-trap captured the moment Meerkat Manager Chloe Farrington and Meerkat Volunteer Maggie Campbell-Jones released the very first Phoenix individual, Pinky (VPHF001), after attaching a radio collar.

The successful capture occurred on the 15th. For the rest of the month the group was visited 5 times by different observers to begin habituation. So far a total of 18 meerkats have been counted, including Pinky. The group seems to consist of 5 adults, 6 sub-adults, 1 yearling, 5 juveniles and an additional unknown meerkat. Some individuals' sexes have been determined, but it will be a while longer until observers know for certain. Identifying individuals mostly through binoculars is not easy. Currently Phoenix tolerate observers sitting and slowly moving around between 30-40m. To accept humans at such a proximity so quickly is impressive, previous wild groups (such as Tswana and Little Creatures) initially only tolerated observers at double that distance. Furthermore, when wild groups leave to go foraging in the presence of an observer, all individuals typically bolt. But most members of Phoenix. particularly the juveniles, yearling individual and the

sub-adults, have been remarkedly calm and move off to forage very gradually. The adults are more cautious and take longer to depart. Observers have been scattering small amounts of boiled egg around their burrow to see if any individuals will take to it. So far the meerkats have paid little attention to the offerings (on the other hand, the local birds and a Cape ground squirrel seem to love boiled egg...)



Alert Phoenix individuals, radio-collared sub-adult Pinky (VPHF001) can be seen on the right. Photo Credit: Zurich Manager Zoe Turner.

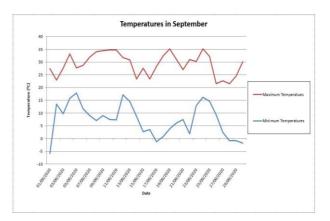
Observers are confident that Phoenix is babysitting as the group have occupied the same burrow since the capture. Also, distinctive chirps of very young meerkats can sometimes be heard, even from a fair distance. Meerkats generally move to different burrows every few days as foraging in the same area for too long can deplete any abundance of food. But when pups are born, they must remain safely underground for at least 2-3 weeks. This restricts the rest of the group to the breeding burrow for that period. Currently there are no other known burrows occupied by Phoenix. Had they moved elsewhere observers likely wouldn't have been able to capture them. Much of this success has been due to sheer luck.

Overall, it has been a very good start for Phoenix. Observers are looking forward to tracking the group to discover new burrows in a part of the reserve not visited often. Their capture has brought the total number of meerkat groups at the project to 13, and the total number of individuals (including those unmarked) to approximately 200. We look forward to keeping everyone up to date on the habituation progress and the life history of Phoenix.

Pregnancies in September 2020

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

Weather at the KMP



Temperatures in September have fluctuated significantly from below freezing to over 35°C. The hottest day was the 24th with a temperature of 35.1°C. The coldest temperature was -5.9°C on the 1st, recorded before sunrise. On that same day there was 1.2ml of rain, the total rainfall for the month was 1.4ml.

September 2020 Life History Details

Elrond's Council:

- All 22 members were present at the end of the month.
- Subordinate female Pippin (VECF003) and subordinate male Legolas (VECM009) left and returned to the group once. Subordinate female Galadriel (VECF032) left and returned on two occasions. Subordinate male Sauce (VZUM026) left and returned three times, he was seen roving at Namaqua and Make-e-plan.
- There was one group split on the 16th, the group reunited that same day.
- The group's Habituation Level is still Incomplete due to Galadriel's poor tolerance of observers, with her rarely allowing observers to stand or walk within 6m.
- All individuals appear to be in good health.

Gold Diggers:

- All 11 marked individuals were present at the end of the month. An additional unmarked yearling female was also present.
- There were no group movements, losses, group splits or encounters.
- The Habituation Level is still considered In Progress until the yearling female is marked. Observers have begun following the group for short periods.
- All individuals appear to be healthy.

Hakuna Matata:

- There were 13 individuals present at the end of the month.
- Dominant female Flint was pregnant by the end of September.
- Israel (VLM245) emigrated out of Hakuna Matata, he has not been seen roving at or immigrating into any other group.

- Belphegor (VHMM032) left and returned to the group two times.
- Lilac (VWM214) was seen roving at Hakuna Matata on two occasions and was repeatedly chased off by the group.
- All group members appear to be healthy.

Jaxx:

- All 18 individuals were present at the end of the month.
- Dominant female Baloo (VJXF080) aborted a litter but was pregnant again by the end of September.
- There was a group split on the 17th, they reunited that same day.
- No other events occurred at Jaxx.
- All individuals seem to be in good health.

Lazuli:

- There were 14 out of 15 individuals present at the end of the month.
- Juvenile male Pegasus (VLM271) did not emerge with the group on the 19th and was absent at the end of September.
- Two unknown adults encountered the group on the 18th, Lazuli chased both away.
- The group had an inter-group-interaction on the 18th with an unknown group with an undetermined number of individuals. The rivals retreated.
- There was a group split on the 30th, Lazuli reunited that same day. Upon reuniting, subordinate male Captain Barbosa (VLM265) competed with dominant male Odin (VLM266) for dominance. The group assisted Odin in attacking Captain Barbosa. Male dominance remained unchanged.
- All group members appear to be healthy, with Odin and Captain Barbosa only suffering minor injuries from their fight.

(Little) Creatures:

- All 5 marked individuals were present at the end of the month along with one unmarked wild adult male.
- Dominant female Debbie (VCRF013) and subordinate female Mildred (VCRF009) were pregnant. Debbie gave birth between 15-18th. On the 19th Mildred emerged with blood around her mouth, it is not confirmed if she had killed or eaten Debbie's offspring. Mildred gave birth between 19th-22nd.
- Debbie and Mildred have both been lactating.
 No pups have been seen.
- The Worm's Heart (VCRM010) left once and had returned to the group by the 12th.
- The group's Habituation Level is still considered In Progress as there is still an unmarked wild adult male.
- All individuals in Little Creatures appear to be in good health.

Make-e-Plan:

- There were 17 out of 18 individuals present at the end of the month.
- Juvenile male Irwin (VMPM045) was absent from the group on the 14th and has not been seen since.
- There were no other group movements, encounters or group splits.
- All remaining individuals appear to be healthy.

Namaqua:

- There were 12 out of 14 members present at the end of the month with yearling males Melee (VNQM007) and Tussle (VNQM008) absent.
- Yearling male Ambush (VNQM006), who disappeared last month, has not returned to the group and is considered Last Seen.
- Tussle was last seen going down with the group on the 4th. He did not emerge the following morning.
- Melee was with the group on the morning of the 16th but was struggling to keep up with the other individuals. He was absent during the afternoon session and has not been seen since.
- Sauce (VZUM026) encountered the group once and was chased off.
- It has been confirmed that tuberculosis is present in the group. Dominant female Heatherleigh (VQLF018) and subordinates Melee, Tussle, Quarrel (VNQM010), Skirmish (VNQF009) and Manzaï (VNQF013) are showing symptoms.

Phoenix

- The only identified individual, Pinky (VPHF001) was present at the end of the month along with 17 unmarked wild individuals.
- No major events have been observed in the group yet.
- Phoenix's Habituation Level is In Progress.
- Pinky seems to be in good health. There does not appear to be any signs of disease in the group.

Tswana:

- There were 11 out of 12 marked individuals present at the end of the month with yearling male Dopamine (VTSM004) absent.
- Dominant female Britney (VTSF009) gave birth between the 11-16th. She is the only female with signs of lactation. No pups have been seen.
- Tswana's Habituation Level is in Advanced Progress as all individuals are marked and have started being visited in afternoons.
- All individuals appear to be in good health.

<u>Ubuntu:</u>

- There were 16 out of 17 members present at the end of the month.
- Crocus (VUBM030) did not emerge with the group on the 3rd and was absent at the end of September.
- No other events occurred at Ubuntu.
- All remaining individuals seem to be healthy.



Whiskers:

- There were 21 individuals present at the end of the month.
- Dominant female Swift gave birth on the 1st of September. Three pups had emerged by the 27th. Swift was the only female lactating.
- Subordinate female Bones (VWF212) was evicted and returned on the same day.
- Subordinate male Lilac (VWM214) left once and was seen roving at Hakuna Matata. He returned 3 days later.
- All individuals in Whiskers appear to be in good health.

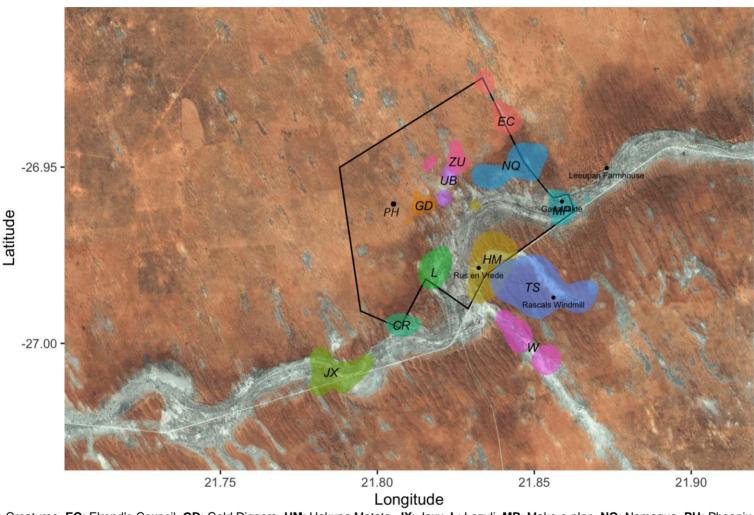
Zulus:

- All 16 individuals were present at the end of the month.
- Tsotsi (VZUM061), a pup born to dominant female Spruddel in July, was Last Seen and assumed predated.
- Subordinate male Pixie (VWM210) left the group once and had returned on the 18th.
- All individuals in Zulus seem to be healthy.

The following authors contributed to this report:

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Group Territories September 2020



<u>Key:</u> CR: Little Creatures, EC: Elrond's Council, GD: Gold Diggers, HM: Hakuna Matata, JX: Jaxx, L: Lazuli, MP: Make-e-plan, NQ: Namaqua, PH: Phoenix (territory details currently data deficient, only known breeding burrow shown), UB: Ubuntu, TS: Tswana, W: Whiskers, ZU: Zulus.