

The

Meerkatter

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

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Drongo Drama

Among the few different symbiotic relationships meerkats share with neighbouring species, one of the most interesting is the relationship with the intelligent black-coloured bird, the Fork-tailed Drongo. Occasionally when meerkats dig up insects (which are often inaccessible to the birds) some prey escape and are snatched up by the awaiting drongos. Other times meerkats consume part of a meal, leaving small morsels behind that the drongos will feed on. The meerkats benefit from having the drongos around through their early-warning system; if a drongos sees a predator such as a large bird of prey, something which threatens both drongos and meerkats, the drongos will emit an alarm that the meerkats will respond to. One morning at Lazuli, this relationship took a step further and most likely spared a pup from the talons of a predator – an observation that we have possibly never heard about before at the Kalahari Meerkat Project.



Lazuli subordinate female Weasel (VLF241) closely monitoring the Pale-chanting Goshawk in a distant tree after the incident. Photo Credit: Life History Shaz Alderton

The event occurred not long after Lazuli had left their burrow one morning to begin their daily search for food. Tagging along was the group's two remaining tiny pups, born in a mixed litter to the dominant female Sigma (VLF230) and the subordinate female Annie (VLF240), and a single drongo. In a matter of seconds both meerkats and drongo emitted high urgency alarm calls and the group scattered. A Palechanting Goshawk had dived in seemingly out of nowhere and was swooping down towards a fleeing pup. At the same moment the drongo deliberately flew at the goshawk, screeching and flapping its wings erratically. In response the goshawk rapidly turn-tailed and flew away to a nearby tree. Lazuli regrouped and closely monitored the goshawk for the rest of the morning, keeping the tiny pups close. The goshawk made no further attempts to snatch a meerkat.



A drongo taking off with a cricket it had stolen from a Zulus juvenile. Photo Credit: Life History Shaz Alderton.

Observers do not know if the goshawk ceased its attempt to grab a pup due to being startled by the drongo or if it realised the human presence at the last minute (raptors are typically shy of observers and very rarely attempt to predate meerkats when humans are present). Regardless of the reason, it was a lucky escape for the Lazuli pup.

At other groups the drongos have been less heroic to the benefit of the meerkats, particularly at Zulus. The seven juveniles, four of which were born in a mixed litter to subordinate females Lil G (VZUF029) and Lentil (VZUF032), and the remaining three born to subordinate female Timon (VZUF049), have repeatedly fallen victim to the tricks of a drongo pair. Drongos may emit false alarm calls, causing the meerkats to flee and abandon their prey for the birds to pinch. Adult meerkats may be quick to catch on to

the false calls and ignore them, but the inexperienced Zulus juveniles: Salazar (VZUF051), Helga (VZUF052), Godric (VZUM053), Rowena (VZUF054), Bear (VZUM056), Mion (VZUM057) and Zuma (VZUM059), were easy targets for the trickery. Remarkably, the drongos can mimic the alarm calls of other species that meerkats react to, so they can continuously fool the meerkats to steal their food. Previously some individual drongos have been observed mimicking the meerkat's very own highurgency alarm calls, something which no individual will ignore.

Losing food in such a manner may be costly (and irritating), but, as we have seen with the incident at Lazuli, listening to the alarm call of a drongo may be the difference between life and death.

Make-e-plan's 4th Anniversary

It was 4 years ago that Quintessentials females Bridget (VQLF011) and Heatherleigh (VQLF018) were discovered with Zulus male Pi (VZUM006), acting as part of a new group later called Make-eplan. This month we are going to take a look at the history and current composition of this group to see why they have become popular among the current research assistants.



Make-e-plan stopping for a drink at a dam. The radio collared individual is dominant male Banksia (VVHM117). Photo Credit: Zurich Manager and former Life History Zoe Turner.

After only 10 days of discovering Make-e-plan, observers confirmed that 2 year old Bridget had established herself as the group's dominant female. Her position has not gone unchallenged, her female offspring Wispa (VMPF003), Bearnaise (VMPF004) and Dauphinoise (VMPF007) all attempted to compete for dominance but were unsuccessful. Those females have since disappeared. Bridget has been the only dominant female for Make-e-plan's entire existence so far. The other Quintessential female, Heatherleigh, remained in Make-e-plan for 8 months without ever competing for the dominant

female position. But in March 2017 she was evicted from Make-e-plan and repeatedly chased away by Bridget and the rest of the group. Heatherleigh went on to form a new group with other evicted Make-e-plan females and some Lazuli males. Her group was initially known as Make-another-plan. Today we know them as Namaqua.

Make-e-plan's first dominant male, Pi, remained dominant until he was predated in August 2018. Only a few months later a coalition of three roving males from Van Helsing immigrated. Two of these males, Le Grand Obstacle (VVHM103) and Shamal (VVHM111), were infected with Tuberculosis. Tuberculosis has been re-occurring across the project's population since the start of the project more than 25 years ago. It has led to the extinction of many meerkat groups as it is often fatal and highly contagious (it is thought to be mostly spread between individuals through aggressive encounters and allogrooming). The eldest male, Le Grand Obstacle, had quickly established himself as the dominant male, but his condition worsened over the following months. He was euthanized in February 2019 due to prolonged suffering of tuberculosis. That same month the next oldest male, Shamal, established dominance. His reign was short; in July 2019 he had deteriorated too significantly from the effects of tuberculosis. Too weak to maintain his position, the third and youngest Van Helsing male, Banksia (VVHM117), challenged Shamal for the dominant position and won easily. A week later Shamal was euthanized due to the ongoing suffering from the disease.

Given this history, observers were concerned that Make-e-plan would not survive long. However today, to everyone's relief, none of the Make-e-plan individuals show any sign of tuberculosis. Bridget and Banksia are still the group's dominant pair, neither have received any challenges from any of the other group members in all of 2020. The subordinates of Make-e-plan are all Bridget's offspring, with the exception of the yearlings Hope (VMPF029) and Mushu (VMPM028), who are the offspring of Wipsa. Observers do not yet know if any of the current members are Banksia's offspring. The group's oldest subordinate, Bigwig (VMPF022), was sired by Van Helsing male Hobo Llama (VVHM123). The next oldest litter of four, Kratos (VMPM024), Scylla (VMPF025), Cirilla (VMPF026) and Thorn (VMPM027), were sired by La Grand Obstacle while he was still the dominant male. It is not yet known who sired the remaining members, which consists of five sub-adults and four juveniles. Typically 80% of all of a dominant female's offspring are sired by the dominant male. It is likely the remaining subordinates are Banksia's offspring as they have been born during his time as dominant male.

Make-e-plan have become a well-loved group among the present research assistants for a multitude of reasons. The majority of the group are very cooperative during weighing time. Banksia is considered exceptional for undertaking behaviours uncommon among other dominant males such as babysitting and regularly pup-feeding. Bridget has a unique attitude respected by all observers and seems to undertake sentinel behaviour more

commonly than other dominant females. She has also demonstrated impressive intelligence (she learnt after just a single false drongo alarm to ignore them for the rest of the morning). Bridget's group occupies a large territory, parts of which cover areas with flora not seen at other groups such as flats where (in the wet months) one can find themselves surrounded by a field of beautiful pink lilies. At any one time an observer following Make-e-plan may have Cape ground squirrels, pied babblers, hornbills, red-breasted shrikes, glossy starlings and other smaller species of birds within metres of each other simultaneously!



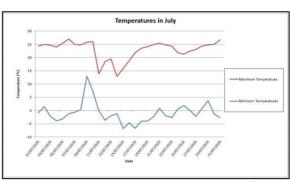
Some members of Make-e-plan at sunset. The pups are dominant female Bridget's (VQLF011) litter born in April. Photo credit: Meerkat volunteer Rebecca Schober.

Furthermore Make-e-plan's dominant pair are among the last living members of their original groups. Banksia is the sole remaining individual born into Van Helsing and Bridget, along with Namaqua's dominant female Heatherleigh, are the last remaining members born into Quintessentials. Everyone at the Kalahari Meerkat Project is hopeful that Make-e-plan will remain disease-free and continue to thrive for years to come.

Pregnancies in July 2020

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

Weather at the KMP



Average temperatures were sporadic between the 10th and 17th but were relatively stable for the rest of the month. The highest temperature for July was 27°C on the 6th. The lowest temperature was -6.7°C on the 15th occurring between 5:00-6:00am, before sunrise. There has been no rainfall this month

July 2020 Life History Details

Elrond's Council:

- There were 22 members present at the end of the month.
- Padfoot (VECF028), a pup from the mixed litter born to dominant female Tayl Baez (VBBF117) and subordinate female Galadriel (VECF032), was assumed predated.
- Common roving male Sauce (VZUM026) left the group on the morning of the 4th and returned that evening.
- Elrond's Council's habituation status is still considered Incomplete due to Galadriel's developing habituation progress.
- All group members appear to be of good health.

Gold Diggers:

- At the end of July, the group consisted of 11 marked individuals and one unmarked wild female. George (VGDM006) was absent at the end of the month.
- There is still no clear dominant female or dominant male.
- George did not emerge with the group on the 26th and did not return before the end of the month. That same day an unmarked wild yearling female emerged with the group. There was previously an unmarked yearling female in Gold Diggers back in April so it is possible it is the same individual.
- With the presence of an unmarked individual the habituation status of Gold Diggers has gone from Advanced Progress back to In Progress.
- All individuals appear to be healthy.

Hakuna Matata:

- The group ended the month with all 14 individuals present.
- The four pups born to dominant female Flint Lockwood (VHMF001) last month have all been assumed predated. VHMP042 and VHMP044 were last seen on the 2nd, VHMP043 and VHMP045 were last seen on the 3rd.

July 2020

- There were no group movements, pregnancies, encounters, inter-group-interactions or other major events this month.
- All group members appear to be in good health.

Jaxx:

- All 18 members of Jaxx were present at the end of the month, including dominant female Baloo's (VJXF080) three pups.
- Sub-adult male Cubby (VJXM138) did not emerge with the group on the 26th but had returned by the following morning.
- No other major events occurred.
- All individuals look to be in good health.

<u>Lazuli:</u>

- There were 15 individuals present at the end of the month.
- Four of the pups, VLM267, VLM268, VLM269 and VLP270, were all assumed predated, leaving one pup (VLM271) remaining.
- The group's habituation status is still in Advanced Progress, with observers now following the group for longer periods.
- All group members are in good health.

(Little) Creatures:

- All 5 individuals were present at the end of the month along with one unmarked wild male.
- There has been no pregnancies, group movements, inter-group-interactions or any other major events.
- All individuals appear to be in good health.

Make-e-Plan:

- All 18 individuals were present at the end of the month.
- There has been no pregnancies, group movements, inter-group-interactions or any other major events.
- The group appears to be in good health.

Namaqua:

- There were 16 individuals present at the end of the month.
- Sauce (VZUM026) from Elrond's Council encountered Namaqua twice on the 13th and 14th. He was war-danced and chased away by the group on both occasions.
- The group's yearlings have had noticeably poor body conditions (low weights). However there are no signs of any major illnesses or diseases.

Tswana:

- All 12 members were present at the end of the month.
- The position of dominant male is still unknown.
- There were no pregnancies, group movements, inter-group-interactions or any other major events
- All individuals appear to be in good health.

Ubuntu:

 There were 17 members present at the end of this month.

- Ubuntu had three inter-group-interactions with Zulus. Ubuntu retreated during the second interaction on the 30th and Zulus retreated in the other two interactions on the 13th and 31st.
- No other major events occurred.
- The group appears to be in good health.

Whiskers:

- All 18 members were present by the end of July.
- Swift (VWF176) was displaced from the position of dominant female at the beginning of the month after receiving major aggression from other group individuals. Multiple females including Swift, Pandi (VWF222), Epsilon (VWF224) and Mercy (VWF230) all competed for dominance. On the 22nd observers confirmed that Swift had regained the position as she was asserting dominance and receiving submissions from all other females.
- Eldest subordinate females Bones (VWF212) and Crimson (VWF215) were absent on the day of the overthrowal, with Bones failing to emerge with the group and Crimson being evicted. Crimson briefly returned to the group the following day but was evicted a second time. Bones appeared two times and Crimson appeared three times before both females rejoined Whiskers on the 13th.
- Beowolf (VWM225) was not with the group on the 14th but was seen rejoining Whiskers the following morning.
- Swift suffered major wounds to the face, throat and chest but completely recovered by the end of July. Other members of the group including Bones, Crimson, Pandi, Beowolf, Epsilon and Meicko (VWF233) suffered minor injuries but all recovered. Overall the group seemed to be in good health by the end of the month.

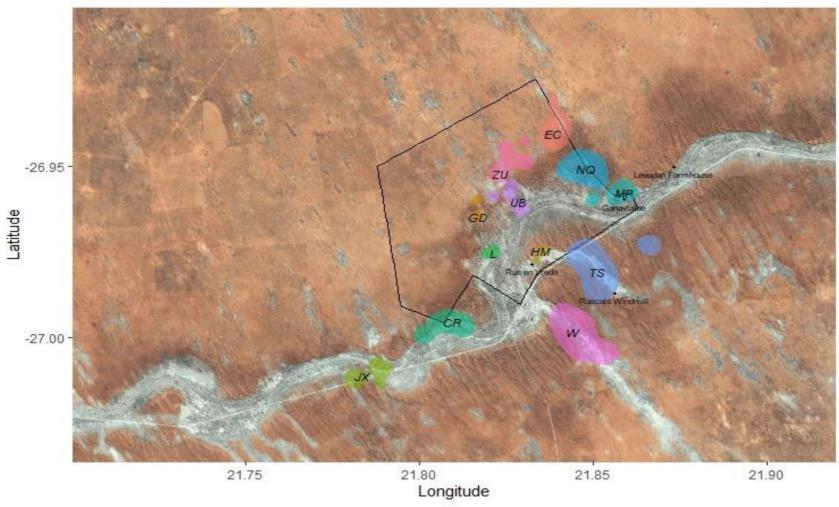
Zulus:

- There were 15 individuals present at the end of July including an unknown number of pups after dominant female Spruddel (VZUF028) gave birth on the 14th.
- The group were still babysitting and showed signs of lactations towards the end of the month.
- Pixie (VWM210) who was absent at the end of June appeared three times before rejoining the group on the 22nd. He was evicted by dominant male Scuzi (VWM213) on the 25th but returned to the group two days later.
- Zulus had three inter-group-interactions with Ubuntu on the 13th, 30th and 31st. Ubuntu retreated during one interaction and Zulus retreated during the other two.
- All group members seem to be healthy.

The following authors contributed to this report:

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Group Territories July 2020



Key: CR: Little Creatures, EC: Elrond's Council, GD: Gold Diggers, HM: Hakuna Matata, JX: Jaxx, L: Lazuli, MP: Make-e-plan, NQ: Namaqua, UB: Ubuntu, TS: Tswana, W: Whiskers, ZU: Zulus.