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INCIDENT OF THE GIRAFFE IN THE NIGHTTIME

BY ZOE MULLER



Adult female intrigued by carcass of dead baby giraffe.

iraffe have a bad reputation Ask any safari guide about their behaviour and they will delight in telling you how giraffe are bad mothers, abandoning their young hours after giving birth and leaving them alone and vulnerable in the bush. Keepers of captive giraffes too will tell of problematic

mother-calf relationships - sometimes, the mother refuses to let her newborn calf suckle or come close or, worse, she rejects it completely, forcing the keepers to intervene to save its life.

In the wild, giraffe exhibit an unusual parenting system: they hide their young for the first four weeks of life. This has

given rise to the theory that mothers 'abandon' their young soon after birth. Rather than being symptomatic of neglect, however, this behaviour protects the calf from the dangers of its new environment. Hiding it in a secure place protects it from agile predators and the hazards of the open savannah and ensures it remains in a shady place to avoid overheating.

The diligent mother usually keeps her calf hidden for the first few weeks of its life but she returns regularly to feed it and check on it. As it gets older and stronger, she will start to take the calf out and herd it with other young calves in a crèche system formed by females of the same group. Typically, the adult females take it in turn to look after this crèche, allowing the other mothers to leave in search of food and other resources. This system has evolved to ensure maximum calf survival: female giraffe are actually maximising the survival potential of their young, making them rather undeserving of the 'bad mother' tag!

I am studying a population of Rothschild's giraffe within the Soysambu Conservancy in Kenya. Having spent many hours observing giraffe in Kenya and elsewhere in Africa, I was already sceptical of their reputation as bad mothers, but recently I witnessed an incident that really made me question what we know about giraffe parenting behaviour.



Juvenile and Adult female inspecting carcass of dead baby giraffe.

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There are approximately 65 Rothschild's giraffe in Soysambu Conservancy, and they are pretty successful reproducers. There is always an abundance of young giraffe at any

one time, and their survival rate is good because there are no lions on the property. Part of my research involves identifying all giraffe individually, which means I get to know them very well, and



Adult female inspecting the carcass of dead baby giraffe.

one in particular caught my attention. One of the females (identified as F008) had a four-week-old calf at foot. This calf had a seriously deformed hind leg, which made it instantly recognisable. It was either born with a deformed leg or it was injured early on, but the calf could always be observed having great trouble walking and it spent most of its time standing still.

Like a doting mum, F008 could always be found keeping vigil right next to her calf. During many field trips, I never saw F008 much more than about 20 metres from her compromised calf, and on each occasion she was standing by it regardless of the rest of the herd's behaviour. Normally all adults in a herd will synchronise behaviour - they will all be foraging or ruminating together - but F008 would not do this. She always stood by her calf. This behaviour is interesting in itself - she was clearly compromising her own health (through decreased foraging and increased stress from extra vigilance) to protect her calf, thwarting this notion of 'bad motherhood' in this individual at least.

On May 3, 2010 I headed out into the field for my usual daily observation and on the transect I found a large group of giraffe in an area where they are not normally found. This was a surprise, but what was even more surprising was



Other giraffe highly interested in the carcass of dead baby giraffe.

Despite the large amount of evidence for such behaviour in elephants, this exploratory or investigatory behaviour of dead conspecifics and apparent 'protective' behaviour of the carcass has seldom been recorded in other mammal species and certainly not in giraffe

their behaviour. The giraffe at Soysambu are well habituated to vehicles and are normally very relaxed and calm. On this morning however, I found a large herd of 17 females all highly vigilant and running around in apparently bizarre patterns. They were also scared by my vehicle something that never normally bothers them.

I stopped the vehicle and expected them to settle but they carried on running around and when they did stop, they would stare intently at one particular area of bush where they seemed to be congregating. I needed to find out what they were so excited about and so I drove over to that area of bush. F008's injured calf had died and its body was lying in an open area of grass.

It looked like it had died maybe an hour previously, apparently from natural causes. It was a sad moment and I felt for F008, who was one of the females running around, but I was fascinated

by what was happening and decided to retreat, sit quietly and watch. This is what I saw over four days:

3RD MAY (DAY 1)

08:00: When I found the carcass, there were 17 female giraffe in the area, all running around in distress. Their movements were haphazard, they were highly vigilant and very unsettled. I positioned the vehicle away from the carcass and observed the herd for the next three hours. All 17 ran around the area being vigilant, continually approached or retreated from the carcass and showed extreme interest in it. F008 was in the group.

16:45: I returned to find 23 female giraffe and four juveniles in the area, again all quite restless, walking around and being vigilant. This time I observed the adult females approaching the carcass and nudging-' it with their

muzzles, then lifting their heads to look around before bending down to nudge it again. F008 was present and involved in this behaviour with the other adult females. The juveniles were tentatively approaching the carcass, would bend down to it, apparently sniff it and then jump up suddenly and run away before returning to repeat this behaviour.

21:30:I returned that evening as I expected to find some predators in the area. Instead I was surprised to find 15 adult females all clustered around the carcass, closer than they had been during the day. They were highly vigilant and did not move off as I approached. F008 was present and close to the carcass.

4TH MAY (DAY 2)

09:50: I expected the carcass might have been taken by predators during the night, but found it to be intact, in the same position and surrounded by seven adult females, including F008. All were walking around the carcass and being vigilant.

15:35: There were 15 adult giraffe in the area, this time 11 females had been joined by four males. The females, including F008, were still circling the carcass, approaching or-retreating and inspecting

it by bending down and sniffing or nudging with their muzzles. I noticed that while the females showed great interest in the carcass, the males showed none they were either foraging or inspecting the females for mating opportunities. At no point did any male go closer than 100 metres to the carcass.

20:45: I returned again at night to try and observe predator activity only to find the carcass still untouched and surrounded by three adult females, including F008.

5TH MAY (DAY 3)

07:45: On first inspection, no giraffe could be observed. However, after stopping the vehicle and scanning with binoculars, I noticed that there was one adult female present - F008. I noted that she seemed to have left the carcass for the first time since it had died and that she had moved to stand under a large tree approximately 50 metres away from it. She was not foraging or ruminating, just standing still in one spot.

I sat in the vehicle and observed her for about 10 minutes until I drove slowly over and she moved away. I went to inspect the carcass - it was gone! After a lot of searching, I finally located its remains and found that it had been halfdevoured by predators (probably hyena) during the night.

It was at this point that I realised it had been dragged approximately 50 metres to the left of its original location and was now resting by the big tree, exactly where I had seen the mother standing when I arrived.

So my initial recording that she was 50 metres from the carcass was in incorrect - in fact, when I had arrived and first observed her, she had been standing over the half-eaten remains of her calf.

14:00: Later that day, F008 was back in the same spot – standing over the carcass in its new position by the large tree. No other giraffe were around.

17:45: F008 was still there, still standing by the tree and remains, being vigilant. Still no other giraffe in the area.

6TH MAY (DAY 4)

08:45: F008 was still in the area, but was now approximately 200 metres



Adult female nudging carcass of dead baby giraffe with her muzzle.

away from the tree where the carcass was yesterday. She was standing in an open area. The carcass had been taken by predators.

14:00: No giraffe sighted in area.

7TH MAY TO 12TH MAY (DAYS 5 TO 10)

The site has been visited several times each day to see if giraffe have returned to utilise the area. No giraffe have been seen there since F008 was there alone on the morning of May 6. I have never seen anything like this behaviour in wild

I am not going to speculate on the motivations or possible 'emotions' driving this behaviour – I will let you draw your own conclusions . I simply wish to report on the interesting chain of events that I observed.

It is well documented that elephants show great interest in the carcasses of dead elephants and herd members, and this is often viewed as evidence of their empathic nature and ability to 'mourn' their dead. Regardless of such anthropomorphic labels or attribution of human emotions, what is clear is that elephants do exhibit unusual and uncharacteristic behaviour around the carcass of a dead elephant (Douglas-Hamilton et al., 2006; McComb et al., 2006).

Despite the large amount of evidence for such behaviour in elephants, this exploratory or investigatory behaviour

of dead conspecifics and apparent 'protective' behaviour of the carcass has seldom been recorded in other mammal species and certainly not in giraffe.

Giraffe are highly social but we are only just beginning to understand the complexities of their social systems and family networks. This incident provides unique insight into one aspect of giraffe behaviour that we rarely see - that of family ties and the effects of the loss of a herd member. I hope that by reporting these observations, people who have had similar experiences or observed such behaviour might report them so that we can build a clearer picture of this aspect of giraffe behaviour and ascertain whether this is an isolated incident, or if it is much more prevalent in mammals than we have initially allowed ourselves to believe.

ZOE MULLER has spent the last ten years working in wildlife conservation had a life-long interest in giraffe. She is now based full-time at Soysambu Conservancy in Kenya, having set up the Rothschild's Giraffe Project which is the first ever research programme dedicated to studying the Endangered Rothschild's

More information about Zoe and her research can be found at www.girafferesearch.com