

The History of the QB Family

During the first three years of the Amboseli elephant study we registered most of the families and by the time I set up a permanent camp in the center of the Park in September 1975, I knew 43 different families. There were, however, a few latecomers. In 1976 four families appeared to immigrate in from the east. All (GB, IB, KB, OB) eventually stayed and used the central part of the Park.

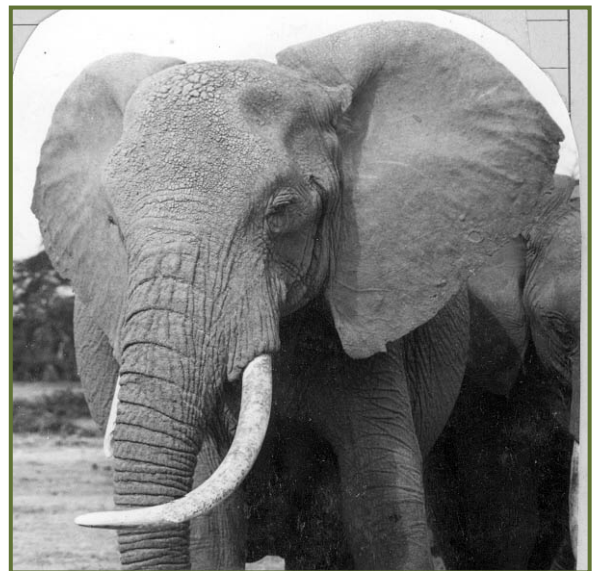
Other latecomers appeared from time to time on the western side of Park. They were less habituated to vehicles and often ran or moved rapidly away. Among these near strangers was a family that I assigned the code QB. (There was a small QA family that went extinct early on when their only adult female died.)

I first noted the QBs on January 9, 1976. I photographed a female who looked like Jessica but the rest of the JAs were not there. I also wrote in my field notes: "very nervous group." I didn't see them again until November 14, 1976. This time they were a group of nine. The family appeared to be made up of the following:

Large Female	about 35 years
Young F with upcurved left tusk	about 12 years old
Young F with even tusks	10-12 years old
Young F with straight tusks	8-10 years old
Young F with two broken tusks	8-10 years old
Young F with broken right tusk	8-10 years old
Young F with deep notch top right	8-10 years old
Adolescent F	7-8 years old
Adolescent M	7-8 years old

What was interesting was that they had no calves under the age of seven years old, which meant they had gone through some bad times. Also it was obvious that the large female could not be the mother of all the younger individuals who were so similar in age. Their own mothers must have been killed during the poaching that was occurring in the 1970s.

It was an intriguing family and I was interested in getting to know them better. It was also the beginning of the struggle to find names beginning with



Quilla's ID photo

Q. I had to make them up and started by naming the matriarch Quilla.

Over the next few years I saw the Quilla and the QBs from time to time but they were always a peripheral family spending most of their time in Tanzania. However I was able to get a better idea of which individuals made up the family. By the end of 1977 I had named all the young females in the family. The upcurved-left female was called Qualida; the even-tusked one Qessala; the straight-tusk Qatara; the two-broken tusks Qola; and the broken right tusk Qalypso.

Amboseli had experienced a very bad drought in 1976, which was the culmination of three years of poor rainfall. That drought broke in December 1976 but it took the females some months before they started reproductive cycling again. The first female I saw in oestrus was Delia of the DB family in February 1977. She was in consort with one of the biggest and highest ranking males in the population, M22 or Dionysus, who was in full musth with temporal glands streaming and dribbling urine.

Twenty-two months later on November 25, 1978, I found Delia with a newborn male calf. It was the first calf born to the population in 16 months and there was tremendous excitement surrounding the baby, with family and non-family members trying to get as close to him as possible. From the day of his birth the QB family, which previously had rarely associated with the DB family, began to spend time with Delia and her calf. Eventually a close relationship built up between Delia and Quilla the QB matriarch. At first Deborah and Dinah were intolerant of Quilla and the other QB females, and often threatened them and chased them. The QB females, however, initiated affiliative greeting ceremonies whenever they approached the Ds until the D members began to respond by greeting in return. They truly insinuated themselves into their good graces.

Many more calves were born to the Amboseli families over the next year, but probably for nutritional reasons the elephants in the west took much longer to recover from the drought. It was not until February 1980 that a QB female, Qualida, had a calf of her own. There was a long break and then Quilla had a female in May 1981 and Qola had a



Qualida with her distinctive left-upcurved tusk

daughter in August of that year. The following year in October Qatara had her first calf, a male. Sadly died in January 1983 as many first calves do.

During 1983 was three more calves were born to the QBs, to Qalypso, Qessala and to one of the younger females who was now called Qumquat. One would have thought that once the QBs had calves of their own that they would leave Delia and DBs, but that's not at all what happened.

By 1983, Quilla and her offspring were spending most of their time with Delia and her offspring, and the rest of the QB family had resumed their previous distribution and association patterns. The other DB members spent more time on their own than with Delia and Quilla, and I considered that both families had splintered. This split proved to be permanent and eventually the Delia/Quilla family was called the DCs. This is the first and only recording in Amboseli of a female leaving her own family to join another one. Dinah and her group remained the DAs and Deborah's contingent formed the DBs. The second oldest female Qualida who was only 19 years old led the remaining QBs. It was very unusual behavior and nothing like that has ever happened before or since to any of the other families during 40 years of the study.

After the break at the end of 1983 the QB family's composition and structure was as follows:

Individual	Sex	Estimated or Known Date of Birth
Qualida	F	1964
QUA80	F	2-80
Qessala	F	1965
QES83	F	5-83
Qalypso	F	1966
QAL83	M	3-83
Qola	F	1967
QOL81	F	8-81
Qatara	F	1968
Qumquat	F	1969
QUM83	F	5-83
Qaboos	M	1969

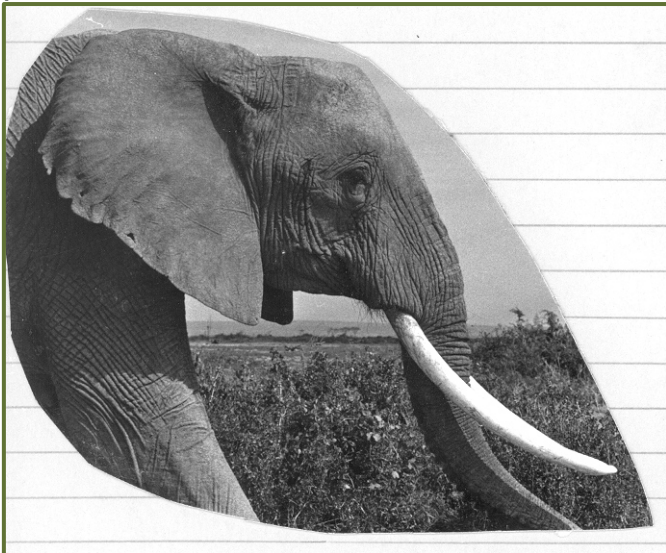
Quilla had taken her new two-year-old calf with her as well as one of the young females whom we named Qasmira. All the others stayed with Qualida. Qasmira was probably Quilla's daughter.

Both the QBs and the newly formed DCs now spent the majority of their time on the southwestern side of the ecosystem frequently crossing over into Tanzania. From our sightings records over the years it appears that Delia never closely associated with the DBs again.

Just when the QBs were settling down and building up their numbers with new calves environmental and social conditions acted against them. In 1984 there was another severe drought. At the same time the Maasai had promoted a new warrior set and the combination of the drought and scores of young men out to prove their bravery was devastating for the elephants. In all 67 elephants died during 1984: 11 adult females, 13 adult males, three juveniles, 13 weanlings, five second-year calves, and 22 first-year calves.

The QBs did better than many of the Amboseli families even though they were led by an inexperienced matriarch. No adults died, but Qalypso's calf succumbed at the height of the drought. Qualida gave birth to a second calf in December 1984 but he died in April 1985 probably because he received poor nutrition in the womb. Miraculously, young Qatara, who had lost her first calf, gave birth at the end of the drought and that calf, a male, lived.

The next years were peaceful for the QBs. There was a break of almost two years when no calves were born but then in October 1986 Qalypso, who had



lost her calf in the drought, gave birth to a son. Sadly this calf died when he was five years old in 1991. The following year three more calves were born: Qola had a male in January, Qualida had a daughter in May, and Qumquat gave birth to calf that died three months later of unknown causes. In 1988 Qessala had a daughter, then there was another break and in 1991 the QBs had their own baby boom with five calves: Qualida, Qumquat, Qalypso, Qatara and Qola all gave birth. Only one of these calves, Qalypso's died

as a calf; the others all lived to be adults. So poor Qalypso had lost all three of her calves.

With the new calves arriving it was time to name the older calves. Our policy is to name calves when they reach four years old. Before that they are given a code based on their mother's name and their year of birth. We knew the naming would be difficult with the letter Q but we managed to come up with some names, odd as they were. Qola's 1980 was named QoQo; Qumquat's 1983 female because Quince; Qessala's 1983 daughter was called Qoral; and Qatara's 1984 male was named Quennel.

By 1987 we had basically run out of the common first names to use for elephants so we decided to start using themes. All the calves born in a single year would have names based on a theme. We started this system for the 1987 calves and we chose as a theme place names in Kenya. There were two surviving 1987 calves in the QBs, Qualida's and Qola's. Our immediate problem

was that there were no places in Kenya beginning with Q. We got around this hitch by turning the K sound into a Q. So Qualida's daughter was named Qamakunji and Qola's Qaratina.

By the end of 1991 the QB family stood as follows:

Individual	Sex	Estimated or Known Date of Birth
Qualida	F	1964
QUA91	F	12-91
Qamakunji	F	5-87
Qessala	F	1965
QES88	F	12-88
Qoral	F	5-83
Qalypso	F	1966
Qola	F	1967
QOL91	F	12-91
Qaratina	F	1-87
Qoqo	F	8-81
Qatara	F	1968
QAT91	M	4-91
Quennel	M	12-84
Qumquat	F	1969
QUM91	M	12-91
Quince	F	5-83

In the meantime the male we called Qaboos had gone independent as all young males do. He left only two males behind him in the family both belonging to Qatara. One of the striking things about the QB family was that they had a very skewed sex ratio with 14 females and three males. The overall ratio at birth is 50:50.

The average interval between elephant births is four years and the QBs were right on schedule. All was quiet between the end of 1991 and the beginning of 1995 and then four more calves were born. Qessala, Qalypso, Qoqo and Qualida had calves. Qola's daughter Qoqo was just 14 years when she had her first calf. Once again Qalypso lost her calf, her fourth.

Finally the pattern changed and three males were born. Qualida's '95 was a male and then in 1996 Qumquat had a son; and in 1997 Qola had a son. However, in another unusual and odd occurrence the QBs lost some of their other males because Qatara decided to split off from the family and move on her own with just her sons. That split became permanent and we made her the QC family.



Qoqo with her newborn calf and her younger sister Qaratina allomothering; when Qaratina was a baby Qoqo had allomothered her

In the meantime with new calves in the family, the older female calves were very busy being allomothers. An allomother is an individual who cares for an infant that is not its own. In other words it is a sort of baby-sitter. Immature female elephants are strongly attracted to young calves particularly newborns. They watch over them, follow them around, rescue them if they get in trouble, and just generally fuss over them and give them lots of attention. This behavior is beneficial for all concerned: the calf is well taken care of, the mother

gets a chance to feed and rest, which is just what a lactating female needs, and the baby-sitter learns about mothering herself, which will be very useful knowledge later on when she has her own calf.

Despite Quilla leaving and then Qatara splitting off the QBs were a remarkably successful family. They had not lost a single adult female from the time I first met them in 1976 through 1998. That's 22 years and an amazing record. It couldn't last and it didn't. The first adult female to die was Qessala. She simply disappeared in November 1999 along with her youngest calf but her older offspring were left behind which is a good indication that the mother died. We don't know what happened to her.

Aside from that death 1999 was a good year for the QBs. Seven calves were born some to first-time mothers. Only one died and that was Qaratina's. Qalypso finally had a calf who survived and grew up to be named Qalinda. Over the next years more calves were born and there was only one more death for a period of almost 10 years. Quince, who was Qumquat's daughter born in 1983 died of unknown causes.

An amazing series of events happened to the QBs while we happened to be filming a series for Animal Planet. We got a report that an adult female elephant was mired in mud out near the Tanzanian border. The team rushed out there and discovered it was Qualida hopelessly stuck in deep mud. They tried getting her out with ropes but to no avail. They had to leave her for the night but returned the next day with a tractor and managed to extricate her.

Several days later we got a report that a calf was stuck in a deep well in the same general area. The calf was rescued but was injured both from scraping and from hyenas biting her trunk. Although we guessed it might be Qualida's calf it was decided to send her to the David Sheldrick Wildlife Trust orphanage because she needed medical treatment. It turned out to be the right decision because even if we could have found Qualida the calf could not have survived with the bad wounds she had. As it turned out she gradually recovered and is alive today in Tsavo.

By the end of 2008 the QBs had grown considerably:

Individual	Sex	Estimated or Known Date of Birth
Qualida	F	1964
Qeilah	F	2-03
Quentin	M	5-99
Qolumba	M	2-95
Quassia	F	12-91
Qandala	F	2-04
QUS08	F	6-08
Qamakunji	F	5-87
QAM05	F	5-05
Queenia	F	12-99
Qalypso	F	1966
Qalinda	F	7-99
Qola	F	1967
Quebec	M	6-03
Qadaffi	M	3-97
Quiche	F	12-91
Qaratina	F	1-87
QRT03	M	1-03
Qoqo	F	8-81
Querida	F	12-99
Qorona	F	1-95
QNA08	F	6-08
Qumquat	F	1969
QUM06	M	3-06
Quaye	F	12-02
Qantina	F	11-99
Qtip	M	6-96
Quinine	M	12-91
Qoral	F	5-83
Quistis	M	6-03
Qadija	F	6-98
Qasima	F	12-88
Queiroz	F	12-02

Although the QBs have had few males, the one male from the early days grew up to be a very impressive bull. Qaboos started coming into musth in his late 20s and was very active in pursuing females and challenging other musth males. I was lucky enough to see a serious fight between Sioma and Qaboos and much to my surprise Qaboos won despite the fact that he was 19 years younger than Sioma.



Two bulls in full musth fight: Sioma (left) and Qaboos (right)

All was going well for the QBs but a double tragedy was about to occur. The worst drought in living memory hit Amboseli in 2009. By the end of that year 83% of the wildebeests, 71% of the zebras, and 61% of the buffaloes had died. Close to 400 elephants perished from both the drought and an upsurge in poaching. The problem was that there was almost no vegetation left to eat. Amboseli always had fresh water because of the underground rivers coming from Kilimanjaro. These rivers create permanent swamps in the Park. So the animals did not die of thirst but rather from hunger. In addition, in the case of the elephants, as they weakened they appear to succumb to disease as well.

The calves were the first to go. There was nothing for them to eat and their mothers could not produce enough milk for them, especially as the calves got older. In 2008, 151 calves were born, which was a record. However, the next year these calves were just at the age when they needed to supplement milk with vegetation and there simply wasn't anything they could eat. As a result 97 of them died during 2009. The calves born during 2009 also suffered but they did a bit better because they didn't have to eat as much vegetation. Of the 85 calves born during the drought 38 died.

The 2009 drought challenged all the Amboseli families and the older animals were not spared either: of the females in the whole population over 50 years old only two survived. Over half of the matriarchs died, including Qualida. The QBs also lost Qalypso, Quintina, Quentin; and sadly the big male Qaboos disappeared, almost certainly poached.

But something even worse happened to the QBs. While a portion of the family was in Tanzania they got into some trouble with people, who chased them over the rim of a deep quarry and they fell to their death. Six elephants died in this most horrible way. Some died immediately but most of them had to be shot. The ones who died were: Qola, Qoqo, Qaratina, Quiche, Quebec and Qaratina's '03. Fortunately, this was a very rare event and we haven't heard of anything like this happening again.

The drought broke in December and fairly good rain fell in 2010. African savannahs are remarkable in being able to recover quickly. Within a couple of months the woodlands and plains were transformed from what looked like bare soil to lush green swards. It always amazes me. Underneath that dusty ground the seeds and roots remain waiting for the moisture to release them.

Slowly the elephants began to recover. They put on weight and there was a spring in their step. The ATE team had their work cut out for them trying to discover who had died, who had survived, and who all the orphans were. It took almost a year to figure it all out. The elephants got into huge groups enjoying the lush new grass springing up all around Amboseli, and many females came into oestrus at this time.



Qumquat and the first calf of the baby boom

We weren't expecting any births at all for a long while, since elephant pregnancies last for 22 months. It would take time for the population to recover, and many females needed time to regain body condition before they

could resume their reproductive cycles. We knew there would be an amazing baby boom because so many females would be ready to conceive around the same time. We just didn't know when it would start.

Much to our delight the first female to give birth in the baby boom was Qumquat who was now the matriarch of the QBs. We found her on October 12, 2011 with a beautiful female calf. The family members were very protective of the calf and clearly excited about the new arrival.

A week later another calf was born to AA family and then two weeks went by and a third calf was born. Then suddenly more and more started to come. By the end of the year 46 had been born. As I write this now in August 2012 we've just recorded the 200th calf born since October 12th. We have had two other baby booms before, but this one surpasses both of those. After all the losses and tragedies these calves have changed the feel of the families. They just seem so much "happier". It has also helped us get over horror of the drought and all the deaths.

Since Qumquat had her calf, two more QB females have had calves: Querida, QoQo's daughter who somehow escaped the quarry, and Qantina, Qumquat's daughter making her a grandmother.

We wish this family well. They are such survivors. The following is the current composition and structure of the QB family:

Individual	Mother if Dead	Sex	Estimated or Known Date of Birth
Qumquat		F	1969
QUM11		F	10-12
Qores		M	3-06
Quaye		F	12-02
Qantina		F	11-99
QAN12		M	5-12
Qtip		M	6-96
Qamakunji	Qualida	F	5-87
Quintia		F	5-05
Queenia		F	12-99
Quassia	Qualida	F	12-91
QUS08		F	6-08
Qandala		F	2-04
Qolumba	Qualida	M	2-95
Qeilah	Qualida	F	2-03
Qalinda	Qalypso	F	7-99
Quebec		M	6-03

Qoral	Qessala	F	5-83
QOR09		F	6-09
Quistis		M	6-03
Qadija		F	6-98
Qasima	Qessala	F	12-88
QSS10		F	6-10
Queiroz		F	12-02
Qadaffi	Qola	M	3-97
Qorona	QoQo	F	1-95
QNA08		F	6-08
Querida	QoQo	F	12-99
QRD12		F	3-12
Independent Males			
Quinine	Qumquat	M	12-91
Qolumba	Qualida	M	2-95

Cynthia Moss
Amboseli National Park
August 2012