THE HISTORY OF THE KB FAMILY

The KB family has had an unusual history. I consider it one of the immigrant groups that moved into the central region of Amboseli in the late '70s. I saw the family for the first time on January 1, 1977. Most of the other Amboseli families had been photographed and sighted many times by this date, thus it was a surprise to find this new family. They were very frightened and ran away, which was not characteristic of the Amboseli elephants and suggested that they were from outside. Another clue to their origin was that they were with the GBs and IBs who were also recent immigrants. Including these other two families there were about 30 animals present. The new family seemed to be made up of about 8-10 members including two medium-sized adult females, one young adult female and

several calves.



Kora's ID photo

I saw this new family several more times in January and managed to photograph the three females. It was difficult to tell who was the matriarch or leader of the family because the two older females were the same size and thus probably the same age. Matriarchy is agebased: the oldest female is the leader. The two oldest females were distinctive: one had asymmetrical tusks with one tusk higher than the other; the second female had a left ear that flopped forward. I assigned the

family the code letters KB (I was now going through the alphabet a second time, so there was already a KA family) and I named the asymmetrical female Kleo, the flop-eared female Kora, and the younger female Kit.

On March 4, I noted that there was another female with them who was around the same age as Kleo and Kora. She had even tusks and smooth ears. From that point on she was the group. Either I had overlooked her or she had been separated on the other sightings. I named her Kizzy. By April I had seen the KB family eight times and was beginning to get an idea of the group composition. Aside from the four adult females there appeared to be four youngsters, but it was difficult to

figure out which of the calves belonged to which females because they were all weaned and not sticking close to any particular adult.

By mid June I had sighted the KB family 15 times and I had tentatively worked out the composition as follows:

Kleo	Adult F	Asymmetrical tusks
Kora	Adult F	Flop ear
Kizzy	Adult F	Smooth ears, symmetrical tusks
Kit	Young F	Asymmetrical tusks
8-9 year	F	Splayed tusks
8-9 year	F	Upcurved tusks
5-6 year	F	Wart on right side of face
4-5 year	M	No distinguishing marks

From this point on the family was sighted regularly on a monthly basis. I believe the core of their home range had been one of the swamps to the east of the Park and that they were forced to leave when people began to cultivate in the area. Four other families appeared to move in at the same time. All became permanent residents in Amboseli and eventually began to calm down and tolerate vehicles.

By 1978 the KBs were well known. The family still consisted of eight members. There were no small calves, but that was not unusual since there had been a very bad drought in 1975 and 1976 with the result that few calves survived and very few were born in the following two years. During the drought the females had stopped reproductive cycling altogether. However, as soon as conditions improved they began to come into oestrus again and mate. Since so few of them had young calves there were a lot of females ready to conceive. The result was a baby boom in 1979 and 1980. Only two calves had been born to the Amboseli population between January 1977 and November 1978. From November 25, 1978 to June 5, 1980, one hundred calves were born. At times it seemed like babies were falling out of the sky.

The KBs were a bit slow to join the baby boom, but finally in February 1980 Kora gave birth to a male calf. This must have been a very exciting time for the family because the next youngest calf was eight years old. Later in the year Kleo gave birth to a son and Kizzy to a daughter. It took Kit a bit longer to conceive. She gave birth to a female in December 1981. In the meantime in May 1981, the young male in the family disappeared. He might have gone independent early; he would have been nine years old and the average age of independence for males is 14. It is more likely that he died. However, all in all the family was doing well, growing and prospering with 11 members by the end of 1981.

By now I knew the family well and had named the younger animals. The splayed female was called Keely, the wart-faced one Kameo, and the up-curved female Kaitlin. "K" names were not easy to find so I had to change some names normally beginning with a "C" to "K". In fact, naming in general was getting harder and harder. I had gone through five "Names for Babies" books and was now on a "Dictionary of Saints". My policy is to give newborn calves a code name based on their mother's name and their year of birth. When calves reach four years old they are given proper names with a letter beginning with their family initial.

Conditions continued to be good for the Amboseli elephants for the next couple of years. Many of the females who had given birth in 1979 gave birth again in



Keely with her splayed tusks was easy to identify

1983. The population was growing rapidly. However, environmental conditions changed once again. In 1984 there was a severe drought. Many elephants died that year, both directly from lack of food and through human-elephant conflict. In times of drought the Maasai and their cattle and the elephants and other wildlife all concentrate around the central Amboseli swamps and are basically on top of each other. Under these conditions competition and conflicts occur. Elephants sometimes kill cows that they come upon and are frightened of because they are associated with man, and then in retaliation the Maasai spear elephants. To aggravate matters in 1984 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.

Compared to some of the other families that suffered dreadful losses, the KBs did well. They only lost one calf, sadly Kora's 1980 male. The drought broke at the end of 1984 and a relatively peaceful and prosperous period followed right into the 90s. The KB females must have maintained an adequate diet during 1984 because it turned out that several of them had conceived in 1983 and managed to

carry their pregnancies through the drought and give birth at the end of 1984 and during 1985. In fact the KBs had a veritable baby boom with six births.

Not only did the big females give birth but also the young females, who were calves when I first met them, reached sexual maturity and became mothers for the first time. Females can mature as early as nine years old and then after a 22-month gestation period, give birth to a calf at 11 years, but that is the young end of the scale. The average age of first conception is 11 with first birth at 13. Kameo stuck with the average. At the age of 13 she gave birth to a daughter in December 1984. Kaitlin, who was 16, gave birth to a female in March 1985 and Keely, who was 17, gave birth to a female in November 1985. In the meantime, among the older females, Kleo and Kora both had calves in January 1985 and Kit had one in February. Only Kizzy was left out of this amazing productivity. All the calves were female; Kleo's 1980 male, whom I named Kyle, was the sole male in the family, not a very satisfactory situation for him. Young males like to spar and test their strength against other young males.

The family now numbered 16, doubling in size from when I first met them in 1977. I named the other calves born in 1980 and 1981. By the end of 1985 the KB family consisted of the following individuals:

Individual	Sex	Estimated or Known Month & Year of Birth
Kleo	F	1952
KLE85	F	Jan-85
Kyle	M	Nov-80
Kora	F	1952
KOR85	F	Jan-85
Kizzy	F	1956
Kalliope	F	Nov-80
Kit	F	1966
KIT85	F	Feb-85
Kassia	F	Dec-81
Keely	F	1968
KEE85	F	Nov-85
Kaitlin	F	1969
KAI85	F	Mar-85
Kameo	F	1971
KAM84	F	Nov-84

All went well for a while for the KBs, but tragedy struck in 1986. Kit and both of her calves disappeared, almost certainly killed. They may have been speared by

Maasai as part of their ritual displays of bravery or they may simply have been killed by poachers. A great deal of poaching was going on in Kenya at this time, but, luckily, Amboseli was mostly spared because of the presence of tourists, researchers and the Maasai (who do not tolerate poachers).

Another year went by and Kizzy had a calf in April 1987, finally breaking the run of females with a male calf. The normal interval between calves for the Amboseli females is four to five years and the KBs were pretty much on schedule: Kleo had a son in March 1989; Kameo and Kaitlin had their second calves in 1990; and Kora and Keely had calves in 1991. But then, sadly, Kaitlin and her youngest calf died around May 1991 and again the cause was unknown.

However, the KB family thrived over the next several years with more births and only two deaths. Kyle, as expected, struck out on his own at a younger age than average. He left his family by the time he was 12 and was seen frequently hanging out with other young males having great sparring matches.

It was soon time to name all the 1984 and 1985 calves. This was going to be a challenge since I had definitely run out of 'K' names. I struggled with the Names for Babies and finally came up with "Kyrena" for Kleo's daughter, "Keiko" for Kora's, and "Klytie" for Kaitlin's. Luckily two donors wanted to name 'K' calves so Keely's daughter was named "Kita" (after an elephant in the Detroit Zoo) and Kameo's daughter was named "Kate" for a donor's daughter.

Finally some males were born to the family in 1994. Kleo had a son in January and Kizzy had a son in July. Kizzy became a grandmother when her 14-year-old



Kaitlin's daughter Klytie

daughter Kalliope gave birth to her first calf, a female, in December 1994. In 1995 Kora brought another male into the family with the birth of a son in March. Kameo had another male in October 1996, and Keely had her third calf, a daughter, in April 1998. Three of the young females became first mothers: Klytie and Kate both had calves in 1997, and Keiko gave birth in 1998. Sadly, Kameo and Kate lost their calves. It is not unusual for a young mother to lose her first calf, but it was surprising that Kameo lost hers.

By the end of 1998 the family had grown to 24 and included the following members:

Individual	Sex	Estimated or Known Month & Year of Birth	
Kleo	F	1952	
Kijana	M	Jan-94	
Kristian	M	Mar-89	
Kyrena	F	Jan-85	
Kyle	M	Nov-80	
Kameo	F	1971	
Kadzo	F	Mar-90	
Kate	F	Nov-84	
Kora	F	1952	
Katzman	M	Mar-95	
Katito	F	Jan-91	
Keiko	F	Jan-85	
KKO98	M	Jun-98	
Kizzy	F	1956	
Kostas	M	Jul-94	
Kilgoris	M	Apr-87	
Kalliope	F	Nov-80	
KAL94	F	Dec-94	
Keely	F	1968	
Klemagina	F	Apr-98	
Kereyian	M	Dec-91	
Kita	F	Nov-85	
Klytie	F	Mar-85	
KLY97	F	Jul-97	

The KBs were proving to be a very successful family. In 1998, like the rest of Kenya, the park received a huge amount of rain courtesy of *El Nino*. There was a super-abundance of food and the all the elephants grew positively fat on the lush vegetation. The elephants formed huge aggregations of 200-300 and there was a tremendous amount of play. Even the big adult females lost their dignity and ran around with the whites of their eyes showing attacking imaginary enemies in the long grass. It would be wonderful if it could always be like that, but nothing is predictable in African savannahs.

Some of the young family males had left to strike out on their own. All males born into a family eventually become independent usually around 13-14 years old. Kyle, Kilgoris and Kristian had made the break by 1998.

The following year there was a baby boom in the KB family, as well as in the rest of the population. Four more calves were born to the KBs. Kleo was the first to give birth that year in May, to a female. In that same month Kleo's daughter Kyrena had her first calf, a female, making Kleo a grandmother. Towards the end

of 1999 we began to see the results of *El Nino*. Baby elephants seemed to be raining from the sky. Up through October '99 there was the usual number of births in the population, 63, but in November and December we suddenly had a deluge of new calves. These were conceived 22 months before starting in January 1998 when the El Nino rains were well underway and the elephants were in the



Kalliope in 1995 when she was 15 years old

best possible condition to breed. In the last two months of 1999 alone 48 more calves were born giving us a record of 111 births for one year. The KBs joined this *El Nino* boom with three more births: Kizzy, Kora and Kalliope gave birth to daughters in November, December and January respectively.

All went well for the KBs for the next few years but then tragedy struck once again. First Kameo and her youngest calf died in October 2000. We suspected they were speared. Much more devastating, the matriarch Kleo died in April 2001, apparently of an illness. She left a two-year-old calf, Karie, her seven-year-old son Kijana and her adult daughter Kyrena. Kleo's death was the beginning of the breaking up of the family. There always tended to be temporary splits in KBs. Kora often went off with just her calves. Kizzy was sometimes with Kleo and sometimes on her own. Now the split between the remaining large adult females, Kora and Kizzy became more pronounced.

In February 2004 Kora died. We think she was speared. Kora's death was another blow to the family and from that point on we rarely found all the members together. Kizzy took over as matriarch for her contingent and Keiko another with Kora's offspring. Kleo's granddaughter Kate led a third group. The subgroups formed depending on how closely related the individuals were.

Individual	Sex	Estimated or Known Month & Year of Birth	Mother if Dead
Kizzy	F	1956	
Kyra	F	Feb-03	
Katya	F	Nov-99	
Kostas	М	Jul-94	
Kalliope	F	Nov-80	
KAL04	М	Feb-04	
Kaypro	F	Jan-00	
Kendall	F	Dec-94	
Keely	F	1968	
Kofi	М	Dec-02	
Klemagina	F	Apr-98	
Kereyian	М	Dec-91	
Kita	F	Nov-85	
Keetee	F	Jul-01	
Keiko	F	Jan-85	Kora
Kuffour	М	Nov-02	
Kaiser	М	Jun-68	
Karita	F	Dec-99	Kora
Katito	F	Jan-91	Kora
Katzman	М	Mar-95	Kora
Klytie	F	Mar-85	Kaitlin {Kora?}
Kotoku	М	Nov-01	
Kathryn	F	Jul-97	
Kate	F	Nov-84	Kameo {Kleo}
Kitty	F	Oct-01	
Kadzo	F	Mar-90	Kameo {Kleo}

Kyrena	F	Jan-85	Kleo
KYR04	М	Nov-04	
Kiddo	F	May-99	
Karie	F	May-99	Kleo
Kijana	М	Jan-94	Kleo

Despite their losses the family was doing well after the death of Kora. Miraculously, Karie, Kleo's orphaned calf, survived, as well as her son Kijana. Kora's calves also survived. Over the next five years eleven calves were born.

The good times came to an end in 2009. Amboseli experienced the worst drought in living memory. Even the very old Maasai men and women could not remember a worse year. More than 80% of their cattle died. The wildlife suffered as well—83% of the wildebeests, 71% of the zebras, 61% of the buffaloes, and 25% of Amboseli's elephants died.

There simply wasn't enough food for the animals. Although there is always water in Amboseli, fed from Kilimanjaro, but with no rain there was little or no vegetation. Most of the calves born in 2008 and 2009 died. Even more tragically many of the older females died. All but two of the big adult females over 50 perished. Elephants have six sets of teeth in their lifetime and when the sixth set wears down it is difficult for an old elephant to chew tough vegetation. At the same time there was an upsurge in poaching and in most cases we didn't find the carcass and so could not tell if an adult female died from the drought or was killed for her ivory.

In December 2009 the drought finally broke and good rain began to fall in Amboseli starting in January 2010. It didn't take the females long to recover enough to start breeding again. Already in January 2010 we recorded females in oestrus. With a 22-month gestation period we expected new calves in November 2011 and the births came as expected. There were two births in October,



Kate's calf born in December 2011 was one of the first to be born after the drought

so those females were surprisingly early. More calves came in November and

December: a total of 46, and then in 2012 there was a deluge of baby elephants with 200 births!

The KB family contributed six births—five males and one female--to the baby boom; the KB2s (we had given Kate and her subsection a new designation because by now they were independent of the other KBs) added three. Among the KB births was a male born to Kalliope. Unexpectedly, this calf died two years later and we don't know why. It is unusual for a matriarch to lose a calf, but perhaps he had a congenital condition.



Kendall with her new calf in January 2016; with her is her younger sister Kigali acting as an allomother

There was soon a second wave of births. Those females who gave birth in 2012 gave birth again in 2015 and 2016. After the loss of her calf, Kalliope wasted no time and became pregnant again giving birth in January 2016. The month before, her daughter Kendall had a female calf. The two calves look like twins and are inseparable.

Kendall's younger sister Kigali has been an attentive "allomothers" ever

since these two calves were born. An allomother is an individual who cares for an infant that is not her own. In other words she 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.



Kalliope & her newest calf in June 2016

Both the original KB family and the KB2s are doing very well as I write this history. Keiko in the KBs and Kadzo in the KB2s had calves in January 2016. There have been two deaths. Kyrena disappeared and we never found her carcass or cause of death. Her orphaned calf is being well taken care of by the family. The second mortality was Kitty's calf who died shortly after birth.

The KB males who have grown up and gone independent are also doing well. Kristian has been coming into musth and it looks like he will prove to be a successful male.

Below is current composition and structure of KBs and KB2s plus their independent males:

Individual	Sex	Estimated or Known	Mother
marrada	Jex	Date of Birth	{grandmother
			if Dead
Kalliope	F	Nov-80	Kizzy
Karla	F	Jan-16	-
Kigali	F	Feb-04	
Kaypro	F	Jan-00	
KPR15	F	Apr-15	
Kendall	F	Dec-94	
KEN15	F	Dec-15	
Kalybar	F	Mar-12	
Kita	F	Nov-85	Keely
Korioli		Aug-13	
Kenny	М	Apr-09	
Keetee	F	Jul-01	
KTE15	М	Jul-15	
Klemagina	F	Apr-98	Keely
Kleopatra		Oct-13	
Keiko	F	Jan-85	Kora
KKO16	М	Jan-16	
Kotokori	М	May-12	
Keddy	F	Feb-07	
Karita	F	Dec-99	Kora
Kasongi	М	Dec-12	
Klytie	F	Mar-85	Kaitlin
Kasanji	М	Sep-12	
Koober	М	Dec-08	
Kathryn	F	Jul-97	
Kanike	М	Sep-12	
KB2			
Kate	F	Nov-84	Kameo
KATE15	F	Mar-15	
Kamlaben	F	Dec-11	
Kitty	F	Nov-03	
Kadzo	F	Mar-90	Kameo
KDZ16	М	Mar-14	
Kapeta	F	Jan-12	
Kiddo	F	May-99	Kyrena {Kleo}
Korpita	М	Mar-14	

Karie	F	May-99	Kleo
Kabba	М	Sep-12	Kyrena
Kaluena	F	Jun-12	

Independent	Code	Birth Date	Mother
Males	No.		
Kilgoris	445	Apr-87	Kizzy
Kristian	476	Mar-89	Kleo
Kereyian	516	Dec-91	Keely
Kostas	558	Jul-94	Kizzy
Kijana	559	Jan-94	Kleo
Katzman	594	Mar-95	Kora
Kaiser	648	Jun-98	Keiko
Kotoku	757	Nov-01	Klytie
Kofi	779	Dec-02	Keely
Kuffour	780	Nov-02	Keiko

Cynthia Moss Amboseli National Park June 2017