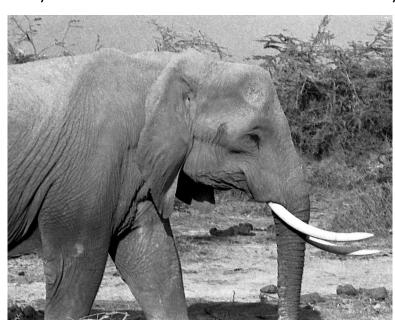
## The History of the KA Family

Harvey Croze and I started the Amboseli Elephant Research Project in September 1972 with the goal of studying one of the few relatively natural populations of elephants remaining in Africa. We chose Amboseli because the elephants were wandering freely over migration routes that they had been using for hundreds of years. They were not fenced or compressed into a protected area and they were not being heavily poached. Another good reason for choosing this population was that it was small enough (600-700) to get to know every animal individually. We wanted to study the life histories of individuals. Therefore, we set out to get recognition photos of first the adults and much later the calves as well.

We worked for the first three years on a part-time basis, both of us actually based in Nairobi with other jobs. On the field trips we would take photographs of all the adults we encountered and then try to figure out who belonged with whom. We knew that elephants lived in female-based families but we didn't know how many families there were or who made up the families in Amboseli. As we began to work out the composition and felt relatively secure in our designation of a family we gave that family a letter of the alphabet and then named all the adult females with names starting with that letter. Thus the first family we recognized and got good photos of was the AA family.

It was early in the morning on October 5 that we found a group of 13 elephants moving toward the Enkongu Narok swamp. We soon discovered that many of them were adult males who were already independent from their



The old female, Flop Ear, on October 5, 1973

families. After eliminating the males there appeared to be seven members in this family. The oldest and the one we determined was the matriarch was a big, old female we called Flop Ear, because one of her ears flopped over at the top. The other females with her were much younger. There were no small calves, the voungest being about three to four years old. We took as many photos as we could.

That afternoon we found them again as they were emerging from the swamp. We took some more photos and tried to figure out which calves went with which females. The following month we found Flop Ear and her family once more and this time there was a female with them we had not seen before. She had a small calf less than a year old.

A month later I was in Amboseli again and was able to get a good count of this family and sit with them for a while in order to work out the relationships. The family appeared to consist of the following:

Large adult female (Flop Ear)
Adult female
Adult female
Adult female
1st year calf
Young female
~12 year old male
~8 year old female
~6 year old female
3-4 year old female

When we came to the group with Flop Ear we had already given out the letter "F". In fact, we had reached "K" so Flop Ear's family became the Ks. We left her name as it was but the other females got K names: Karen was the next oldest; Kay was the next; the young female was named Katrineka after Harvey's daughter; the female calves were eventually called Kim, Kriste, Kerry and Keira. The adult female with the young baby somehow never got a name because we still weren't sure if she belonged to the Ks. The young male was called Karl.

Over the next two years, while I was still only working part-time in Amboseli, I saw the K family (soon called the KA family when we had to start through the alphabet a second time) eight times and by the time I started the full-time study in September 1975 I knew every member of the family and felt fairly confident about which calves belonged to which females. During that period, in December 1974, a male calf was born to the second oldest female, Karen and in January 1975 a male calf was born to Kay. Unfortunately, tragedy also struck the KA family. The last sighting I had of the wonderful old Flop Ear was on March 3, 1975. On that same day I noted that Kay had a spear wound in her ear and I suspected that the family had been attacked by Maasai warriors. In the meantime, the K female with the first year calf had also disappeared. I never saw her after the end of 1974.



The second oldest female, Karen, on October 5, 1973

The loss of a matriarch is always a major, disturbing event for an elephant family. Some families break into small sub-units for months or even for one or two years after, as a result of the loss of leadership provided by the matriarch. The KA family did better than most families and stayed together, probably because there was an older female, Karen, to take over, and the younger females were not confused about whom to look to for direction. In 1975 Karen was 28 years old, which is young to be a matriarch, but the other females were all under 25.

Now that I was living in the Park and following the elephants on a daily basis, I got to know more about the KAs. They stuck to the western side of the Park and were fairly predictable in their movement patterns. They used the II Merisheri woodlands and the Enkongu Narok swamp and they rarely ventured to other parts of the Park. They appeared to have a special relationship with two other families who used the same area: the FAs and the HAs. More often than not these three families would be found in close association with each other. I called this kind of relationship a *bond group*. By the end of 1975 I had worked out that the KA family contained nine members as follows:

Individual	Sex	Birth (Known or Estimated)
Karen	F	1947
KAR74	М	12-74
Kay	F	1952
KAY75	М	1-75
Katrineka	F	1960
Karl	М	1961
Kim	F	1965
Kriste	F	1967
Kerry	F	1968
Keira	F	1970

I was fairly sure at least one of the older female calves belonged to Karen and one to Kay. From their behavior I guessed that Keira was Karen's daughter and Kerry's was Kay, but I could not be positive. I didn't know how Kim and Kriste fit in.

Tragedy struck the KA family again at the end of 1975. I found Kay with a terrible spear wound. There was no chance of her surviving and she was probably in a lot of pain, so the wildlife authorities had to shoot her. Her calf was missing.



Katrineka being mated by the bull we called "Hulk"; she gave birth two years later

That year there had been low rainfall in the Park and surrounding areas, and in 1976 the rains failed with only a miserly couple of inches falling during what was supposed to be the wet season. There was a brief flush of green in April and May and then a serious drought set in. It was just after the short period of rain in June 1976 that Katrineka gave birth to her first calf. It was a very bad year to be born in Amboseli. I recorded the

births of 29 calves. By the end of the year only 15 remained. Of those that died most were probably the victims of drought. It was sad and depressing watching these calves get weaker and weaker and then disappear. Their mothers had milk but probably not in great quantity or quality. What really seemed to affect the calves was the lack of suitable vegetation to feed on once they reached the age when they should have started to eat solid food. Calves begin to eat a bit of grass when they are between three and four months old, and by the time they are eight months old they need quite a lot of food to sustain them. In 1976 as the drought progressed there was only swamp vegetation which the young calves had difficulty both handling and digesting. Many of the calves that had been born in the early part of the year died in September, October and November. Katrineka's calf died in October at the height of the drought.

Finally rains came in December and the elephants, adults and calves, gradually recovered. The next three years proved to be very favorable ones

for the elephants. The rainfall was higher than average with the result that there was abundant and nutritious vegetation. In addition the poaching that had occurred in the areas surrounding the Park came to end in 1977; and in 1978 the Maasai warriors were promoted to junior elder, and with that change the incidents of spearing of elephants decreased dramatically. All in all it was a very peaceful and productive period for the elephants.

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 KAs joined in the baby boom with two calves born in 1979. Katrineka had a daughter in July and Karen had a son in August. Both these calves survived and things were looking up for the KAs. In fact, they experienced no losses from the end of 1976 until 1984. However,



The two KA calves turned out to be redheads

Karl left the family as all young males do. The average age of independence is about 14. In the meantime more calves were born. Making up for lost time, Karen had another calf in December 1982 and Katrineka gave birth again in April 1983. The normal calving interval is about four and a half years so she was right on schedule. The young females, Kim, Kerry and Keira all matured by 1981 and had calves in 1983.

All was going well until 1984 when 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.

The KAs were not spared. Kim and Keira's calves died and then Kim was speared in December 1984. The next couple of years were not so bad. There was average rainfall and the family only experienced two losses. Karen's '82 calf died in 1985 and Kerry's calf died in 1986. There were no births in 1984 and 1985, but Karen had a new calf in February 1986, another male, making four sons in a row: and Kriste gave birth to her first calf in November 1986. By the end of 1986 the family consisted of the following:

Individual	Sex	Birth (Known or Estimated)
Karen	F	1947
KAR86	М	2-86
Kevin	М	8-79
Kirk	М	12-74
Katrineka	F	1960
KAT83	F	4-83
Kelly	F	7-79
Kriste	F	1967
KRI86	М	11-86
Kerry	F	1968
Keira	F	1970

Over the next few years the KAs did not have very good luck. There were four losses in 1987. Karen's son Kirk, who was just going independent, was speared to death. Katrineka and Kriste lost their calves and Kerry, who had given birth in 1987, lost hers when he was six months old. Young females have a lot to learn before they can successfully raise calves.

The KAs finally got some peace and had three and a half years with no losses and several births. Katrineka, Keira, and Kriste had calves, but then calves started dying again. They were changing their range and perhaps they were moving into areas where they were coming into conflict with the Maasai. From 1991 to 1993 five calves died, but far more serious than these losses, Katrineka disappeared and was suspected to have been speared. Without her mother's milk her youngest calf died.

Once again there was a period of quiet, this time for four years. Then the worst happened. Karen died in September 1997. We think it was of natural causes. She was about 50 years old. The loss of any matriarch is terrible for a family, but when a family has such a big, old female and the remaining females are 20 years younger, the loss seems more serious. Kriste was the

oldest at 30. The KAs disintegrated for a while but eventually they came together with Kriste as leader.

Unfortunately, Kriste was speared in October 2000 and died. The next oldest female Kerry took over and she has done a surprisingly good job at leading the family. It is surprising because the KA family had one tragedy after another, they lived in an area with frequent spearing, and Kerry was only 32 when she took over as matriarch. During the eight years between 2000 and 2008 she held her family together and it grew. Ten calves were born and only two of these died. No family adults died although two of the KA independent died--Kevin and Karl—but we can't blame that on Kerry because these males were long gone. By the end of 2008 the family consisted of the following:

Individual	Sex	Birth (Known or Estimated)
Kerry	F	1968
KER08	М	5-08
Kemp	F	2-02
Kochab	F	1-95
Keira	F	1970
Kunene	F	12-04
Keyboard	F	1-00
Kirty	F	3-96
A. Kidjo	F	3-88
Kir	М	3-07
Kelly (Katrineka's)	F	7-79
Kristof	М	4-05
Kilobyte	F	11-00
Kilifi (Katrineka's)	F	2-87
Kingolotto	М	2-01

The following year in 2009, Amboseli experienced the worst drought in living memory. Nearly 400 elephants died. Among these were 60 adult females of which 27 were matriarchs. Some families suffered severe losses. For example, the BBs lost seven adult females as well as many calves. Others lost all the calves born after 2006 leaving only adolescents and adults. On the other hand a few families made it through the drought with few deaths.

One of these fortunate families was the KAs. I don't know how Kerry did it but she got her family through the drought with no losses at all. And even more amazing the two calves born during 2009 (to Keira and Kilifi) both survived. To give some perspective, 83 calves were born in Amboseli during 2009. Of these only 41 survived. Kerry is now one of my elephant heroines. I also have

to give credit to Keira who is so close in age to Kerry that they are really more like co-matriarchs.



Elephant heroine Kerry who, aside from being a very successful matriarch, has one of the most beautiful tails

One sad note for the KAs, however, is that they only have one living adult males: Keira's son Kilombera who is 19 years old. The others, Karl, Kirk, Kevin, and Kent, have all died since becoming independent. Karl, however, did have a good, long life for a male. He only died in 2007 when he was 46 years old. I am sure he fathered many calves.

Now in 2011, with no new births, the KA family numbers 17. I am expecting several births in the family at the end of this year and through next year. The following females could give birth: Kerry, Kochab, Keyboard, Kirty, A. Kidjo, Kelly, and Kilobyte. All the families in Amboseli are expecting calves and it will transform their lives.

Cynthia Moss Amboseli National Park October 2011