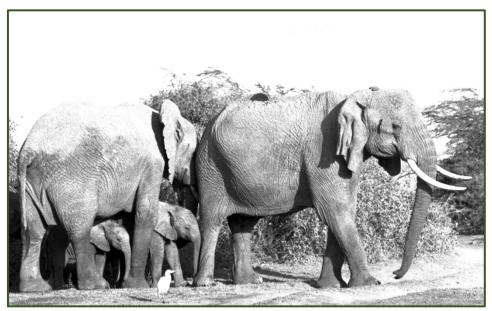
## The History of the CA Family

I first met the CA family on October 10, 1973. At that time the Amboseli Elephant Research Project was just getting started. What my colleague Harvey Croze and I were trying to do was learn to recognize all the elephants in the population. Every time we came upon a family we started photographing the individuals. On this day we were sure that we had never seen the family before because the matriarch--the largest and oldest female--was very distinctive. She had a damaged right ear that was crumpled in such a way that the whole thing formed folds and looked like a curtain. She was immediately named "Curtain Ear" and it seemed appropriate to assign this family the code initials "C". Each family was given a letter of the alphabet and then everyone in that family given names starting with that letter. Later when



Curtain Ear in 1974

we had reached 27 families and we had to start going through the alphabet for the second time, the family became the CAs, the second C family being the CBs.

On that first day, the family appeared to number 12. There were three

other adult females, seven calves and two adolescents around 10-15 years old. We weren't able to get pictures of all of them but we managed to photograph the four adult females. There was a second big female, but we weren't sure if she was part of the family, so we tentatively gave her the name Cruella. Then there was a very beautiful female who seemed to be about 30 years old. I named her after my sister Carolyn. The third female was much younger, about 18 years old. She was called Cybil.

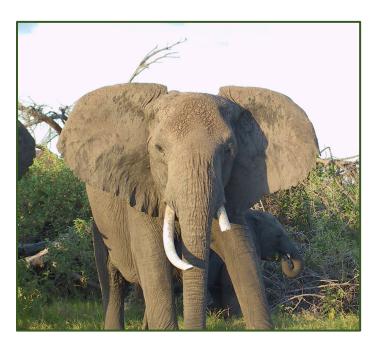
The family was next seen on February 24, 1974 and this time we got even better photos and were able to more or less work out the structure. It appeared to include the following members:

Curtain Ear	F
1-year-old calf	?
5-year-old	M
Carolyn	F
2-year-old	?
Cybil	F
2-3-month-old	?
4-5-year-old	F
7-year-old	M (possibly Carolyn's)
10-year-old	?
14-15-year-old	M
Cruella	F

Over that year, Cruella was seen once completely on her own, which is highly unusual for a female, and then once again with the family. After that she was never seen again and she was presumed to have died, probably of natural causes.

During 1975 the family was recorded six times and there were no further births or deaths, but it was not a good year in Amboseli because there was low rainfall. The following year was even worse. 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.

The bad times started even before that for the CAs. On January 8, 1976 I found the



Cybil

family without Curtain Ear and her youngest calf. There were only eight members of the family there: Carolyn and Cybil and their calves, Curtain Ear's older calf and two of the adolescents. Then on March 3, 1976 Carolyn was found dead about one mile from my camp. The Park rangers said she had a septic spear wound on her hind leg. A few days later I found Cybil in a little group of three. She had lost her baby and was left with just her older daughter and Curtain Ear's older calf. Carolyn's young calf had also died.

During the early and mid-1970s there was both poaching and spearing of elephants in and around Amboseli. Many elephants were killed for their ivory and also because the Maasai people who lived in the area were very unhappy with the area being made into a national park. To aggravate matters the drought was very harsh and the Maasai, their cattle, and the wildlife were packed into a small area and competing for the same resources.

The loss of a matriarch is always a major, disturbing event for an elephant family. Some families disintegrate and break into small sub-units for months or even one or two years after as a result of the loss of leadership provided by the matriarch. Cybil not only lost her matriarch, she lost almost everyone else in her family. At only 21 years old she was left to lead and defend her little family. What seemed to be left were four members, including one of the other calves who had joined her. The family consisted of the following with the new names assigned to them:

Individual	Sex	Estimated or Known Date of Birth	Mother if Dead
Cybil	F		
Crystal	F		
Charles	М		Curtain Ear
Cecil	М		Carolyn?

Despite very adverse conditions Cybil managed to keep these individuals alive during the severe drought that developed over the year. 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 spearings

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 many 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.

Cybil joined in the baby boom and gave birth to a male calf in November 1979. Her little family had grown to five. Her daughter Crystal reached sexual maturity two years later and conceived in July 1981 giving birth to a daughter in May 1983. Crystal was 14 years old at the time.



Crystal

## Conditions continued

to be good for the Amboseli elephants. Many of the females who had given birth in 1979 gave birth again in 1983. The population was growing rapidly. However, environmental conditions changed once again. 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, 16 juveniles, five second-year calves, and 22 first year calves.

Once again tragedy struck the CAs. Cybil was speared and badly wounded in July 1984 and her calf died. Miraculously she recovered from her wounds. Two months later when the drought was at its height Crystal's calf died.

Without the support of a large family the CAs were suffering. In the meantime, Cecil had left the family for good the year before and Charles who was 15 in 1984 also left to strike out on his own. Cybil remained with just Crystal, a sad little family of two.

However, Cybil and Crystal turned out to be tough survivors. Despite having been wounded and very ill for awhile, Cybil managed to carry a pregnancy to term and gave birth to a male calf in December 1984. Cybil's son survived and was eventually named Caleb. In March 1987 Crystal had her second calf, a male. Fortunately, he too survived and Cybil, Crystal and their two calves continued to do well. Cybil became very conservative in her movements, tending to stay in one area of the Park much of the time. This strategy seems to have been successful because her family began to grow. In 1991 Cybil gave birth to another daughter and Crystal was proving to be a good mother herself. Her son, born in 1987, became a healthy, strapping young male and in 1992 Crystal gave birth to her first daughter.

The calves in the family have been named according to the system I use. Usually a calf is not named until it is four years old. Up until that age it is referred to by a code based on its mother's name and its year of birth. Thus, before Caleb was named he was referred to as CY4 meaning Cybil's '84 calf. In 1991 when Crystal's '87 calf was four he was named Cherangani (I chose Kenya place names for all the 87 calves—the Cheranganis are mountains in western Kenya); and in 1995 I named Cybil's '91 calf Caralluma (that year the naming theme was plants that grow in Amboseli). Crystal's '92 female calf was eventually named Celia. By the end of 1992, the family numbered six and consisted of the following:

Individual	Sex	Estimated or Known Date of Birth	Mother if Dead
Cybil	F	1955	
Caralluma	F	Jan-91	
Caleb	М	Dec-84	
Crystal	F	1969	
Celia	F	Mar-92	
Cherangani	М	Mar-87	

Over the next years more calves were born and amazingly none was lost. This success is exceptional for a tiny remnant family that had all the odds against them, and I have to admit that, because they managed to overcome all the challenges they faced, the CAs are one of my favorite families.

In 1995, Cybil gave birth to a female, who was named Campbell. In February 2000 she gave birth to a son and five years later in February 2005, Cybil had another male calf. Crystal gave birth to three females, one in 1997, another in 2001, and the third in 2005. Cybil became a grandmother again when Caralluma gave birth to a daughter in 2003. In July 2006, Cybil's youngest daughter, Campbell, gave birth to her first calf, a male; and in April 2007, Crystal's daughter, Chissano, gave birth to a female calf making Cybil a grandmoher. Out of the nine births starting in 1995, seven of the calves were females, which was good because it meant that the family would grow in number since all the females would stay. All young males eventually go independent. For example, Caleb and Cherangani went independent at about 12 years old, in 1996 and 1999 respectively. By May 2007, Cybil's family had grown to 13 plus three male offspring known to be alive and out in the world of bulls. It is an amazing achievement considering that there were just two members in the CA family at the end of 1984.



The CA family in 2005

Life seemed to be going well for all the Amboseli elephants, but nature began to show its harshest side. Not enough rain fell for two years in a row and then in the third year, 2009, there was barely any rain at all. Amboseli experienced the worst drought in living memory. People, livestock and wildlife all suffered. Sixty to eighty percent of the cattle died; 83% of the wildebeest, 71% of the zebras and 61% of the buffaloes perished. Nearly 400 elephants died both



Caralluma and her miracle calf born during the 2009 drought

from the drought and an upsurge of poaching.

All the families except one suffered losses. The CAs were hit hard. Their wonderful, brave matriarch, Cybil, who had revived and grown her family, died. In addition, the independent male Caleb, died, plus Cybil's young adult daughter Campbell, and four calves (Cybil's '05 and '08, Campbell's '06 and Chissano's '07). There was, however, one amazing survivor. Caralluma gave birth to

a son at the height of the drought in October and someone she got him through the drought.

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 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, so those females were

surprisingly early. More calves came in November and December: a total of 49, and then in 2012 there was a deluge of baby elephants with 201 births!

The CAs joined the baby boom with one calf in 2011 and another in 2012. All seemed to be going well for their recovery, but then in 2013 tragedy struck. Crystal and her youngest calf died. We don't know the circumstances of their deaths. Once again the CAs had lost a matriarch. At 22 years old, Cybil's daughter, Caralluma, was the oldest adult female and thus she had to take over the leadership.

Like her mother before her, Caralluma has done an excellent job of guiding her family. Remarkably, there have been no deaths in the family for the last six years, since 2013. During the same period there have been nine births. There are now 19 members in the family.

The CA family very rarely comes into the Park these days so it has been hard to even do censuses of them, much less update the ID photos. They appear to spend most of their time to the south and east of the Park. We assume they are sticking to the safe areas including two conservancies because they have not lost anyone. Still we wish they would come into the Park more often so we could check up on them. In the meantime, we are happy that the family is flourishing.

## The Current Composition and Structure of the CA Family

Individual	Sex	Estimated or Known Birth Date	Mother {grandmother} if Dead
Caralluma	F	Jan-91	Cybil
Charlemagne	М	Apri-15	
Colao	М	Oct-09	
Catalina	F	May-03	
CTL17	М	Dec-17	
Chapati	М	Sep-14	
Celia	F	Mar-92	Crystal {Cybil}
Couscous	F	Jan-14	
Chelsea	F	Feb-10	
Courtney	F	Nov-03	
Constanza	F	Aug-15	

Chissano	F	Apr-97	Crystal {Cybil}
CHS16	F	Jan-16	
Chara	F	Mar-12	
Chaser	F	May-01	Crystal {Cybil}
CSR18	М	Jan-18	
Cordelia	F	Aug-13	
Cheri	F	Apr-05	Crystal {Cybil}
CRI17	F	Nov-17	
Independent	Code	<b>Birth Date</b>	Mother
Males	No		
Cherangani	435	Mar-87	Crystal {Cybil}
Cogswell	713	Feb-00	Cybil

Cynthia Moss Amboseli National Park September 2019