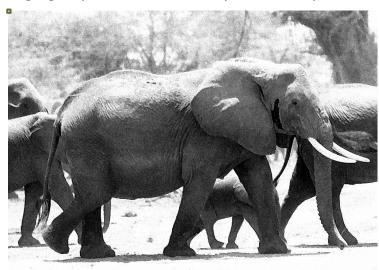
## The History of UA Family

I first met the UA family on October 1973. I was still only working part-time in Amboseli at the time, and for a year I had been stealing time away from other work in Nairobi to drive down to the Park and begin to get to know the elephants. The first time I saw the family, I was struck by a big, beautiful matriarch who was in a large group of almost 100 elephants. They were at the edge of Ol Tukai Orok, the



Ursula in October 1973; she was a very big female

palm woodlands where I would eventually establish the elephant research camp. I took photos of this female and others. I estimated the big female to be about 40 years old.

Two months later I found the same large female with a tiny calf in a small group of seven elephants south of the Longinye swamp. As well as the new calf, a female in her thirties and a much younger female of about nine years old accompanied her. There were also three male calves with the family around four, six and eight years old. It

seemed that the four and eight year olds were the sons of the big female but I did not know where the six-year-old male fit in. The family appeared to include the following:

Big female
Her new calf
Male calf
Sub-adult male
Second adult female
Sub-adult female
Male calf

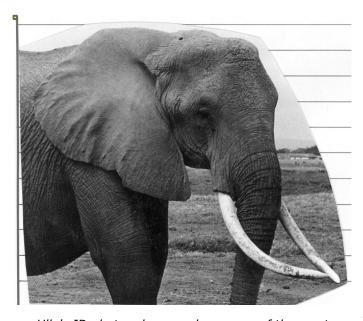
about 40 years old less than 2 months old about four years old about 8-10 years old about 30 years old about nine years old about six years old

I didn't see this family again until March 1975. By then I had assigned the big female's family the letter 'U' and according to our system named the adults with names beginning with that letter. The beautiful female was named Ursula, the second adult female Ulla, and the young sub-adult female was called Una.

Some changes appeared to have occurred in the family since I had seen them in late 1973. Ursula's older son and the mystery male were still there, but Ursula had obviously lost her '73 calf as well as her middle son. Una wasn't present either. I saw them several times that month, but none of these were clear sightings and often I could only recognise Ursula in the middle of a larger group of elephants. The family disappeared for another six months, but again they were seen in large

groups. It wasn't until January 1976 that I found them in a small enough group to monitor the family closely. Ursula wasn't with them, and I never saw her again. I had to conclude she had died sometime in December 1975. I was fairly convinced that she must have been poached because there was definitely killing of elephants for ivory around Amboseli in the 1970s and poachers tended to go for males and the bigger females.

I was glad to see that Ursula's son and the other male were still with Ulla and Una. They were joined by a young teenage female. She associated with the family fairly consistently throughout 1976 and I eventually called her Ulrica. Ulla had taken over as matriarch.



Ulla's ID photo: she was always one of the most beautiful females in Amboseli

In July 1976 Ulla gave birth to a female calf. Like many of the Amboseli families, the UAs had struggled through the low rainfall years of the 1970s, and Amboseli was in a severe drought by the time this calf was born. I was worried about her survival. The rains were still several months away, if they came at all.

Ulla and the family stayed very close to the Park that year. Like many elephant families, they were tied to the permanent water available in the swamps, and avoided the heavy conflict with people and the poaching that was occurring outside. In September 1976 the mystery male associated with the family

disappeared. I never found out whether he was truly a family member, and whether he dispersed to become independent, died or was killed. In November Ursula's surviving son also disappeared, with a similar unknown fate.

The rains finally came in December 1976, and Ulla's new calf had made it through. I named her Ute. As the good times returned to Amboseli and the elephants recovered, I realised the UA family formed a bond group with the BB family. The two families spent a lot of time together throughout 1977. It was a good strategy for such a tiny family, which consisted of just Ulla, her calf Ute, Una and Ulrica. The BBs were a much larger family with 14 members and the association no doubt helped the UAs.

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

elders, 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 UAs made a small contribution to the baby boom. In February 1979 Una gave birth to her first calf, a male and in March 1980 Ulla had a daughter. Two years later Ulrica had her first calf, a female. I was pleased to see the family growing and relieved that they were having some daughters. All males leave their families when

they are about 14 years old. Females, however, stay in their family for the rest of their lives. To be successful elephant families need to build up their female numbers.

The three UA calves thrived but the next two calves born to the family did not do as well. Una had a calf in June 1983 but he died a few months later. The following year, 1984, turned out to be another time of serious drought. Ulla's calf born at the very height of the drought in October 1984 died several months later probably because he did not get the nutrition he needed before he was born.



Una having a nap

This drought passed and conditions were fairly good for the elephants over the next few years. The UAs wasted no time building up their numbers. Una had a daughter in September 1985 and then the family had their own mini baby boom in 1987 with three births: Ulrica in February and then Ulla and young Ute in August. All were males. It was Ute's first calf; she was only 11 years old, which is young—the average age of first birth is 13. Perhaps she was trying to catch up with the others.

By the end of 1987 the UA family was a respectable size with 11 members:

Individual	Sex	Estimated or Known Month & Year of Birth
Ulla	F	1943
ULL87	М	8-87
Ulona	F	3-80
Ute	F	7-76
UTE87	М	8-87
Ulrica	F	1963
ULR87	М	2-87
Ulva	F	2-82
Una	F	1964
UNA85	F	9-85
Ulysses	М	2-79

Our policy on naming is to wait until a calf is four years old. When a calf reaches this age its chances of survival are very good and it is usually at this age that its mother will have a new calf. Up until the age of four a calf has a code based on its mother's name and its year of birth. 'U' was not an easy letter to find names for, but if we couldn't find names in the many Names for Babies books we had, we made up names. It was in 1987 that we started using themes for each year's calves. Thus the calves born in 1987 were given place names in Kenya; 1988 was African musicians and so on with pop stars, football players, plants in the Amboseli area, African rivers, etc. It wasn't terribly helpful for the 'U' names but it was helpful for most of the other letters. We also started a donor-naming program and that also helped but until this year we never had a 'U' name suggested.

Over the next decade, the family grew steadily and thrived with thirteen births. All but two of these survived and grew to adulthood. In the meantime we discovered that Ulva, Ulrica's daughter born in 1982, was a tuskless. This trait is not particularly common in the Amboseli elephants. However, we have found that tusklessness and onetuskedness runs in families so it must be inherited. Ulva was the only tuskless in the UAs until 2000 when she gave birth to a tuskless daughter, but it was interesting that there were several tusklesses and one-



Ulva, Ulrica's daughter, turned out to be tuskless

tuskers in the BB family with whom they formed a bond group. We know now from DNA analysis that they are related to one another. So far there have been no male tusklesses recorded in Amboseli, but they have been recorded elsewhere. It must be a tremendous disadvantage for an adult male to be without tusks.

By 2000 several of the UA males had gone independent. Una's Ulysses was the first to go in the mid 90s. Some males leave almost overnight, others come and go for awhile before departing, sometimes for



Ulysses grew up to be a bruiser; he broke his ear in a fight

as long as a year, and then a few others are "mama's boys" and don't want to leave at all. We have had a couple of males who have stayed with their mothers until they were 18 and 19 years old. None of the UA males were reluctant to leave. They set out for the world of the big bulls by the time they were 14 or 15. After Ulysses left the next to go were the three males born in 1987. We had named them Swahili names: Upendo, which means love, Uhuru, which means freedom, and Umoja, which means unity.

Despite the departure of the young males, the UA family was growing fast. However, there was one sad loss. Una died in 2006 from unknown causes. She left five living offspring. From 2000 to 2008, 22 calves were born. Ulla and Ulrica were both grandmothers several times over and the family was flourishing. At the end of 2008 the family had 33 members (plus five independent males):

Individual	Sex	Estimated or Known Month & Year of Birth	Mother if Dead
Ulla	F	1943	
ULL08	М	8-08	
ULL01	F	5-01	
Unity	F	4-97	
Usambara	М	4-93	
USA07	М	3-07	
Ulona	F	3-80	
Ulmazi	М	11-04	

Username	F	3-00	
Urania	F	3-94	
Ute	F	7-76	
UTE06	F	4-06	
Umana	М	12-02	
Ultana	F	2-96	
ULT08	М	2-08	
Ulrica	F	1963	
ULR04	М	1-04	
Urban	М	4-99	
Urena	F	11-91	
URE08	М	3-08	
Uttam	М	3-03	
Ulva	F	2-82	
ULV04	М	3-04	
Unix	F	9-00	
Usher	М	4-96	
Undine	F	9-85	Una
Uzma	F	5-03	
Urbanus	М	4-98	
Usha	F	5-90	Una
USH08	М	12-08	
Umberto	М	6-03	
UTwo	F	2-97	Una
Undo	F	6-00	Una
Independent	Code	Birth Date	Mother
Males	No		
Ulysses	316	2-79	Una
Upendo	456	2-87	Ulrica
Umoja	454	8-87	Ulla
Uhuru	453	8-87	Ute
Ubangui	534	3-92	Ulva

All seemed to be going very well for the UA family but 2009 turned out to be the worst year that people had experienced in living memory. There was a catastrophic drought caused by three years of low rainfall and then one year of almost no rain. By the end of 2009, 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. To add to the troubles, we discovered that there was poaching for ivory at the same time,

possibly catalysed by the number of carcasses, and the desperate economic losses people in the ecosystem were suffering.

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 UAs were one of the worst hit families in Amboseli. They lost twenty-three family members as a result of the drought, including all eleven calves below the age of five. Older animals were not spared either: of all the Amboseli females over 50 years old only two survived. Over half of the Amboseli matriarchs died, including the wonderful old Ulla. She finally succumbed to the drought in July 2009, leaving her family leaderless at a terribly difficult time. We were saddened by many of the deaths, but Ulla's touched the team personally as she was one of our oldest elephants and had been the matriarch of her family for 34 years. Ulla wasn't the only adult female lost in the UAs: Ute, Ulona, Ulva, Usha, Usambara and Unity also died, all within a six-month period. The family structure was seriously altered by the loss of so many adult females.



Ulrica was the oldest member of her family to survive; she wasted no time having her next calf

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. Poaching seemed to have been reduced, and we felt more confident for the elephants. They got into huge groups to enjoy the lush new grass springing up all around Amboseli, and many females came into oestrus at this time.

The UA family began to recover along with the rest of the elephant population. However, their relationships had been irrevocably changed by their losses, especially that of the death of their matriarch Ulla. Despite having Ulrica, a big old female to turn to, Una and Ulona's surviving daughters spend much of their time together, without Ulrica. Both fragments of the family retained their strong bonds with the BB family whose matriarch Barbara was one of the two females over 50 years old to survive the drought. We are waiting to see whether the two UA fragments will begin spending more time together during the current period of

Undine's new male calf, named Ubu by a donor, is curious about everything

plenty that Amboseli is experiencing, or whether they will permanently split into two separate families.

The calves conceived when the drought broke in early 2010 started being born at the end of 2011. We are currently experiencing the biggest baby boom we have ever recorded with 246 calves born in an 18month period. Almost every adult female now has a calf. The only females coming into oestrus are the young ones. The big males are having a frustrating time. They come into musth, search for females and leave disappointed.

Fortunately, for everyone concerned—wildlife, livestock, Maasai, researchers--we are experiencing a higher-than-average rainfall year, which makes for a very welcome change after the horrific drought year of 2009. The elephant calves are getting a very good start in life. In fact, we have recorded the highest ever survivorship with so far only 10 calves out of all those born in the baby boom dying. Normally at least 10% of calves die in their first year.



Urania's female calf was born in February 2012

The UA family females have joined the baby boom and are doing their best to build their numbers back up. So far five calves have been born to Ulrica, Urena, Undine, Urania and UTwo. Four are males and one is a female. There was one tragic death. The young male Uhuru, Ute's son was poached in March 2012.

The UA family are true survivors, and we hope this is the beginning of a brighter period in their history. Amboseli remains a relatively safe place where there are currently low levels of poaching and conflict and there is still room for elephants. There are not many places left in Africa like it and we are doing everything we can to keep it that way.

## Current Structure and Composition of the UA Family

Individual	Sex	Estimated or Known Month & Year of Birth	Mother if Dead
Ulrica	F	1963	
ULR12	М	1-12	
Ulundi	М	1-04	
Urena	F	11-91	
URE12	М	1-12	
Uttam	F	3-03	
Unix	F	9-00	Ulva
Urania	F	3-94	Ulona
URA12	F	2-12	
Ulmazi	М	11-04	Ulona

Undine	F	9-85	Una
Ubu	М	1-12	
Uzma	F	5-03	
Urbanus	М	4-98	
UTwo	F	2-97	Una
UTW12	М	7-12	
Undo	F	6-00	Una
Independent	Male	Birth Date	Mother
Males	Code		
Ulysses	319	2-79	Una
Upendo	456	2-87	Ulrica
Umoja	454	8-87	Ulla
Ubangui	534	3-92	Ulva
Usher	624	4-96	Ulva
Urban	698	4-99	Ulrica

Cynthia Moss Amboseli April 2013