

THE AA FAMILY HISTORY

The AA family holds a very special place in the Amboseli study, because it is the first family that was sighted and photographed on the very first day of the study on September 1, 1972. It has since become one of the best-known families in the population. I have continuous records of its births and deaths, good times and bad times over the past 38 years.

On that first day I was with my colleague Harvey Croze and we were trying to contact as many groups of elephants as possible and photograph at least the adult members. We drove out to the western part of the Park crossing the causeway over the Enkongo Narok swamp. Just along the shore we found a group of females and calves. Unfortunately, they were disappearing into the deep swamp, but we managed to count 13 animals and note that there were two calves less than a year old. Harvey took some photographs of the adult females. Two days later on September 3rd we came upon this group again and this time we were able to get better photographs and record the age and sex structure. The family appeared to consist of the following:

Large adult female (convergent tusks)
4-5 year old calf
Female with a large wart on her right ear
Six-month-old calf
5-6 year old calf
Adult female (straight tusks)
4-5 year old calf
Adult female (slightly splayed tusks)
Six-month-old calf
5-6 year old calf
Adolescent female about 10 years old
8-10 year old male
Young male with a slit cut in his trunk

We took the films back to Nairobi and developed them. On that trip we had seen and photographed seven definite families each of which we gave a letter of the alphabet. The first group was called the "A" family and the adult females in that family were named with letters beginning with "A" with one exception. The female with the wart on her ear never got an "A" name but continued to be designated Wart Ear. The largest female, the matriarch, was called Annabelle. The adult female with straight tusks was named Alyce, the young adult female with splayed tusks Amy, and the adolescent female Alison. In our data coding sheets we used the first three letters of the females' names as their code and so we tried to give them names with unique first three letters. Thus we spelled Alyce's name with a "y" so that she would not have the same code as Alison. The young male was given the code number M31, but was usually referred to as Slit Trunk. He had an open eight-inch slit in his trunk that went right through to the inner nasal passage. However, it had healed well and did not seem to cause him any problem.

Over the next three years, during the part-time study, we saw the A family (soon called the AA family when we had to start through the alphabet a second time) 23 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 two new calves were born: Annabelle and Alyce both had calves in early 1973. Unfortunately, tragedy

soon struck the AA family. On October 1, 1974 Harvey made a visit to the Park and was told by the rangers that at the edge of the OI Tukai Orok woodland there was a freshly dead elephant who had been speared by Maasai warriors. He found the carcass and discovered that it was Annabelle.

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 for one or two years after, as a result of the loss of leadership provided by the matriarch. The AA family did better than most families and stayed together, probably because there was an older female, Wart Ear, to take over, and the younger females were not confused about who to look to for direction. In 1974 Wart Ear was 30 years old; the other females were all under 25.



Wart Ear looking through the window of my Land Rover in 1975: even then the AAs were very tolerant of vehicles.

Alison and other female calves took care of Annabelle's calf, who was nearly two years old when her mother was killed, but she was not getting any milk. She hung on for several months, but she died sometime in the first months of 1975. Another loss was the 8-10 year old male. We don't know whether he died or went independent, but we're fairly sure he died. The average age of independence for young males is 14. Slit Trunk who was older was still with the family. It was very unlikely that the younger male would leave first. Most commonly they would have left together. Thus by the beginning of the full-time study the AA family contained 12 members and consisted of the following:

Individual	Sex	Known or Estimated Year of Birth
Wart Ear	F	1944
Amos	M	1972
Abigail	F	1967
Alyce	F	1950
Adam	M	1973
Amelia	F	1968
Amy	F	1952
Audrey	F	1972
Albert	M	1967
Alison	F	1962
Agatha	F	1968
Slit Trunk	M	1959

Once I was living in the Park and following the elephants on a daily basis, I got to know more about the AAs. They proved to have a relatively small, dry-season home range and were one of the most predictable families in their movement patterns. They used the OI Tukai Orok woodlands and the Enkongo Narok swamp and they rarely ventured to other parts of the Park. They were unusual in forming no bond group with any other family in the population. They tended to stay on their own, and even in the wet season when most of the other families formed large aggregations the AAs could usually be found moving in a self-contained group away from the crowds.

During 1975 no changes occurred in the AA family. 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 during the short period of rain that Amy gave birth to a male calf. I found her with the new calf on March 30, 1976. On August 11, I recorded Alison with a new calf, her first.

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. Both Amy and Alison's calves died in September 1976.

Amy's four-year-old calf, Audrey, left the family completely for several weeks at the height of the drought. It seemed that she didn't have the energy to follow the family out to the woodlands in the evenings. We had seen other single calves in the same age range doing this. I'm sure many were killed by hyenas and lions. Because Audrey had a distinct nick in her ear I was able to keep track of her.



The AA family drinking at the swamp edge

Sometime in the first half of 1976, Slit Trunk became independent, striking out on his own as young bulls do. Unfortunately, he was one of the ones who failed to make it through the drought. There were a lot of Maasai spearings that year because the Maasai, their cattle, and the wildlife were packed into a small area and competing for the same resources. I suspect Slit Trunk was killed because he lacked experience of how to keep out of the Maasai's way.

Finally rains came in December and the elephants, adults and calves alike, gradually recovered. Miraculously Audrey survived, returned to the family, and never left it again. 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.



Two male calves from the AA family spar, practicing for skills they will need later in life

At first it appeared that the AAs were making a respectable contribution to the baby boom. Alison was seen in oestrus in March 1977 and gave birth to a daughter in January 1979. Alyce conceived in June 1977 and gave birth to a male calf in April 1979, and Amy conceived in August 1977 and had a daughter in June 1979. All seemed to be going well for the AA family and then tragedy struck again. In June 1979, which was still the wet season, the AAs were way out of the Park on a seasonal migration. They apparently ran into Maasai, who unusually for that year, decided to spear some elephants. Alyce was killed and both her newborn calf and Amy's were either killed or died as a result of the turmoil. Amelia and her younger brother Adam were orphaned. It was sad for the family because it should not have been a time of losses for them.

Fortunately, there were to be peaceful times ahead for the AAs. In November 1979, Wart Ear gave birth to a daughter. And the young females in the family were reaching sexual maturity at 11 and 12 years old. It was quite exciting at times when one of them came into

oestrus and was hotly pursued by the bulls. Young females often don't know what to do when they are in oestrus and their inexperience can cause chaos.

The young females in the AA family had their own baby boom in late '81 early '82. Amelia gave birth to a female calf in December 1981; Agatha and Abigail had daughters as well in March 1982. Amelia and Agatha were 13-14 years old when they became mothers for the first time and Abigail was 14-15. Abigail was suspected to have been pregnant two years before but apparently had a stillbirth. If her calf had lived she would have been a mother at 12 years, which is at the low end of the age range.

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 1983. The population was growing rapidly. However, environmental conditions changed once again. In 1984 there was a 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 AAs were one of the lucky families; they did not lose a single animal that year. Wart Ear gave birth to a calf in November 1984, just as the drought was ending. With the welcome rain it looked as if the elephants would enter a new period of good times. Three females in the AA family managed to carry calves right through the 1984 drought. Amy gave birth to another daughter in January 1985 which meant she had conceived in March 1983. And young Audrey at 13 years old gave birth to her first calf, a male, in June 1985. Amelia had a son in November 1985. Two losses occurred in the AA family in 1985. Audrey's calf died when it was less than two months old, which was not altogether surprising. Young mothers are more likely to lose their calves than are older, experienced females. We also know that Audrey suffered during the drought of 1976 and may not have been as healthy and strong as other young females. What was surprising was that Wart Ear's '84 calf died in September. Maybe it was never a strong calf because the last half of Wart Ear's pregnancy had been during the drought.

One departure from the family also occurred. Amy's son Albert left to strike out on his own as all young males eventually do. The average age for a male to leave his family is 14. Albert was a definitely a mama's boy. He didn't leave until he was nearly 18 years old. He stuck close to Amy for an extra four years.

Albert and his friend Conrad shortly after Albert became independent from the AA family



By the end of 1985 the AA family numbered 18 and consisted of the following members:

Individual	Sex	Known or Estimated Year & Month of Birth
Wart Ear	F	1944
Anastasia	F	11-79
Amos	M	1972
Abigail	F	1967
Anwyn	F	3-82
Amy	F	1952
AM5	F	1-85
Amber	F	6-81
Audrey	F	4-72
Alison	F	1962
AL3	M	4-83
Astrid	F	1-79
Agatha	F	1968
Althea	F	3-82
Amelia	F	1968
AE5	M	11-85
Anghared	F	12-81
Adam	M	1-73

Audrey got pregnant again in March 1986 and gave birth in January 1988 only to lose her calf a month later. The other females were more fortunate. Abigail and Agatha had calves who survived in January 1987 and Alison had a healthy calf in January 1988. Alison's son born in 1983 was speared and died in April 1988. This was at a time when there were very few spearing incidents. He appears to have been in the wrong place at the wrong time. Later in 1988 Wart Ear gave birth to a son who survived.

In the meantime two more of the AA family males became independent. Adam and Amos left at the same time when they were 13 and 14 respectively.

During 1989 and 1990 life was fairly peaceful for the AAs. There were no births or deaths in 1989, and in 1990 three calves were born. Amy gave birth to a son in March and Audrey and Amelia gave birth in May. By mid 1990, with those three births the AA family reached 22 which was nearly double what it was when I had met them 18 years before. Then in November 1990 the family provided us with an extremely exciting event. In all the many years we have been watching and following the Amboseli elephants, we researchers on the project had only seen two births. It seems that 99% of births occur at night and that is why we have missed them. In any case, on November 8, 1990, Alison's daughter, Astrid, gave birth, and cameraman, Martyn Colbeck, and I were able to watch and film the whole thing. Unfortunately, this calf was stillborn, but the behaviour around the birth and the subsequent discovery by the other elephants that the calf was dead was fascinating. (It made an important sequence in our film "Echo of the Elephants".) Astrid herself seemed completely shocked at the calf lying in its birth sack. She backed away from it. A few minutes later her mother Alison came and carefully felt and smelled it but she seemed to know right away that it was dead. Eventually she went off with the others, but Astrid stayed by herself with the dead calf all night and into the next day.



Alison, grandmother to Astrid's still born calf, tries to rouse him

The following year on October 3, 1991, my assistant Norah and MSc student Hamisi watched Anastasia, Wart Ear's daughter, give birth. This calf was helped to its feet by its grandmother and appeared to be fine, but died before it was a month old. Neither of the losses was surprising. Both females were young first-time mothers.

In the meantime during 1991 there were two successful births: Abigail and Alison both had sons. Sadly there were also two deaths. Anastasia had another calf that only lived for a short time and Agatha's 1987 calf died mysteriously. He was four years old, not a common age for calves to die.

Life was relatively uneventful for the AAs over the next few years. There were no births or deaths in 1992 and in 1993 there were two births: Alison's daughter Astrid, whom we filmed giving birth to the stillborn calf in 1990, produced a healthy female calf; and in April, Agatha also had a daughter.

During 1994 and 1995 the AA family continued to do well. Six calves were born and no young males went independent so the family increased in size and by 1996 had reached 30, twice the average size of 15. Not surprisingly with a family of this size, it tended to break down into smaller sub-groups. Wart Ear and her adult daughter Abigail and their calves formed one sub-group; Amy and her adult daughter Audrey and their calves, and sometimes Amelia and her calves formed another; Alison, Astrid, Agatha, and Althea formed a third. But the whole family also moved in one large group often enough for them to still be considered a single family.

There were two sad events in the family in 1996. Anastasia gave birth to a calf that was blind and it died soon after. This was the first record we had of a blind calf. Anastasia had now given birth three times and has lost each of these calves when they were less than two weeks old. Abigail gave birth to a calf in February 1996 and it appeared to have been either born dead or have died within a few hours of birth. We found it in the morning with the whole family surrounding it and they refused to leave it for many hours. Abigail has produced many healthy calves and so it was surprising that this one died.

The following year in March 1997, a profound loss occurred in the AA family. The wonderful matriarch, Wart Ear, whom my colleagues and I knew so well, died, apparently of old age. Partially lying in the swamp just below Observation Hill, she died in the very center of the AA range. We were not surprised. She had been moving around on her own at times, behaviour that often heralds the death of an old female. Wart Ear had an exceptionally gentle, trusting disposition and so I was relieved that she died peacefully. At the same time I knew I would miss her.

Perhaps because Wart Ear had relinquished leadership before she died, the AAs did not disintegrate the way many families do after a matriarch dies. Most of the family stayed together

under the leadership of Amy. However, Wart Ear's daughter Abigail formed a sub-family of her own including her adult daughter Anwyn, their calves, her younger sister Anastasia and her brother Alpha Blondy. At first they sometimes moved with Amy but eventually they became completely independent of the Amy section of the AAs, so much so that we decided to declare them a new family and gave them the code letters AC. This kind of complete split is rare and it just makes elephants all the more intriguing.

At the end of 1997 the AAs minus the AC family consisted of the following 22 members:

Individual	Sex	Known or Estimated Year of Birth
Amy	F	1952
Amit	M	3-90
Angelina	F	1-85
Amber	F	6-81
AMB95	M	3-95
Audrey	F	4-72
AUD94	F	10-94
Alison	F	1962
Avram	M	10-91
Arles Mbele	M	1-88
Astrid	F	1-79
AST97	F	8-97
Alicia	F	2-93
Agatha	F	1968
AGA97	M	5-97
Alexandra	F	4-93
Althea	F	3-82
ALT95	M	1-95
Amelia	F	1968
AME95	M	1-95
Ann	F	5-90
Abel	M	11-85
Anghared	F	12-81

Over the next few years the AA family sorted out who wanted to spend time with whom. They were often in subgroups led by Amy, Alison, Amelia or Agatha, but they also all joined up often enough that we did not split them into separate families. They continued to share the same range as before. They went about their routines, going out into the bushland at night and coming into the Enkongo Narok swamp in the daytime. There was a fairly serious drought in 2000 and five calves born in 1999 and 2000 died as a result. A sixth calf, Amelia's five-year-old son Aquarius was speared to death by Maasai, probably because of intense competition for the remaining resources.

After that spate of losses life was peaceful for the AAs for the next five years. Eleven calves were born and only two died. Then in December 2005 another tragedy struck. The very beautiful Amy died apparently of natural causes. We do not know what the illness was, but although she did not look unhealthy and had several pregnancies, her last three calves died

before reaching two years old. For an old, experienced female like Amy this was unusual, so we suspect something was not right for a long time.

With Amy gone the AAs went through another period of confused leadership but eventually the next oldest female, Alison, took over as matriarch. At 44 years old at the beginning of 2006, Alison was wise and experienced and she appeared to be an excellent leader. She was also a successful mother. Since her first calf was born in 1976 when she was 14, Alison had given birth to seven more calves. Only two of her eight calves had died: the first born during the terrible 1976 drought and her third born due to spearing. Of the remaining six, four were females and two males. Both males had gone independent and were out in the world of adult bulls. Her female offspring have stayed close to her and have made her a grandmother.



Alison in November 2008 with her three youngest offspring: calf born in 2006, Artemis and Arden

Since Alison took over as matriarch there have been 14 births in the AA family. There were only four deaths in the following three years, all of calves. Life seemed to be going well for the family, 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. Over 300 elephants died both from the drought and an upsurge of poaching.

Some elephant families fared better than others but there were losses in all the families. The AAs lost 10 members, but only two adult females: Amy's daughter Audrey, who was 38 years old, and Astrid's daughter Alicia, who was 16. The others were calves five years old and younger.

The AC family, the offspring of Wart Ear, actually did better than most, maybe because it was a small family. Both of Wart Ear's daughters, Abigail and Anastasia, survived. They only lost one calf and remain with seven members.

Below is the current composition and structure of the AA family:

Individual	Sex	Known or Estimated Year of Birth	Known or Putative* Mother (for those whose mothers have died)
Alison	F	1962	Annabelle*
Arden	F	Feb-02	
Artemis	F	Feb-98	
ART10	F	Apr-10	
Astrid	F	Jan-79	
Annan	F	Aug-97	
Agatha	F	1968	Annabelle*
Amoah	M	Mar-02	
Austin	M	May-97	
Alexandra	F	Apr-93	
Althea	F	Mar-82	
Andrea	F	Dec-02	
Amelia	F	1968	Alyce*
Ava	F	Dec-99	
Ann	F	May-90	
Alfre	F	Aug-03	
Anghared	F	Dec-81	
Angelina	F	Jan-85	Amy
Appiah	M	Feb-02	
Amber	F	Jun-81	Amy
AMB10	F	Jun-10	
Abra	F	Oct-94	Audrey

I spent a morning with the AAs recently, trying to get to know the family once more now that many of the big females are gone. Of course, I know Alison, Amelia and Agatha, but I wanted to be able to recognize some of the younger adult females without their ID photos.

The family seemed relaxed and the individuals looked in good shape physically. Towards the end of the drought I honestly did not believe Alison would make it. She was so thin. Now all the bones that had jugged out before were covered in flesh. Her granddaughter, the calf born in April this year to Artemis, was sticking close to her, which was a good thing. Young females need all the help they can get to raise babies. Amber, Amy's daughter, also gave birth in 2010. Amber doesn't have a mother or grandmother to help her, but her sister Angelina is there to assist.

Over the years the AA family has proven itself to be resilient in the face of losses. I feel confident that they will recover and their numbers will grow once again.

In the meantime there are a number of AA males out in the world of adult bulls and we hope some of them will be passing on the family genes. Below is a table of the living AA bulls:

Independent Males	Birth Date	ID Number	Mother
Albert	Jan-67	251	Amy
Amos	Apr-72	249	Wart Ear
Adam	Jan-73	250	Alyce
Abel	Nov-85	405	Amelia
Arlus M	Jan-88	458	Alison
Avram	Oct-91	505	Alison
Acamar	Jan-95	578	Althea
Alioth	Mar-95	577	Amber

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