

THE HISTORY OF THE SB FAMILY

The SB family was first recorded on April 6, 1974. It was a momentous day for them because my colleague Harvey Croze and I darted the matriarch and put a radio collar on her. It was early in the study and we wanted to find out what the range of the elephants was. As it turned out this matriarch was probably a good choice. We called her Sona because of the beeping sounds that we picked up on the radio receiver.

Sona was a big, handsome female. That first day we could not figure out who was in her family nor how many. She and others were associated with another matriarch who we already knew—Jezebel of the JB's. The next time we saw Sona we were able to get a better idea of her associates. She was with a female who belonged to the JA family, Juliet. The other females that were close to Sona were also photographed. There was one other adult female, one young female about 10 years old, and two calves.

We saw Sona several times during 1974 both from the air when radio-tracking and from the ground. On August 18



Sona (rt) with radio collar in 1974; on the left is Sadie at 10 years old

1974, we found Sona in small group of five elephants. We were able to get good photos and work out who was who in the family.

In those early days of the study as we found new families, each was assigned a letter of the alphabet and then everyone in that family was given names starting with that letter. Later when we had reached 27 families we had to start going through the alphabet for the second time. There was already an 'S' family that became the SAs and Sona's family was called the SBs. The second adult female in her family was named Sara. The SB family consisted of the following:

Sona	Large adult female
Sara	Adult female
Young female	10 years old, probably Sona's
3-4-year male calf	Probably Sona's
5-6-year female calf	Probably Sara's

On September 16, 1974, we again saw Sona in a group of five and were able to confirm that this was the extent of the family.

By the end of 1974 Harvey had taken a new job and had to cut down on his Amboseli work. I carried on and saw Sona and her family three times during 1975. At this point I was still working very much on a part-time basis traveling to Amboseli as often as I could. In September 1975, I set up a permanent camp in the Park and began a full-time study. This change made it possible for me to gather more data on each of the families.

The radio tracking data on Sona and the SBs revealed that they spent much of their time outside the borders of the Park ranging in all four directions. We managed to get over 60 data points on Sona and worked out that her home range was some 1,300 square kilometers or about 500 square miles. At times in the wet season she moved over 18 miles from the Park. In other words, she was quite an adventurer. The other two females we radio-collared at the same time from other families were much more conservative in their movements, sticking to within the Park most of the time.

Because the SBs spent a good deal of time outside the Park, I didn't see them as frequently as other families, but I did get to know them eventually. My observations showed that the SBs associated with the JAs and YAs more than any other families in the population. By our definition they formed a "bond group". The three matriarchs of these families were all big females. Elephants grow throughout their lifetime so the bigger an elephant is the older it is. This continuous growth helps us age elephants whose birthdates we do not know. I estimated that Sona was born in 1931, Jezebel 1935 and Yolanda of the YAs in 1923. Therefore in 1975, they were 44, 40 and 52 years old respectively.

I saw the SB family nine times during 1976. On August 9, 1976, I found the group with a small calf. I hadn't seen the family for four months, but from its size and level of coordination I estimated the calf to be two months old. It belonged to Sara. A 4-5-year-old calf suckled from Sona so I knew it was definitely hers. This calf was a male and he had a very wrinkled forehead. I called him "prune-head", which I know wasn't flattering, but it made me remember who he was. I still thought the older female calf belonged to Sara and I decided to call her Suki. On this sighting of Sona I saw that she had lost her collar. I was actually pleased that it had fallen off, because it had stopped transmitting in May 1975.

The year 1976 turned out to be a bad one for the Amboseli elephants and other animals as well, because there was a very serious drought. It was also a time of heavy poaching and of spearing by Maasai. Over 60 elephants died that year. The SBs actually fared well, probably because they had such an experienced matriarch. Even Sara's new calf survived. Of the 29 calves that were born to the whole population in 1976, 14 died before they were a year old. Of those that died, most were 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 start 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. There wasn't enough food for them or their mothers.

There were no losses in the SB family but their close bond group members did not do as well. Joyce's calf born that year died in October. Yolanda disappeared in November 1976, along with her six-year-old calf leaving only a small group of three: Ysolde, her two-year-old son, Yves, and an adolescent male.



Sona's daughter Sadie grew up to be a magnificent female

The drought broke at the end of 1976, but sadly, the SB's good fortune did not last through 1977. I saw the family 12 times that year. On November 6, 1977, I found the SB family, once again with the JA and YAs, but on this day Sona and "prune-head" were not there. Sadly, Sona was never seen again. I suspect that Sona had been poached. There was devastating poaching throughout Kenya in

the 1970 and 1980s. Although Amboseli was spared outright slaughter there still was some poaching, especially of the bulls and the older, bigger females. The "prune head" turned up later and was formally named Prune Head and numbered M258. (For reasons of simplification the males are referred to by their numbers in the record books and databases, but with only a few exceptions they all have names as well.)

After the deaths of the two matriarchs, Sona and Yolanda, it was interesting to see how the three families interrelated. Ysolde basically joined Jezebel's group and very rarely moved on her own. On the other hand, the SBs led by Sara became far more independent and spent less and less time with the JAs and YAs. I always wonder how bonds between individual elephants are formed and why some are stronger than others. Jezebel and Yolanda were around the same age and I suspect that their bond kept those two families together. Ysolde appeared to have a stronger bond with some of the younger members of the JA family. The three families still formed a bond group but it definitely was not as tight as when the three older matriarchs were alive.

Good rains fell during 1977, 1978 and 1979. At the same time the serious poaching came to an end. This was a very good period for the Amboseli elephants with only a few Maasai spearings to mar the halcyon days. Because of the previous drought years only two calves were born to the Amboseli



Suki in 2002 when she was 24 years old

population from January 1977 to November 1978. The birth rate was so low because females were not in good enough condition to reproduce. After the good rains fell, they gradually recovered and began to conceive. Twenty-two months later, in December 1978, an elephant baby boom began.

The SBs joined the other females in the population with two births. The young female, now named Sadie, gave birth to her first calf in March 1979. This calf, a male, survived. Often a female loses her first calf, but Sadie beat the odds and raised her son. The following year in December Sara gave birth to a daughter.

The SBs had their ups and downs over the next four years. After surviving the drought during the year he was born, Sara's '76 calf died in 1982 when he was six years old. We don't know why, but our records show that all the calves born that year fared badly even in subsequent years. Sara's daughter Suki reached maturity and produced her first calf in March 1983. However, the following year, 1984, experienced another severe drought, which took a tremendous toll on the population. Many of the calves that had been born in 1983 died, and sadly, one of them was Suki's calf. It was also in 1984 that we think Prune

Head died. He had gone independent from the family as all young males do between the ages of 10-15. However, in his case we never saw him again and had to assume that he had died. During the worst possible conditions Sadie gave birth to another male calf in August 1984. Somehow, he survived.

In February 1985, we found Sara looking very thin and ill. She died but we don't know the cause. With her death, the SB family was in trouble. The next oldest female was Sadie, thought to be Sona's daughter. She was only 21 years old, which is very young to become a matriarch. Her little family of five consisted of the following:

Individual	Sex	Estimated or Known Date of Birth	Mother if Dead
Sadie	F	1964	Sona
SAD84	M	Jun-84	
Stuart	M	Mar-79	
Suki	F	1968	Sara
Seteyo	F	Dec-80	Sara

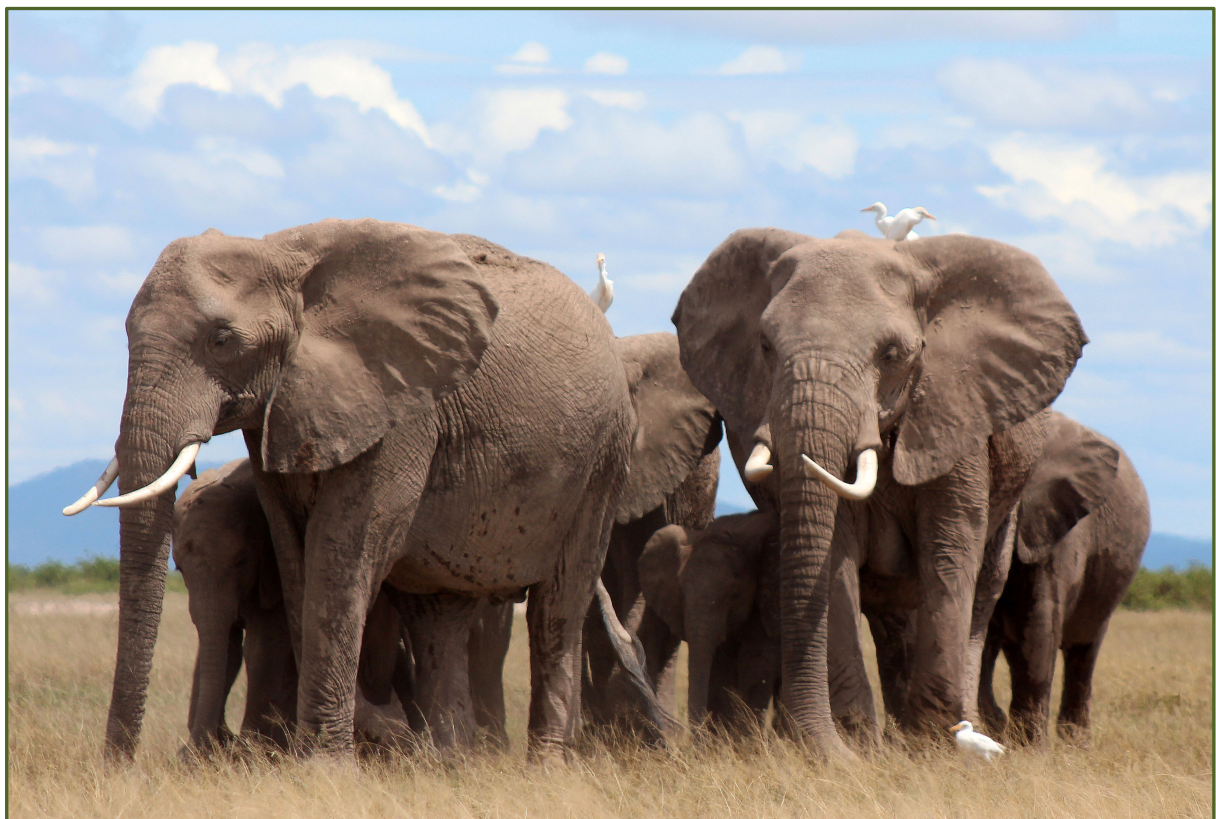
With no large, experienced female to lead them, the family was not expected to do well over the next few years. However, Sadie proved us wrong and successfully led her family. Sadie gave birth in 1988, 1992 and 1996 and did not lose any of these calves. Suki did not do as well, but considering that she lost her mother right at the time when she needed help in raising her calves, she did not do badly. She gave birth to her second calf in November 1986, a healthy and strong male. Then in August 1991, she gave birth to her third calf, but this one died the following month. After this loss, she recovered and almost immediately conceived her next calf. In September 1993 Suki had her first surviving daughter.

In the meantime, Sadie appeared to break all ties with the JAs and YAs, which was unusual, but she was such a young female and apparently no longer had close ties with anyone in those two families. Her small group moved on its own.

Sometime in the late 1990s and early 2000s, Sadie did something quite unusual and intriguing. She changed the range of her family. The SBs were always predominantly western elephants spending the largest proportion of their time west of the Ekongu Narok swamp. In 1995, a sanctuary called Kimana was created east of Amboseli alongside one of the swamps fed from Kilimanjaro. Sadie made her way over there and seemed to like it and stayed. It was a significant move of almost 30 miles. Suki, on the other hand, appeared not to have the same positive feelings about Kimana as Sadie and she broke away from the main part of the family to move with her calves and her sister Seteyo in the center of Amboseli along the western side of Ekongu Narok. These days when Sadie comes back to the Park, she and Suki will join but they go their separate ways again.

Elephants are always doing things I don't expect. It's one of the reasons I find them so fascinating. Suki is thought to be Sara's daughter, while Sadie is probably Sona's. It means they're not sisters, but they are still relatives and members of the same family. Generally, families don't break up until they are so large that they are no longer socially and ecologically viable. That's usually when they reach well over 30 in number. Who knows what's in the minds of Sadie and Suki.

In any case, both Sadie's and Suki's sections of the family are doing very well. Sara's daughter, Seteyo, who moves with Suki, reached maturity in 1995 and gave birth to her first calf in May 1997. This calf died almost immediately, but again it is not uncommon for a female to lose her first calf. Suki had another son in April 1998.



Suki's section of the SB Family with Suki on the right and her daughter Soit Nado on the left

By now we had many more calves to name. I use a special system. Usually a calf is not named until it is four years old. Up until that age a calf is referred to by a code based on its mother's name and its year of birth. At the beginning of each year we take all the calves who will reach four in that year and name them according to a theme or for a donor or friend. For example, with Suki's calves, her oldest surviving calf was named Sebastian in a year we used common names; and her 1993 calf was named Soit Nado, because our theme for that year was mountains and hills around Amboseli.

Sadie's first-born son, Stuart, turned out to be a "Mama's boy". Most males strike out on their own by the time they are 14, but Stuart stayed until he was

18. It was amusing to watch. He stuck close to Sadie just like a very young calf. Eventually, the pull to independence made him leave. Her second son, Shem, born in 1984, did not show the same behavior. He became independent at the normal age. Suki's son, Sebastian, born in 1986, also went independent at around 14, but he did not survive the transition. He died in September 2000 probably as a result of spearing.

With the departure of the young males and several births, the family composition at the end of 2000 was as follows:

Individual	Sex	Estimated or Known Date of Birth	Mother if Dead
Sadie	F	1964	Sona
SAD00	F	Jan-00	
Sting	M	Sep-96	
Sabaki	F	Jul-92	
Sveva	F	Dec-88	
Suki	F	1968	Sara
SUK98	M	Apr-98	
Soit Nado	F	Sep-93	
Seteyo	F	Dec-80	Sara
SET00	M	Mar-00	

Considering that they had all the odds against them when they lost Sona and then Sara, having a family of 10 plus two males out in the world was definitely an achievement.

Over the next eight years the SBs continued to flourish. Sadie and Suki remained separated most of the time, but they both successfully reared the calves born into their subgroups. Sadie was a particularly productive female. By 2008 she had five living daughters and five sons.

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. 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. The SB family did better than most. They only lost two calves during the drought. Sadie and Suki somehow pulled them through.



Pretty Solange was born to Sadie in December 2002; in this photo she was 10 years old

It took the elephants a few months to recover but they were soon in good condition once again. The females had stopped reproductive activity during the drought year with the result that 22 months later in 2011 only one calf had been born up until October. Then a baby boom began.

Qumquat was the first to give birth on October 12, 2011. From that date until the end of 2012, 248 calves were born, an all-time record. The SB family contributed four births to the baby boom in 2012 and three more in 2013. Both Sadie and Suki had calves in 2012 and then Suki seemed to want to make up for lost time and quickly had another calf in April 2015. The normal calving interval is 4-5 years. Suki had this calf three years after her previous one.

Today the SB family is thriving. Sadie's five adult daughters are giving her many grandchildren. Sveva, Sabaki, Symphony, Solange and Stephanie have 11 calves between them. The big surprise came in January 2018 when Sadie had yet another calf at the age 54. We think she's wonderful!

***Cynthia Moss
Amboseli National Park
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The Current Composition and Structure of the SB Family

Individual	Sex	Estimated or Known Month & Year of Birth	Mother {grandmother} if Dead
Sadie	F	1964	Sona
SAD18	M	Jan-18	
Senufo	M	Oct-12	
Saint	M	Nov-09	
Stephanie	F	Feb-05	
SPH16	M	Feb-16	
Solange	F	Dec-02	
SOL18	M	Apr-18	
Sunni	F	Oct-14	
Symphony	F	Jan-00	
SYM18	F	Feb-18	
Symbeline	F	Dec-13	
Sabaki	F	Jul-92	
SBK18	F	Feb-18	
SBK15	F	Apr-15	
Seventy-One	F	Jan-12	
Sveva	F	Dec-88	
SVE16	F	Feb-16	
Sanhaja	F	Mar-12	
Seaman	M	Mar-08	
Suki	F	1968	Sara {Sona}
Solomon	M	Apr-15	
Subiya	F	Mar-12	
Schnapps	F	Apr-07	
Soit Nado	F	Sep-93	
SNO18	M	Jan-18	
Silvia	F	Dec-13	
Sirocco	M	Jun-10	
Seteyo	F	Dec-80	Sara {Sona}
Shakespeare	M	Oct-13	
Independent Males	Male No.	Birth Date	Mother
Stuart	323	Mar-79	Sadie
Shem	401	Aug-84	Sadie
Sting	622	Sep-96	Suki
Sinclair	732	Mar-00	Seteyo
Skip	783	Dec-02	Suki
Simeon	872	Apr-05	Seteyo