

DA, DB AND DC FAMILY HISTORIES

The 'D' females and the families they make up have always been something of a mystery. In fact, the Ds have a history of doing things elephants are "not supposed to do". In the beginning the Ds were thought to be one family. What was eventually designated the DA family was photographed on the very first day of the study on September 1, 1972. Two adult females were present: a large



old matriarch whom we named Dorothy and a much younger female we called Dinah. The next time this family was seen on August 4, 1973 there was a third adult female present and she was photographed and named Delia. Over the next few months other females were seen in association with the D females but always in a variety of odd combinations. One female was seen only once and then disappeared. She is simply referred to as the "D female".

Delia in October 1973

It was not until 1974 that I had some idea of who belonged to the family. It looked like this:

Dorothy	Large adult F
3-4 year old calf	?
6-7 year old female calf	F
Adolescent male around 10	M
Dinah	Adult F
2 year old male calf	M
Delia	Adult F
Adolescent male around 12	Young M
Deborah	Adult F
Diana	Young F
Daphne	Young F
"D female"	Adult F
Male—around 15	Young M

In early 1975 Dinah gave birth to a female calf, and on March 26, 1975, I recorded the last sighting of Dorothy. There was poaching of elephants in Amboseli in the mid 70s, but I suspect Dorothy died of natural causes because she had two broken off tusks which would not have been worth

killing her for. The young male in the family, who would have been about 17, also disappeared. On May 15th Delia was seen with a new calf, a male.

I set up my camp in September 1975 and began to see the Ds on a much more regular basis. It didn't actually help my confusion; if anything seeing them frequently made the picture more confusing. They were never all together and yet they didn't split into nice neat sub-groups. Eventually I decided that there were two families with Dinah leading the remnants of the original DAs and Delia as more or less the matriarch of all the other D females, who became the DBs. The two young females Diana and Daphne intrigued me. They were the same size and looked very much alike and I suspected they were twins. They could have been the daughters of Deborah or the "D female". I'll never know. Deborah herself was younger than Delia, but she did not seem to take the lead from Delia.

Over the next years there were many losses for the Ds. Diana gave birth to a calf in 1976, but it died soon after, and earlier in the year Delia's 1975 calf died probably due to the severe drought in Amboseli during that year. Dinah's male, Dhahabu, and Delia's male, Dennis, went independent gradually during 1976 and 1977. Diana died in September 1977. We suspect she was speared. Her tusks were not taken.

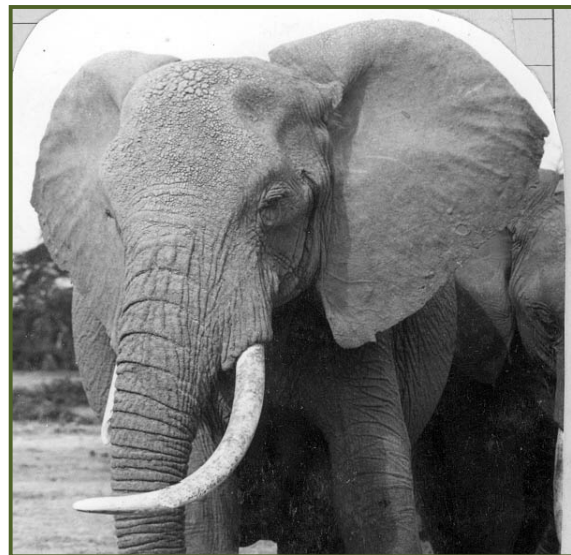
Deborah in October 1973



Deborah gave birth to a calf in March 1977. It was one of only two calves born to the whole Amboseli population that year. Times had been very hard for the elephants during the drought of 1975 and 1976 and the females (except for Deborah and one other) simply stopped reproductive activity. The elephants resumed breeding soon after the rains began in late 1976. It took them a minimum of two months to start cycling and the first female I saw in oestrus was Delia in February 1977. She was in consort with one of the biggest and highest ranking males in the population, M22- or Dionysus, who was in full musth with temporal glands streaming and dribbling urine.

Twenty two months later on November 25, 1978, I found Delia with a newborn male calf. It was the first calf born to the population in 16 months and there was tremendous excitement surrounding the baby, with family and non-family members trying to get as close to him as possible. From the day of his birth the QB family, which previously had rarely associated with the DB family, began to spend time with Delia and her calf. Eventually a close relationship built up between Delia and the matriarch of the QB family, Quilla. At first Deborah and Dinah were intolerant of Quilla and the other QB females, and often threatened them and chased them. The QB females, however, initiated affiliative greeting ceremonies whenever they approached the Ds until the D members began to respond by greeting in return. They truly insinuated themselves into the good graces of the Ds. It was very unusual behaviour and nothing like that has ever happened before or since to any of the other families during the study.

Quilla's ID photo



Starting with the birth of Delia's calf there was a true baby boom in Amboseli and in general conditions were very good for the elephants over the next five years. The Ds only had one loss. Daphne died in December 1979 and was found only a few hundred meters from where her suspected twin sister Diana had died. It was

thought that Daphne might have died trying to deliver a calf. The other D females began to join Delia in the baby boom. Deborah had a female calf in March 1980; Daisy had her first calf in November 1981; and Dinah had a son in May 1982. In the meantime, Dinah's older son, now called Duncan, went independent during 1982.

By 1983, Quilla and her offspring were spending most of their time with Delia and her offspring, and the rest of the QB family had resumed their previous distribution and association patterns. The other DB members spent more time on their own than with Delia and Quilla, and I considered that the family had broken into two. This split proved to be permanent and eventually the Delia/Quilla family was called the DCs. This is the first and only recording in Amboseli of a female leaving her

own family to join another one. Dinah and her group remained the DAs and Deborah's contingent formed the DBs.

The only female I wasn't sure of was Daisy. When the breakup was developing she spent more time with Deborah than with Dinah, but after the split she spent more time with Dinah and they formed a fairly tight-knit family. Looking back at the old photos I can see that Daisy was with Dorothy and Dinah on that first sighting and thus I think she was originally a member of the DA family.

Conditions continued to be good for the elephants through 1983 and that year two more births occurred in the D families. Delia and Deborah both gave birth to female calves in April. In the following year, 1984, there was a serious drought and many elephants died, especially calves that were born in 1983. However, both Delia and Deborah got their calves through the drought, possibly because they were large dominant females who were experienced mothers. The Ds lost one family member during the drought and it was not one I would have expected. Dinah's nine-year-old daughter Denise died. I don't know what the cause was. She simply disappeared. In that same year, Duncan, who was no longer living in the family, also disappeared, and thus Dinah lost two of her offspring.

Delia with her daughter, Doreen, born in 1983; here she is five years old; today she is a matriarch.



In 1985 there was adequate rainfall once again and the elephants recovered. In August of that year Daisy gave birth

to her second son. She had carried this calf through the drought. Other females became pregnant once the drought ended. Deborah conceived in March 1985 and gave birth to a son in January 1987; and Dinah conceived in April 1985 and produced a son in February 1987.

By the end of 1987 I had named the older calves and the D family structures were as follows:

Individual	Sex	Estimated or Known Month & Year of Birth
DA		
Dinah	F	1950
DIN87	M	2-87
Desmond	M	5-82
Daisy	F	1968
DAI85	M	8-85
Dmitri	M	11-81
DB		
Deborah	F	1941
DEB87	M	1-87
Dups	F	4-83
Diz	F	3-80
DC		
Delia	F	1941
Doreen	F	4-83
Doug	M	11-78
Quilla	F	1940
QUI85	M	3-85
Qarla	F	5-81
Qasmira	F	1968

Life was fairly uneventful for the D families over the next few years. No more calves were born until 1990. Much to our surprise Diz, Deborah's nine-year-old daughter, gave birth to a calf in January. For several weeks I thought this calf, a male, was Deborah's because he suckled from her as well as from Diz. Nine is very young to have a calf. Most females don't give birth for the first time until they are about 13 years old, but Diz had full breasts and eventually I was convinced it was her calf. Fortunately Diz was an exception in the population as a whole, although as it would turn out not in the D family.

In March 1990 both Delia and Daisy gave birth to male calves. By now there was a preponderance of males in the D families. It meant that there were not many allomothers or babysitters to take care of the new calves. In the DB family Deborah's '83 calf, Dups had to do all the work. She took her job very seriously though and kept busy looking after the three little ones. In 1991 there were two more

calves added to her work. Deborah and Dinah gave birth and at least these calves were females who would one day become allomothers. In acting as an "allomother", Dups was taking over many of the responsibilities of caring for the babies in the family. An allomother will stand over a calf, go



and get it if it wanders away, and rush to its aid if it cries out. This behaviour allows the mother to feed and rest in peace much of the time, which is just what a lactating mother needs. Our studies have shown that calves in families with many allomothers have a better chance of surviving. Contrary to our statistics the DB family calves did very well, so Dups must have been working extra hard.

Dups watches over Donner and Dorothea while they play

In late 1991 there was a major tragedy in the D families. The adult female Dinah, leader of the DA family, was killed by Maasai while she was out of the park. Her youngest calf, born in 1991, disappeared at the same time. With Daisy already spending most of her time with Deborah, and no other adult female remaining, the DA family ceased to exist. Dinah's two sons, Desmond and Dillon, joined the DBs. In the meantime, the DCs (Delia and Quilla) were now spending all of their time in the western part of the ecosystem and particularly across the border in Tanzania. They no longer associated with the DBs and we rarely saw them. Therefore, from this point on this history will concentrate on the DBs, but we will come back to the DCs towards the end of this history.

With the death of Dinah, the permanent departure of Delia and Quilla, and the addition of Desmond and Dillon, the DB family numbered 12 in 1992. Since that time it has been a cohesive and successful family. During 1992 and the first part of 1993, was relatively uneventful for the DBs. Diz gave birth to a female calf. This calf, who was eventually named Dorcas, was born when Diz's previous calf, a male, was only three years and three months old. He was immediately weaned, and although many calves can survive after they have been weaned at this age, this calf was unable to get enough food by himself, and after several months he died. It was sad but it was not surprising. Diz was a very young female and would not have been able to produce enough milk to suckle both calves. Luckily she proved to be an excellent mother after that time.

The DB females continued to start breeding at an exceptionally young age. In 1994 Dups had her first calf at the age of 10 years and 10 months, which means she conceived when she was nine. But Dups's years of practice in taking care of calves seemed to have paid off. Her calf was robust and healthy. The following year in January 1995 Deborah gave birth to a very large male calf, who was doted upon by his older sister Dorothea.

In the meantime, the older males started leaving the family. Dmitri and Desmond left to strike out on their own, leaving Dillon, Dustin and Dodori behind, and they started showing all the signs of becoming independent early. It is common for younger brothers to leave early once their older brothers are out there in the exciting world of independent males.

The DB family structure at the beginning of 1996 with new names was as follows:

Individual	Sex	Estimated or Known Month & Year of Birth
DB		
Deborah	F	1953
DEB95	M	3-95
Dorothea	F	3-91
Dodori	M	1-87
Dups	F	4-83
DUP94	M	2-94
Diz	F	3-80
Dorcas	F	4-93
Daisy	F	1968
Donner	M	3-90
Dustin	M	8-85
Dillon	M	2-87 (Dinah's)

All went along well for the family over the next years. Between 1996 and 2008, 12 more calves were born: six males and six females. One of the females to give birth was Dorcas who was only 10 years old and thus carrying on the tradition of early births in the family. We were pleased that they were having some female calves because they are so important to the rearing of the younger calves. Of those 12 calves only two died during that period. Daisy seemed to have had some bad luck. Her female calf born in 2001 died of unknown causes in 2003 and then her male calf born in 2005 disappeared in 2006. Everyone else did well. No adults died. However, all the male calves left

earlier than usual and their departure meant that the number in the family, despite the births, only increased by a few.



Deborah and her 2000 calf, later named Dodo; here in 2003 she's two and a half; note the little tusks just appearing

In 2008, Diz and Daisy gave birth to male calves. Then in October tragedy struck. Daisy died in October and we could not figure out the cause. Her calf disappeared at the same time. Perhaps Daisy hadn't been well and this may have been why her two older calves died when they were young. (We

wish we could have post-mortem examinations done on elephants that are found dead with no obvious wounds, but at the moment there are no facilities to carry out such a major operation.)

There were no more births or deaths in 2008. The next year, 2009, proved to be the most devastating year in recorded history for Amboseli, its wildlife, people and livestock. There was a horrific drought that killed off thousands of animals. Over 20% of the elephants died. Some families lost as many as eight adult females. Those families will take years to recover. The DBs were one of the families least affected by the drought. Deborah very cleverly took the family off to a conservation area to the north of the Park where there was a good deal of bush even at the height of the drought. Fortunately, the tourist camp there created a waterhole for the elephants. We didn't see the family for months and then when they returned they had only lost a few members, Dups's 2007 calf, and we thought, Dorothea. Deborah turned out to be one of only two females over 50 years old who survived the drought.

Much to our surprise, Dorothea fooled us and reappeared months later with a healthy calf born in 2009. We have no idea where she had been or why she didn't follow her mother Deborah back to the Park. Once again the Ds were doing things that were unusual and unexpected.

Even though the drought ended in December 2009, it took awhile for vegetation to grow again. Sadly, in the meantime Diz and her 2008 calf died. However, that was the last of the drought deaths for the DBs and they are now flourishing. Dorie, Daisy's daughter had her first calf in December

2009 and Dorcas gave birth in February this year. The others have joined in making up for lost time and have been mating. There will definitely be a baby boom for the DBs and all the Amboseli families in 2012.

The present structure and composition of the DB family is as follows:

Individual	Sex	Estimated or Known Month & Year of Birth
DB		
Deborah	F	1952
Dodo	F	6-00
Duke	M	3-95
Dorothea	F	3-91
DTH09	M	2-09
Dahlia	F	8-01
Dups	F	4-83
Domain	M	9-01
Dawud	M	4-98
Drogba	M	12-02 (Diz's)
Damian	M	11-99 (Diz's)
Dorcas	F	4-93 (Diz's)
DRC10	F	2-10
Donna	F	9-03
Dorie	F	11-97 (Daisy's)
DRI09	F	12-09

This year many of the western families that spent most of their time in Tanzania have started to come back into Kenya. One of these families is the DCs. It has given us a chance to catch up with them. Delia, Quilla, Qasmira and Qarla have all died. The young males in the family have gone independent—Dennis, Quinn, Dipanker and probably Dupre. We don't know their fate. Doreen, who is 27 years old and who turned out to be a one-tusker, is doing surprisingly well. She has four calves and they are all females. This sex ratio is a big advantage for a small family like hers. It means she will eventually be surrounded by her adult daughters who will also produce calves and the family will be able to grow. Quilla's part of the family is struggling, but if they stick with Doreen they will be successful. Below is the present structure:

DC	Sex	Estimated or Known Month & Year of Birth
Doreen	F	4-83 (Delia's)
DRE07	F	4-07
Drea	F	6-03
Dram	F	2-00
Diphda	F	5-95
Quartz	F	2-91 (Quilla's)
Quthing	M	3-04
Qapella	F	3-95 (Quilla's)
Dupre	M	6-96 (Delia's)

The following are the living males from the three families

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Independent Males	Birth Date	Male No.	Mother
Dennis	Jan-61	94	Delia
Quinn	Mar-85	416	Quilla
Dustin	Aug-85	408	Daisy
Dodori	Jan-87	437	Deborah
Dipankar	Mar-90	488	Delia
B. Donner	Mar-90	487	Daisy
Dominic	Feb-94	553	Dups
Duke	Jan-95	585	Deborah
Duran	Oct-96	611	Diz

I love the Ds for being so unusual, adventurous and unpredictable. I hope they will prosper from now on.

Cynthia Moss
Amboseli Elephant Research Project
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