

## The History of the VA Family

The VA family has always been a favorite of all the researchers who have worked on the project. From the beginning it has been a big, powerful family with big, powerful females, so that it was impossible not to be suitably impressed by them. Altogether we have documented 120 members of this family over the four decades we have known them. The family was first sighted in December 1973. At that time the average family size was 7, so this family of 18 was exceptionally large. What also made it striking was the presence of two beautiful females who looked very similar and seemed to be co-matriarchs, something I had not observed before. I suspected they were sisters. Whatever their relationship, they seemed to be very closely bonded.



*Victoria and Virginia looked remarkably similar; it turned out they were co-matriarchs of their family*

In 1973 my colleague Harvey Croze and I were in the process of getting to know all the adults in the Amboseli population, and so as usual we photographed these

beautiful females and their associates. In those days, there were no digital cameras and the precious rolls of film had to be transported to Nairobi, contact sheets printed and exposure selection made before we could get a good look at the pictures. Only when the final identification photographs were printed could we assign names. The taller female became Virginia and her sister was called Victoria.

In September 1975 I began my full-time study in Amboseli, and I started to see all the families far more frequently. Between September and the end of the year I saw the VA family six times. Even though on two occasions they were in very large groups of 50 and 100 elephants, Virginia and Victoria always stood out in the crowd. I thought Virginia must be in her forties; she already had an adult daughter whom I named Vida, a teenage daughter I called Valentina, and two young male calves, aged about 5 and 9. Victoria had a similar direct line of descendants; two daughters I called Violet and Vee and two younger sons. In addition there were three other young adult females who became known as Vera, Veronica and Vanessa, all of whom I estimated to be in their early twenties.



The family stayed around until April 1976, when they disappeared. By this time I had a good idea of who was in the family, and it looked like this:

Virginia	Adult F around 40 years old
Male calf	5 years
Male calf	9 years
Valentina	Teenaged F
Vida	Adult F
Male calf	6 years
Victoria	Adult F around 35 years
Male calf	7 years
Violet	around 11 years
Vee	Adult F
Female calf	2 years
Female calf	7 years
Vera	Adult F
Female calf	6 years
Veronica	Adult F
Female calf	3 years
Vanessa	Adult F
Female calf	1 year

They were gone for four months, and when they reappeared in August I only saw them once. This visit set a precedent and for the rest of 1976 I saw them only once each month. I had started to get a sense that this family were roamers, quite different to some of the other elephants, who were much more resident. Their travels might have taken them to good feeding grounds, but it brought trouble too, and in late 1976 both Vera and Vanessa were speared and died, leaving young calves behind. Vanessa's '74 daughter was only two, and at the very youngest limit at which a calf can survive without her mother. VA females are tough though, and this little girl, who came to be known as Varina, made it through against the odds. Vera's daughter also survived and became known as Vicky. The year ended on a happy note though, as Victoria gave birth to another calf, a male.

We knew the VAs were northern elephants but we became very interested in how far they were going. The rains were good in 1977, allowing the elephants to range widely but at the same time poachers still posed a significant threat, compressing elephants into the relative safety of the National Park. We decided to fit Virginia with a radio collar. She became one of the first collared elephants we ever followed, and we followed her throughout the good rains that continued into 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. We were very excited to see where Virginia and Victoria led their family to exploit the good and abundant food, and they didn't disappoint us, covering a much larger area than we expected over those three years.

Four more calves were born to the family in those years; Vee and Violet both had daughters, and Veronica and Vida had sons. The family thrived, and Victoria, Virginia, Vee and Veronica all kicked off the new decade with calves in 1980 and 1981. By early 1982 the young males of the family were becoming adventurous and starting the road to independence. They needed names, and, since a copy of War and Peace was doing the rounds of the camp, these became the Russian boys: Vostok (Virginia's '67), his younger brother Vasili, and compatriot Vladimir (Vida's '69). Victoria's sons became Viktor and Vronsky.



*An old photo of Cynthia with Vida passing close by with no concern*

In 1984, just as Vladimir and Vasili were becoming independent, Amboseli experienced another severe drought, which took a tremendous toll on the population. Many of the calves that had been born in 1983 died; Victoria, Vee, Veronica, Vega and Velvet all lost their youngest calves as a result of the terrible conditions. Overall, however, the family was still large and successful. I was particularly happy when the orphaned Varina gave birth in February 1985 to her first calf, a female. Victoria's line was thriving; helped in no small part by the fact that Vee had four surviving daughters. By the mid 1980s, then, the family looked like this:



<b>Individual</b>	<b>Sex</b>	<b>Estimated or Known Month &amp; Year of Birth</b>	<b>Mother</b>
Virginia	F	1928	
Valentina	F	1963	
Vida	F	1941	
Virgil	M	Feb-83	
Vodka	M	Jan-79	
Victoria	F	1935	
Vronsky	M	Dec-76	
Violet	F	1964	
Vincent	M	Apr-83	
Vivian	F	Jun-79	
Vee	F	Apr-05	
Vevay	F	Nov-84	
Venus	F	Dec-78	
Vesta	F	Jan-73	
Vega	F	1968	
Veronica	F	1955	
Velika	F	Feb-85	
Ved	M	May-79	
Velvet	F	Jan-72	
Vicky	F	1969	Vera
Varina	F	Jan-74	Vanessa
Valeska	F	Feb-85	
<b>Independent Males</b>	<b>Code No.</b>	<b>Birth Date</b>	<b>Mother</b>
Vostok	246	1967	Virginia
Viktor	245	1968	Victoria
Vladimir	248	1969	Vida
Vasili	247	1971	Virginia

In 1985 we decided to put another collar on a VA female. What happened during the collaring operation is something I will never forget. We targeted Vega, Vee's 17-year-old daughter. The terrain was bumpy and very difficult to drive in but we managed to get close enough to dart her. Within a few minutes she started to get sleepy and began to sway. Perhaps she gave a low call or just her posture alerted the matriarchs because Virginia and Victoria rushed over to Vega and got on either side standing parallel to her and between them they pushed and leaned in and held Vega up preventing her from collapsing. However, the drug put her completely to sleep and she slipped down between. Virginia and Victoria then turned and tried to lift her. We had to go into action to stop them from hurting her in their efforts. I drove one of the Land Rovers straight at them and finally managed to get them to leave. They waited only 100 yards away and as soon as she woke up she



was able to go straight to them. Once again it showed how incredibly loyal and compassionate elephants are.

Experiences such as this one with Vega made me dislike radio-collaring. We believe in non-invasive research and this betrayal of the trust we've built up with the Amboseli elephants makes it a very difficult to carry out this kind of exercise. Sometimes it is absolutely necessary such as for veterinary treatment. We have put a minimum number of collars on elephants since that time but only when it became obvious that we had to map their corridors in order to save them and their range.

The inevitable for any elephant family happened to the VAs in 1988; Victoria died, and an important guiding force for the family was lost. She had been speared, and we were deeply saddened that this wonderful female had lost her life at the hands of humans. The VAs could probably cope better than most families with the loss of a matriarch, as they still had Virginia who was already in the leadership role. But I think Virginia must have missed her co-matriarch acutely, and I wonder if the burden of leading such a big family fell on her more heavily without Victoria's support. Just two years later, Virginia also died, naturally at the age of about 60 years. Before she died she left the family and moved on her own for a few months, something we rarely see. I truly felt the loss of these two females--although the family was large and thriving there was something absent every time I drove up to them and failed to see those graceful, big females.

Nothing stands still, however, and there was still a large elephant family busily roaming across the ecosystem. Although perhaps not roaming quite as far as they had been: we now saw the family fairly steadily throughout the year, instead of the prolonged absences that



*Victoria's son Vronsky grew up with tremendous self-assurance and has become one of the most aggressive fighters among the males*



had been their hallmark under the leadership of Virginia and Victoria. I wasn't sure if this was a short-term ecological pattern, or a "safety" strategy by Vida, adjusting to her new leadership role. By the mid 1990s we were sure that we wanted to know more about the VAs movements outside the park, so in 1996 we deployed another collar, this time on Vicky. This was another challenging period in terms of conflict and some poaching and sadly sport-hunting across the border in Tanzania; Vostok, Viktor and Vasili had all been killed, and we were keen to understand which areas elephants were using far from the relative protection of the Park.

Vicky's collar functioned between 1996 and 1999. The technology of the era was much less reliable than today's collars, so we only recorded 36 positions or "fixes" over that period. But even so, we



*Vicky waking up after being fitted with a radio collar*

learned that the family was ranging over some 2,000 km<sup>2</sup> (nearly 800 mi<sup>2</sup>), an area six times bigger than the National Park. The family was still growing too; despite losing two calves to drought in the early part of the decade, there had been an amazing 28 births to VA females between 1990 and 1999. Their size and the confidence of the females in this large family made them a force to be reckoned with, and they occupied the top of the hierarchy amongst the Amboseli families.

However, the dawn of the new millennium was not to be kind to the VAs. The fortunes of almost every family we have studied have waxed and waned with the years, but the VAs suddenly seemed to attract trouble in proportion to the size of their family. Thirty-one family members died between 2000 and 2009; some as a result of drought or illness, but others due to spearing and poisoning. Vee was speared in 2000, Velika died as a result of a snare, and several other family members disappeared. Disappearances of adult females and their calves continued over the next few years, and once again we suspected the VAs ranging was bringing them into



trouble. We decided to replace Vicky's now-defunct collar with a fresh one and find out where they were ranging.

Technological advances had come a long way, and after fitting a new style collar on the December 20<sup>th</sup> 2007, Vicky was logged more than 150 times, once every two hours in just under two weeks. Downloading the data remotely meant we could start to log elephant movements on a much finer scale than had been possible previously. We were excited to extend the project with more collars, using the data to understand elephant movements and start to show important wildlife corridors in an ecosystem that was starting to undergo profound changes in land use.



*Varina was orphaned at a very young age but she is a hardy survivor to this day*

Our hi-tech plans got put on hold however, when the worst drought in living memory struck Amboseli in 2009. Following several years of poor rainfall, the rains failed completely. By the end of the year 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. Amboseli always has fresh water because of the underground rivers coming from Kilimanjaro, which create permanent swamps in the Park. Animals did not die of thirst but rather from hunger; the failed rains had meant no vegetation grew, and the food quickly diminished. It was heartbreaking watching listless families kicking in the dust, trying to unearth the meager tough roots and stalks that remained. As the elephants weakened they appeared to succumb to disease as well.

The calves were the first to go. Their mothers' could not produce enough milk for them, especially as they got older. In 2008, 151 calves were born, which was a record. By 2009 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 and their mothers (especially older mothers) were better able to meet their demands for milk. Nonetheless, of the 85 calves born during the drought 38 died.

The harsh conditions challenged all the Amboseli families, and the VAs suffered too. They had thirteen young calves, born since 2007, half of which did not survive. Older animals in the population were not spared either: of the females over 50 years old only two survived and over half the matriarchs died, including Violet. I suspected she had been poached, as the price of ivory was increasing and suddenly there was a lot of ivory locally available from all the elephants who had succumbed. It inspired a few people to try and get ivory from the still-living elephants too, until Kenya Wildlife Service shot and killed two poachers in November 2010, scaring off those seeking a profit from the misery. That same month Velvet also died, and with her death the VAs lost another experienced female.

The drought finally broke in December and fairly good rain fell in



*Vevay with her splayed tusks and some of the other VAs enjoying a mudbath after the drought broke*

2010. African savannahs are remarkable for their regenerative powers. 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 had been brought under control once more, 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, including all the females in the VAs who had lost their calves in the drought. Four of the VA females had managed to carry pregnancies throughout the drought, and they gave birth in early 2010.

The calves conceived when the drought broke in early 2010 started being born at the end of 2011. The VAs were not quick to produce calves and we had almost documented a hundred births before Valeria and Vela gave birth in January 2012. Another six births followed soon after, bringing the VAs back to a healthy, and huge, total of 69 members, including their independent males.

<b>Matriline</b>	<b>Individual</b>	<b>Sex</b>	<b>Estimated or Known Date of Birth</b>	<b>Mother if Dead</b>
<b>Victoria</b>	Vega	F	1968	Vee
	VEG10	M	Mar-10	
	Vista	M	Jul-01	
	Vangelis	F	Dec-96	
	VGS12	F	Jul-12	
	Vevay	F	Nov-84	Vee
	VEV10	M	Apr-10	
	Vvork	F	Jun-01	
	Vertigo	F	Dec-96	
	Verve	F	Mar-96	Vee
	VRV12	M	Jul-12	
	Valeria	F	Feb-86	Vesta
	VLR12	M	Jan-12	
	Valente	M	Feb-86	
	Vivaldi	M	Apr-00	Vesta
	Vigna	F	Jan-91	Venus
	Verulam	M	Nov-04	
	Vimala	F	Sep-98	Venus
	VIM12	F	Jul-12	
	Vivisimo	M	Jun-01	Venus
	Vivian	F	Jun-79	Violet
	VIV12	M	Feb-12	
	Viggo	M	May-03	
	Vivicah	F	Nov-96	
	VVH10	M	Nov-10	
	Vela	F	Feb-95	Violet
	VLA12	F	Jan-12	
	Vuria	F	Mar-87	Violet
	Viceroy	M	Jun-07	
	Verify	F	Nov-00	



	Vasco	M	Nov-99	Violet
<b>Vera</b>	Vicky	F	1969	
	Vanilla	F	Oct-08	
	Vaclav	M	Dec-99	
	Vanna	F	Oct-86	
	VNN10	M	Jan-10	
	Vipusa	F	Apr-06	
<b>Vanessa</b>	Varina	F	Jan-74	
	VAR12	F	Jun-12	
	Vimto	M	Apr-08	
	Vienna	F	Jan-03	
	Valetta	F	Apr-97	
	VTT12	F	Jun-12	
	Vinata	F	Jan-92	
	Vermicelli	F	Apr-08	
	Valeron	M	Nov-02	Valeska
<b>Veronica</b>	Vandela	F	Feb-96	
	VDL11	M	Dec-11	
	Vampira	F	May-07	Velvet
	Viera	M	Jan-02	Velvet
	Vin Diesel	M	Sep-03	Veena
<b>Virginia</b>	View	M	Mar-00	Vida

<b>Independent Males</b>	<b>Code No.</b>	<b>Estimated or Known Month &amp; Year of Birth</b>	<b>Mother</b>
Vladimir	248	1969	Vida
Vronsky	321	Dec-76	Victoria
Ved	328	May-79	Veronica
Virgil	388	Feb-83	Vida
Voi	450	Jun-87	Vega
Vipingu	451	Mar-87	Vida
Vata Mombasa	471	Apr-88	Vee
Valde	481	Mar-89	Veronica
Viride	522	Feb-91	Violet
Vaal	535	Jan-92	Vesta
Vassako	536	May-92	Vega
Vovoda	537	Jan-92	Vee
Volta	538	May-92	Veronica
Volcano	551	Apr-93	Vida
Vaughn	573	Feb-94	Vicky
Vernon	574	Dec-94	Venus
Van	625	Nov-96	Vesta

In July 2011, when the elephants had recovered and before the start of the baby boom that we knew was coming, we reinstated our collaring program to track the elephants' movements. Vicky's 2007 collar had experienced technical failure so we decided to replace it



at the same time as we collared four other females. The VAs had shown us more than any other family what experienced females do to keep their large and successful families fed, but Vicky had more than a few surprises still in store for us.

The technological advances vastly increased the amount of data we were able to get from the new collars, giving us more information and at a much finer scale. In the first year alone, Vicky's collar made almost 9,500 "fixes" (GPS locations), and only 43% of these were in the Park, the lowest of all the females that we collared. The estimate of her typical home range was the largest of all five females, covering 445 km<sup>2</sup> (172 m<sup>2</sup>) for her core area, and ranging over 1,142 km<sup>2</sup> (441 m<sup>2</sup>). Vicky also holds the "records" for the greatest distance travelled from the Park boundary (38km, 23.6 miles) and the greatest distance travelled in a single day (40.9km, 25.4 miles). It is amazing to get all this data to confirm our long-held convictions that the VAs are wanderers. We are using these data to assess the corridors elephants are currently using, and the risks they face when travelling outside protected areas.

Changing land-use patterns and increasing human populations do pose significant threats for Amboseli and its wildlife, but the data Vicky and her family have given us over the years enable us to fight alongside other stakeholders and partners to keep Amboseli a place where the VAs can roam as far as they like.

***Vicki Fishlock & Cynthia Moss***  
***Amboseli***  
***June 2013***



*Varina & her '12 calf; note their wiggly tails*