

SOLIO 1970 -2010 40 YEARS OF RHINO CONSERVATION

Solio Game Reserve is the premier rhino breeding sanctuary in Kenya. Over the forty years it has been in existence, Solio has provided 93 black and 52 white rhinos to other reserves while maintaining a healthy population itself. It all started from small beginnings.

In 1966, Courtland Parfet bought Solio Ranch in the Laikipia area of central Kenya. It was mostly grassland utilised for beef cattle but with a range of indigenous wildlife including many buffalo, zebra, gazelles and leopards. As a committed conservationist, Mr Parfet's wife Claude, persuaded her husband to fence an area of the ranch to protect the wildlife and allow them to live their natural life without interference or threat from humans. The 55 sq km area was fenced to keep the wildlife in and any poachers out.

At the outset, there were no rhinos in the reserve. However, sport hunting and poaching of the once abundant black rhino in Kenya had resulted in many small remnant populations, sometimes just a single individual, spread around the country with no hope of long term survival and often endangering nearby human settlements and still under the threat from poaching.

Kenya's Wildlife and Conservation Management Department (WCMD) - the forerunner of the Kenya Wildlife Service - approached Courtland Parfet and asked if he would look after a few of these remnant black rhinos while WCMD found them a permanent home. So it was, when the first five individuals were moved in from Kiboko in the south east in 1970, that Kenya's first rhino sanctuary was established. With no other secure areas to call on, over the next ten years the WCMD came back several times asking if they could move in a few more rhinos each time. By 1980 Solio Game Reserve was the new home of 27 individuals from 9 different areas.

Table 1. Source of Black Rhinos

<u>Location</u>	<u>Number</u>	<u>Year</u>
Kiboko*	5	1970
Embu	2	1971, 1980
Tsavo East*	3	1971, 1977
Isiolo	1	1972
Solio Ranch	2	1972, 1975
Nyeri Forest	1	1974
Darajani*	1	1974
Lamuria Ranch**	9	1975, 1979
Nyeri Forest	2	1980
Rumeruti	1	1980

* located in south east Kenya, others in reasonable proximity to Solio

** ranch being subdivided up

Between 1970 and 1980 the numbers of black rhinos in Kenya crashed by over 90%, from 20,000 to 1,500 and continued to do so to 1990 when only 400 were left, just 2% of the 1970 population. For the most part these deaths were at the hands of poachers seeking a lucrative income from the sale of the horns. While the largest market for rhino horn was, and is, as an ingredient in Traditional Chinese Medicines, Kenyan horn was mostly smuggled through to North Yemen where the horns were fashioned into handles for their 'Djambia' daggers.

While the black rhino lives mostly on browsing bushes and trees, there was abundant grassland in the reserve which is the food source of the other species of African rhino, the white. In 1980, Solio decided to introduce a founder herd of 16 individuals imported from South Africa

With excellent habitat and securely hidden from view, this new group of rhinos bred and prospered such that the reserve had to be extended to 68 sq km in 1991. In the meantime other areas in Kenya in both National Parks and private ranches were made sufficiently secure to house rhinos and Solio became the prime source of many founder populations. Some 30 individuals were moved out of Solio to help form nucleus populations in other new reserves including Nakuru National Park, Sweetwaters Game Reserve, Lewa Downs Conservancy and Ol Jogi

By 1992 there were 66 black and 55 white rhinos in the reserve. The rhinos continued to thrive and so did translocations to other areas.

Table 2. Black Rhino Translocation History

		Total	Male	Female
Pre 1990	Nakuru NP	15	7	8
	Sweetwaters	8	4	4
	Lewa Downs	3	1	2
	Ol Jogi	4	2	2
1993 July	Sweetwaters	8	4	4
1994 Jan/Feb	Lewa Downs	4	2	2
1994 Jan/Feb	Tsavo East	8	4	4
1994 Jan/Feb	Ol Jogi	2	1	1
1994 Jan/Feb	Aberdares	2	1	1
1994 March	Tsavo East	8	4	4
	Lewa Downs	1	1	0
2004	Mugie Ranch	4	2	2
TOTAL at October 2005		67	33	34
2007 Feb	Ol Jogi	3	2	1
2007 Feb	Ol Pejeta	23	16	7
TOTAL at December 2008		93	51	42

To date, some 93 black and 52 white rhinos have left Solio for new homes with 9 whites even leaving the country - six to help Uganda re-introduce rhinos and three to Malawi. Truly Solio represents the heartbeat of rhino conservation in Kenya.

Table 3. White Rhino Translocation History

	Total	
Ol Jogi	5	
Mt Kenya GR	3	
Chem Chem	3	Malawi
Nakuru NP	8	
Lewa	5	
Kongoni Ranch	6	
Ziwa	6	Uganda
Meru NP	12	
Kitale	2	
Masai Mara	2	

TOTAL at December 2008 52

However success brings with it problems and with black rhino numbers in Kenya dropping to 400 in 2000, and Solio having the largest single population, the reserve became a major target for professional poachers. The white rhinos bore the brunt and in a five year period 21 white and 9 black rhinos were murdered either shot or caught in snares. By now Courtland Parfet's son Edward had joined the company as General Manager and was determined to stop the slaughter. A security and monitoring system had to be established.

To monitor and manage the rhinos it was essential to know how many there were and how to recognise each individual. In September 2005 Benson Irungu, Solio's new head of security and Felix Patton, an Englishman who specialised in photo-identification of rhinos, set about cataloguing, by the start of 2006, the 85 black rhinos in Solio. This task was all the more fascinating as most of the rhinos were not used to humans and they walked slowly and inquisitively to within a few metres of the vehicle, looked and wandered off.

Using the photographs obtained, a team of rhino monitoring rangers was trained to recognise each individual and each patrol group were given a photo-identification booklet that they could use in the field to check the identity of each rhino sighted.

Patrol teams were in place and the first monitoring record was put into the computer on November 13th, 2005. Fittingly this was for the rhino Karanja, a male which was believed to be one of Solio's founding population so well over 35 years of age. It is also one of the only rhinos in the world that has grown a "third" horn.

The amazing breeding performance of Solio's black rhinos had dealt a blow to their habitat. A survey of the rhinos food sources showed that the mainstay *Acacia drepanolobium* was almost

eaten out and all other appropriate species severely depleted. Solio has a black rhino density of 1.2 per sq km where 0.5 would be considered high. As such unless the population was drastically reduced, the rhinos would eat themselves out of food. A plan was developed to move up to 30 of the Solio rhinos to nearby Ol Pejeta Conservancy where they would colonise an area which has been free of rhinos and had abundant Acacia. In February 2007, East Africa's largest ever rhino translocation took place with 24 Solio rhinos going to Ol Pejeta Conservancy and 3 to another reserve, Ol Jogi.

As Solio's black rhino population was being reduced, so the white rhino population was continuing to grow. Poachers do not care if the horns are from the black or the white rhino so the white rhino population had to be catalogued and monitored like the black. By the end of 2008, Solio recorded 150 white alongside 71 black rhinos. The continued breeding success would enable more rhinos to be moved to new areas in future years.

The poaching pressure is ever present. There is a need to bring in more income to sustain the rhinos' security and habitat. The next year or two will see big developments at Solio with tourist revenue to be increased, rhinos to be sold or translocated and the Reserve to be extended by a further 15 sq km. In true Solio tradition, the rhinos and other wildlife will be put first and only those changes that will not have an adverse effect on their behaviour and environment will be considered.

It is, and will remain, a privilege to be counted among the few who have the opportunity to visit the heartbeat of rhino conservation in Kenya.

Felix Patton
Rhino Monitoring Coordinator

1440 words