

BLACK RHINO IN CRISIS

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A thin layer of ground fog shrouded the Mana Pools air strip, a fog that spilled over from the warm Zambezi River a quarter of a mile away. It was 0700 and the Bellanca "Scout" was moist from the humidity and slick to the touch as I pre-flighted it in preparation for the patrol that was about to begin.

The beauty of the lower Zambezi valley is hard to describe but I am sure it was the same beauty that attracted Stanley and Livingstone a little over a hundred years ago. It makes life worth living and inspires an early rise.

The mission was to patrol along the Zambezi from Mana Pools east to Kanyemba next to the Mozambique border then inland about five miles and proceed west paralleling the Zambezi until approaching the Kariba dam thence to return to Mana Pools along the river. I was to look for people that were not supposed to be there, anyone not wearing the uniform of the Army or of National Parks and Wildlife Management (NPWM). The mission could have its excitement.

As I rolled down the runway the thin layer of ground fog seemed to part and drop as I lifted into the still, cool air. At the departure end of the strip a small herd of about sixty elephant stood as sentinels - not so much as flapping their enormous ears.

While climbing to about 1,000 feet along the river, hundreds of hippo seeking early morning warmth in the sand ran for the river and thudded in, several herds of Cape buffalo numbering more than a thousand grazed in the riverine grasslands and elephant too numerous to count found pleasure in the water and the adjacent green belt. Yes, this was paradise.

But what of the black rhino? During the patrol approximating three hours I saw not less than one hundred - and this was not at all unusual. Each morning patrol, as well as afternoon patrols, took me on different routes in the lower Zambezi valley so that in the course of a week I had covered the entire area. Black rhino were like fleas on a scraggly dog - this uninhabited region of the valley was home to more than one thousand black rhino, and that was a conservative guess.

But what is wrong with this picture? Well, it took place in 1978 during the Rhodesian "war" which, in 1980, led to the transition of Rhodesia to Zimbabwe.

What of Zimbabwe today? Wars often have a way of aiding

wildlife, and this was the state of things in Rhodesia for many years. When Zimbabwe emerged the government carried on the policy of protecting wildlife. But things were not so in Zambia to the north. Zambian poachers decimated the elephant and rhino populations of Zambia and then, in 1984, commenced cross-border operations into Zimbabwe. Shortly after that NPWM initiated "Operation Stronghold" in an effort to stem the killing of black rhino. It has been an ongoing operation since that date and with questionable results. Even with the official policy of "shoot to kill" necessitated by the fact that poachers had been ambushing game scouts, killing six, the poaching did not deescalate. Through mid-1982, 162 poachers had been killed by NPWM game scouts and another 48 wounded.

I had flown in Zimbabwe many times over the years since the war ended, particularly in the north where the unenclosed wild regions still exist. In May, 1992, while training Crispin Jakopo (the NPWM conservation officer in charge of anti-poaching in the lower Zambezi valley) in anti-personnel flying techniques and transitioning him into the "Scout", I repeated the mission described in the beginning of this paper. For one week Crispin and I flew morning and afternoon. This time, instead of looking just for poachers, we were also trying to locate black rhino. We saw none!

Zimbabwe has been thought to house the last unenclosed wild population of black rhino of any significance in Africa. In March, 1992, at the Convention on International Trade in Endangered Species that took place in Japan, Zimbabwe reported that it estimated its black rhino population to number 2,000. That "estimate" was not based on actual count but on scientific speculation. The moment of truth came in the last half of 1992 when an actual count took place: in the Matusadona National Park on the southern shores of Lake Kariba, instead of an estimated 150 black rhino, only 16 could be found. The shocking pattern repeated in Chizarira National Park, 19 of an estimated 200 were found; in Chirisa, four instead of 200; in Chewore National Park, one instead of 300; none in Chete Game Reserve out of 70. Only in parks to the west, more remote from the Zambezi over which the bulk of the poachers scuttle from Zambia, was the situation found to be less alarming with as many as 67 found in Hwange National Park.

NPWM scientists have said that it is likely there may be perhaps double those figures in dense bush, leaving a wild population of approximately 350. There are another 150 on privately owned ranches, moved south from the Zambezi valley.

"The figures originally quoted were estimates," stated Drew Coneybear, NPWM chief ecologist, "Given what we know now, it would seem there were not that many rhinos and, second, that poaching could be at a higher level than we thought."

NPWM has now stated that at the present rate of poaching ".....unless something radical is done very soon, there is probably

only 18 months left for the black rhino in the wild."

What about dehorning? In June, 1992, dehorning commenced as a move to frustrate poachers. In five months only 110 animals had been dehorned, at a cost of approximately \$2,000 each. It is hard to find black rhino - they are solitary beasts that keep to the shade and are not easily sighted. In addition to the cost, horn grows so fast that in about a year there is enough to make a poacher drool at the mouth.

By mid-1982 there had been 1,117 confirmed black rhino killed by poachers! It would be fair to speculate that many more have been killed and left to rot in the bush uncounted.

Thus, Zimbabwe does not have 2,000 black rhino. It does not have the 987 in the regions of actual count cited above. It has for sure 107 in the wild and approximately 150 more on privately owned land - total 257.

Zimbabwe has done an excellent job in the face of great financial adversity - it has virtually no foreign exchange with which to effectively address the problem. It must rely on outside help such as other governments, NGOs and individuals.

What about black rhino in Botswana, Namibia, Mozambique and South Africa?

In Botswana it is estimated that there are fewer than five black rhino and less than 100 white rhino. The black rhino estimate is based on dung identification and not on sightings. In early 1992, a black rhino carcass was found that has been poached. It was thought to have been a target of chance by poachers seeking elephant. Botswana counts elephant twice a year and by last count there were approximately 60,000, mostly in the northern third and most heavily in the Okavango delta.

In Namibia it is estimated that there are 591 black rhino (450 in Etosha, 130 in Damaraland and 11 in Koakoland), and 6,000-10,000 elephant, all in the northern fifth of the country. As in Botswana, poaching is on the rise due to the settlement of the civil wars in Angola (now heating up again) and in Namibia, and the numbers of ex-soldiers who have automatic weapons.

Mozambique has been in the throws of a civil war since the Portuguese left. There have been no statistics developed from which estimates can be projected. I flew in Mozambique in 1990 when I delivered a light observation aircraft to Zimbabwe for anti-poaching work and found no elephant or rhino (black or white) south of Beira. In the Maputo Elephant Reserve where there were over 100,000 elephant prior to Portuguese withdrawal, the count in 1990 revealed six. More than fifty have crossed into Natal and are now protected by the government of KwaZulu.

I flew a DC-6 cargo aircraft from Beira to Pemba in 1991 over extensive and uninhabited swamps. There, deeply away from the devastation caused by the civil war, I saw many herds of elephant numbering in the hundreds - their bellies and legs were "pink" from, I assume, being in the water belly level nearly all their lives. I saw no rhino. The wildlife in the swamp regions is abundant and in good shape - another "benefit" of war.

South Africa is a much larger nation and more densely populated with humans. Its rhino are scattered about but most are concentrated in the Transvaal and Natal. I had not intended to include South Africa in this paper because I did not have current data that I could verify. But I received a FAX from noted rhino authority Dr. Martin Brooks of the Natal Parks Board and I know that his statistics are as reliable as can be obtained. I attach a copy of his FAX as an exhibit to this paper.

Thus, the total number of black rhino in South Africa approximate 819, consisting of 453 definite, 270 probable and 96 possible. The number poached in 1992 in black rhino reserves was 15, more than twice the number poached in either 1990 or 1991. I add that neither the Natal Parks Board nor the national parks system have dedicated anti-poaching aircraft. They would warmly welcome such assets.

The disappearance of the black rhino in the wild is caused by one thing - POACHING! What can be done to help stem the killing?

1. Dehorning is too costly and new horn grows back at about 7cms a year. Rhino that have been dehorned have been killed and the nubs removed.

2. Darting and relocation? Yes, but to places where security can be achieved. There have been successes and failures. Black rhino have been moved to farms further south from the Zambezi. The farmers provide armed guards and a safer haven. Mortality has been near zero.

Recently (in 1992) ten were moved from Zimbabwe to Australia (an excellent venue for black rhino). It has been reported that a cow and a large bull died and another cow is very sick. That is an unacceptable mortality rate. Questions have been raised about the method of shipping, the quality of the crates, the experience of those who accompany the rhino, the medications used (or not used), etc.

An example of success is that of "Operation Rhinoceros" initiated in 1960 by Ian Player of the Natal Parks Board. At that time there were only 600 southern white rhino in existence in the wild. His methodology was successful. Of the hundreds of white rhino moved, none died as a result of the move - zero mortality! The story of this success can be gleaned from a book authored by

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Ian Player entitled "The White Rhino Saga", William Collins Sons & Co Ltd, London, 1972.

Relocation has been urged by Nick Steele, Director, KwaZulu Bureau of Natural Resources, in a report rendered by him dated 6 October 1992 following an extensive visitation to the areas of Zimbabwe involved. Mr Steele is the Chairman of the African based Rhino Management Group Security Committee. That committee is composed of representatives of the wildlife departments of South Africa, KwaZulu, Botswana, Namibia, and Zimbabwe. In addition to relocation, the committee has urged the countries involved and their neighbors to adopt laws that would allow cross-border law enforcement, hot pursuit, and investigations into illegal trade in neighboring countries.

3. Interim measures. With the exception of South Africa, the jurisdictions involved are third world countries without adequate foreign exchange with which to mount effective programs from within. They need help. They have manpower but not technology. A lot of equipment is needed but given the limitation of funds even from governments such as the USA, priorities must be set and the most urgent addressed. For instance, I have been involved in furnishing two light observation aircraft for anti-poaching work, one to Zimbabwe and one to KwaZulu. In both instances their work product has been exceptional. They have allowed poachers to be located, ground units to be vectored in and the poachers neutralized.

In the first year of operation in Zimbabwe, 25 poachers were apprehended, 27 black rhino were located and translocated and illegal rhino horn and ivory was recovered. In addition flora and fauna surveys were conducted and humanitarian assistance rendered (a woman canoer was bitten by a hippo. Crispin Jakopo landed on a sand bar in the Zambezi and casevaced her to Kariba hospital).

Sadly, in July, 1992, both aircraft were lost in accidents. The Zimbabwe aircraft was lost when taking into custody a cache of AK-47s stored by poachers on a farm. The KwaZulu aircraft stalled and spun in while tracking a snared black rhino dragging a large log drag. The rhino was darted and the snare removed.

Now Zimbabwe has only one aircraft, a Piper Super Cub in very bad condition. KwaZulu has no aircraft. Botswana has no anti-poaching aircraft and Namibia has only one Super Cub. Zimbabwe should have three Bellanca Scouts, KwaZulu one plus a Cessna 206 utility aircraft, Botswana two Scouts, and Namibia one Scout and a Cessna 206. In addition, there should be one Scout as a back up to cover when others are down for service.

The two Scouts that were lost are in the process of being replaced with insurance proceeds. But five more Scouts and two Cessna 206s are badly needed. The cost of good used aircraft is not excessive - considering the value they are to ground units. A Scout has averaged \$55,000.00 to buy, equip, ship, reassemble and deliver

to the job site. A Cessna 206 would cost about \$85,000.00 to get on site. Thus the cost of the Scouts would approximate \$275,000.00 and the C-206s \$170,000.00, for a total of \$445,000.00. When measured by the cost of one black rhino, the cost of the needed aircraft is small.

There are many other needed items - heavy duty 4x4 trucks for the carriage of animal containers in the bush, generators, light 4x4 trucks, fencing (electrical and other), radios, training, etc.

The Wilderness Conservancy recently donated five computer systems to Zimbabwe NPWM so that hand sorting of data could be eliminated and predictions instantly made as to when and where poachers would most likely be operating. In addition, a complete pre-school has been donated for the children of the game guards and scouts at the Mana Pools compound.

The Wilderness Conservancy would welcome your assistance in its effort to field the aircraft needed to get the job done. 100% of all donation go to the project and NONE to administration!

SUMMARY OF BLACK RHINO IN SOUTHERN AFRICA

Country	Actual	Probable	Possible
Zimbabwe - wild	107		243
farms	150		
Botswana			4
Namibia		591	
South Africa	<u>453</u>	<u>270</u>	<u>96</u>
Total	<u>710</u>	<u>861</u>	<u>343</u>
Grand Total	<u>1914</u>		

NATAL PARKS BOARD

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TO: DR ROBERT N CLEAVES, WILDERNESS CONSERVANCY

FAX NO.: 091 310 476 7527

FROM: DR MARTIN BROOKS

DATE: 1993.03.11

MESSAGE

Dear Dr Cleaves

RHINO STATISTICS

Thank you for your letter dated 2 March 1993 received by fax from Mr Steele on 10 March 1993.

1. Numbers of black rhino in South Africa, 1992

COUNTRY	SIZE	DEFINITE + PROBABLE + POSSIBLE			TOTAL	TREND
SOUTH AFRICA (3 subspecies)						
Augrabies National Park	65 km ²	8	-	-	8 (a)	Up
Vaalbos National Park	180 km ²	12	-	-	12 (a)	Up
(Subtotal <i>D.b.bicornis</i>)		(20)	-	-	(20)	
Addo Elephant National Park	114 km ²	28	-	-	28 (a)	Up
(Subtotal <i>D.b.michaeli</i>)		(28)	-	-	(28)	
Atherstone	135 km ²	4	-	-	4 (a)	New
Andries Vosloo Nature Reserve	65 km ²	15	-	-	15 (a)	Up
Greater St Lucia Wetland Park:						
Mfabeni (Eastern Shores)	800 km ²	18	-	1	19 (a)	Up
Mkuzi	251 km ²	40	30	6	76 (b)	Stbl
Hluhluwe-Umfolozi Park	900 km ²	156	102	24	282 (b)	Up
Itala Game Reserve	297 km ²	58	-	-	58 (a)	Up
Kruger National Park	19485 km ²	35	125	58	218 (d)	Up
Lapalala Wilderness (P)	100 km ²	10	-	-	10 (a)	Stbl
Ndumo Game Reserve	100 km ²	15	13	7	35 (c)	Up
Pilanesberg Game Reserve	500 km ²	33	-	-	33 (a)	Up
Sable Ranch (P)	30 km ²	10	-	-	10 (a)	Up
Weenen Nature Reserve	49 km ²	11	-	-	11 (a)	Up
(Subtotal <i>D.b. minor</i>)		(405)	(270)	(96)	(771)	Up
Total		453	270	96	819 (b)	Up

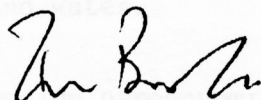
2. Poaching statistics

The numbers of black and white rhinos poached in the black rhino reserves are as follows:

	1990	1991	1992
Black rhino	1	0	0
White rhino	6+	7	15

With kind regards

Yours sincerely



DR MARTIN BROOKS
HEAD : SCIENTIFIC SERVICES