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*Problems in rhinoceros conservation
in South Africa
by J. C. du Toit*

CHAPTER 4

Problems in rhinoceros conservation in South Africa – J.G. du Toit

The discussion in *Chapter 3* illustrate the concept of the small hunting wheel driving the big conservation wheel. Until a moratorium was imposed on 8 August 2008, rhinoceros horn could be legally traded in South Africa. Since 2005 alternative ways to obtain rhinoceros horn for medicinal purposes, were developed by shrewd traders. In *Chapter 16* Van Niekerk explains that the following modus operandi is used to obtain the horn: darting method, stock theft method, shooting method, snaring method or hunting method.

Other methods to obtain horn are as follows;

- Theft from museums and stockpiles also play a role where the animal is not directly involved.
- Hunting is used as a method to obtain the trophy legally, but the horn was utilized as medicine.
- Farmers dehorn their animals and sell the horn illegally.
- Faked poaching, where ranchers are paid after the animals have been poached.

Legal medicinal hunts

During 2005 the first legal white rhinoceros hunts with Vietnamese clients were conducted in South Africa. These hunts were legal as trophy hunts but there can be little doubt that the trophy became medicine on its way to the East and therefore these hunts are referred to as medicinal hunts. According to local information the Vietnamese clients seldom displayed much interest in trophy size or quality other than the weight of the horn. Genuine trophy hunters are more concerned about the length of the horn, which is the accepted measure by which rhinoceros horn trophies are ranked. The Vietnamese were prepared to take relatively cheaper animals with smaller trophies that would be unacceptable to clients from a traditional trophy hunting environment like the USA where only the longest horns, at top prices, are taken. This is reflected in the trophy pricing with trophy fees for traditional hunters being adjusted according to the length of the trophy. For medicinal hunts it has been reported that the price was derived from the weight of the horn at ZAR 150 000 per kg, resulting in an average fee of ZAR 450 000 for an average 3 kg of horn. It was also reported that several clients purchased multiple hunts, whereas traditional trophy hunters would generally only bag one rhinoceros trophy per hunt. The impact of these medicinal hunts on the rhinoceros industry was huge, with an estimated income of ZAR 121 050 000 for the period 2005–2008 (Refer to **Table 4.1**). The sad effect is that, if these animals were kept alive, one could harvest ZAR 120 million every three years.

The percentage of rhinoceroses hunted for 2008 as a percentage of the animals in the nine provinces can be seen in **Table 4.2**. Northwest Province (6.5%) and the Eastern Cape (6.1%)

hunt more animals than the natural population growth of 6.1% on private property as calculated by Castley & Hall-Martin (2005). Therefore animals are imported for hunting purposes in these two provinces. An interesting scenario is that the poaching in these two provinces is relatively low with losses of only 1 (Eastern Cape) and 5 (North West) animals by the end of August 2009.

The average number of rhinoceroses hunted for the period 1971–2004 was 36 animals per year, with a total of 1148 for the period of 34 years. During the period 2005–2012 Vietnamese hunters targeted the market for rhinoceros horn and a total of 1005 animals were hunted; an average of 126 animals per year. This is a 350% increase in hunting. “Norms and standards for hunting rhinoceroses” was published on 10 April 2012 by minister Edna Molewa to deal with the hunting pressure on the white rhinoceros population in South Africa (Refer to Chapter 2). Hunting was therefore a smoke screen for poaching, especially in the Northwest and the Eastern Cape Province.

Poaching

With more effective law enforcement, the only loophole for buyers is the criminal way of poaching. Poaching was always less than 0.1% of the white rhinoceros population. When the moratorium on trade in horn was imposed during 2008, however, poaching increased from 0.4% to the current 2.92%. (Refer to **Table 4.3**). The comparison between poaching and hunting in the Vietnamese hunting era (2005–2012) can be seen in **Table 4.4**. The table illustrates that poaching (1695) and hunting (1005) amount to a total of 2700 animals killed.

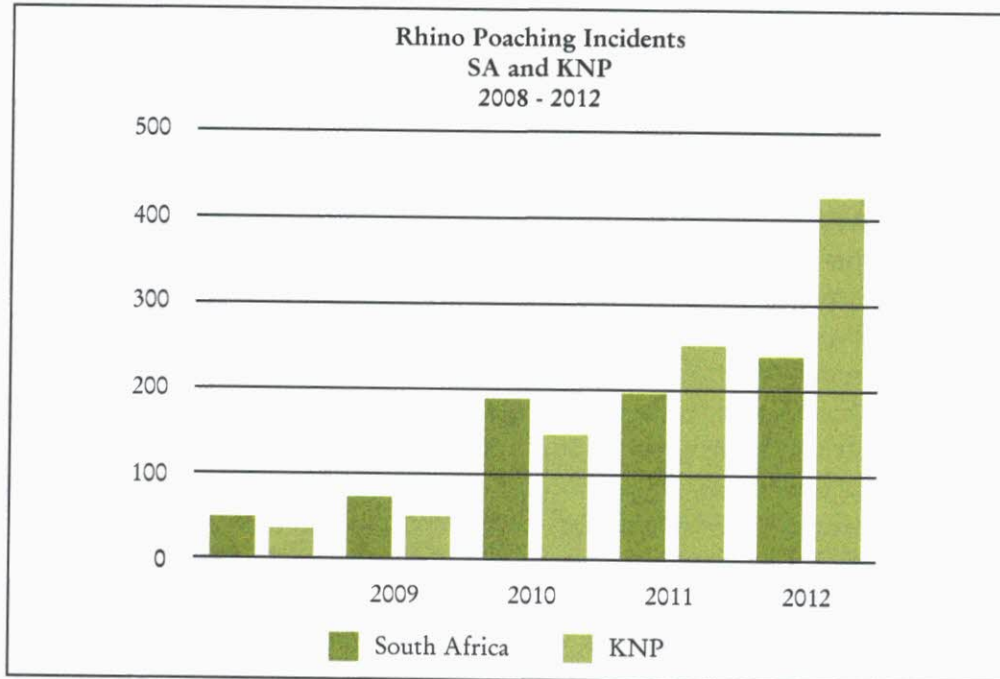


Figure 4.1: Rhinoceros poaching incidents South Africa vs. Kruger National Park

Figure 4.1 illustrates that the total poaching of white rhinoceroses in South Africa was more than the total for the Kruger National Park until 2011. The focus is placed on the largest population in South Africa with a market via Mozambique to the Far East. Conservation

authorities must remove animals from Kruger National Park to smaller areas where law enforcement can be done more intensively.

Table 4.5 reflects the poaching incidence per province since 2004 when poaching was under control. When the moratorium was imposed in 2008 the incidence of poaching increased in the Kruger National Park, Limpopo and KwaZulu-Natal. During 2009 this trend was experienced both in Gauteng and Mpumalanga.

Theft of horn

Burglaries and theft of rhinoceros horns from natural history museums, private and State property is another phenomenon in recent times. During the past years, at least 46 rhinoceros horns or pieces of horn have been stolen during burglaries from ten different locations, namely:

- Graaff-Reinet museum; 2 horns
- King Williams Town; Amathole Museum; 2 burglaries, 1 horn stolen
- Grahamstown; Albany Museum: Thieves broke in and removed one horn which was a fibreglass replica
- Oudtshoorn Museum; broke in stole 2 horns
- Cape Town Museum; South African Museum: broke in stole 2 horns
- Pietermaritzburg; Natal Museum: 7 horns stolen.
- Grahamstown; 16 horns stolen from a game farm
- Thomas Baines Nature Reserve; removed 2 safes, presumably in the belief that they contained horns.
- Lephalala District, Limpopo; 1 rhinoceros horn stolen on a game ranch
- Eastern Cape; 7 horns stolen from a private game reserve

Armed robberies in an attempt to acquire rhinoceros horn are of even greater concern. There was one successful attempt on a private game reserve and one successful raid on the Addo Elephant National Park. On 24 June 2009, a gang of six armed men held up several members of the park staff and forced the manager to open the walk-in safe where they gained access to the rhinoceros horn stockpile. The stockpile consisted of eight horn tips and entire horns weighing 10 kg. The robbers also stole four firearms and made off with three motor vehicles. An earlier attempt to break into the safe had been prevented by park staff, but clearly the robbers were not too deterred. In all cases the circumstances suggest that the robbers had information relating to the presence of the rhinoceros horns and the exact location of the horns. This might suggest collusion between the thieves and staff of the various places burgled.

Reasons for increase in poaching

- AROA – (*African Rhino Owners Association*) was terminated in 2000 because of a lack of private ranchers interest.
- The ESPU – (*Endangered Species Protection Unit*) was terminated in 2000. **Refer to Chapter 20.**
- Central databases (CDB) did not exist – information was fragmented between nine provinces. **Refer to Chapter 8.**
- DNA technology was not implemented. **Refer to Chapter 7.**

How can the poaching Tsunami be stopped?

The only way is to legalise trade and take the rhinoceros horn out of the smuggling basket. With good monitoring structures such as the databases in place and strict law enforcement the legal route will lower the poaching level to 0.1%, as it was in the past. As an interim measure, hunting of rhinoceros cows should be stopped and communities should be given ownership of rhinoceroses. In Limpopo Province alone there are 800 000 ha of communal land that can be used for rhinoceros ranching.

Table 4.1: Income derived from medicinal hunts for the period 2005–2008

YEAR	MEDICINAL HUNT	AVERAGE PRICE (ZAR)	TOTAL INCOME (ZAR)
2005	4	R 450 000	R 1 800 000
2006	56	R 450 000	R 25 200 000
2007	143	R 450 000	R 64 350 000
2008	66	R 450 000	R 29 700 000
TOTAL	269		ZAR 121 050 000



Source: Ian Player

Table 4.2: White rhinoceros numbers on private properties and the percentage hunted in each of the nine South African provinces during 2008

PROVINCE RHINOCEROS	NUMBER PROPERTIES	NUMBER HUNTED	NUMBER HUNTED (%)	RHINOS/PROV.
Gauteng	173	22	0	0
Limpopo	1646	156	19	1.2
North West	465	62	30	6.5
KwaZulu-Natal	517	39	23	4.4
Northern Cape	105	16	Refused info	
Eastern Cape	213	26	13	6.1
Free State	201	36	5	2.5
Western Cape	34	11	0	0
Mpumalanga	251	24	5	2.0
Greater Kruger PNR	569	3		
TOTAL	4174	395		

Table 4.3: Poaching as a percentage of the total population size (1980 - 2012)

YEAR	CALCULATED NUMBERS	CENSUS NUMBERS	POACHED NUMBERS	POACHED % POPULATION
1980	2 984		0	0
1981	3 180		0	0
1982	3 389		0	0
1983	3 612		4	0.11
1984	3 850		5	0.13
1985	4 103		4	0.10
1986	4 373		6	0.09
1987	4 661	4126	4	0.09
1988	4 967		4	0.08
1989	5 294		4	0.08
1990	5 642		8	0.14
1991	6 013		5	0.08
1992	6 409		15	0.23
1993	6 830		13	0.19
1994	7 279		26	0.36
1995	7 758	6 670	10	0.13
1996	8 268		2	0.02
1997	8 812	7 292	4	0.05
1998	9 392		8	0.07
1999	10 010	7 913	10	0.09
2000	10 668		7	0.07
2001	11 370	10 988	6	0.05
2002	12 118		23	0.19
2003	12 915		19	0.15
2004	13 764		8	0.06
2005	14 669	13 521	15	0.10
2006	15 634		23	0.15
2007	16 662		12	0.07
Moratorium				
2008	17 758		76	0.43
2009	18 926		120	0.63
2010	20 171		333	1.65
2011	21 497		448	2.08
2012	22 911		668	2.92

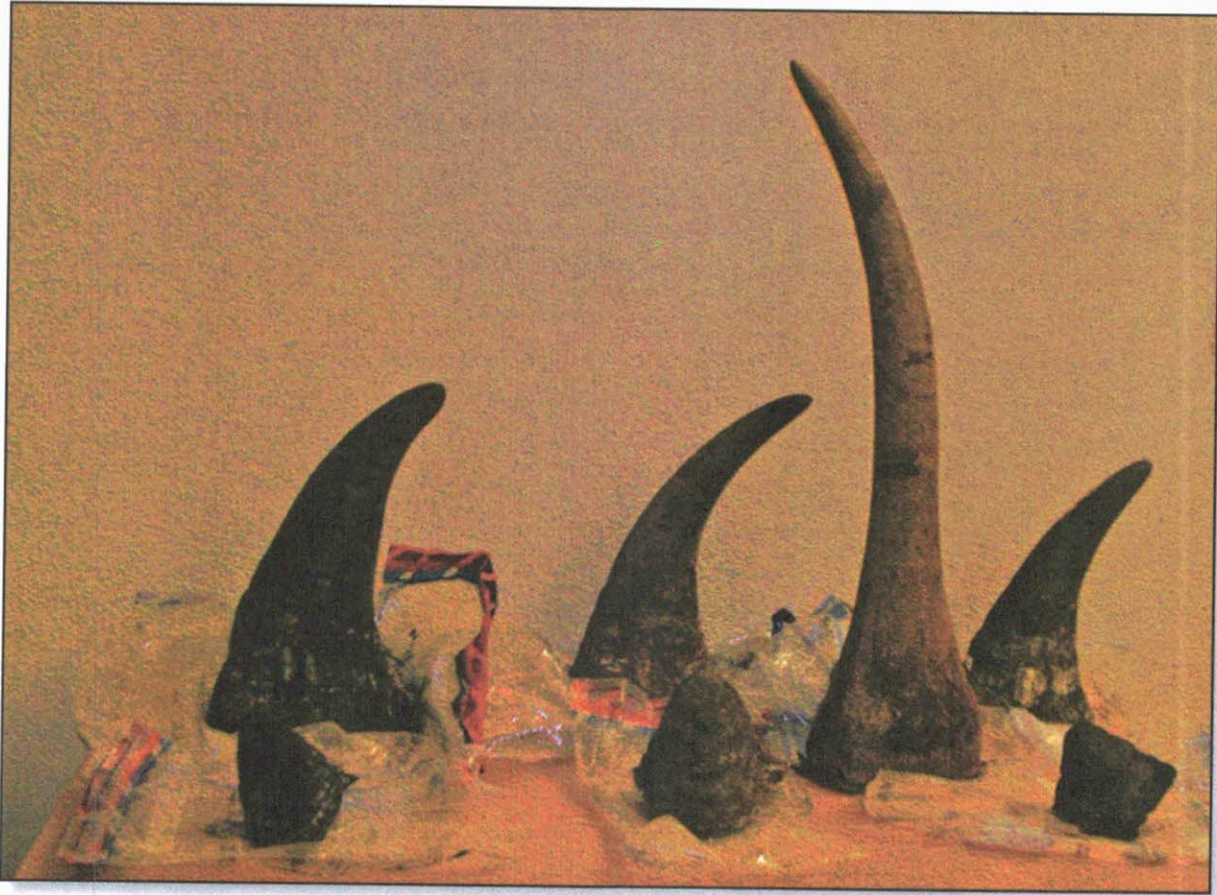


Table 4.4: White rhinoceroses poached and hunted since the Vietnamese hunting era started (2005 - 2012)

DATE	POACHED	HUNT	TOTAL LOSS	RATIO P:H
2005	15	78	93	1:5.2
2006	23	92	115	1:4.0
2007	12	124	136	1:10.3
2008	76	94	170	1:1.2
Moratorium				
2009	120	107	227	1:0.89
2010	333	150	483	1:0.45
2011	448	160	608	1:0.36
2012	668	200*	868*	1:0.30
TOTAL	1695	1005	2700	

* Estimated number

Table 4.5: Poaching incidents per province (2004–2011) since Vietnamese hunting era started in 2005

PROVINCE	2004	2005	2006	2007	2008	2009	2010	2011
KNP (SANParks)	7	10	17	10	36	50	146	252
MNP (SANParks)	0	0	0	0	0	0	0	6
Gauteng	0	0	0	0	0	7	15	9
Limpopo	0	0	0	0	23	16	52	74
Mpumalanga	0	0	2	3	2	6	17	31
Northwest	0	2	0	0	7	10	57	21
Eastern Cape	0	0	0	0	1	3	4	11
Free State	0	0	0	0	0	2	3	4
KwaZulu-Natal	3	1	5	0	14	28	38	34
Western Cape	0	0	0	0	0	0	0	6
Northern Cape	0	0	0	0	0	0	1	0
TOTAL	10	13	24	13	83	122	333	448

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