

RHINO UTILISATION CONSIDERATIONS – AN INDEPENDENT PERSPECTIVE ON ETHICS, WELFARE, POLITICS AND ECONOMICS AND A CODE OF ETHICS RESULTING THEREFROM

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Abstract: Rhino utilisation is controversial to say the least. The possible resumption of trade in horn had battle lines drawn in the sand at CITES CoP10, Harare June 1997. The possible reinstatement of hunting of black rhinos will hand those who have to deal with it a crown of thorns to wear. The activities of animal activists threaten pragmatic conservation practices based on utilisation. Utilisation is not all good though and of-late some hideous wildlife practices, ironically justified as being in accordance with the principle of sustainable utilisation of natural resources, like canned hunting, have been unveiled. South Africa and Southern Africa need not adopt the lily white, colonialist approach of East Africa but we cannot afford wildlife management practices to be unethical or irresponsible and we have to look to adjusting our utilisation policies and the messages we send to the world at large, such that they take into consideration the need for communities to benefit from management yet in the process, in no way compromise the welfare of the animals around which this management centres. That is what this paper, focusing ultimately on a Code of Ethics for rhino utilisation, addresses.

INTRODUCTION

In 1929, probably less than 100 white rhinos survived in the Zululand reserves of the Umfolozi/Hluhluwe Complex. Those were all that remained of the once great numbers of rhino inhabiting the South African bushveld regions. Shot to the brink of extinction by hunters, traders and sportsmen, rhino nevertheless miraculously survived in this small pocket and once protection was afforded, their numbers crept up to an estimated 437 by 1953. That same year, Ian Player, past patron of the Rhino and Elephant Foundation (REF) and at the time employed by the Natal Parks Board, carried out an aerial survey in the Umfolozi Game Reserve which revealed that there was a danger of too many of these great creatures in the sanctuary. His recommendation to begin removing some eventually led to the translocation of more than 3000 white rhino to government and private reserves in Southern Africa and to many zoos around the world. This very effort ensured the survival of the white rhino and, at the same time, placed an **economic value** on the animal (Walker, 1994). Walker goes on to write "*It would be a sad day if we were so preoccupied with keeping rhinos alive that we would not even consider trade in their horns. Trade in horn might help the species survive. It seems there are some perfect men with perfect intentions in this world who are determined not to let either of these options get much of a hearing. We should not accept that. We need to press for bold new initiatives and explore every means at our disposal on behalf of both species of Africa's rhino*".

The June 1997 meeting of the Convention of International Trade in Endangered Species (CITES) was something of a turning point for wildlife trade policy. The eight-year-old ban on international trade in elephant products was relaxed slightly to allow three African elephant range states (Zimbabwe, Botswana and Namibia) to initiate a strictly controlled legal trade. A proposal by South Africa to investigate the potential of a controlled legal trade in rhino products was defeated, but only by a tiny margin – one vote to be exact! There appears to have been a shift in international thinking to approaches that are more innovative than simple blanket trade bans to save endangered species ('t Sas-Rolfes, 1997).

Humans have hunted rhinos for thousands of years, mainly for meat and for the medicinal properties of the horn. Following the decline in Asian rhinos, Asians began to import African rhino horn. The volumes of rhino horn consumed as medicine are fairly low and until recent decades medicinal use probably never posed a serious conservation threat. In the 1970s a series of events in the Middle East precipitated a rhino conservation crisis (’t Sas-Rolfes, 1997). The discovery of oil in Saudi Arabia created many lucrative employment opportunities for people from neighbouring countries, including Yemen. The disposable income of Yemeni men rose substantially and with it, their willingness to pay large sums of money for rhino horn *jambiya* (ceremonial dagger) handles, a key Yemeni status symbol. The demand for rhino horn surged, causing a rise in price and a consequent escalation of poaching in Africa.

By the late 1970s CITES had become operational with all rhinos listed on Appendix 1. Initially the trade ban was a dismal failure. Rhino horn prices soared on all markets, especially in the Far East. Black market trading continued unabated and most of Africa’s rhino populations were decimated by poachers. By the early 1990s poaching levels had dropped numbers had stabilized and surviving populations were confined to a few Range States and highly protected situations.

Currently the world’s most successful rhino range State is South Africa, a country which has used a combination of bold management strategies and market-based economic incentive measures to turn its seriously threatened population of southern white rhinos into the world’s least threatened variety. There is a belief that the rhino horn ban is finally working. Most consumer states have joined CITES and outlawed the domestic use of rhino horn. Poaching levels have dropped to what appear to be manageable and sustainable. The outbreak of a civil war in Yemen in the 1990s had a negative effect on the country’s economy and resulted in suppressed levels of consumer demand. From the above it seems the problem has abated. Is this true? Will re-opening a legal trade in rhino horn once again endanger surviving populations? This rest of this paper deals with these issues and the sensitivities attached to the above questions.

IMPORTANT CONSIDERATIONS

Hunting

Some authors argue that sport hunting offers social and economic benefits for conservation and does not endanger a species (Bond, 1994). Others vehemently disagree (see Dr Telecky of the Humane Society of the United States’ 1995 report *Big Game, Big Bucks*). Sport hunting when properly controlled can be maintained at a sustainable level (Craig and Gibson, 1993) and the revenues used to reward communities for tolerating and conserving such potentially challenging neighbours. However, in most parts of Africa excessive offtake by poaching has diminished stocks of to the point where ‘trophy quality’ animals are either extremely rare or absent from populations.

Authors like Cynthia Moss (1988) say that destroying large bulls in for example an elephant population, significantly alters the elephants’ way of life, as elephant cows prefer to mate with the largest and hence oldest bulls if given the choice. She further states that contrary to some hunters’ beliefs, these are not old males past the age of effective breeding, but some of the fittest males in the stock who, by their longevity, have demonstrated their adaptiveness. Douglas-Hamilton (1997) states that shooting a big tusker is killing a mature and useful member of society in the prime of life and is an unnecessary depletion of the gene pool. The above statements indicate that sport hunting is a practice fraught with controversy, even to the point that very different schools of thought on its impact on conservation exist within the scientific fraternity.

Of late there has been a barrage of ethical objections (most originating from overseas-based animal welfare/activist groups) against killing animals like elephants for sport or pleasure on the grounds that they are higher order sensate beings, like chimpanzees, gorillas and dolphins which no-one would consider hunting for sport these days. Hence, according to Douglas-Hamilton (1997) if it is accepted that sport hunting has economic and conservation benefits (despite the strong lobby of ethical and

ecological arguments against it) it is worth considering a form of green hunting which could offer an alternative to actually having to kill the animal.

Darting Safaris / Green Hunts

Dr Paul Bartels of the Wildlife Breeding Resource Centre (WBRC), a working group of the Endangered Wildlife Trust (EWT) has written the following on green hunting:

"Wildlife conservation, research and management procedures often require an animal to be captured by way of chemical immobilization. Reasons for capture include translocation, medical treatment, surveys, micro-chipping, ear-notching, fitting radio-collars, etc. This practice is carried out by private and government biologists, veterinarians and capture teams and is ongoing in many countries around the world. The practice of using a client or sportsman to dart the animal has been in operation for a number of years, however, mostly on an *ad hoc* basis. Wildlife species that have been darted for these purposes include elephants, rhino, lion, buffalo and jaguar (South America). Recently there has been an increase in the practice of Dart Safaris by a number of hunting operators. Not all of these hunts have been conducted for a conservation, research or management reasons. Safari Club International recently made provision for darted animals to be entered into the SCI Trophy Record Book. There are a number of laws, acts and guidelines governing the practices of Professional Hunting and Game Capture as well as governing the welfare of animals. These do, however, vary between countries and provinces and none of them fully address all the issues surrounding Dart Safaris / Green Hunts."

The EWT supports the practice of Dart Safaris with the following provisos:

Only animals that have to be immobilized for conservation, research or wildlife management reasons, should be made available for a Dart Safari.

An experienced and qualified veterinarian must be used to handle the immobilization drugs (legal requirement in RSA) and be present throughout the procedure, i.e. from when the animal is immobilized until its full recovery.

All the relevant laws, acts and guidelines governing hunting, game capture and animal welfare must be adhered to.

The issue concerning when and how often a particular individual animal can be re-darted is described in Points 1 and 5.

No animal should be darted for the sole purpose of 'providing' an animal for a client, i.e. for commercial reasons only.

The Dart Safari should be promoted and carried out by appropriately trained and experienced professionals, with due regard for the safety and wellbeing of the animal, the client and personnel involved. Suitable insurance should also be taken out for both the animal and the client for the duration of the Dart Safari.

The darted animal should be kept in sight during the entire procedure so as to monitor the effects of anaesthesia and to be in a position to render immediate assistance in potential life threatening situations, e.g. lateral recumbence in ruminants, sternal recumbence in elephants, etc. In most cases it is strongly recommended that a radio transmitter be used in the dart and that a helicopter be on stand-by to find lost animals or to render immediate follow-up assistance if required. Human trackers should also be on standby to serve the same function. Darted animals have been known to break out of small camps or to disappear in open countryside. In the case of animals such as elephant, rhino and buffalo the use of a helicopter on stand-by should be considered as mandatory to the safety and success of the Dart Safari.

The client's ability to successfully carry out the Dart Safari should be assessed before the safari by the professionals involved and appropriate training given to the client in the areas found lacking before the safari commences.

Sport Hunting

Gerhard Damm of the African Chapter of Safari Club International (SCI) writes:

"In an evolutionary development which lasted millions of years, primates who were principally gatherers and carrion eaters, developed additional tools, which enabled them to take that all important first step towards development (conquering of the environment through manipulation) and towards being a more effective hunter. The human hunter has - by his or her mental qualities - an entirely different relationship to the animal as compared to the non-human predator. The human hunter enters into this relationship for various reasons, which may be subsistence, spiritual sustenance, the acquiring of a particular trophy etc... In the course of history and development, not only did we develop more effective hunting techniques or weapons, we also - and this means humanity as a whole and not only the hunters - irrevocably changed the environment and its animals; some were domesticated, but all have been touched, influenced and possibly changed through progress. It is understandable that parts of our multi-faceted society reject hunting in general or in a particular form for religious, ethical, social, political and others reasons. This is an act which remains in the sphere of personal liberty of any member of our society and as such is perfectly acceptable. In a tolerant society we also have, however, the right to demand tolerance and acceptance for our desire to hunt."

"Of critical importance for the credibility of hunters within a modern society are ecological motivation, sound conservation practices and ethical behaviour. The entire world is asked today to be more ecologically orientated. The next millennium will, therefore, require not only the hunters, but the world's human population to measure themselves against ecological yardsticks. This will require the hunters to accept potentially more stringent control measures and more regulations. The control mechanisms of informal and formal codes and laws, and most importantly self discipline in pursuing an activity which is by and large uniquely individual and away from the crowds must be strengthened by adequate preparation and peer pressure. **Black sheep or rotten apples in the hunting fraternity must be dealt with as severely, as are such individuals by society at large.**"

"Is it right and defensible to kill 'canned lion' or any other 'canned' animal? Certainly not, at least it cannot and must not be called hunting. Is it right to kill animals at a waterhole or at a bait? Maybe one has to go back to the origins of hunting - and then this question must be answered with a yes, since these are elementary and hunting techniques. However, modern man, hunting with modern rifles with telescopic sights or with high-tech compound bows¹ with a myriad of accessories, must let his or her individual sense of responsibility govern the actions in the field. He or she must reflect on the consequences of these actions and must weigh them accordingly. And last but not least - in our overpopulated world of today legal and informal restrictions in the form of national and international laws and codes of ethics are not only justified but necessary."

Here is the Code of Ethics of SCI (the fastest-growing and most proactive hunting organisation in the world) as published in a promotional leaflet of the African Chapter:

Recognizing my responsibilities to wildlife, habitat and future generations, I pledge:

To conduct myself in the field so as to make a positive contribution to wildlife and ecosystems.

To improve my skills as a woodsman and marksman to ensure humane harvesting of wildlife.

To comply with all game laws, in the spirit of Fair Chase, and to influence my companions accordingly.

To accept my responsibility to provide all possible assistance to game law enforcement officers.

To waste no opportunity to teach young people the full meaning of this code of ethics.

To reflect in word and behaviour only credit upon the fraternity of sportsmen, and to demonstrate abiding respect for game, habitat and property where I am privileged to hunt.

Narrowing the above down to Africa, SCI writes, as their **Code of Sport Hunting Conduct for Africa** "*abide by relevant laws, other legal requirements and recognized codes of conduct; ensure*

¹It is important to remember that in South Africa in 1996 five out of six bow hunts on white rhinos failed dismally and as such should be discouraged strongly

humane practices in utilization of wildlife; use of correct hunting methods and equipment; educate others and recognize needs of indigenous communities regarding sustainable use of natural resources."

The fiasco which raged around canned lion hunting and which caused South Africa huge international embarrassment just prior to the 1997 CITES meeting in Harare, centred around a lack of ethics, blatant disregard of the principle of Fair Chase and the fact that the animal was hunted in an unnatural environment which gave all the advantage to the hunter. Having studied various documents on Fair Chase I find myself most comfortable with the definition as prepared by the African Chapter of SCI which states:

Fair Chase is defined as:

Pursuit of free-roaming animal or enclosed-roaming animal possessed of the natural behavioral inclination to escape from the hunter and be fully free to do so.

Hunt without artificial light and not from a motorized mode of transport.

Hunt in an area that does not by its nature concentrate animals for a specific purpose or at a specific time such as a waterhole, salt lick or feeding station.

No taking of female with dependent young.

I would like to see the following added to the above:

No taking of visibly pregnant females.

On the issue of ethical considerations, I am firmly of the opinion that a sport hunted animal must exist as a naturally interacting member of a wild sustainable population located in an area large enough for it to breed and forage and hunt freely and that it must be sustained within a natural state of balance between forage, predator and prey. If not, then it will be very difficult to argue that the animal was not taken under 'canned' conditions.

In October 1998 conservationists got wind of a planned black rhino hunt. It was brought to our attention through Kwazulu-Natal Nature Conservation Service (KZNNCS), the offer for the black rhino hunt appearing in Volume 18 No 8 of *The Hunting Report*. Various meetings were held and the issue was discussed thoroughly. Although organizations like SCI, REF, PHASA (professional Hunters Association of South Africa), EWT and TRAFFIC had voiced their disapproval around the move to hunt black rhino, the owner of the rhino still went ahead with marketing the hunt overseas. This controversy appeared as an article in *The Star* newspaper in which mention was made that the organizers of the hunt intended to take the authorities to court over their refusal to issue a licence to allow that rhino to be hunted, given that a French national had already offered R400 000 to hunt the rhino. The public discussions which ensued on Radio 702 and Radio Highveld proved once again how one individual, one 'loose cannon' acting independently of existing support structures, codes of conduct and professional advice, can in general, bring huge discredit to conservation and hunting in South Africa.

The possibilities around reopening limited black rhino hunting should be explored given the significant part limited hunting played in the success story around the white rhino. However, it must be continually borne in mind that hunting a rare animal like a black rhino will have to be restricted to clearly abundant animals reaching the end of their lifespan who cannot make a meaningful contribution, genetically speaking, in other areas to which they could have been translocated. Moreover, codes of ethics and the principle of Fair Chase will have to be rigorously adhered to and the animal hunted must exist in a home range whose size is not constrained by factors other purely biological ones thus removing all concerns that it was taken in an area with which it was not *au fait*, where it was not interacting with its own species and was unable to move and forage freely. Most importantly though, rhino owners, hunters and conservationists must embark on a pro-active education and sensitization campaign prior to the reopening of the hunting of black rhino. I envisage that to win over even a small percentage of public support around something as controversial as this may take well over one year and would need a carefully orchestrated yet completely transparent process which encourages constructive dialogue and debate, which listens to and considers different opinions voiced and most importantly, which shows mechanisms to be in place which will ensure that the revenue

generated from the hunt will be used constructively to further black rhino conservation as a whole and to incorporate and integrate communities into that process. In this regard KZNNCS under the very able guidance of Dr George Hughes are light years ahead of any other organisation in this country and their guidance should be sought on this matter and KZNNCS's facilitation thereof, encouraged.

Welfare

The highly controversial television coverage, broadcast by M-NET's *Carte Blanche*, of canned lion hunting and the abuse of captured juvenile Tuli elephants, has focused the spotlight, very intensely I might add, on animal welfare, more specifically, wildlife welfare. Any operator/game capturer/animal dealer/trader who thinks they are still immune to scrutiny and who thumb their noses at the international community and the thought processes of the majority of people out there, is in for a very big surprise. If I was to break society into percentages I would say that 5% are hunters, 5% are animal rightists/activists and 90% "sit on the fence". For a part of my career I have been on the inside of the animal rights/activist world and when one sees the lengths these people will go to show to the world what is happening behind the scenes regarding animal abuse and what massive budgets they have to achieve this with, then you understand that devious operators are all functioning on borrowed time. Why? Because the activists get it right to sway the opinion of the 90% that matter – those that sit on the fence – in their favour.

Under certain circumstance I do not find that too disturbing, as I for one have never condoned cruelty nor the mistreatment of animals. However, what I do have a huge problem with is that the majority of these emerging 'ecoterrorists' in South Africa have no formal biological training whatsoever (that they have extensive PR and media manipulation experience is unquestionable), nor do they wish to attempt to address conservation problems – the real issues - pragmatically. Even worse, they ignore the harsh fact that if wildlife is to survive in Africa it will only survive through having the people who share the land with the animals deriving tangible financial benefits from having the animals around.

I will never understand how overseas based animal welfare organizations who profess to care for both animals and people can continue to waste millions of dollars, sadly sourced from ignorant donors/supporters, to for example, fight to have the hooded and harp seal culling quota off Canada's Newfoundland ice floes reduced, yet fail dismally in the process. What could that money have done in Africa? How much land could that money have bought to extend game parks? How many pragmatic community-based African conservation initiatives could that money have begun? I have seen first hand the lifestyles of these cream poachers and it sickens me that they now target Africa's wildlife, using our charismatic megafauna, like elephants and lions and rhinos to fund raise on the back of. Their arguments are always fundamentally flawed yet because they are driven by highly influential paid support within powerful groups like the European Union, they are able to make the necessary headway. Their international campaigns are designed to shock people into thinking that utilization is abominable and fraught with cruelty, corruption, greed and abuse. The difference between them and us, is that we are poor little dedicated conservationists who every now and then establish a charitable foundation - which must run on the smell of an oil rag - to fund raise for worthy causes whereas they run their operation like a business – bottom line is everything and more!

The only way we will counter the threat they pose to conservation - and here I have no compunction in saying that 'animal rightists/activists pose the single greatest threat to the maintenance of realistic conservation in Africa' - is to inoculate ourselves against their attacks through cleaning up the game industry completely! With South Africa now being part of the global community we have opened ourselves up to scrutiny from the outside. Did the canned lion footage on *Carte Blanche* really go about lions having their welfare compromised? Well, to a certain degree yes it did, but the bigger picture was that a UK-based activist coordinator had master-minded that canned hunting footage would shock the world so, that the footage would compromise the credibility of the South African delegation to CITES in Harare. They knew South Africa's role around the ivory trade deals might have been pivotal (it was in the end) so they tried to sideline us using foul play tactics. In which

month did CITES 1997 (CoP10) take place? **June**. When was the Cook Report on canned hunting released on Carte Blanche? **May 1997**. Coincidence? I know for definite, that it was not.

Lions have been milked and so have elephants. What about rhinos? To date, activists have not yet focused on rhinos but believe you me, that is their next target species and there would be nothing better for them than to source footage of a bow-hunt that went wrong, or of a canned rhino hunt, or of a translocation and trade deal that went wrong (*the plight of the four white rhinos, three of which died, sold at a 'bad auction' in the Free State in 1997 refers*). I think it imperative that rhino owners develop a system which justifies their conservation actions yet which is rigorous enough, that should a transgressor be identified, they, using existing legislative procedures, can deal with the person in a manner befitting the transgression. That would communicate to all that they take the welfare of rhinos seriously, that they will enforce ethical and responsible utilization and most importantly, that they have integrity, issues which they will have to prove their credibility in if they are to win the future wars which will rage around rhinos at CITES.

CITES

South Africa will again be motivating at CITES Cop11, Nairobi 2000 for a resumption of trade in rhino horn with a zero quota. I think it most important that this proposal be carried through by our delegation to CITES as it is important that constructive dialogue between Parties to the Convention on trade in rhino horn, be kept alive. However, I am concerned about a few issues which I think might need addressing before the Parties to CITES finally give the green light. David Newton of TRAFFIC has identified a few potential pitfalls in this regard. They are:

South Africa does not seem to have adhered fully to Resolution Conf. 9.14 which centres around the registration of privately owned rhino horn stocks. If so, why not?

What is being done to register privately owned rhino horn stocks?

How much control actually exists over current stocks?

What mechanisms are in place to prevent the horns from ending up in the illegal trade?

How can we guarantee that horns in the illegal trade are not coming from South Africa?

What systems are in place to ensure the legal and controlled purchase of horn stocks?

With a great percentage of the country's rhinos now occurring on private land, what measures exist to ensure control given that most, if not all of these farms carry the exemption permit?

What mechanism are in place to ensure the tracking of horn using radio-isotope analysis and DNA techniques? This is needed for formal marketing methods.

Only 3 of the 9 Provinces have formal rhino horn registration procedures – why?

Are the other six Provinces addressing this current lack of registration procedure?

Given the new provincial boundaries, how do Provinces know who horns truly belonged to in the past? Has this been addressed?

Why has South Africa not engaged in a process of consultation with Range States, something which those countries whose ivory trade proposals were approved at CoP10 did effectively and with positive results?

I do not see AROA currently linking closely enough with TRAFFIC on trade issues and how best these might be handled at CITES. I think that if more effort was put into developing a solid relationship there, AROA could become a driving force through which rhino horn trade considerations could be pro-actively taken to the DEAT in an attempt to leverage through that channel, what is ultimately desired, that being a regulated, controlled, trade in horn.

CRIMINOLOGY

Wildlife and green environmental criminology should include crime which encompasses poaching, illegal trade in endangered and vulnerable fauna and flora species and other crimes against wildlife and its habitat (Swanepoel, 1998). When defining the illegal trade in endangered species, various concepts merit closer attention. For example, let us consider the term illegal trade which is most important in the context of this document on rhino utilisation considerations. For the purpose of this

paper, the term illegal trade includes the hunting, capture, possession, import, export or transport of any endangered fauna and flora species, as well as the donation or receipt of any such species as gifts (Louw, van Heerden and Smith, 1978).

Rhinos as the target of crime

Since the dawn of the twentieth century and especially since 1970, close to 70% of the rhinos found on earth have been killed. This rapid depletion has left the rhino amongst the world's most endangered mammal species (*see report by Kumleben Commission of Enquiry into the alleged smuggling of, and illegal trade in, ivory and rhinoceros horn in South Africa - published January 1996*). In South Africa however, because of relatively effective regulations, law enforcement and the encouragement of private ownership of rhinos, numbers of both black and white rhinos have not experienced the precipitous decline in numbers which typified most other African countries. In fact, on the contrary, numbers have increased, thus making South Africa a prime target for the illegal trade in rhino horn and leaving this country's rhino populations in an extremely vulnerable position.

The largest markets for rhino horn and other rhino horn products are the Far East, North Yemen and India (Swanepoel, 1998). Belief has it that black rhino horn (sometimes referred to as 'fire horn') is more popular than that of the white rhino (sometimes referred to as 'water horn') because it is smaller and hence contains more power. If we are to fully understand the chemical significance of the rhino horn for Eastern cultures and hence have a better understanding of market dynamics and the economic potential around this resources, then this belief definitely warrants scientific investigation/ratification. Rhino horn is used mainly for the following purposes:

The making of daggers. Also called jambiya, daggers are given to Yemeni boys as initiation gifts and with more than 50 000 boys being initiated annually in Yemen, the demand for rhino horn far outweighs the supply. In fact, this demand promotes the illegal trade in rhino horn and if not addressed through pragmatic conservation/economic approaches, this demand could have horrifying consequences for the survival of rhinos in the new millennium.

Medicinal uses. Rhino horn is a key ingredient in many TCM (traditional Chinese medicine) recipes. The medicinal recipes of China's Pen Ts'ao Kang Mu, a pharmacopoeia written in the sixteenth century, has over 12 000 recipes with rhino products as an ingredient (Swanepoel, 1998). It is important to note that not just the horn is used in TCM, but hide and dried blood too.

An unpublished study done by Dr Hym Ebedes in 1997 refers to a report compiled by Judy Mills of TRAFFIC East Asia entitled *Market under cover : the rhinoceros horn trade in South Korea*, in which Mills describes the use of rhino horn by South Korean doctors. Her findings were as follows:

Doctors who would use the rhino horn if it were legal	83%
Doctors who use rhino horn as medicine	70%
Doctors believing that:	
a) rhino horn is essential medicine	89%
b) rhino horn is effective medicine	60%
c) no substitute exists for rhino horn	34%
Doctors who would prefer rhino horn legalised	37%
Doctors who keep rhino horn in stock	16%

Uses of rhino horn in South Korea are predominantly for

nosebleeds	43%
strokes	22%
CSW balls	18%
fever	6%

In Seoul alone, there are 11 Colleges offering training in Oriental medicine, 7000 licensed Oriental medicine practitioners, 4700 Oriental medicine clinics, 2352 Oriental medicine pharmacies and approximately 20 Oriental medicine hospitals. According to Mills, the other main users of rhino horn over the past 20 or so years have been the Peoples Republic of China, Hong Kong, Japan, Singapore and Taiwan (otherwise known as the Republic of China - ROC). The Peoples Republic of China alone has a population in excess of 1 billion people and Taiwan has a population in excess of 20 million people. The Peoples Republic of China has a 5000 year old civilisation that differs in many aspects from western cultures and practices. Acupuncture for example, is a traditional Chinese method used for curing stress, painful joints and muscular conditions. Rhino horn is used to break fevers, for pain relief and for other therapies. The demand for this product is high and the belief in its efficacy, unquestionable. Given the above in collaboration with the figures cited from Mills, the question which needs to be posed is "*is it possible to convince millions of people, who for decades at least have used rhino horn as an important component of their traditional healing processes, that alternative medicines must be found to substitute rhino horn?*" I believe not, hence pro-active approaches are needed to address the demand for- and supply of, this commodity. Let us **finally** accept that there is a sustained demand for rhino horn by Oriental people in the Far East, by Oriental people living in the USA, by Yemeni craftsmen, otherwise rhinos would not be killed for their horns.

Swanepoel (1998) states that the illegal trade in rhino horn not only affects the species itself but also interest groups involved in it. He further states that victims of illegal trade can be divided into the following categories:

State controlled parks – every taxpayer is a co-owner of the endangered species in a park (for that matter, of every species) and therefore has the right to insist on the protection of the given species. By failing to effectively control the illegal trade in an endangered species like rhinos, an offence is being committed not only against every taxpaying citizen by way of loss of income from nature-based tourism, but also by way of destruction of natural heritage through loss of biodiversity.

Private owners – this group/stakeholder contributes hugely to the current success around rhino conservation in South Africa and incur very heavy individual financial losses when animals are poached and illegally traded. Their interests need to be protected if rhinos are to be viewed as assets worth investing in. The ramifications, from a private land-owners' perspective, of a devaluation of rhinos, especially white rhinos, is all too obvious. In this regard the **HUGE** threat international animal rights and/or activist groups pose to the concept of rhino conservation through responsible utilisation, should not be under-estimated. Their beliefs express emphatically that no trade at all should be allowed, a fundamentally flawed yet emotionally-based tenet around which their argument centres (one which is gaining momentum in South Africa at present) being that 'associated with any form of economic gain around animals/wildlife there is always misuse and abuse'.

Non-governmental organisations (NGOs) – if they have invested donor funds into rhino protection programmes, like the Rhino & Elephant Foundation (REF) did and the African Rhino Owners Association (AROA) and WWF continue to do, they too suffer losses because of illegal trade.

The species *per se* – reduction in numbers through poaching and illegal trade can reduce the reproductive fitness and hence survival capacity of a species and can lead to localised extinctions which in turn implies loss of biodiversity and in the case of pachyderms like rhinos and elephants, loss of keystone species which have an important impact ecologically speaking. This aside, let us not for one second forget the potential cruelty which can so easily accompany the illegal killing of an animal for its horn. Swanepoel (1998) interestingly enough draws attention to the trauma a mortally wounded yet still live rhino must experience when having its horn hacked from its head. This I believe raises a question which needs to be addressed through rigorous international debate: "*with rhino horn being a highly prized and immensely sought after product in the East, would those, who truly have the welfare of rhinos at heart, prefer to have the given product, i.e. the horn, provided through harvesting under controlled conditions from domesticated individuals in a manner which in no way*

compromises the welfare of any individual, or have the horn ruthlessly hacked from a poached animal whose death may have been long and agonizing and which, once dead, is a complete loss to the pool of genetic diversity of that species?"

The protection of South Africa's wild fauna and flora is not only regulated by CITES and other international institutions, but also through the application of various national laws and provincial ordinances. Three acts and four ordinances were applicable before the first general democratic election in 1994. After this milestone event in South Africa's history, nine provinces were established instead of the previous four. This led to an even further diversification of legislation (Swanepoel 1998). Laws and regulations are not applied consistently throughout the country and when one takes into consideration that there is no national legislation enforcing the CITES treaty and that the provincial ordinances in South Africa are not consistent when it comes to the sentencing procedure, the confusion intensifies. This needs to be addressed as uniformity makes law enforcement easier, provides for consensus in trade proposals and facilitates, for the private owner, a more structured environment through which the dynamics around CITES can be understood.

At present, to most private rhino owners, CITES appears to be little other than a nebulous, bureaucratic, obstructive giant. These stakeholders need to make it their business to understand how the Convention works and that, if their interests are pro-actively communicated to CITES through the correct channels, opportunities exist for them to leverage from the Convention what they desire most, which is controlled trade for economic gain to ensure the long-term conservation of rhinos in South Africa.

One issue which will have to be addressed, is that with the proposed legalisation of trade in rhino horn, the tendency exists for illegal trade to still continue in spite of legalisation. An example can be found in the diamond and gold industries. Trade in diamonds and gold is legal, but according to the Central Statistical Service of South Africa, in 1993/1994 665 prosecutions and 503 convictions and 377 prosecutions and 341 convictions for trafficking in gold and diamonds respectively, were documented. Hence, in spite of legalisation, illegal trade still occurs. In an attempt to limit this as much as possible, it is imperative that legalisation be coupled with proper countermeasures to illegal trade like effective legislation and strict control (especially at thoroughfares like seaports, airports and border control posts). In addition to the above, the current criminal justice process also needs to be considered. It is high time that South Africa, a country which prior to 1988 was accused of impassively and impartially standing by while ivory and rhino horn were smuggled across our borders, sent out a message to the international community that the illegal trade in endangered species is not an issue of private or moral interest, but rather a criminal one which, through active policing, will be addressed in the same way as crimes such as rape, abuse, theft and murder.

We South Africans have not done enough to date to educate and influence the nations that use rhino horn. We have not done enough to inform the users of rhino horn, through mediums such as the press, the internet, radio and television that in most countries around the world where rhinos naturally occur, their survival is threatened because of the illegal trade which provides the very product the end-users demand, horn. 't Sas-Rolfes wrote in 1995 that despite the 20-year ban on the trade of rhino horn, the illegal trafficking still continues and is a highly lucrative international trade. This explains why most conservationists feel that the ban on trading in rhino horn, regulated by legislation and conventions like CITES, is not successful. Clive Walker, past Chairman of the Rhino & Elephant Foundation wrote in the Foundation's 1994 journal *"the international ban on trade in rhino horn has probably failed to save one single rhino. Right under our noses, the black rhino, once distributed from Cape Town to the Sudan, has been blasted off the African landscape by poachers using the most successful assault rifle ever made, the AK-47. If the Yemenis and the South-east Asians had had a regular, legal supply of horn back in 1980, there may not have been any need to spend so much money on investigations into the illegal trade. Why not let the Yemenis have rhino horn jambiyas? In spite of the low numbers of black rhinos, we are certainly not past the point of having a non-supply situation. South Africa alone has stocks of black and white rhino horns being held in vaults, which to date, are worthless. Moreover, buying rhinos has become an investment. A legal regular supply of horn could have had the effect of bringing the price down, but the ban has brought about exactly*

the opposite effect, the price has gone sky high, rising, as rhino numbers have declined. Horn is so valuable today that economic incentive makes it worthwhile to risk ones life".

RECOMMENDATIONS

Quo vadis? What pro-active and pragmatic steps could be taken by private rhino owners?

Make contact with the actual users, the herbalists, traditional healers and medical doctors trained to use rhino horn, as well as the man on the street. Determine their needs and develop from this information a business plan which takes into consideration cultural needs; supply and demand scenarios; economic trade-offs; conservation benefits through responsible, ethical, utilization procedures and awareness drives centred around the importance of a controlled, regulated, transparent trade structured such that it optimizes the long-term survival chances of rhinos in Southern Africa.

Conduct independent yet collaborative research around concerns which have been obfuscated to-date (Ebedes, *pers. comm.*), such as whether the potency of the second horn harvested equates to that of the first. If the potency of the second harvest is found not to be equal to that of the first, then I cannot see why, through the use of dietary manipulation, that the potency of the second harvest cannot be adjusted to match that of the first. Much information centres around how valuable the horn is in TCM but little information exists on what compounds exactly in rhino horn the Chinese for example, are after. Moreover, horns being keratin derivatives must carry in them the chemical profile and probably the relative concentrations thereof too, of the minerals and elements of the vegetation community in which the rhino live. Detailed chemical studies focusing on what compounds matter most to TCM doctors and users of the product, would generate data for a model on what dietary requirements would optimize the chemical profile of the horns of rhinos in captivity, from which sustainable harvesting takes place.

Establish and list a company whose sole purpose is to look after the interests of private rhino owners wishing to trade in horn through the provision of a professional service. By this I mean that linked to this company should be an advisory arm or specialist division, to assist new rhino owners with:

- a) the establishment of a management plan around their newly acquired asset(s)
- b) the development and implementation of a security plan to safe-guard the capital invested by the private rhino owner

Transform AROA into a powerful lobbying tool. A profit-driven company will never have the same leverage with for example the DEAT as will an NGO or Section-21 company. The company is there to drive the financial considerations and this should not be confused with the fine art of lobbying whose sole purpose is to bring other stakeholders on board through convincing them that the activities of the company are honest, ethical, responsible and structured so as to be of benefit to all South Africans irrespective of race, colour or creed. AROA should be used as a mouthpiece by private rhino owners to lobby governments, both local and international; to create public awareness around the importance of trade in horn; to facilitate information dissemination / the handling of the media; to fund and facilitate research which is of direct value to the objectives of private owners and in accordance with the business plan of the company and to integrate communities around the sustained management of rhinos.

Lobby government to facilitate the trading, on a limited scale, of existing rhino stocks currently being held by conservation authorities and private owners. Trade of products obtained through poaching is certainly undesirable, but, trade of old accumulated stockpiles and registered horns can actually help reduce poaching pressure. The real issue for conservation is the source of supply of a particular product: was the product obtained from a source that will encourage further poaching, or does the source compete with the providers of freshly supplied (poached) product? The CITES system of trade restrictions and bans is not well equipped to make this critical distinction, and much time is wasted trying to prevent illegal transactions that may actually benefit conservation. The key to managing trade in wildlife products is to exercise control over supply, not over

subsequent transactions. Ironically, trade bans do create a measure of control over commodity trade: they place it in the hands of organised crime. Organised crime syndicates specialise in acquiring monopoly power in the provision of high value, illegal goods. They establish links with corrupt enforcement officials to ensure a high degree of legal immunity and rely on the law enforcement system to keep their competition out of business. As an institution, CITES is hardly capable of thwarting the activities of well organised criminal syndicates that are proficient in smuggling goods like narcotics. This is unlikely to change as CITES has some inherent weaknesses in its institutional design that preclude it from ever being implemented properly. That we have to work with CITES is however a given so we must find ways to protect the supply at source; there is no substitute for adequate field protection.

Send rhinos to key destinations in the Far East so that they can be effectively deployed as ambassadors to shore up the awareness drive around of the plight of their wild relatives both in Africa and Asia.

Establish rhino breeding centres at key destinations in the Far East in order that those countries might be empowered with a mechanism through which they too can contribute towards global rhino conservation by the sustainable provision of horn from 'domesticated' animals. To optimize the fiscal returns on horn harvesting, Milner-Gulland *et al.* (1993) calculated that the rhino should be dehorned once every two years. The philosophy behind this is that the horn regrows and hence provides a sustainable income. Indications are that, as a land use form, returns might be as high as US\$50/ha which should be compared with cattle farming at approximately US\$5/ha (du Toit, 1998). Given this, the following question can be and should be posed to the international community and to all African rhino range States "*why shear the wool of sheep and sell it through a free enterprise system, yet not the horn of a rhino?*"

Do not dehorn wild rhinos in an attempt to make them less attractive to poachers nor to make them more commercially valuable. Berger and Cunningham published a very interesting paper in 1996 in *Pachyderm* entitled "*Is rhino dehorning scientifically prudent?*" Their findings contrasted calf survivorship of horned and dehorned black rhino females in the Namib Desert. They found calf mortality was higher in a dehorned population sympatric with spotted hyenas than it was in a hyena-free area or where mothers were horned. Their study was controversial in that sample sizes were small and not all ecological variables were offered but sometimes, management decisions based on empirically-derived data might be better than those based on no data at all.

Establish a more interactive relationship with the nature conservation departments of the nine provinces; parastatals like KZNNCS, SanParks, Mpumalanga Parks Board, etc., as well as with organizations like TRAFFIC, WWF, RMG, the CITES Implementation Process under way in the DEAT and the Ecological Criminology Justice and Eco-Human behavioral sciences initiative. This is important if the interests of private rhino owners are to be taken to Government, 'watchdog' bodies like the Portfolio Committee for Environmental Affairs and Tourism and ultimately to CITES.

In an attempt to establish even more effective anti-poaching mechanisms, the positive effects of that for rhinos being all too obvious, rhino owners, with specific reference being made here to private rhino owners, may wish to consider establishing their own local informant system. Why not consider paying a fee (annually say) into a Trust which can be properly and transparently administered to ensure that all community members benefit therefrom and not just a select few equivalent to what a poacher would receive, to the local community thereby creating good will and indicating to them that you take the protection they afford your rhinos as seriously as you take the welfare of the animals on your ranch?

Allow the green hunting of rhinos when conditions around the dart safari are in direct compliance with the criteria for an ethical hunt as prepared by Dr Paul Bartels of the WBRC of the EWT and only when a helicopter is present to provide the vitally important back-up service of aerial tracking in the event of the 'trophy being lost in the bush'. One issue which I feel needs to be dealt with is that to provide another safety/catch net to prevent green hunts from going wrong,

there would most likely be a need to improve training of veterinarians and to devise careful criteria for suitable qualifications for a veterinarian to accompany a green hunt. No mention is made of whether pregnant animals are which have to be immobilized for one reason or another, are eligible for green hunting. My advice would be to exclude pregnant animals entirely from dart safaris given that pregnancy is the precursor to live birth in mammals like rhinos and it would be desperately difficult to defend green hunting a pregnant rhino cow when hunting (*which the public associates with death*) and pregnancy (*which the public perceive as a life giving process*) are so mutually exclusive. It is of the utmost importance that it be understood by all that the conservation ideal of green hunting requires that it be used only as an alternative to lethal hunting and not as an additional quota, as that would only cause extra harassment. Linking green hunting to research could further justify green hunting by restricting it to animals which, as Dr Paul Bartels puts it, would be immobilized anyway. Once the animal is down, a radio collar could be affixed in a matter of minutes. If it is an advanced GPS model, the movements of the animal could be recorded at regular intervals with great precision. The hunter will not only have experienced his hunt, taken photographs of his quarry, and acquired his non-lethal trophy, but can be introduced to the excitement of field research. Precise records of the movements across the home range by the individual can be sent to the hunter at intervals as well as observations on the animals general behaviour and ecology. This would allow the hunter to learn more about the natural habits of his 'trophy', thereby hopefully encouraging him/her to develop a more objective interest in the ecology and behaviour of rhinos.

Ensure that the code of ethics of SCI is adhered to at all times during hunts. It is a known fact in South Africa that some rhinos purchased at auctions end up hunted only a few days after the auction. I think this is a potential minefield which needs to be addressed/diffused before it explodes in the press. Animal activists are well aware of this practice and I for one question the ethics of this. A few questions which I believe need to be addressed in this regard are:

- How long does it take a newly introduced rhino to become truly *au fait* with its surroundings?
- Does hunting a newly introduced rhino comply with the principle of fair chase?
- Can the client, the professional hunter and the owner of the rhino justify this as a sport-hunted animal according to the definition of SCI as contained within this paper?
- What criteria are used to determine the final destination of the rhino is an acceptable one and what monitoring is done of the animal(s) subsequent to their introduction?
- Are the sources from which the rhinos are acquired e.g. KZNNCS not turning a blind eye to what is happening out there knowing full well that what they're selling may render financial gain but is it ethical, responsible and can they justify what they're doing to the rest of the world – the 90% factor? If so, what could the political ramifications of this be?

Never ever allow the hunting of rhinos with bows to be reinstated. If the opportunity ever presents itself for an international fiasco around rhinos the equivalent of that which raged around the Tuli elephants at Brits, it will most likely manifest itself in the form of a rhino hunted with a bow. Somewhere something will go horribly wrong. The horror story will leak. The animal activists will have what they love most, a story of horrific cruelty which can be sensationalized and then swiftly capitalized upon by the 'cream-poachers' of this world. The person who will be the most damaged by this will be the owner of the farm on which the hunt took place and South Africa, which subscribes to the policy of sustainable utilization of natural resources, will once again suffer international embarrassment at the hands of international activists.

Private rhino owners should actively campaign all provincial departments to become part of a nationwide initiative to establish mechanisms which allow for the registration of privately-owned rhino horn in accordance with what was written into *Res. Conf. 9.14* of CITES. The assistance of TRAFFIC should be sought in this regard.

Lobby aggressively for legalized trade. Why? Legalizing trade may reduce the transaction costs of illegal trading, but it also reduces the profit margins of illegal traders. If properly designed, a legal trade mechanism should do much more to discourage illegal trade than to encourage it. Who

knows, rhino horn trade and the financial and conservation benefits derived therefrom may overshadow those of hunting and we may find a global consensus that rhino horn trade is better than hunting? Until we initiate the processes and compare the results, we will however, never know.

The above information, I believe, succinctly lays the foundation for what now follows:

A Code of Ethics for the African Rhino Owners Association (AROA):

Members of AROA will

Commit to uphold the animal welfare laws of the country as contained within the Animals Protection Act

Support the environmental policy of South Africa, which is to promote long-term conservation efforts and the maintenance of biodiversity through sustainable utilisation

Commit to breeding goodwill with neighbouring communities through ensuring that in the rhino management plan of the conservancy, structures are described and implemented which result in the communities also benefitting from the conservation of this asset

Commit to participate in the annual rhino census

Commit to participate in, help with and facilitate research programmes as approved in writing by the Board of AROA, into rhino conservation management

Commit to the identification and safe custody of all rhino horns

Commit to allowing spot audits of rhino horn stock(s)

Commit to help combat any illegal trade

Commit to maximisation of the gene-pool through the exchange of males

Commit, as highest priority, to attempt to find conservation-related uses for a live individual prior to deciding on its being made available for hunting

Commit to inform AROA annually and in advance, of any males that will be hunted together with the full history of the given individual

Commit to only allowing a Dart Safari or Green Hunt to take place if:

the hunt complies completely with the protocols as compiled by the Wildlife Breeding Resource Centre – a working group of the Endangered Wildlife Trust (EWT)

*a fully qualified and competent wildlife veterinarian, who is also a member of the Wildlife Group of the South African Veterinary Association (SAVA), is present
a helicopter is on standby*

Commit to allowing sport-hunting of a rhino only if:

the calibre to be used is not less than .375mm

hunting standards comply with those of Safari Club International (SCI), especially with respect to the principle of fair chase

Commit to never allowing the sport hunting of a rhino with a bow

Actively promote non-consumptive markets such as trade in horn from registered stocks and individual animals specifically kept for the provision of horn on a sustainable basis

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