

STRATEGIC WHITE RHINO CONSERVATION IN THE PRIVATE SECTOR

Richard H Emslie
Scientific Officer
IUCN SSC African Rhino Specialist Group

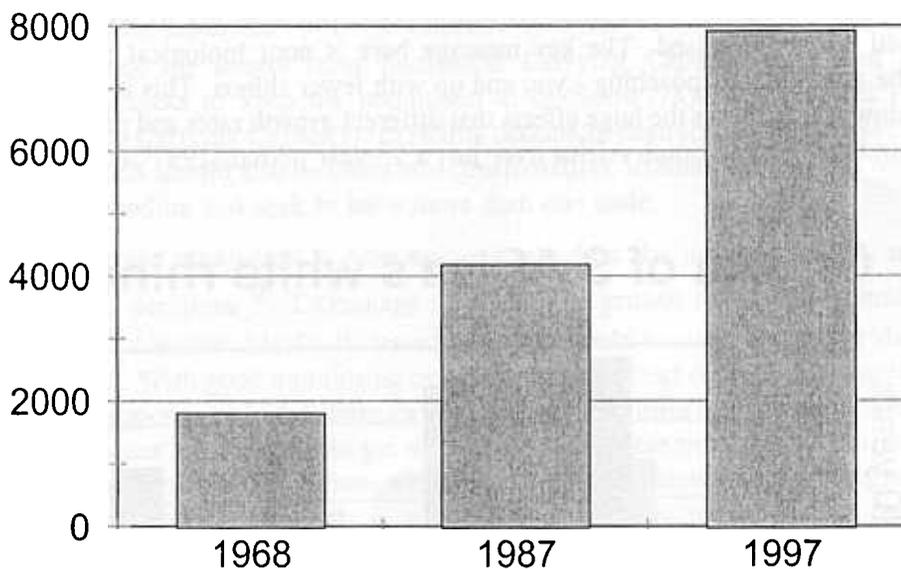
INTRODUCTION

This paper discusses a number of strategic issues affecting the private sector in the light of the draft South African white rhino conservation and sustainable use strategy discussed in the previous paper. It seeks to provide additional background information and highlight items for possible action/discussion by AROA at the following workshop (flagged with *). This paper will also note areas where the Private sector could shoot itself in the foot (flagged with #).

BACKGROUND - HOW HAVE WE DONE ? WHERE ARE WE GOING?

The bar graph below shows the total estimated number of white rhino in South Africa at three periods since 1968.

White rhino numbers in S.Africa



White rhino hunting began in earnest in 1968, and in 1987 Daan Buijs undertook his first survey of numbers of white rhino on private land in South Africa (Buijs 1987). Despite the export of many animals, over-hunting on some properties, and in a few instances the introduction of rhinos into what we now realise was unsuitable habitat, numbers in South Africa still increased from 1968-1987 by an average +4.5% per annum.

Following the decision by the main supplier of white rhinos (the then Natal Parks Board) to let their white rhinos fetch their true economic value on auction, matters improved. Subsequent surveys by Emslie (1994), Buijs and Papenfus (1996) and Buijs (1998) all found that numbers of white rhinos

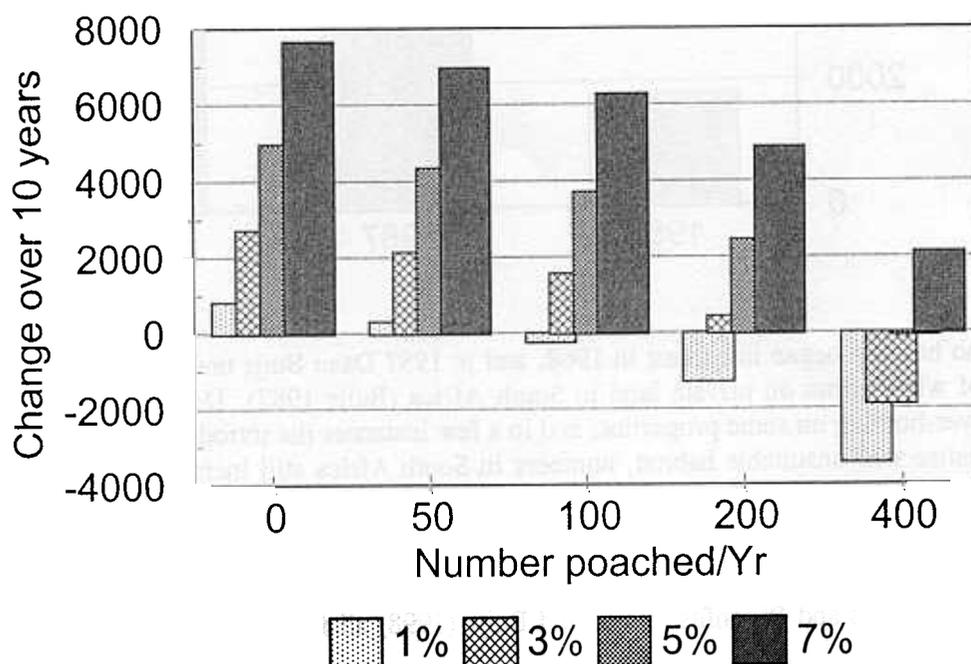
have grown rapidly on private land since 1987. These surveys revealed that the continued increase on private land has been due to both continued buying of additional rhino from the State sector, and is also a direct result of biological growth. Since 1987, South African white numbers have increased by a very creditable +6.7% per annum. This rate of increase is the same attained by South Africa's southern-central black rhino (*Diceros bicornis minor*) metapopulation from March 1990-December 1996 (Adcock 1998). If this growth rate can be maintained, and there is sufficient habitat available, numbers will exceed 15 000 by 2007. In just 10 years we have the potential to increase numbers by almost the same amount that numbers grew over the previous century.

The capacity for population growth in many State-run populations is limited and therefore to reach 15 000, the proportion of white rhino under private and communal ownership will need to increase. Strategically an increase in numbers on private and communal land is also highly desirable. Past experience in both Kenya and Zimbabwe has shown that during times of heavy poaching, black rhinos fared better on privately-managed land. Indeed, the draft South African white rhino strategy recognises that having an increased number of rhinos in additional populations under a full range of management models (i.e. private, community and State) will add strength to the strategy from a security and genetic perspective, and provide an increased buffer against poaching.

ACHIEVING RAPID POPULATION GROWTH

To reach 15 000 white rhinos by 2007 requires both good security on the one hand *and* rapid population growth (as a result of sound biological management built on good monitoring data) on the other. Just as in rugby and football, to succeed in rhino conservation one needs a solid defence (good security). However, as Manchester United so aptly showed last season, a team's chances of winning are greatly enhanced if it has a potent attack capable of scoring a few tries or goals a game (rapid population growth). On the other hand, if you don't often score, you may loose if you concede just one goal. In rhino terms, if population growth is poor, one's ability to withstand an outbreak of poaching will be compromised. The key message here is poor biological management should be viewed in the same light as poaching - you end up with fewer rhinos. This is well illustrated by the bar chart below which shows the huge effects that different growth rates and poaching levels can have on white rhino numbers in South Africa over just a 10-year period (1997-2007).

Growth of S.Africa's white rhino 97-07



This graph highlights the critical importance of maintaining high population growth rates and keeping poaching to a minimum. With no poaching, the difference between a 3% and 7% population growth rate over 10 years is an extra 4 932 rhinos! At current market value this represents an increase in asset value in excess of R 500 million. The graph also shows that with high population growth rates, one's ability to withstand limited poaching is greatly enhanced. Even with heavy poaching of 400/yr, with a 7% annual growth, rhino numbers would still increase by 2 126 over a decade. On the other hand with only 1% growth, such heavy poaching (400/year) would reduce numbers by 3 357 (-42%) over a decade, with extinction of white rhino in South Africa following in a further 13 years.

The graph shows that a small (even just 2%) difference in annual population growth rate translates into many more animals in just a few years, greatly increasing one's ability to withstand poaching outbreaks. Another advantage of rapid growth rates is that loss of genetic diversity is minimised. This is why managing for rapid growth is a critical component of both the new IUCN SSC AfRSG Continental African Rhino Action Plan (Emslie & Brooks *in prep.*) as well as most National rhino conservation strategies. It makes good sense to manage for maximum growth.

The draft South African white rhino strategy (and indeed many National rhino conservation strategies) aims to achieve a medium-term metapopulation growth rate of at least 5%. However this level is the *minimum* desirable acceptable level. Ideally, one wants to maintain higher growth rates than this.

HOW TO ACHIEVE CONTINUED GOOD GROWTH

As any cattle farmer knows pregnant and lactating cows have high nutritional requirements. Rhinos are the same. Rhino cows that are not nutritionally stressed can build up sufficient condition to conceive and successfully raise calves. The key to achieving good biological growth is not to overstock. Although much progress has been made over the last decade in recommending desirable maximum stocking rates for black rhino, there is room for improvement in the assessment of white rhino ecological carrying capacities *. To set maximum desirable stocking rates it is recommended that one first estimates the longer term Ecological Carrying Capacity (ECC) of the area (in rhinos/km²) and then seeks to keep the population at or below 75% of this level (= estimated Maximum Productivity Carrying Capacity). In setting maximum desirable white rhino stocking rates - densities of other grazers should also be taken into consideration. In small populations one should also seek to minimise inbreeding and seek to have more than one male.

Good monitoring of your population is essential as it provides the information you need to make informed management decisions *. To manage for maximum growth one needs accurate population estimates *converted to densities*. Ideally ID based methods should be used to monitor rhino in all but very large populations. With good monitoring one also should collect data on inter-calving intervals, age at first calving, proportion of adult females with calves, condition of animals, home range sizes, mortality rates and causes etc. In order to get most value from these monitoring data, it is necessary to compare the results from your populations with the performance elsewhere. Thus regional synthesis of monitoring data is important, and this is why the draft Strategy recognises the need for Status reporting for at least the major populations *. Just as a manager of a unit trust portfolio uses information on the performance, status and growth prospects of different companies, so should rhino metapopulation "investment" decision making be guided by similar information on rhino populations.

As an example, let us examine how we can use inter-calving intervals (ICI) as a key indicator of reproductive performance (ICI). On average, an ICI of 2¼ yrs is excellent, 2¾ yrs = good, 3 yrs = below average and 4+ yrs = poor. Modelling of a rhino population over 25 years (Emslie 1999) showed that:

- i) the end population size will be four times greater with an ICI of 2 years compared to 5¼ years;
- ii) increasing ICI from 2 to 3a years will halve final population size; and
- iii) doubling ICI from 2 to 4 years will reduce average final population size by 62%.

The proportion of adult F class females (over 7 years) with calves is also a good indicator of reproductive performance. However to be able to compare results between areas it is essential that all areas standardise and use the same age classes. I strongly recommend the use of the standard six age classes used for both white and black rhino. These age classes (p. 27) were derived by Keryn Adcock from Norman Owen-Smith's known-age photographs and form part of the AfRSG's new revised "Sandwith's" ID training course for field rangers (Adcock & Emslie *in prep.*). Apart from judging the size of the animal, horn growth can also give a clue to the age of the animal (p. 28). These six age classes are similar to the RMG black rhino aging series and allows comparison of results with black rhino where there is so much more detailed data.

Another indicator of population health is the condition of the animals. This can be scored on a standardised condition assessment scale from 1-5. The figure on page 29 shows white rhinos at different levels of condition.

Home range sizes of individual rhinos can also be used to give an indicator of the carrying capacity of your area.

As discussed above, monitoring (including population estimation) of rhinos is best done using individual identification (ID) techniques (p. 30). When collecting such information in the field, it is a good idea for staff to keep white rhino ID notebooks in their top pockets which can be used if a rhino is seen. By printing the forms on both sides of the paper and stapling a few forms to make a booklet allows one to make them small enough to fit in a top pocket. One simply fills in the form in the middle of the booklet. This can be torn out and given to the programme supervisor when completed who can quality control the sighting and record the sighting on the reserve database.

Managers should not hesitate to get professional advice from a recognised expert if needed in regards to ecological management, how many rhinos to stock, and biological monitoring.

RHINOS MUST BE ADEQUATELY PROTECTED

As the graph above shows, biological growth on its own is not enough. Although Western Province scored five tries against the Sharks in this season's Currie Cup they still lost, as the Natal Sharks ran in eight. One also needs a good defence, or in the case of rhinos its equivalent - good protection.

Zimbabwe's Raoul du Toit has likened poaching to a fire which needs to be nipped in the early stages, because once it has got out of hand it is very difficult to control. As shown in the graph above we need to keep poaching at current low levels.

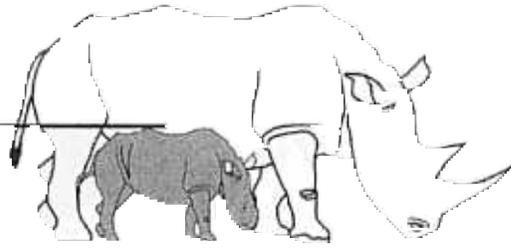
It is self-evident that staff training, leadership, supervision, conditions and equipment are all important. Regular monitoring and tourism activity in your area can also contribute to improved security. Intelligence gathering has also proved itself in Africa and Asia as a very cost effective anti-poaching measure. Increased community involvement and participation in Conservation also seems to have a security benefit.

You wouldn't leave wads of R100 000 in cash lying around unguarded - neither should rhinos be left without security. While a number of private populations have been training their field rangers to a high standard, in others fencelines are checked daily, and in others a regular tourist presence acts as a deterrent to poachers, there is probably room for improvement in a number of populations. *

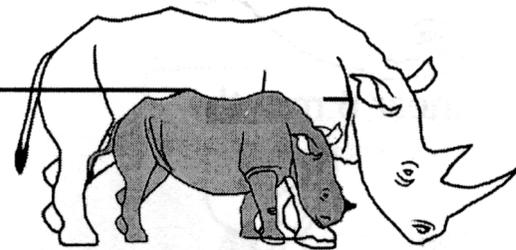
Apart from successfully protecting rhino, in the event of an animal being poached it is desirable to develop a reaction plan with details of how to secure the crime scene, what to do, what not to do, who to contact, their phone numbers, etc. * In this way vital evidence can be collected to maximise the chance of both apprehending the criminals but also getting a successful conviction in court. KwaZulu-Natal Nature Conservation Service's Rod Potter has organised courses dealing with how to react at the rhino crime scene.

White Rhino age classes

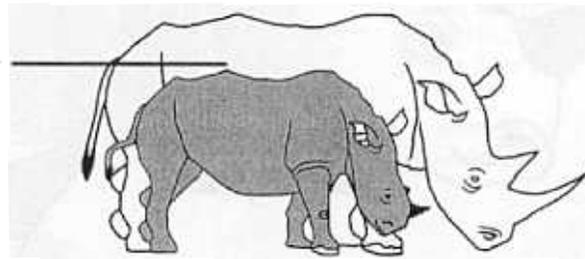
A 0-3 months



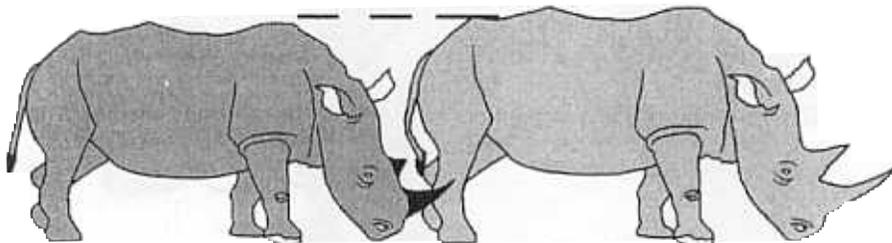
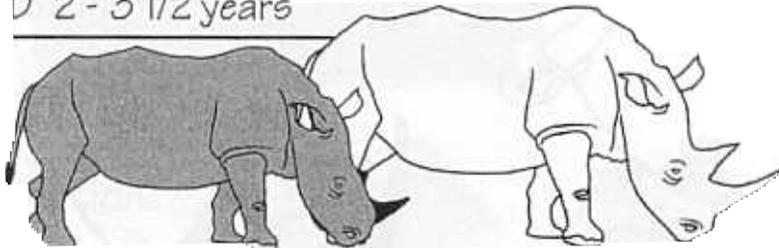
B 3 months to 1 year



C 2 years



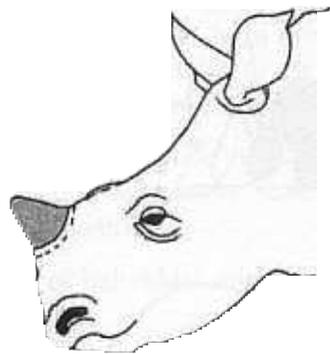
D 2 - 3 1/2 years



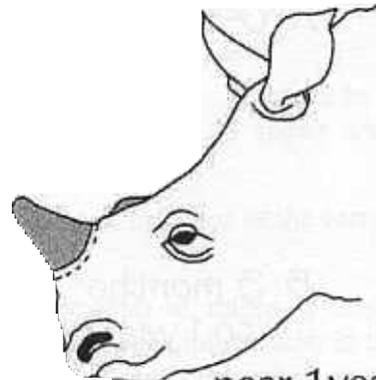
E 3 1/2 - 7 years

F 7 years and over

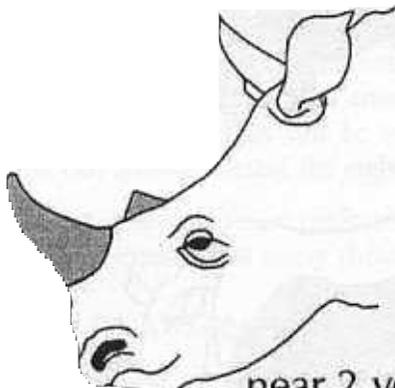
WHITE RHINO HORN DEVELOPMENT



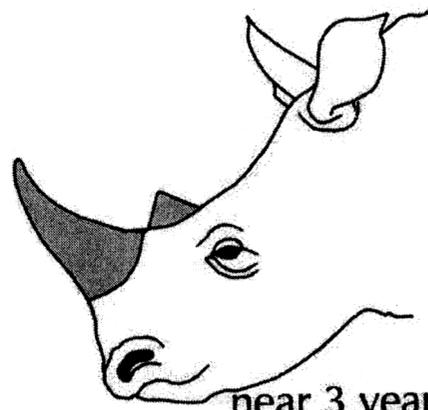
near 6 months



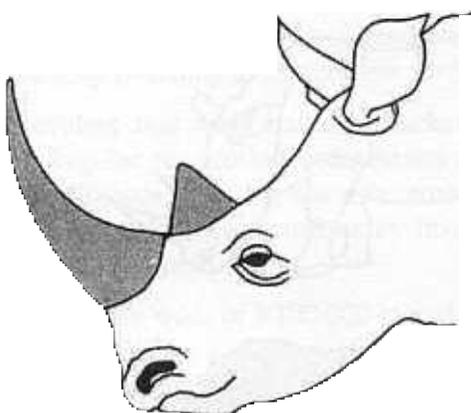
near 1 year



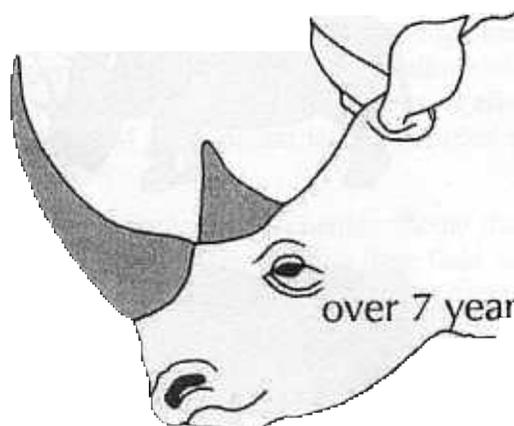
near 2 years



near 3 years

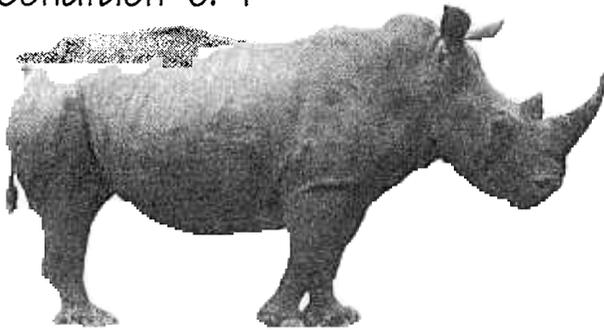


near 5 years



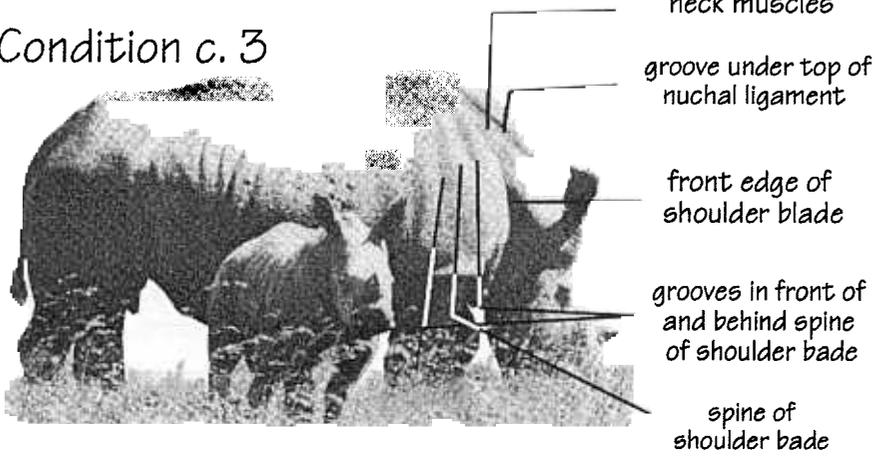
over 7 year

Condition c. 4

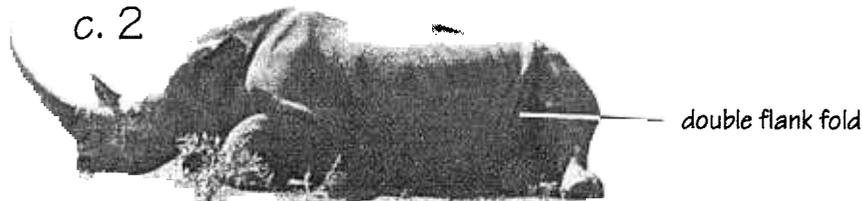


WHITE
RHINO
BODY
CONDITION

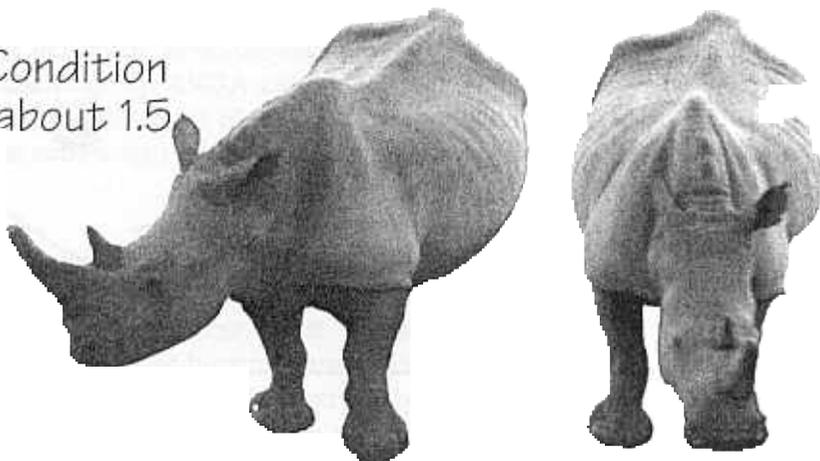
Condition c. 3



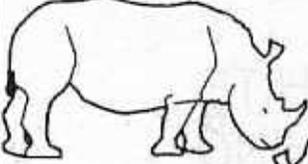
Condition c. 2



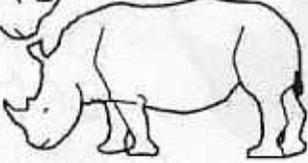
Condition about 1.5



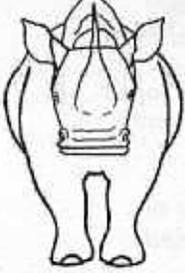
Seen?



Seen?



Seen?

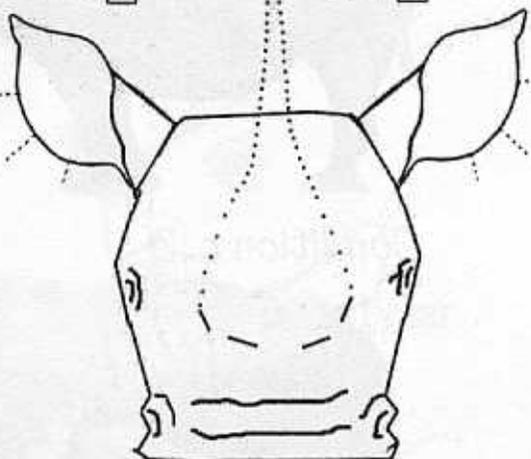


Seen?



WHITE RHINO IDENTIFICATION NOTES
 Reserve: Date:.....
 Observer:
 Location:

Seen?

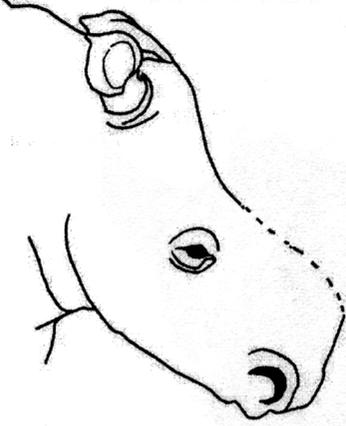
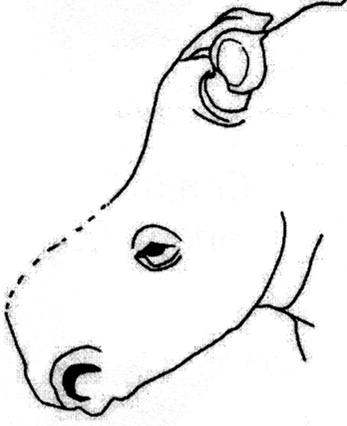


Seen?

Total:		A	B	C	D	E	F
Group Composition	♂						
	♀						
	?						

Sex: ♂ ♀ ? Unknown

Age: A B C D E F

Combined with the recently established precedent of heavy sentencing for those convicted of rhino offences, repeated successful arrests and convictions of rhino poachers and horn dealers can act as a deterrent. Opportunist criminals may seek other easier and less risky ways to make a fast buck.

If my memory serves me right, private sector rhino custodians in both Kenya and Namibia have set up emergency reaction funds. Some private rhino custodians have put some money into the fund which can be used to hire helicopters, etc., if needed in an emergency. In these times of declining government budgets, citizens are having to become more and more self reliant. Maybe setting up an emergency reaction fund is something AROA members should consider. *

RHINO CONSERVATION IS EXPENSIVE - HOW DO WE FUND IT ? HOW DO WE INCREASE INCENTIVES FOR THOSE CONSERVING RHINO?

CITES resolution conf. 9.14 recognises that range States should aim for self sufficiency and sustainability in their rhino conservation efforts, and that recovery plans should include provisions for the reinvestment of revenues derived from use of rhinoceros to offset their high costs of conservation provided it is appropriate for the situation in the country and will not adversely affect rhino conservation in other range States.

Successful rhino conservation is expensive - The draft South African white rhino strategy suggests the private sector can fund it in four possible ways:

- i. Tourism
- ii. Hunting (45 odd white rhino/year)
- iii. Live sales (Record prices now - but future ?)
- iv. Open a limited controlled trade in horn ?

i. Tourism

The draft white rhino strategy recommends the development of tourism to increase profits and create employment opportunities. Many of you are experts in this field, and so I have only added two suggestions AROA may wish to consider.

Strategically it may be a good idea for AROA and the Game industry in general to quantify net benefits of rhinos and game to the economy in terms of employment, economic and social benefits to surrounding areas and FOREX generation. This will help provide the facts to justify game farming to the whole of South African society as a valid form of land use, and in many cases the best form of land use (rather than being seen as a waste or under use of valuable land). *

The draft South African white rhino conservation strategy recognises that the long-term conservation of white rhinos is dependent upon the support and participation of all sectors of the South African population. The challenge for AROA and State conservation agencies is how to promote and facilitate the participation and involvement of communities in the conservation of rhinos. Tourism is one key area where communities can become involved and become aware of the value and benefits of conservation.

ii. Hunting

Whatever we may personally think about rhino hunting, to quote non-hunter Raymond Bonner (1993), this should not cloud a judgement about whether they (hunters and hunting) can be good for conservation. Since white rhino hunting started in earnest in 1968, the number of white rhino in South Africa has more than quadrupled. Currently only about 0.6% of South Africa's white rhinos are hunted per annum, and the number of top dollar hunters appears to be limited to about 40-45 per year. White rhino trophy hunting in South Africa is a good example of a consumptive use of a species that has clearly been sustainable. Hunting has played a role in keeping live sale prices high, and this has also generated much needed revenue benefiting the State sector as well as contributing to

increased incentives for the private sector to conserve rhino. White rhino hunting has also created a number of jobs and generated much needed FOREX for the country.

I am pleased to report that since I did some research for the WCS/WWF international rhino cost-benefit study there has been a major improvement in the controlling and monitoring of hunting. In addition data are being used to quantify the economic benefits of hunting (by AROA, PHASA ? *).

I strongly agree with Clive Walker, that only appropriate and humane hunting methods should be used to hunt white rhino #. Bow hunting of pachyderms is currently outlawed in most provinces with the exception of Free State and possibly Northern Province. In the latter there is currently a moratorium on bow hunting except under special permit on an experimental research basis. AROA members may wish to discuss the possible need to take a stand and unequivocally register their views on this matter if they have not already done so, given that any bow hunting of rhino is likely to bring the whole industry and country into disrepute. *

As part of the process of trying to eliminate illegal trade in rhino horn it would be a good idea to identify all hunting trophies using the standardised system *. All stakeholders involved with hunting in the private and State sectors probably need to get together to discuss this. For the system to work everyone must use the same system. AROA members can obtain more information on and discuss standardised trophy identification with KZNNCS's Rod Potter.

iii. Live sales

The high value of rhinos on live sales has helped stimulate the private sector to conserve rhino. In addition the revenue generated by the State sector has assisted conservation agencies maintain good conservation programmes in the face of declining government grants. Live sales are therefore also critical to the State sector. At the 1999 Hluhluwe auction, record white rhino prices were again obtained. However, the question is how can demand (and price) be maintained or increased in future as more and more surplus rhino become available? Any reopening of trade (called for in the draft white rhino strategy) if it is ever sanctioned by International community at CITES is likely to lead to increased live-sale price (probably increasing total carrying capacity).

International sales of live white rhino must be to approved and acceptable buyers only. #

SOUTH AFRICA'S WHITE RHINO CARRYING CAPACITY - THE MORE LAND AVAILABLE THE BETTER

With such a potential rapid increase in numbers, South Africa's capacity to hold white rhinos will eventually be reached. If poaching can be held in check, then thanks to compounded growth this point could be reached much sooner than most people expect. Sadly, when South Africa's carrying capacity for white rhino is reached, it may be necessary to start culling surplus rhinos (as sufficient large-scale sponsorship to fund the capture and relocation of all surplus animals to suitable secure reserves in other range States is unlikely to be forthcoming). It is expected that economic incentives are likely to strongly influence the rate of further expansion of white rhino onto both private and communal land, and thus govern South Africa's eventual carrying capacity for white rhino. The logical conclusion is that, in all likelihood, the greater the economic incentives for communities and the private sector to conserve white rhino in South Africa, the bigger the probable area of land available to white rhinos, and the more the dreadful day when white rhinos eventually have to be culled (or sterilised) can be postponed.

Some (who know nothing about savanna ecology) may argue that culling of white rhinos is unthinkable and that "nature should instead be left to take its course". Unfortunately, this *laissez-faire* approach to management is not an option, for the one simple reason that most white rhino occur in smaller fenced reserves and not vast open areas where natural processes can be left to function. White rhino expert Norman Owen-Smith (1983) was the first to point out that fencing prevents dispersal of

surplus white rhino (especially subadults) into more marginal peripheral habitat, and thus one of the white rhino's main population regulation process is prevented from operating. In fenced areas, large, long-lived megaherbivores like white rhino also have the ability to temporarily overshoot carrying capacity, with the end result, that if unmanaged, artificially high densities of white rhino can build up in fenced parks if left unchecked. In turn, the resultant artificially high grazing pressure can reduce fuel loads precluding the use of fire, as well as creating conditions favourable for bush encroachment and/or artificially accelerated soil erosion. White rhino carrying capacities should decline in response to these habitat changes, and in time there probably will be a die-off of white rhino and other species. By then it may be too late if the ecological damage has been done. One cannot simply turn the clock back and recover lost topsoil from the sea! If culling is not considered an option when the carrying capacity is eventually reached, then other alternatives such as sterilisation and birth control will need to be considered.

REOPENING TRADE ?

The draft white rhino conservation strategy (Anon, 1999) proposes that South Africa pursues a legal trade in rhino products in accordance with international agreements and conventions including CITES. In his booklet *Rhino Ranching*, Kobus du Toit (1998) also strongly supports the international sale of horn, as does resource economist Michael 't Sas-Rolfes (1995). Most private white rhino owners I have spoken to are also supportive of reopening trade. This view is not shared by all in the international community, however.

I have heard a private rhino owner express the view that horn should be sold as "these are my rhino and I should be able to do what I want with them" #. This view is naive in the extreme. Deciding whether to trade is not only a private sector matter, as the bulk of the rhinos and stockpiles are in State hands. Submitting a downlisting proposal to CITES to allow trade is also a national matter. Furthermore the reopening of trade is an international concern. Some rhino owners seem not to fully appreciate the fact that there can be no legal trade without the approval of a downlisting by two-thirds of the Parties to CITES.

To provide background to any following workshop discussions on trade it is worth briefly looking at some of the main arguments both in favour of and against the reopening of the horn trade.

Some of the reasons advanced in favour of reopening trade include:

Rhino conservation success is linked to budgets, and a trade would generate much needed additional income for both State and the private sector. Trade bans currently limit potential income and hence capacity of resource managers to maintain adequate expenditure. With a trade those paying the costs of conserving rhinos would also get more of the benefits.

A trade would almost certainly stimulate the live sale price, and probably increase the total area of land available for rhino, and hence put back the day when white rhinos may have to be culled. With a trade game farmers could get a compounded return from both biological growth and repeated horn harvesting.

Demand could be supplied legally without killing rhinos (stockpiles and farming)

A trade should increase self-sufficiency and sustainability of South Africa's conservation effort (as called for by CITES Resolution 9.14).

Trade bans drive trade underground, increasing prices and creating and maintaining opportunities for criminal middlemen and corrupt officials (like prohibition did in the USA). Reopening a trade would also send a message to potential speculators that rhinos are not going extinct.

A controlled legal trade would provide opportunities for constructive dialogue with traditional Chinese medicine (TCM) practitioners who would no longer be forced to deal with criminal black marketeers. Some feel that constructive dialogue between conservationists and TCM practitioners may also benefit other endangered species.

Horn is seen by many TCM practitioners as an important ingredient and not a frivolous or luxury item. It is therefore likely to be harder to eliminate demand for horn in the same way that prohibition did not eliminate demand for alcohol in the USA.

Previous consumption levels of horn in TCM were limited, and it has been estimated that such demand could be supplied legally.

If a well-controlled legal trade were to reduce illegal trade, this may reduce poaching pressure and hence field protection costs.

The southern white rhino no longer classified as *Threatened* or *Endangered* but in the *Lower Risk* category of *Conservation Dependant*.

If some substitution of legal African horn for Asian horn occurs in TCM, this may reduce pressure on Asian rhinos.

In southern Africa, many have argued that the more value wildlife has, the more chance wildlife habitat can be maintained and not be transformed (with the obvious spin-off for the conservation of biodiversity).

There are also a number of strong arguments why trade should not be reopened and rhino owners should be aware that many people internationally are against South Africa reopening a controlled horn trade. If South Africa wants to further its draft strategy aim of starting a controlled legal trade - strategically all stakeholders should be fully aware of and attempt to deal with these objections.

Some of the reasons advanced in opposition to reopening a trade include:

While CITES bans on their own clearly failed to halt poaching, the combination of increasing internal bans and international bans under CITES may be starting to work. For this reason, trade bans should be given more time, and indeed the international community should rather re-double its pressure on consumer nations to stop using horn.

If illegal demand declines in response to the combination of internal and international trade bans - poaching pressure could also decline - reducing costs of effectively protecting rhinos in the field. This is important given declining government grants for conservation.

Will it be practically possible to set up sufficient and effective anti-laundering controls at all stages of the proposed trade, and in so doing not put other taxa of rhino in other countries at risk? Trade control is not *only* a South African matter.

Any reopening of trade might create criminal opportunities for corrupt middlemen and government bureaucrats to organise poaching of animals in other range States with a view to trying to launder the horn and pass it off on the international market as legal.

Trade control mechanisms are currently not adequately developed. How would they work? Who would do it? Who would pay for the controls? How professional would the controlling body be?

Would a properly controlled trade be economically viable? Is monitoring of private sector rhinos and their movements adequate? * #

Concern has been expressed over control and registration of horn stocks - especially in the private sector (AROA ?) * #

Corruption, declining budgets in State sector, loss of skilled staff and declining morale in some provincial nature conservation agencies raises questions concerning the future capacity of South Africa to control a legal trade?

While a legal trade could supply previous TCM demand, concern has been expressed that legalising trade may increase new demand among young affluent South-east Asians around the

world, possibly increasing demand to unsustainable levels. If this started a general increase in demand for rhino medicines, then Asian rhinos may be put at increased risk.

Ownership and consumptive use of wildlife and wildlife products are seen as negatively affecting the conservation efforts in some range States (such as India and Kenya) that have been for many years promoting a non-commercial protectionist "wildlife are part of our heritage" education and conservation approach (e.g., Kenya or India).

Concern has also been expressed that the reopening of trade may possibly result in anti-South African tourism campaigns which may hamper tourism and economic and employment growth?

Whether private rhino owners like it or not - it is worth repeating that no legal trade in horn will take place unless it is approved by two-thirds of the international community at CITES. Parties at CITES will have to be convinced the conservation benefits outweigh the possible risks, and that the necessary anti-laundering controls can be implemented so that other taxa of rhino are not put at increased risk. Private rhino owners need to be aware that there is a large body of international opinion that "commercialisation and trade are bad" and "to prevent use is to save" *.

GOING FORWARD - SUGGESTIONS OF POINTS FOR THE WORKSHOP TO CONSIDER

With criticism of the control of private horn stocks, and the need for the private sector to conserve a greater proportion of South Africa's white rhinos in future, the time is opportune for all private owners to work together to build up AROA. With the development of the new draft white rhino conservation strategy, rhino owners also need to determine how they can help implement this strategy. The workshop therefore represents a very timely and important step forward, and provides an opportunity for the private sector to build upon their very successful white rhino conservation efforts over the last decade. *

This paper and the new draft white rhino conservation strategy show that:

Sound white rhino conservation in South Africa requires a partnership between State, private sector and communities.

While all rhino conservationists are seeking long term solutions to ensure the continued survival and growth in numbers of the world's rhino taxa, there are differing opinions as to the strategies most likely to conserve rhinos in the long term. Trade in rhino horn cannot be started at the whim of some private owners. Re-opening trade requires the support of the international community.

There is an urgent need to institute proper monitoring and control of horn stocks (especially in the private sector). *

There is room to improve monitoring, biological management and security in some reserves *

There is a need to develop reaction plans in the event of poaching, and for the private sector to consider the creation of an emergency reaction fund. *

There is a need to set up National white rhino status reporting - at least for major populations *

High standards of animal welfare must be maintained. *

The private sector should seek ways to increase community participation and involvement? *

Rhino owners should together with colleagues in formal state conservation agencies consider what structure a National Consultative Forum to coordinate this strategy should take?

Sustainable use is a means to help fund sound conservation. It is poor PR to make it seem an end in itself.

There are a number of instances (#) where AROA and South Africa could suffer as a result of the actions of a small minority of individuals, provinces, etc. AROA perhaps should consider how to deal with such "loose cannons" whose actions may threaten opportunities for everyone else.

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