

CHAPTER 12

RHINO HORN “THERE IS NEVER THE RIGHT WAY TO DO THE WRONG THING”

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1. ETHICAL DECISION MAKING

Arguably, rhino horn is currently one of the most valuable natural resources.

One could argue that, composed largely of keratin, it has little value other than to the rhino. But rhino horn is in demand as a commodity equal to drugs and weapons for global crime syndicates raising the debate on legalized trade and production of rhino horn. The poaching crisis has also forced the need for management procedures aimed at reducing the risk of poaching.

The global poaching and illegal wildlife trade crisis presents a complex, contentious, dynamic mix of commodification, rampant commercialization, conservation, criminality, corruption, terrorism, globalization, economics, politics, status, tradition, culture, science and sentiment.

“There is never the right way to do the wrong thing”. This saying cuts to the core of ethics, broadly defined as ‘moral guidelines for conduct’.

Ethical or ethics based decision making provides a means of cutting across a wide range of conflicting issues, needs, responsibilities, compromises and societal values aimed at finding acceptable, considered decisions and actions, balancing conservation, management utilization and welfare of the individual and the greater population.

Ethical decision-making allows us to maintain dignity, integrity and humanity, guiding us to decisions and paths, that whilst not always popular, or in line with specific doctrines, are justifiable and enduring and can withstand vigorous examination - and hopefully ensure the future of rhino conservation.

Ethics based debate requires clear definitions and informed decision making - a challenge given the very nature of poaching and organized crime, culture and tradition, and the dangerous polarization of trade and anti-trade camps currently clouding the horn issues.

2. THE RHINO AND ITS HORN

As mentioned above, the horn probably has the most value for the rhino itself. Rhino evolved with their own renewable ‘multi-tool’. The rhino uses its horn for protection and defense, mark territory, display, digging, pushing, lifting and carrying, breaking branches, rolling etc. The rhino mother uses her horn to protect, defend, guide, lift and break branches for the calf.

The horns have a concave base that sit on a bony protuberance (growth point) on the front of the skull. Underlying the horn base is a large network of sinus cavities and supporting structures. Under natural or free ranging conditions, the horn may break off, become detached or damaged as a result of general use, wear and tear, or fighting. Generally, if the damage is not severe, the horn regrows.

Average growth rate of rhino horn in an adult is 2-6 cm annually and 10 -15 cm in a juvenile or sub adult. Wear and tear may exceed annual growth. The rate of growth, condition and shape of the horn varies according the area, habitat, age, nutritional and health status, wear and tear, and interestingly, individual behavior of the rhino.

Rhino can survive with their horns and the horn can be removed (or harvested) without the need to kill the rhino but these are simplistic statements that ignore the complexity of behavior and survival and do not take into account the realities of both poaching, criminal syndicates or the challenges and implication of management practices and horn ' issues'.

3. CURRENT DEVELOPMENTS AND TRENDS IN RHINO POACHING

Some of this is confirmed and some hearsay.

- The taking of younger rhino and smaller horns is on the increase and confirmed by both carcasses of very young (as young as two weeks) rhino with horns removed at poaching sites and the seizure of smaller horns.
- The belief that horn from a live animal; and or a wild animal has greater potency than that of a dead or captive bred animal possibly contributing to defacing and live removal of horn – this needs to be balanced against the use of drugs, poor shooting and unreliable ammunition and weapons.
- Collateral losses \ casualties not included in the poaching statistics but linked to poaching crisis: rhino dying or being compromised by immobilization, panic or poor management (capture, translocation, moving to smaller bomas for protection and intensive management)
- Unidentified or attempted poachings

Defacing refers to the brutal practice of hacking off the face of the rhino in order to get both horns and the horn bases. This practice will be covered by Prof Marais in his presentation.

4. RHINO HORN: MANAGEMENT, HARVESTING AND POACHING DETERRENT\ PROTECTIVE MEASURES

DEHORNING

Dehorning refers to the management process whereby the rhino is chemically immobilized and the horn cut off above the growth point. Dehorning is used as an anti-poaching tool, for harvesting of horn and for management purposes to prevent injuries with relocations and in captive situations.

DEHORNING AS AN ANTI-POACHING MEASURE

Dehorning as an anti-poaching measure has been utilized with very mixed results. Dehorning essentially removes only two thirds of the horn. The horn base and a small portion of the horn remain. This still has value for the poachers. Horn grows continuously and dehorning would need to be repeated.

 INTERVIEWS WITH ARRESTED POACHERS INDICATE THAT:

- The serum that seeps between the horn and horn base is called 'horn pulp' in poaching circles and in demand for 'medicinal' purposes
- Dehorned rhino have been killed by poachers, not just for the horn base but to prevent the need for tracking a dehorned rhino again (risk\ time factor versus reward). Marking the feet with cuts into the pad of dehorned rhino was tried in Zimbabwe as a means of identifying dehorned rhino.
- As a revenge
- The horn from a live and \ or wild animal has greater potency than that of a dead or captive bred animal
- The horn of a rhino that survives a poaching attempt may be in greater demand.
- There are indications that the whole intact horn with concave base is in demand and may demand a higher price
- Removal of horn from a live animal may mean that the rhino will still be around to be reproached when the horn has regrown.

In considering the above points, it should be remembered In the case of highly organized syndicates, horn is ordered and specifications given whilst in other instances the poachers on the ground are not in contact with those higher up the supply chain, or with end users and may be influenced by local culture and beliefs. Opportunistic poachers take what they can get.

The involvement of vets, high schedule immobilization drugs, local capture and wildlife industry operators and the leakage of horn onto the illegal market further complicates the issues around horn.

Dehorning partially transfers the risk from rhino to 'owner ' and there have been a number of armed Contrary to claims that there it is completely safe, there have been a number of deaths associated with immobilization of rhino. If the horn is cut too low, close to or into the growth point, bleeding, infection, cavitation, maggot infestation and compromised or abnormal regrowth may occur. Dehorning for as an anti-poaching tool needs to be repeated every 14 to 18 months. There are costs and practicalities associated with dehorning and due to drug legislation, legal dehorning may only be carried out by a veterinarian.

The aesthetic aspects of dehorning are a consideration. Tourists may not want to see dehorned rhino, whilst others are accepting of the crisis and 'chopped horn' rhino when the reasons were explained.

Dehorning as a protective measure is not a silver bullet or fail proof and has only been successful when combined with a range of other security and anti-poaching measures. It has been effective in high risk and threat situations as a temporary measure.

Dehorning is not practical for large or extensive conservation areas but has some application in smaller managed populations combined with other 'tools'. As with any anti-poaching or protective measure, dehorning may push risk towards properties on which dehorning has not be carried out.

5. DEHORNING AS A HARVESTING TOOL

The same technique is utilized as for poaching deterrent but economically needs to be repeated every 24 months; and is currently being carried out by rhino owners in anticipation of trade opening.

Dehorning is regulated by NEMBA and TOPS.

6. IMPACTS OF DEHORNING ON RHINO

Given that the rhino has a horn for a reason and that the horn is utilized in various ways including maintenance behaviours, it can be assumed that dehorning will have an impact on the rhino.

There is currently insufficient data, time elapsed or scientific studies, to definitively state what the impacts of dehorning are. A dehorned rhino may be more vulnerable to and less able to protect itself against predators.

Dehorning in captive and semi-captive conditions, when all rhino are dehorned, appears to have no significant impact on the welfare or social behavior of the rhino. Problems arise when some are dehorned and others are not.

There is still a need for further, longer term 'trade neutral' research into the impacts of dehorning on 'wild' and captive rhino.

The question has been raised as to whether dehorning has increased the number of defacings but again, inadequate data is available.

7. HORN TREATMENTS

Various techniques involving the infusion of dye, toxic and /or X-ray detectable substances into the horn rendering it less attractive to poachers (and end users) have been attempted.

The best-known and patented procedure developed by Dr van Niekerk and Hems involves the infusion of a dye and anti-parasitic remedy, under pressure into the horn. The dye, the same as that utilized for bank notes in bank heists had some success based on 'smoke and mirrors' and the hype created around the horn treatment. Signage is put on all fences surrounding horn treated properties warning poachers.

There was initial resistance to horn treatments with various reasons given for not supporting the process. But a number of treatments have been carried out and in some areas; reduction of anticipated poaching was seen.

A treated horn seized recently from a poacher indicated that the dye had not spread through the horn and was concentrated only at the infusion site. Further research is needed and underway.

Detractors and critics express concern about the legality of intentionally poisoning a horn that may have negative impacts on the end user but the legal aspects were researched and essentially - you cannot sue your drug peddler for selling you cocaine cut with bicarb when you buying an illegal product and that the toxin used is being used within the regulations under the extra label use allowed on products by veterinarians.

Given the extent and nature of the poaching crisis, horn treatments could be considered as another tool against poaching and a means of devaluing horn and reducing risk. The risks include those of chemical immobilization.

Success of process is dependent 'smoke and mirrors'. As with dehorning, may be effective in small populations; cost and practicality are considerations and may not be effective for larger or extensive areas.

Other techniques that have been tried to devalue horn include drilling multiple holes into the horn and injecting dye. This may devalue horn but carries the risk of weakening the horn structure.

8. HORN REMOVAL

A new and still highly controversial technique has been suggested and is currently under research with mixed results and response whereby the horn growth point or horn bud is completely removed effectively preventing the horn from growing back. There have been some very public 'cow boy attempts' with subsequent complaints to Veterinary Council which have biased public view to this; but further research and development of the technique is being undertaken on by Dr Gerhard Steenkamp with reportedly good results (and under more humane and professional conditions).

Further complicating the horn issues is the question of corruption at local permit issuing level. Permits are required to dehorn or treat a rhino horn. There are firm indications that owner information is leaked from permitting offices to poaching syndicates.

9. INTENSIVE HORN PRODUCTION

Intensive farming of rhino for horn production and harvesting is currently underway. Whilst this may produce a harvestable and ready supply of horn there are other welfare implications and ethical considerations about intensive farming of a non-domesticated animal and activities associated with intensive farming – one being the forced removal of calves to encourage cows to breed more frequently, disease and poaching risks.

As a conservationist with a strong involvement in rhino I would like to see rhino, free ranging in the wild, breeding and doing what rhino should be doing – with their horns intact. But the poaching crisis is forcing us to look at different options, we need to keep open minds, think laterally and remember that 'There is never the right way to do the wrong thing' and we need to push through and find the right way to do the right thing for the right reasons ensuring the continued existence of rhino on the planet.

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