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Endangered Wildlife Trust Perspective on the Dehorning of Rhino

The Endangered Wildlife Trust's (EWT) mission is to conserve threatened species and ecosystems in southern Africa to the benefit of all people.

This statement represents the EWT's position on the dehorning of rhino. The EWT has been actively involved in addressing the poaching of rhinos since April 2010 with the launch of the EWT's Rhino Security Project.

In 2011 the South African Department of Environmental Affairs (DEA) commissioned the EWT to undertake a formal investigation into dehorning of rhino as a possible intervention to curb rhino poaching. The investigation culminated in a report entitled, "*A Study on the Dehorning of African Rhinoceroses as a Tool to Reduce the Risk of Poaching*" (DEA, 2012¹), the findings of which have informed this position paper.

The poaching of rhinos in South Africa has escalated dramatically since 2008, with 83 rhinos being poached that year compared to the 13 poached in 2007. This trend continued in 2009 (122 rhino poached) and 2010 (333 rhino poached) and in 2011, the number of rhinos killed was 448. It would seem that this record will be topped in 2012, as by mid-October, 444 rhinos had already been poached for their horns. As South Africa is home to about 74% of the world's remaining rhinos, it is imperative that measures be put in place to reduce poaching and protect these rhinos.

Dehorning of rhinos

One such possible protection measure is the dehorning of rhinos. The main aim of dehorning is to reduce the amount of horn per rhino available for illegal harvesting, and thus reduce the incentive for poachers to kill the rhino. Dehorning involves the immobilization of the rhino by a suitably experienced veterinarian, with the use of chemical immobilisation drugs. Most of the horn is removed by cutting it off horizontally with a chain saw, without cutting too close to the germinal layer. The immobilisation drug is then reversed with the animal waking up fairly quickly thereafter.

The advantages of dehorning rhinos

Although dehorning is a relatively recent intervention in South Africa, the Namibian and particularly Zimbabwean experience has shown that, while dehorned rhinos are still poached, deaths due to poaching are considered to have been significantly reduced with dehorning in cases where it is combined with effective anti-poaching measures. Rhinos that have been dehorned in Zimbabwe in recent years have shown a 29.1% higher survival rate than rhinos with their horns. It must however, be emphasised that dehorning is only effective where there is also good anti-poaching security.

Disadvantages / risks of dehorning rhinos

Dehorning has been found to be ineffective as a standalone measure and in the absence of stringent security. For example, one of the major factors that contributed to the loss of most of the rhinos in Hwange National Park, Zimbabwe, (90% of which were dehorned), was the lack of adequate security. Dehorning is invasive, contentious and expensive. In addition, there are potential associated impacts and disadvantages associated with the technique, some of which are:

¹ http://www.environment.gov.za/sites/default/files/docs/studyon_dehorning_african_rhinoceros.pdf



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- Immobilizing the rhino poses a risk to the health of the animal, albeit a manageable one.
- The nature of rhino horn anatomy means that the entire horn cannot be removed and the remaining horn stump may still provide sufficient incentive to poach the rhino, especially considering the high prices that rhino horn currently fetches on illegal markets.
- Dehorning is an expensive process which must be conducted by veterinarians, and must be repeated at regular intervals as the horn regrows, should the poaching threat remain. This requires repeated immobilisation of individual rhino, thus increasing the risk to these individuals, although this risk is relatively insignificant when there is a high level of poaching.
- The long-term impacts of dehorning on rhino behaviour, reproductive fitness, population structure and dominance are poorly understood, and further research is needed on these issues. However, in situations where the threat of poaching is high, these impacts may be considered to be secondary to saving the rhinos' lives, in which case dehorning may be considered as an option.
- Dehorning may diminish the appeal of rhino viewing to the tourism sector. This sector is growing and provides thousands of jobs and any adverse impact on this sector must be carefully considered. However, awareness campaigns to inform tourists of the issues could potentially mitigate negative perceptions.
- Dehorning is likely to negatively affect the live-sale value of rhinos, as the lack of horn could affect tourism and hunting industries.
- A further consideration with dehorning is the need for the horns to be safely stored after dehorning, which presents a security risk in itself. There are also costs involved in storing the horns at a secure facility.
- Dehorning is likely to be effective if practiced by all or at least a significant number of the reserves in an area, so as not to simply push the poaching threat to neighbouring reserves.

The EWT position on dehorning

The EWT's position is that dehorning should be considered as one of a suite of interventions to reduce poaching, and is not as a panacea by itself. It is of primary importance that the security of the rhinos must first be addressed. As far as possible, improved and increased security should be the first course of action to protect rhinos. In cases where rhino populations are considered to be at highest risk, it may be preferable to translocate them to a less vulnerable area rather than dehorning them. High risk rhino populations are those that:

- Have poor security
- Are in isolated areas
- Whose locations are known
- In areas where poaching gangs operate

Dehorning can be considered under the following conditions (see figure 1):

- In populations where the threat of poaching is very high.



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- Where dehorning is implemented as an emergency interim measure to buy time to implement improved security measures (although, to reiterate, in the absence of security measures, dehorning may not be effective).
- Where most, if not all, rhinos in an area are dehorned to provide maximal deterrent, and to reduce possible negative behavioural impacts associated with disadvantaging dehorned individuals.
- When dehorning is accompanied by publicity drives to raise awareness that the rhinos have been dehorned.
- In small populations (< 30-40 rhinos), where it is feasible to dehorn all individuals.
- Where rhinos are re-dehorned regularly in the presence of an ongoing poaching threat. In cases where ongoing threat from poachers is significant, re-dehorning every 12-24 months may be necessary, whereas under scenarios of lower threat, intervals of 24-36 months may suffice.
- In large reserves and large populations, rhino dehorning can be implemented strategically, with only the most vulnerable segments of the population, such as those living on the edge of reserves, being dehorned.

In conclusion, a number of factors influence the impact of dehorning on the survival of rhinos. Dehorning should only be considered when absolutely necessary to protect rhinos which are exposed to the highest levels of poaching risk and where the survival of these rhinos is at risk.

Moreover, more research is needed on the efficacy and impacts of dehorning, and any dehorning programme should be accompanied by an effective monitoring system, to improve the understanding of the effects of dehorning on issues such as social behaviour, the ability to protect calves against predators and aggressive bulls and reproductive fitness.

The EWT bases its perspectives on the best available information and data available at the time. Our positions and opinions may change as more information and data become available.



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Figure 1: The circumstances under which dehorning should be considered as a tool for reducing the threat of poaching

https://www.environment.gov.za/sites/default/files/docs/studyon_dehorning_african_rhinoceros.pdf

