

**Dehorning rhinos: why there may be a case for doing it**

①The large bull rhino was about a hundred metres away. The jeep carrying the darting team moved closer, there was a popping sound and the bull twitched and moved off with a dart clearly visible in his upper leg. Within two minutes he was down on his knees. The dehorning team approached quickly, attached blinkers to cover his eyes as a group of ranch hands held him down and attached a rope to his back leg. (dehorn 〈動物の〉角(つの)を取る twitch ぴくぴくする, ひきつる dart 投げ矢 blinker 目隠し革)

②Things then happened quickly but with an assured and rapid routine. The vet monitored the rhino's vital signs - it was sedated but not unconscious and not obviously alarmed or in any pain. The dehorners measured and recorded the circumference and height of the horn and calculated how much to remove.

③Once the measurements were done, a line was carefully drawn around the large front horns and the smaller rear ones leaving about four or five centimetres below the cut line to ensure growth would continue and there would be no damage to the horn bed where it joins the skull. A battery driven saw was then used to cut through the horn, which took little more than a minute. Someone sprayed cold water on to the horn to prevent over-heating and burn injuries.

④Then the horn was off. The team cleaned up the edges of the horn stump and gathered up any shaving or horn dust and sealed them in marked bags. The two horns were measured, weighed and marked with indelible ink. When a rhino is first dehorned DNA samples are taken for future identification. (bed 爪床 (そうしょう) 動物の爪の基部を包む肉 shaving [通例複数形で] 削りくず indelible 〈インクなど〉消えない)

⑤The main horn from the first rhino I saw dehorned weighed 565g, the smaller horn 67g and the shavings 45g. This would be worth an estimated US\$40 000 in Vietnam and China, the main markets for poached ivory horn. That's according to rhino owner John Hume and Kruger Park Chief Ranger Nicholas Funda, who gave me the latest estimates of horn prices. The horns and shavings from dehorned rhino are kept in a bank safe or secure depository.

⑥Dehorning is practised on many South African private reserves and is seen as a way of detering poachers. It has even been used on some parks and conservancies in Zimbabwe and Namibia, according to a study on the effects of dehorning. Dehorning itself is not hugely controversial - what is, is whether the harvested horn should be sold. This will be debated, with vehement arguments on both sides, at the CITES conference in Johannesburg in September 2016. (deter 思いとどまらせる conservancy 資源保護団体, 自然保護管理地区 vehement 熱のこもった CITES = Convention on International Trade in Endangered Species of Wild Fauna and Flora 絶滅のおそれのある野生動植物の種の国際取引に関する条約)

**A ranch full of rhinos**

中略 ⑦Dehorning doesn't totally stop poaching as there is still a band of horn left which could be hacked off. But evidence from peer-reviewed studies has shown that dehorning, when widely advertised, does deter poachers. They will seek to find the most lucrative targets according to a study and will generally avoid farms and ranches with dehorning and good security. Even so, Hume has had attempted incursions by poachers. (peer-review ピアレビュー論文や研究費申請書などの同じ分野の学者による審査)

⑧The horn grows back on the rhinos and Hume dehorns his every 18 months to two years. The same study of dehorning suggests there is no long-term impact of dehorning, as long as all rhinos in an area are dehorned. In the wild, there could be reduced ability of cows to defend calves from predators like hyenas and lions.

⑨But on ranches, there is no obvious change in behaviour or health. When I saw the two dehornings there seemed to be no great trauma involved and the rhino were on their feet and walking away in less than 15 minutes.

⑩The horn is made of keratin, the same substance as hair and fingernails. Rhino horn has been used in Chinese traditional medicine for millennia and now is believed, erroneously, in Vietnam to cure both cancer and hangovers. 中略 (keratin ケラチン, 角質 millennia millennium の複数形 erroneously 誤って, 間違って hangover 二日酔い, 服薬後の副作用)

**The debate rages on**

⑪There is currently a ban on the international trade in rhino horn. As a result the booming demand in China and Vietnam has created a huge and lucrative black market with horn fetching \$60,000 a kg. (fetch 〈荷役〉ある値で売る)

⑫Hume believes that rhinos in the wild will only be saved through a combination of good security and dehorning, at least on private ranches. A few national parks and reserves want to dehorn and there is a lobby for a regulated and closely monitored legal trade in rhino horn.

⑬This view is strongly opposed by many conservation and animal rights NGOs which means that this approach is unlikely to get sufficient support from governments to end the 39 year old CITES ban on trade.

⑭The issue will be debated at the CITES Conference in Johannesburg at the end of September, when Swaziland applies to be allowed to trade in rhino from legal stocks and natural mortality. But no change is remotely possible at this stage. (remotely およそ [全然] (...でない))

⑮Hume and a growing number of rhino breeders and conservationists who support dehorning and controlled trade have a mountain to climb to prove it can be done. What is clear, though, is that dehorning is a useful tool that can reduce the attraction of a rhino to poachers without any ill-effects for the rhino. [Sep 20, 2016/By Keith Somerville (a visiting professor at the University of Kent)/contents by the Conversation and run by CNN]

**★Ice breaker for active discussion**

1. What's your first impression about the article?
2. What can you say about the "medical uses" of rhino horns?
3. Despite the regulations on the international trade of rhino horns, why do you think the problem still exists?
4. What's your opinion about dehorning? Could it deter illegal poaching?
5. Make sentences using the following words: indelible, deter, peer-review, fetch and vehement.