he white rhinoceros is a magnificent beast. Weighing up to 2.3 tonnes, and up to 1.86 metres tall at the shoulder it is second only to the elephants as the largest, heaviest land animal alive on the planet. I have been privileged to be involved in research and management work with the species in South Africa, where the majority of the global population resides. Working up-close provides an insight into the dinosaurial scale and power of the animal. The rapidity with which the most experienced rhino capture team members race away from an awakening rhino shows the respect that we have for their potential. And yet, white rhino are naturally placid beasts. They rarely charge. When challenged they generally stand defensively back-to-back, or do a runner. The black rhino,

To trade, or not to TRADE?

That is, indeed, the question in South Africa right now as a judge recently lifted a moratorium on domestic trade in rhino horn. What does this mean for South Africa's rhinos, and the worldwide conservation crisis? **Jason Gilchrist** answers these questions.

on the other hand, Africa's other rhino species, has a reputation for being bad-tempered and aggressive.

Together, the African rhino populations dwarf the remaining numbers of the three Asian rhino species, the Indian (Greater one-horned), Javan, and Sumatran rhino. Nevertheless, Africa's rhino are in serious trouble. As their predicament worsens, opinions are greatly divided on the best way forward. Things have come to a head with the recent controversy surrounding South Africa's lifting, and un-lifting, of its ban on domestic trade in rhino products. How to save the rhino?

First, let us consider why all five of the world's rhino species are endangered or in serious danger of becoming so. The principal driver of population decline is demand for horn from Asian human populations, at present particularly from Vietnam. This illegal demand is motivated by the desire of an expanding aspirational middle-class to utilise perceived medicinal properties, for which there is little

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INDIAN / GREATER ONE WHITE RHINOCEROS **BLACK RHINOCEROS** SUMATRAN RHINOCEROS **Diceros bicornis** Ceratotherium simum **HORNED RHINOCEROS Dicerorhinus sumatrensis** 5.055 left 20,405 left <100 left Rhinoceros unicornis, 3,333 left

or no evidence and no logic. Rhino horn is composed of keratin, the same protein that forms finger and toe-nails and hair in all mammals, including ourselves. At best, rhino horn is no different in its qualities from water buffalo, yak and cattle horn.

Why am I so concerned about the future of the most populous of the extant rhino species, the white rhino? Being relatively numerous today, does not guarantee a future, even in the short term. As recently as the 1960's, the northern white rhino, a subspecies previously indigenous to Uganda, Chad, Sudan, the Central African Republic, and the Democratic Republic of Congo, was estimated to number 2360 individuals (exceeding the population of southern white rhino at the time). We now have to face-up to the fact that the northern white rhino is, thanks to poaching, functionally extinct, with just three geriatric individuals remaining under 24-hour guard in Ol Pejeta Conservancy in Kenya. As a population they are a reproductive dead-end (notwithstanding a Jurassic Park-style resurrection). In contrast, the southern white rhino recovered from near extinction at the turn of the 20th century to represent a conservation success

JAVAN / LESSER ONE HORNED RHINOCEROS
Rhinoceros sondaicus, 58-61 left

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Strien, T.Dixon, Wikimedia

story, peaking at over 20,000 individuals around 2007-2008.

CONSERVATION

In order to try to protect declining rhino populations, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), an international agreement between governments that aims to ensure that international trade in specimens of wild species does not threaten their survival, placed a ban on international trade in rhino-derived products covering all rhino species in 1977. South Africa, home to the majority of the world's rhino, further imposed a moratorium (ban) on domestic trade (i.e. within South Africa) in rhino horn in 2009, motivated by a substantial increase in poaching in the country, and a consequently declining rhino population. That ban was recently overturned. The lifting of the ban (by the South Africa High Court) has since been appealed by the South Africa Minister of Environmental Affairs, so the ban is, at least temporarily, back in place, but the precedent the series of events has set is worrying.

The main reasons given for reneging the domestic ban on trade

CONSERVATION



in rhino horn in South Africa, by those challenging into force. They claimed that without a financial the existing ban, were twofold. Firstly, it was argued that it was not working - poaching continued continue to keep rhino, and that would be bad news unabated. Secondly, the legislation had been illegally introduced in the first place as the national constitution required public consultation. The call to overturn the There is an prohibition was supported by the South African High Court and the argument that ban was then lifted, prior to appeal.

The push for lifting of the ban, to the rhino is to make allow trade in rhino horn within production of horn South Africa, is of questionable motivation. The court case that sustainable. overturned the ban was instigated by two of South Africa's largest rhino game ranchers. One of the ranchers, John Hume, is reputed to own over 1,100 rhino, and had over 4 tons of rhino horn stockpiled when the ban came the nation that hosts the next CITES congress would

benefit to them from keeping rhino, they would not for rhino. Why would anyone in South Africa want to buy rhino horn? There is only one answer: so that they can ultimately sell it on to the Asian market and make a profit. But selling rhino horn to Asian nations remains illegal (under CITES legislation). the only way to save

Here comes the division bell. In September 2016, the next CITES congress will likely debate lifting the international ban on the rhino horn trade, with South Africa expected to raise the issue. That congress just happens to be hosted by South Africa. By allowing trade in rhino horn within South Africa,

be sending out a message of intent to the world they want to be able to sell rhino horn. However, a change in CITES policy would require a two-thirds majority vote from amongst the 180 CITES nations. At present, it seems unlikely such backing will come to pass.

It would be easy to take a knee-jerk reaction to such a call to legalise international trade in rhino horn. It appears unpalatably wrong, because it encourages trade in species that are becoming endangered, and it facilitates marketing of the rhino horn to, and therefore increased demand from, the very consumers whose desire for horn is currently driving rhino toward extinction. However, there is an argument that the only way to save the rhino is to make production of horn sustainable. Currently rhino are, more often than not, killed for their horn. But rhino horn can be harvested. Keratin grows back in the same way that your fingernails, toenails, and

These are reasonable arguments. But to legalise the trade would represent a huge about-turn in the strategy to save the rhino. And if that aboutturn is approved, it will be very difficult to reverse the decision if it does not prove to be effective in reducing poaching. A whole industry will have invested to sustainably supply and profit from rhino horn, indeed many game ranchers in South Africa are already doing so. But what if CITES vote to legalise the international trade in rhino horn and the demand and consequent poaching therefore increases?

Personally, I baulk at the idea of encouraging trade. After all, there is no medicinal value in rhino horn: it does not cure fever, or cancer, or boost libido, or increase self-esteem via physiological means. Why encourage people to buy a product based upon false pretences; surely that is unethical in itself? Legalising the international trade unleashes profiteers who will actively and falsely market rhino horn in order

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Will rhinos simply survive behind bars rather than out in the wild? Is this what we want?

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to benefit from the financial rewards that it will bring them. Making promises without substance. This will fly in the face of the demand-reduction work of numerous conservation projects, e.g. the Chi Campaign, Education for Nature Vietnam, and I'm a Little Rhino, that have been using education as a tool to encourage informed rejection of the use of rhino by potential current and future consumers in Asia. With evidenced success. All that good work will be undone by opening the floodgates to encourage consumerism of rhino horn.

The polarisation of the debate on how to save rhino is driven by desperation. Existing actions do not appear to be working fast enough to save species. I have been involved in the darting and capture of white rhino, the subsequent horn removal (by chainsaw), and translocation of rhino to safer areas. These are severe responses, for the rhino and the teams responsible, to a pressing problem, and aim to reduce poaching, but they are not long-term solutions. Poisoning horn has also been used as a weapon in the war on wildlife crime, but with limited success. At present, a rhino is poached in South Africa on average every

eight hours. One thousand two hundred and fifteen rhino were killed in South Africa last year alone. At current rates of loss, Africa's rhino could be extinct as soon as 2036. Drastic action therefore becomes an attractive solution. But a dramatic change of direction, opening the international trade in rhino horn, could have fatal consequences for the world's rhino.

By addressing the technicalities that saw the domestic ban overturned, South Africa should see it reinstated in the near future, but the challenge will not go away. Breeders will continue to pressure for trade (John Hume's rhino horn stockpile is estimated to be worth US\$235 million on the Asian black market), and we have to face up to the ineffectiveness of current strategies at reducing poaching, which remains a valid argument for legalising the trade. CITES 2016 is potentially a watershed, with South Africa not only the host of the meeting, but the world's largest caretaker of rhino.

My greatest concern is that rhino survive not as a wild animal, but as a farm animal. Rhino are iconic creatures, and they belong in the veld (the African grasslands) and Asian forests, as a functional component of the ecosystem within which they have evolved. White rhino in South Africa are already being domesticated; kept in fenced enclosures, and fed from troughs like cattle. Is this the future for rhino? Is this the future that we want for rhino?

Jason is an Ecologist. His research has recently focussed on Game Animal Stress Physiology, including work with capture and de-horning of white rhinoceros. His field research has been based in Uganda, Madagascar, and South Africa. He is a lecturer at Edinburgh Napier University.

To read more about ways to save the rhino, including dehorning and spy-cams visit www. jasongilchrist.co.uk/photogalleries_538019.html

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