


It's a classic scene. The dawn sun is coating two barrelbodied black rhinos in a light that is as golden as maple syrup. They are stretching their legs on the open plains and giving us quite the show, but their twitching ears suggest these myopic, curmudgeonly creatures are alert to our presence. All too soon they turn away and hightail it...

We prefer to think of African wildlife roaming the savannah, as in the TV documentaries, free from the restrictions of fencing and human intervention. But these two rhinos are highly protected animals, not only by distant perimeter boundaries but also by heavy, if discreet, security. In this African reserve of 25,000 ha no fewer than 150 men are
employed just to protect the 126 rhinos.
The brutal killing of Africa's rhinos for their horns is on the rise. Last year in South Africa, home to more than three quarters of Africa's total rhino population, it reached epidemic proportions. Some 668 rhinos were poached in 2012. In 2011, 448 rhinos were lost. Compare that to 2007 when only 13 rhinos were poached.

Despite the beefed up anti-poaching patrols and state-of-the-art security measures (drones are being explored), the official death toll is likely be much, much higher by the time you're reading this.

With rhino horn now worth more than its weight in gold, commanding prices as high as $\$ 60,000$ per kilogram on the black market, it's not surprising that this poaching epidemic has spread beyond South Africa. Sophisticated crime syndicates are currently plundering Africa's natural heritage for the rhino horn across the iconic creature's range. And it too is on the increase.

Last September we were taken by field rangers in Kenya's Lewa Wildlife Conservancy - a successful, private sanctuary for rhinos and other species - to see the crumpled carcass of a white rhino shot at close range just a few days earlier. Lewa had no poaching incidents between 1983 and 2009, only for the peaceful streak to end with three killings during 2010 and 2011. Sadly, things escalated even further in 2012, with seven rhinos falling at the hands of poachers. Elsewhere in Kenya the statistics reveal a big spike in poaching in the last few years.

In Namibia's Kunene region, a stronghold of the desert-adapted black rhino that has previously escaped the reach of poachers due to its remoteness, a mother and her calf were found dead this December - the

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mother's horns had been hacked off.
Left unchecked, experts predict poaching at the current rate will outpace the annual population growth rate of rhinos by as early 2016. In future, travelling to Africa to see the Big Four rather than the Big Five is a distinct possibility.

The situation has become so grave that radical solutions are being widely discussed, including the possibility of legalising the trade in rhino horn. In South Africa, former home affairs' chief Mavuso Msimang has been tasked with advising the government on whether the country should petition to lift the ban on horn sales at the next meeting of the Convention on International Trade in Endangered Species (CITES).

There's been a groundswell of opinion

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rhinos last year. Markus Hofmeyr, Kruger's Head of Veterinary Services, has the job of assisting law enforcement officers with postmortem reports.
"My personal view is that if we can make the rhino worth more alive than dead we'll win this war," he told us. He suggested that if private rhino owners were allowed to sell rhino horn this would provide a safety net for wild rhinos in national reserves.
"I don't see why that should be a negative situation. We're living in a changing world and if we don't understand what's driving the demand for horn, and we're not stopping it, we need to think of alternative ways of dealing with it.
"I think we need to view the preservation of rhinos in our national parks and wildlife reserves as the sacred cow - we must not intervene there, we must not dehorn them or try to artificially increase their breeding rates - but we need a buffer and that's where the private guys could come in if they had added value in keeping rhinos."

If legal trading were to go ahead a lot of complex issues would have to be sorted out first. "How you're going to regulate it and ensure the horn you're selling comes from the rhino you say it does and not from another poached animal," he added.

Hofmeyr explains that SANParks' official line is that of the government. In

## WHAT IS RHINO HORN?

Rhino horn is largely made up of keratin - similar to the protein in human nails and hair. The structure is unlike most other horns and is closer to that of a horse's hoof. Horn regrows when cut. It's attached to a bony protuberance on which new cells are produced. Uneven daily wear and tear results in the characteristic cone-shape of rhino horn.

## WHAT DO RHINOS USE THEIR HORNS FOR? <br> Rhinos use their horns when they socialise, rubbing horns to 'greet' other rhinos. Males fight each other, sometimes to the death, using their horns to battle for territory or supremacy. Female rhinos use their horns to protect calves from predators. They also use their horns as an encouraging guide, when calves go ahead of their mother. Black rhinos use their horns when feeding, to snap or shift branches and uproot shrubs.

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2012 South Africa, despite strong lobbying by another pioneering rhino conservation body, Ezemvelo KZN Wildlife, failed to put forward a pro-legalisation bid to CITES. Ezemvelo KZN Wildlife had argued for a restricted trade in horn under which only stockpiled horn from natural mortalities in state reserves could be sold. The move had the backing of well-known rhino conservation guru Sir Ian Player.

Jabulani Ngubane is Ezemvelo KZN Wildlife's Rhino Security Intervention Co-ordinator. We interviewed him just after he'd taken part in a successful sting
operation to arrest one of the top criminals involved in horn trading.
"You need to think differently at a global level how you're going to control supply and demand," he said. "We're confident that if we have a single, central selling organisation to control it, we can make rhinos a resource and supply horns for the next 10 years without touching new horns," he stated.
"As guardians of the species we don't see any alternative. Law enforcement alone is not going to solve the problem.
"The primary aim is to sell our rhino horn below the current price, so you'll
discourage guys from going to the black market. Our proposal is not based on flooding the market, like we did with ivory. The aim is to make a constant supply, maybe three or four times a year at a fixed price so guys can't collude at auction."

Pelham Jones is adamant legalisation is the only way left to save Africa's rhinos. "The CITES ban has not saved the life of a single rhino, but it has helped create a massive illegal market," he noted.

The fact remains however that when a temporary controlled trade in ivory was allowed by CITES five years ago, elephant poaching increased. Wouldn't the same thing happen with rhinos?

Executive director of the Environmental Investigation Agency (EIA) Mary Rice says the legal market in ivory ended up providing "a massive smokescreen" for the illegal trade. "Because it's available everybody thinks it is okay," she suggested. "How can a similar programme now be considered for rhino?"
"Despite the legal trade, up to 90 per cent of ivory on the market was shown to be from illegal sources. This legal ivory was meant to flood the markets, reduce the price of ivory and thereby reduce the need for poaching," she added. But the opposite happened and China failed to abide by assurances that no illegal ivory would be allowed to enter the market.
"A legal trade can only work where there are stringent controls in place," she stated. "How can China possibly be considered a suitable candidate for introducing a similar system for rhino horn?"

Cathy Dean, director of leading rhino charity Save the Rhino International, says her organisation is generally in favour of sustainable use of rhinos because conservation efforts need to generate income to avoid over reliance on donor support.

But she too urges caution: "Save the Rhino has not yet reached a position on the legalisation debate. We're concerned that occasional, one-off sales of elephant ivory have not reduced poaching for ivory. We'd like to see more detail on how the trade will be regulated, how income generated goes back into rhino conservation, and on the likely impact on demand.
"Other pre-conditions include getting a better grip on the abuse and corruption that are contributing to the present high levels of illegal trade, auditing horn stockpiles and increasing the database of horn DNA samples, so that, if trade is approved, legal horns can be distinguished from illegal horns," she concluded.

Save the Rhino's concerns about this last point are already being tackled in South Africa by a ground-breaking initiative to compile a complete database of rhino horn $\triangleright$



A haunting reminder of the rhinos killed by poachers

## DOES RHINO HORN HAVE ANY MEDICINAL VALUE?

There's no evidence that rhino horn cures cancer, though the jury seems to be out on the thorny question of whether it has fever-reducing properties. This debate is due to the complex nature of traditional Chinese medicine (TCM) and some conflicting scientific reports.

Although banned from the official TCM list of medicines in the 1990s, rhino horn in TCM has historically said to have 'cold' properties and is used to treat 'hot' diseases, including a patient's perceived feeling of 'heat' when suffering from fever. In TCM rhino horn is also thought to have a more farreaching role in treatment.

Some scientific reports claim there are no medicinal qualities in rhino horn, although leading rhino expert Dr Richard Emslie, scientific officer for the IUCN Species Survival Commission's African Rhino Specialist Group, explains that western clinical trials have in the past shown it to have a slight feverreducing effect, akin to mild aspirin.

He suggests these properties may have been exaggerated and stresses that there are valid clinical substitutes for rhino horn such as water buffalo horn, various herbs and yak horn.
"The new suggested uses for rhino horn, such as the bogus claim that rhino horn can cure cancer, are worrying," he said.
> "My personal view is that if we can make the rhino worth more alive than dead we'll

win this war"

## MARKUS HOFMEYR,

KRUGER'S HEAD OF VETERINARY SERVICES

## WHAT IS ILLEGALYTRADED RHINO HORN BEING USED FOR?

The main markets for rhino horn are in Asia - in particular Vietnam and China. Rapidly increasing wealth has contributed to the increased recent demand. In China rhino hom has for centuries been used in traditional Chinese medicine (TCM) to cure fevers and reduce inflammation. Contrary to popular belief it's not sold as an aphrodisiac. In Vietnam powdered rhino horn is used in the hope of combating a range of ailments, fuelled by recent rumours that a high-level official was cured of cancer by it. Affluent young people and rich businessmen in Vietnam use rhino horn to try and cure hangovers and to 'detox' after overindulging.

It's also viewed as a status symbol and people make gifts of horn, for example to win favours from an employer.

Rhino horn is also used in Yemen to make the handles of prized daggers called jambiya.

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 commanding prices as high as $\$ 60,000$ per kilogram on the black market, its not surprising that this poaching epidemic has spread beyond South AfricaDNA. The project is headed by Dr Cindy Harper, director of Pretoria University's Veterinary Genetics Lab. When we met her the department's on-going caseload involved processing DNA samples from over 630 poaching incidents. She believes the unique identification system under development is the key to policing a legal rhino horn trade.
"If we want a controlled trade we can't ever allow illegal stuff through the system and this is how we could manage it."

Clearly this issue is as complex as it is emotive. While it continues to divide opinion in rhino conservation quarters and beyond, one thing is indisputable: time is running out for rhinos. We looked back at our travel journal entry for the first time we saw a rhino in the wild. It was in Zimbabwe
in 1994, and we'd marvelled at their "very solid but bizarre shapes". That day our love affair with these amazing animals began. Zimbabwe's rhinos were under threat from poaching even then, but today their numbers in state reserves have all but collapsed, with some populations too small to be viable. In Kruger, if the poaching rates continue experts warn its rhinos could be wiped out as early as 2020. Can we now stand by and witness the rhino's demise, and possible disappearance, across all African range states, without considering this controversial but timely question?

* You can follow Ann and Steve Toon's ongoing rhino photojournalism project at www.africanrhino.org



## How to help

Find out more about rhinos and how you can help them, check out the following websites: ■ Save the Rhino International (www.savetherhino.org) International Rhino Foundation (www.rhinos-irf.org) World Wide Fund for Nature (ww.panda.org) Save the Rhino Trust (www.savetherhinotrust.org)

