



Case study: Rhino horn

WILDLIFE AS FOOD, TONICS, AND MEDICINE

Rhinoceros horn has historically been used in traditional medicine in Asia to treat fever and cerebrovascular disease. More recently, belief in its efficacy in treating other ailments, from hangovers to cancer, appear to have increased demand. The prices that it currently commands – usually cited in the tens of thousands of dollars per kilogram¹ – are disproportionate to any medical utility it might have. Rather, it appears to be conspicuously consumed as a status symbol. Recent surveys of markets indicate a growing demand for rhino horn jewellery and décor items, including traditional libation bowls.²

The present rhino population is a fraction of what there once was. As recently as 1960, there were estimated to be 100,000 black rhinos in Africa.³ Due to heavy poaching from the late 1970s through the mid-1990s,⁴ there are less than 5,000 black rhinos today. Indeed, there are less than 28,000 rhinos of any species left in Africa and Asia. About 70% of the remaining population are southern white rhinos living in the eastern provinces of South Africa, descendants of

a population of less than 100 that has been protected there since the 1900s.⁵

Each rhino carries a small amount of horn,⁶ the global total of which is about 130 tons. Government stockpiles account for at least another 27 tons,⁷ and it is unclear how much is privately held. Demand for this horn has grown greatly over the past 10 years, driving an escalating wave of poaching. In 2014, most (94%) of the poaching in Africa took place in South Africa, and most (68%) of the rhinos poached in South Africa were taken from Kruger National Park, which is contiguous with Limpopo National Park in Mozambique. Many of these rhinos were taken by Mozambican poachers crossing between the two parks.⁸

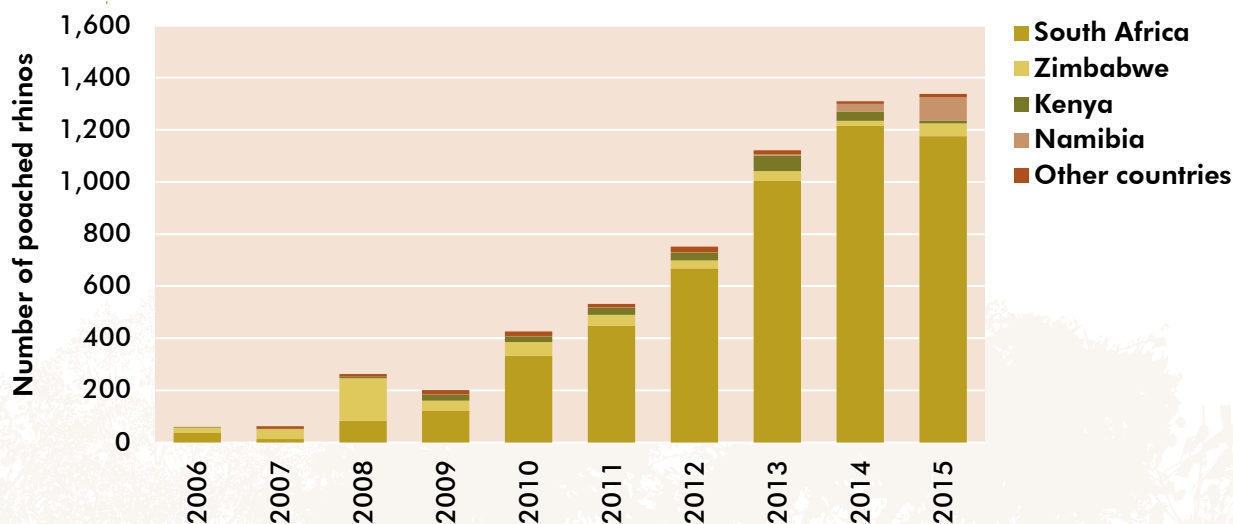
In addition to traditional poaching, the high value of rhino horn has driven a peculiar means of evading CITES controls. The white rhino, which is both the most prevalent species and which carries the largest amount of horn, has been on Appendix I since 2005 throughout its range, besides South Africa and Swaziland.

In these two countries, it has been placed on Appendix II for the exclusive purpose of allowing international trade in live animals (for zoos and the like) and hunting trophies. The latter exception spurred a practice known as “pseudo hunting”, in which staged hunts were held so that horn could be exported to illicit markets.

Beginning around 2006, the number of rhino sport hunting applications for rhinos in South Africa began to increase.⁹ Less than 75 applications were received in 2004 and 2005, but this increased to more than 150 in 2006 and to over 200 in 2007. Between 2007 and 2010, an average of 116 rhinos were hunted in South Africa each year, as compared to between 35 and 70 per year previously.¹⁰

It also became clear that these applications were coming from people with no prior hunting experience, particularly citizens of Viet Nam, a country from which applications had not been received before. The number of sport hunting applications by Vietnamese nationals increased from 84

Fig. 6 Number of rhinos poached by selected countries, 2006-2015



Source: Emslie 2016¹¹

(out of 111 applications) in 2009, to 116 (out of 166) in 2010, declining to 112 (out of 222) in 2011.¹² To address this abuse, the South African government took the extraordinary measure of suspending the issuance of hunting licenses to Vietnamese nationals in 2012.¹³

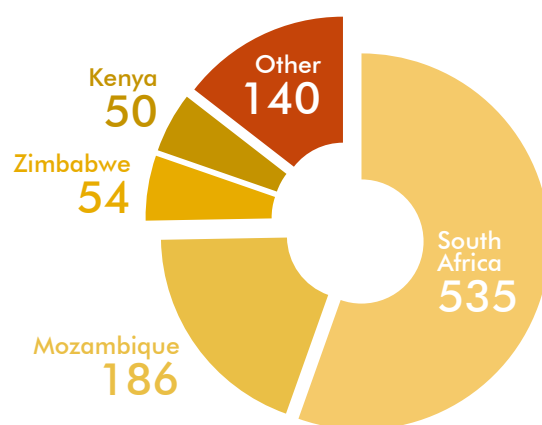
According to CITES documents, in 2011, authorities in the Czech Republic also became aware of hunting applications from other countries not historically associated with the rhino trophy hunting.¹⁴ The investigation revealed that Vietnamese traders (with Czech mediators) had been recruiting Czech citizens to participate in pseudo rhino hunts for several years.¹⁵ During the investigation that followed, at least 24 horns were detected and 16 people in the Czech Republic were indicted.¹⁶

Further investigations revealed an even wider range of participants. In 2012, a Thai national pled guilty to organizing 26 “fake” rhino hunts and acting as an agent for import and export groups and companies in Thailand and Laos.¹⁷ In 2014, citizens of the United States were charged with conspiracy to sell illegal rhino hunts in South Africa, money laundering and trafficking of rhino horns.¹⁸ The investigation has resulted in the arrest of almost three dozen individuals.¹⁹

The value of rhino horn became such that professional criminals with no history in the wildlife trade and no connection to source or destination markets began to explore the market. According to media sources, during 2011 and 2012 members of the Rathkeale Rovers, an Irish Traveler group, raided museums and auction houses and stole rhino horns worth a reported sum of 57 million pounds.²⁰

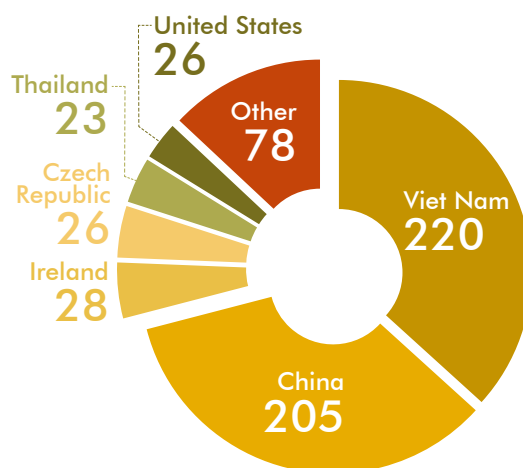
According to World WISE, in order of importance, South Africa, Mozambique, Zimbabwe and Kenya are the main sources of seized shipments (Fig. 1). The United Arab Emirates and European countries (including Slovakia, the Czech Republic, Belgium, Italy and Germany) are indicated as transit countries. And, in order of

Fig. 7 Share of seized rhino horns by country identified as source (kilograms), aggregated 2006-2015



Source: World WISE, conversions applied

Fig. 8 Share of seized rhino horns by country identified as destination (kilograms), aggregated 2006-2015



Source: World WISE, conversions applied

importance, Viet Nam, China, Ireland, Czech Republic, United States and Thailand²¹ are indicated as destination countries (Fig. 2).

Endnotes

- 1 Fieldwork at the end of 2015 has indicated a whole horn retail price of about US\$26,000 per kilogram. See online methodological annex for details.
- 2 See online methodological index for details.
- 3 According to IUCN: <https://portals.iucn.org/library/efiles/documents/1999-049.pdf>
- 4 Tom Milliken and Jo Shaw, *The South Africa – Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates*. (Johannesburg, TRAFFIC, 2012).

5 Richard Emslie, 2012. *Ceratotherium simum*. The IUCN Red List of Threatened Species. Version 2015.2. <www.iucnredlist.org>. Downloaded on 26 August 2015.

6 Some species of rhino have two horns, and some only one. White rhinos, which have two, also have the largest horns, and carry an average of 5.88 kg of horn per rhino. As a result of their size and larger numbers, white rhinos carry 88% of the live rhino horn today. Black rhinos carry 2.65 kg apiece. D. Pienaar, A. Hall-Martin and P. Hitchins, “Horn growth rates of free-ranging white and black rhinoceros”, *Koedoe*, vol. 34, No. 2 (1991), pp. 97-105. All Asian species carry less than one kilogram apiece. See Esmond Bradley Martin and T. Ryan, “How Much Rhino Horn has come onto International Markets since 1970?” *Pachyderm*, vol 13, (1990).

7 In 1994, CITES Resolution Conference 9.14 urged all range States to register, mark and store all horns found (whether from natural mortality, dehorning operations or illegal activity) in a secure location. See



- CITES Res. Conf. 9.14 (Rev. CoP15). At the 2011 IUCN/SSC AfRSG meeting, several range States provided estimates of rhino horn stockpiles, which totaled close to 23,700 kg. See CITES CoP16 Doc. 54.2 Annex. In 2013, Zimbabwe reported 4,961 kg of rhino horn in stockpiles (See SC65 Doc. 43.2 Annex 2). Leaks from these stockpiles can (and have recently been) a source of illicit trade. Thefts from museums and illegal sales from private stockpiles are also on the rise. South Africa Department of Environmental Affairs, *Progress Report: rhino poaching*. Portfolio Committee Meeting, 13 November 2012.
- 8 South Africa Department of Environmental Affairs, *Progress Report: rhino poaching*. Portfolio Committee Meeting, 13 November 2012.
 - 9 See CITES CoP16 Doc54.2. (Rev 1) "Report of the Secretariat": <https://cites.org/eng/cop/16/doc/E-CoP16-54-02.pdf>
 - 10 Ibid and CITES CoP16 Inf. 38. "Rhino Conservation, the Illegal Killing and Hunting of Rhinoceros in South Africa and Comments on the Proposal Submitted by Kenya to Place a Zero Quota for the Export of Hunting Trophies of White Rhinoceros": <https://cites.org/sites/default/files/eng/cop/16/inf/E-CoP16i-38.pdf>
 - 11 Richard H Emslie, Tom Milliken, Bibhab Talukdar, Michael H Knight and Susie Ellis (in prep.) African and Asian Rhinoceroses – Status, Conservation and Trade - A report from the IUCN Species Survival Commission (IUCN/SSC) African and Asian Rhino Specialist Groups and TRAF-FIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP15) (2016).
 - 12 M. Taylor, K. Brebner, R. Coetzee, H. Davies-Mostert, P. Lindsey, J. Shaw, M. t Sas Rolfes, *The viability of legalising trade in rhino horn in South Africa*. Pretoria: Department of Environmental Affairs, (2014).
 - 13 CITES CoP16 Doc54.2. (Rev 1) "Report of the Secretariat": <https://cites.org/eng/cop/16/doc/E-CoP16-54-02.pdf>
 - 14 CITES SC66 Doc. 51.1 Annex 6 "Report of the Secretariat": <https://cites.org/sites/default/files/eng/com/sc/66/E-SC66-51-01.pdf>
 - 15 CITES SC66 Doc. 51.1 Annex 6 and CITES CoP16 Doc54.2. (Rev 1), op cit.
 - 16 CITES SC66 Doc. 51.1 Annex 6, op cit.
 - 17 The Supreme Court of Appeal, 2014. *Lemthongthai v S* (849/2013) [2014] South African Supreme Court of Appeal 131 (25 September 2014).
 - 18 Indictment in United States v. Dawie Jacobus Groenewald et al.: <https://www.fws.gov/southeast/news/pdf/RhinoIndictment.pdf> and <https://www.justice.gov/opa/pr/owners-safari-company-indicted-illegal-rhino-hunts>
 - 19 United States Department of Justice "Operation Crash": https://www.justice.gov/sites/default/files/press-releases/attachments/2014/10/23/operation_crash_summary_october_2014.pdf
 - 20 BBC News, Museum raids gang guilty over Chinese art and rhino thefts, 29 February 2016: <http://www.bbc.com/news/uk-england-cambridgeshire-35667130>
 - 21 It is unclear whether the Czech Republic was a transit or a destination country.

However, authorities indicated that suspects were connected to the Vietnamese community in the Czech Republic.