

OPINIONS

Views expressed in *Pachyderm* are those of the individual authors and do not necessarily reflect those of IUCN, the Species Survival Commission or any of the three Specialist Groups responsible for producing *Pachyderm* (the African Elephant Specialist Group, the African Rhino Specialist Group and the Asian Rhino Specialist Group).

CITES–approved ivory sales and elephant poaching

Daniel Stiles

PO Box 5159, Diani Beach 80401, Kenya; email: kenyadan@kenyacoast.biz

I have been carrying out ivory trade surveys in Africa, Asia, Europe and the USA since 1999, most of them in collaboration with Esmond Martin. Some countries I have surveyed more than once and I have also undertaken longer term research on ivory carvers in South East Asia. This experience has given me insights into the workings of the ivory industry at national and international levels and I would like to share here some of my thoughts on aspects of what is occurring concerning the ivory trade.

There are fundamental problems with the existing situation that lead to unnecessary elephant poaching, which is apparently reaching alarming levels in both Africa and Asia (Anon. 2008a; Kaufman 2007; Mubalama and Bashigg 2006; Blake et al. 2007; Fay 2007; Born Free 2007; Wasser et al. 2007, 2008; Tomlinson 2008). The baseline data report of the MIKE programme, managed under the auspices of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), showed that Central and East Africa had the highest rates of illegal elephant killing in recent years (Anon. 2007). Central Africa is thought to be a region particularly affected by elephant poaching (Hunter et al. 2004; Milliken et al. 2007).

CITES–approved sales

The two sales of legal ivory from southern African countries that the Parties to CITES approved in 1997 and 2002 have received enormous attention in the media and have been linked to elephant poaching by ivory trade opponents. During the first sale, which took place in 1999, Botswana, Namibia and Zimbabwe auctioned off about 50 tonnes of tusks to Japanese dealers at an average price of USD 103/kg, which

raised about USD 5 million. The second sale of 101.8 tonnes from Botswana, Namibia, South Africa and Zimbabwe to Japan and China took place between 28 October and 6 November 2008. The prices in 2008 averaged USD 152/kg and brought in a total of USD 15.4 million. About six tonnes remained unsold, suggesting that ivory demand is not as strong in East Asia as previously thought.

Influence on demand and poaching

CITES banned the international sale of most types of African elephant ivory in 1989 by listing the African elephant in Appendix I. The ban came into effect in most CITES countries in 1990. The Asian elephant had been listed in Appendix I by CITES at its inception in 1976. Ever since the African ivory trade ban, there has been a heated debate on whether CITES should permit limited sales of legal ivory stocks held by selected countries that have demonstrated effective elephant conservation and which have growing elephant populations. The countries that meet these criteria and have requested permission from CITES to sell are all in southern Africa. CITES has therefore downgraded the elephants of Botswana, Namibia, South Africa and Zimbabwe to Appendix II to allow for the ‘one-off’ ivory sales.

Most animal welfare organizations have lobbied hard against these sales, arguing that the sales result in increased demand by the public for ivory, which—it is claimed—leads to a rise in elephant poaching to supply this additional demand. Critics of legal ivory trade also claim that illegal ivory is laundered in some way when legal international sales are allowed. Some have even asserted that a

new elephant holocaust is occurring with poaching at higher levels than those prior to the 1989 CITES ban (Anon. 2008a, 2008b and 2008c; Wasser et al. 2007, 2008). They imply that the CITES-authorized ivory sales are partly to blame for the current high level of poaching (e.g. Anon. 2008b; Anon. 2008d; Born Free Foundation 2007). Most of the evidence for increased elephant poaching is from observations made in small localities with no controlled, systematic sampling over larger areas, or from extrapolations made from assumed ivory smuggling amounts, thus estimates for the scale of regional or continent-wide elephant killing are questionable.

One of the principal aims of the ivory investigations that Esmond Martin and I have been carrying out is to look for any relationship between the CITES-approved sales and changes in demand for ivory (Martin and Stiles 2000, 2002, 2003, 2005, 2008). We have analysed raw and worked ivory price data over time, changes in numbers of ivory workshops and craftsmen in the main ivory-working cities, numbers of ivory pieces seen for sale and numbers of retail outlets selling ivory to determine trends in ivory market scale and demand.

We found clear evidence that ivory market scale and demand dropped everywhere immediately following the 1989 CITES ivory trade ban. In the early 1990s compared to the late-1980s, where data were available, ivory prices were lower, there were fewer ivory workshops and craftsmen and less ivory for sale in fewer outlets. However, we also found that in some places ivory market activity had been picking up since the mid-1990s. This activity seemed to be associated with apparent increases in elephant poaching in range states that exhibited low levels of law enforcement and high levels of corruption and political instability (Dublin et al. 1995).

We identified Thailand, China/Hong Kong, Côte d'Ivoire, Sudan and Egypt as key illegal ivory importing, manufacturing and worked ivory selling countries. Most Central African countries and Nigeria were important in supplying and illegally exporting mainly raw ivory, but also worked ivory. The European Union, the USA and Japan all had static ivory markets at a scale substantially lower than before 1990. These three economic blocks imported and manufactured a majority of the world's ivory up to the 1980s (Cobb 1989). The USA, Germany and Zimbabwe had quite large ivory markets, but most of the ivory was legal.

We asked hundreds of ivory dealers, vendors, craftsmen and workshop managers if the 1999 sales had had any impact on ivory demand. Virtually all who knew of the sales (and not all did) replied that they had had no impact on their business and that the sales had not affected demand. There had been a misunderstanding on the part of some who thought that perhaps international ivory trade was opening up again, but this misunderstanding did not translate into more ivory use or better sales. Anti-trade campaigners argue that allowing the sales sends the wrong signal to the public that buying ivory is acceptable again, but workers in the ivory industry say that they have seen no signs of this.

The ivory price and other indicators that we collected showed no changes associated with the 1999 sales (Stiles 2004a; Martin 2007). Analyses of ivory seizures made between 1989 and 2007, carried out by the Elephant Trade Information System (ETIS) and managed by TRAFFIC, concluded that no evidence could be found to validate the hypothesis that CITES decisions produce 'signals' that lead to increased illicit ivory trade and elephant poaching (Milliken et al. 2007). Rather, the conclusion is that consumers who have a long-standing desire for worked ivory and the economic means to purchase it drive ivory market activity. The CITES-approved sales are irrelevant to market demand.

The economic development that has been seen in South East Asia, Taiwan, Hong Kong and South Korea beginning in the 1980s and in China since the 1990s is the principal factor driving rising demand for ivory. Ivory is a high prestige and auspicious material in Asia, used often for display, religious and gift-giving purposes. Demand is such that when the Chinese government tried to close down the government-owned domestic ivory industry in the early 1990s, it simply led to illegal private ivory factories and trading springing up (CITES 2005; Martin and Stiles 2003). After government crackdowns on illegal ivory working and selling in Thailand beginning in 2002, ivory workshops simply went underground or shifted location (Stiles 2004b, 2009a and 2009b). Both of these countries currently have legislation permitting a regulated, legal ivory market.

Working and selling ivory is legal, with some restrictions, in most countries of the world. With rising demand in parts of Asia and steady demand elsewhere, there has been pressure for ivory deal-

ers and manufacturers to find supplies to satisfy this demand. Legal international supply from Africa has been prohibited since 1990, with the two exceptions, supplying one country in 1999 and two countries in 2008. It is counter-productive to have a situation in which domestic ivory markets are legal while international supply is prohibited. It leads to elephant poaching to satisfy the demand.

Raw ivory prices decreased in most countries in the early 1990s after the CITES ivory trade ban, driven down by reduced demand caused by the stigma created by publicity against buying ivory (Stiles 2004a; Martin and Stiles 2005). The main ivory market countries also had large stockpiles of ivory from the 1980s, which initially satisfied demand. Rising demand for ivory in Asia since the early 1990s resulting from economic development, coupled with domestic ivory stockpile depletion caused raw ivory prices to rise in many Asian countries beginning in the mid 1990s and increasing in the new millennium (Martin and Stiles 2002, 2003; Stiles 2004a; Born Free 2007).

I carried out ivory market surveys for TRAFFIC in Thailand and Vietnam in 2008 and was surprised to find that raw ivory prices had about tripled since earlier surveys in 2001 and 2002 (Martin and Stiles 2002; Stiles 2004b, 2008, 2009a and 2009b). The main factor was ivory seizures cutting off the (illegal) supply from Africa. Similar price rises have been reported from China, where raw ivory seizures have been numerous in recent years (Ling 2007; Milliken et al. 2007). The steep rise in price engendered by the CITES trade ban is further motivating elephant poaching. It will be interesting to see if the 62.3 tonnes of ivory purchased cheaply (USD 144/kg average) by China from southern Africa in the 2008 auctions will have any effect on Chinese raw ivory prices, or on the amount of ivory seized in attempted illicit imports to China in the near future (CITES in litt. to Daniel Stiles, 10 November 2008).

I believe the attention given by opponents of the CITES-authorized southern African sales has diverted attention from the real dilemma, which is how to deal with high ivory demand. CITES Parties agreed in 2007 on a moratorium on international ivory sales from countries that have elephants in Appendix II for nine years that took effect in November 2008. I hope that animal welfare groups and conservationists can work together during this period to lower ivory demand by consumers worldwide, but particu-

larly in Asia. Consumers must become conscious of the fact that buying recently-made ivory contributes to elephant killing. Instead of campaigning against international ivory sales, elephant lovers should now work to scale down domestic ivory markets. It might even be useful to work towards a voluntary temporary closure of domestic ivory markets to enable the design and establishment of a well regulated international ivory trade system. A complementary approach to lower demand would be to levy a 'conservation' or luxury tax on worked ivory items.

I do not believe it is feasible to attain zero ivory demand. Cultural and economic factors are too powerful. I also do not believe that it is desirable to waste resources attempting to achieve a total domestic and international ban of ivory trading. If demand for ivory is minimal, natural elephant mortality and problem elephant control can easily supply demand in a legal manner, putting ivory poachers and smugglers out of business. In fact, these sources could probably supply demand at current levels.

We should remember that the ultimate objective is to stop elephant killing for ivory, not killing ivory trade. The anti-trade movement seems to have lost sight of that fact, and by pressing for a ban on international ivory sales while domestic ivory markets are legal and demand is high, they are actually ensuring that elephant poaching will continue.

Acknowledgements

Save the Elephants, Care for the Wild International, Born Free Foundation, The Humane Society of the United States, TRAFFIC and the National Geographic Society funded the ivory investigations, but the views expressed are those of the author.

References

- Anon. 2007. MIKE Baseline Information. 55th Meeting of the Standing Committee, SC55 Doc. 10.2, The Hague (Netherlands), 2 June. CITES, Geneva.
- Anon. 2008a. Ivory poaching at critical levels: elephants on path to extinction by 2020? Science Daily 1 August.
- Anon. 2008b. CITES Standing Committee releases ivory to China – world's largest illegal market. International Fund for Animal Welfare press release, July 16.

- Anon. 2008c. Elephants under threat. <http://bornfree.org.uk/campaigns/elephants/elephants-under-threat/>.
- Anon. 2008d. Devastating news for African and Asian elephants at SC57, Geneva. Care for the Wild International press release, 15 July.
- Blake S, Strindberg S, Boudjan P, Makombo C, Bila-Isia I, et al. 2007. Forest elephant crisis in the Congo Basin. *PLoS Biol* 5(4): e111 doi:10.1371/journal.pbio.0050111
- Born Free Foundation 2007. Inconvenient But True. The Unrelenting Global Trade in Elephant Ivory. Species Survival Network, Washington D.C. and Born Free Foundation, Horsham, UK.
- CITES 2005. Verification mission related to the control of internal trade in ivory in China. SC53 Doc. 20.1 Annex. Geneva, Switzerland.
- Cobb S. (ed.) 1989. The Ivory Trade and the Future of the African Elephant. Ivory Trade Review Group, Oxford, UK.
- Dublin H, Milliken T, Barnes R. 1995. Four Years after the CITES Ban: Illegal Killings of Elephants, Ivory Trade and Stockpiles. IUCN, Gland, Switzerland.
- Fay M. 2007. Ivory wars: last stand in Zakouma. *National Geographic March*:34–77.
- Hunter N, Martin E, Milliken T. 2004. Determining the number of elephants required to supply current unregulated ivory markets in Africa and Asia. *Pachyderm* 36:116–128.
- Kaufman M. 2007. Study finds surge in elephant poaching. *Washington Post* 28 February.
- Ling X. 2007. Elephant ivory trade in China: recent market surveys. In: Hongfa X, Kirkpatrick C, Liou C, Wasser R, eds., *The State of Wildlife Trade in China*. TRAFFIC East Asia, Hong Kong. p. 4–6.
- Martin E. 2007. To trade or not to trade? *Africa Geographic* October.
- Martin E, Stiles D. 2000. The Ivory Markets of Africa. Save the Elephants, Nairobi, Kenya and London, UK.
- Martin E, Stiles D. 2002. The Ivory Markets of South and South East Asia. Save the Elephants, London, UK.
- Martin E, Stiles D. 2003. The Ivory Markets of East Asia. Save the Elephants, Nairobi, Kenya and London, UK.
- Martin E, Stiles D. 2005. Ivory Markets of Europe. Care for the Wild International, West Sussex, UK, and Save the Elephants, Nairobi, Kenya and London, UK.
- Martin E, Stiles D. 2008. The Ivory Markets of the USA. Care for the Wild International, West Sussex, UK, and Save the Elephants, Nairobi, Kenya and London, UK.
- Milliken T, Burn RW, Sangalakula L. 2007. The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory: A report to the 14th meeting of the Conference of the Parties. CoP14 Doc. 53.2, Annex 1; CITES, Gland, Switzerland.
- Mubalama L, Bashigg E. 2006. Caught in the Crossfire: the forest elephant and law enforcement in a region of political instability, eastern Democratic Republic of Congo. *Pachyderm* 40:69–79.
- Stiles D. 2004a. The ivory trade and elephant conservation. *Environmental Conservation* 34(1): 309–321.
- Stiles D. 2004b. Update on the ivory industry in Thailand, Myanmar and Vietnam. *TRAFFIC Bulletin* 20(1): 39–43.
- Stiles D. 2008. An Assessment of the Illegal Ivory Trade in Viet Nam. TRAFFIC Southeast Asia, Petaling Jaya, Malaysia.
- Stiles D. 2009a. The Elephant and Ivory Trade in Thailand. TRAFFIC Southeast Asia, Petaling Jaya, Malaysia.
- Stiles D. 2009b. The status of the ivory trade in Thailand and Viet Nam. *TRAFFIC Bulletin* 22(2): 83–91
- Tomlinson C. 2007. Elephant poaching said to imperil survival. Associated Press, 7 June.
- Wasser SK, Mailand C, Booth R, Mutayoba B, Kisamo E, Clark B, Stephens M. 2007. Using DNA to track the origin of the largest ivory seizure since the 1989 trade ban. *PNAS* 104(10):4229–4233.
- Wasser SK, Clark WJ, Drori O, Kisamo ES, Mailand C, Mutayoba B, Stephens M. 2008. Combating the illegal trade in African elephant ivory with DNA forensics. *Conservation Biology* 22(4):1065–1071.