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CITES Alone Cannot Solve the Elephant Crisis

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Renewed concerns about the status of elephant populations in parts of Africa and Asia have re-energized the debate over whether international trade bans, implemented under the Convention on International Trade in Endangered Species (CITES), have the desired effect (e.g. Anon 2008; Lemieux & Clarke 2009; Lovett 2009; Styles 2008; Milliken *et al.* 2009). That debate is largely a distraction, however, because it ignores the ultimate problem: the existence of *any* legal markets for elephant ivory, whether international or national.

If the goal of conservation today is to protect elephants from the threats posed by legal and illegal hunting (poaching) for the marketplace, and to promote the recovery of depleted populations, then the only possible solution – actually one of three options suggested by Styles (2008) – is to remove elephant ivory not just from international trade, but entirely from the global marketplace. If ivory had no commercial value, there would be little incentive for anyone to kill elephants for their tusks and one of the major threats to their survival would disappear. In the absence of effective legislation banning all trade and sale of elephant ivory, combined with adequate enforcement and compliance, the poaching of elephants for their ivory will surely continue.

It is now more than 20 years since African elephants (*Loxidonta africanus*) joined Asian elephants (*Elephas maximus*) on Appendix I of CITES, effectively banning (on paper, at least) the international trade in all elephant products, including ivory. At the time, two species of elephants were recognized and listed, the African elephant, *Loxodonta africanus*, and the Asian elephant, *Elephas maximus*. Now twenty years later, at least three and, possibly, more species, are recognized (Eggert et al 2002, Niskanen 2004, Roca et al. 2001). The existence of newly recognized elephant species – all of which would seemingly qualify as "look-alike species" under CITES, has conservation implications that have yet to be formally acknowledged by CITES. In the current text, the generic term "elephants" applies equally to all recognized species.

Since then, however, there have been a number of "one-off" sales of African elephant ivory from populations subsequently downlisted to Appendix II, the first of which occurred in 1999 (Milliken et al. 2009). Following the most recent round of auctions of stockpiled ivory in 2008, there is now a restricted 9-year moratorium on *international* ivory sales (Wasser *et al*. 2010). The moratorium applies only to the four countries whose elephant populations are listed in Appendix II and who were allowed to sell their ivory in 2008: Botswana, Namibia, South Africa and Zimbabwe. The moratorium has not, however, dampened enthusiasm in some quarters for further legal ivory sales. For example, two proposals to downlist additional African elephant populations from Appendix I to Appendix II of CITES, and associated requests for further one-off sales, were considered at the 2010 CITES Conference of the Parties (CoP15) in Doha, Qatar. While they failed to receive the necessary two-thirds majority to be adopted, the two downlisting proposals were supported by a majority of Parties casting votes.

Meanwhile, the poaching of African elephants throughout parts of their range is on the rise and once again depleted elephant populations are in further decline (Styles 2009; Wasser *et al*. 2007, 2008, 2009, 2010; Milliken *et al*. 2009). The conclusion offered by some proponents of the ivory trade is that the current situation provides further evidence that trade bans do not protect elephants. Such conclusions ring hollow because elephant ivory has *never* been removed from the marketplace. There is actually no basis, therefore, for testing the hypothesis that a total

ban on trade *and sale* of ivory would virtually end the poaching of elephants. Perhaps the only real surprise is that the original CITES ban in 1989 appeared to reduce poaching, at least for a while (e.g. Douglas-Hamilton 2009).

Why is poaching and illicit ivory trading (Milliken *et al*. 2009) apparently on the increase again? One suggestion is that as long as the debate over the effectiveness of trade bans continues, the mere possibility that additional elephant populations will be downlisted in the not-too-distant future, and that the current moratorium is time limited, maintains the prospect of renewed markets and international trade in the future. These two factors, plus the continued existence of legal national markets for elephant ivory, provide incentives for commodity speculators (see Wasser *et al*. 2009) and organized crime syndicates (Wasser *et al.* 2008; Milliken *et al*. 2009) to continue poaching, even if some of the ivory must be stockpiled for a while in anticipation of a future payoff.

Another possibility is that those involved in the illegal ivory trade understand their need to demonstrate that putative trade bans do not work. This possibility provides another incentive (from their perspective, merely an investment in the future) to ensure that poaching continues, or even escalates, as it now appears to be doing, despite the existence of the current CITES moratorium on international ivory sales.

Of course, there remain other economic reasons for over-exploiting large, valuable, but slowly reproducing organisms like elephants, as well as great whales and old growth forests. As Clark (1973a, 1973b, 1989) and Caughley (1993) pointed out years ago, it makes more economic sense to deplete such "resources" as quickly as possible and to invest the profits elsewhere than it does to "harvest" (a conservation euphemism) them in a biologically sustainable manner. Viewed in this light, there is really no economic incentive for ivory traders (nor for the whaling and forestry industries) to conserve stocks in the wild. And there will always be sufficient local inhabitants willing to risk life and limb to put food on the table by selling poached elephant tusks to unscrupulous middlemen.

Those who promote continued trade in elephant ivory are also denying the long established lesson of history (see, for example, Geist 1988; Lavigne *et al*. 1996; Lavigne 2006) that, "Species that people use as commodities are inherently at risk of population reduction or elimination" (Norse 1993, p. 81). And, they are ignoring the undeniable human behaviour, so aptly described by Vreeland (1916, p. 97) that, "As long as there are dealers in wild game you will find men who will kill it in spite of anything you may do to the contrary".

Failure to close *all* commercial markets to elephant products virtually guarantees that the poaching of elephants and the illegal trade in ivory will continue. And, no doubt, the tangential and unproductive debate over the pros and cons of international trade bans will continue unabated, further jeopardizing the status of elephant populations in many parts of Africa and Asia.

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References

Anon (2008) Call of the Wild. Is the prohibition of trade saving wildlife, or endangering it? *The Economist*. 6 March 2008.

Caughley, G. (1993) Elephants and economics. *Conservation Biology* **7:** 943-945.

Clark, C.W. (1973a) The economics of overexploitation. *Science* **181:** 630-634.

Clark, C.W. (1973b) Profit maximization and the extinction of animal species. *Journal of Political Economy* **81:** 950-961.

Clark, C.W. (1989) Clear-cut economies. Should we harvest everything now? *The Sciences* **29:** 16-19.

Douglas-Hamilton, I. (2009) The current elephant poaching trend. *Pachyderm* **45:** 154-157.

Eggert, L.S., Rasner, C.A. & Woodruff, D.S. (2002) The evolution and phylogeny of the African elephant inferred from mitochondrial DNA sequence and nuclear microsatellite markers. *Proceedings of the Royal Society B* **269:** 1993-2006.

Geist, V. (1988) How markets in wildlife meat and parts and the sale of hunting privileges, jeopardizes conservation. *Conservation Biology* **2:** 1-12.

Lavigne, D.M. (2006) Wildlife conservation and the pursuit of ecological sustainability: a brief introduction. In: *Gaining Ground: In Pursuit of Ecological Sustainability.* Lavigne, D.M. (ed.) International Fund for Animal Welfare and Univ. of Limerick. Guelph, Canada. pp 1-18.

Lavigne, D.M., Callaghan, C.J. & Smith, R.J. (1996) Sustainable utilization: the lessons of history. In: *The Exploitation of Mammal Populations.* Taylor, V.J. & Dunstone, N. (eds.) Chapman & Hall, London, UK. pp 250-265.

Lemieux, A.M. & Clarke, R.V. (2009) The international ban on ivory sales and its effects on elephant poaching in Africa. *British Journal of Criminology* **49:** 451-471.

Lovett, J.C. (2009) Elephants and the conservation dilemma. *African Journal of Ecology* **47:** 129-130.

Milliken, T, Burn, R.W. & Sangalakula, L. (2009) *The Elephant Trade Information System (ETIS) and the Illicit Trade in Ivory.* Traffic East/Southern Africa. CITES CoP15 Doc. 44.1 Annex. 40 pp.

Niskanen, L. (2004) Report: Sixth meeting of the African Elephant Specialist Group. *Pachyderm* **36:** 136-139.

Norse, E.A. (ed.) (1993) *Global Marine Biological Diversity.* Island Press, Washington, DC.

Roca, A.L., Georgiadis, N., Pecon-Slattery, J. & O'Brien, S. (2001) Genetic evidence for two species of elephants in Africa. *Science* **293:** 1473-1477.

Styles, D. (2008) Africa: The ivory trade need not endanger the elephant. *The East African* <www.allafrica.com/stories/printable/200809010552.html>.

Styles, D. (2009) CITES-approved ivory sales and elephant poaching. *Pachyderm* **45:** 150-153.

Vreeland, F.K. (1916) Prohibition of the sale of game. In *Conservation of Fish, Birds and Game*. Committee of Fisheries, Game, and Fur-bearing Animals. Commission of Conservation Canada. Proceedings of a meeting of the committee, Nov. 1 and 2, 1915. The Methodist Book and Publishing House. Toronto, Canada. pp 93-99.

Wasser, S.K., 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. *Proc. of the National Academy of Sciences* **104:** 4228-4233.

Wasser, S.K., Clark, W.J., Drori, O., Kisamo, E.S., Mailand, C., Mutayoba, B. & Stephens, M. (2008) Combating the illegal trade in African elephant ivory with DNA forensics. *Conservation Biology* **22:** 1065-1071.

Wasser, S.K., Clark, B. & Laurie, C. (2009) Forensic tools battle ivory poachers. *Scientific American* **2009(July):** 69-74.

Wasser, S., Poole, J., Lee, P., Lindsay, K., Dobson, A., Hart, J., Douglas-Hamilton, I., Wittemyer, G., Granli, P., Morgan, B., Gunn, J., Albers, S., Beyers, R., Chiyo, P., Croze, H., Estes, R., Gobush, K., Joram, P., Kikoti, A., Kingdom, J., King, L., Macdonald, D., Moss, C., Mutayoba, B., Njumbi, S., Omondi, P. & Nowak, K. (2010) Elephants, ivory, and trade. *Science* **327:** 1331-1332.

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