



*Econ Journal Watch,
Volume 1, Number 1,
April 2004, pp 55-57.*

Response to De Alessi

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IN “ELEPHANTS” CHARLES MORCOM AND I ARGUE THAT THE economics of open-access, storable natural resources, such as ivory, differ fundamentally from those of nonstorable, open-access resources, such as fish (Kremer and Morcom 2000). In general, overharvesting of open-access resources reduces long-run yield or, in extreme cases, leads to extinction. Overharvesting, therefore, makes the future price high. We argue that if the good can be stored, the expectation of high prices in the future can lead to high prices in the short run, as speculators buy up the resource. This stimulates increased harvesting, or poaching, in the short-run. Thus, for storable, open-access resources, expectations of high harvesting rates can be self-fulfilling and there may be multiple rational expectations equilibria: for example, one in which the species is driven to extinction and one in which it survives.

A government which seeks to preserve the resource can potentially eliminate the extinction equilibrium if it can *ex ante* credibly commit to endangered species laws that mandate that if a species nears extinction the government will spend enough to protect the species, even if this would not be justified on cost-benefit grounds *ex post*. However, many governments may not be able to credibly commit to do this. We argue that such governments could eliminate the extinction equilibrium by building up stockpiles of the storable good and threatening to release them on the market, if the species became extinct. This would eliminate the extinction equilibrium by depressing the price in the event of extinction, making poaching less attractive now.

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I won't go through all of De Alessi's points, but will focus on his two main arguments. First, he argues our analysis rests upon four assumptions and that these assumptions are incorrect. Second, he argues that private conservation initiatives are worthwhile (De Alessi 2004).

De Alessi's statements about our assumptions are incorrect. First, he states that we assume that trade in ivory is legal and that in reality the market value of ivory is indeterminable, since trade is illegal. Saying that ivory does not have a market value because it is illegal is equivalent to saying that marijuana does not have a market value because it is illegal. Illegal goods still have markets and prices. It is odd that De Alessi at one point says "prohibitions have never really worked" and then criticizes us for assuming trade in ivory exists. One point of our article is that if stockpiles could be sold by governments, if elephants became extinct, this might help keep prices down now. Given that we are arguing for less regulation of international commerce, it seems odd to object on grounds that this would not be consistent with CITES—selling stockpiles if elephants became extinct would not be illegal, and even if it were, existing regulations could be changed.

Second, he argues we assume habitat is constant. Our qualitative results would go through as long as some open-access land remains. Models abstract from reality—but this assumption is not critical to our results. Our results are relevant to species for which poaching contributes to population decline and, as discussed in our paper, that is true for many species.

Third, De Alessi writes that we assume that all elephants must exist in an open-access state. In fact, we explicitly note that under appropriate circumstances elephants will be protected as private property.

Fourth, De Alessi says we assume that state intervention is the only viable approach to conservation. In fact, as noted above, we explicitly say otherwise, albeit not in De Alessi's ideological language. Typical of De Alessi's rhetorical style here is his criticism of us for discussing "credible" government policies, although a central point of our original article was that government claims are often not credible.

The remainder of De Alessi's article is devoted to extolling private conservation initiatives and criticizing governments. There is a large literature on private initiatives, which De Alessi cites. I am sure many are worthy. Had I been writing a report to a foundation on how to protect elephants, I would have discussed these programs. But the purpose of a journal article is to contribute new knowledge, not to review existing knowledge. Existing models assume that ivory prices are not influenced by

expectations about the future. That is surely wrong. The purpose of our article was to examine the implications of correcting that mistake.

REFERENCES

- Kremer, Michael, and Charles Morcom.** 2000. Elephants. *American Economic Review* 90(1): 212-234.
- De Alessi, Micheal.** 2004. An Ivory Tower Take on the Ivory Trade. *Econ Journal Watch* 1(1): 47-54.

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