

## The Kiss of Death Or Does Conservation Work?

We - the public that is - have been bombarded over the years with appeals from International Conservation Organisations (ICOs) to save this and fight for that and preserve the absolutely last whatever, each appeal sketching in graphic detail the plight of the remaining few and the deep loss we will all feel and suffer should they vanish. On the other hand, articles in newspapers and magazines, and programmes on TV and radio all tell us a different story. Whether its rain forests, tigers or crested newts, there seem to be fewer and fewer and less and less of everything. God forbid - but are these perhaps connected? If there really *are* fewer tigers now than there were before, is it because we did not give enough in the past? or would there be even fewer now if we hadn't given what we did give? or are *they* - the ICOs and their ilk - not doing the right things? In other words, is conservation working? and how can *we* tell anyway? or should *we* just go on giving secure in the knowledge that surely *they* know what best to do with *our* money?

I am particularly concerned here with efforts to conserve species like the tiger, rhino and elephant, species which seem to be endangered as much from a demand for the products of the animal as for the space that they need to live in. Let us make a simple mental model of the problems facing their would-be conservationists. We start, say, with a Continent full of tigophants which sport magnificent husks; but there is a demand for tigophant based medicines and ornaments so traders purchase tigophant husks from hunters for onward sale. This reduces the numbers of tigophants so conservation authorities spend more effort in preserving them and in chasing poachers. Meanwhile, rising populations and real incomes among the consumers of tigophant products increase the demand, so the price and value of husks rises creating greater incentives to hunt them. Furthermore, the diminishing numbers of tigophants inflates the price and value of husks. Traders now purchase even more husks from hunters, tigophants get fewer and fewer, conservationists try harder and harder, husks gets more and more valuable, so traders now finance even more

hunters to hunt even more tigers; and so on and so on in a tightening spiral to extinction (rather like the reinsurance market of Lloyds of London).

In this simple model we are describing the behaviour of the market in terms of the supply of rhino (or elephant or tiger or bear) products, the demand for them, and the price at which traders will deliver these products to consumers. Consider a market equilibrium where the supply, demand and prices are all stable. If from this equilibrium we increase the supply of products then prices will fall, while if we reduce the supply then prices must rise. Similarly, if from equilibrium we reduce demand then prices will fall, while if we increase the demand then prices will rise. The most extreme changes in price will occur with rising demand and falling supply (prices will rocket), and with falling demand and rising supply (prices will plummet). In contrast, prices will remain relatively stable if demand and supply either fall together or rise together.

Price is important because it will in principle govern the incentives to hunt rhinos, elephants, tigers or whatever. So in policy terms, any conservation policy which reduces supply in the face of steady or rising demand will increase prices and therefore the incentives to hunt, making conservation more difficult and more expensive. In contrast, conservation policies which either reduce demand *and/or* increase supply will reduce prices and incentives to hunt, making conservation easier and cheaper.

No one wants extinction: what we want is national Parks, wild areas and rangelands full of rhinoceroses, tigers and the like. So with this simple model in mind let us examine the policies recommended and implemented by the ICOs, policies which we - Joe Public - are asked to finance, to see how, or if, they might actually help achieve our objective.

Now I have real problems with anti-poaching which is much promoted in National Parks and other protected areas for it is only effective if the national conservation authorities literally wage war on the poachers and shoot to kill – well over 400 in Kenya during the glorious "Leakey" days. To me it is quite inexplicable how we can condone the slaughter of destitute peasants in the name of conservation, and indeed there is a veritable Pandora's Box of human rights issues to which conservation organisations must one day answer.

But even the most authoritarian of regimes cannot keep up such a fight forever and in general anti-poaching campaigns are waning. We know that only a very small minority of poachers are actually caught which simply increases their costs of production. *Confiscation* of poached products simply means that more must be poached, because it needs ten kilos plus the amount confiscated to supply ten kilos, while *finer and imprisonment* simply raise fixed costs which are passed onto the end user as higher prices, and the higher the price and value of the products the more incentive there is to poach it. So, outright murder apart, anti-poaching would appear to increase the numbers poached and their price, which increases incentives to poach even more. Absolutely no money for anti-poaching then.

I also have difficulties with the policy to destroy confiscated or naturally harvested products, as Kenya did with her ivory and rhino horn and as India does with her tiger products. Reference to our mental model can again help us here. The destruction of stocks simply reduces the supply to the market which, if the demand remains, will lead to a rise in price and in the value of any stocks held by traders. As with anti-poaching, destruction of the products forces prices and values up and increases the incentives to hunt more. It also creates the perverse incentive for hoarders of stocks to make the species extinct. Definitely not a policy either to promote or to support.

Fortunately, bizarre policies like dehorning rhinos enjoyed only a brief moment of glory, for not only did an unacceptable number of animals die either in the process or soon after it (which of course reduces supply and leads to a rise in the value of what is left), but dehorning also makes the poacher poach more. While it is still worth his while to hack out the remaining stub more must be killed to meet a fixed demand since there is not that much left on any one animal. So - no money for dehorning or similar nonsenses.

On private land, the conservation bastion - or Fort Knox strategy - has become popular. Here, so many resources are thrown at protection that it is simply not worth the while of a hunter to try and hunt. A recent TV programme focussed on a private ranch in Kenya where a private landowner has set aside land as a rhino sanctuary; a wealthy patron has provided munificent resources for protection and upkeep; overseas visitors pay top-of-the-market fees for a truly remarkable wildlife experience;

and everyone is contented, especially the 30-40 rhinoceroses who live there. Now this is fine, but only for as long as the price of the product stays within limits. Consider the osmotic gradient: the higher the gradient the more energy is required to maintain it. Such ranches in Kenya and elsewhere in Africa have a race on their hands between the current and future price of rhinoceros horn and the resources they can mobilise for protection, and one wonders what resources will be required when the producer price of horn is worth, say, its weight in gold. Nonetheless, maintenance of *any* stocks potentially increases the supply of rhino horns which will act in the long run to keep prices down. So - all strength to your elbow.

A hugely publicised policy is to declare illegal the trade in the animal products, typically under the auspices of CITES – the Commission for the International Trade in Endangered Species. The immediate effect of a trade ban is of course to create a perverse increase in demand - the hurry-while-stocks-last syndrome<sup>1</sup> - and therefore of price. Furthermore, banning the trade increases costs because illegal trading is more costly than is legal trading, and once the trade is driven underground it is more costly, difficult and dangerous to monitor. Together, all these effects simply push up prices and values, and with them the incentives to hunt.

Such trade restrictions and bans have had little conspicuous success with either booze or drugs, and it is now widely recognized that they are effective only with the simultaneous treatment of demand. To my mind the whole concept of CITES is deeply and fatally flawed. First, by acting as a restrictive mechanism rather than a supportive one, and by not addressing at all the problem of supply and demand, CITES has reinforced the quite misleading concept that any trade is bad for conservation and has failed to encourage sustainable and legal trade where that can be shown to be beneficial. Worst of all, by removing significant financial incentives CITES is contributing to the problem rather than to the solution: countries with good management systems are being penalized by restrictions on the income they can make from their stocks, while those with poor management systems are offered no financial incentives to do better. Most definitely do not support CITES.

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<sup>1</sup> Remember that the last remaining wild individuals of Spix's Macaw were captured following the mere *threat* of placing them onto Appendix 1 of CITES  
The Kiss of Death © 1995 Mike Norton-Griffiths

One key to all this muddle must lie with manipulating the demand for the products, be it for medicines, dagger handles, or stuffed animals in museums, and the efforts of the ICOs in this respect have sometimes met with spectacular success. It was the emotional blackmail -- remember "Only Elephants Should Wear Ivory"? -- rather than the CITES trade bans which proved so highly effective in reducing the demand for ivory in the west. Sadly there has been less success elsewhere, for example in the east with elephants, tigers and rhinoceroses, even when accompanied by education programmes and by efforts to identify, supply and promote acceptable substitutes for the animal products. Clearly, however, here at last is a conservation initiative worthy of our support.

But curiously one policy area which seems to be absolutely *off limits* for the ICOs is to meet demand by increasing the *supply* of products, either by releasing stocks, or by culling, or by breeding specifically for the market - all of which would bring down prices and the incentives to hunt wild stocks. And here we suddenly come face to face with the most extraordinary inconsistency and contradiction in the policy of the ICOs who extol as one of the most important values of "biodiversity" the wealth of pharmaceutical products as yet undiscovered. For here we have living examples of the natural products of biodiversity (rhino horn, tiger bones and penises, bear fat and bile) being used by *millions* of people in their traditional pharmacopeias - but which are outlawed and suppressed by the ICOs. Now what exactly is going on?

It cannot be because we doubt the efficacy of these natural products. After all, you and I don't know if modern medicines work on us or not, we are just told by our doctors that they do; so it should not matter to us one jot if rhino horn, or tiger penises, or bear gall bladders work or not. Neither should it concern us (health and welfare issues apart) if we are farming cows, sheep, chickens, trees, flowers, tigers, fruits, rhinoceroses, beans or bears.

So why not farm these animals and meet the perfectly justifiable traditional demand for their natural products? One argument is that illegal (i.e. poached) products will be hidden by the legal trade -- but that is a sensible as saying that Rolex should desist from making watches because you can buy forged ones. Another argument is that there will be a continuing illegal demand for natural products over farmed ones. But if that is the case then the market will surely provide both "free

range" and "battery" tiger penises, much as it provides both free range and battery eggs.

Clearly, rhino farms which provided horn to the dagger and medicine markets at a price that undercuts the naturally harvested product would have many benefits: parks would be full of rhinos, the trade would be out in the open where it can be monitored and regulated, and the profits would go to the countries supporting the rhinos. So extend the idea to tigers (which breed in captivity like rabbits - or vice versa): if there is an annual demand for a thousand dried tiger penises and 5,000kg of bones then for goodness sake farm them, in the same way as we farm cows, sheep and pigs for their bits and pieces - else as sure as eggs is eggs (battery or free range) the tiger and the rhino will soon be extinct.

Indeed, there is one very interesting controlled experiment here. Rhinoceroses (and tigers) are fiercely protected by every ICO and all trade in their products has been banned by CITES for years, yet they are rapidly being hunted to extinction while the prices for their products have rocketed as their numbers (supply) plummeted. In contrast, deer are not conserved or protected in any way, their products are equally important in traditional pharmacopoeias, the world is overrun with them, supply has steadily increased to match demand while prices of their products have remained stable or if anything decreased. Clearly, it would appear to be the Kiss Of Death to be adopted by the international conservation community as an endangered species .

So it would seem that many of the policies espoused by the ICOs to protect rhinoceroses, tigers and the like, and for which they are asking us for money, are in fact having the perverse effect of actually increasing the incentives to hunt more and more of them in the wild. I would say that it is a complete waste of money to support *any* appeal which aims to stop the trade in wildlife products, or finance anti-poaching activities, or create new reserves, or support the destruction of products, or prevent sport hunting: this merely increases the probability of extinction. But an appeal that aims to raise rural incomes so that poaching is no longer a sensible way to spend your time; or to set up a farm for tiger products; or to fund an education programme which promotes aspirins over rhino horns as a fever suppressant - then that is worthy of support.

So, are these International Conservation Organisations and the policies they promote part of the solution or part of the problem? I would say that although the jury is still out, on balance their kind of conservation is definitely NOT working. Ideally we should try an experiment, perhaps with some totally inoffensive and useless species and a second, hugely over-protected one. Place the first at the top of "protect me" wish list of all ICOs and to boot on Appendix 1 of CITES, and remove all restrictions on the second. I would bet that in ten years the first would be near extinction while the second would have achieved near pest status.

I definitely need an aspirin - or perhaps an infusion of rhino horn.