## Cherry-Picking 'Grey Literature' On Rhino Horn

Ivo Vegter The Daily Maverick

Editor's Note (GRD): Please read this article in conjunction with the following article authored by Colin Bell, which also appeared in The Daily Maverick.

The International Fund for Animal Welfare last week released a meta-report claiming to review the economic literature on rhino horn trading. It is as weak as the article reporting its release, sadly. "Pro-trade thinking comes in for criticism", reported lan Michler about rhino horn, last week in Daily Maverick. He cited a single source: a new report commissioned, paid for and published by the International Fund for Animal Welfare (IFAW). Michler is a photographer and "naturalist" working with the Conservation Action Trust, and if the article reads like a press release, that is because it is. The exact same text appeared in <a href="The Mercury">The Mercury</a>. If you want a guess at the report's conclusions, look no further than IFAW's stated purpose: "[We work] to stop all commercial exploitation and trade of animals."

The report is innocuously entitled Horn of Contention: A review of literature on the economics of trade in rhino horn, but it is far from neutral. Since Michler does not bother to provide a link to the actual report, one can safely assume that the majority of his readers will not have read it. Let me, therefore, begin with his article. The piece challenges South African environmental economists, naming Michael 't Sas-Rolfes and Michael Eustace in particular. The former maintains a website and written several detailed papers on rhino trade over a period of more than 20 years. The latter has long been involved in wildlife conservation himself, and writes for Business Day. It tries to discredit both.

"Pro-trade fighters" present "the legalization of trade in rhino horn as the panacea for the continent's rhino poaching crisis", according to the Michler article, promptly hitting its first rhetorical pothole. IFAW, likewise, <u>accuses them</u> of "ridiculous arguments that legalizing trade would stop poaching." Nobody I have ever read on this subject has proposed a panacea that would stop poaching.

Just last week, I pointed out: "Of course, neither private property rights nor legal trade in animal products are panacea." About farming endangered species, 't Sas-Rolfes has on more than one occasion <u>said</u>: "It is not a panacea." Eustace <u>wrote</u>: "Poaching will never be totally stopped." So, while I did IFAW the courtesy of quoting their purpose, rather than describing it in my own disparaging words, Michler starts by over-simplifying and misrepresenting the views of those in favor of legal trade in rhino horn. And then they accuse their opponents of being "simplistic and misguided". It doesn't get much better, either.

"...now in the first of what is likely to be many more convincing critiques..." is a telling line. Why anticipate "many more convincing critiques"? The rhino horn trade debate rose in intensity soon after the spike in poaching began in 2008. Why, after dozens of papers, conferences, talks and opinion articles on legal rhino horn trade, not to mention several invitations by government for public comment, is this first critique so long overdue? It is not that it took so long to write. It was commissioned only in November 2013 and published just two months later. Why would it need the support of other critiques? Does Michler also think this one is quite unconvincing by itself, as I do? Why would he report those non-existent future critiques to be "convincing" even before they are written? Reporting the past is history. Reporting the present is news. Reporting the future is fiction. Michler notes the IFAW report's conclusion, but not its reasoning. He highlights that the report finds economists that make the case for rhino horn trade publish so-called "grey literature", as opposed to "formal peer-reviewed articles", which are more ambiguous in their conclusions.

First, and most importantly, this is a bald-faced lie. The IFAW report reviews only six papers. Two of them it considers formal, but "ambiguous" in their conclusions about whether poaching increases or decreases with legal trade. By that it means only that they discuss complexities specific to the markets they address, which may influence how market behavior may depart from economic theory. This is normal. That is what economic papers do. And both, for all their formality, predate the recent rhino poaching crisis, so have nothing to say about it. The remaining four papers – one of which is actually a newspaper article – it considers informal, or "grey". However, this is equally misleading.

One of them, Elephants, rhinos and the economics of the illegal trade by 't Sas-Rolfes, was published in a peer-reviewed journal, Pachyderm, which is an organ of the elephant and rhino specialist groups of the International Union for the Conservation of Nature (IUCN). You may know the IUCN as the keeper of the Red List of threatened and endangered species. It proposed the Convention on the International Trade in Endangered Species (CITES) in 1963, before IFAW was even founded. Other than the color of the animal for which it is named, doesn't get any less "grey" than that. For another example, the report authors selected a self-published pro-trade paper by Rowan Martin, categorizing it as "grey", while ignoring a peer-reviewed journal article which Martin co-authored that makes a similar case and was published in the prestigious AAAS journal Science.

The report also claims that there is a lack of formal literature specific to the rhino poaching crisis that began in 2008, whether pro- or anti-trade. This is odd. Besides Martin's paper, a cursory search on Google Scholar turned up <u>Hall</u> (2012), <u>Vigne & Martin (2013)</u>, <u>Challender & MacMillan (2014)</u>, and <u>Conrad (2012)</u>. All are academic papers about rhino

horn or rhino farming. Three (all except Hall) appear in credible journals. Three take a position in favor of legal trade or critical of a trade ban. The fourth, Vigne & Martin (not Rowan Martin), is neutral on this point. So the IFAW report authors are not just dishonest, they cherry-pick the literature they choose to review in order to fit their conclusions.

Second, economics, being about individual human action, is not an exact science. It can explain behavior, but it cannot reliably predict it. Some economic theorists have entirely rejected the notion that given enough data and sufficiently sophisticated statistical tools, economics can, or ought to, be used as a scientific predictor of the future. If it could, central planning as a model of economic organization would work just fine. It isn't, which is exactly why so many economists advocate free markets. A central planner cannot, as a rule, trump many independent agents who concurrently attempt competing solutions to satisfy varied needs and wants.

Not all the methods of the natural sciences are even available to economics. Anecdotal evidence is easy to come by, of course, but that is a low standard of proof. Models can be constructed, but they are only as good as the theories and assumptions on which they are based. When you try to model very complex systems, you quickly discover that models – both in the physical sciences and in economics – have severe limitations. The ultimate standard of scientific evidence, short of mathematical proof, is a well-constructed laboratory experiment or randomized controlled trial, both of which are rarely possible in economics. It is sheer hubris to suppose that economics can supply a proof, in advance, that a given policy will achieve a desired end.

Third, a superficial appeal to peer review is not sufficient to make or break a case. Dismissing papers you don't agree with as "grey", even if they are, is a misleading appeal to authority. It fails to address the substance of the arguments. Not only that, but the "hallowed process of peer review is not all it's cracked up to be", we learn in <a href="How science goes wrong">How science goes wrong</a>, an article that appeared, appropriately enough, in The Economist. So, when the IFAW report rejects the pro-trade papers as "less rigorous in their application of economic principles", it is throwing rocks in a glass hothouse.

In fairness, the IFAW report authors do raise several valid flags about market complexities and potential confounding factors. Michler glosses over them, perhaps because the report's own summary is overly simplistic. The full text is a little more nuanced on this topic. It is clearer about the supposed "ambiguity" of the formal papers it reviews, and about its criticisms of the pro-trade papers and articles it chooses to critique.

It is not true to suggest, as the report does, that the pro-trade economists fail to assess complexities that might change their conclusions, such as the true extent of demand in an unfettered market, the scope for laundering illegal horn, or the potential for demand management. One paper is focused entirely on assessing, as far as economics can do, the market characteristics of rhino horn that prompted the recent upsurge in poaching. Another, omitted from the IFAW report, investigates rhino awareness, product substitution and a decline in rhino horn trade in a major market.

Pro-trade economists and rhino farmers also frequently stress the importance of sound institutions, complementary demand management programs and regulatory monitoring and enforcement, if South Africa is to establish a successful legal market that succeeds both at supplying demand and protecting rhino populations.

More to the point, however, would be to observe that many of these complexities are issues that are best dealt with by producers in a free market. Not IFAW, nor environmental economists, nor government regulators, own crystal balls. The IFAW report concludes that "economic logic does not suggest that a legal trade in rhino horn would necessarily reduce poaching of rhino in Africa". That is true, and no pro-trade economist would dispute this. They would use the word "likely", instead of "necessarily". Pro-traders argue, and this report concedes, that "under certain conditions this may occur", suggesting that we ought to focus on those conditions, rather than on whether or not to permit legal trade. IFAW argues that the onus of proof is on those who advocate legalizing the trade in rhino horn, despite the fact that the preponderance of the evidence is on the side of the pro-trade economists. But what about scientific proof?

If the IFAW activists know that this is a standard neither they nor their opponents in this debate can meet, it is a disingenuous and desperate attempt to rescue a losing argument. If they don't know this, they expose their own economic naiveté. And if they need to ignore existing academic evidence to sustain a demand for proof, they're being dishonest. However, I'd like to propose that South Africa's policy makers give them what they want.

The scientific way to prove something is to conduct an experiment. We know that the CITES experiment, to ban the trade in rhino products, has run for nearly 40 years. It has at best proven that a ban does not work, and arguably that it is counter-productive. We know that the rise in poaching has been met with greatly increased enforcement efforts by government, rhino owners, and concerned citizen groups, but they remain out-numbered and out-gunned, while the rhino is being poached faster than population numbers grow.

We also have experiments, in the vicuña, the crocodile, the addax, the ostrich, the dama gazelle and the scimitar-horned oryx, which demonstrate that property rights and legal trade can work. If scientific proof is what IFAW wants, all we lack is the experiment that will supply it: legalize trade in rhino horn. And, <u>as I argued before</u>, don't try only once-off stockpile auctions, but establish a proper, ongoing free market.

If the experiment fails, there is no real downside: we're merely back at square one, with the rhino facing extinction. If, however, it succeeds, we may be able to save the species. Economics is not an exact science. It is about human behavior. It is about risk and reward in the face of uncertainties and unknowable demand. It cannot guarantee positive

outcomes. However, given the potential reward, and the lack of a downside, legalizing rhino horn trade seems the only sensible way forward. Conversely, maintaining the status quo while demanding impossible standards of proof of advocates of change is the only certain policy: it will guarantee failure.

To paraphrase Michler's conclusion: With the extinction of rhino at stake, it is difficult to see how the global regulatory authorities would be able to allow any continuation of the current no-trade policies.**DM** 

Ivo Vegter is a columnist and the author of <u>Extreme Environment</u>, a book on environmental exaggeration and how it harms emerging economies. He approaches issues from the perspective of individual liberty and free markets. His meticulously researched opinion pieces appear in The Daily Maverick.

## Rhinos: It's Time For Plan B

**Colin Bell The Daily Maverick** 

Editor's Note (GRD): I had an interesting exchange of emails with Colin Bell after reading his article. He said "I am not against hunting in SA. For me it is another form of land use and frankly I would rather see land under wildlife than under goats!" Although I do not agree with a number of other points Colin mentioned, and tend much more towards Ivo Vegter's opinion, it is worthwhile contrasting the two articles ... here you go!

In public debates about how to save our rhino, those who advocate ending the ban on trading their horns fail to acknowledge (if you'll excuse the metaphor) the elephant in the room. They also seem to be very jaundiced economists. Not least among them is Ivo Vegter (Daily Maverick, 21 January 2014). Economics is as much an art as a science, and history is full of examples of the planet's most brilliant economists making some of the world's most disastrous economic and financial decisions. The tragedy of the horn debate is that, for reasons I will point out, highly respected rhino custodians (park authorities, field rangers, anti-poaching, monitoring teams) and even politicians and scribes like Vegter, have embraced a failed, private-sector-driven, pro-trade economic model as the answer to the rhino crisis.

I think there are two reasons for this. The first is a constant public engagement by a few academics and private rhino farmers who stand to make or lose a fortune if trade in rhino horn is legalized or not. The stock of just one of these rhino farmers is worth billions or zero, depending on the outcome of this debate. The second reason is a misunderstanding of the difference between successful policies to save rhinos pioneered by environmentalist Dr Ian Player in the past and conditions today in the face of rampant poaching. Vegter raises the standard pro-trade argument that "if the (rhino horn sale) experiment fails, there is no real downside". In my 35 years in the wildlife industry I have seldom seen a more naive statement. The replacement of rhino in the wild with rhino farmed like cattle is, in my opinion, a definite downside. The idea that selling lopped-off horns from farmed rhinos will curb poaching is untested, unproven, unlikely, and something protraders avoid like that proverbial elephant in the room. Unfortunately we do not get a second chance if we get the economics of rhino trading wrong; rhino in the wild will be gone. So we have to get it right and there's no room for experiments.

Let's look at the economics. Pro-traders argue that supply of rhino horn can equal demand through free-trade pricing. This may work for large, complex and visible items like Ferraris, but it has not worked for other consumer goods where counterfeiters thrive and expand markets by attracting new buyers to the market by selling goods at discounted prices. With the real cost of obtaining a rhino horn being merely the cost of a bullet and a hacksaw, there will always be too much of a price difference between the legal selling price of a rhino horn and the cost of poaching that horn. To assume that free-trade pricing economics will stem demand and solve the poaching crisis is nonsense. That sort of theory doesn't stick when criminal poaching syndicates and the rogue militia have the ability to expand markets by supplying discounted goods and perverting the legal market.

The pro-trade price theory simply has not been proven – it is pure conjecture nor does it take into account the massive potential size of the market. The counter-argument (speaking to my real concern) is: what if the demand for rhino horn is much greater than supply? With close to a billion potential Asian consumers, this could easily become the reality, especially when criminal syndicates can induce increased demand by operating in the grey markets at prices below those set by the central selling organization. Then what? In my view, the horns of just 25,000 rhinos simply cannot satisfy the demand from just a million, let alone a billion or more potential Asian consumers.

Vegter cites examples of ostriches, crocodiles, vicuñas as successes that rhino policies must copy in order to ensure rhino survival. I'm not convinced that these are comparable examples, as none show the same relative scarcity levels based on values attached to body parts. Tigers and elephants do, and we've seen what trade in their parts has done to wild populations. If trading were the simple answer for all wildlife crises, why don't we try to breed and trade tigers (or maybe even wild dogs) out of their critical status?