

The Economics of Poaching, Trophy and Canned Hunting

By Internationalwildlifebond1, dated 27 August, 2015



Let's just start by saying there is a complex array of variables impinging on the whole economics that weigh on the conservation of wildlife. Hence, this (rather long) article can only ever hope to be a brief summary of the headline 'figures' and available 'evidence' for consideration.

The Hunting Industry Income

In a 2008 report⁽¹⁾ it was estimated that income from Trophy Hunting^(Note 1) generates at least £128m (\$201m) per year across 23 sub Saharan African countries. These figures appear to be direct income from Trophy Hunters to hunting tour operators, so excludes permits bought at auction, travel, hotels and other income generated in country. We can safely assume that with an adjustment for inflation alone, the income today can be projected to around £192m (\$300m USD).

Just to put that income into perspective, the 2008 figures⁽¹⁾ are based on 18,500 international Trophy Hunter clients, so an average of around £7,000 (\$11,000 USD) per Trophy Hunter. The hunting taking place over some 1.4m km² of land area, which is an area 22% larger than the area designated as safe, protected havens for wildlife where hunting is not permitted.

However, those 2008 figures are perhaps an underestimate. The Trophy Hunting industry income for South Africa alone was estimated in 2013 at £71.8m (\$112m USD)^{(2)(Note 1)}, with the whole industry across 9 Trophy Hunting countries of Africa estimated at £151m (\$235m USD).

Table 1 – Trophy Hunting, Tourism Income and Population

	Population ^(a) (million)	Trophy Hunting Revenue ^{(2) (b)} (\$m USD)	Tourism Revenue ^{(2)(b)(c)} (\$m USD)	Trophy Hunting Revenue as % of Tourism Revenue
South Africa	51.4	112	9,547	1.2%
Ethiopia	84.3	1.45	522	0.3%
Cameroon	18.9	2.4	159	1.5%
Tanzania	44.9	32.9	1,457	2.3%
Zambia	11.8	7	125	5.6%
Botswana	2.0	25.4	218	11.7%
Namibia	2.1	32.8	517	6.3%
Burkina Faso	15.7	0.8	72	1.1%
Zimbabwe	11.8	20	634	3.2%
	242.9	234.75	13,251	1.77%

(a) Based on US Census numbers (2009)

(b) All figures converted to 2011 \$ USD

(c) UNWETO (2012)

Note 1 - It is not clear in the context used if 'Trophy Hunting' includes, or excludes 'Canned Hunting.'

Note 2 – It is not clear how Governments set their permitted hunt quotas – It is not often scientific and is suspected to be corruption (reference (1), para4.2, iii) many cases, Government revenue appears the main driver.

In comparison, the World Travel and Tourism Council estimated 2012 tourism income for South Africa at ZAR102bn (£5.5bn, or \$8.58bn USD), employing 10.3% of the population and making up 2.3% of South Africa's GDP. It can be seen that in South Africa Trophy Hunting is only a fraction of

general tourism revenues, with Trophy Hunting revenue making up less than 0.02% of South Africa's GDP (or Trophy Hunting is only around 1.2% of tourism revenue).

According to Adam M Roberts⁽⁵⁾ - CEO of Born Free Foundation and Born Free USA: *"There is very little evidence that the proceeds of trophy hunting benefits conservation or local communities in the hunting areas, with as little as 3% or less of the revenue generated trickling down. Lions and other charismatic wildlife are worth far more alive than dead to Zimbabwe's tourism industry. In Zimbabwe it is estimated that trophy hunting generates only 3.2% of total tourism revenue."*

The above figures appear to be extracted from the Economists at Large report⁽²⁾ which concluded:

"Research published by the pro-hunting International Council for Game and Wildlife Conservation and the UN Food and Agriculture Organisation, supported by other authors, finds that hunting companies contribute only 3% of their revenue to communities living in hunting areas. The vast majority of their expenditure does not accrue to local people and businesses, but to firms, government agencies and individuals located internationally or in national capitals. As the quote above demonstrates, expenditure accruing to government agencies rarely reaches local communities due to corruption and other spending requirements".



Based on an estimated £151m (\$235m USD)⁽²⁾ industry turnover, at 3% trickle down this equates to £4.53m (\$7.07m USD) getting down to the grass roots level of conservation and local communities across 9 countries. Based on US Census numbers (2009) these same 9 countries have a combined population of some 243m. So the Trophy Hunting income trickle down of 3%, £4.53m (\$7.07m USD) divided by 243m people, equates to just £0.02 (\$0.03 USD) per capita. Even if one was to hypothesise that only 5% of the population (12.15m) 'benefit,' that still only equates to £0.4 (\$0.62 USD) per person.

Governments set quotas^(Note 2) for Hunting Permits (also called Concessions) at auction to the highest bidder (a Hunting Tour Operator usually). The record for a permit sale was set at £224,000 (\$350,000 USD)⁽³⁾ in 2014, Namibia, for the "right to hunt an endangered black rhinoceros" – the Dallas Safari Club had the dubious distinction of holding that auction, the first such Namibian auction to be held outside of Namibia itself. The income (after auction deductions) presumably went straight into the Namibian government's general coffers, so how much actually went into conservation? It's not clear.

Incidentally, the world wide black rhinoceros population is estimated at 5,055⁽⁴⁾ (across eastern, south western and south central Africa) up from just 2,300 in 1993. So, based on that 2014 permit⁽³⁾ the entire remaining black rhinoceros population is worth approximately £1.13bn (\$1.77bn USD) , just based on the dubious nature of their permit value alone.

In the Trophy and Sport Hunting Endangered Species Handbook⁽⁶⁾ the point is clearly made that an animal is worth far more as a tourist attraction than as a hunter's trophy. For example, tourists can of course see a given elephant many times over and the elephant can rack up repeat 'appearance' income. As a trophy, the Trophy Hunter pays a one-time fee of £2,500 - £13,000 (\$4,000 - \$20,000 USD) for an elephant. 1986 estimates (adjusted for 2% inflation only) for an African lion's appearance (in full mane) income for tourists is estimated at £580,130 (\$905,000 USD)⁽⁷⁾. Walter Palmer⁽⁸⁾ reportedly paid £35,000 (\$55,000 USD) to torture and murder Cecil (may he RIP), which looks like a poor return compared with Cecil's potential 'A-lister' income in excess of \$905,000 USD.

The 2014 report⁽³⁾ "Can Trophy Hunting Actually Help Conservation?" from which the above permit reference was taken, ultimately proved inconclusive. The whole economic evidence to support either side of the argument was far too anecdotal, the distribution of income far too opaque.

In conclusion, the Trophy Hunting industry turnover is clearly big (but not significant compared with general tourism). Every year trophy hunters kill⁽¹⁹⁾ on average 105,000 animals, including 800 leopards, 600 lions, 640 elephants, and 3,800 buffalo. In the five years to 2006, 1,830 lion trophies were exported from South Africa; in the five years to 2011, 4,062 were exported, a 122% increase, and the vast majority captive-bred ('canned') animals⁽²⁰⁾.

Does Trophy Hunting contribute much back to the local economy in hunting areas? Not really, just from some rough figures, it is apparent that it does not.

What Happens if Trophy Hunting is Removed from an Economy?

The obvious example here is Kenya, where elephant hunting was made illegal in 1973, with a complete ban on all hunting (without permits) from 1979. However, illegal poaching is still a major issue, highlighted in March 2002⁽⁹⁾ when a family of 10 elephants were killed.

Although Kenya has many national parks and reserves protecting wildlife, elephant populations are still at risk, a problem which is made worse by corruption and some officials supplementing their income with permitting poaching⁽¹⁰⁾.



The Trophy Hunting enthusiast say "look what's happened to Kenya since they banned hunting and the conservation that the hunting provided to the wildlife." A BBC news article⁽¹¹⁾ entitled "Mara Wildlife in Serious Decline" from 2009 states clearly "numbers of giraffe, warthog, impala, and hartebeest fell by 50% or more between 1979 and 2002," citing evidence from a British Journal of Zoology report⁽¹²⁾. The loss of grazing animals is already having an impact on lions, cheetahs and other predators according to the researchers.



However, the scientists who conducted the report⁽¹²⁾ believe the surge in domestic livestock has been held largely accountable for the drop in wildlife population – The three main causes that have been cited for the drop in wildlife numbers are illegal poaching, larger numbers and ranges of domestic livestock, plus changing land use patterns on the ranches. There is no mention of 'Trophy Hunting' cited as a cause/effect for the decline in Kenya's wildlife since 1979

- the Trophy Hunter's 'claim' appears unsubstantiated.

In terms of poaching in Kenya, the 2005 BBC article⁽¹³⁾ "Lifeline for Kenya's 'lost' Wilderness" the poachers shot the last of the black rhino in Sera over a decade ago. Elephant herds are now at levels of 20% compared with the 1970s. Lawlessness and armed poachers are still evident today, but heavily fortified wildlife areas are still managing to protect black rhino, lions and leopard also managing to 'survive' somehow.

So, is Kenya an example of what will happen if Trophy Hunting is banned in a country? No, it is not. Kenya would seem to be an example of poor land management, poaching and wanton over-grazing, based on a culture where a man's wealth and social status is directly linked to owning large herds of cattle, which dominate the grazing available to the detriment of wildlife.

Illegal Poaching

The 'demand' side numbers are truly shocking – We are just going to concentrate on rhino horns to start with (but of course there is an illegal trade and demand in many animal parts).

Rhino horn per kilo sells for up to £57,600 (\$90,000 USD) in Taiwan – in comparison gold was trading at £23,300 (\$36,300 USD)/kilo on gold exchanges on 19 August 2015. In Vietnam prices for rhino horn are as high as \$133/gram (£85,300, or \$133,000 USD/kilo)⁽¹⁴⁾.

Across swathes of Asia, rhino horn is considered to have medicinal properties and is 'marketed' as an aphrodisiac. Worryingly, there is an increasing demand from an 'educated' and increasingly wealthy middle-class as cures for everything including cancer⁽¹⁴⁾. In Vietnam, there is anecdotal evidence that this shift in increased demand coincides with the rumour that a high-profile Vietnamese official used rhino horn to cure his cancer. Is there any science to back up the claims made for rhino horn as a human medicine? A TRAFFIC⁽¹⁵⁾ survey identified that buying rhino horn products, at best had "emotional benefits rather than medicinal."

However, a number of Vietnamese doctors and respected physicians claim rhino horn "could be part of an effective treatment." The evidence for this 'miracle' cure is purely anecdotal. Millions of £/\$ get spent every year on the scientific search for effective cures for cancer, but tradition and myth seem to be all that's required in Vietnam, China and Taiwan to make taking a rhino's horn and most likely the 'donating' rhino's life so 'necessary.'

What's being done about it? The International trade in rhino horn is banned under CITES (Convention on International Trade in Endangered Species of Fauna and Flora).

Despite this, in 2008 the number of poached rhinos in South Africa shot up to 83, from just 13 in 2007. By 2010 the number of poached rhino had risen to 333, followed by over 400 in 2011⁽¹⁴⁾.



Anti-poaching operations (such as the International Anti-Poaching Foundation, <http://www.iapf.org/>), are on the front line against highly organised, highly 'motivated' and highly armed poaching gangs.

In the "rhino wars"⁽¹⁴⁾ with poachers in South Africa, some thousand rhino were slaughtered between 2006 and 2012. Some 22 poachers were gunned down and more than 200 hundred arrested. One such arrested and convicted poacher was Gideon van Deventer (Deon). He was interviewed by The National Geographic in 2012⁽¹⁴⁾. Deon was imprisoned in Kroonstad Prison near Johannesburg, the ring leaders Deon was pressured to testify against, were never prosecuted. Deon was reportedly released four months after the National Geographic interview.

One alternative approach to 'meet' the unabated demand from Asia is to breed rhino in protected farms⁽²⁷⁾. The South African farm owned by John Hume has the largest privately owned rhino herds in the world. The farm harvests a rhino's horns under 'safe and painless' anaesthetised conditions, after which the rhino is released back into the farm's protection. The rhino's horn eventually grows back after about two years. The harvested horns are micro-chipped and currently stock-piled in a very secure vault. Under South African law only rhino horn extracted by a permit (concession) Trophy Hunt, can the resulting rhino horn 'legally' be exported.

As John Hume's argues that under the current law *"We are basically telling the Vietnamese that it is fine to kill an animal because our tradition of cutting off a rhino's head to put on a wall as decoration is acceptable. But your tradition of cutting off its horn to use as 'medicine' is abominable"*

Legalising the rhino horn trade may be one of the approaches that helps reduce poaching. In theory, 'legal' farm supplied rhino horn being released from stock-piles to meet demand will mean that prices paid will fall, thus making poaching less viable, plus making farms like John Hume's more commercially viable. Changes to the governing law are being mooted in the South African government. There are several different options for extending the 'legalised' trade in rhino horn:

1. One off sale of rhino horn stockpiles
2. Domestic trade in rhino horn
3. (Semi) permanent international CITES regulated sale

On John Hume's farm, the rhinos' existence is perhaps rather 'synthetic' but better than no existence. However, under the current climate, even on John Hume's farm the rhino are not safe from poachers, with regular incursions. Either way, there is no doubting the human 'commoditisation' or 'canned' business opportunities presented by the plight of the rhino.

The same 'commoditisation' theory could be applied to elephant's ivory tusks. But unlike rhino horn which is keratin, similar to horse's hoof, ivory is an elephant's tooth. When the tusk is severed, if the elephant survives the shock, the nerves inside are likely to become infected and kill the elephant victim. With 'commoditised' 'canned' lion hunts, the lion victim's body is often broken up for parts and exported to meet demand for 'medicine' in China.

In conclusion, from my perspective, the worrying increase in the demand side is the main concern.

Canned Hunting

Lion populations are dwindling, from an estimated 200,000 a century ago to some 30,000⁽¹⁸⁾ today, some estimates as low as 20,000⁽¹⁸⁾ across Africa. These African lion populations live in increasingly smaller domains⁽¹⁷⁾. In their natural habitats, lions roam far and wide within the safe boundaries of national parks, but also beyond. This wandering can bring conflict, with lions encroaching on farmed livestock. This perceived menace means that support for lions is not always as widely held as one might hope⁽¹⁷⁾.

What is the answer to conserving lion populations, hopefully increasing and sustaining a steady growth? The 'canned' lion industry has a rather synthetic 'solution' that commoditises the lion to the point of making its existence purely one of subservience. But with the number of lions in 'canned' environment growing (theoretically boosting the lion population), it's become big business.

"For every captive-bred lion hunted, you're saving animals in the wild," said Pieter Potgieter⁽¹⁷⁾, chairman of the South African Predator Association. If there were no captive hunts, he says, there would be more sport hunting and poaching of wild lions.

But a growing number of scientists and conservationists see little evidence to suggest that the captive hunting industry in South Africa has done anything to stem lion declines in the wild across the continent⁽¹⁷⁾.

There are about 160 lion farms in South Africa. There are now more lions held in captivity (upwards of 5,000) in the country than live wild (about 2,000)⁽²⁰⁾ with the income generated from the 'canned' businesses estimated at approximately £44.9m (\$70m USD)⁽¹⁸⁾ in 2012, but increasing since. This 'business' is based on a typical income for a 'canned' lion hunt of £5,000 - £25,000 (\$7,800 – \$39,000 USD), plus resale of the lion's body parts. The 'canned' income of course goes directly into the founding canned entrepreneurs' pockets (less applicable taxes), with little evidence of trickle down into the wider population.

Lions are released (for the fee) to be 'hunted' - Chris Mercer⁽¹⁹⁾, advocate, wildlife sanctuary founder and co-author of the book 'Canned Lion Hunting – a National Disgrace', describes canned hunting as *"the hunting of an animal where the target is unfairly prevented from escaping the hunter, because of either physical constraints..., or mental constraints..."*

Fiona Miles, director of Lionsrock⁽²²⁾, a big cat sanctuary in South Africa run by the charity Four Paws⁽²³⁾, argues that 'canned' hunting promotes poaching - *'The lion farms' creation of a market for canned lion hunts puts a clear price-tag on the head of every wild lion, she says; they create a financial incentive for local people, who collude with poachers or turn a blind eye to illegal lion kills. Trophy-hunters who begin with a captive-bred lion may then graduate to the real, wild thing.'*

Once the lion victim has been killed, the paying Trophy Hunter takes possession of the head and/or skin as their 'prize.' The lion's bones and selected body parts are exported to Asia, where 'big cat bones' are highly regarded in traditional hypothetical 'medicines' and 'remedies.'

This highly efficient, highly lucrative market shows no signs of abating.

Some argue that this 'canned' approach is no worse than sheep farming. But with 'canned' lions we are talking about a dwindling wild species, lions that naturally wants to roam and hunt freely, not herds of 'domesticated' sheep. Besides, the 'canned' lion hunting option certainly did not entice Walter Palmer (or many of his ilk I fear) from seeking 'the real thing' - Walter chose to illegally take the 'thrill' of removing Cecil (may he RIP) from his life as a free animal with responsibilities within his pride.

Poaching

As long as the demand side for hypothetical medicines continues unabated, there will be illegal poaching and 'canned' farms to meet it. 'Education' is not likely to help – The increasing demand⁽¹⁷⁾ is coming from a burgeoning middle class and professionals in Asia, ie. 'Educated' people. But these educated people have no clear rationale for their 'faith' in the properties of the endangered species based medicines they crave - almost some form of rehabilitation is needed to counter the years of traditional dogma.

Lobbying at an inter-governmental level would be a notion, but is hardly likely to make much headway any time soon.

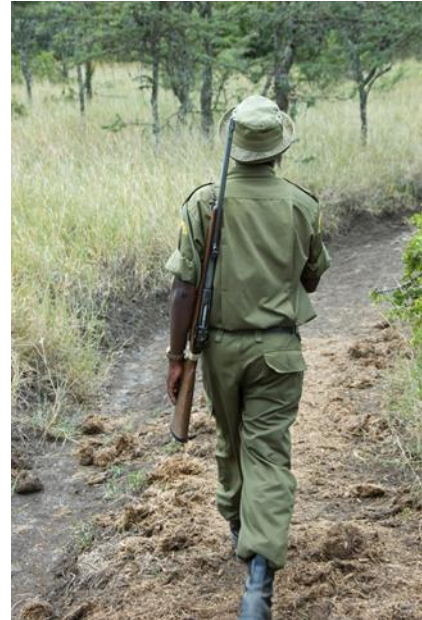
CITES (Convention on International Trade in Endangered Species of Fauna and Flora) has been in force since 1975, it now has some 181⁽²⁴⁾ signatory States.

Incidentally, Vietnam was an accession State to CITES in 1994 and China in 1981 (*Note: The term 'accession' is used in relation to the States that did not sign the original Convention in 1973 – 1975*). So, CITES seems an ineffective tool in the face of insatiable demand and organised crime when it comes to high value poaching and shipments of animal parts. A global stand and rethink is clearly required.

The debate is how to reduce the demand side (which will no doubt be a long and painful process just to stabilise growth in demand, let alone reduce it), but at the same time protect the dwindling, wild species numbers before it's too late? In terms of rhino horn, then harvesting the horns (in a sustainable way, that doesn't kill the 'donating' rhino) and allow legal export from farms 'might' help reduce illegal poaching, but what sort of world is that we are condoning?

Then there is the option of pouring resources and technology to combat the illegal poachers' activities and poacher 'life style.' These poachers seem to show no mercy for their animal victims, or the anti-poaching rangers that confront them. Anti-poaching units have to be suitably armed in response and supported in using that response to its fullest extent. Expecting anti-poaching rangers to try and dissuade and/or arrest a poacher with nothing more than the 'higher moral ground' is a fool's errand, when the poacher is spraying bullets at the ranger from an AK-47 rifle. Those that don't agree with rangers firing back at the poachers, means the 'rhino war' is already lost - the animal targets left to their own defence (which compared with the poachers' arsenal, is derisory).

Those poachers that are arrested and prosecuted seem to have a high degree of leniency in their favour⁽¹⁴⁾. The liberal approach to 'offer the poachers a better alternative' would seem naïve when the poached commodity in question has such high demand/value, worth more than gold at today's rates. Those high values no doubt more than smooth out any wrinkles with shipping the poacher's 'death products' to their eagerly waiting clients.



An initiative to combat poaching by Protect International CIC⁽²⁵⁾ is to fit a rhino's horn with a camera and sensors, when 'trouble' is detected an alert and live video feed is transmitted back to base.

Steve Piper, a director of Protect, elaborates (20 July 2015);

"Proof of concept research has already been completed and our South African team are now preparing to fine tune prototypes in the field, we expect to have the first rhino prototypes out within months and are just beginning development on versions for tigers and elephants. We hope to have a fully functional control centre established early next year. The figures make it painfully clear; there is no

time to waste, the tide has to be turned and the Protect RAPID can do it; the only thing heading for extinction over the next decade is poaching itself."

Conclusions

As long as there is a blood lust demand for Trophy Hunting there will be a corrupt and dubious supply market to cater for it; issuing quotas, permits and making it seemingly 'legal' (but morally abhorrent) for the Sabrina, Arron, Walter, Dr Seki et al. of this world to quench their blood lust upon.

Trophy Hunting does not equal well funded conservation. The trickle down of funds is anecdotal, not evident enough to prove the hunter's claim.

Canned Hunting is not conservation – it's a commoditisation business, based on exploitation pure and simple.

Making Trophy Hunting and Canned Hunting more socially unacceptable and lobbying for change is one approach; be that airlines not transporting the hunter's prizes or the banning of trophy imports - but the Trophy Hunter will always find another legal, or illegal way to ship their prizes back to their 'caves' I have no doubt.

Until such time as the veil of 'legality' is no longer acceptable in any form (take heed from the boundaries pushed back against slavery and apartheid), making animals more valuable as tourist attractions, by taking that wildlife sight-seeing holidays might help push the economics even further back against the economic argument for the continued 'facilitation' of Trophy Hunting.

"Cecil's Law"⁽²¹⁾ is the moniker of a bill introduced by a group of U.S. Senators in July 2015, named in honour of Cecil the lion (may he RIP). The "Conserving Ecosystem by Ceasing the Importations of Large (CECIL) Animal Trophies Act," has the intent to extend current U.S. import and export restrictions on animal trophies to include species that have been proposed for listing as threatened or endangered under the Endangered Species Act. Current U.S. law only provides protection for species whose status on the list has been finalised by the U.S. Fish and Wildlife Service. The African lion has been proposed as an addition to the Endangered Species Act list, but the U.S. Fish and Wildlife Service has yet to 'finalise' the designation (and the process can take over a year to complete). The CECIL Act would ensure that species under consideration for protection are also covered by trophy import restrictions by default. The adoption of CECIL's law would be a welcome step in the right direction and a statement of intent.

Efforts are being made to reduce the demand side; the Humane Society International (HSI)⁽²⁶⁾ is working with the government of Vietnam on an education and outreach programme to try and reduce the demand side for rhino horn.

I have left myself somewhat perplexed, but not daunted by this study of the economics. There is always a better way. We just have to keep hoping and finding ways to work in from the margins (moving the lines as with CECIL's Law, the Protec and HIS initiatives), fighting our way inward to defeat the inner, rotten and festering core.

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