

Trophy Hunting For Conservation in sub-Saharan Africa

“If you want to save wildlife, make it economic”

Sir Julian Huxley

Introduction

Sub-Saharan Africa encompasses forty-two underdeveloped and developing countries, which are characterized by high population growth, high unemployment, low GDP, limited tertiary and industrial sectors and aid dependency. This region also possesses one of the most diverse and abundant wildlife heritages in the world. However, due to recent population explosion, human/wildlife confrontation -- such as poaching, pollution, deforestation and desertification-- has dramatically increased, putting the wildlife and its habitat under severe threat.

Many conservation initiatives have tried to prevent the loss of habitat and wildlife. The general public usually perceives conservation issues and the preservation of natural habitats as being founded purely on moral or ethical grounds. However, it is vital to understand that wildlife and its habitat should *also* be seen as a natural resource in the same way as gold or oil. Indeed, wildlife has a huge potential for economic development, therefore we should focus even more energy on it and find more and better ways to keep it pristine and sustainable in order to benefit both the country as a whole as well as its wildlife.

Different methods of conservation are being used to try and achieve the above aim -- trophy-hunting being one of these. This essay will focus on this often very controversial issue: Can trophy-hunting help in both community development and wildlife conservation? We will first explore the advantages, disadvantages and problems of trophy hunting before considering if there are any solutions to the problems which could make trophy hunting a useful tool of conservation.

Trophy hunting is defined as “hunting by paying tourists, typically with the objective of selecting individuals with exceptional physical attributes and usually in the company of a professional hunting guide”⁴. Twenty-three sub Saharan countries allow trophy hunting. Interestingly, Kenya has forbidden it and this will allow us to compare countries that allow trophy hunting with those that don't.

Potential important economic benefits

Trophy hunting in sub-Saharan Africa is a very lucrative business and has a huge economic potential. According to various estimates, hunters pay 10 to 20 times more than conventional tourists. These high prices are due to the hiring of scouts, professional hunters, equipment and purchasing shooting permits as well as the profit margin. In South Africa for example, shooting a large male lion will cost about USD\$ 25 000. The annual revenue generated from the hunting industry represents as much as 0.13% of Botswana's GDP and 8% of Zimbabwe's (ZCSO 2000, The Economist) compared to 0.0005% in Hungary (Hofer, 2002). In contrast, other types of tourism such as photo safari are, even in South Africa, not enough to cover the cost of looking after national parks. In addition, generating high volumes of money with low numbers of tourists has very positive aspects especially as it limits environmental damage often seen in mass eco-tourism (littering, transport, destruction of fauna and flora etc). Thus, sport hunting contributes significantly to countries' economies without impacting too strongly on the environment. Farmers also use the income to protect their capital from poachers by setting up

anti-poaching squads which not only protects wildlife but also creates jobs for local community members.

Furthermore, trophy hunters, unlike photo safari tourists, usually come for adrenaline and not to enjoy the local scenery. On average, 22% more land in sub-Saharan Africa is allocated to hunting than to national parks, and this is land in non scenic areas which would not be economically self sufficient because it would not attract enough tourists. In addition, hunters are much less susceptible than other tourists to being discouraged from traveling by political or environmental disturbances, which sadly still is a characteristic in many parts of Africa. This means that unlike other types of tourists who are more prone to cancel holidays at the first sign of turmoil, trophy hunters contribute to creating an economically sustainable market in areas unattractive to tourists which provides secure long term jobs and incomes for the local population which could probably not benefit from other types of tourism.

Benefit for local population and reduction of poaching

Trophy hunting also benefits local communities because it generates employment for scouts, drivers, anti-poaching units and professional hunters. Moreover, unlike in most national parks, local communities are not excluded from using hunting grounds for subsistence hunting, small cattle grazing, firewood collection etc, which is liable to reduce the bad image that locals have of wildlife parks and nature reserves. Thus, trophy hunting can have a positive image on local communities by providing an income and allowing low scale use of natural resources. In Kenya where hunting is banned, locals receive very little direct profit from wildlife and in order “not to let it go to waste”, they resort to poaching. This has the result that “conservation in Kenya has become largely a law enforcement operation and, inevitably, this is a drain on limited local resources.”⁸

Preservation of the environment

The legalization and great financial potential of trophy hunting has made farmers switch from traditional farming to wild game farming. Thanks to this, 27000 km² of ranching land was converted to wildlife habitats in Zimbabwe⁶. Traditional farming, such as crop production and ranching greatly contribute to habitat loss, soil erosion, environmental degradation and, in the case of ranching, can also serve as an interface for livestock/wildlife disease for example Rinderpest, Rift Valley Fever and Foot and Mouth which can be transmitted from domestic cattle to wildlife with potential catastrophic effects². By using land for trophy hunting instead of agriculture and farming, wildlife is greatly benefited without causing important economic and ecologic loss.

Scientific interest

Fresh cadavers of animals shot by hunters can be useful for scientific research, to obtain information on species such as age, sex, food intake, health etc and can help scientific progress. This information can also be used to set more efficient hunting quotas, which as we will see later is a major obstacle to conservation hunting.

From loss to gain

Trophy hunting can also be used to make (instead of lose) money from problem animals. The Kruger National Park spends a lot of money for their annual elephant cull in order to reduce pressure on biodiversity. Similarly, Kenya, which has banned hunting, has to pay hunters to kill problem animals such as roaming hippopotamuses or elephants which cause important financial and human damage. Translocation and contraception are possible but they are expensive and do not bring in money as trophy hunting does (although the method employed should depend on the rarity of the species in question). However it has to be said that it is difficult to organize hunts to

control problem animals because the need occurs unexpectedly and hunts would have to be organized at very short notice.

Sustainable and self-regulating

The most important aspect about trophy hunting is that, if managed responsibly with a sense of marketing, it can be sustainable and ultimately self-regulating. In effect, even if hunting park owners are acting only for their own financial interest, it is in their own interest to encourage and participate in species reproduction/re-introduction to ensure that there will always be a continuous and thus sustainable supply of game for their clients. Trophy hunting provides incentives for farmers to buy and provide land for their game animals and it can no doubt be argued that the better the farm is managed, the more benefit there will be. The abundance of the previously threatened Southern White Rhino (*Ceratotherium simum*) in southern Africa has been partially accredited to game farmers (Leader-Williams et al., 2005). Hunting does not necessarily lead to population loss but can be practiced without harming population growth. For example, the Nyae Nyae game populations (Namibia) “would still yield growing populations of approximately 11.5% per year for springbok and 6.5% for other plains game species for 2% annual off-take rates for trophy hunting through 2007; and thereafter from 2007 to 2015 through a combination of trophy hunting at 2% and meat harvesting at 6.5% per year off-take (Fig.7)”. Sustainability is a key word in conservation and together with self-regulation; trophy hunting could be an independent and cheap way of doing conservation.

We have seen that trophy hunting can be put to the service of conservation but also to local community development. Conservation methods which benefit local populations are crucial as “the key to the survival of wildlife in Africa is to involve rural residents directly in conservation efforts. Because most of the people in these areas exist at a very basic subsistence level, it is argued that the best way to secure their involvement is to permit them to derive, [...] economic benefits from the wildlife. If animals have an intrinsic value which can improve the community's standard of living, then the community has a vested interest in protecting the source.”⁶ Poachers for example, who usually belong to poor local communities can realize that there is more money to be made by protecting wildlife in the long term instead of decimating it for short term gain. Hunting can thus seem to be a cheap, dependant, long-term and *locally accepted* solution to guarantee the future of wildlife, but many practical and ethical obstacles still stand in the way to make trophy hunting an efficient tool for conservation.

Ethical dilemma

For many people, trophy hunting, and hunting in general is unethical -- conservation through hunting is a contradiction in terms. The idea of killing an animal, especially the emblematic ones such as elephants, lions or rhinos can be shocking. This is further intensified by the practice of canned and put-and-take hunting (animals are hunted in small enclosures or habituated to human presence), which is viewed as inhumane because it does not respect the rules of “fair game” in which the animal has a chance to escape. On a personal note, I believe that, considering the fact that animals will never have a ‘fair’ chance against a hunter with a gun anyway, it is just as well that the animal is killed somewhere where it will not manage to escape badly hurt.

Some farmers also resort to ‘wildlife farming’ where wild animals are bred in small pens to give a maximum of offspring. These cages rarely respect the minimum requirement for wild animals and many die from bad hygiene and overcrowding⁵. Thus, unless properly regulated and controlled, trophy hunting can also be negative for conservation and animal welfare. “Wildlife” farming is a contradiction as a farmed animal is no longer a wild animal and in this case the whole concept of saving wildlife is lost.

Trophy hunting can provoke disgust and give a very negative image of conservation and its methods.

Environmental and Genetic degradation

A more scientific problem is the loss of genetic quality. Because farmers want to make maximum profit they do not hesitate to resort to family interbreeding and cross breeding to create more 'exotic species' such as "red wildebeest". Clients also demand to shoot the best looking specimens (size of mane, horn, tusks, etc) and thereby seriously affect genetic quality. Some have referred to trophy hunting as "reverse evolution" as it goes against the balance of nature. For example, according to studies, for every male lion that is shot, up to 12 cubs can die (because when another male takes over the pride he will kill the cubs). To maximize profits some farmers have also introduced exotic species into their reserves such as dama dama deer in South Africa at the great risk of destroying the local ecological habitat especially if these escape and breed outside the game farms (as seen with rabbits introduced for hunting in Australia). Another negative effective on the environment is that hunting farms are small and by law, are required to fence of their properties. This has the effect of preventing natural migrations and population redistribution, and, because farmers tend to pack their land with trophy animals, this also results in ecological degradation. This is intensified by the fact that some farmers try to get rid of animals that are not interesting for hunters (cheetah, wild dogs) which upsets the ecological balance.

Local mistrust

As we saw above, it can be argued that trophy hunting, by benefiting local communities, can reduce poaching. Hunting is an old tradition in Africa, young Masai-Mara used to prove themselves by killing a lion but nowadays local hunting is forbidden or very restricted. The same use of the same word for both 'wildlife' and 'meat' in Swahili suggests how deeply hunting is rooted in the sub-Saharan culture. White hunters from abroad however are encouraged to come to Africa to hunt its wildlife. This can create tensions between the hunting industry and locals, who, quite understandably see it as an injustice to allow strangers to exploit natural resources when the locals are forbidden to do so. "If the law seems unjust it is much harder to enforce" and in consequence this may provoke and/or intensify poaching. Because hunters nearly always conserve their trophy or parts of it, this sends the wrong message to locals that dead animals "are still a valuable trade commodity." Finally, by allowing hunting, farmers can more easily resort to poaching because it is much more difficult to control if they are breaking the law or not. Thus, hunting can increase poaching from locals and the game farmers.

As we saw, hunting can be sustainable over many years, but it is a mainly a seasonal market and because low qualified jobs are not highly secured in Africa, it is much easier to fire employees during the non seasonal period and recruit new ones at the beginning of the next season (but the farm still has to be looked after through out the year). Although jobs opportunities will always exist at the start of a new season, the seasonal licensing causes social tensions, displacement and unemployment in the off-season.

Poor management and corruption

A third problem with trophy hunting is that of poor planning and management. The lack of scientific data on wildlife population can prevent the setting up of adequate and sustainable hunting quotas which are mostly established on guesswork and, if wrong, can seriously harm wildlife populations, especially endangered ones.

Lastly, corruption, nepotism, ineffective laws and the difficulty of enforcing them present a very important threat to wildlife. Its lucrative nature and the potential for abuse and corruption still affect the industry. Where effective law exists, money is lost to corruption and still goes to the

game farmers or bureaucrats without directly benefiting local communities. Corruption not only leads to loss of revenues but also allows game quotas to be exceeded. One of the reasons Kenya banned hunting is because overshooting and corruption cost the government between 20 and 40 million USD a year. This also contributes to negative attitudes towards trophy hunting and encourages poaching. Trophy hunting for conservation can have a serious impact on wildlife. Many of the problems encountered above arise from irresponsible behavior and can hopefully be solved.

Maximizing profits and minimizing threats

Even if it is often difficult to find perfect solutions to all the problems caused by trophy hunting, it is already a first step to balance the negative effects with positive effects. The best solutions are those that create win-win situations for all people involved in the project (government, hunters, farmers and local communities). The main aim is to maximize economic and social benefits by multiple uses of wildlife. An example of this is to use animals first for photo safaris then for hunting and allow locals to use the cadavers for meat (this also decreases bush meat hunting) and skin. Not also does this maximize profits, but by using wildlife for photo tourism, farmers will be less inclined to cull ‘uninteresting’ game and overpopulate their parks and will have an incentive to keep ecological degradation as low as possible level.

The distribution of hunting tenures should be done in a way to minimize the negative effects of trophy hunting. Firstly, hunting leases should be given over many seasons to provide incentives for the farmers to make sustainable use of their game (by encouraging reproduction, preventing poaching etc) for future seasons. This has a further advantage of ensuring long term jobs which is a basis of sustainability and development. If hunting leases are given only for one year, farmers have no incentive to make sure that there will be species present for the next season. Secondly, concessions should be given on certain conditions such as a guaranteeing that anti-poaching, ecological and ethical standards are maintained. This is not easy and depends mainly on the self-regulation of hunting. One author has come up with the solution to rank and publish (in tourist guides for example) hunting operators on their “commitment to conservation, community development and hunting ethics” which would motivate operators to conduct hunts in a manner more conducive to conservation. Thirdly, it could be a good idea to force farmers to release a certain percentage of their breed stock into nature reserves and donate a certain percentage of their income to conservation organizations. Fourthly, to allow migration and thus prevent overpopulation and ecological degradation, neighboring farms should be encouraged to merge together to create larger game parks. Finally, quotas should be based on the age, sex and health of animals to prevent reduction of genetic quality and distortion of the ecological system.

Involve local communities

To permit some revenue to flow directly to, it could be a good solution to transfer certain property rights (but not full ownership) to local communities, although it is possible that they might lack management skills which would prevent maximization of benefits. Communal Areas Management Program for Indigenous Resources (CAMPFIRE) program seeks to empower rural communities for conservation and sustainable development through harvesting natural resources². In the Lupande Game Management Project (Zambia), profits from wildlife are now directly distributed in cash to villagers. Individuals keep a portion and the rest is given to community projects such as clinics and schools which are approved by the whole community. Eighty percent of hunting revenues now devolve to the village. Improving community services such as schools offers a nice opportunity to educate the next generation on conservation issues, which are not well understood in the current generation.

Alternative hunting

Eco-hunting (darting animals) offers an interesting alternative to hunting by creating a win-win solution. It is economical (the hunter instead of the biologist pays for the “hunt”) and brings scientific benefits, without “under diminishing the skill and the risk of the hunt, the quality of the experience equals or exceeds that of a lethal hunt.”⁹ (the hunter can even get a cast of the horns or tusks). But this a very new concept and there is in my opinion a risk that, because of the removal of the ethical barrier of hunting, hunters will flock to Africa and there is a risk of abuse which could have negative effects.

Eradication of corruption

Lastly, and most importantly, there is the urgent need to erase corruption, cronyism and abuse of the trophy hunting industry. This is a huge and difficult task as corruption is very easy to execute but very difficult to control. Ironically because it affect so much more than only the trophy hunting industry (governments, economies...), conservationists can form a united front with many different agencies (UN, OECD, World Bank) which have much more power and resources than the rather weak conservation lobby. Transparent mechanisms (training hunters and guides, more effective quota management and hunting concession distribution) are needed for allocation of hunting permits to avoid corruption, cronyism and mismanagement. Transferring decision-making to people without links to the wildlife hunting industry so that the economic side of hunting does not influence decisions could be part of the solution.

Conclusion

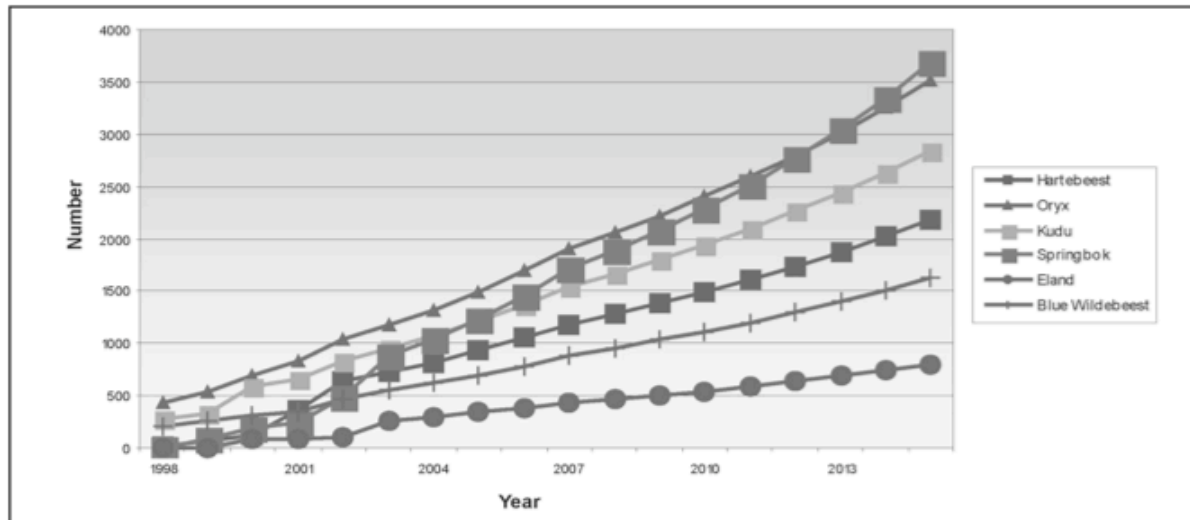
In conclusion, it can be said that hunting, if properly managed, has the potential to raise the livelihood of individuals and national economies. By generating money, hunting can lead to win-win situations to all people involved and local communities and governments are willing and able to participate in conservation and are committed to it.

Hunting may be good for conservation but ensuring that it is ethical, sustainable, and positive for conservation is difficult because of the large profits that can be made from it if the conditions are not respected. At present, because of corruption, abuse and lack of scientific knowledge, trophy hunting has a high potential of causing severe ecological degradation. In order for hunting to benefit both conservation and development it should be responsibly managed, transparent and controlled. In my opinion, it should be kept as an expensive sport – i.e. not be allowed to develop further -- until the quality of the hunting industry and government administration improves and all benefits are maximized. The hunting of endangered species should be totally banned.

For practical and moral reasons, conservation cannot take place to the detriment of local populations. The hunting industry however represents a high potential for viable development especially for rural communities which other conservation methods may not provide. It must nevertheless not be forgotten that other methods may lead to huge positive impacts which trophy hunting cannot propose. Trophy hunting can be considered as an important example of a new interdisciplinary approach to solving together both social and conservation problems.

Although more moral than ethical, the dilemma of allowing the killing of one animal to save others will always be present. By regarding wildlife only as an economic resource there is a danger of undermining the whole spirit of conservation and even wildlife. It must never be forgotten that causes are defended by passion, not by guilt and money.

Fig. 7. Extrapolated population growth rates for Nyae Nyae plains game (meat-producing) species, based on sustainable off-takes of 2% for trophy hunting through 2015 and 6.5% for meat harvesting from 2007 to 2015



Reference:

¹“*Building a Future for Wildlife*” - The World Zoo and Aquarium Conservation Strategy (2005)

²“*Conservation and Development Interventions at the Wildlife/Livestock Interface, Implications for Wildlife, Livestock and Human Health.*” IUCN occasional paper of the IUCN Species Survival Group n°30 (2003)

³“*Sport Hunting in the Southern African Development Community Region: An Overview.*” TRAFFIC East/Southern Africa. (2006)

⁴“*Economic and Conservation Significance of the Trophy Hunting Industry in sub-Saharan Africa.*” Biological Conservation 134 (2007)

⁵“*The Myth of Trophy Hunting as Conservation*” League Against Cruel Sports (2004)

⁶“*Development of a Model System for Touristic Hunting Revenue Collection and Allocation*” Joni E. Baker, Tourism Management (1997)

⁷“*Hunting has conservation role*” Elli Leadbeater (BBC)

⁸“*Hunting for conservation solution*” Euene Lapointe (BBC)

⁹<http://www.eco-hunt.co.za/>

¹⁰<http://www.american.edu/TED/campfire.htm>