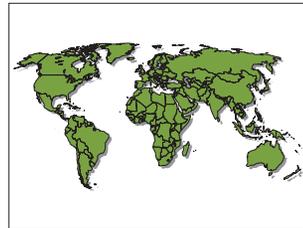


RECREATIONAL TROPHY HUNTING: “WHAT DO WE KNOW AND WHAT SHOULD WE DO?”



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Abstract. Trophy hunting is an important tool in conservation, but it is not conservation in itself. As a conservation tool, trophy hunting must provide measurable social, economic and ecological benefits. Hunting tourism and ecotourism have a number of similar elements and, well managed hunting tourism fulfils the concepts of ecotourism. Hunting tourism may be considered the least intrusive form of ecotourism since the balance of evidence proves that trophy hunting can help conserve threatened species and their habitats. The work done at several international symposia in recent years forms the basis for the development of Principles, Guidelines, Criteria and Indicators for hunting as key components of global sustainable hunting tourism, of resident recreational hunting and in consequence as a building block for rural poverty alleviation and as an important conservation contribution.

Key words: Sustainable Use; Trophy Hunting; Recreational Hunting; Conservation; Best Practices; Hunting Associations; Sustainable Hunting Tourism; Principles, Criteria and Indicators of Sustainable Hunting.

1. Introduction

In the 21st century, hunting in general and trophy hunting in particular are almost purely recreational. Recreational trophy hunting is the motor which drives a multi-million dollar global hunting industry. We need to establish strategies for the different hunting regions in the world, which show that recreational trophy hunting is part of a triple-bottom-line approach to sustainable conservation. This approach includes social, economical and ecological considerations.

The Society of Conservation Biologists (SCB) discussed these issues in 2001 in Christchurch/New Zealand. The process continued at the Conservation Hunting Conference in Edmonton/Canada in 2004 and brought together stakeholders at the London Recreational Hunting Symposium in 2006. In July 2007, a follow-up meeting at the SCB conference in Port Elizabeth/South Africa looked at practical solutions. Some participants at the latter meeting stated that the process has not yet found the appropriate attention of some important international hunting associations, lip service and monetary contributions towards the various conferences excluded. Although, there seems to be no lack of comprehension on the part of the hunting organizations, but there is certainly a lack of willingness to cooperatively drive an evolutionary adaptation of traditions, concepts and practices. Furthermore a cohesive global strategic vision on how to solve the issues of the present and the challenges of the future is missing.

The 54th General Assembly of the International Council of Game and Wildlife Conservation CIC in Belgrade debated this under the topic “Trophy Hunting, Hunting Trophies and Trophy Recording” in a workshop in May 2007. It formed part of the ongoing process within the CIC to find regionally applicable solutions for trophy hunting as well as for national and international hunting tourism. The participants from international organizations like CIC, Dallas Safari Club, FNAWS-ISHA, Conservation Force, Rowland Ward, FAO, IUCN, CITES as well as representatives of many European and some African Hunting Associations felt that a permanent international expert taskforce should work in this field. The CIC debate expanded the ongoing work of CIC on Sustainable Hunting Tourism.

2. History of Recreational Trophy Hunting

In the United States, President Teddy Roosevelt founded the Boone & Crockett Club in 1887. The Boone & Crockett Trophy Scoring System was established in 1930. Rowland Ward in London started to compile measurements in 1892. In 1930 the CIC was established and the CIC trophy formula started to take form. All three systems focused on comparative analysis and the achievements of the newly fashionable wildlife management philosophy. In the mid 1970s Safari Club International emerged with an own record book. Whereas the record books of Boone & Crockett, CIC and Rowland Ward are open for anybody who selects to have a trophy registered, SCI's book is restricted to SCI members only.

The entry limits of Boone & Crockett, CIC and Rowland Ward are set at high scores, whereas SCI entry levels for most recorded game species are set at relatively low limits. Boone & Crockett makes it obligatory that all trophy owners who wish to enter a trophy in the B&C book sign an affidavit confirming that the trophy was taken under strict "Fair Chase" conditions. A similar "Fair Chase Statement" is presently contemplated by Rowland Ward and CIC, respectively.

Hunting trophies are extraordinary characteristics in horns, tusks, overall body size, mane, etc of mature males. These trophies develop with age. They are usually directly connected with the breeding success of the trophy animals. The really outstanding trophies occur with animals crossing the line to post-reproductive stage. Such animals have also spread their genes during many breeding seasons.

High trophy scores or high entry limits can therefore be interpreted as being conducive towards the hunting of mature trophy animals, whereas low trophy scores and low trophy entry limits may be interpreted as favouring the taking of immature or younger animals still active or necessary in the healthy breeding cycle of the game population.

Advancing age eventually becomes an exclusionary factor from breeding activity. The removal of a few mature males from an animal population with a healthy demographic structure falls largely within the compensatory mortality range. CIC and Rowland Ward are therefore contemplating to include age related parameters into their trophy scoring methods.

Those opposed to trophy hunting concentrate their arguments on the statement that hunters kill the best "trophy-bearing males". They disregard that females contribute 50% of the genetic material. Neither does their argument consider the limiting influence of environmental and nutritional factors on trophy development.

The myth that "trophy hunting for big horns" contributes towards the degeneration of species' characteristics originates probably from a Canadian study (COLTMAN 2003) on a small population of Rocky Mountain bighorn sheep. In contrast, LOEHR (2006) found similarity in the relationship between growth rate and longevity in thinhorn sheep (*Ovis dalli*) for hunted and natural mortalities. LOEHR suggests that ram horn growth rate does not respond to artificial selection. LEE (2006) stated "that big-horned bighorn rams are becoming more numerous, not less so – they are definitely not going bald" and refers to the entries in the Boone & Crockett Record Book.

That trophy standards are improving applies also to a wide variety of African game animals. The African elephant is one exception. The poaching pandemic was responsible for the near total elimination of big tuskers. The African Buffalo is another exception as we will hear later.

There are some negative aspects to recreational trophy hunting. These aspects have their root partially in the competitive focus of some hunters to obtain "record" trophies, partially the term "sport hunting".

“Sport hunting” has been deliberately misinterpreted by hunters and anti-hunters. Roosevelt’s Fair Chase movement at the end of the 19th century was intended to distinguish the real hunter from the market hunter who had indiscriminately killed game to the point of eradication. Sportsmen and sport hunting meant fair play, style, dash and moderation. Not “sport” as in golf or tennis!

The Safari Club International record book and the SCI award programs are highly profitable ventures for SCI. They also foster competition and low entry limits, a growing number of “slams” and awards may encourage hunters to collect the most, or the biggest, or most of the biggest trophies. Yet the bulk of the entries are so-called “representative trophies”, which may be of pre-reproductive age. Nevertheless, the Hunting Report, an international newsletter covering trophy hunting around the world sees positive aspects and states that “the robustness of the world hunting economy and the spill over of economic value into local communities are due in large part to SCI-type trophy hunting. The Hunting Report also states that conservation programs worldwide are flourishing because of this ‘mania’ and that these programs are cropping up in ever smaller nooks and crannies of the world because of SCI’s readiness to create new trophy categories to celebrate newly defined subspecies”.

In Europe, the CIC formula system is occasionally being misused for individual glorification and an unhealthy competition between European hunting countries to “produce” the largest antlers. Moreover, the CIC scoring system has distinct flaws, like beauty and penalty points, which may be construed as being given or subtracted on an understandably subjective basis.

A consequence of this development was that the tape measure and “shopping lists” with animals and specific trophy sizes unfortunately became part of many hunts. A good number of hunting managers, professional hunters and landowners succumbed to the “record temptation”. Ultimately, the trend encouraged genetic manipulation of game animals, canned shooting, high-fenced killing grounds supplied by “breeder facilities” and abetted the killing of immature animals and of those which are essential for breeding.

Overshooting of quotas by hunt operators and unsustainable quotas for trophy animals set by regulatory authorities have also contributed to opposition towards trophy hunting. This can be said especially in Central and East Asia in relation to certain local deer populations of (*Cervus elaphus ssp.*), argali sheep (*Ovis ammon ssp.*), Urial sheep (*Ovis orientalis ssp.*), brown bear (*Ursus arctos ssp.*), but also for some regions and species on the African continent.

The underlying reasons are often a combination of several factors: In some hunting areas the change in political and economic systems led to rogue free-market attitudes; to some extent the observed decline in trophy animals may be attributed to the commercial use and/or poaching of wildlife; the short-term allocation of concessions often has a consequence to a “let’s take what we can as long as we can” attitude; periodic adverse climatic impacts in areas subject to droughts and severe temperature variations; socio-political changes like an increase in private herd ownership of domestic animals which affect wildlife habitats negatively, and so forth.

This issue has been addressed by a number of authors in scientific papers, yet no major hunting organization has considered the necessity of getting involved and issue clear “State of Wildlife Warnings” in those cases where resource management and hunting is observably unsustainable.

3. Implications of Recreational Trophy Hunting

Capturing economic return from trophy hunting through entrepreneurial spirit helps to preserve and produce hunting opportunities. Trophy hunting provides economic benefits beating those of conventional agriculture

and thus could encourage biodiversity conservation. HARRIS (2004) argues that trophy hunting tourism avoids most of the problems of ecotourism because hunting has the potential to provide relatively large financial inputs to specific areas with little need for additional infrastructure. The “damage” caused by trophy hunting is, in fact, minimal – last not least, one of the results of sound conservation management is the sustainability in numbers of mature trophy class animals. Although the image of a dead animal may be distressing to non-hunters, well-managed hunter harvests are almost inconsequential from a biological viewpoint. Yet even in those positive cases, the question remains often open whether the funding obtained through trophy hunting is being put to good use.

Although the trophy quality of horned and antlered game within a game population can be used to judge the overall demographic health of a particular game population, the trophy recording in the traditional “Books” is, however, only of limited value to judge important biological parameters. There are four reasons:

- The relative weight in the scoring formulas given to anthropomorphic factors like “beauty”, color, etc.;
- The lack of biologically relevant species-specific information;
- The less than exact geographical and other data concerning the location of the hunt;

The lack of non-trophy data, like the weight, body condition of the killed animal and the circumstances when it was killed (*i.e.* single animal, within a herd, rutting, observations regarding breeding success, etc).

Much information could be obtained from precise records of hunted animals, if the data sets would be complete, accurate and honest. However, we must not forget that trophy hunting is not a random process and the data do not represent random samples from a particular demographic class; data interpretation must take this into account. The CIC is, therefore, contemplating and discussing a complete revision of its hunting trophy database.

The protectionists advocate the prohibition of all wildlife trade and markets – hunting included. This misguided stance is paralleled by the narrow focus in many hunting circles which base the selection of trophies on traditional anthropomorphic ideals, disregarding important biological components and most importantly the age of the trophy animal. Both viewpoints are detrimental for wildlife. The following examples show some cases, where subjective hunter trophy “ideals” might ultimately be unsustainable:

- The average hunter selects Cape buffalo trophies according to standards set by record books. This leads to bulls being killed before they entered the breeding cycle (GANDY & REILLY 2004, ROBERTSON 2007, TAYLOR 2006). The net effect of killing a good portion of immature bulls has approximately the same result as if harvesting immature individuals only (ERNANDE *et al.* 2003). Trophy quality will suffer and side effects like lower birth rates, disturbances in social structure, etc will occur subsequently.
- The African lion suffered from the hunting of prime pride males essential for the maintenance of healthy lion demographics. PACKER’s “black nose theory” was a first step to establish criteria for assessing the age of life male lion. PACKER’s age criteria have been expanded in “A Hunters Guide to Aging Lions in Eastern and Southern Africa”. Although field research still has to be done to determine whether these criteria are applicable throughout the lion range, the premise that hunting mature lions above a certain age bracket will have no detrimental effects on the genetic make-up and the sustainability of the population is of importance.
- In the United States some wildlife managers now propose to let the middle age class whitetail bucks live. They want hunters to take more yearling bucks and mature trophy bucks only above a certain age bracket, as well as does, in order to balance an observed terribly skewed whitetail demography.

- In Europe, HACKLÄNDER (2007) stated that hunting selection in red deer based on anthropomorphic ideals in antler scoring formulas might throw the genetic diversity of a deer population out of balance, since it disregards the natural genetic diversity in antler formation. HACKLÄNDER recommends to base selection criteria on overall physical appearance and age.
- In the Russian Federation, but also in other hunting countries of Central and East Asia, Maral, wild sheep and bear species are arguably the highest value contributors to recreational trophy hunting, yet none of the hunting management regimes bases harvest rates on age factors. Systems like those applied in North America may offer solutions, like a minimum rack size for Maral (*i.e.* the six-point regulation in the western Canadian provinces), Stone's sheep (either the tips of the horns have to pass the bridge of the nose when seen from the side or the annuli of the horns have to show a minimum age of 8 ½ years), grizzly and black bear (pre molar extraction and scientific age evaluation) as well as the mandatory examination of trophies from key species by the regulatory authorities.



This is a mature huntable bull



This bull should be left alone (Photos: Catherine Robertson)

The question of limiting off-take to mature males of near post-prime or post-prime age brackets in trophy hunting is being debated for many years. Apart from Rowland Ward and the CIC, none of the major scoring systems of the international hunting associations has shown an inclination towards change. There may be several reasons: the hunting associations are reluctant, because change may create controversies amongst their membership; the hunting operators are reluctant, because they see their work being complicated and the landowners may see a reduction in financial benefits.

Other causes may be the lack of cooperation between hunting operators and the scientific community and in consequence the observable tendency of scientists to impose their views on the hunting stakeholders despite of vague empirical hunting data, shifting regulatory frameworks and usually short-term hunting concession use.

The “certification issue” is a case in point. What works for globally traded timber in a multi-billion dollar industry is not necessarily successful in the relatively insignificant niche market – in global economic terms – of recreational trophy hunting. The promoters of “certification systems”, especially of single species systems have overlooked the terms of economic feasibility and administrative practicality as well as the tendency of such systems to become corrupt. This applies even more to those all-inclusive certification systems, which hold promise to end up in expensive administrative nightmares.

Trophy hunting exerts selective pressure on adult males and trophy selection is a less than an exact science. Therefore, the success of trophy hunting programs depends on adaptive management processes. Hunting regimes – especially in remote areas like in some parts of Africa and Central/East Asia – need to produce sex and age-specific mortality patterns similar to those occurring naturally; respectively they have to

maintain demographic structures in the hunted game populations which are conducive to natural breeding behaviour (HARRIS *et al.* 2002)

Hunting associations, especially those involved in trophy recording, should acknowledge the need for international cooperation to ensure that such hunting programs are encouraged. The combined efforts of the hunting associations and the national wildlife management authorities must include the scientific community like the IUCN specialist groups to produce positive outcomes.

4. Conclusion

The “pressures” of hunting in the 21st Century involve limited time frames, fussy hunters, the vagaries of game and a good dose of luck. This is compounded by the “*if I don't take it now, the next hunter will*” attitude (TAYLOR 2007). The clients' nationality also has an influence on trophy ambitions – European clients, especially German and Austrian, tend to prefer “character” trophies, usually older animals; American clients, who make up the large majority of hunters travelling the globe, prefer symmetrical, high scoring trophies, often younger animals essential as breeding reservoir. These particular “pressures” must be addressed by the hunting associations in focusing the interest of their members and of the hunting service providers on the “holistic” hunting experience instead of the inches, centimeters and points of a trophy. Independent international hunting media can add a momentum of peer pressure, which would eventually filter down to the individual hunter.

Regulatory and scientific authorities need to carefully monitor the impact of hunting on the genetic and population make-up of game species and use appropriate adaptive management processes to immediately act on undesirable outcomes.

In the context of international and national provisions and legal requirements for sustainable use (e.g. CBD Guidelines on Biodiversity and Tourism Development, Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity), hunting tourism, as specialized form of ecotourism, has to establish suitable principles and criteria for trophy hunting, as is the case for any other form of land use.

The CIC initiative “Sustainable Hunting Tourism” proposes the development of a formalized set of Principles, Criteria and Indicators embedded within a framework of guidelines. This process, driven by a think tank of experts drawn from hunting, scientific, tourism and regulatory authorities, will enable the objective evaluation of hunting against the three pillars of sustainability.

Trophy hunting can outweigh any perceived or real disadvantage, if responsibly managed and monitored. The Principles, Criteria and Indicators can provide global standards and tools for these processes. Broken down into regionally applicable modules they will lead towards acceptable “Best Practice Standards” in recreational hunting tourism and hunting in general.

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