



**A BRIEFING PAPER TO INFORM DECISIONS PERTAINING
TO TROPHY HUNTING IMPORT BANS**

10 OCTOBER 2019

PREPARED BY DR. ROSS HARVEY ON BEHALF OF THE EMS FOUNDATION

Preamble

1. In September 2019, an article was reposted on the International Union for the Conservation of Nature (IUCN) website that questioned the compatibility of trophy hunting with the principle of 'sustainable use' as one of the IUCN's objectives.¹ The article was in fact one of a number of position papers presented to the IUCN Council in November 2017 for its deliberations on admission of new members.² The article bears strong relevance to the current political moment and the fact that we are facing a sixth mass extinction. The authors find that trophy hunting is unethical and incompatible with the quest for a just and sustainable world.
2. The United States House Committee on Natural Resources has recently voted in favour of the "Conserving Ecosystems by Ceasing the Importation of Large Animal Trophies Act" or the "Cecil Act." The purpose of the Bill is to "amend the Endangered Species Act of 1973 to prohibit import and export of any species listed or proposed to be listed under such Act as a threatened species or endangered species, and for other purposes."³ The Bill has not yet been voted on in the House of Representatives. The Bill essentially places stringent conditions on the permitting of trophy imports from other countries, one of which, for instance, is that "hunting of the species in such country enhances the propagation or survival of the species".
3. A recent letter published in *Science* by Professor Amy Dickman and others, supported by a sign-on list of a further 128 signatories⁴, has been reported in the global media as representing a scientific consensus that trophy hunting can enhance

¹ IUCN WCEL Ethics Specialist Group, 'Compatibility of trophy hunting as a form of sustainable use with IUCN's objectives', <https://www.iucn.org/news/secretariat/201909/compatibility-trophy-hunting-a-form-sustainable-use-iucns-objectives>, accessed 10 October 2019.

² IUCN Global Species Programme, "Sustainable Use and Trophy Hunting: Differences and IUCN Positions," *IUCN*, 2017, https://www.iucn.org/sites/dev/files/factsheet-annex-compatibility_of_trophy_hunting.pdf.

³ Mr Grijalva and others, "Conserving Ecosystems by Ceasing the Importation of Large Animal Trophies Act," 2019, <https://www.congress.gov/116/bills/hr2245/BILLS-116hr2245ih.pdf>.

⁴ Amy Dickman et al., "Trophy Hunting Bans Imperil Biodiversity," *Science* 365, no. 6456 (2019): 874–874, <https://doi.org/10.1126/science.aaz0735>.

the propagation or survival of the species and that banning trophy imports will imperil biodiversity. The letter, however, does no such thing. There are at least two response letters that are shortly to be published. One is lead-authored by Dr. Katarzyna Nowak (in which the current author is also a contributor). Another is lead-authored by Dr. Chelsea Batavia, who has also authored an authoritative journal article that demonstrates the moral unacceptability of trophy hunting.⁵

4. The letter by Dickman and others is written by a number of the same people who authored the Sustainable Utilisation and Livelihoods (SULi) briefing paper for the IUCN to inform decisions on trophy hunting.⁶ This has become the standard go-to text for those opposed to prohibiting trophy hunting imports. It is important to note the tone of response of the SULi briefing paper to the IUCN WCEL Ethics Specialist Group's paper, which has become typical of proponents of trophy hunting as a form of sustainable use. "We take issue, however, with its tone and highly opinionated (rather than reasoned) approach and stress that an ethical discourse is about finding normative and ethical truths based on mutual respect and recognising its open-endedness. There is no space for declaring the own position as superior by slamming an opposing viewpoint ("ignores the evidence", "views of a certain group", "highly simplistic" etc.) and questioning its validity ("We recommend that Council does not take this submission into consideration in their decision-making").⁷
5. As the UK prepares to deliberate this matter through an urgent consultation on stopping the imports of trophy hunt parts, this briefing paper provides a counter-argument, based on the best available evidence, to the SULi paper⁸ that has perpetuated the defence of trophy hunting essentially as a 'necessary evil' – a phrase

⁵ Chelsea Batavia et al., "The Elephant (Head) in the Room: A Critical Look at Trophy Hunting," *Conservation Letters* 12, no. 1 (2019), <https://doi.org/10.1111/conl.12565>.

⁶ D Challender and R Cooney, "Informing Decisions on Trophy Hunting," *IUCN Briefing Paper*, 2016, https://www.iucn.org/sites/dev/files/iucn_sept_briefing_paper_-_informingdecisionstrophyhunting.pdf.

⁷ IUCN Global Species Programme, "Sustainable Use and Trophy Hunting: Differences and IUCN Positions," 8.

⁸ Challender and Cooney, "Informing Decisions on Trophy Hunting."

reminiscent of William Wilberforce's enemies for the twenty years prior to 1807 when the Atlantic Slave Trade was eventually formally abolished.

Introduction

The best defences of trophy hunting tend to follow the following line of reasoning: Trophy hunting, if well governed, can ensure the survival of the species in question by targeting only those specimens that are surplus to overall species survival requirements. In so doing, large amounts of revenue accrue to host countries and local communities on the frontlines of conservation. Regarding the latter, high-paying hunters have a low ecological footprint and provide bushmeat, revenue and jobs for local communities in rural, poverty-stricken and isolated communities. This serves, in part, to increase frustration tolerance for human and animal conflict, which is prevalent where large numbers of elephants or lions exist outside formally protected areas. Moreover, hunting camps provide counter-poaching presence in so-called marginal areas that are often incompatible with the aesthetics required for photographic or other forms of non-consumptive tourism. Therefore, hunting, while far from ideal, is a necessary form of conservation that preserves wild landscapes that would otherwise be converted to livestock or other forms of agriculture.

The argument can appear compelling on the surface and the IUCN SULi paper is no different in this respect. It opens with a definition of trophy hunting as the 'hunting of animals with specific desired characteristics (such as large antlers)' but recognises that 'there have been, and continue to be, cases of poorly conducted and poorly regulated hunting.' It nonetheless holds that 'well-regulated trophy hunting programmes can, and do, play an important role in delivering benefits for both wildlife conservation and for the livelihoods and wellbeing of indigenous and local communities living with wildlife.'⁹ It therefore recommends that no decisions to ban trophy imports:

- i) be taken without careful analysis of the particular role that trophy hunting programmes are playing in conservation and livelihood contributions;
- ii) are based on consultation with affected range states and do not undermine local approaches to conservation;
- iii) are taken only after exploration of other options for engaging with relevant countries to change poor practice and promote improved governance of hunting;

⁹ Ibid., 1.

- iv) are taken only after identification of feasible alternatives that respect indigenous and local community rights and deliver greater incentives for conservation over the long term.

It is the primary contention of this paper that only points ii) and iv) above should be heeded. The role that trophy hunting may play in conservation at present is scientifically¹⁰ and ethically¹¹ questionable, hence the need to identify alternatives based on consultation with range states and local communities. Attempts to reform hunting governance only delay the process of identifying feasible alternatives and continue to perpetuate the notion – against the evidence – that trophy hunting is compatible with either good governance or ecological sustainability.

¹⁰ Patrick I. Chiyo, Vincent Obanda, and David K. Korir, “Illegal Tusk Harvest and the Decline of Tusk Size in the African Elephant,” *Ecology and Evolution* 5, no. 22 (2015): 5216–29, <https://doi.org/10.1002/ece3.1769>; Tim Coulson et al., “Predicting the Evolutionary Consequences of Trophy Hunting on a Quantitative Trait,” *Journal of Wildlife Management* 82, no. 1 (2018): 46–56, <https://doi.org/10.1002/jwmg.21261>.

¹¹ Batavia et al., “The Elephant (Head) in the Room: A Critical Look at Trophy Hunting.”

Governance

It is rather alarming that trophy hunting is defended with vehemence despite its proponents recognising unequivocally that its failure to deliver conservation benefits are repeatedly undermined by poor governance. It seems that, in their view, governance can simply be reformed but offer no analysis of why the governance of trophy hunting tends to be as weak as it is or exactly how it could be reformed in light of the vested interests already deeply entrenched. The authors of the SULi paper write, for instance, that:

'Rather than bans on trophy hunting, poor practices could be improved by sustained engagement with and support for responsible national agencies to improve governance frameworks and on-the-ground management.'

But this fails to engage with the deeper question of why poor governance and trophy hunting appear to be so deeply intertwined. The reason that the US CECIL Bill aims to ban trophy imports from poorly governed range states is that hunting abuses proliferate under poor governance regimes. In poorly governed states, it is relatively costless for members of the hunting fraternity to offer what game theorists call 'side payments' to ensure concessions. Similarly, it is less costly to pay a government scout – typically sent to accompany a hunt – to look the other way when quotas are abused – than to adhere to the rules. Moreover, in an open system, the incentives are loaded in favour of free-riding – over-exploitation of quotas – instead of adhering to the quota. The authors of the SULi paper openly admit this:

*'This is not to say that there is not a level of illegal practice taking place, as in most industries. There are regulatory weaknesses and illegal activities taking place in some countries, sometimes very serious. These include hunting in excess of quotas, in the wrong areas, taking of non-permitted species, and for African rhinos, problems with "pseudo hunting" and sale of hunting trophies into black markets in consumer states.'*¹²

¹² Challender and Cooney, "Informing Decisions on Trophy Hunting," 5.

Even if the quotas are scientifically determined (providing exactly the right figure for sustainable offtake), professional hunters may be under pressure to provide more than one trophy bull elephant, for instance, for their client. And the truth is that political pressure too often plays a role in determining the quota. As we have seen with overfishing, recently even in the United Kingdom, the idea of ‘sustainable use’ based on a scientifically informed ‘maximum sustainable yield’ from which a quota is derived, is likely to be a fiction.

The reality is that over-consumption of our natural resources has driven the planet to the Anthropocene, the overstepping of our planetary boundaries and the sixth extinction. Greed is at the centre of it, and trophy hunting is ultimately driven by the greedy motivation to acquire the trophy (technically sexual appendages) of a large, wild animal. Governance reforms, even if successful, are not likely to change the nature of trophy hunting, which is incentive-incompatible with ecological sustainability.¹³

Deeper governance questions persist in open systems (non-fenced reserves or concessions) that are not addressed by the authors of the SULi paper:

First, in an open landscape such as the Kavango Transfrontier Conservation Area (KAZA), which spans Angola, Namibia, Zambia, Botswana, and Zimbabwe (between them home to the vast majority of the world’s remaining African savannah elephants), it is not clear to which range state any given elephant belongs to on any particular day. For instance, if an elephant is shot in a hunting concession in Botswana that arrived there that day from Angola, is it part of the quota of 400 licences that the government has recently reintroduced to that country?

Second, if high-revenue photographic tourism depends on the same animals (say, large tusked elephants, of which there are only about 40 remaining in the world) that the hunters are chasing, is it acceptable to undermine photographic tourism for the sake of satisfying

¹³ I make this argument in a forthcoming academic paper. Using a simple collective action game theory model, I show that the incentive to free-ride is invariably stronger than the incentive to adhere to the quota (for hunters). Even if the ‘team player’ adheres to the quota, however, the selective genetic, population ratio and behavioural impacts of hunting are such that the practice should be entirely avoided.

the demands of trophy hunters? These types of opportunity costs are typically not considered in the governance decisions pertaining to hunting at the country or regional level.

Third, if the genetic selective effects of trophy hunting are such that elephants are such that elephants are being born with smaller or no tusks, then are we not wilfully condoning a practice that purposefully, by its very nature, undermines the gene pool in critically endangered species? Is this something that the world is comfortable with from a *governance* perspective.

Finally, if the ecological effect of hunting is to negatively skew population ratios – selecting the largest bull elephants or pride male lions, for instance, does this – then are we prepared to live with this (on the grounds that these effects are a price worth paying for ensuring that the land used for hunting would otherwise be converted to agriculture, an as-yet untested hypothesis)?

The authors of the SULi paper pit trophy hunting against photographic tourism as if these are the only two viable alternatives for funding conservation – a false dichotomy. They favour trophy hunting where photographic tourism is apparently unviable:

‘While tourism can be one viable alternative in a limited number of cases, it requires access, infrastructure, guaranteed wildlife viewing opportunities and political stability – all conditions that are missing in many of the places where trophy hunting is working.’

It is important to note that the argument is not referenced or supported by scientific sources. A cursory look at the data reveals that trophy hunting is poorly governed precisely in locations characterised by a *lack* of political stability.¹⁴ And it is this lack of stability that often creates the conditions for corruption to thrive.¹⁵ To argue that trophy hunting should

¹⁴ Zimbabwe is a case in point, as is Zambia, Mozambique and Tanzania. While these countries are not at risk of civil war (except perhaps for Mozambique), they perform poorly on just about every World Bank Governance Indicator.

¹⁵ Nigel Leader-Williams, Rolf D Baldus, and RJ Smith, “The Influence of Corruption on the Conduct of Recreational Hunting,” in *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*, ed.

be supported to ensure conservation in politically unstable places seems to be logically incoherent. Where conservation successes have been achieved in politically unstable places such as Chad's Zakouma National Park, it has been in the absence of hunting.¹⁶ Where trophy hunting is working, according to many of the authors' own case studies, the conditions they note as necessary for photographic tourism to thrive are in fact present.¹⁷ Botswana, similarly, thrived for the five years in which the Khama administration imposed a moratorium on trophy hunting on public concessions. Local communities, however, that previously benefited from hunting, have been vocal in their frustration at the way in which the ban was imposed.¹⁸

The paper now deals with some specific statements made in the SULi paper.

Barney Dickson, Jon Hutton, and B Adams (Blackwell Publishing, 2009), http://www.wildlife-baldus.com/download/influence_of_corruption_on_hunting.pdf.

¹⁶ Nuwer R, 'In Chad, the Elephants (So Many Elephants) Are Back', *New York Times*, 14 May 2018, <https://www.nytimes.com/2018/05/14/travel/chad-elephants-zakouma-park.html>, accessed 10 October 2019.

¹⁷ See Case Study 1 under the Annex – Rhinos in South Africa and Namibia; Case Study 3 – Bighorn Sheep in North America; Case Study 4 of Zimbabwe is short on peer-reviewed references and also makes sweeping statements about how photographic tourism has been tried in some of these places and failed. However, Dereck Joubert has written that Great Plains has recently taken over an ex-hunting area in Zimbabwe where the hunting was very heavy – to the point of decimation (contradicting the point that hunting contributes to conservation. For a critical contribution to the debate, see: Joubert D, 'Dereck Joubert sets the record straight about trophy hunting impact on lions and refutes claims of so-called benefits', *Africa Geographic*, 6 February 2019, <https://africageographic.com/blog/dereck-joubert-sets-record-straight-about-trophy-hunting-impact-lions-refutes-claims-so-called-benefits/>, accessed 10 October 2019.

¹⁸ Joseph E. Mbaiwa, "Effects of the Safari Hunting Tourism Ban on Rural Livelihoods and Wildlife Conservation in Northern Botswana," *South African Geographical Journal*, January 2, 2017, 1–22, <https://doi.org/10.1080/03736245.2017.1299639>.

Where does the money go?

One of the major arguments generally offered in favour of trophy hunting is that it generates significant revenue both at the macro level and for local communities on the frontlines of conservation efforts. The only paper cited in this respect (at least in the ‘background’ section by the authors of the SULi paper is by Naidoo et al.¹⁹ They write that ‘in developing countries generally 50 – 90 percent of the net revenues (excluding operator costs) are allocated to the local entity, with the remainder to the government authority. The local community benefit can be as high as 100 per cent (or as low as zero).’ This is unsupported and tells us little about the actual distributed benefits of hunting. It is also worth noting that the authors do not cite the widely publicised report by Economists at Large, which in 2013 estimated that, on average, about three per cent of the trophy hunting value chain reached local communities.²⁰ A later study by the same group set out to evaluate the findings of a report released by the Safari Club International (SCI) Foundation and found that the economic benefits of hunting have been heavily overstated.²¹ The contribution to Gross Domestic Product in the countries assessed was likely in the region of 0.03%, as opposed to the SCI Foundation’s claims of between 2.8% and 5.1%. As a proportion of overall tourism expenditure, hunting contributed a miniscule 0.78% of the total \$17 billion.²²

¹⁹ Robin Naidoo et al., “Complementary Benefits of Tourism and Hunting to Communal Conservancies in Namibia,” *Conservation Biology* 30, no. 3 (2016), <https://doi.org/10.1111/cobi.12643>.

²⁰ Economists at Large, “The \$200 Million Question: How Much Does Trophy Hunting Really Contribute to African Communities?,” 2013, www.ecolarge.com.

²¹ Cameron K Murray, “The Lion’s Share? On the Economic Benefits of Trophy Hunting” (Melbourne, 2017), www.ecolarge.com.

²² Ibid.

Killing to conserve?

The SULi report recognises full well that poorly managed hunting has negative ecological impacts: ‘artificial selection for rare or exaggerated features, genetic or phenotypic impacts due to hunting (such as reduced horn size), introduction of species or subspecies beyond their natural range (including in other countries), and predator removal.’²³ It nonetheless offers the view that, provided governance reforms materialise, trophy hunting ‘can and does have positive impacts’, if only for conserving the land. However, this clearly demonstrates that the authors are well aware that hunting is at best the least-worst option in a suite of possible interventions. Moreover, the SULi report fails to recognise the severe future ecological impact of trophy hunting even under good governance conditions. For instance, it is clear that the presence of older elephant bulls is necessary for social reasons to reduce delinquent behaviour among juveniles²⁴ and prevent early musth onset²⁵, thus controlling population growth. Male elephants are also increasingly reproductively successful with age (beyond 40)²⁶, while hunters typically target bulls over the age of 35 who are thought to have already passed on their genetic material (which ignores the benefits of present older males). The fact that older bulls are increasingly reproductively successful also helps to maintain stable population growth rates, which maintains uneven (desirable) ecological impacts across a landscape. Trophy hunters target the biggest and best of any species, which are clearly necessary for proper ecological functioning. Therefore, to argue that it can have net positive conservation effects suggests a misunderstanding of the way in which animals contribute to the functioning of an ecological system.²⁷

²³ Challender and Cooney, “Informing Decisions on Trophy Hunting,” 5.

²⁴ Rob Slotow et al., “Older Bull Elephants Control Young Males,” *Nature* 408, no. 6811 (2000): 425–26, <https://doi.org/10.1038/35044191>.

²⁵ Julie A Hollister-Smith et al., “Age, Musth and Paternity Success in Wild Male African Elephants, *Loxodonta Africana*,” *Animal Behaviour* 74, no. 2 (2007): 287–96, <https://doi.org/10.1016/j.anbehav.2006.12.008>.

²⁶ Lucy A. Taylor et al., “Movement Reveals Reproductive Tactics in Male Elephants,” *Journal of Animal Ecology*, no. September 2018 (2019): 1–11, <https://doi.org/10.1111/1365-2656.13035>.

Hunting generates incentives for landowners to conserve or restore wildlife?

That ‘policies enabling landowners to benefit from sustainable use of wildlife led to the total or partial conversion of large areas of land from livestock and cropping back to wildlife in South Africa, Zimbabwe, Namibia, Pakistan, the United States and Mexico... Without such benefits, the future of these lands and the wildlife that inhabit them is highly uncertain.’ This is a backdoor argument, which suggests that in the absence of trophy hunting, some landscapes would not have been conserved for wildlife. There is, however, no counterfactual, and the private ownership model in South Africa, which many categorise as a conservation success story, has actually resulted in conservation challenges such as habitat fragmentation, canned hunting, the persecution of predators on breeding ranches and so forth.²⁸ At best, the SULi argument suggests the urgent need for alternative models that reintegrate currently fragmented landscapes and ensure community ownership in a model that incentivises non-consumptive use from which to derive benefits for future generations.

²⁷ Michelle D Henley and Robert Cook, “The Management Dilemma: Removing Elephants to Save Large Trees,” *Koedoe*, 2019, 1–12.

²⁸ Ross T. Pitman et al., “The Conservation Costs of Game Ranching,” *Conservation Letters* 10, no. 4 (2017): 402–12, <https://doi.org/10.1111/conl.12276>.

Trophy hunting increases tolerance for living with wildlife?

A popular argument, espoused by the SULi paper and more recently by proponents of reintroducing trophy hunting to Botswana²⁹, is that it increases frustration tolerance for human and wildlife conflict (HWC), reduces illegal killing and reduces HWC itself. A paper commonly cited (but interestingly not by the authors of the SULi paper) suggests that trophy hunting can create ‘landscapes of fear’³⁰ that keep elephants and other dangerous animals away from human settlements. The authors of the SULi paper write that:

‘Where wildlife imposes serious costs on local people, such as loss of crops and livestock or human injury and death, and there are no means for people to benefit from it, retaliatory killing and local poaching are common. This is particularly important in Africa where elephants and other species destroy crops and large cats kill humans and livestock.’

The problem with this line of reasoning is that it assumes that HWC decreases with hunting. However, in Botswana – the country with the world’s largest elephant population – HWC was a problem long before the hunting moratorium was imposed. What is different now is that elephants have been free to disperse, which is optimal for ecological functionality. Moreover, many elephants have migrated into Botswana from neighbouring KAZA countries for fear of being hunted or poached in their home ranges. This has increased the competition for scarce resources such as water, especially given the onset of a prolonged drought season. Hunting camps tend to produce artificial water sources for animals, but this has negative ecological effects on vegetation.³¹

²⁹ See this media video (subject to extensive selection bias and false dichotomy that hunting offers the only solution): <https://www.africahunting.com/threads/voices-from-the-frontline-communities-and-livelihoods-in-botswana.52109/>, accessed 11 October 2019.

³⁰ Joris P G M Cromsigt et al., “Hunting for Fear: Innovating Management of Human-Wildlife Conflicts,” *Journal of Applied Ecology* 50, no. 3 (2013): 544–49, <https://doi.org/10.1111/1365-2664.12076>.

³¹ Henley and Cook, “The Management Dilemma: Removing Elephants to Save Large Trees.”

Trophy hunting may create landscapes of fear that reduce HWC in the short run, but in a drought cycle there is nothing that will keep thirsty animals away from competing for water resources. The longer-term solution, at least in southern Africa for reducing human and elephant conflict, also has more to do with smart land-use planning and conservation-compatible agriculture than with hunting. It will also require proper regional coordination and an extension of the KAZA region well up into the highlands of Angola that feed the Okavango Delta. The logic is as follows: Elephants raid crops that are planted in their migratory paths. This is devastating for rural farmers. However, farmers can plant alternative complementary crops such as chillies and farm bees in addition to employing methods that increase yields per hectare for staple crops. These plantations should be away from dedicated elephant migratory corridors, which should provide safe passage for the entire region's elephant herds to ensure maximum dispersion away from people. Part of the way to establish the corridors is to line fences with variations of chilli deterrents and/or bees. Beyond this, products such as chilli sauce and honey can be sold to tourism outlets as part of a country's local content policies. Moreover, tourists should be encouraged to engage with the local communities that live on the frontlines of conservation and purchase their artwork or pay to watch cultural dances. These are often themed around the wild animals that local community members bear the cost of living with.³²

³² Anna Songhurst, Graham McCulloch, and Tim Coulson, "Finding Pathways to Human–Elephant Coexistence: A Risky Business," *Oryx*, August 5, 2015, 1–8, <https://doi.org/10.1017/S0030605315000344>; Rocío A. Pozo et al., "Determining Baselines for Human–Elephant Conflict: A Matter of Time," *PLoS ONE* 12, no. 6 (2017): 1–17, <https://doi.org/10.1371/journal.pone.0178840>; Rocío A. Pozo et al., "Chilli-Briquettes Modify the Temporal Behaviour of Elephants, but Not Their Numbers," *ORYX* 53, no. 1 (2019): 100–108, <https://doi.org/10.1017/S0030605317001235>; Ciska P.J. Scheijen et al., "Efficacy of Beehive Fences as Barriers to African Elephants: A Case Study in Tanzania," *Oryx* 53, no. 1 (2019): 92–99, <https://doi.org/10.1017/s0030605317001727>; R. M. Cook et al., "African Honeybees as a Mitigation Method for Elephant Impact on Trees," *Biological Conservation* 217 (2018): 329–36, <https://doi.org/10.1016/j.biocon.2017.11.024>; Lucy E. King et al., "Beehive Fence Deters Crop-Raiding Elephants," *African Journal of Ecology* 47, no. 2 (2009): 131–37, <https://doi.org/10.1111/j.1365-2028.2009.01114.x>; Lucy E. King et al., "Beehive Fences as a Multidimensional Conflict-Mitigation Tool for Farmers Coexisting with Elephants," *Conservation Biology* 31, no. 4 (2017): 743–52, <https://doi.org/10.1111/cobi.12898>; Lucy E King, Iain Douglas-Hamilton, and Fritz Vollrath, "Beehive Fences as Effective Deterrents for Crop-Raiding Elephants Field Trials in Northern Kenya - King - 2011 - African Journal of Ecology - Wiley Online Library," *African Journal of Ecology* 49, no. 4 (2011): 431–39.

Some final thoughts

While trophy hunting may currently, under governance conditions rarely met in practice, provide some indirect conservation benefit – through providing counter-poaching presence and some benefits for a handful of local communities, it is not a long-term solution to preserving biodiversity for future generations. The history of recreational trophy hunting is that it drove many species to near extinction, especially in colonial Africa.³³ That it has now contributed to a handful of lion and elephant population recoveries (the SULi paper selects the privately-owned Bulyebe Valley Conservancy in Zimbabwe as its best example) is not an argument that unequivocally supports hunting (being an extremely small sample size).

On the subject of colonial domination, it is critical to note that the benefits associated with trophy hunting for local communities are increasingly seen as a form of neo-colonial handout, even in Zimbabwe, which is typically held up as the prototype for hunting's unparalleled success.³⁴

The most important question raised by the SULi paper is that of alternatives. The authors' criticism of photographic tourism, for instance, is that it cannot compete with the volume of land under conservation for trophy hunting and requires 'political stability, proximity to good transport links...'³⁵ However, as mentioned earlier, Zakouma National Park in Chad demonstrates that these conditions are not always necessary for photographic entities to flourish. Moreover, encouraging hunting in areas that do not currently exhibit political stability seems likely to lead to the very over-hunting and corruption that the authors of the SULi paper recognise as problematic. Moreover, in a forthcoming response to the Dickman et al letter in *Science*, the authors (present author included) delineate a number of other alternatives that reduce dependence between the developing 'south' and the global 'north' and show that trophy hunting is no longer 'a necessary evil.' To their credit, the authors of the SULi paper do recognise the value of alternatives beyond photographic safaris, though are clearly sceptical thereof.

³³ Barney Dickson, Jon Hutton, and William M Adams, *Recreational Hunting, Conservation and Rural Livelihoods: Science and Practice*, ed. Barney Dickson, Jon Hutton, and William M Adams, *Recreational Hunting*,

On governance, it is unclear how SULi expects their suggested reforms to gain traction within political economies defined by deeply entrenched and vested interests. For instance, why would governing authorities that currently benefit from side payments from hunting organisations and/or concession owners be willing to adopt reforms? The proposal appears to be incentive-incompatible with the distribution of political power, a situation antithetical to meaningfully having the voices of local communities represented and respected.

Trophy hunting bans compel the search for viable alternatives. Therefore, while the caution is heeded that a phase-in time may be necessary, the latter may also lead to more deeply entrenched hunting behaviour that is currently destructive. The authors of the SULi paper write, for instance, that ‘bans are unlikely to improve conservation outcomes unless there is a clear expectation that improved standards will lead to the ban being lifted, and the country has the capacity as well as the political will to address the problem.’³⁶ This is an implicit recognition that governance reforms in hunting can only be pursued if there is a credible expectation among hunters that the governing authorities will not abandon trophy hunting altogether. This seems to follow the logic of ‘clean coal’, which supports the continuation of a destructive electricity technology instead of allocating resources towards genuinely clean renewable technologies.

Conservation and Rural Livelihoods: Science and Practice (Oxford, UK: Wiley-Blackwell, 2008), <https://doi.org/10.1002/9781444303179>.

³⁴ Mucha Mkono, “Neo-Colonialism and Greed: Africans’ Views on Trophy Hunting in Social Media,” *Journal of Sustainable Tourism* 27, no. 5 (2019): 689–704, <https://doi.org/10.1080/09669582.2019.1604719>; Muchazondida Mkono, “The Age of Digital Activism in Tourism: Evaluating the Legacy and Limitations of the Cecil Anti-Trophy Hunting Movement,” *Journal of Sustainable Tourism* 26, no. 9 (2018): 1608–24, <https://doi.org/10.1080/09669582.2018.1489399>; Muchazondida Mkono, “Trophy Hunting in Africa: The Case for Viable, Sustainable Alternatives,” *The Conversation*, May 15, 2019, <https://theconversation.com/trophy-hunting-in-africa-the-case-for-viable-sustainable-alternatives-115649>.

³⁵ Challender and Cooney, “Informing Decisions on Trophy Hunting,” 8.

³⁶ *Ibid.*, 10.

Trophy hunting comes at considerable opportunity costs and has only demonstrated genuine conservation benefits in a small number of isolated cases. Its continuation may well impede the large-scale reintegration of currently fragmented landscapes that are necessary to recovering biodiversity and restoring functional ecological systems. This is a matter of urgency, especially given our context of the sixth extinction induced by the very consumption that trophy hunting exemplifies. It is also clear, and appears not to be recognised by SULi, that trophy hunting's contribution to conservation is in steep global decline.³⁷ Given the strong ethical and ecological objections to the practice, it seems inconceivable in the 21st century that any country could continue to defend trophy hunting on the grounds that it is some kind of necessary evil. At best it illustrates a crude utilitarianism, which suggests it is better for a few animals to die to save the landscape than to lose the landscape. However, that is creating a binary trade-off between hunting or landscape loss. This dichotomy is unwarranted, as there is no evidence that more dynamic, sustainable and forward-looking alternatives are not already at hand.

³⁷ Bertrand Chardonnet, "Africa Is Changing: Should Its Protected Areas Evolve? Reconfiguring the Protected Areas in Africa," 2019, <https://portals>.