Trophy hunting certification

Adaptive certification is the best remaining option for the trophy hunting industry in Africa to demonstrate sustainable and ethical hunting practices that benefit local communities and wildlife conservation.

Thomas C. Wanger, Lochran W. Traill, Rosie Cooney, Jonathan R. Rhodes and Teja Tscharntke

The killing of well-known lions in 2015 and 2017 has sparked a polarized debate around trophy hunting, and led to bans on entry of legally acquired trophies into key consumer countries. Such bans are a reaction to concerns about unethical or unsustainable hunting practices, but they do not consider the complex trade-offs around land and resource use in Africa, and the role that regulated hunting can play in wildlife conservation. Here, we propose an adaptive trophy hunting certification scheme that is a market-based solution for sustainable and ethical hunting practices, building on the lessons learned from other natural resource-use certification schemes. We argue that integrating effective compliance and wildlife monitoring, adaptive co-management and a landscape approach into a certification scheme will spark a constructive discussion of trophy hunting, achieving conservation- and community-development objectives. We propose a scheme that is routed through the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and where the cost of accreditation is borne by the hunting industry. Certification may be the last option for the trophy hunting industry to demonstrate and assure sustainable practices that benefit wildlife conservation and rural livelihoods.

The trophy hunting debate

The debate around 'conservation hunting' is not new, but we elaborate on some of the key points here to provide context[1,2]. The principal argument in favour of trophy hunting in Africa is that the benefits generated through hunting can encourage the conservation of land — and wildlife populations therein — that may otherwise be lost to competing land uses such as agricultural or urban expansion[2]. So far, the revenues and other socio-economic and livelihood benefits gained through hunting have driven land-use changes across large areas of private land in southern Africa from pastoralism towards wildlife, and have provided incentives for community-based natural resource management programmes[3]. Full bans on hunting in some African countries, notably Tanzania (1973–1978) and Zambia (2000–2003), led to a loss of biodiversity as a consequence of the loss of economic incentives[3].

Contrastingly, valid criticism of the trophy hunting industry centres on issues around animal welfare, disruption to age–sex structures of targeted populations, localized extinction events and the failure of income to reach local communities[1,2]. Much of the unethical and unsustainable practice that occurs within the hunting industry is a consequence of weak institutions and judiciaries, as well as fragile and inequitable economies in many African countries. Currently, there are no coherent international mechanisms to ensure transparent and sustainable trophy hunting practices to overcome these criticisms and leverage the benefits for wildlife populations and human livelihoods.

Certification in trophy hunting

The most progressive, yet unrealized, solution is hunting certification — a consumer-focused mechanism whereby hunting operators adhere to strict environmental, social and ethical criteria. Certification could provide guidance to the consumer and would allow the market to promote good practice.

Despite past discussions on the certification of the trophy hunting industry[3], there are practically no certified hunting operators in Africa. Savannas Forever in Tanzania, a non-governmental organization (NGO), attempted a certification scheme in the mid-2000s, but this failed, due in part to collusion between a corrupt political elite and hunting operators that refused examination of trophies for age determination or to engage with local communities[4]. While there are many sources of guidance for good hunting practice, we are not aware of other attempts to use these as a basis for certification in Africa. Below we look at certification schemes of other extractive industries for guidance.

Other certification schemes

Certification/accreditation schemes such as the Forest Stewardship Council (FSC), Marine Stewardship Council (MSC) and Rainforest Alliance are part of a voluntary, market-based, international standards system with strict criteria that allow the use of a recognizable label. Such schemes, and the associated labels, are now widespread. For example, FSC-accredited agencies have certified over 500 forestry operations, accounting for more than 29 million hectares in 56 countries[5], and the MSC accounts for over 12% of world catch and nearly 22,000 products carry the MSC 'blue tag' in over 70 countries[6]. Agricultural certification further accounts for a significant proportion of tropical crops such as coffee, cocoa and palm oil[7].

One reason why such schemes have proliferated is because of the support provided by enabling institutional structures and networks. Following pioneering efforts by the World Wide Fund for Nature and private industries to initiate FSC and MSC, several certification organizations created the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance (http://www.isealalliance.org) to develop multi-sector sustainability standards and to act as a strong multi-stakeholder platform. This platform has allowed stewardship councils to influence consumer choice through public pressure on relevant government authorities, as well as raise environmental awareness and elevate the profiles of eco-labels.

The success of certification of extractive industries is subject to ongoing debate, but there are clearly documented positive outcomes. Certified seafood, for example, is three to five times less likely to be subject to harmful fishing[8], and certified organic farms are more biodiversity friendly[9]. However, a review of certification initiatives of fisheries, agriculture and tourism found only weak evidence for positive environmental, social and economic effects[10]. Moreover, MSC-certified fisheries have been criticized for overfishing, high levels of bycatch and incompetence[11]. Accreditation schemes have also been accused of failing to adequately consider livelihood issues when specifying their goals, inadvertently creating trade barriers for developing nations and the unattainability of criteria for small-scale producers[12].

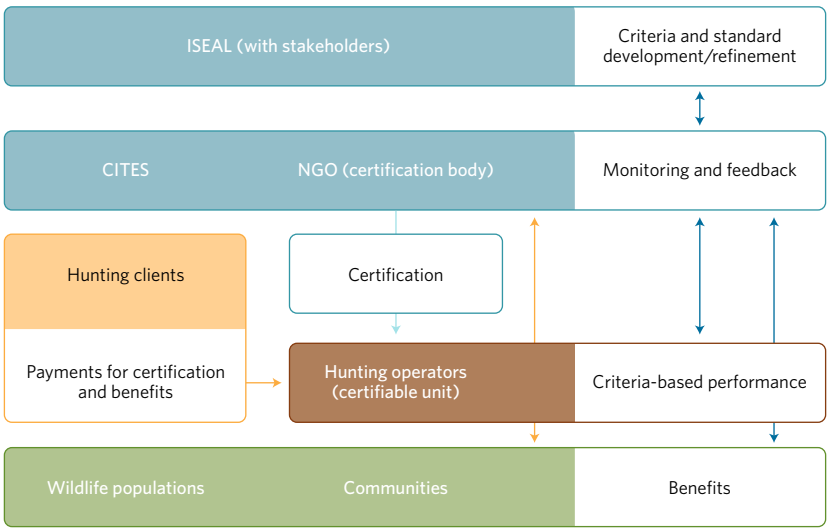

Fig. 1 | Schematic overview of adaptive trophy hunting certification. International institutions and networks (ISEAL, NGOs and CITES) provide the background to develop criteria and standards. An NGO may act as the certification body and certifies the hunting operator (light blue arrow). Hunting clients pay hunting operators and provide the financial resources (orange arrows) to pay for the benefits of wildlife populations and rural communities, and the costs of the certification body. Hunting operators and overall benefits are monitored by the NGO and CITES based on criteria that can be improved through adaptive management and in close discussion with ISEAL (dark blue arrows).

Adaptive trophy hunting certification

We propose a trophy hunting certification scheme that leverages existing institutional frameworks and international networks for an enabling environment, and that builds on strong market demand for sustainable hunting practices. It also explicitly integrates monitoring of compliance and conservation outcomes and uses these to inform adaptation of the certification criteria over time (Fig. 1). The monitoring framework provides a strong evidence base for continual improvement of the certification scheme and ensures, for instance, that livelihood issues are considered and criteria can be met by small-scale producers.

Leveraging international networks

An effective trophy hunting certification scheme should be routed through CITES, the primary framework for regulating international movement of trophies through established quotas. CITES has experience in co-developing enabling structures for improved communication and information sharing between relevant agencies, as for law enforcement agencies in Europe and Africa involved in combating wildlife crime (that is, the European Union Trade in Wildlife Information Exchange, http://www.eu-twix.org/; the Africa Trade in Wildlife Information Exchange, http://www.traffic.org/home/2016/2/16/platform-to-enhance-collaboration-in-countering-illegal-wild.html). Such monitoring structures and tight networks among the involved stakeholders are useful for wildlife trade issues in Africa, and almost certainly for trophy hunting certification. Transparent sustainability standards for trophy hunting should be developed through ISEAL in collaboration with hunting industry stakeholders. The certification scheme could achieve credibility by partnering with major conservation organizations with expertise and infrastructure on the ground.

Certification costs

The western-based hunting market is generally supportive of wildlife conservation and community empowerment. Indeed, 86% of trophy hunters visiting Africa were more likely to purchase a hunting package that benefitted local communities than one that did not. Up to 99% were unwilling to support hunting operators that were not conservation friendly[3], and hunters were prepared to pay an additional US$3,900 for 10% of their overall hunting fees to be redistributed to local communities[13]. This demand for hunting packages certified for environmental and social benefits allows certified hunting operators to charge premium prices that can be used to cover certification costs.

Nonetheless, the coverage of certification costs remains one of the key challenges to implementing trophy hunting certification. Under MSC, for example, cost of accreditation is between US$15,000 and US$120,000 (ref. 11) with a median of US$67,000, and annual certification fees for a certifiable unit range from US$200 to US$2,000 (https://www.msc.org/get-certified/use-the-msc-ecolabel/costs). However, the cost of hunting operator accreditation could be spread over time, and a premium for a certified hunt should be passed on to hunters, given that interviewed hunters were prepared to pay up to US$3,900 for hunting that benefits communities.

Effective certification criteria

The criteria for our proposed certification scheme will need to ensure (1) adequate benefits of hunting to landowners and/or relevant communities; (2) species-specific quotas and strict limits on minimum age and trophy size; and (3) ethical standards (Box 1). Achieving these objectives will require effective monitoring of certification performance and subsequent modification of the certification scheme where objectives are not met. An effective monitoring programme must extend beyond a narrow focus on monitoring hunting operator compliance to the broader monitoring of the conservation and social benefits. A key role for a wider monitoring remit is evaluating the effectiveness of certification criteria to achieve conservation and social objectives and to trigger improvement of these criteria over time. Major conservation NGOs and the creation of new institutional structures could play a leading role in facilitating adaptive co-management, collaborative learning, and monitoring among local communities, government agencies, hunting operators and other relevant organizations[14]. Engagement with these institutional structures could also be a certification requirement. A key aspect of this approach should be the continued re-evaluation of the certification criteria in response to monitoring data on conservation and social benefits, quotas and ethical standards; an explicitly adaptive approach administered by the NGOs.

Focusing on landscapes

Trophy hunting certification also needs to address a key challenge inherent to all resource-use certification schemes: the integration of a global sustainability standard with variable local environments and multi-stakeholder perspectives[15]. Specifically, land tenure can be private, communal or state-owned, and different groups of local people may use land for subsistence or commercial cropping, livestock farming and wild animal harvest across the different tenures. A landscape approach, whereby the entire landscape

Box 1 | Proposed certification criteria for adaptive trophy hunting, including a regional and landscape focus

Local community development

Participatory approaches integrating the local community

Ensuring benefits for local people (for example, through economic benefits such as fees for hunting, use of local accommodation, carcass use)

Developing certification standards in roundtable discussions with all stakeholders (for example, local community representatives, hunting operators, conservation NGOs, land owners, state and country representatives)

Contributing to reduce poaching in the hunting area

Keeping game numbers on a socially sustainable level (for example, preventing damage from wildlife)

Legislation

Hunting respects local customary rights as well as regional and national legislation

Legislation and administrative regulations are enforced

Stocking land with only native game and tolerating naturally occurring predators

Involvement of international bodies (for example, CITES, hunting lobbies)

Hunting ethics

Selective hunting avoiding negative selection pressure on populations (for example, species-specific age limits, preference for animals near or at post-breeding age, no pressure on genetically dominant and healthy animals, clear quotas)

Intolerance of unethical practices, such as 'canned hunting' (that is, the practice of breeding animals to be released and hunted)

Individual accreditation of hunters

Intolerance of cruelty to animals

Regional and landscape focus

Regional focus on community development and sustainable conservation of wildlife populations

Integrated approach to protect ecosystem services for local communities

is certified, may be a tangible solution to achieve broader sustainability criteria, such as the protection of ecosystem services that are critical for local communities (Box 1). It would also increase the cost efficiency of certification because a conglomerate, instead of individual hunting operators, can be certified at once. The adaptive learning and co-management framework would be particularly well suited to certification on landscape scales where collaboration among many communities, government agencies, hunting operators and certification institutions will be key.

Conclusions

Trophy hunting must follow sustainable practices to minimize harmful effects on wildlife populations, benefit rural communities and be able to demonstrate these to ensure a continued social licence to operate. We argue that an adaptive certification scheme can contribute to conservation efforts and livelihoods. To be successful, such a scheme should be linked to international standard-setting bodies and conservation organizations, leverage an existing market, and build on effective monitoring and adaptive co-management strategies. Combined with a landscape-level approach, this may serve as a role model for best practice natural resource-use certification. However, availability of expertise and credible information on the conduct and impact of trophy hunting are necessary.

Indeed, given the shift in public opinion towards trophy hunting, the industry faces possible extinction through increased international sanctions, poor community relations and over-exploitation of wildlife populations. Thus, it seems to be in the direct interest of the trophy hunting industry to embrace hunting certification for sustainable practices that can create opportunities for wildlife and livelihood benefits. Failing this, alternative sources of funding for the conservation effort in Africa will need to be sourced. ❐

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References

1. Lindsey, P., Balme, G., Funston, P., Henschel, P. & Hunter, L. T. B. *Conserv. Lett.* **9**, 296–301 (2016).
2. Di Minin, E., Leader-Williams, N. & Bradshaw, C. J. A. *Trends Ecol. Evol.* **31**, 99–102 (2016).
3. Lindsey, P. A., Frank, L. G., Alexander, R., Mathieson, A. & Romanach, S. S. *Conserv. Biol.* **21**, 880–883 (2007).
4. Packer, C. *Lions in the Balance: Man-Eaters, Manes and Men with Guns* (Univ. Chicago Press, 2015).
5. Gullison, R. E. *Oryx* **37**, 153–165 (2003).
6. Bush, S. R. & Oosterveer, P. *Sustainability* **7**, 1861–1883 (2015).
7. Potts, J. et al. *State of Sustainability Initiatives Review 2014: Standards and the Green Economy* (International Institute for Sustainable Development, Manitoba, 2014).
8. Gutierrez, N. L. et al. *PLoS ONE* **7**, e43765 (2012).
9. Tuck, S. L. et al. *J. Appl. Ecol.* **51**, 746–755 (2014).
10. Blackman, A. & Rivera, J. *Conserv. Biol.* **25**, 1176–1185 (2011).
11. Christian, C. et al. *Biol. Conserv.* **161**, 10–17 (2013).
12. McGrath, D. G., Castello, L., Almeida, O. T. & Estupinan, G. M. B. *Soc. Nat. Resour.* **28**, 513–529 (2015).
13. Fischer, A., Weldesemaet, Y. T., Czajkowski, M., Tadie, D. & Hanley, N. *Conserv. Biol.* **29**, 1111–1121 (2015).
14. Armitage, D. R. et al. *Front. Ecol. Environ.* **7**, 95–102 (2009).
15. Tscharntke, T. et al. *Conserv. Lett.* **8**, 14–23 (2015).

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Author contributions

T.C.W. and L.W.T. conceived the work. All authors wrote the manuscript.

Competing interests

The authors declare no competing financial interests.