

POLICY PERSPECTIVE

Life after Cecil: channelling global outrage into funding for conservation in Africa

Peter A. Lindsey^{1,2}, Guy A. Balme^{1,3}, Paul J. Funston¹, Philipp H. Henschel¹, & Luke T.B. Hunter^{1,4}¹ Panthera, 8 West 40 St, Fl 18, NY, 10018, USA² Mammal Research Institute, Department of Zoology and Entomology, University of Pretoria, Pretoria, South Africa³ Department of Biological Sciences, University of Cape Town, Cape Town, South Africa⁴ School of Life Sciences, Westville Campus, University of KwaZulu-Natal, Durban 4000, South Africa**Keywords**

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Correspondence

Peter Lindsey, Harare, Zimbabwe.

E-mail: plindsey@panthera.org

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Abstract

Trophy hunting is widely used in Africa to generate funding for wildlife areas. In 2015, a global media frenzy resulted from the illegal killing of a radio-collared lion, “Cecil,” by a trophy hunter in Zimbabwe. Trophy hunting is contentious and much of the media discourse is emotional and polarized, focusing on animal welfare and debating the value of hunting as a conservation tool. We use the Cecil incident to urge a change in the focus of discussion and make a call for global action. We highlight the dual challenge to African governments posed by the need to fund vast wildlife estates and provide incentives for conservation by communities in the context of growing human populations and competing priorities. With or without trophy hunting, Africa’s wildlife areas require much more funding to prevent serious biodiversity loss. In light of this, we urge a shift away from perpetual debates over trophy hunting to the more pressing question of “How do we fund Africa’s wildlife areas adequately?” We urge the international community to greatly increase funding and technical support for Africa’s wildlife estate. Concurrently, we encourage African governments and hunters to take decisive steps to reform hunting industries and address challenges associated with that revenue generating option.

Introduction

The July 2015 killing of a well-known wild lion, “Cecil,” in Zimbabwe provoked an unprecedented global public media reaction. Cecil was killed illegally by an American hunting client under guidance from a local professional hunter, allegedly without the appropriate permits. In the space of a week, global outrage over the incident erupted with extraordinary coverage in the news and social media. The Government of Zimbabwe initially called on the United States to extradite the American hunter to Zimbabwe to face poaching charges. In addition, there have been widespread calls in the international press for the banning of lion hunting and for bans on the import of hunting trophies to the United States and other Western countries. A petition in support of a ban on trophy imports to the United States had received well over a million signatures at the time of writing.

“Cecil-gate” reflects growing objection to the notion of hunting wildlife for sport, particularly among urbanized Westerners. Trophy hunting in Africa is particularly controversial. The image of wealthy foreigners posing over carcasses of charismatic African animals increasingly elicits furious responses in the news and social media, and opposition from high-profile celebrities. Opponents of trophy hunting were quick to react to the death of Cecil and stress that if the practice was banned, lions could be saved. While the realities of the issue are considerably more complicated, this incident and the global reaction could have profound consequences for conservation in Africa.

Here, we provide a brief overview of the pros and cons of hunting as a conservation tool, evaluate its economic impact in Africa and demonstrate that, with or without trophy hunting, most African conservation agencies are severely underfunded. Trophy hunting represents a

significant, but flawed and inadequate means of generating funding for the management of wildlife areas in Africa. Here, we urge a shift in attention away from perpetual debates over the value and acceptability of hunting to the more pressing question of: “How can we generate enough funding to protect and manage Africa’s wild lands from poaching, human encroachment and other anthropogenic pressures?” Using Cecil as a pivot, we make a call for urgent global action.

The pros of hunting as a conservation tool

There are significant trophy hunting industries in South Africa, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe, and smaller industries in Ethiopia and various West and Central African countries. Hunting was previously a major revenue earner in Botswana, but the practice was banned on public and state lands there in 2013–2014. Trophy hunting helps fund the operating budgets of state wildlife authorities in some countries and creates economic incentives for the retention of vast state-owned hunting blocks for wildlife (Nelson *et al.* 2013). Trophy hunting increases the range of conditions under which wildlife is a viable land use because photo-tourism, the primary alternative form of wildlife, is limited to areas that combine good infrastructure and abundant wildlife or spectacular scenery (Lindsey *et al.* 2012). Land used for viable photo-tourism likely comprises a remarkably small proportion of Africa’s wildlife estate, even in the most popular countries for tourists such as Botswana (Winterbach *et al.* 2015). Trophy hunting was the stimulus for the development of wildlife-based land uses across large areas of private and community lands in southern Africa, resulting in significant increases in the abundance of a wide array of wildlife species in those areas (Barnett & Patterson 2006; Child 2008; Weaver 2011; Nelson *et al.* 2013).

The cons of hunting as a conservation tool

Trophy hunting has some serious limitations as a conservation tool, many of which were ignored during the simplistic media discourse over Cecil-gate. For example, trophy hunting frequently fails to generate enough income to manage wildlife land effectively, typically generating only \$138–1,091/km² in gross income (2015 figures), out of which come running costs, fees and profit, sometimes leaving little for the protection of land where hunting

occurs (Lindsey *et al.* 2012). By contrast, estimates of the funding requirements for effective management of protected areas range from \$460 to \$2,048/km² (Bell & Clarke 1984; Packer *et al.* 2009 [2015 figures]). In addition, due to the reliance of state wildlife authorities on hunting income for the functioning of strictly protected areas and headquarters, there is often a failure to reinvest adequately in the management of hunting areas (Lindsey *et al.* 2014). That reliance means that in most countries, state wildlife authorities have failed to (or are unable to) devolve sufficient benefits from hunting to local communities (Nelson *et al.* 2013). These factors create a cycle of declining revenues and capacity to protect wildlife in some scenarios, and weak incentives for conservation among communities (Manning 2012; Nelson *et al.* 2013). In some cases, the conservation value of hunting is undermined by corruption, which allows unscrupulous operators to continue accessing and depleting hunting areas at the expense of more conservation-minded industry players (Leader-Williams *et al.* 2009). For certain species, and notably lions, excessive quotas and unselective offtakes have resulted in adverse population impacts (Packer *et al.* 2009). Similar adverse impacts can be expected where trophy hunting results in additive offtakes of species affected by high levels of poaching. In some places, trophy hunting is conducted along the boundaries of protected areas, adversely affecting protected populations (Loveridge *et al.* 2007; Croes *et al.* 2011; Groom *et al.* 2014). There are also a variety of ethically questionable practices that do serious damage to the prospects of trophy hunting being accepted as a legitimate conservation tool, such as “canned” and “put and take” hunting (the hunting of animals in enclosures and the release of animals specifically to be shot, respectively; Barnett & Patterson 2006; Lindsey *et al.* 2012).

Overall, the net conservation impacts of hunting vary greatly within and among countries. For the hunting industry to play an effective conservation role, there is a need for African governments and the hunting industry to take concrete steps to improve the sustainability of the practice. Importantly, greater reinvestment in the protection of the resource is required of hunting operators. To reach adequacy in most cases, such investment will require subsidizing hunting blocks through philanthropic donations from the wider hunting community. Systems are also required to ensure that the best performing operators access hunting blocks and that those who do not perform in conservation terms are prevented from operating (e.g., Baldus & Cauldwell 2004; Lindsey, Frank *et al.* 2007; Lindsey, Roulet *et al.* 2007; Lindsey *et al.* 2013).

Prospects for the future of the hunting industry

Revenues for African governments from hunting seem likely to decline. Following Cecil-gate, there is the distinct possibility that prospective clients will be dissuaded from hunting charismatic species due to the fear of being exposed on social media, or of being drawn into legal problems. Furthermore, public pressure on Western governments, coupled with concern over the sustainability of trophy hunting has led to increasing restrictions on the import of hunting trophies from Africa (Nelson *et al.* 2013). For example, the United States, the primary market for African hunting trophies, listed West and Central African lions as 'Endangered' and southern and East African lions 'Threatened' pursuant to their Endangered Species Act and is considering proposing the listing of lions on CITES Appendix I at the next conference of the parties. In 2015, Australia and France banned the import of lion trophies the import of lion trophies. Similarly, the EU recently banned lion imports from three Central and West African countries and may expand that ban to include other nations.

In some areas, the area over which hunting is practiced has declined due to the depletion of hunting blocks through bushmeat and ivory poaching and human encroachment (Lindsey *et al.* 2014). These factors, the growing popular backlash against trophy hunting, the enlistment of popular celebrities to campaign against hunting, the growing number of animal welfare/rights groups and mainstream conservation NGOs opposed to hunting, and waning wildlife populations in hunting blocks in parts of the continent suggest that trophy hunting is likely to decline in prevalence in Africa in future. The hunting community, albeit with some exceptions, has done surprisingly little to improve the prospects for trophy hunting. There appears to be reluctance within sectors of the hunting community to take concrete steps to improve the management of their industry, instead of focusing essential resources to maintaining the status quo (e.g., <http://africanindaba.com/2014/03/sci-fighting-for-lions-campaign-one-year-later-march-2014-volume-12-2/>, accessed October 2015).

The challenge of funding conservation in Africa

Africa has an abundance of very large protected areas (IUCN 2015), which (given the economic constraints experienced in the continent) pose a larger burden than for many countries elsewhere. In current lion range, for example, there is at least 1.51 million km² of protected area, not including private and communal conservancies

(Bauer *et al.* 2015; IUCN 2015; Figure 1). We estimate the cost of managing these effectively to be in the region of \$694 million–\$3.1 billion per year (based on published estimates of the costs of running PAs (Bell & Clarke 1984; Packer *et al.* 2009). The NGO African Parks which specialize in protected area management and which operate in a wide range of conditions, for example, had an average operational budget of \$830 ± \$285/km²/year for the seven parks in six countries that they comanaged in 2013 (inflated to 2015 values; African Parks 2013). Extrapolating that figure to all of the protected areas within lion range would suggest a required budget of at least \$1.25 billion/year for effective management. The costs of managing individual protected areas vary greatly but our overall estimate is likely based on typical "average" funding needs and be of the correct order of magnitude (though does not take into account misuse of funds through corruption).

Many countries have protected area budgets of <\$100/km² (or 1/5th to 1/20th of the required amount), leaving massive budget deficits (Mansourian & Dudley 2008), and leading to the local extirpation of lions in PAs with inadequate funding (Henschel *et al.* 2014). These gaps are not being plugged with support from the international community, with as little as \$200 million being allocated annually (Brockington & Schofield 2010), a contribution of similar magnitude to the revenues from trophy hunting (Lindsey, Roulet *et al.* 2007).

The massive conservation funding shortfall comes at a time when Africa's wildlife is under unprecedented pressure from illegal hunting for bushmeat, ivory, rhino horn, and other wildlife products; when the boundaries of most protected areas are under intense pressure from growing human and livestock populations (Lindsey *et al.* 2014; Watson *et al.* 2014; Wittemyer *et al.* 2014). There is an urgent need for the world to find alternative funding streams to reduce reliance of African countries on trophy hunting and to protect wildlife from human pressures. Simply arguing for the replacement of trophy hunting with photo-tourism is not enough. Since trophy hunting was banned in Botswana in 2012, there has been minimal uptake of hunting blocks for photo-tourism and there is little evidence to suggest that other countries (most of which have smaller tourism industries) would succeed in that regard either. Innovative approaches to conservation funding are needed, such as payments for environmental services to communities, landowners, and governments (Dickman *et al.* 2011). In some instances, funding for such enterprises could be generated through "debt-for-nature" schemes where debts are written off in exchange for setting aside and managing land for conservation (Phillips 2000). Additional options lie in the refinement, implementation, and enforcement

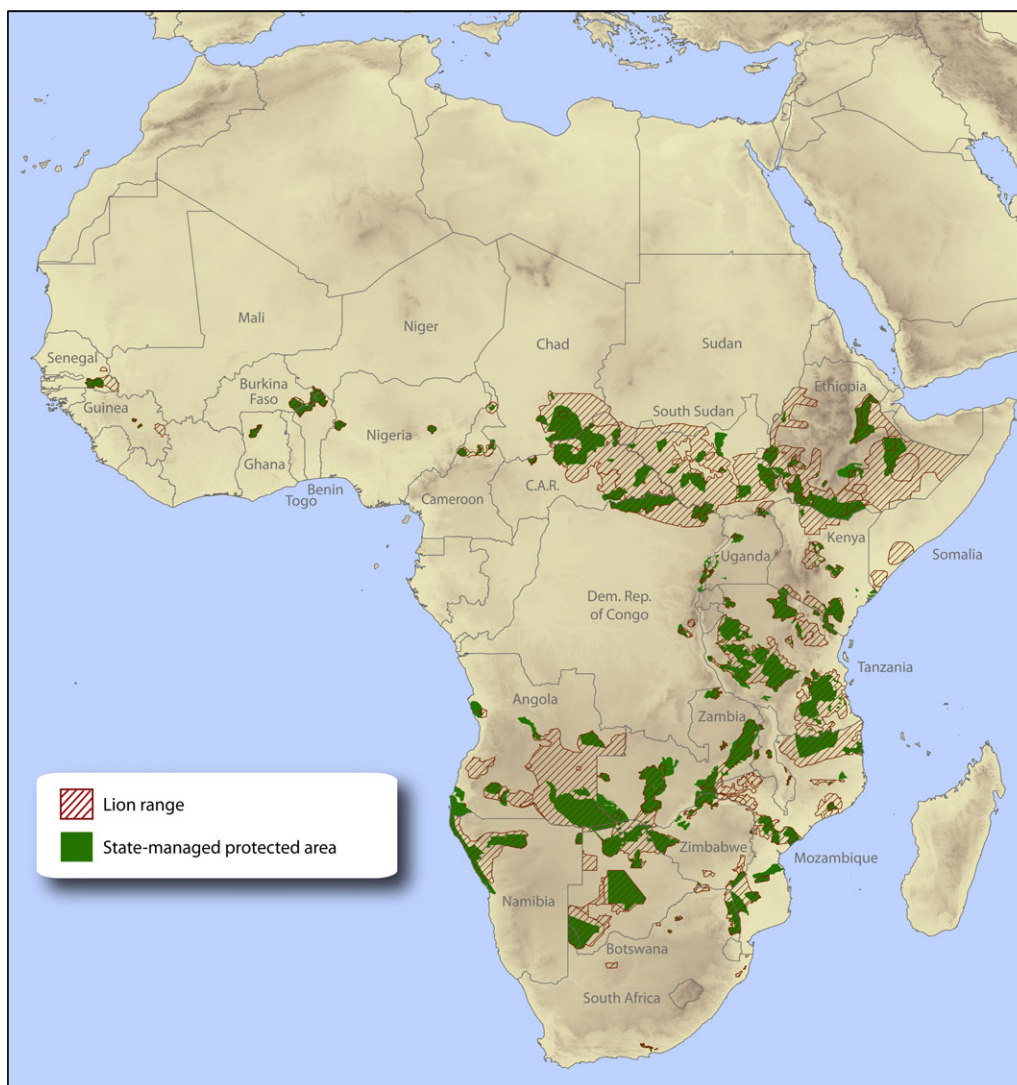


Figure 1 Protected areas in lion range (including definite range and “possible” range), following Bauer *et al.* (2015).

of carbon or biodiversity offset schemes, whereby developers or polluters pay for conservation (Bekessy & Wintle 2008). There is a case for allocating development funding, at least two orders of magnitude more of which is provided to Africa than conservation funding [<http://www.oecd.org/newsroom/aid-to-developing-countries-rebounds-in-2013-to-reach-an-all-time-high.htm>, accessed August 2015], for the management of PAs and development of tourism infrastructure to stimulate economic growth and job creation (Lindsey *et al.* 2014). The case for such allocations is strengthened by the linkage between key conservation issues, such as the bushmeat trade and human-wildlife conflict to livelihoods. Industrialized nations have never lived up to the promise made at the 1992 Rio summit to allocate \$2 bil-

lion/year in aid for conservation (Miller 2014). Cecil-gate could be used as justification by governments to increase aid for conservation in Africa. Support for conservation should not be withheld to countries experiencing civil unrest or corruption, despite the challenges associated with working in such nations, because such nations are often home to biological assets of global significance. However, if conditions of extreme underfunding persist, such countries may suffer from the necessity of triage. There needs to be caution when allocating funding to avoid the kind of geographic skews that result in the 4–5 most popular countries for NGOs receiving the majority of the funding at the expense of other worthy recipients (Brockington & Schofield 2010). With additional funding would come the need for mechanisms to ensure that

those resources are used effectively. The tendency of multilateral donors to allocate large, but nonrecurrent tranches of funding for conservation, for example, could be rethought and consideration given to long-term, ongoing “drip-feed” financing of protected areas. Another possible mechanism to assist with the efficient use of donor funding is through the development of partnerships or joint ventures for the management of wildlife areas between state wildlife authorities and reputable NGO/private sector partners. Such partnerships would also lend technical support which is also needed to assist in the effective management of wildlife areas in some places.

While elevated international support for conservation in Africa is essential, we urge caution on short-term steps aimed to reduce the ability of African countries to generate income from and for wildlife. Recent global movements to preclude trophy hunting, for example, have been characterized by lack of realistic suggestions for alternative income streams for wildlife areas in countries where that land use is practiced. Increased reliance on donor aid would increase the vulnerability of conservation efforts to political instability and to the vagaries of international relations. In addition, efforts to raise international funding for conservation-related issues have achieved modest success so far, highlighted by delays between commitments and disbursements for the REDD+ programme (Canby *et al.* 2014). Rather, efforts should be focused on both increasing and diversifying the funding streams available for conservation in Africa.

Cecil-gate highlighted incredible global passion for African wildlife. The conservation community must capture that passion in a way that generates sustained funding for conservation on the continent and to urgently mitigate ongoing catastrophic losses of wildlife and wild lands.

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