2015/18: The killing of Cecil the lion: should trophy hunting be banned in Africa?

What they said...

'Trophy hunting creates thousands of jobs and therefore supports thousands of families' Marina Lamprecht of Hunters Namibia Safaris

'[T]rophy hunters...kill around 105,000 animals in Africa every year, including 600 elephants and 800 leopards, at a time when every individual is crucial to the survival of the species'

Ameena Schelling, writing for the online conservation publication The Dodo

The issue at a glance

On October 12, 2015, Zimbabwean officials ruled that United States dentist, Walter Palmer, had no case to answer for the fatal shooting of Cecil, a 12-year-old dark-maned lion, well-known throughout Zimbabwe and studied as part of Oxford University's lion project.

Cecil, a collared lion living in the Hwange National Park in Matabeleland North, Zimbabwe, should not have been targeted. He is believed to have been lured out of the park in order to be shot.

Cecil was shot and wounded with a bow and arrow by Dr Palmer and finally killed by the same hunter some forty hours later, on July 1, 2015. Dr Palmer had paid \$US55,000 for the hunt. When news of the kill was reported there was international outrage and calls for the end of trophy hunting across Africa.

The dismissal of charges against Dr Palmer has provoked a further outcry as Zimbabwean officials originally claimed that 'Both the professional hunter and land owner had no permit or quota to justify the off take of the lion and therefore are liable for the illegal hunt.' The subsequent decision not to take action against Dr Palmer has been condemned by some as a sop to international hunters, designed to reassure them that they can hunt in Zimbabwe without fear of prosecution. Supporters of trophy hunting argue such hunts actually aid wildlife conservation and provide other benefits to African communities. One animal death, the legality of which is disputed, is not, they claim, grounds for ending trophy hunting.

Background - The following information has been extracted and modified from the Wikipedia entry titled 'Trophy hunting'. The full text can be accessed at https://en.wikipedia.org/wiki/Trophy_hunting

Trophy hunting is the selective hunting of wild animals classified as game animals. Trophy hunters typically seek the oldest, and most mature animal from a given population, which is typically a male with the largest body size or largest antlers or horns. These animals are claimed to have made their contribution to the gene pool and are nearing or are post-breeding age. Another motivation for the hunter may be the opportunity to participate in the management of a population by selectively removing these post breeding-age males. Parts of the animal may be kept as a hunting trophy or memorial (usually the skin, antlers, horns and/or head), the carcass itself is often used as food.

Trophy hunting has firm supporters and opponents. Public debate about trophy hunting often centres on the question of the morality of recreational hunting or the extent to which the money paid by sportsmen seeking a trophy animal provides a conservation benefit to the overall population of game animals and the rural economies where the game is hunted.

The hunting trophy

A hunting trophy is an item taken from the body of a game animal killed by a hunter and kept as a souvenir of the successful hunting or fishing expedition.

Often, the heads or entire bodies are processed by a taxidermist, although sometimes other body parts such as teeth, tusks or horns are used as the trophies.

Such trophies are often displayed in the hunter's home or office, and often in specially designed "trophy rooms," sometimes called "game rooms" or "gun rooms," in which the hunter's weaponry is displayed as well.

Big game hunting

A big-game hunter is a person engaged in the sport of trophy hunting for large animals or game. Potential big game sought include, but are not limited to, bears, big cats, hippos, elephants, rhinos, buffalos, moose and so forth. Tanzania has an estimated 40% of the population of lion (Panthera leo). Its wildlife authorities defend their success in keeping such numbers (as compared to countries like Kenya, where lion numbers have plummeted dramatically) as linked to the use of trophy hunting as a conservation tool.

The debate around trophy hunting in Africa

Trophy hunting has been practised in Africa and is still practised in part as a conservation policy. Opponents, however, claim that it is ineffective as a conservation tool and that claims that it is being used for that purpose are often fraudulent. According to a study sponsored by CIC in partnership with FAO, the revenue generated by hunting tourism in seven SADC countries in 2008 is approximately US\$190million.

In an opinion piece by Jeff Flocken of the International Fund for Animal Welfare, the author states that 'despite the wild claims that trophy hunting brings millions of dollars in revenue to local people in otherwise poor communities, there is no

proof of this. Even pro-hunting organizations like the International Council for Game and Wildlife Conservation have reported that only 3 percent of revenue from trophy hunting ever makes it to the communities affected by hunting. The rest goes to national governments or foreign-based outfitters. The money that does come into Africa from hunting pales in comparison to the billions and billions generated from tourists who come just to watch wildlife. If lions and other animals continue to disappear from Africa, this vital source of income-nonconsumptive tourism-will end, adversely impacting people all over Africa.']

However, South African Environmental Affairs Minister, Edna Molewa, contradicts Flocken's conclusions by stating that the hunting industry has contributed millions to South Africa's economy in past years. In the 2010 hunting season, total revenue of approximately R1.1-billion was generated by the local and trophy hunting industries collectively. 'This amount only reflects the revenue generated through accommodation and species fees. The true revenue is therefore substantially higher, as this amount does not even include revenue generated through the associated industries as a result of the multiplier effect,' according to Molewa.

Botswana banned trophy hunting in 2014, and now villagers claim they get no income from trophy hunters, and suffer from damage from elephants and buffaloes damaging their food crop fields and lions killing their livestock. Some conservationists claim trophy hunting is more effective for wildlife management than a complete hunting ban.

Internet information

On October 27, 2015, The New York Post published an article titled, 'It's not just Cecil - lions are vanishing all over Africa.'

The article looks at the diminishing number of lions across Africa and suggests reasons for this development. The full text of the article can be read at http://nypost.com/2015/10/27/its-not-just-cecil-lions-are-vanishing-all-over-west-africa/

On October 16, 2015, The Guardian published a report titled 'Hunter accused over Cecil the lion hunt says charges should be dropped'. The report looks at the justifications offered for the hunting safari that resulted in the death of Cecil the lion.

The full text can be accessed at http://www.theguardian.com/environment/2015/oct/15/hunter-accused-cecil-lion-hunt-charges-should-be-dropped-theo-bronkhorst

On October 16, 2015, The Telegraph published a news report titled, 'Biggest elephant killed in Africa for almost 30 years brings back memories of Cecil the lion'

The report details the shooting of a bull elephant believed to be the largest killed in Zimbabwe in 30 years. The full article can be accessed at http://www.telegraph.co.uk/news/worldnews/africaandindianocean/zimbabwe/ /11934535/Huge-tusked-African-elephant-killed-by-german-hunter-in-Zimbabwe.html

On October 12, 2015, The New York Times published a report titled, 'Dentist who killed Cecil the lion probed for illegal hunting again.'

The full text of the article can be accessed at http://nypost.com/tag/cecil-the-lion/

On October5, 2015, the conservation site, The Dodo, published a comment by Ameena Schelling titled, 'Hunters Say Trophy Hunting Helps Animals. Here's Why They're Wrong.'

Schelling examines a number of the commonly presented arguments in favour of safari hunting and attempts to demonstrate that each is in error.

The full text can be accessed at https://www.thedodo.com/does-hunting-help-conservation-1389284014.html

On September 18, 2015, The Zimbabwe Daily News published a comment titled 'The hidden consequences of hunting Africa's lions.' The report examines recent research that suggests that a number of the claims made for the benefits that trophy hunting provide are in error.

The full text of the report can be accessed at http://www.zimbabwesituation.org/?p=45926

August 7, 2015, The Conversation published a comment by Professor Melville Saayman titled 'Why a ban on hunting in Botswana isn't the answer to challenges facing the country'

The report argues that conservation issues in Africa are complex and that simply placing a ban on trophy hunting going to supply a solution.

The full text of the opinion piece can be found at https://theconversation.com/why-a-ban-on-hunting-in-botswana-isnt-the-answer-to-challenges-facing-the-country-44793

On August 7, 2015, The Wall Street Journal published a report titled 'Human-Population Boom Remains Largest Threat to Africa's Lions in Wake of Cecil's Killing'

The report argues that the pressure of human population growth and competition for resources remain a far greater threat to lions' survival than trophy hunting.

The full text of this report can be accessed at http://www.wsj.com/articles/africas-growing-population-imperils-its-lions-1438939803

On August 3, 2015, Think Progress published a report by Beenish Ahmed titled 'The Economic case against trophy hunting'.

The report details the harm doner by trophy hunting and challenges the claims made for the advantages the practice is supposed to bring to African communities.

The full text of the report can be accessed at http://thinkprogress.org/world/2015/08/03/3687425/trophy-hunting/

National Geographic

On July 28, 2015 National Geographic published a report titled 'Killing of Cecil the Lion Sparks Debate Over Trophy Hunts'.

The report details the worldwide reaction to the death of Cecil the lion and details some of the arguments and proposals that have been put.

The full text of the report casn be accessed at http://news.nationalgeographic.com/2015/07/150728-cecil-lion-killing-trophy-hunting-conservation-animals/

SCI First for Hunters has published a report titled 'The Benefits of Hunting'

The report outlines a range of supposed benefits, from benefits to the African communities through to benefits to the species being hunted.

National Geographic has published a report detailing the decline in big cat numbers.

This report can be found at http://animals.nationalgeographic.com/animals/big-cats-initiative/lion-decline-map/

World Wide Fund for Nature (WWF) has released a report detailing the elephant decline. This can be accessed at http://wwf.panda.org/what_we_do/endangered_species/elephants/african_elephants/Sc.

Arguments supporting the controlled trophy hunting of animals

1. Trophy hunting is an industry that provides foreign capital and employment

It has been claimed that trophy hunting is a valuable source of employment as well as having other side benefits which assist African village communities.

On August 15, 2015 VOA's Johannesburg correspondent, Gilliam Parker, stated, 'The hunting industry in South Africa brings in more than \$744 million each year. The industry employs about 70,000 people. In 2012, foreign hunters spent \$115 million in South Africa and trophy hunting is the most profitable form of commercial land use in the country.' Similarly, Marina Lamprecht of Hunters Namibia Safaris has stated, 'Trophy hunting creates thousands of jobs and therefore supports thousands of families. In my own trophy hunting operation we employ 20 people as well as feed 288 children at a local village school with venison from the trophy hunt - without hunters these children would not have regular access to protein.'

In a report prepared by SCI: First for Hunters the following claims were made, 'Trophy hunting alone currently generates \$US20 million annually in Botswana and more than 1,000 jobs... \$US100 million was generated by foreign trophy hunters in South Africa in 2000 with estimates surging to nearly \$US137 million per year if multiplier effects and secondary industries are considered... In Tanzania, trophy hunting employs approximately 3,700 people annually with 2,282 individuals are permanently employed by trophy hunting with another 2,000 seasonally employed who in turn support a minimum of 88,240 families...'

In an opinion piece published in The Conversation on August 7, 2015, Melville Saayman, Professor of Tourism Management and Economics at North-West University summed up what he believes are the economic advantages trophy hunting offers Botswana. Professor Saayman stated, 'It is also important to understand where and how hunters spend money when they take a hunting trip. Firstly, there's transport: travel costs, including flights and moving to the location. Then they need accommodation, food and drinks. Finally, it costs money to book the species they are hunting, the professional hunters who ensure permits are obtained, trackers, skinners and taxidermists.

'Aside from employment opportunities, communities also benefit. In most cases the carcasses are donated or sold at a cheap rate to communities, since the trophy hunters cannot transport the meat so only take the horns and skin. These hunters are big spenders, investing on average more than \$US10 000 per trip, which is considerably higher than the average spending by any other type of tourist. The ban, therefore, implies a loss in taxes, foreign exchange and jobs.'

2. Eco-tourism can damage the environment and is not always a viable, stand-alone alternative to trophy hunting It has been noted that far from being a boon to animal conservation, eco-tourism can actually harm natural environments.

In an article published in California Magazine on August 3, 2015, Glen Martin outlined some environmental disadvantages of eco-tourism as practised in Kenya. Martin suggested that eco-tourism harmed the local environment and led to greater pressure on native species. He stated, 'First, these [tourist] lodges constitute permanent physical footprints on the wild landscape. They require roads and other infrastructure, and thus fragment wildlife habitat. Locals tend to congregate around them, driving game further afield.'

Martin went on to explain, 'Further, many of the lodges are owned by foreign entrepreneurs and corporations, and the profits tend to trickle up to their proprietors and Kenya's deeply corrupt oligarchs, not down to the poor farmers and

herdsmen on the land.'

It has also been claimed that eco-tourism is not always an option for impoverished communities in need of additional income

Wilderness Salaris, one of South Africa's leading photo-tourism operators, has a position statement on trophy hunting that states: 'There are areas [of Africa] that cannot support high-end, mid-range or even low-end photographic ecotourism. It is in these areas especially that hunting (conducted ethically, responsibly and sustainably) has a role to play. This has been true even in stable developed tourism industries like South Africa's, and is certainly true in less mainstream destinations like the Central African Republic or Burkina Faso.'

Similarly Safari Club International, a pro-hunting group, has argued, '[T]he surest way to persuade an indigenous population to preserve animals is by giving those animals financial value. And the surest way to give them value is to allow them to be hunted, with the locals getting the proceeds.'

It has also been pointed out that frequently the two types of industry - ecotourism and trophy hunting - need to operate together in a region if economic benefits are to be gained.

3. Trophy hunting can be regulated to protect animal populations from over-exploitation

It has been claimed that the African countries that allow hunting manage it carefully so it is sustainable - by not allowing hunting of animals still capable of breeding, for example.

It is in their interests to ensure a \$200 million industry is not lost. Much of this money is all they can afford for genuine conservation work.

Namibia has been held up as an example of an African nation where the commercialisation of wildlife, including the selling of licences to trophy hunters has seen an increase in wildlife numbers because local communities have a vested interest in ensuring quotas are abided by.

In an article published in California Magazine on August 3, 2015, Glen Martin detailed the quota system employed in the Salambala Conservancy in Caprivi, a northern Namibian province of 230,000 acres. Martin explained, 'The community and the central government have established sustainable annual quotas for almost every species inhabiting the land, right down to game birds: 50 impala, seven African buffalo, fifty zebras, four kudus, four waterbucks, four hippos, three crocodiles, three baboons, two black-backed jackals, 100 white-faced ducks, 150 turtle doves, 50 guinea fowl, and 70 red-billed francolins. The quota for elephants is eight, with six going to trophy hunters, one dedicated to the community's chief and elders, and one reserved for distribution among conservancy members.'

Martin concludes, 'The community keeps all income generated from trophy hunters and meat sales. Prior to independence and the establishment of Salambala, any Subia community member who poached an animal likely would have met with praise; his act would've meant meat for family, friends and neighbors. Now, the illegal taking of game is considered a major offense, theft from the community as a whole.'

It has further been claimed that wildlife populations are most at risk in countries where hunting is banned and where, therefore, there is no attempt at regulation. Referring to the situation in Kenya, Dr Richard Leakey, paleoanthropologist, conservationist, and the first director of the Kenya Wildlife Service, has stated, '(Thousands) of animals are being killed annually with no control. Snaring, poisoning, and shooting are common things. So when you have a fear of debate about hunting, please don't think there is no hunting. Think of a policy to regulate it, so that we can make it sustainable. That is surely the issue, because an illegal crop, an illegal market is unsustainable in the long term, whatever it is. And the market in wildlife meat is unsustainable as currently practiced, and something needs to be done.'

4. Trophy hunting can result in improved conservation outcomes for hunted species

It has been argued that if impoverished communities are able to make an income from legally managed trophy hunting they will see some purpose in the conservation of threatened species. Without this, it is claimed, many species are seen as only an impediment to agriculture or human habitation and so farmers are likely to kill them and illegally sell their by-products.

This point was made by John Hanks in the November 2013 edition of Africa Geographic Magazine, who argued that trophy hunting gave rural communities a reason to conserve game species. Hanks stated, 'More significantly for resident communities, they have an incentive to protect the large mammals that would otherwise be seen as a threat to their livelihoods.'

Similarly, spokesman for the World Wide Fund for Nature (WWF), Roland Gramling, has pointed out that,' ... in some circumstances, regulated hunting has to be tolerated, because it reduces the poverty that fuels poaching.'

According to a 2005 paper by Nigel Leader-Williams and colleagues in the Journal of International Wildlife Law and Policy the legalisation of white rhinoceros hunting in South Africa motivated private landowners to reintroduce the species onto their lands. As a result, the country saw an increase in white rhinos from fewer than one hundred individuals to more than 11,000, even while a limited number were killed as trophies.

In a 2011 letter to Science magazine, Leader-Williams also pointed out that the implementation of controlled, legalized hunting was also beneficial for Zimbabwe's elephants.

Leader-Williams stated, 'Implementing trophy hunting has doubled the area of the country under wildlife management relative to the 13% in state protected areas.'

Leader-Williams concludes, 'As a result, the area of suitable land available to elephants and other wildlife has increased, reversing the problem of habitat loss and helping to maintain a sustained population increase in Zimbabwe's already large elephant population.'

Melanie Virtue, who manages conservation agreements, including one for the protection of endangered West African

elephants, for the UN's Convention on Migratory Species, has stated, 'If the local people see no benefits to having elephants on their land, they will kill them anyway, whether it's legal or not.

There's a reason why there are no wolves and bears left in northern Europe - because the local communities didn't want them there. So you have to provide an incentive if you want to keep them.'

5. Game animals are far more at risk from competition for resources with human beings and from poaching Africa's increasing human population has come into dramatic conflict with the continent's wildlife. The food sources of this growing human population are put at risk by some of these animals and the result is that the animals are hunted. This means that lions, tigers and elephants may be more likely to be killed by village communities than by trophy hunters

In a report published in The Wall Street Journal on August 7, 2015, it was noted, 'Africa's human population... is the fastest-growing in the world. In roughly the same period as the lion decline, the number of Africans has nearly doubled, to 1.2 billion people. The population will double again to 2.5 billion by 2050, according to the United Nations. At that point, one out of every four humans will live in Africa.'

Such pressure of human population on limited food resources means that communities are unable to tolerate competition from wildlife. A number of large game animals prey on the farm animals that African communities rely on in order to survive. The August 7, 2015, Wall Street Journal article notes, 'More people has meant more forests being turned into pastures, more locals hunting the lion's prey for their own meals and more herders killing lions rather than risk losing cattle.' It has been reported that in Kenya each lion kills \$270 worth of livestock annually. Such losses are catastrophic in a country where per capita income is \$1200 a year. Defenders of trophy hunting claim that communities will kill competing game animals irrespective of whether trophy hunting is allowed.

It has also been noted that illegal poaching is a far greater threat to wildlife than trophy hunting.

A spokesman for WWF, Roland Gramling, has pointed out that the 12,000 elephants killed by poachers each year is given negligible media attention, compared to the relatively small numbers taken by licensed trophy hunters who have become the focus of extensive media interest.

In an article published by the University of Wisconsin's Conservation Magazine, in January 2015, Jason Goldman compared the relative impact of poaching and legal, licensed trophy hunting on rhinos. Goldman quotes official figures of 745 rhinos poached annually across Africa. Supporters of trophy hunting argue that its impact is minimal compared to that of poaching. Regarding rhinos, for example, in South Africa and Namibia, where trophy hunting is allowed, each country licences the killing of five black rhinos a year.

Arguments opposing the controlled trophy hunting of animals

1. Many species numbers are too low to allow even regulated trophy hunting

Iconic African species are declining at a startling and unsustainable rate. In its promotion of the Big Cats Initiative, designed to halt the drop in the large cat species, National Geographic has stated, 'Lions are dying off rapidly across Africa. These cats once ranged across the continent and into Syria, Israel, Iraq, Pakistan, Iran, and even northwest India; 2,000 years ago more than a million lions roamed the Earth. Since the 1940s, when lions numbered an estimated 450,000, lion populations have blinked out across the continent. Now they may total as few as 20,000 animals. Scientists connect the drastic decreases in many cases to burgeoning human populations.'

The World Wide Fund for Nature (WWF) has noted, 'Since 1979, African elephants have lost over 50% of their range and this, along with massive poaching for ivory and trophies over the decades, has seen the population drop significantly. Back in the early part of the 20th century, there may have been as many as 3-5 million African elephants. But there are now around 470,000.'

This decline is continuing up to the present time. A National Geographic article published on July 8, 2015, stated, 'Mozambique's elephants, poached for their ivory for the illegal trade to Asia, are in a precipitous decline. Between 2009 and 2014, their numbers fell from an estimated 20,000 to 10,300, according to a survey by the Wildlife Conservation Society as part of the Great Elephant Census.'

Critics of trophy hunting argue it has had no effect in reducing the decline in numbers and is actually worsening the situation. On October 6, 2015, the conservation site, The Dodo, published a comment by Ameena Schelling in which she stated, '[T]here are around 20,000 to 35,000 wild lions left in Africa, depending on whom you ask, and big game hunters legally kill around 600 each year. That's an annual population loss of 2 to 3 percent, which is entirely unsustainable, even if you don't add in deaths due to poaching and livestock protection.'

Schelling has summed up the situation in this manner, '[T]rophy hunters...kill around 105,000 animals in Africa every year, including 600 elephants and 800 leopards, at a time when every individual is crucial to the survival of the species.'

2. Regulations supposed to control the number of animals taken are not adequately enforced

It has been claimed that because there is substantial money to be made from trophy hunting there are significant incentives for both tour guides and officials to inadequately enforce the regulations.

It has been noted that safari tour guides are under great pressure to give their high-paying foreign clients the experience they want. Julian Rademeyer, the author of 'Killing for Profit', a book about poaching in southern Africa, has claimed that professional hunting safari organisers face huge pressure to ensure that foreign hunters bag the big trophies they for which they have come to Africa.

Rademeyer has stated, 'They will do pretty much anything to get your trophy. There's immense pressure on hunting outfits to get those trophies. It's meant to be regulated use and sustainable hunting. In instances where you have

widespread corruption and regulations are not adhered to, it just becomes a killing frenzy and that's what's happening in Zimbabwe.'

The shooting of Cecil has been condemned as an instance of this behaviour, with the suggestion being made that Cecil was deliberately lured out of a national park so that he could be shot on nearby farm land.

On August 21, 2015, in an article published in Blood Lions, Don Pinnock stated, 'In Zimbabwe and Namibia, problem animal permits can be obtained even before the animal to be killed is selected. A variation, in Namibia, is a "snipe" hunt where a hunter with a permit can shoot any elephant a community declares to be a problem, often because they want the meat. Several rare desert elephants have been shot this way. Strangely, "problem" animals always seem to have the biggest tusks or largest, darkest manes.'

It has also been claimed that legalised trophy hunting acts as a screen behind which illegal hunters and poachers can go about their business.

It has been stated that criminals presenting themselves as legal hunters have become involved in trophy hunting. They use the business to illegally trade horns. They sell these animal parts for high prices on black markets in countries such as Vietnam and Thailand.

South African officials say that since 2009 false hunters exported about 300 rhino horns illegally. Because of this, South Africa has stopped giving hunting permits to citizens from the Czech Republic and Vietnam where the illegal trade is rife. Namibia has also been offered as an example of a country where trophy hunting has ultimately acted as a cloak for poachers. Namibia's endangered black rhino's initially seemed to benefit from the country's regulated trophy hunting; however, as prices for rhino horn continue to soar, the animals' fragile recovery is being undermined by a dramatic increase in poaching. In an article published in The Guardian on May 21, 2015, it was stated, '[I]n the first months of 2015, Namibia's rhino population has been hit by 60 poaching deaths.'

3. Trophy hunting destabilises animal communities and encourages further decline in numbers

One of the guiding principles that governs the setting of quotas for trophy hunters is that they should take older animals toward the end of their reproductive lives, on the assumption that these animals are of less value to the wildlife population. However, the idea that older individuals are no loss to their herds is countered by a study published in the Journal of Wildlife Management by researchers Jeanetta Sellier, Bruce Page, Abi Vanak and Rob Slotow. They found the selective removal of a few large trophy or older males from carnivore and antelope populations led to the destabilisation of social structures and a loss of essential social knowledge. The consequences were infanticide, reproductive females using sub-optimal habitats and changes in offspring sex ratios.

It has been claimed that social destabilisation is a particular problem for elephants which are extremely communal animals.

Sellier, Page, Vanak and Slotow have noted, 'Older bulls have a social network with high centrality and strong bonds. Consequently, the elimination of older bulls may negatively affect social cohesion in bull elephant groups, increasing the reproductive tenure of younger males. This can increase their length of musth, leading to elevated aggression, killing people and killing white rhino.'

Similar destabilisation occurs in lion prides. In an article published in National Geographic on August 4, 2013, Jeff Flocken stated, 'The adult male lion is the most sought-after trophy by wealthy foreign hunters. And when an adult male lion is killed, the destabilization of that lion's pride can lead to more lion deaths as outside males compete to take over the pride.

Once a new male is in the dominant position, he will often kill the cubs sired by the pride's previous leader, resulting in the loss of an entire lion generation within the pride.'

Flocken also notes, 'Trophy hunting is also counter-evolutionary, as it's based on selectively taking the large, robust, and healthy males from a population for a hunter's trophy room. These are the same crucial individuals that in a natural system would live long, full lives, protecting their mates and cubs and contributing their genes to future generations.' The impact of killing such dominant male lions can be seen in what has happened since Cecil was killed. On August 9, 2015, it was reported that one of Cecil's cubs had been killed by a rival male who was trying to mate with his mother. On September 5 it was reported that another of Cecil's cubs had been killed by a young male seeking to take over his pride. Experts have warned that the pride - originally made up of three lionesses and eight cubs - has only a five per cent chance of survival after several solitary male lions were spotted prowling near their abandoned den in Hwange National Park.

4. Eco-tourism is more economically valuable than trophy hunting

Opponents of trophy hunting typically note that it is a short-term and inefficient way to generate income for African communities and that eco-tourism is more profitable as well as being sustainable into the future.

On October 6, 2015, the conservation site, The Dodo, published a comment by Ameena Schelling in which she stated, 'An individual animal, particularly if it's a member of the more iconic species, is worth far more to a country alive over the course of his lifetime than dead.'

Schelling went on to demonstrate the point, noting, 'Need proof? Look at Botswana. Beginning in January 2014, the country banned almost all hunting after comparing the conservation cost of big game hunting with the income generated from photo tourism: The photo tourism season is longer, makes better use of animals and employs significantly more locals. In the first year of the ban, the country brought in around \$344 million from nonlethal tourism.'

Similarly, in an article published in Think Progress on August 3, 2015, Beenish Ahmed stated, 'Trophy hunting generally cuts short the earning potential of a living animal. For example, the ivory of a single poached elephant can earn about

\$21,000 on the black market. That's a small fraction of the \$1.6 million that same elephant can rake up through ecotourism over the course of its life.'

Jeff Flocken, North America regional director of the International Fund for Animal Welfare said the revenues from hunting, which one study found to be just 1.8% of the overall tourism revenue in nine African countries, were immaterial to the conservation of species.

Flocken stated, 'Non-consumptive nature tourism-like wildlife viewing and photo safaris-is a much greater contributor than trophy hunting to both conservation and the economy in Africa. If trophy hunting and other threats continue depleting Africa's wildlife, then Africa's wildlife tourism will disappear. That is the real economic threat to the countries of Africa.'

5. The economic benefits of trophy hunting have been exaggerated and are not widely disseminated within impoverished communities

It has been argued that the impoverished communities living in the areas where trophy hunting takes place get very little financial benefit from the hunts. Most of the fees paid by hunters are skimmed off the top by tour organisers and others further up the organisational chain. Little, it is claimed, is actually paid to those most in need of income.

In an article published in Think Progress on August 3, 2015, Beenish Ahmed stated, 'The amount of overall revenue from hunting big game that goes towards community development is only around three percent. That number might even be lower since many of the countries where game hunting is most widely practiced are plagued by corruption that may well undermine the amount of earnings that reach local communities from collectively-held land.'

The argument is also made that the amount of income generated by these hunts has been exaggerated. While some researchers have claimed that trophy hunting is a \$200 million a year enterprise in Africa, more recent assessments suggest that the number is far smaller. According to Economists At Large, a Melbourne-based organisation, the figure is based largely on unpublished tallies by hunters' associations which have been accused of supplying inflated figures. Beenish Ahmed from Think Progress has also noted that trophy hunting generates relatively few jobs compared to the amount of land given over to hunting preserves. Ahmed has stated, 'The number of jobs generated by trophy hunting across the continent of Africa has been put at around 15,000.' Some researchers, however, point out that the jobs created by the industry are rather low considering how much land is used for the sport. For the 11 countries where big game hunting is most widely practised, hunting preserves take up about 15 percent of national territory, but account for less than one percent of their respective country's GDP.

In South Africa, there are more than 160 farms breeding big cats such as lions and tigers. Killing animals specifically bred to be hunted is called 'canned hunting'. The animals are released into enclosed areas and shot by hunters who pay anywhere from about \$8,000 to \$40,000 for the 'hunt'. The profits made from these hunts are even less likely to be shared beyond individual companies.

Further implications

There is no easy answer to the question of how best to alter the complex of factors that are leading to the potential extinction of many iconic African species.

Trophy hunting is periodically condemned as a principal agent of this destruction; however, even in African nations where such hunting has been banned wildlife numbers have continued to drop to disturbingly low levels.

The two additional causes of the decline in wildlife numbers are poaching (illegal, unregulated hunting) and the dramatic increase in the human population of Africa (with the resultant competition for habitat and resources this creates between humans and wild animals.)

Namibia has been held up as an example of how carefully regulated trophy hunting can both conserve wildlife and contribute to the wellbeing of African communities. In Namibia communities are placed in control of the management of the wildlife in their territories (or consultancies) and are able to set quota and sell licences to kill the animals occurring there.

Supporters of this practice note the increase in the numbers of species such as the black rhinoceros, apparently, in part as a result of such locally managed trophy hunting.

The claim has been made that practices such as these give local communities an incentive to conserve their wildlife as an ongoing source of income and meat. Without this incentive, such animals are simply viewed as unwanted competition for land and a threat to livestock and sometimes, as in the case of lions, to human populations.

Critics, however, note that even under the Namibian model, once the international price attached to the by-products of animals such as the black rhinoceros reach a certain level the profits to be made from killing them illegally and selling rhino horn, for example, (outside the regulation of local quotas) become too great to be easily resisted and wildlife numbers begin to fall again.

It has also been claimed that the range of animals that exist in Namibia and the opportunity to harvest them in a profitable but potentially sustainable manner do not exist in all African countries where trophy hunting occurs. In these countries the profits are shared far less equitably among local populations and the killing occurs with local communities having far less incentive to ensure that individual species are not over-exploited.

Even where quotas are being conscientiously observed it has been noted that trophy hunting is not the conservation neutral practice some of its supporters claim it to be. Where the oldest dominant males are taken out of the population pool, this leads to instability within the surviving animal communities with other younger males becoming more aggressive and potentially more harmful to each other, to immature animals in their pride or herd and to human beings. Thus, removing specifically targeted animals, according to an approved quota system, can have a seriously damaging

effect on the survival prospects of those animals which remain.

The only conclusion to be drawn is that with or without trophy hunting the continued survival of many iconic African species seems highly problematic.

Newspaper items used in the compilation of this issue outline

H/SUN, September 9, 2015, page 22, comment by David Leyonhjelm, `Trophy hunting ban puts animals ahead of humans'. http://www.heraldsun.com.au/news/opinion/trophy-hunting-ban-puts-animals-ahead-of-humans/news-story/52c6eb1e58618b1ec352e9f61a0b47a3?sv=35a8f1d8656f4e3d17eec9a5e00c3c2f