

by Catherine E. Semcer

Conservationists Should Support Trophy Hunting



Why I joined 132 other researchers and conservationists in signing the open letter “Trophy hunting bans imperil biodiversity,” published in Science Magazine on August 30, 2019.

With the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) reporting that 1 million species are at increased risk of extinction in the coming decades, ending trophy hunting may seem logical. However, bans on trophy hunting are likely to *increase* the challenge of conserving the world’s biodiversity. This is why 133 conservation researchers and practitioners, myself included, signed a letter in *Science Magazine* last week highlighting why the trophy hunting bans currently being debated in the United States, United Kingdom and European Union are ill advised.

The signatories to the letter are neither politicians nor celebrities but rather people who have dedicated their lives to the study and conservation of wildlife. We are associated with institutions ranging from the University of Oxford to the IUCN, the International Union for Conservation of Nature, to the Frankfurt

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Zoological Society and other respected conservation and sustainable-development nonprofits. Most signatories, including me, are not trophy hunters and not all of us are entirely comfortable with trophy hunting—but we are all deeply uncomfortable with the loss of species and habitats that trophy hunting bans are likely to perpetuate.

Preventing extinction by conserving habitat

Our position has been met with skepticism from activists, members of the media and the general public who find trophy hunting abhorrent. This is to be expected given the heightened emotions many feel at the sight of a dead animal considered rare or exotic. That such a scene could produce positive outcomes for the conservation of biodiversity seems nonsensical to such people; however, it is not.

If we are to reverse the decline of a million or more species toward extinction, then the most fundamental action that must be taken is the conservation of habitat. The need for habitat conservation is woven throughout the Convention on Biological Diversity's Aichi Targets, forms the foundation of two of the 17 United Nations Sustainable Development Goals and has been a longstanding goal of international assistance programs such as those overseen by USAID.

In much of the world, especially in emerging markets like Africa, habitat conservation depends on making wildlife economically competitive with other land uses. Habitat conversion and degradation—particularly due to crop farming and herding of livestock—are among the top threats to species conservation in Africa and around the globe. Reducing the incentive to transform wildlands into pastures and farms by clearing woodland and killing wildlife that prey on livestock or compete for forage is essential to conservation.

As our *Science* letter points out, trophy hunting operations in Sub-Saharan Africa have provided incentives to conserve an area of wildlife habitat more than six times the size of the US National Park System. This includes nearly 50 million acres (20.2 million ha) of private hunting reserves in South Africa that form a market-based conservation estate comprising 16.8% of the country's total land area. It also includes more than 14% of Zimbabwe's total land area. These areas multiply the conservation impact of adjacent protected areas such as national parks.

This habitat conservation is a direct result of the fact that trophy hunting can be profitable for landowners and community members. In South Africa, most hunting reserves are former cattle ranches that were converted to wildlife conservation after legal changes allowed landowners to hold property rights in wildlife. These rights give landowners incentives to maintain high-quality habitat on their land. They also encourage healthy wildlife populations that enable owners to sell hunting opportunities that, together with value-added products such as game meat, are worth an estimated \$131 million per year to rural South Africans.

In Zimbabwe, 777,000 households benefit from cost-sharing arrangements with trophy hunting operations under which they receive half of the accumulated revenues each year. This has led to a 15% to 25% increase in household incomes, depending on the region. In Zambia, trophy hunting has contributed to improved food security in a country where 63% of people live in poverty. The tangible

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benefits provided by trophy hunting encourage communities to see wildlands and healthy wildlife populations as economic assets rather than liabilities, and discourage the expansion of agriculture into undeveloped areas.

Trophy hunting revenues also ensure that habitat is well cared for, especially where government budgets are limited. In Tanzania, all of the expenses related to the government's anti-poaching activities are funded by trophy hunting. Poaching, along with habitat loss, has been identified as one of the most significant threats to the world's biodiversity.

Those seeking to ban all trophy hunting should take note of the fact that following US and European Union bans on the importation of lion trophies from Tanzania, the revenues to fund those anti-poaching units decreased by 23% and led to a corresponding decrease in the ability of rangers to safeguard wildlife.

The long-term impacts of piecemeal bans like the ones against lion trophies remain to be seen, but they seem certain to risk undermining habitat conservation that is at the heart of global efforts to curtail extinctions. The economic viability of trophy hunting programs depends on their ability to manage a limited, regulated offtake of high-value species such as lion. Should this ability be denied—by, for example, import bans in the markets where most trophy hunters come from—researchers believe wildlife would no longer be an economically competitive land use on more than 14 million acres of wildlands in Tanzania, Mozambique and Zambia alone.

Wildlands like these provide habitat not only for well-known and charismatic species like lions, but also for countless birds, insects, small mammals, reptiles and fishes. While these creatures are often ignored by hunters and photo tourists alike, they collectively form a much greater share of the world's biodiversity than the large mammals that draw millions of visitors to Africa each year. These “little things that run the world” must not be overlooked in the ongoing public debate around trophy hunting.

For example, in Tanzania's Kilombero Valley, a key wildlife corridor between the Selous Game Reserve and the Udzungwa Mountains, trophy hunting revenues provide economic incentives to keep intact wildlands that provide habitat for the Kilombero weaver, Kilombero cisticola, Kilombero white-tailed cisticola and Kilombero reed frog, all of which are endemic to the area.

In South Africa, habitat provided by private hunting reserves has been credited with helping avert the extirpation of the leopard tortoise and the extinctions of the geometric tortoise and Waterberg copper butterfly. These reserves have also been essential in promoting the recovery of species on the IUCN Red List and the US Endangered Species Act. These include the white and black southern species of rhino, the bontebok and Cape Mountain zebra.

In Mozambique's Coutada 11, a hunting area covering roughly a million acres, 405,000 hectares, scientists have discovered a species of mole rat, *Cryptomys bierai*, that may be taxonomically distinct. More discoveries like these likely await in Africa's hunting areas—but for them to be appreciated by science and by those who benefit from healthy ecosystems, the habitat in these areas must be protected.

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The limits of photo-tourism

Critics of trophy hunting have suggested that such areas would be better conserved if they were converted to photo-tourism. These critics cite photo-tourism's comparative advantage in total contribution to GDP as well as revenue generation and job creation. However, this argument ignores some critical contexts that demonstrate that trophy hunting and photo-tourism are not interchangeable.

First, local support for conservation depends less on its overall contribution to national GDP and more on its benefits to *households* in and adjacent to conservation areas. While the number of jobs created by trophy hunting are low compared to the tourism industry overall and national labor markets, trophy hunting areas typically have low human population densities and small labor pools. Locally, there can be fewer than 1,000 households, and job creation stemming from trophy hunting can be significant.

Second, while the contributions of trophy hunting to GDP are relatively small, they have a disproportionately large impact on the budgets of wildlife conservation agencies. Tanzania provides a prime example of this, with the Tanzania Wildlife Authority receiving 60% of its total operating budget from trophy hunting fees charged by the agency.

In contrast, revenues from photo-tourism have a less consistent record of contributing to conservation. A 2016 report from the UN World Tourism Organization found that only half of photo-tourism operations in Africa were directly contributing to anti-poaching or other conservation efforts.

Third, by focusing on cash generated by trophy hunting, critics ignore how those revenues compare with other conservation enterprises as well as the added economic value to local communities provided by trophy hunting. Even the lower end of the estimated revenue generation from trophy hunting is still one-third higher than the \$142 million generated by protected-area entrance fees in 14 African countries. And, unlike photo-tourism, trophy hunting also contributes to local and regional food security. Researchers estimate that trophy hunting in Zambia provides more than 286,000 pounds (130,000 kg) of meat each year—with an estimated value of \$600,000—to nearby rural communities.

Finally, most of the areas currently used for trophy hunting lack the scenery, infrastructure, amenities and other qualities that are typically needed for photo-tourism. An analysis conducted in Botswana concluded that trophy hunting was the only economically viable wildlife-dependent land use on two-thirds of the country's wildlife estate. Other research has concluded that only 22% of Botswana's Northern Conservation Zone has intermediate to high potential for photo-tourism.

Moreover, a study published in 2016 determined that if trophy hunting were removed from community conservancies in Namibia, 84% of those conservancies would become financially insolvent. This insolvency would place a wildlife area five times the size of Yosemite National Park at increased risk of conversion to agriculture or development.

What might befall Africa's biodiversity if campaigns to ban trophy hunting are successful is already playing out in Kenya. Since banning big-game hunting, in 1977, the country has witnessed deeply troubling declines in its native biodiversity, including many species considered common in other

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countries where trophy hunting is integrated into the conservation system. These declines have simultaneously occurred with expanded livestock grazing in the country's rural areas and increased political tensions between Kenyan wildlife authorities and rural communities over failures to address human-wildlife conflict and the lack of sharing of photo-tourism revenues.

Lessons for a new Africa

While trophy hunting has made and is making significant contributions to the conservation of African biodiversity, it is important to recognize that these contributions are unlikely to be sustained over the coming decades. As discussed in a February 2019 IUCN report, participation in African trophy hunting is waning even without blanket bans in key US and European markets: Over the preceding eight years, South Africa has experienced a 60.5% decline in the number of visiting hunters, while in Namibia the number of visiting hunters declined by approximately 30% between 2007 and 2013. These trends highlight the risks of pegging conservation solely to tourism and recreation, as is often the case.

At the same time that participation in hunting is declining, Africa is rapidly urbanizing and industrializing. These trends will likely reduce the threats to habitat from pastoralism and crop farming and open up opportunities for conservation that are either not dependent on, or not appropriate for, the kinds and scale of economic incentives that trophy hunting currently provides. However, these trends will also drive new threats to wildlife habitat, such as large-scale development (for example, Botswana's decision to build the Stiegler's Gorge Dam in the Selous Game preserve) and expanded infrastructure, for which trophy hunting is unlikely to increase the relevant opportunity cost.

In this context, trophy hunting can be understood as a tool that helps African decision makers manage the transitions their nations are undergoing. It buys time, preventing the loss of habitats and their biodiversity before solutions can be developed to face the conservation challenges that will accompany a more populous, urban and interconnected Africa.

As trophy hunting moves toward a twilight period, conservationists should be asking themselves what lessons the African experience with trophy hunting has provided, and how those lessons can be applied to overcome future conservation challenges. Solutions should draw from the large pool of African-born conservationists and nurture their higher-than-average degree of receptiveness to delivering conservation through capitalism. This topic should be an ongoing theme at future Business of Conservation Conferences, US-Africa Business Summits, IUCN World Conservation Congresses, World Economic Forums and other high-level discussions. Doing so will increase the likelihood of conservation keeping pace with Africa's rapidly expanding economies and the continent's growing embrace of democracy and free trade.

With 1 million or more species facing extinction globally, now is not the time to be taking conservation tools off the table. But that is exactly what trophy hunting bans will do—place millions of acres of habitat, and the countless species that rely on them, at risk. The focus of countries like the United States should be on helping African partners find a way forward in conserving biodiversity, not on criticizing the use of a tool that has successfully delivered conservation, often in the most difficult of circumstances. A helping hand will forge stronger friendships than a wagging finger, and strong

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friendships between nations are essential if we are to confront the challenge of mass extinction and the other threats facing our world.

Catherine E. Semcer is a Research Fellow with the Property and Environment Research Center (PERC); her work focuses on rights and market-based solutions to policy challenges in environmental security, conservation finance and sustainability. This article was first published in September 2019 by PERC and is republished here with permission.

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