INTERNATIONAL HUNTING AND SUSTAINABILITY

A Scientific Evaluation

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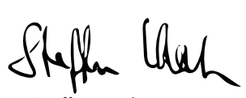
FOREWORD

In the debate about international hunting, emotional arguments and deeply ingrained convictions often take centre stage. As Sven Herzog writes, the term ‚trophy hunting‘ is sometimes used with ‚discriminatory intent‘. Africa’s iconic wildlife, including lions, elephants, and rhinoceroses, provides anti-hunting activists and animal rights advocates the best opportunity to reinforce general prejudices against hunting. They have identified hunting abroad as the ‚soft flank‘ of wildlife use, and their political allies use the ban on trophy imports as a political lever to appease the anti-hunting lobby in various countries.

By examining empirical data and considering numerous studies, Sven Herzog questions whether the rejection of international hunting truly serves the interests of nature conservation and animal welfare. He questions the effectiveness of alternatives such as photo tourism and examines how well-regulated overseas hunting can contribute to species conservation and the economic empowerment of African communities. International hunting, under strict regulations and in a sustainable framework, plays a key role in preserving biodiversity. It not only enables the generation of essential revenue for protected areas but also supports local communities by creating jobs and generating income.

This study is an invitation to critical thinking and questioning established assumptions. It urges readers to look beyond the surface of emotional rhetoric and see international hunting in a new light—as a promising way to tackle the conservation challenges in Africa.



Dr. Steffen Koch,
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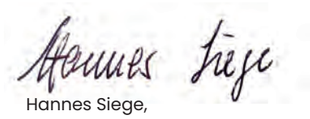

Hannes Siege,
Deputy Head of the German
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PREFACE

Professor Adam Hart,
University of Gloucestershire,
Co-author of Trophy Hunting,
winner of the Marsh Ecology Book of the Year Prize, 2023

We are living through, and are the cause of, an extinction event. Our activities, our huge demands on the planet, are without doubt the cause of this biodiversity crisis. Habitat loss is key among the threats we pose, because if flora and fauna have no place to live then extinction becomes a reality. We urgently need to find ways in which we can co-exist with the natural world such that we retain habitat. However, most of our land-uses, like agriculture, mining, towns, cities and roads, are at odds with that goal. Economic return and growth seem mostly to require land uses that destroy, rather than promote, habitat.

One land-use that can conserve habitat is recreational hunting. Initially counterintuitive, the idea that hunting can help conservation is also deeply controversial. Many people around the world feel that hunting animals is morally wrong, and that hunters who will pay for the pleasure of hunting are "sick", "evil" and worse. However, the reality is that, in many places, clients paying to hunt specific animals can provide enough revenue to prevent habitat being converted into other land-uses that will not support a natural ecosystem. Many hunters will in fact pay very large sums to hunt individual animals with particularly large horns, antlers, tusks or other "trophies". Revenue from hunting tourists, and especially these so-called "trophy hunters", can pay salaries, fund anti-poaching patrols, maintain infrastructure and so on. But of course, the flip side of this coin is that, if poorly regulated and managed, hunting can rapidly reduce biodiversity. Unscrupulous operators and officials meanwhile can also make sure that little of the revenue raised goes to those people living within and around hunting areas.

Currently, many Developed World nations are considering imposing "trophy bans" of one form or another, usually motivated by the fact that they believe trophy hunting to be a threat to conservation. Typically, these bans seek to prevent the importation of hunting trophies, either from any animal, or from animals identified as threatened in some way. These proposals are usually very popular among the public, and among politicians seeking easy wins. It is a curious hypocrisy that many of the nations proposing bans often themselves have thriving trophy hunting industries, which of course are not threatened by import bans. Nations like the UK push for bans while languishing at the bottom of global conservation league tables, all the while hosting overseas hunters paying huge sums to shoot red deer in the Scottish Highlands or grouse on the Yorkshire moors. Meanwhile, nations like Botswana, Namibia and Zambia head those same league tables, and use regulated trophy hunting as part of their, highly successful, conservation tool kit.

On one side then there are strong voices calling for bans, while on the other are those that maintain hunting is good for conservation. As is often the case, there is a balance point between these two positions and many conservation scientists, including me, are trying to find that balance. Hunting can be a useful conservation tool, but it can also have problems relating to animal welfare, conservation and revenue sharing. Politicians and the public must navigate this challenging landscape with little experience or understanding, and to do so against a backdrop of highly partisan campaigning, and in some cases active misinformation.

In this study, Sven Herzog provides some waymarks and paths for those trying to navigate this difficult debate. Those readers of a cynical disposition will doubtlessly point to the fact that this study was commissioned by the International Council for Game and Wildlife Conservation, a hunting organization. However, if you are such a reader then I would point you to the many reports condemning hunting published by large, global NGOs campaigning for bans and ask whether you apply that same level of cynicism to those? Do not be fooled into thinking that the trophy hunting debate is simple, no matter which side of the fence you are on. It is far from straightforward and there is no definitive answer to whether trophy hunting is good for conservation. The reality is that is depends on where it undertaken, what species are targeted, which economic model is used, and so on.

I have seen much of the information presented to politicians in the UK, and I have watched the parliamentary debates. It is woefully clear that, while many politicians want to help conservation, they are being served poorly by the information they receive. What is desperately needed in this debate is far less campaigning rhetoric (from both sides), and far more evidence-led discussion, based on reliable sources This report dives into some of that evidence and provides a counter narrative to the one most politicians will have heard. That is refreshing. After all, it is only by receiving a range of information will they be able to decide whether bans are really such a good idea.

Two tons of meat for the people in the hunting area – Matetsi, Zimbabwe.

1. OBJECTIVE

This study aims to provide an overview of scientific results concerning the impact of hunting tourism from ecological, economic, and socio-cultural perspectives, based on selected studies from various geographic regions. It also aims to shed light on current political developments both in Europe (import bans) and in the host countries (hunting bans) and to assess these developments based on a synthesis of selected examples.

2. TROPHY HUNTING, OVERSEAS HUNTING, INTERNATIONAL HUNTING?

At this juncture, we must consider which terms to use in this study to ensure an unbiased and value-neutral approach. Thus, before we delve into the substantive questions more intensively, we should clarify and differentiate between some terms.

In addition to the terms „trophy hunting“ and „hunting tourism,“ we frequently encounter terms such as „overseas hunting,“ „international hunting,“ „sports hunting,“ „safari hunting,“ and increasingly „conservation hunting.“

At this point, we ought to ask ourselves which terms we should use within the framework of this study to achieve a neutral and unbiased approach.

„Trophy hunting“ is a common term both in everyday language and in the scientific literature, but it is applied very inconsistently and has sometimes even discriminatory connotations.

The specific meaning of the term often remains unclear, as does the connotation intended by the author. Furthermore, the expression „trophy hunting“ often does not go beyond a „buzzword,“ a meaningless trend term that primarily attracts media attention. We should, therefore, use this term cautiously.

In this context, it is essential to find a neutral, geographically and discriminatively neutral term that describes the matter that has been broadly referred to as „trophy hunting“ as accurately as possible. Terms such as „hunting tourism,“ „overseas hunting,“ or „international hunting“ offer themselves here (cf. Siege & Siege 2020).

Photo: Dr. Ludwig Siege

In all cultures, hunting trophies had a ritual significance: dancers with colobus monkey, leopard, and kob antelope in Gambella, Ethiopia.

The term hunting tourism is defined by the social and economic processes it involves: „Tourism“ refers to a temporary change of location by individuals to destinations outside their usual living and working environments, typically for recreational purposes. Tourism as an industry is a relatively distinct sector in most regions of the world, which undertakes the task of enabling people to engage in this form of recreation. Hunting tourism is thus a phenomenon of so-called „leisure hunting,“ an evolutionary stage of human hunting (in contrast to subsistence hunting or market hunting, see Herzog 2019), characterized primarily by the fact that hunting is not conducted to secure one's own livelihood.

In this context, it is irrelevant whether a hunter travels from one country to another for hun-

ting, whether it's within Europe or in Africa. The reasons for hunting are also insignificant. Whether the motivation for hunting is to socialize with like-minded hunters, to take down a particular game animal, or simply to witness a unique nature experience.
Even if some common definitions fundamentally exclude this (Fennell 2015, Shannon et al. 2017), hunting tourism can certainly also be interpreted as a form of nature or ecotourism (for a more detailed discussion, see Ellenberg et al. 1997, Strasdas & Zeppenfeld 2011, or Siege & Siege 2020), provided it is carried out sustainably and resource-efficiently.
„Overseas hunting" describes hunting by the hunter as an „overseas hunter," i.e., someone who hunts outside their home continent. The specific circumstances of this hunting and/or their motives are not further evaluated. The term „international hunting" behaves practically synonymously. The latter seems overall more appropriate as it refers more to the hunting actions themselves rather than the perspective of the hunter.
It is important not to equate „international hunting" and „canned hunting," i.e., the hunting of animals in fenced areas rather than in free-ranging wild habitats. The subject of canned hunting will not be explicitly addressed in this study.
Furthermore, the term ‚illegal hunting,' often deliberately or unintentionally equated with ‚trophy hunting,' should be referred to as ‚poaching' to avoid confusion (cf. Bauer et al. 2015).
Finally, a clear separation between the action itself and its consequences on one hand and the motive of the action on the other is an essential prerequisite for an objective discussion of the subject.

Often overlooked by the public: Hunters from the Netherlands or Denmark also hunt abroad in Germany.

Photo: Dr. Ludwig Siege

Photo: Dr. Ludwig Siege

In the Ngorongoro Crater: The image of the „King of the Beasts" often shapes the media's perspective.

3. „SOME ANIMALS ARE MORE EQUAL": THE MEDIA PERSPECTIVE

Media frequently portray powerful images of white hunters posing dominantly over hunted animals under the African sun. In contrast, images of driven hunts in regions such as central Europe and Scandinavia, conducted by guest hunters from various countries, are much less frequently seen.

The killing of the lion Cecil in 2015 in Zimbabwe triggered the largest public media reaction to date (cf. Lindsey et al. 2016, Macdonald et al. 2016). Siege & Siege (2020) refer to this event, which was strategically publicized by international NGOs, as „the 9/11 of overseas hunting."
As a result, France, the Netherlands, and Australia have banned the import of trophies from lions and other species. The United Kingdom and Germany have each intensely and publicly debated a ban on trophy imports. Some countries have since required even more comprehensive documentation of sustainable management before allowing trophy imports, and more than 40 airlines now refuse to transport hunting trophies (Carpenter and Konisky 2019).
The fact that red deer in certain regions in Germany such as Bavaria or Saxony can be more endangered than elephants in northern Botswana is just as irrelevant in public representation as the fact that ethical minimum standards for hunting exist both here and there, sometimes adhered to more, sometimes less. Often, media evaluation lacks a balanced assessment of the circumstances concerning their impacts. To stick with the example mentioned above: while the presence of even a large number of red deer in Germany can at most lead to browsing in forests, but does not seriously threaten anyone's livelihood or health, elephants can indeed threaten the economic existence of entire families or village communities. People are regularly injured or killed by elephants. Elephants, therefore, along with lions, are among the most hated animal species among residents of rural African areas (Packer 2015). Nevertheless, we find in most, at least publicly funded media reports, the narrative that red deer should be culled, and elephants should be protected.
The question as to how this divergence in media perception comes about cannot and should not be the subject of this study. However, we must never lose sight of the fact that numerous extraneous factors are at play in the analysis of the phenomenon of „international hunting": Wild animals are always projection surfaces for deep human, also very personal emotions, from which journalists and other media professionals, but also scientists, are by no means free.

4. INTERNATIONAL HUNTING AS A SUBJECT OF SCIENTIFIC INVESTIGATION

For many decades, international hunting tourism, and its effects on local ecosystems, as well as on local economic and social conditions, have been the subject of scientific studies therof, a selection is analysed below. As expected, different authors will approach this topic from different professional angles, i.e., ecological, socio-economic, and socio-cultural perspectives, and thereby they will come to different results.

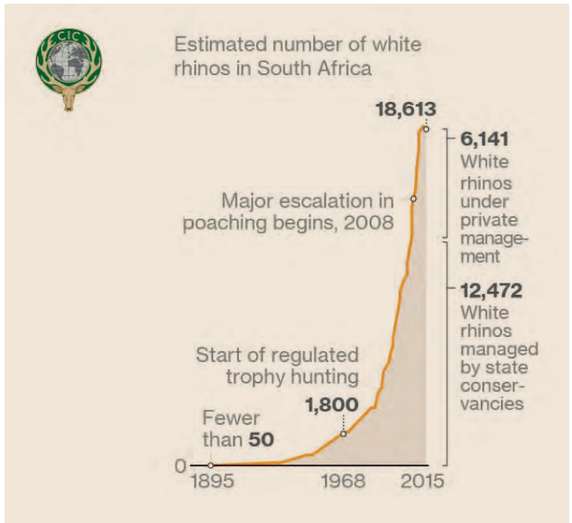
Interestingly, sometimes disturbingly, and in any case, concerning, is the fact that the professional standards that should be applied to a scientific publication are not always guaranteed in publications on the subject of „hunting." Regularly, we find publications in quite reputable scientific journals that merely convey a preconceived opinion of the authors. For example, Horowitz (2019) writes in a commentary on the work of Dickman et al. (2019):

"A. Dickman et al. argue that trophy hunting should not be discontinued. However, their premise is not viable when examined under the light of basic morality.

Whether Dickman et al. concur or not, wildlife has the basic right of existence, irrespective of human existence and interests. Intentional killing of animals to satisfy the whims of wealthy individuals is detestable. No potential gains, even those that are promoted by Dickman et al. as beneficial to wildlife, justify undermining the moral basis of the protection of Earth's natural resources. It is our responsibility to suppress the destructive tools at our disposal so that these resources remain unharmed. Culling of endangered species is a selfevident fallacy. Our foremost emergency is to restore endangered species to their former state, irrespective of human interests. Unless required for basic existence, hunting of all forms is a practice that should be eradicated like the smallpox virus."

A professional debate on the question of ethics and especially the ethical implications of the phenomenon of „hunting" is always welcome. However, pure (albeit entirely legitimate) personal opinions have no place in a scientific publication. The relevant platforms of social media provide the appropriate forum for such comments.

It is also noticeable that many studies focus on the Global South, particularly Africa. This may be due to the availability of funding, the impact of large iconic mammal species on a lay audience, or maybe also the personal socialisation of the respective authors.



Often ignored by the media: since the 1960s, international hunting has contributed to the preservation of species such as the southern white rhinoceros in South Africa.

Photo: Dr. Ludwig Siege

Numerous scientific studies have shown the positive effects of international hunting: here the radio-collaring of an elephant.

Finally, a lack of interdisciplinary research is noticeable (cf. Bichel & Hart 2023). An approach aiming to understand the nature of hunting tourism has to be fundamentally interdisciplinary, as it is a complex topic with many different facets to be analysed from This phenomenon is presumably also related to the aforementioned fact that even in peer-reviewed scientific journals, the two (fundamentally contrary) phenomena of ‚hunting' and ‚poaching' are regularly not considered separately. If the data situation does not allow for such a distinction (which is indeed regularly the case), then this problem must at least be critically discussed. This present study follows an interdisciplinary approach, attempting to analyse the ecological, economic, and socio-cultural impacts of international hunting. The aim is to summarise the results of different studies with different specialist focuses in a synopsis. The starting point, following the disciplinary study situation, is first of all the question of which:

- ecological,
- economic, and
- socio-cultural

effects of international hunting are verifiable. These questions will be answered by analysing selected scientific and other specialist publications on this topic. Finally, an interdisciplinary assessment of the phenomenon of „international hunting" will be attempted.

However, it is not always easy to make a clear distinction between the three dimensions of sustainability. They are often causally interrelated. This is regularly the case when, as we will see, the utilisation of the value-creation potential of wild animals creates improved local economic conditions, which in turn create incentives and potential for conservation measures.

This is likely to be viewed critically: Hunting outfitters often advertise with such images.Yet International hunting means much more than just the trophy.

5. ECOLOGICAL IMPACTS OF INTERNATIONAL HUNTING

5.1 Species Conservation and Recreational Hunting

There is a broad consensus today that the main causes for the worldwide decline of large mammals are habitat loss and degradation, competition with livestock farming, poaching for meat, the illegal trade in animal products (ivory, horn, etc.), as well as persecution due to direct conflicts between humans and wildlife (cf. Schipper et al. 2008). This is not always clearly communicated in secondary and tertiary literature, as evidenced by e.g. the current CMS/COP report, which indiscriminately equates „over-exploitation" with „hunting."

There is also widespread agreement today that sustainable use, including sustainable hunting, is one of the most important instruments for conservation of both endangered and non-endangered species and their habitats worldwide (cf. Herzog 2019). A recent meta-analysis of more than 1,000 scientific and professional publications from the period between 1953 and 2020 emphatically confirms this (Di Minin et al. 2021).

5.2 Positive Ecological Effects of International Hunting

When examining the dominant issues in protection and management of wildlife today, we have to consider how international hunting may contribute to these efforts. Key approaches in this context include:

- Maintaining appropriate population sizes and social structures of the hunted species
- Preventing poaching and illegal trade in wildlife products
- Preserving largely intact ecosystems
- Providing the necessary financial resources for species protection

Particularly the latter point has significant economic implications, which will be discussed in the appropriate context. Furthermore, we have to differentiate between sustainable and non-sustainable hunting. Today, we possess extensive knowledge about the biology and ecology of hunted species and their habitats, which makes this distinction possible.

Numerous wildlife management tools are available today (cf. Herzog 2019), enabling and supporting sustainable management. The question is no longer whether we should hunt

wildlife populations but how to do it sustainably to protect and conserve species and populations in their environments. This „how" is determined by biological and ecological facts and the threat status of a species or population.

For over a century, the challenges of protecting Africa's iconic large mammals and corresponding solutions have been discussed (cf. Schillings 1906, Seton-Karr 1908). In the latter half of the 20th century, conservation thinking and ecosystem thinking gained increasing importance in the industrialized countries. In this intellectual environment, the effects of international hunting and hunting tourism on species and ecosystems, particularly the African savanna landscapes, have been explored and investigated.

Adams (2004) describes that since the mid-20th century, international hunting has been a crucial factor in conserving numerous, not exclusively iconic, wildlife species in sub-Saharan Africa.

The example of the two rhino species in South Africa and Namibia is impressive, showing that sustainable hunting, including the legal export of trophies, can significantly contribute to the protection of these species and their habitats. The population of the southern white rhinoceros (*Ceratotherium simum*) in South Africa and Namibia has increased from about 1,800 individuals in the late 1960s to over 18,000 individuals in the mid-2010s due to sustainable hunting practices. The black rhinoceros (*Diceros bicornis*) has also seen a population increase from around 2,300 individuals in 2004 to about 3,700 individuals in 2014 (cf. Cooney et al. 2017, 't Sas-Rolfes et al. 2022).

For instance, the protection of North American bighorn sheep (*Ovis canadensis*) has been funded mainly through revenues from hunting and hunting tourism. After the population decreased from about one million in the early 19th century to about 25,000 individuals in the 1950s for various reasons, it has more than tripled since then due to conservation measures financed by hunting revenues (Hurley et al. 2015).

A similar situation exists for the bighorn sheep of Mexico on Tiburon Island, which went extinct for unknown reasons and were reintroduced by local indigenous communities. Within a few decades, their population has increased more than twentyfold under hunting management and now probably aligns with the habitat's carrying capacity (Valdez et al. 2006, Wilder et al. 2014, Hurley et al. 2025).

The conservation of the endangered Suleiman markhor (*Capra falconeri megaceros*) and the Afghan urial (*Ovis ammon orientalis*) is also a success attributed to international hunting. In the 1980s, there were estimated to be fewer than 100 individuals of the first mentioned taxon and around 200 individuals of the latter in Pakistan. Through intelligent community-based management, funded by revenues from international hunting, the population of the markhor have increased to about 3,500 individuals, and the urial population has grown to around 2,500 individuals, thus saving these subspecies from extinction (Woodford et al. 2004, Frisina & Tareen 2009).

Sustainable management of wildlife under international hunting includes more than just protecting, conserving, or reintroducing individual species. Di Minin et al. (2016) review the impacts of international hunting on conservation in sub-Saharan Africa, concluding that hunting tourism can maintain or enhance regional biodiversity through three main mechanisms:

1. Funding for conservation projects,
2. A relatively low ecological footprint compared to other forms of ecotourism, and
3. Special protection for populations of hunted species.

The authors conclude that non-specific hunting bans or restrictions on importing hunting trophies may have highly negative impacts on the overall conservation situation in the region.

Cooney et al. (2017) illustrate how international hunting positively impacts different regions of the world through various approaches:

- Direct incentives for landowners (state, community, or private) to protect wildlife,
- Generating financial resources for conservation, including anti-poaching efforts,
- Reducing illegal wildlife killing through increased tolerance of wildlife.

Dickman et al. (2019) respond to increasing initiatives aiming to ban the hunting of specific iconic species, particularly in Africa, or to impose import bans on trophies of these species

in Northern countries. They argue that such initiatives, if successful, would significantly harm conservation efforts. In African countries with hunting tourism, more land is used for hunting than for total reserves without hunting, and banning hunting would quickly lead to converting these areas into agricultural land, including grazing areas or settlements, resulting in the loss of valuable ecosystems and biodiversity.

During the decades after Kenya banned hunting in the 1970s, there has been a significant decline in wildlife populations, especially the iconic species (cf. Child 2000). Ogutu et al. (2016) also show a continuous decline in various wildlife species in Kenya from 1977 to 2015, correlating with an increase in livestock. This trend appears unbroken.

Similarly, the situation in Uganda, Botswana, and Malawi, or in countries like Somalia, which currently have neither functioning reserves nor sustainable hunting systems (Amir 2006), is barely studied. The question arises whether the presence of legal hunting activities can significantly reduce illegal hunting and poaching through the mere presence of legal hunting activities. Observations and initial scientific studies support this hypothesis.

Studies suggest that illegal land users or settlers, and poachers tend to avoid areas with established hunting management and anti-poaching patrols, thereby enhancing conservation efforts (Strampelli et al. 2022). In Botswana, conflicts between humans and wildlife increased after a hunting ban was imposed. The number of documented conflicts rose from 4,361 in 2012 to 6,770 in 2014 (Mbaiwa 2018).

Areas where hunting tourism is abandoned due to import bans and restrictions are unprotected against negative human impacts. Valuable ecosystems are lost this way. A study in the Selous and Rungwa game reserves found that poaching was significantly fewer in areas with active hunting concessions compared to those without (exceptions: elephants). Moreover, the Selous with more hunting concessions compared to Rungawa shows less poaching (Lyakurwa et al. 2020).

In addition to these direct impacts, international hunting also has numerous indirect effects. The most important indirect effects are the creation of local incomes through international hunting, leading to increased acceptance of wildlife species that might otherwise be intensively persecuted in human-wildlife conflicts. As long as wildlife is seen solely as a burden and has no economic value, uncontrolled killing (for example, of lions regularly preying on livestock) can easily lead to unsustainable regional overexploitation due to spill-over effects.

Another crucial contribution of international hunting is preventing poaching through the financing of specific anti-poaching structures.

Photo: Hannes Siege

Photo: Hannes Siege

In areas where hunting is not permitted, poaching, which includes the use of snares, is a frequent occurrence.

Photo: WikiCommons

Ethically indefensible: hunting farms and enclosures offer special breeds as unique trophies. Here, a „Golden Gnu."

5.3 NEGATIVE ECOLOGICAL EFFECTS OF INTERNATIONAL HUNTING

Concerns are frequently raised that hunting or hunting tourism may have negative ecological impacts.

For example, in this context, the risk of high or unbalanced ungulate abundances is mentioned, with corresponding negative impacts on the ecosystem vegetation, particularly if a few ungulate species of interest were to be especially promoted (e.g., Ripple et al. 2016).

Other authors see the risk that more interesting hunting species could eventually replace less interesting ones in the long term (cf. Richardson 1998).

However, both arguments describe eventualities that are not clearly substantiated by studies but remain speculative. Moreover, both arguments apply much more to the only economic alternative (aside from conversion to agricultural land), which is photo tourism. For the wildlife experience of a large number of people or for high-priced offerings for a small number of paying tourists, significantly higher abundances (cf. Winterbach et al. 2015) of touristically interesting species are required than is the case for international hunting. In the future, there is also the question of whether such high densities of herbivores will still be beneficial to savanna and forest ecosystems in light of the challenges posed by climate change. Finally, the first-mentioned assumption is refuted by studies from the Moyowosi-Kigosi Game Reserve in Tanzania (Musika et al. 2020). It was shown that negative impacts on vegetation are primarily caused by (illegal) livestock grazing. Hunting in these areas has a positive influence on natural vegetation and thus also serves as a tool for the preservation of biodiversity.

Another argument is the influence on social (e.g. increase in infanticides in big cats, cf. Swenson 2003; Whitman et al., 2004) and/or genetic structures due to selective hunting. The majority of genetic studies on this question relate to North American bighorn sheep (cf. e.g. Coltman et al. 2003; Festa-Bianchet & Lee 2009, Festa-Bianchet et al. 2014; Douhard et al. 2016; Festa-Bianchet & Mysterud 2018). It is certainly true that hunters often do not hunt game randomly, but selectively hunt for certain individuals according to special criteria. One such criterion is often the sex and/or the strength and shape of antlers or horn. If the shape or size of the trophy is at least partly genetically determined, i.e. if it does not depend exclusively on the nutritional status or other ecological conditions, there is a risk that the early removal of these individuals from the population will have a selective effect on the gene pool. This in turn can lead to a long-term loss of genetic variation in the population. This real risk must be limited by ensuring, in the interests of sustainable hunting, that the individu-

als in question reach a sufficiently old age and can reproduce sufficiently often before they are hunted (see, for example, Coltman et al. 2003).
However, taking these facts into account should be a matter of course in the interests of sustainable hunting. Problems are therefore only to be expected if there is no sustainable hunting strategy and no corresponding rules. Thus, the repeatedly described problem of changes in genetic structures is by no means inherent in the system, but - as happened in North America - merely a question of applying suitable sustainability criteria.
A classic argument against hunting wild animals as such is the fear that this will reduce the population size and thus add another threat to the existing ones. Lions and leopards often are mentioned in this context, as they are so-called top predators and tend to be more susceptible to interventions in the population. This question will be examined using a few examples below.
Tanzania currently has a large proportion of the African lion (*Panthera leo*) population and also has a significant leopard (*Panthera pardus*) population. Both species are hunted by international hunters. Packer et al. (2011) analyzed the hunting bag for lions and leopards in Tanzania for the period between 1996 and 2008 for a hunted area of around 300,000 km², as well as the results of direct counts for non-hunted areas. The hunting bag during the period in question was declining. The authors found similar results for hunting leopards. They assume that the decline in hunting bag also reflects corresponding declines in the population, but they cannot provide concrete evidence of this. They recommend a stricter, regionally differentiated limitation of hunting quotas for lions and leopards. Loveridge et al. (2007) investigated the effects of hunting outside the park on the lions within the park in Hwange National Park in western Zimbabwe between 1999 and 2004. The hunting bag of male lions doubled between 2001 and 2003 compared to the values of the three previous years, which led to a local decline in the number of adult males (from a sex ratio of 1:3 to 1:6 in favor of adult females). The territories vacated by adult males were occupied by the immigration of other males from the park. Infanticides were observed when new males entered the packs. The proportion of male offspring increased between 1999 and 2004, which could be interpreted as a compensation for the high mortality rate among adult males. As main reasons for a local population decline in lions and leopards the killing of animals, defending of human life or livestock or as a revenge for attacks, habitat losses and the decline in prey species (usually due to poaching) are assumed (cf. Bauer et al. 2015, Arias et al. 2024).
Using various models, Bauer et al. (2015) attempt to derive regional trends for the future using population estimates from the past. It should be borne in mind that data based on models should always be interpreted with a certain degree of critical caution. The results show indications of a further future decline in populations in Central and East Africa, but of increasing populations in the four southern states of Botswana, Namibia, South Africa and Zimbabwe. The authors attribute this to more intensive management (although sometimes also in small enclosures), better financing of protection measures and re-introductions in this region. They express concern that management budgets for protected areas in central and eastern Africa will not be able to keep pace in the long term.
Other, also model-based studies indicate that unsustainable hunting of lions can be problematic for the population in the long term if additional anthropogenic mortality factors (in particular poaching, the killing of so called "problem animals" and a lack of prey) are present (see, for example, Creel et al. 2016, Loveridge et al. 2023).

Not sustainable: artificial breeding.


Jagdschein

für Herrn C. G. Schillings

zur ~~berufsmässigen~~ Jagd auf Elefanten und Nashorne.

Gültig vom 7ten Juli 1899 bis 7ten Juli 1900

Gebühr 500 Rp. + 300 M = Sa 800 M

Tanganam den 7ten Juli 1899

Der Kaiserliche [illegible]

Verboten ist die Jagd auf: Alles Jungwild, Kälber, Fohlen, auf junge Elefanten, soweit sie zahnlos sind oder das Gewicht des einzelnen Zahnes 3 kg nicht erreicht, und auf weibliches Wild, soweit es als solches erkennbar ist.

Schussgelder sind zu zahlen 100 Rp. für jeden ersten und 250 Rp. für jeden ferneren erlegten Elefanten. 50 Rp. für jedes erste und zweite und 150 Rp. für jedes fernere er-

Hunter and photographer Carl Georg Schillings was already dedicated to conservation-based hunting (gamekeeping) in 1898.

For leopards, too, various studies have found evidence that anthropogenic interventions in populations are by no means always sustainable (see, for example, Braczkowski 2013, Braczkowski et al. 2015, Trouwborst et al. 2019, Naude et al. 2020), although it is often not clear to what extent illegal killings have or may have contributed to the results.
From the analysis of such studies, we see that the problems described are usually not problems with hunting as such, but rather the question is whether or not hunting is being carried out sustainably. It should be remembered that the sustainable use of a wild animal species is not fundamentally dependent on its local abundance, or even on its endangered status. Even an animal species classified as endangered can be hunted sustainably if the removal rates are sufficiently low, provided that the relevant criteria exist and are complied with. Another important question in relation to the studies cited and various other studies is whether the phenomena described really arose from legal hunting or from illegal killing or poaching. Admittedly, this is not always easy to answer. In the interests of good scientific practice, it would be important to regularly discuss this very question in the light of the study results. An interesting example in this regard is the study by Archie & Chiyo (2012), who postulate the hypothesis of changes in genetic structures with possible consequences for the behavior of certain individuals in the African elephant (*Loxodonta africana*) as a result of poaching. In elephants in particular, there are extensive social bonds and interactions that are disrupted by uncontrolled interventions in the population and may also lead to more aggressive behavior (see, for example, Allen et al. 2021). However, even for species that are viewed as critical in terms of conservation, such as lions or leopards, there is also clear evidence of how sustainable hunting can be achieved (see, for example, Whitman et al. 2004, Balme et al. 2010, 2012). A minimum age of six years for lions has already been legally prescribed in Tanzania, Mozambique and Zimbabwe and is also increasingly being enforced (see Begg et al. 2018). It should be intuitively clear that conclusions drawn from big cats, for example, cannot be uncritically applied to other species. For example, we have evidence from various studies on brown bears (*Ursus arctos*), in which the phenomenon of infanticide is also widespread, that hunting does not lead to an increase or even to a reduction in infanticide (Miller & Keay 2003, McLellan 2005).
International hunting and hunting tourism are therefore a tool for species conservation that not only adds value to local biodiversity, but also provides good reasons for protecting wildlife habitats from other forms of land use that are detrimental to biodiversity and/or for re-establishing locally extinct species. This is important not least because formally designated protected areas for most species only cover a fraction of the original distribution area. For example, individual subspecies of the leopard are only found in two percent of their original range (Jacobson et al. 2016), so that in the long term, such species need to be valued as widely as possible. International hunting contributes significantly to this.
Even if unsustainable hunting has contributed to population declines locally (see above), this does not pose a significant threat to the species in question as such and is rather negligible compared to the really decisive threats such as poaching or the conversion of natural landscapes for agricultural purposes (see, for example, Loveridge et al. 2007; Packer et al. 2009, 2011, Lindsey et al. 2015, Felix et al. 2022).

Photo: Dr. Ludwig Siege

Worldwide hunting travel offers at the „Jagd und Hund“ fair, Dortmund.

Sustainable land use: In some cases, wildlife and livestock can complement each other, such as on cattle farms in Namibia.

6. ECONOMIC DEVELOPMENT THROUGH INTERNATIONAL HUNTING

6.1 The Economic Importance of International Hunting in Africa

The economic significance of international hunting naturally varies depending on the geographic region and societal conditions. In Africa, hunting tourism is prevalent in 23 countries, with the industry being particularly significant in Southern Africa and Tanzania. In Central and West Africa, hunting tourism either remains stable or is declining. Hunting tourism in these regions occurs almost exclusively in an area of approximately 1,394,000 km² south of the Sahara, which is comparable to the size of Germany, Austria, and Italy combined (Lindsey et al. 2007).

The direct economic contributions of international hunting, such as its contributions to the Gross Domestic Product (GDP) of individual African countries, vary. Estimates suggest that Tanzania, generates about 300 million US dollars annually, significantly impacting local communities. In other countries, such as Namibia and South Africa, the income from international hunting is similarly substantial, providing essential funding for conservation efforts and local economic development (see Siege & Siege 2020).

The generated income is crucial for the protection of natural habitats and offers higher financial incentives for conservation than other land-use forms, such as livestock farming or agriculture. Alternative land uses in these areas, like forestry or ecotourism, often do not yield comparable economic returns (Child 1988, Lindsey et al. 2007, Di Minin et al. 2016).

6.2 „Community-based natural resource management“: Ideal for Utilizing Wildlife

First, let us take a look into the past: Initial approaches to community-based management of wildlife populations emerged as early as the 1960s in Amboseli, Kenya (Sindiyo 1968). However, these efforts took a different turn, especially with the introduction of a hunting ban in the 1970s.

Further projects based on the sustainable use of wildlife populations were initiated in Zimbabwe starting in the 1970s, gaining recognition far beyond the region until today.

Previously, there had been a noticeable decline, particularly in large, iconic wildlife species. Wildlife management was under state control and operated through conventional regulatory and protectionist measures. Legislative changes eventually made it possible to gradually transfer responsibility for wildlife to landowners, who were encouraged to utilize these resources profitably, without the state relinquishing its overall responsibility.

One of the initial steps in this process was the launch of Zimbabwe´s „Wildlife Industries New Development for All“ (WINDFALL) project in 1978. Its goal was to mitigate human-wildlife conflicts and increase acceptance of conservation and species protection by directing revenue from wildlife utilization directly to local district councils (see, e.g., Murphree 1990).

However, the WINDFALL project faced several issues. Communities were often excluded from decision-making processes, only limited amounts of meat reached local communities as food, and only a small portion of the generated revenue was returned to the district councils. Furthermore, these councils did not always distribute the funds to the communities where the wildlife lived. Since community lands were not directly involved, the project failed to promote local participation in decision-making processes or foster a sense of responsibility at the local level.

Thus, WINDFALL was not sufficiently successful in establishing a direct connection between natural wildlife resources and their sustainable economic utilization, which was essential for the long-term economic development of communities based on wildlife management (see Murindagomo 1990).

The Communal Areas Management Programme for Indigenous Resources (CAMPFIRE), launched in 1989, was developed in response to these specific challenges of community-managed wildlife resources. The project's goal was to alleviate poverty in Zimbabwe's rural but wildlife-rich regions by granting rural communities the right to utilize wildlife in a sustainable way. This approach was tied to the expectation that the local population would ensure the sustainable management of wildlife resources they relied on, thereby preserving a large and diverse wildlife population over the long term.

CAMPFIRE enabled local communities to participate in the management and valuation of their wildlife resources, allowing them to profit particularly through hunting and photographic tourism. This created incentives for communities to protect and conserve wildlife on their communal lands (see, e.g., Murindagomo 1990; Child 1996a,b; Vorlaufer 2002).

The program was successful, although some authors argue that the project's social and economic goals were only partially achieved, while its contribution to species conservation is considered remarkably high despite occasional increases in human-wildlife conflicts (see, e.g., Murombedzi 1999, Vorlaufer 2002). Other authors, such as Frost and Bond (2008), emphasize that despite cases of insufficient payments and frequent delays, over 20 million US$ was distributed to participating communities between 1989 and 2001, 89% of which originated from international hunting activities.

A survey (albeit with only 76 respondents from five villages) conducted in the project area (Mutandwa & Gadzirayi 2007) revealed that the project contributed to job creation and infrastructure development. However, it also highlighted a potential for improvement in terms of community participation.

Child et al. (2012), through a transdisciplinary retrospective long-term analysis spanning 50 years, demonstrated that policy approaches emphasizing the valuation of wildlife and the

Photo: Dr. Ludwig Siege

Community-based management: A village hunt in a buffer zone at the Selous Game Reserve. The meat is transported to the village by tractor.

transfer of responsibility to landowners and local communities led to significant economic benefits and promoted conservation activities. Today, local wildlife and its utilization—both through wildlife photography and hunting tourism—are recognized as important and economically viable land-use options. These options are capable of generating significantly more jobs and economic growth compared to conventional land use.

The authors identify the main future challenge as scaling up this model. This includes ensuring genuine transfer of ownership from the government to local communities as well as fostering democratic and effective organizational participation within those communities.

However, the further political development of Zimbabwe, marked by political instability and land expropriations during the so-called „land reforms," ultimately led to increasing problems. These issues were not inherent to the project concept itself. Even amid this economic decline, international hunting was significantly less affected than photography tourism (Cooney et al. 2017).

Despite the challenges, the program has had a significant role model effect across southern and eastern Africa. Similar approaches have been implemented and continue to be applied in countries such as Zambia (Lubilo & Child 2010), Tanzania (Baldus et al. 2003), Botswana, Mozambique, and Namibia (see also Baldus 2009; Roe et al. 2009).

The approach of community-based management has also proven to be one of the most important tools for the economic development of rural areas in many regions of the world. However, communities must work in the long term to maximize employment opportunities and thereby increase household incomes, as well as strengthen the often-overlooked socio-cultural ties to wildlife and other natural resources. For the sustainable success of natural resource conservation at the local community level, a complete decentralization of land and natural resource ownership is essential (see, e.g., De-Georges & Reilly 2009).

An analysis of financial and payment-in-kind flows from tourism and hunting in 77 community conservancies in Namibia between 1998 and 2013 showed that the main advantages of hunting are, on the one hand, financing protected area management and, on the other hand, providing affordable food for the entire community (Naidoo et al. 2016). In contrast, the benefits of non-hunting tourism lie primarily in job creation.

The study also modeled a scenario simulating a ban on trophy hunting. Such a ban would significantly reduce the number of conservancies able to operate sustainably. The loss of income from non-hunting tourism would have less severe consequences. A combination of hunting and non-hunting tourism provides the greatest incentives for conservation on community land in Namibia. Focusing solely on hunting tourism or other forms of tourism would diminish the value of wildlife as a land-use option and have serious consequences for community-based conservation.

Finally, it is worth referring to recommendations such as those found in a study by Lindsey et al. (2016). The authors propose that, in the light of various concerns regarding community-based conservation, the international community should take greater responsibility for large-scale funding programs for conservation in Africa. While increased international support may be desirable, it must not undermine the (admittedly still improvable) approaches of community-based natural resources management (CBNRM) or reduce the responsibility placed on local communities. Self-reliance of local communities is a critical key to poverty alleviation and conservation and should not be relinquished without necessity.

PHoto: Dr. Ludwig Siege

Drying over fire and smoke makes wild meat durable.

Photo: Dr. Ludwig Siege

International agreements have contributed to making international hunting sustainable for decades: CITES COP 15 in Doha, 2010.

6.3 Economic Consequences of Hunting Bans and Import Restrictions on Trophies

6.3.1 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) focuses on the international trade of endangered wild animal and plant species since 1975. Such trade is permitted only if it does not adversely affect the conservation of the species.

The central element of the convention is the requirement for permits for the import and export of species, depending on their level of endangerment. Appendix I lists species that are in danger of extinction. Appendix II includes species that are potentially threatened by international trade, whereas the regulation of species covered by Appendix III is requested by a state where these species occur. The classification within the appendices is reviewed and updated every three years at the CITES Conferences of the Parties. Additionally, both the EU and the USA have implemented supplementary systems of trade regulation and control that go beyond the requirements of CITES.

6.3.2 National Hunting Bans and Import Restrictions

Regularly, often under the influence of powerful NGOs, local hunting bans are implemented. However, these are often only of temporary character. For example, Botswana imposed an international hunting ban in 2014. As a consequence of the negative impacts on livelihoods of rural communities (Blackie 2019), the government of Botswana conducted nationwide consultations with the affected rural communities, and the ban was unanimously rejected (LaRocco 2020). Thus, the hunting ban was subsequently annulled.

Import bans or restrictions on hunting trophies by various Northern countries have, according to preliminary research, significantly impaired local investments in wildlife conservation measures or rural development overall, as a study by Nyamayedenga et al. (2021) shows. The authors examined the effects of the import ban on trophies from African elephants to the U.S. in 2014 by analyzing the period immediately before (2008 to 2013) and after (2014 to 2017) the import ban: After the import ban, there was a significant decline of hunting licenses as well as a significant decline in the number of American hunting tourists.

Clark et al. (2023) studied the social, ecological, and political impacts of previous trophy import bans. The authors note that such bans lead to substantial cost burdens, and fail to address or even make exacerbate the actual threats to the species in question (e.g., poaching), and simultaneously delegitimize the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Trophy import bans are described as crude political instruments that can cause more problems than they solve.

Photo: Dr. Ludwig Siege

A constant threat: Hundreds of people in Africa fall victim to elephants each year.

7. SOCIO-CULTURAL ASPECTS OF HUNTING TOURISM

The socio-cultural impacts and implications of international hunting are extremely diverse. Among many other aspects, they also concern two areas that will be briefly discussed here. These are, on the one hand, the attitudes of hunters towards their own activities or the general attitudes of people towards hunting tourism, which will each be examined based on a study.

Based on a survey of hunting tourists (n=150) and African hunting operators (n=127) at two U.S. hunting fairs, Lindsey et al. (2006) show that hunters are willing to hunt in areas where no attractive landscapes or high wildlife densities exist. The presence of agriculture and livestock in a region is also not necessarily deterrent to hunting tourism. This demonstrates that hunting tourism is capable of generating income in areas where other forms of ecotourism may not be profitable. According to this survey, hunters value the fact that the conditions of their hunting activities do not lead to a restriction of conservation goals. However, hunting operators do not always recognize this. Moreover, there are also hunters who are not willing to voluntarily adhere to such standards. Therefore, the authors argue that regulatory measures for hunting remain necessary.

The question as to whether people's attitudes towards international hunting depend on their living environment is explored by van Houdt et al. (2021). Through surveys, they find that the rejection of hunting tourism mainly depends on the geographical origin of the respondents, as well as on factors such as age, gender, ethnicity, and engagement in conservation. However, these latter factors are themselves influenced by geographical origin. People from Africa largely support international hunting, and age or gender has less impact on their attitude than in Europe. Regarding the issue of import bans on trophies from Africa, the responses from Africa also significantly differed from those of the rest of the world. It is noteworthy that the study was based on an online survey, which may have led to the underrepresentation of rural African areas.

The second major socio-cultural theme is the ethical implications. Most scientific studies focus on the ethical implications of (recreational) hunting as such (e.g., Gunn 2001; Lovelock 2015; Batavia et al. 2020; Darimont et al. 2021; Ghasemi et al. 2023) or the psychology of hunters (Darimont et al. 2017; Beattie 2020). The term „trophy hunting" has rarely been analysed scientifically from an environmental ethics perspective. Certain exceptions are the works of Macdonald et al. (2016), Nelson et al. (2016), and Batavia et al. (2019, 2020).

Macdonald et al. (2016) and Nelson et al. (2016) primarily argue from the perspective of responsibility ethics, similar to most authors who deal with hunting ethics. At the same time, many (fundamental) animal and nature conservation organisations exclusively accept a virtue ethics approach. Responsibility ethics mean that an action is justified if it aims to achieve a moral "good" or avoid a moral "evil". Attitude ethics is a theoretical approach where actions are assessed based on intrinsic values and principles, regardless of their consequences (Weber 1926).

Macdonald et al. (2016) wrote concerning this conflict in the context of international hunting in Africa: „Some opponents of trophy hunting maintain that it is unjustifiable regardless of any positive outcomes, in doing so identifying a moral imperative, a concept traceable to the philosophy of Immanuel Kant. […] Trophy hunting of big cats may eventually be judged unacceptable by Western policymakers, but we fear that precipitate legislation in reaction to western-orientated values could have far-reaching negative impacts on biodiversity without development of alternative, economically viable policies. Those in the Kantian camp on trophy hunting might reassure themselves with the knowledge that they occupy the moral high ground, but if they hold sway, there may be rather less African wildlife for them to see from that lofty position."

Thus, we can state that this topic can be deepened further and we, as in other societies, also have a conflict between virtue ethics and responsibility ethics in hunting. Most scientific publications take the responsibility ethics approach.

In Malawi, women protect themselves from crocodiles while fetching water.

Photo: Hannes Siege

8. CONCLUSION

8.1 People Protect What They Value

It has been shown that people who live in simple, often poverty-stricken environments alongside wildlife either tolerate or actively protect these animals if they value them. Such value arises primarily from incentives, typically through the direct economic benefits to communities and households from the use of these wild animals. The utilisation of free-ranging wildlife (whether through hunting or photo tourism) is in direct competition with other, ecologically problematic land uses like agriculture and grazing.

The wise use of the potential that wildlife offers provides the basis for sustainable, economic regional development that maximises the protection of natural resources, in this case, the local wildlife populations and their natural habitats.

Photo: Hannes Siege

Lucky wildebeest, the snare did not tighten around its neck. Poaching decreases when wildlife gains value, for example, through regulated hunting.

8.2 Ecological Effects

The vast majority of scientific studies available to date show that international hunting, over the long term and broadly speaking over recent decades, has predominantly had positive ecological effects over the past decades. These benefits primarily arise from intensified protection and sustainable management of the hunted species, their prey, and their habitats.
This occurs mainly through direct and indirect economic incentives.
The value creation potential of hunting tourism contributes to reducing competing land-use practices, such as intensive -and often illegal- grazing, which increasingly represent a cause of ecological problems in the Global South as population pressure grows.

Compared to photo tourism, hunting tourism has a significantly lower „ecological footprint." This is due to the much higher economic value generated by a hunting tourist compared to a photo tourist on one hand, while on the other hand, hunting tourism has much lower infrastructure requirements (such as transportation networks, energy and water supply, supply chains for consumer goods, waste disposal, hotel construction, etc.).
Thus, the benefits of value creation from international hunting are not limited solely to the CO_2 footprint; they extend far beyond that, also impacting parameters such as land use or landscape fragmentation. After all, hunting tourism is possible not only in regions that are too remote for other forms of tourism but also in areas with agricultural use.

Furthermore, the presence of legal hunting in an area significantly prevents poaching and illegal killing of wildlife, as locals, due to the conflict between humans and wildlife, are generally deterred from engaging in such activities by the presence of hunting personnel or the promise of financial gains.
However, it is likely that the provision of sufficient financial resources is crucial, as these funds are also used to train and employ personnel for protection against commercial poaching.
Finally, the analysis presented here shows that the negative ecological impacts of hunting tourism, particularly influences on genetic or social structures, or overexploitation due to „pull effects" around protected areas, are not inherent to the system but can be avoided through the establishment and enforcement of specific sustainability criteria (quotas, age limits, etc.).

Photo: Dr. Ludwig Siege

Lion in traffic: the ecological footprint of photo tourism is higher than that of international hunting.

TENDER ADVERTISEMENT
Date: 15 January 2019

Advertising Conservation Hunting in Salambala and Bamunu Conservancies

The above-mentioned conservancies are located in Zambezi Region. The Ministry of Environment and Tourism has granted a conservation hunting quota to these conservancies for the 2019 hunting season. The quota includes the following:

Salambala: Buffalo x 3; Burchell Zebra x 10; Elephant x 6; Kudu x 2; Warthog x 3; Wildebeest x 3; Crocodile x 1; Hippo x 2; Impala x 10; Waterbuck x 2; Baboon x 2.

Bamunu: Buffalo x 12; Burchell Zebra x 10; Kudu x 2; Elephant x 3; Warthog x 4; Crocodile x 1; Duiker x 2; Hippo x 3; Reedbuck x 3; Waterbuck x 2.

Interested Hunting Operators must obtain tender documents from NACSO's Natural Resource Working Group, Ausspanplatz, 19 Lossen Street, 2nd floor, Windhoek on behalf of Salambala conservancy. Please contact Ms Rosalia Iileka at 0813581174 or email: Rosalia@nnf.org.na.

The deadline for final submission of proposals is 29 January 2019. All documents must be delivered or couriered to:

NACSO's Natural Resource Working Group, 2nd floor,
Ausspannplatz, 19 Lossen Street, Windhoek

Tendering of hunting quotas for conservancies in Namibia by NASCO (Namibian Association of Community-Based Natural Resource Management (CBNRM) Support Organisations).

8.3 Economic Effects through „Community-based Management" of Natural Resources

Hunting tourism takes place in 23 countries in Africa, with the industry being most prominent in southern Africa and Tanzania, and it continues to grow. In central and western Africa, hunting tourism is either stable or declining. Its primary importance lies in creating economic incentives for protecting large areas.
Alternative land uses (such as agriculture or photo tourism) on these lands are often not feasible or only possible with significant interventions in the ecosystem or associated with significantly larger ecological footprints. Although the initial investments and capital costs for market-based forms are higher, hunting tourism projects and businesses also create significant economic benefits for local communities and provide economic incentives for natural resource conservation.

„Community-based management" or „community-based natural resource management" is characterised by decentralised administration and the transfer of extensive land use rights to local communities that manage forests or utilise wildlife (including hunting). This approach aims to protect natural resources and combat poaching.
Such „community-based management" has now become a key concept for the utilisation of natural resources. The major strengths of this approach lie in the direct involvement of local people in the management and value creation of wildlife and in protecting wildlife from poaching. By providing sustainable economic benefits, hunting tourism helps to mitigate poaching and provides tangible benefits for conservation.

8.4 Import Bans or Restrictions on Trophies Endanger Conservation Efforts

Import bans or restrictions on hunting trophies in various northern countries have significant implications for conservation activities and rural development. They often lead to decreased investment in conservation measures or rural development, as a study by Nyamayedenga et al. (2021) shows.
The authors analysed the impact of an import ban on African elephant trophies in the USA between 2014 and 2017 and found a significant reduction in hunting activities and a similar reduction in economic benefits for local communities.
Clark et al. (2023) investigated the documented social, ecological, and political impacts of past trophy import bans and found that extensive bans lead to cost increases and exacerbated threats to the species concerned. Such bans are described as grossly ineffective conservation tools that may cause more problems than they solve.

8.5 Hunting Tourism and Photo Tourism: Two Sides of the Ecotourism Coin

Hunting tourism is able to create incentives for conservation activities in regions, where other forms of ecotourism cannot. Guests are often willing to pay significant sums to hunt in areas where there are no alternative land uses or high wildlife abundances. Even the presence of livestock and agriculture in a region is not a disqualifying factor for hunting tourism.
The major benefits of hunting lie, on one hand, in the financing of protected area management and anti-poaching efforts, and on the other hand, in providing affordable food for the entire community.
In contrast, the benefits of non-hunting tourism mainly lie in the creation of jobs. Hunting bans could significantly reduce the number of protected areas that operate at a cost-covering level.

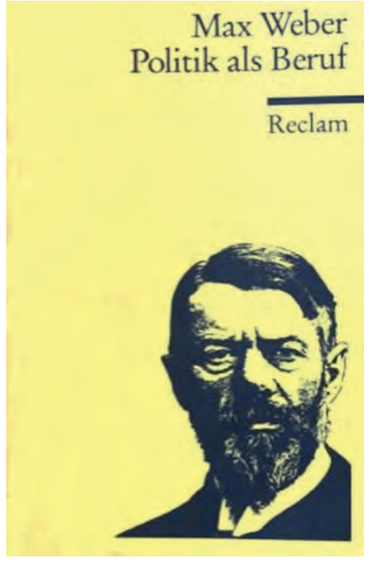
Thus, the question should not be „hunting tourism or photo tourism," but the goal should be a „both-and" approach.

Photo tourism is not always sustainable. A zebra flees from a lioness through a corridor of photo tourists.

Foto: Dr. Ludwig Siege

8.6 Responsibility Ethics vs. Ethics of Attitude

It has been shown that international hunting in almost all relevant contexts contributes positively. This particularly applies to the conservation of natural resources and biodiversity. At the same time, hunting tourism has numerous positive economic impacts, creating jobs and income, alleviating poverty, transferring responsibility to local communities, protecting biodiversity, and preventing crime.
The ethical justification of international hunting is thus derived from the results of the actions taken. These results concern values that are widely recognized as positive in almost all social systems (such as the creation and stabilization of local jobs and income, poverty prevention, the transfer of responsibility to local communities, biodiversity preservation, prevention of crime etc.). All of this occurs independently of the motives of the actors, particularly the motivations of the hunters themselves.



The „originator" of the concept: responsibility and attitude ethics.

A societal consideration of the question of which universal rules and restrictions should be imposed on people primarily requires an examination of the substantive aspects. The evaluation is made in terms of an ethics of responsibility.

At a time when the global threat to biodiversity and climate change are among the greatest challenges humanity faces, this approach seems to be without alternative.

An individual, attitude-based approach is by no means excluded: Every person is free to hunt, to hunt abroad, or to choose not to hunt. Every person is also free to express their opinion on the matter in the public.
However, business models, particularly those of various NGOs that aim to persuade others to adopt a particular stance or to proselytize, are acceptable as long as they allow individuals and societies the freedom to decide for or against a particular view or course of action. They become unethical when they attempt to force individuals or entire societies to adopt certain beliefs through neocolonial influence, disregarding local consequences.

An ethics of responsibility also includes the continuous improvement of existing tools, the correction of mistakes, and the resolution of problems. If, as the vast majority of scientific studies show, international hunting is a powerful tool for combating poverty and conserving species, it would not be senseful to relinquish this tool as soon as problems arise in individual cases.
However, the problems must not be ignored. Instead, it is important to develop and refine sustainability criteria for international hunting through a continuous process of improvement, enabling people to shape their lives and living conditions appropriately and responsibly. This includes the responsibility for the protection and preservation of ecosystems, including their biodiversity.

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