International Council for Game and Wildlife Conservation

CIC – Conservation through the sustainable use of wildlife

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CONSERVATION THROUGH THE SUSTAINABLE USE OF WILDLIFE

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Conservation through the sustainable use of wildlife

What is the conservation of wildlife?

Wildlife species are being threatened mainly because of habitat destruction due to human population growth and the increasing demand for arable land. In some countries, population growth coupled with limited livelihood options, poverty and unemployment leads to food insecurity and can drive people to illegally harvest wildlife for subsistence, resulting in unsustainable consumption patterns and interests.[1] Limited livelihood options drives people to poach wildlife species that have an economic value in trade or local markets as a result of high buying demand.

Together with growing social expectations, a vision of sustainability surrounding the treatment and use of these natural resources has been publicly embraced. Such objectives of conservation as maintaining healthy, productive wildlife populations, preserving natural habitats, and reducing interference with the natural course of life closely align with the goal of sustainable wildlife management.

What is sustainable wildlife management?

Sustainable Wildlife Management (SWM) is the responsible management of socially, ecologically, and/or economically important wildlife species, while sustaining their populations and habitats over time. This requires that all land-users within a given wildlife habitat are aware of and consider the effects of their activities on wildlife and on other concerned stakeholders.

Wildlife is an important renewable natural resource. If sustainably managed, wildlife can provide continuous nutrition and economic income. This contributes to food security and thus to the alleviation of poverty and livelihoods, particularly in rural areas of both the developed and developing world. An unregulated wildlife population in a human-influenced environment, on the other hand, can create considerable human-wildlife conflict and could potentially lead to the complete loss of wildlife populations.

SWM and Hunting

Hunting has influenced human development, culture, religion, and social interactions from times lost in history. There are few, if any, activities, which provide a more sustained link than hunting across all human civilizations from the Stone Age to the Internet Age.

Hunters are an essential part of sustainable wildlife management as they share the same objectives as conservationists. Although sustainable hunting has been described scientifically[2], it lacks public understanding. Hunting, trophy hunting in particular, is heavily criticized despite its ability to support species and habitat conservation efforts (see the IUCN SSC

Guiding Principles on Trophy Hunting as a Tool for Creating Conservation Incentives[3]).

Modern hunting, as one important method of incentive-driven conservation, harnesses economic and societal forces thus benefitting people, ecosystems, and wildlife. When practiced responsibly and prudently, it does not measurably reduce the population size or the genetic quality of the target species or of ecologically related species, such as predators.

The ecological, economical and human dimensions of hunting

Sustainable hunting provides incentives to restore or maintain habitats. Pro bono services which otherwise would have to be financed through public funds can be harnessed from hunters. This voluntary public service positively affects landscapes and livelihoods, as well as individual game and non-game species. Pragmatic solutions that work (i) are market-based, because the market driven private sector is the strongest force in the world; (ii) involve hunting ethics and promote animal welfare because hunting practices must be socially acceptable; and (iii) include rural communities whose livelihoods depend on the wise use of their wildlife, because if the people are an integral part of the process, effective conservation is achievable.

*Public opposition to the principle of sustainable use. The public often steps in the way of sustainable use of wildlife citing public morality as the main reason against hunting, despite any and all evidence of its ample benefits. The media plays an important role in this opposition, drawing on inaccurate information given by the anti-hunting lobby.[4]

The other side of the coin: poaching and human-wildlife conflict

The pressure of limited livelihood options, the lack of ownership of land and wildlife resources, human-wildlife conflict (HWC), and the greed for financial gains are the most frequent triggers of poaching. Poaching disrupts proper wildlife management, can lead to population collapse, and endangers livelihoods. Poaching needs to be classified as crime in order to prosecute offenders. Poaching operations changed over time and many show evidence of the involvement of transnational organized criminal networks.

Human-wildlife conflict is a major driver of poaching. Sustainable hunting can be useful in abating these conflicts, bringing benefits to the communities experiencing HWC. Hunting bans, on the other hand, may exacerbate the issue by removing the livelihood or economic benefits that people derive from the problem animals that encourage tolerance of their presence.

Benefits from sustainable hunting

One of the most significant contributions of hunting to conservation is that it provides incentives to communities and other landowners for habitat protection and the sustainable use of wildlife [5]. These incentives come from the actual and potential economic gains from hunting and the devolution of ownership rights, which gives landowners the responsibility to be stewards of their wildlife [6].

A prime example of this is the CAMPFIRE program in Zimbabwe [7,8], where rural district councils market the wildlife on their land. Between 1989 and 2001 CAMPFIRE

generated 20 million USD for communities, 89% of which came from hunting tourism[7]. Many species' populations, like elephants, have increased in CAMPFIRE areas [8]. The Namibian community conservancy model is another excellent example of this. Here, not only does the land-owning community receive the full amount of the hunting revenue, it also receives the game meat. High-value and endangered species like the black rhinoceros also strongly benefit from Namibia's community-based hunting scheme.

These successful schemes are also functioning in Europe. Hunting creates jobs, predominantly in rural areas, where employment opportunities are rare and the unemployment rate is high[9].

Hunting tourism is the most profitable form of hunting[3]. Furthermore, hunting tourists pay significantly more per person than conventional tourists and have a much smaller ecological footprint because of their low numbers. In South Africa, for example, hunting tourism generates between 65.6 – 137 million USD per year, and in Tanzania between 27.6 and 36.1 million USD per year is raised [10]. In the US, hunters spent 38.3 billion USD, with 11.8 billion USD of that being in taxes, in 2011. From that nearly 38 million USD per day is used to support wildlife agencies and conservation. Often, hunting tourism and photo tourism are viewed as competing businesses, however, they can be simultaneously practiced by separating them in time and/or space.

The revenue generated from hunting can provide a stable financial basis for habitat conservation, even over large areas of land. As an example, revenue from hunting

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tourism contributes to the protection of over 250,000 km^2 in Tanzania, 80,000 km^2 in Mozambique [10] 2,824,000 km^2 in the United States [11]. The area of land protected for hunting in Sub-Saharan Africa exceeds that of protected areas by 22% [12]. These areas are often remote, have little infrastructure, and have low densities of "flagship" species, making them unsuitable for mass tourism. Hunting provides the revenue and incentive for their ongoing protection. A ban on hunting, on the other hand, encourages the conversion of land to alternative intensive land-uses, associated with the loss of habitats and wildlife.

Community-wildlife coexistence: Public participation in every step of the decision-making process is essential to shift the perception of wildlife as pests or threats to human well-being to them being of value socially, economically, and environmentally. This could also lead to the development of land ownership laws whereby communities could be given back rights to access and use the land. Community empowerment is a common theme among the strongest conservation programs which have won the CIC's Markhor Award since it was first established.[13]

Hunters as abundant in-field wildlife monitors: There is an invaluable potential for hunters to become involved as conservationists by monitoring the situation they observe during their hunt, a job that could never be fulfilled by paid employees. This potential could be tapped through the development of reporting systems to support and care for the long-term protection of wildlife species. Such systems run mainly by the hunters are in place in many countries already.

Best practices

Regulated hunting is the only example in an ecological and social context where a relatively large number of people engage with a natural resource sustainably and demonstrate that an ethical engagement with wildlife can be good for people and wildlife[14].

Europe: Spanish ibex (*Capra pyrenaica*) populations thrive again through the combined efforts of hunters, management authorities and land owners. Hunters started the re-introduction of Alpine ibex (*Capra ibex*) and the species has now colonized most of the former ranges. The conservation management of the Chartreuse chamois (*Rupicapra r. cartusiana*) with strong hunter participation saved this rare and isolated chamois phenotype from disappearing, and today a limited annual harvest is again possible. Strict protection of other chamois phenotypes, i.e. Apennine chamois (*R. p. ornata*), Tatra chamois (*R. r. tatrica*) led to steady increases in population numbers and may warrant down-listing and limited harvests in future[5].

Namibia: A policy change in the mid-1990s, which let local people use and benefit from wildlife on their land, transformed attitudes to conservation. The country's communal conservancy programme, which includes an area of ca. 160,000 km^2, is a conservation and rural development success story, with tourism and trophy hunting playing central roles[15]. Namibia also implemented a science-based management strategy for black rhinos with an annual harvest of up to five male black rhinos (*Diceros bicornis*) authorized with CITES approval and supported by the World Wildlife Fund (WWF). Convinced of the successful Namibian black rhino conservation programme, the U. S. Fish & Wildlife Service authorised the import of two black rhino trophies into the United States in 2015 [16].

North America: In North America mountain sheep (*Ovis dalli and O. canadensis*) and mountain goats (*Oreamnos americanus*) are again a common sight, just as pronghorn antelope (*Antilocapra americana*), white-tailed deer (*Odocoileus virginianus*), elk (*Cervus canadensis*) moose (*Alces ssp*) and others. The annual sustainable trophy hunting quotas are on the increase. Musk oxen (*Ovibos moschatus*) are thriving in the Canadian Arctic and provide food, clothing and tools and income for the Inuit from trophy hunting. Regulated waterfowl and upland game bird hunting have helped preserve millions of acres of habitat that benefits not only the game species, but a host of native wildlife, including threatened and endangered species. Regulated hunting has led to the habitat and wildlife restoration and trophy hunting played an important role in these success stories directly (through the manipulation of populations); and indirectly (through the provision of funding for wildlife conservation)[17].

Pakistan: The self-supporting Torghar Conservation Programme (TCP), later the Society for Torghar Environmental Protection (STEP) was based on the principles of sustainable use of wildlife, local tribe involvement, and conservation biology[18]. Today the numbers of Sulaiman Markhor (*Capra falconeri jerdoni*) and Afghan Urial (*Ovis vignei cycloceros*) have increased significantly[6, 19]. The U.S. Fish & Wildlife Service subsequently reclassified the straight-horned markhor (*C. f. megaceros, aka C. f. jerdoni*) from endangered to threatened under the Endangered Species Act (ESA) in 2014 and published a rule that allows the import of sport-hunted straight-horned markhor trophies under certain conditions[20].

Tajikistan: Population estimates for Pamir argali (*Ovis ammon polii*)[19, 21] and Bokhara markhor (*Capra falconeri heptneri*) are encouraging and justify the continuation respectively introduction of carefully designed trophy hunting programs with the ultimate objective of a symbiotic benefit sharing for wildlife species and rural communities.

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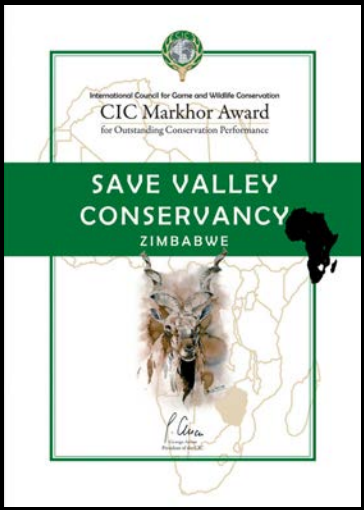

The CIC Markhor Award honors a conservation project of multinational relevance that links the conservation of biodiversity and human livelihoods through application of sustainable use principles. The Markhor Award is granted every two years at the occasion of the Conference of Parties to the Convention on Biological Diversity (CBD).

Past winners have been:

2008 – Niassa Reserve together with the communities of the Selous-Niassa Wildlife Corridor in Tanzania

2010 – Torghar Conservation Program (TCP) in Pakistan

2012 – Namibia's Communal Conservancies

2014 – Tajikistan Mountain Ungulate Project

2016 – Savé Valley Conservancy, Zimbabwe

As Dr. Braulio Dias, Executive Secretary of the Convention of Biological Diversity highlighted at the occasion of the last award ceremony in Cancún, Mexico:

"by giving the Markhor Award to projects that have implemented sustainable use through hunting to further the goal of conservation of biodiversity, it encourages others to follow in their noble footsteps on the path to achieving Aichi targets by 2020."

Key Messages

- Hunting as a method of SWM can protect and contribute to numerous social, cultural, ecological, and economic benefits for all stakeholders directly and indirectly involved in the wildlife sector.
- Establishing transparent, understandable, and realistic legislation through public participation improves the success of a community-based sustainable hunting program.
- Sutainable hunting can play an imminent role in decreasing human-wildlife conflict, thus conserving wildlife resources and benefiting local people.
- Profits associated with hunting tourism (recreational and trophy) can be used to develop the participating community and establish further wildlife conservation measures.
- SWM and hunting plays an important role in combating wildlife crime through networks of reliable officials, committed to abolishing illegal activities.
- Hunters must be fully integrated as field experts into monitoring and conservation programs and recognized as allies in the battle against wildlife crime.
- The contributions of hunting to conservation and society need to be better communicated to increase public acceptance.

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