



ITEM 9B. MONITORING FRAMEWORK - HUMAN-WILDLIFE CONFLICT

Key Recommendations and Messages

- Addressing human-wildlife conflict (HWC) within the Targets of the Global Biodiversity Framework (GBF) is essential if the Goals of the GBF are to be achieved. HWC has enormous impacts on both people and biodiversity, and is a serious global threat to sustainable development, food security and wildlife conservation.
- To avoid unintended consequences we propose this formulation of text, which should go in Target 4: *“Effectively manage human-wildlife interactions to minimize human-wildlife conflict for the benefit of both humans and wildlife”*
- Human wildlife conflict is a completely new topic for the CBD. Inclusion of this target text is crucial, however is unlikely to have its intended impact if there is no headline indicator which can be used to track and incentivise progress. Therefore we strongly encourage the current indicator on human wildlife conflict *“trends in effective and sustainable management of human-wildlife conflict and coexistence”* to be moved from a ‘component indicator’ to a ‘headline indicator’.

What is human-wildlife conflict?

Human-wildlife conflict (HWC) refers to struggles that arise when wildlife poses actual or perceived direct, recurring threats to human interests or needs, often leading to disagreements between groups of people and negative impacts on people and/or wildlife.¹ HWC includes consumption of crops by wild herbivores, killing of livestock by wild predators, damage to infrastructure and equipment (houses, water storage facilities) and can involve human injury and death. Wildlife is often killed in retaliation, in defense, or to prevent future losses, with body parts often entering illegal wildlife trade chains. It is a global issue of concern, but people in some parts of the world are more significantly affected than others, with some experiencing negative impacts on production and livelihoods, and a decreased quality of life. At the same time, as history has shown us, HWC can lead to the local or complete extinction of species, such as wolves in Europe, Balinese and Java tigers in Indonesia, and thylacine in Tasmania, Australia.

HWC is an ancient problem – the scarecrow has been used for over 2,500 years – but in an ever-more crowded world, as wildlife habitats are increasingly converted to human uses, and wildlife movement corridors narrowed or severed by infrastructure and other developments, wildlife are forced to retreat into shrinking and fragmented habitats, it is increasingly imperative to employ holistic and integrated approaches to effectively manage the human wildlife interface. Without such solutions, the

¹ IUCN HWC Task Force 2020

expected trajectory most often seen is for HWC to increase to a peak, then plummet to zero as the wildlife are removed.

Human-wildlife coexistence describes a dynamic state in which the interests of both humans and wildlife are generally satisfied. Coexistence may still contain some level of impact to both and is characterised by a level of tolerance on the human side. It is possible to achieve coexistence even with large, physically or mentally intimidating species, for example in Pobitora Assam where 100 rhinos live within an area of 15 km², regularly moving into human occupied areas but with tolerance exhibited on both sides, resulting in very few conflict incidents.

As we enter ever further into the Anthropocene, where human activities dominate Earth's ecosystems, the challenge of our time will be moving from a global system that exacerbates HWC to one that fosters and supports human-wildlife coexistence.

Scale of the problem

Available statistics demonstrate the significant multi-dimensional impacts of HWC, even though global data are as of yet fragmented and incomplete.

Impacts on biodiversity:

- Conflict-related killing affects more than 75% of the world's felid species for example,
 - Although cheetahs seldom prey on livestock, 48% of cheetah mortality in Namibia has been attributed to retaliatory killing
 - Retaliatory killing by people makes up 50% of tiger mortality
 - Snow leopards increasingly come into conflict with herders due to livestock predation. Of all snow leopards killed worldwide, 55% resulted from HWC
- In several European countries, the wolf had been eradicated due to HWC. Wolf populations are now making a comeback, but because of deep-rooted intolerance, they are still illegally killed
- The Mediterranean monk seal, the only seal species in the region, is under threat, 20% of the species' mortality is attributed to deliberate killing by fishers who see them as competitors

Impacts on vulnerable and already marginalised communities:

- Farmers can lose up to 100% of their annual harvest of staple crops to elephants, leading to food insecurity.
- In 2019, 121 people and 405 wild elephants were killed in Sri Lanka and in Tanzania on average 60 people and 150 African lions² lose their lives annually in HWC.
- The food security of a wider region can be jeopardised when damage by wildlife adds to other uncontrollable devastation caused by drought, crop failure, or war. This was the case in north-east Nigeria in October 2020, when a herd of 250 elephants damaged the crops of 8,000 internally displaced people just before the harvest.

Impacts on economies:

- In Sabah, Malaysia, Bornean elephants cause large-scale damage to oil palm plantations, reducing productivity and risking worker safety. The company Sabah Softwoods Berhad reported annual losses of US\$145,000 (US\$426/km²) due to elephant damage.

² Includes ritual and retaliatory killing

- Aquaculture producers of shellfish and finfish estimate losses of up to 10% caused by marine mammals. Artisanal fishers suffer significant losses to marine predators, for example, in Peru and Uruguay, where southern sea lions forage in the shallow waters of coastal fishery grounds, in more than half of all coastal fishing activities, researchers observed predation of catches by sea lions that resulted in losses of up to 46% and made artisanal fishing unprofitable
- In Europe, the average annual compensation for all livestock damage by carnivores between 2005 and 2012 was estimated at US\$41.38 million

These impacts of HWC on wildlife, people and economies greatly impact the acceptance and thus success of biodiversity conservation programmes. In some geographies conflicts are highly politicised with even very limited conflict events leading to major retaliation, and in some cases near eradication of conflict causing wildlife.

Climate change is expected to further exacerbate HWC in many regions, creating greater competition between humans and wildlife for ever scarcer resources, including water.

Last but not least, as natural habitats continue to be lost and further fragmented, the human–wildlife interface is continually expanding, and this interface represents the front line of potential for the spillover of zoonotic diseases from wildlife to humans and vice versa. Ensuring effective coexistence within these human-wildlife interface areas will be crucial to limit risks of the next epidemic or pandemic, with potentially catastrophic impacts on people, economies and biodiversity, as so vividly demonstrated by COVID-19.

What is needed?

HWC must be recognized as a global threat to sustainable development, food security and biodiversity conservation, and holistic and integrated responses should be developed at scale to minimize and manage HWC and enable coexistence between people and wildlife. Achieving this will require collective and collaborative action across communities, governments, civil society organizations, donor agencies and the corporate world to co-create and implement solutions supported by systematically collected and credible evidence.

Why is this relevant to the GBF?

The inclusion of an appropriately phrased target on HWC in the CBD GBF will commit Parties to implement integrated and holistic approaches to manage HWC.

Without such approaches on HWC, it will not be possible to achieve either the Vision of “*living in harmony with nature*,” nor the species conservation aspirations of Goal A, nor the aspirations of Goal B on enhancing “nature’s contributions to people.” In fact, without holistic measures to address HWC, we could see the opposite of Goal B unfolding across the planet.

Thus the inclusion of HWC in the Targets of the GBF is essential to the overall achievement of its Vision and Goals.

Text Proposals

Reflecting on potential unintended consequences of targets on human wildlife conflict, it’s important to recollect that one of the perceived ‘easiest’ ways to reduce HWC is to simply kill or remove wildlife. This is an approach regularly employed today. Therefore we would strongly encourage that this language is strengthened by clarifying that management should “*benefit both people and wildlife*”.

Such language would exclude management measures that would be inappropriate for wildlife (eg excessive culling of conflict causing species) as well as those that may be inappropriate for people (eg excessive restrictions on natural resource use or access.)

Thus our suggested text for HWC language in the GBF, which should remain as a clause in Target 4, would be “*Effectively manage human-wildlife interactions to minimize human-wildlife conflict for the benefit of both humans and wildlife*”

How can HWC be measured?

Whilst there is currently no global database on HWC, there are many national and some regional databases, and HWC monitoring is becoming more sophisticated and automated, for example through the use of tools like SMART, the [Spatial Monitoring and Reporting Tool](#).

Building on this, there is potential for use by Parties of a composite HWC Index which could ultimately be tracked at global level. Initial steps to define such an Index have been taken by WWF experts and refined through testing with both simulated and real landscape examples. The suggested index of HWC could serve as a mechanism to aggregate national HWC accounts and compare across disparate global HWC contexts. The aims of the mechanism are to enable understanding of the state of HWC in different jurisdictions, to be applicable and comparable over different geographic scales, to be easy to communicate, and to retain key detail while simplifying a complex situation.

WWF has been engaging collaboratively with the IUCN Task Force on Human Wildlife Conflict, and with that group suggested an indicator which could be used to measure progress on the HWC elements of the GBF: “*Trends in effective and sustainable management of human-wildlife conflict and coexistence*” (see [this document](#) for more context.) The HWC indicator was originally included as a Headline Indicator’, but has recently been moved to Component Indicator level, and thus ‘optional’ for parties.

Given the importance of human wildlife conflict, and the current absence of a global dataset on HWC, we strongly urge Parties to move the indicator “*Trends in effective and sustainable management of human-wildlife conflict and coexistence*” from a Component Indicator to a Headline Indicator. This will facilitate the building of a global dataset to populate the HWC indicator, and enable us to track progress and hold all actors accountable for delivering the co-existence between humans and wildlife which is central to the successful achievement of the GBF.

For more information

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