



Principles of Human-Bear Conflict Reduction



2019

Human-bear conflict (HBC) is an international problem involving all eight species of bears across much of Europe, Asia, North America, and the South American Andes. Conflicts between people and bears can result in economic losses, human injuries and fatalities, consequent retributions against bears and real conservation consequences. The status of bear populations varies widely from Least Concern to Critically Endangered, and is primarily related to habitat conditions, human density, human attitudes, and human-caused bear mortalities. As habitat conditions for bears deteriorate, largely due to human intrusion, some bears seek habitats and foods closer to people. This often leads to different forms of HBC (economic losses due to bears using human foods, reduced tolerance of bears, increased retaliatory or illegal killing of bears, etc.) which can impact persistence of bear populations. Programs that effectively address HBC can reduce the economic burden of bear conservation efforts on affected people, improve the population status of bears, and create a positive framework for human-bear coexistence.

This document was designed to provide information for governments and specialized environmental non-governmental organizations (ENGO) to improve their understanding and management of HBC. HBC situations are complex and each situation requires careful site-specific analysis and an interdisciplinary, science-based approach that involves affected peoples. The goal of this document is to provide a general outline of fundamental concepts and ideas associated with HBC, which can be investigated more thoroughly according to specific circumstances.

We define HBC is any situation where wild bears undesirably use or damage human property, where wild bears harm people, or where people perceive bears to be a direct threat to their property or safety. HBC can result in negative effects on the economic or cultural life of people leading to negative attitudes toward bears and human retaliation against bears, all of which can hamper conservation efforts. This definition recognizes the following key elements:

- Undesirable use of property with or without damage to that property (e.g., bear rummaging in garbage);
- Damage to property, which is presumed to be undesirable in all cases;
- Actual harm to people;
- Perceived threat to human safety; and,
- Perceived threat to human property.



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This document was prepared by members of the IUCN SSC Bear Specialist Group, Human-Bear Conflicts Expert Team. There is concern that while bear populations are declining in many areas of the world, conflicts between people and bears are increasing. In general the expertise to mitigate these conflicts is available but it requires sharing knowledge, willingness to act, and some sacrifice by governments and affected stakeholders in terms of providing funding for prescribed solutions and/or altering customary behaviors.

Background of HBC

Fundamentally, HBC stems from humans and bears competing for space and/or bears being attracted to food products produced or managed by people. People living in rural communities generally endure the primary economic and social burden of conserving bears. Current strategies to reduce HBC vary greatly and are not always successful, sometimes even leading to increases in the frequency and intensity of conflicts. Socio-economic, biological, cultural and political factors all have important roles in HBC situations. Long-term strategies to reduce HBC must address all of these components in a coordinated and integrated manner with a view toward balancing the needs of both people and bears.

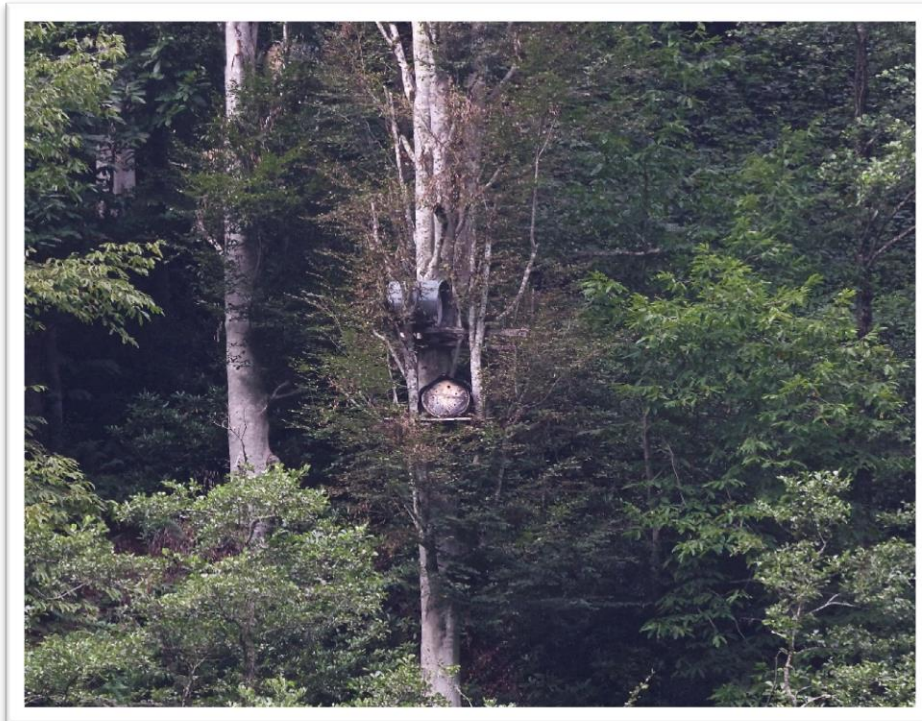
Management of HBC

The status of bear populations varies widely, primarily as a result of local habitat conditions and management practices. The first step toward resolution of HBC is to identify the specific nature, extent and location of the conflict situations. Scientifically informed management actions can reduce the frequency and severity of HBC. However, scientific knowledge of the status and ecology of bears and of the factors prompting increased incidences of HBC is often insufficient to make informed decisions. Understanding human ecology and culture is necessary to fully appreciate community level perceptions of the problem and peoples' attitudes toward bears. This information may be used to develop solutions that will be accepted by local people and the broader society.

Political will and public input are needed to establish policies for addressing HBC and bear management. Government agencies can reduce economic losses of local people and earn their respect and trust by recognizing HBC as a legitimate problem. Denying the risks and losses suffered by local people only generates resentment toward authorities, resistance to conservation efforts, and illicit retaliation against bears. Governments and ENGOs can help in the short-term by responding promptly to complaints of conflicts with bears and listening to the concerns of affected communities. In the longer-term, governments and ENGOs can initiate progressive policies that balance local and national interests with a focus on the conservation of bears by proactively managing anthropogenic attractants, discouraging activities that compromise bear conservation, and implementing landscape level planning for bear habitat.

Affected people are often willing to participate in actions designed to reduce HBC. The differing perceptions, values, and needs of the stakeholders must be identified and understood to create an effective long-term resolution that benefits the relevant stakeholders and does not adversely affect the wild bear population. It is also imperative to take a proactive approach, whenever possible, to prevent or resolve conflicts before human tolerance for bears declines. Local working groups can help build effective plans and implement proactive actions when they have an effective decision-making structure, access to resources, and stakeholder participation.

Programs that are affordable, effective, and accepted by stakeholders are more apt to be successful. Intervention methods that are familiar, inexpensive, and require little new technology are most likely to be adopted by local people. When appropriate, however, new technologies and customized approaches to HBC may offer benefits and increase the success of conservation initiatives. Attempts to alter human behavior and attitudes and apply non-lethal bear management methods should be fully considered before lethal management options are implemented. In some circumstances the implementation of proactive laws or regulations and enforcement to further ensure compliance of people may be necessary.



A traditional method for elevating beehives to prevent brown bear damage in Turkey.

Photo: J. Beecham



A modern adaptation of a traditional method of protecting beehives from brown bears in Turkey that makes it easier to harvest honey in a safe manner.

Photo: E. Ozgun Can



The use of electric fencing to deter grizzly and black bears from damaging a beehive operation in Canada. Electric fences are one of the most effective methods for deterring bears access to attractants.

Photo: M. Proctor



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Monitoring and evaluating the effectiveness of HBC resolution strategies

To assess the efficacy of conflict reduction strategies, the level and extent of HBC must be quantified both before and after implementation through a monitoring program. Monitoring should incorporate five specific measures of performance: (1) Were interventions put in place as planned? (2) Did the level of HBC diminish as a result of the intervention? (3) Was the welfare of humans improved? (4) Was the bear population maintained at a viable level? (5) Were stakeholders satisfied that HBC had declined to an acceptable level?

Concluding Principles

- HBC can compromise the conservation of bears and primarily occurs where people and bears are competing for space and/or bears are attracted to anthropogenic attractants.
- HBC programs should strive to reduce conflicts to socially acceptable levels while ensuring viable bear populations.
- Effective, long-term approaches to HBC require methods and tools that integrate the needs and behaviors of both humans and bears, and address the root causes of HBC.
- The needs of affected stakeholders should be identified, local working groups may be used to uncover the reason for conflicts, and appropriate actions implemented to reduce HBC.
- Management authorities and the public should consider actions that will improve present situations and reduce the potential for future problems.
- Governments and ENGOs must acknowledge the social dimensions of HBC as a problem that can negatively impact conservation initiatives. Focus should be placed on listening to the concerns of affected stakeholders to better understand cultural and social values.
- In some contexts, there may be deep rooted social conflicts, historical events, or ethnic and cultural divides that may cause some people to be unwilling to work together. Addressing these underlying sources of conflict may allow meaningful HBC management to occur.
- HBC resolution should be based on scientifically informed management of bear populations, responsible stewardship of habitat shared by bears and people, and founded on humane approaches.



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