A Guidebook
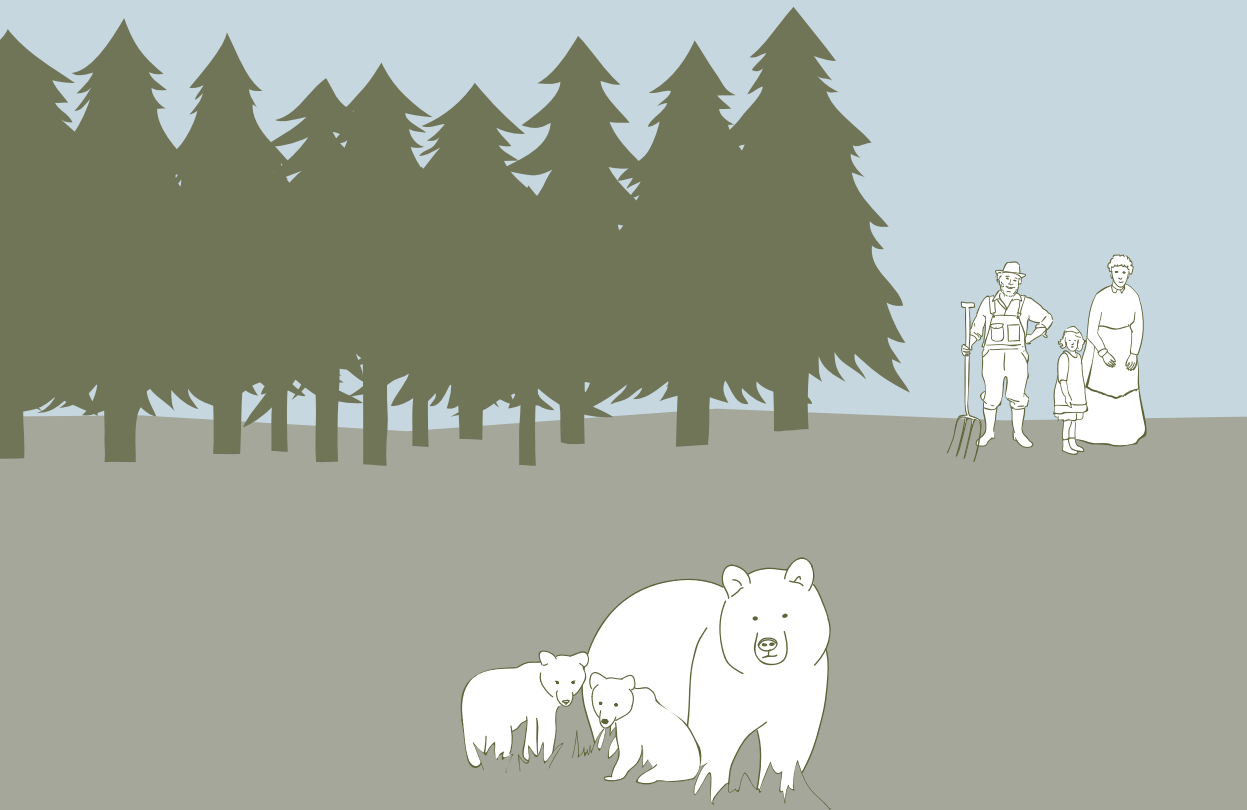# to Human-Carnivore Conflict:

Strategies and Tips for Effective Communication and Collaboration with Communities

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Acknowledgments

Foreword

It cannot be easy to write a guidebook to assist agency and organization specialists in managing human-carnivore conflicts. It requires a knowledge of the science behind carnivore biology and human conflict management in addition to the insight that comes only from actual experience. Based on my long experience as a wildlife manager and brown bear researcher, Seth Wilson has done a remarkable job. Although his goal was to help practical field contact personnel in Slovenia, Croatia, Italy, and Austria, this guidebook is applicable everywhere. It goes beyond improving professional communication with the people affected by carnivores and the damages they cause, by also recommending general strategies to form meaningful collaboration between these people and agencies/organizations and encouraging a proactive approach to carnivore conservation. I highly recommend this book and hope that locally adapted versions of it will be translated and made available to professionals managing human-carnivore conflicts worldwide.

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Purpose

The purpose of this guidebook is to offer strategies and practical tips on effective communication and collaboration with communities to address conflicts with large carnivores. This guidebook was proposed under the LIFE DINALP BEAR project and seeks to increase public awareness of large carnivores by providing educational materials for officials working with human-bear conflict cases.

The guidebook is focused on reducing conflicts with brown bears (*Ursus arctos*) but also incorporates wolves (*Canis lupus*) since these two large carnivores are found in overlapping habitats in portions of Slovenia, Croatia, and Italy. Damage inspectors and intervention team members from Slovenia, Croatia, Italy, and Austria are often involved in responding to conflicts and damages from both species. While certain tools and management techniques for addressing conflict are different for bears and wolves, the communication techniques and strategies for working with communities recommended in this guidebook are relevant to both.

Goals

The fundamental goal of this guidebook is to provide Slovenian, Croatian, Italian, and Austrian damage inspectors, intervention team members, and other partners with useful and practical information that can help improve their professional communication practice. A second and equally important goal is to provide general strategies for meaningful collaboration with the people who live with large carnivores across the four countries involved in the LIFE DINALP BEAR project. A third goal of this guidebook is to encourage a proactive and preventative approach to carnivore conservation that serves the common interest. Specific recommendations and strategies found throughout this guidebook reflect this perspective.

Audience

The main audience for this guidebook is Slovenian, Croatian, Italian, and Austrian damage inspectors and intervention team members who are field level personnel and are in regular contact with farmers, hunters, landowners, community members, and the general public. Additional audiences include all partners involved in the LIFE DINALP BEAR project who are engaged in large carnivore research, conservation, and management across the four partner countries. Other interested Non-Governmental Organizations (NGOs), individuals, or government officials from Europe and North America who are involved in wildlife management may find portions of the guidebook useful.

Approach

This guidebook was developed with input and support from damage inspectors and intervention team members from Slovenia, Croatia, Italy, and Austria. Additionally, individual representatives from the Slovenia Forest Service, Forestry and Wildlife Department of the Autonomous Province of Trento-Italy, University of Ljubljana, University of Zagreb, and University of Veterinary Medicine-Vienna contributed valuable ideas, proposed specific messages to be included in Section I, and made general recommendations to be included in the guidebook.
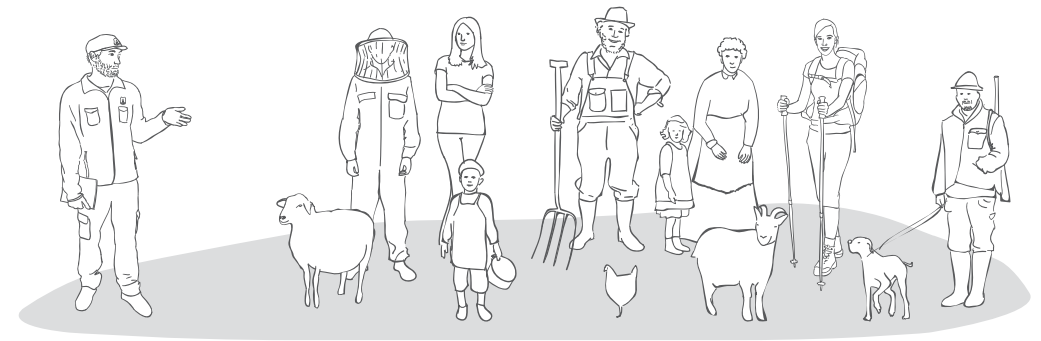
Three separate small group listening sessions were held in Slovenia, Croatia, and Italy during September-November, 2015 with forty-one participants to discuss the content of the guidebook. Damage inspectors, intervention team members, and additional partners from the LIFE DINALP BEAR project contributed to these exercises. And multiple one-on-one interviews and discussions were held with another nine project partners to help guide this effort. The above approach was undertaken in a spirit of collaboration in the hopes to make the guidebook relevant to damage inspectors, intervention team members, and all LIFE DINALP BEAR project partners.

Peer reviewed literature was consulted on communication practices and human-wildlife conflict mitigation in addition to drawing on my own practical experience with human-carnivore conflict research and project work spanning the past twenty years. A policy sciences framework informs several sections of this guidebook, specifically sections that focus on identifying problems, goal setting, and decision making. This guidebook was designed to complement the LIFE DINALP BEAR project Communication Plan.

Terms

Throughout this guidebook, human-carnivore conflict (HCC) is used to reference undesirable types of damage or incidents involving large carnivores, with specific emphasis on bears.

This guidebook generally follows the IUCN/SSC Bear Specialist Group's definition and description of human-bear conflict as specified by the Human-Bear Conflict Expert Team as:

- **Undesirable damage or use of property by bears.**
- **Perceived threat to human property.**
- **Actual harm to people.**
- **Perceived threat to human safety.**

Conflicts or incidents with bears can result in negative attitudes and perceptions of bears and can lead to human retaliation against bears. Conflicts with bears and other large carnivores may have direct and indirect economic impacts to people and communities and cultural traditions (Can et al. 2014).

This guidebook also uses the term institution as a general reference for governmental organizations, ministries, quasi-governmental agencies, and agencies across the four countries involved in the LIFE DINALP BEAR project.

Opportunities and Responsibilities as Damage Inspectors and Intervention Team Members

Introduction

Section I contains specific messages targeted to damage inspectors and intervention team members to be considered during their day-to-day field work. The beginning of this section focuses on the idea that the position of a damage inspector or intervention team member is a unique and special opportunity to serve one's country, the public, and to be part of solutions for large carnivore management and conservation in Europe. Along with this opportunity comes the responsibility to serve common interests and to use knowledge and expertise wisely.

The middle portion of Section I recommends that human-carnivore conflict should be understood and mitigated through systematic and scientific understanding. Specifically, this section offers a schematic for identifying key processes that make up a cycle of human-carnivore conflict.

The final parts of this section emphasize that a preventative and proactive approach to human-carnivore conflict is a smart long-term strategy to follow specifically when working with the local communities who are arguably a critical stakeholder for finding sustainable coexistence with large carnivores.

The Opportunity in Representing Country, Institutions, and Profession

The opportunity to represent your country through local or national governments and institutions you are affiliated with is an honor. This brings the expectation of professional conduct and a responsibility to the communities you work in and to the general public who have entrusted you to steward large carnivores for present and future generations.

Representing your Country

For many countries, the presence of bears and wolves is a source of national pride, cultural traditions, and an indicator of well managed habitat. It is important to remember that you represent this historical legacy, a diversity of values, and the various traditions that have enabled carnivores to persist in your respective countries. Your work represents an opportunity to maintain an important component of the world's biodiversity.

Representing your Institution and Profession

The various institutions and professions that are directly involved or associated in large carnivore management in Slovenia, Croatia, Italy, and Austria are public extensions of one's country. Thus, you have the opportunity to serve the public.

Your work and your conduct should always reflect the public trust that has been placed in your position. The public trusts you to act with the highest ethical standards. It should be a matter of personal pride to have the chance to serve one's fellow citizens. Your professional conduct, demeanor, and competence reflect public perceptions of your country, institution, and your profession (e.g., forester, veterinarian, biologist). Always adhere to your institutional or professional code of conduct if available.

In certain cases, there may be policies or management actions associated with your institution that you disagree with. When working with the general public, it will be important to maintain an objective and impartial position on the issues and keep your personal opinions to yourself. For example, you might personally disagree with management actions that increase or decrease the size of a bear population or local bear densities. Your personal opinion on these types of examples should be kept in check and you should strive to be an objective and impartial representative of your institution using the best scientific information to guide your professional practice. Avoid discussing your personal opinions on management policy with the press or media, unless you are authorized to do so.

KEY POINTS

- **The public trusts you to act with the highest ethical standards.**
- **Take pride in representing your country, governmental institution, and profession.**
- **Adhere to your professional code of conduct.**
- **Even if you disagree with certain policies or management actions of the institution you represent, it is important to maintain an objective and impartial position when working with the general public.**
- **Base your professional practice on the best available scientific information.**
- **Avoid discussing your personal opinions on management policy with the press or media, unless you are authorized to do so.**

Representing Future Generations

Your work represents a wildlife legacy for future generations. How you conduct your work today is important for tomorrow. Your legacy will either help or hinder those who come after you. Remember that future damage inspectors and intervention team members will likely live and work in the communities you are currently in. How you operate will be remembered. Do your best to leave a positive impression from your work so the next generation can be well received. Ideally, leave a management program that can be cost-effectively sustained into the future.

KEY POINTS

- **Remember to think about the next generation.**
- **Your record will be remembered.**
- **Leave behind a positive impression of your institution and profession.**
- **Leave behind sustainable programs.**

Representing Public Interests Not Special Interests

As a representative of your governmental institution, a specific level of authority is granted to you to make decisions. Remember that with this authority comes the responsibility to act in a just and fair manner—to represent common interests (Clark 2002).

Consider that those individuals who have repeated or intensive conflicts from carnivores
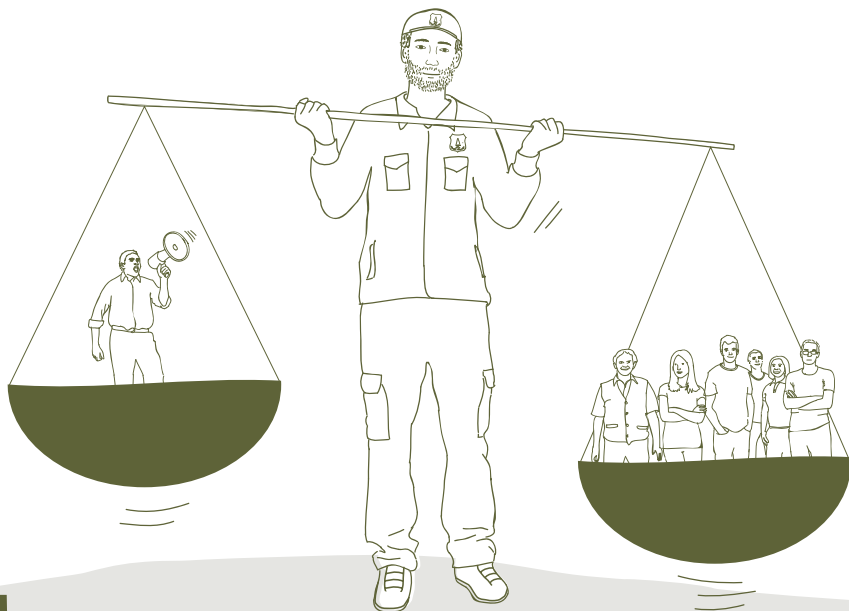
do not necessarily represent general public opinion about bears or wolves. Often a vocal minority may hold negative perceptions of bears and wolves and may be disproportionally represented in the popular press. Press coverage of carnivore conflict can be highly selective in the use of facts, sensationalistic, and can dramatize and simplify events producing negative perception of carnivores (Houston 2009).

Consider that stories or "dominant narratives" that are untrue can develop from a vocal minority and may be considered fact. These "dominant narratives" can become particularly influential and long lasting when they originate from trusted or well respected members of a community. Consider that vocal minorities may generate a story line characterized by "individual as victim" and the "government, wildlife organizations, or NGOs as villain" with a focus on assigning blame rather than engaging in constructive dialogue or finding solutions. Remember that opinions, stories and narratives coming from those individuals who have chronic conflict with carnivores do not necessarily represent broader public opinion about carnivores.

Conversely, individuals or NGOs may promote highly pro-bear or pro-wolf viewpoints and urge for strict protection of all individuals, or blindly promote the use of non-lethal techniques as a panacea for solving conflicts. Misanthropic characterizations of people and the human condition may be prevalent in some narratives along with an undercurrent focused on rectifying a flawed relationship with nature by saving individual bears and wolves.

Remember that narratives are simply stories that may bear little resemblance to reality and ultimately serve to reinforce an individual's own world view or perception of reality. Narratives from special interests within the carnivore arena should not be underestimated in their power in shaping public opinion and influencing people's willingness to modify or change specific practices that can reduce conflicts.

KEY POINTS

- **Vocal minorities do not necessarily represent public opinion.**
- **Press coverage may be biased both with positive and negative story lines involving carnivores.**
- **Stories or "dominant" narratives from vocal minorities may shape public opinion about carnivores.**
- **Remember to represent and consider public interests not special interests.**

Representing the Public Trust

Another responsibility that comes with representing the public trust is to use public funds wisely. It is important that damage claims are evaluated scientifically, fairly and objectively and that monetary compensation should reflect fair market value. Not only is this a responsible use of public funds, it will help establish one's reputation as impartial and help minimize misuse of compensation systems in general.

KEY POINTS

- **Compensation claims should reflect fair market value.**
- **Consistent and fair evaluation of damage claims will build a positive reputation and minimize misuse of compensation systems in general.**

AN EXAMPLE FROM SLOVENIA

In Slovenia, compensation payments for large carnivore damages are paid for by the state using public tax funds. Set price lists are the basis for estimating highest value for monetary damages for impacts like livestock losses, beehive damage, crop losses, car accidents, facilities damage and fruit orchard damage. Price list maximums can often exceed market value (e.g., sheep) and claims are typically evaluated and paid out at maximum levels. Although claims can be paid out at less than the maximum price list levels, this rarely occurs (Ivana Leskovar, Slovenian Ministry of Environment and Spatial Planning-Slovenian Environmental Agency, unpublished data).

This policy emphasizes compensation rather than prevention. Sheep breeders may be reluctant to make personal investments in prevention as long as compensation payments exceed market value. Damage claim inspectors may be reluctant to evaluate claims at less than maximum price list levels since there is no written rule or guideline to use anything other than the maximum price list.

Damage inspectors are encouraged to do what they can so that claims do not exceed market values. This may help encourage investments in prevention by sheep breeders and move away from a system overly focused on compensation.

AN EXAMPLE FROM CROATIA

In Croatia, compensation for bear damage is paid for by Croatian hunters privately or through state enterprises depending on the management authority in that area (Huber 2008, Huber et al. 2008). Without the use of state funds, the overall outcome in compensation results in fewer damage claims and less money requested since hunters have only fairly small funding reserves on a given year.

Hunters that manage bears raise the bulk of their funding from trophy hunting of bears and use a portion of those funds for damage claims (Knott et al. 2014). With less emphasis on compensation, there is incentive by local farmers to make modest investments in better fencing and other preventative tools to reduce to the risk of agricultural and livestock loss to bears.

Using Your Expertise Wisely

As an expert, people trust your knowledge, experience, and skills. This trust gives you a level of power. At the same time, the power you possess may cause people to be wary of your authority and your message. Moreover, people may actively distrust you and the governmental institution you represent for a variety of reasons that extend well beyond carnivores.

How you choose to present yourself and to share your expertise is important. How you come across with people can have a profound effect on how much respect you earn, whether people will actually accept your technical advice, and ultimately whether you can establish productive and professional relationships with the various stakeholders you work with.

If you demonstrate arrogance or show disdain for other perspectives on human-carnivore conflict, it is likely that you will face resistance from individuals and communities and be less effective. The key is to use your knowledge in a positive manner and to recognize that human-carnivore conflict is dynamic and complex. Being open to learning more about the ecological and social conditions that drive conflict will enable you to modify your efforts and be a good adaptive manager (Bormann et al. 1999).

Another way to think about this is to consider that humility in the face of complexity is an asset, not a liability. This is another way to think about being an expert learner—recognize that there will always be complexity, unpredictability, and uncertainty in nature—accepting this and being open to learning more is a prudent way to approach complexity.

KEY POINTS

- **Being an expert does not mean being arrogant.**
- **Humility in the face of complexity is an asset, not a liability.**

Honesty is the Only Path to Follow

Honesty is the best and only policy by which to conduct your professional work. You may be questioned closely by individuals, farmers, hunters, or the general public about all manner of details related to large carnivores—from complex scientific questions about carnivore behavior to detailed questions about hunting quotas, law, or management plans. Always do you best to provide the best available information about large carnivores, management, or regulations that are relevant to your region and country.

Never make something up because you believe that people expect an answer or will think of you as incompetent or unprofessional if you don't have an answer. It is "O.K. not to know." You can always respond with the statement, "I don't know. I will find out and I will be back in touch with you." Think of these situations as opportunities, not as obstacles or embarrassing situations. Being able to follow up with an answer for someone is an excellent chance to demonstrate professional follow through, to establish or strengthen relationships, and to demonstrate your work ethic. Know how to get valid scientific information to those who seek it and make sure that you understand your audience and always be timely when you follow up.

KEY POINTS

- Be prepared for highly detailed questions that you will not know the answer to.
- Never make something up because you think people need an answer.
- Share valid information, make sure it is appropriate to your audience, and follow up in a timely manner!

Effective Human-Carnivore Conflict Management is Systematic and Scientifically Informed

Addressing human-carnivore conflict effectively requires a systematic approach and a scientifically informed understanding of conflict. One's approach should be based on a holistic approach to understanding the ecological and social conditions that cause conflicts and the means to address them (Conover 2001). For example, scientifically based information that is important for understanding carnivore conflict include the type and cause of conflict, spatial distribution of conflicts, and seasonal variation of conflict (Wilson et al. 2006, Barlow et al.

2010, Jerina et al. 2015). It is equally important to understand how conflicts are linked to bear population dynamics, food availability, and variation in individual bear behaviors such as predation avoidance when younger bears and females with cubs use settlements as human shields from older male bears (Elfström et al. 2014a, Elfström et al. 2014b, Gittleman et al. 2001). Additionally, there are important land use practices and human behaviors, perceptions, values and cultural norms that are associated with carnivores and conflict (Wilson et al. 2013). Understanding and engaging people and communities in a systematic process to effectively plan and reduce conflict using proven tools, techniques, and decision processes is increasingly becoming the focus of researchers and practitioners (Wilson and Clark 2007, Treves et al. 2009, Maddin and McQuinn 2014, Miller 2015).
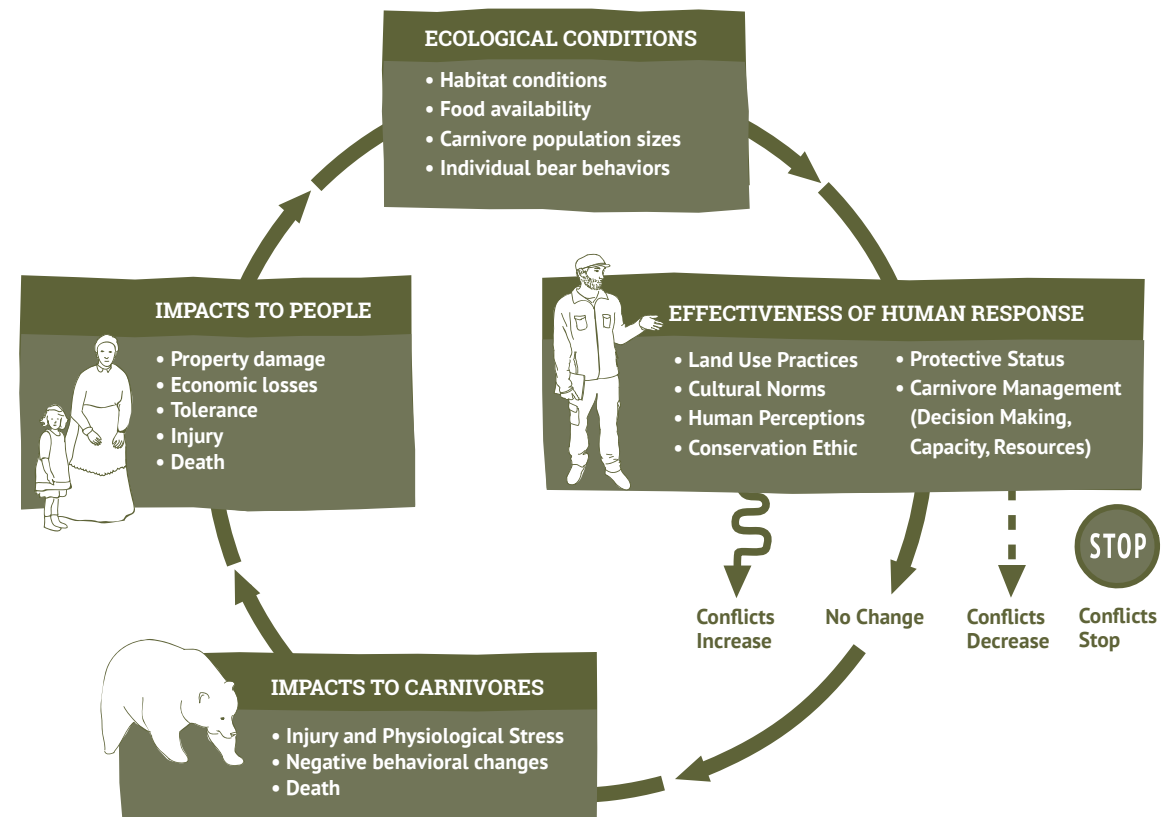
A Framework for Developing an Understanding of Human-carnivore Conflict

The framework above illustrates the cyclical nature of human-carnivore conflict and highlights the important factors to pay attention to. The causes of conflict are driven by multiple factors that interact in complex ways. These are: 1) habitat conditions, 2) food availability, 3) carnivore population sizes, 4) individual bear behaviors, and 5) the effectiveness of the human response. As conflicts rise or fall and the intensity of conflicts vary, the effectiveness of the human response may change and have impacts to carnivores and people. It is important that the main drivers of conflicts be identified and when possible, scientifically understood.

In Montana, USA, brown bear (grizzly) activity and conflicts increased steadily in the late 1990s in the Blackfoot River watershed. Eventually a hunter named Timothy Hilston was killed by a female bear with two cubs on October 30th, 2001. The bears were found and killed by the wildlife authorities.

Local people were extremely concerned about personal and family safety and their livelihoods. This event galvanized an already concerned community to work collaboratively under the leadership of an NGO, the Blackfoot Challenge to significantly improve human-carnivore conflict management with the assistance of the Montana Department of Fish, Wildlife and Parks and ultimately resulted in a long-term reduction in conflicts with brown bears as the bear population increased in the area at approximately three percent per year (Wilson et al. 2013, Kendall et al. 2009, Mace et al. 2012).
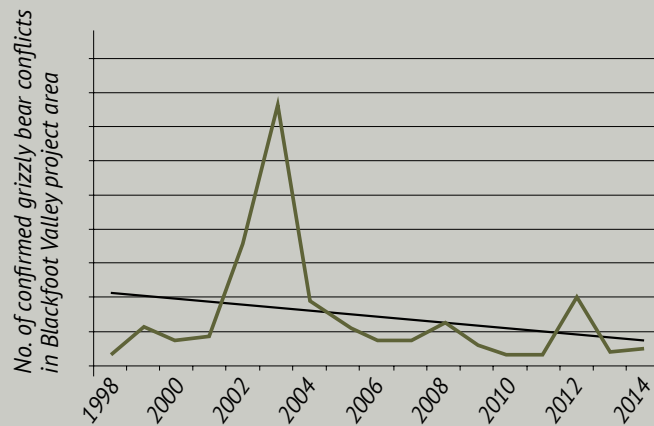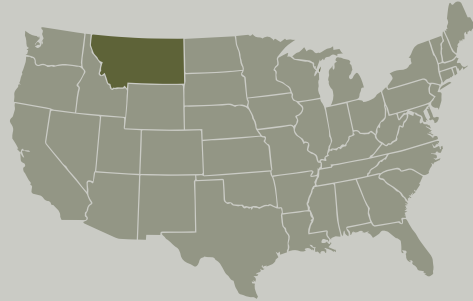
Data source:
MT Fish Wildlife and Parks

Brown bear conflicts in the Blackfoot watershed project area of Montana, 1998-2014. Conflicts have been reduced since the project started in 2001 and have remained low while the bear population has grown at approximately 3% per year

map credit: Seth Wilson

Prevention of Carnivore Conflict Should be a Long-Term Goal

Throughout the world, there are varied and diverse approaches to addressing human-carnivore conflict. The legal and protected status of carnivores for a given country, respective management plan, resources, and social and cultural norms all have important ramifications for how much emphasis is placed on preventative versus reactive approaches to carnivore conflict management.

When possible, a proactive and preventative approach to avoid conflict in the first place is a worthy and long-term goal that serves the public interest, can increase human acceptance of carnivores, can be cost-effective in many cases, and has benefits for both people and carnivores (Bekov 2001). Several examples of proactive measures include: electric fencing of human property (livestock, beehives), the use of bear resistant trash bins/containers, livestock guard dogs, proper containment of livestock feed, removal of livestock carcasses, and well designed and supported public education programs to generally change human behaviors that prevent conflicts.
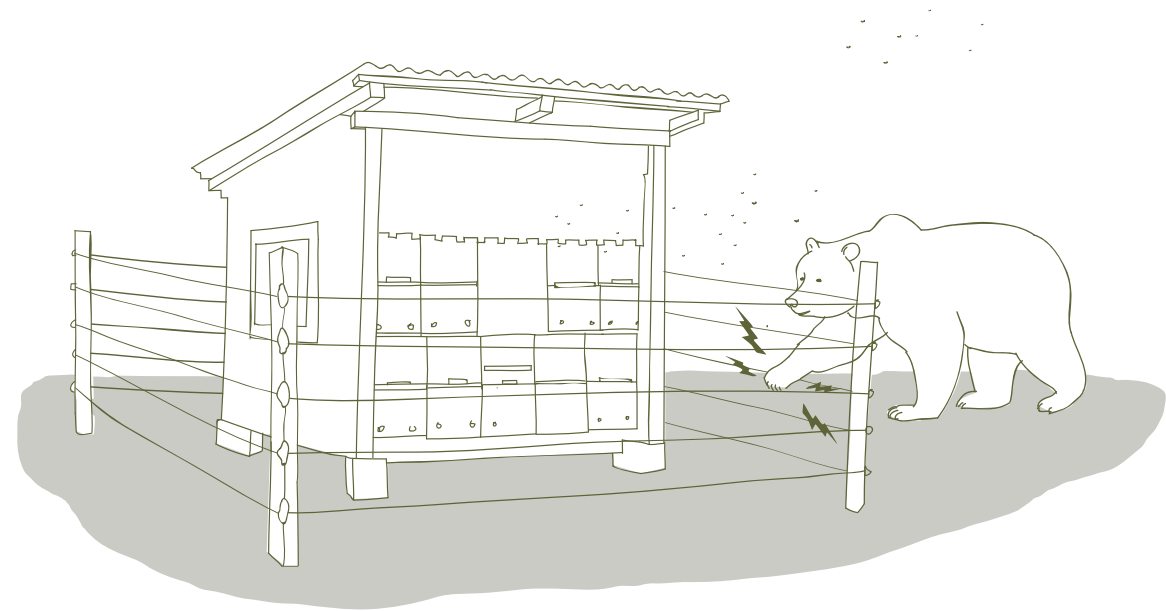
In almost all cases, both preventative and reactive approaches are necessary. For example, if large carnivores like bears develop predatory behavior and injure or kill people, removal (a reaction) of an individual is a common and justified management response. In other situations, the management reaction may be the relocation of bears, compensation for damages, or a preventative measure that is developed after an incident (Spencer et al. 2007).

While removal of specific individual carnivores known to be involved in repeated conflict or those that pose risk to human safety is a commonly accepted management tool, calls for

increased harvest or culling of bears through hunting as a means to reduce human-bear conflict has increasingly been questioned by researchers and the public (Treves 2009, Obbard et al. 2014, Lemlin 2008). A key limitation of hunting as an effective management tool focuses on whether "problem bears" can actually be targeted by hunters (Treves 2009).

As part of an overall conservation and management strategy, sustainable hunting of carnivores like bears when populations are of sufficient size should not be at odds with a concurrent emphasis of preventing human-bear conflicts.

KEY POINTS

- **Use a proactive and preventative approach to carnivore conflict.**
- **The use of hunting as a management tool to reduce human-bear conflict should not necessarily be considered the first approach to be used when addressing human-bear conflict.**

Involvement of Local Communities

Human-carnivore conflict is both a technical and human problem. Many conflicts with bears are caused by people whose behaviors and practices inadvertently draw bears into problem situations. Others are issue-based, resulting from people's different views on the management status of bears, causes of the problem, and what should be done (Primm 1996, Servheen 1989). Mattson et al. (1996:155) have suggested that, "The single most important variable... is likely social not biological." Treves et al. (2009) have encouraged a systematic and participatory approach to working productively with communities to develop solutions for living with carnivores. The meaningful involvement of people and communities who live with carnivores on a day-to-day basis is essential for a long-term and effective approach. When possible, working closely with communities to participate, plan, implement, and to sustain efforts that reduce conflict with carnivores is a proactive and pragmatic strategy for approaching human-carnivore conflict.

KEY POINTS

- **Those who live with carnivores on a daily basis should have an important role in determining how best to coexist.**
- **A meaningful and participatory approach to collaborating with communities is essential for building the long-term capacity to sustain carnivores.**

Practical Tips for Communication to Address Human-Carnivore Conflict

Introduction

Communication is like breathing. It is essential for life and essential for effectively addressing human-carnivore conflict. Damage inspectors and intervention team members have a vital role to play in face-to-face communication with individuals, groups, and communities. As the messengers and the "ambassadors" of large carnivore management, this role cannot be underestimated for its importance. Thoughtful communication will foster trust, respect, and can serve as a cornerstone for developing professional relationships at all levels that are fundamental for long-term success in addressing human-carnivore conflict.

This section begins with the basics—from initial greetings to making positive first impressions in face-to-meetings and public presentations. This section contains several simple and common sense tips that will be useful reinforcement for veteran damage inspectors or intervention team members and for those who are at the beginning their careers. Most importantly, this section is based on the premise that effective communication is a give and take process that fosters mutual learning and understanding. The importance of active listening is explored and specific techniques are summarized.

The middle part of Section II contains tips for fostering discussions about large carnivores by discussing the issues that matter for local people. These topics may not initially be about carnivores but are important entry points for building rapport and relationships with individuals. This section argues that each conversation is important and that mistakes can be seen as opportunities. Recommendations are also provided for responding thoughtfully to stories and misinformation about large carnivores.

This section concludes with a focus on communication in stressful situations, offers insights from two leading carnivore experts from North America, and provides specific tips for maintaining self-control with aggressive individuals and accepting criticism. Additionally, this section recommends that it is important to discuss carnivore management with affected individuals in non-conflict situations.

Making Positive First Impressions

It is important to make positive first impressions with people you work with on a variety of levels. In situations where people may have recently suffered carnivore damage or are upset
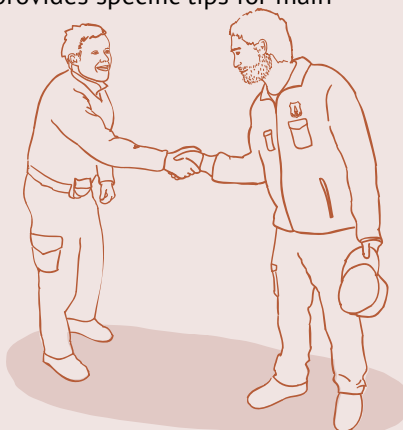
due to a carnivore conflict, it will be important to establish a connection with that person so that they have confidence in you and are reassured by your presence. This will help enable productive communication and discussions where mutual understanding is achieved—perhaps the ultimate measure of effective communication. In other contexts where you are asked to make public presentations that involve community members or specific groups like hunters, farmers, or other stakeholders, it will be equally important to make positive first impressions so that your message is conveyed without distraction and you are perceived as professional, credible, and competent.

Dress Appropriately Based on your Professional Standards and Cultural Norms

How you dress and look is important for how you are perceived. This has importance for how quickly you can establish a connection with someone and enter into productive discussions about the matter at hand. If you have a specific uniform from the institution or profession you represent, wear it consistently and dress in a manner that is true to you.

Ideally, the way you look should not create barriers or distractions and should reflect a common sense approach that is both professional and based on accepted cultural norms.

KEY POINTS
- **Observe established dress codes of your institution (e.g., official jacket or shirt).**
- **Dress in a genuine manner that is consistent with who you are.**
- **Your clothing and appearance should not be a distraction.**

Establish Initial Contact in a Professional and Friendly Way

It may seem like common sense, but in cases when you are meeting someone for the first time, there are common practices to observe. Start with a handshake, make eye contact, and clearly introduce yourself and the institution you represent. A smile that is not forced or contrived can be useful when appropriate in initial greetings. Additionally, observe any customary greetings that are culturally expected.

Do not wear sunglasses and silence your cell phone. *Avoid taking calls during conversations unless it is absolutely necessary or if it is an emergency*. If available and appropriate to the situation, offer a business card at the end of your visit or discussion—this is an important and positive message that indicates that you are available and open for future contact.

KEY POINTS
- **Make eye contact, shake hands, and introduce yourself.**
- **Do not wear sunglasses when meeting people.**
- **SILENCE your CELL phone during conversations.**
- **Leave a business card or your contact information after initial conversations.**

Active Listening: Finding Understanding

Listening may be one of the most important communication skills you can bring to the work of human-carnivore conflict reduction. In the case of human-carnivore conflict, well developed listening skills are critical for:

1) Establishing a professional connection with individuals and community members.

2) Establishing the facts when evaluating damage claims and conflicts.

3) Building trust, credibility, and empathy with those impacted by conflict.

4) Working productively with a variety of stakeholders who hold different values.

There is a clear difference between simply *hearing* someone and purposefully *listening*. Specifically, active listening involves using your power of observation to pay attention to a speaker so you leave the conversation with a clear understanding of what the speaker wanted to share. It is important that a speaker can also see that you are paying attention by observing your body language and your responses to their words. Your interest can be conveyed by using non-verbal messages such as maintaining eye contact, nodding your head and smiling (when appropriate), or through more subtle acknowledgments by saying 'Yes' or "Ok" (Bodie et al. 2015).

Consider your own cultural norms in these contexts as there are likely different non-verbal cues that should be used. These types of non-verbal cues can help a speaker feel at ease and shows your interest in them and their situation. Ideally, active listening will help create the conditions for open, honest, and insightful conversations where mutual learning occurs.

It is important during damage investigations and conflict interventions to be open and non-judgmental during conversations. It is important to be neutral and not to be perceived as taking sides. Active listening takes patience and may be particularly important when a person is discussing the damage(s) or conflicts that they have suffered. Pauses and short periods of silence should be expected and accepted. It is fine to ask questions, but an active listener does not insert questions into lulls in the conversation or periods of silence (Bodie et al. 2015).

As a bottom line, active listening involves giving an individual the time to explore their thoughts and feelings. Remember never to "talk over" someone, avoid interruptions, and do not "hijack" the conservation. In typical damage response situations, it may take fifteen to thirty minutes for an individual to initially express themselves before a more traditional, give-and-take conservation occurs. In some cases an initial outpouring from an individual may be shorter or longer than the above estimates.

Tips for Active Listening*

1. ASK QUESTIONS

- Pose relevant questions to probe or explore what the speaker has said.
- Do not ask too many questions so as to distract the speaker from their main points.

   The Benefits: Asking questions of the speaker reinforces that you are paying attention and demonstrating genuine interest in what they are saying.

2. CLARIFY

- Clarifying what the speaker is saying is done by asking specific questions about more detailed points that may be important in the conversation.
- **Examples:** "What I hear you saying is…" or "Do you mean that…?"

   The Benefits: Clarifying points through specific questions will ensure that core messages from the speaker are being understood by the listener. Clarifying a speaker's messages may take time in the moment but will pay off in the long run by avoiding future misunderstanding and confusion.

3. REFLECT

- Reflecting is closely paraphrasing or re-stating what the speaker has said to show comprehension.
- **Example**: "Are these your key concerns….?"

   The Benefits: Reflecting or carefully paraphrasing what the speaker has said is an effective way to show that you are actually listening and understanding what a speaker has said. It also may act as a sign of respect and help to break down barriers if done thoughtfully.

4. SUMMARIZE

- It can be useful to periodically summarize key points that the speaker has made in order to organize and reiterate their main messages.
- **Example**: "So, your main points are the following…?"

   The Benefits: A summary of key points demonstrates that you have been listening closely and can highlight the important points from the speaker. It is also an important opportunity to correct any misunderstanding or add any missing information.

Note: Active listening should be used as needed—it can be particularly helpful when dealing with complex or controversial situations or issues. When using active listening skills try to be natural and avoid a contrived or paternalistic approach.

Adapted from Skills You Need (2016).

Talk About Issues that Matter to Local People

While it may seem counterintuitive, there are times when the best way to communicate about bears and wolves is to not talk about bears and wolves. This is simply the idea that in order to effectively communicate with someone, it can be useful to start conversations on their terms and to be willing to listen to what is important to that person at that given time.

This means that you should be able to recognize and appreciate topics for discussion that may not initially be about bears or wolves, but that are most comfortable to talk about for the people you are visiting with. This does not mean that you can spend all your time "talking about the weather" or the latest in sports. However being able to make a connection with someone through discussion on their terms will give you important insights about a person's values and perspectives and may help you better understand how to effectively address carnivores. Establishing a connection and maintaining a professional relationship will pay off in the long run as you establish trust and further your ability to discuss carnivores in meaningful and detailed ways that produce mutual understanding.

KEY POINTS
- **Recognize that discussions about bears and wolves can be reached from different starting places.**
- **Be open to initial discussions that are centered on what is important to the speaker.**

Every Conversation Matters

Remember that each conversation matters and can have consequences. Negative impressions or exchanges may be remembered for many years and can become the basis of rumors or hearsay, hindering your ability to work effectively in communities. And remember that when you are talking with an individual, you are "talking" with the community. In other words, an individual's impressions of you, your discussion, and the tenor of your discussion may be relayed to others—both positive and negative exchanges. This may be particularly important in today's world where various social media networks can rapidly spread information through Facebook, Twitter, blogs, websites, etc.

KEY POINTS
- **Each conversation is an opportunity.**
- **Remember that exchanges (both positive and negative) may be relayed to others, the community, and even shared through social media networks.**

The Meeting after the Meeting

In certain cases it will be important to meet after the meeting—this can be particularly important when you have been involved in public events or group meetings where there have been contentious exchanges, confusion, where emotions have run high, or where insults were exchanged. It will be important to be a keen observer in these situations and to watch for important verbal and non-verbal cues (body language) from those attending and be able to identify specific individuals who you may want to meet with at a later time. It may be important to follow up with individuals who are silent throughout a public meeting or display body language that signals their displeasure.

If you become involved in a contentious exchange or if you are challenged aggressively by an individual in a public venue, it will be important to follow up with that individual depending on your assessment of the situation and your individual judgment. It will take introspection and thought on your part to honestly consider if and how your actions and words contributed to the situation. If you were even slightly rude, defensive, or responded in an awkward manner, it will be important to follow up personally.

If you have maintained a calm, kind, and professional demeanor throughout an exchange and yet you sense that an individual is deeply concerned about the issue, angry, or has underlying concerns, it will be important to follow up personally.

A personal phone call as a follow up or an in-person meeting is a powerful signal and professional way to show your commitment to understanding that individual's perspective, to demonstrate respect, to maintain a professional relationship, or to make an apology if needed.

KEY POINTS
- **Remember that in public meetings, some individuals may be reluctant to speak or share their concerns—be willing to reach out and follow up personally if needed.**
- **Personal follow ups are a strong signal that you care about maintaining a professional working relationship.**

Mistakes as Opportunities and the Importance of an Apology

Making mistakes in your work is part of learning. Being able to recognize those mistakes and to have the courage to make apologies is an important part of professional practice. When you made a mistake or have offended someone, it is important to acknowledge this and make an apology. Since each case is different, you will have to be the judge in terms of determining whether an apology is necessary and how to make it. It may be useful to discuss a mistake

with a trusted colleague and reflect on what you did, what went wrong, and how you can avoid making the mistake again.

It is best to make an apology in person rather than over the phone or by e-mail. It will be important to specifically refer to your mistake and offer your apologies. An apology does not need to be lengthy—in many cases, keeping it short and specific is sufficient. Making an apology puts one in a position of vulnerability. By doing so, one demonstrates their maturity, humanness, and the importance of a relationship. Ideally, an apology leads to forgiveness and in some cases can be the basis for a transformative moment in a relationship.

The English poet, Alexander Pope wrote, in *An Essay on Criticism* that, "To err is human, to forgive, divine." These famous words convey the importance of forgiveness. When forgiveness is achieved, apologies can be opportunities to improve relationships.

KEY POINTS

- **Reflect on your own mistakes or with a colleague to figure out what went wrong and how you can improve.**
- **An apology is a powerful signal that you care about a professional relationship.**
- **An apology can improve a working relationship and can be thought of as an opportunity.**

Stories and Misunderstandings

Bears and wolves are charismatic and captivating and have been central figures in story tales, folklore, art, and myth for centuries. It is not surprising that today, bears and wolves are still at the heart of many stories, particularly in rural areas. It is important to recognize that stories about bear or wolf activity, numbers, or individual behaviors can often be exaggerated or taken as fact. Carefully assess potential falsehoods, second hand information, and sensational stories. Be aware that even if a story sounds realistic, it is important that you avoid legitimizing incorrect information by repeating it.

For example, if a family group of bears is observed regularly by local inhabitants, this may be perceived as evidence that the bear population is growing when in fact the population is stable or even declining. Or consider that during poor food years, bears may increase their foraging bout ranges and spend more time in areas with people—this can cause stories to develop by local inhabitants as evidence that the bear population is growing when it is not.

Another common cause of misunderstanding can occur when a bear or wolf is found scavenging on a livestock carcass that has died naturally—an observer may incorrectly assume that the bear or wolf in question is the killer. When people have been injured by bears, rumors can easily lead to misunderstandings particularly if there is extensive media coverage. There

are countless other examples where stories and misinformation are taken as reality when it involves carnivores. When working directly with individuals who convey incorrect information, there are several general thoughts to consider.

First, remember that people may react poorly to being corrected and may be offended. It will be important to judge each situation carefully and consider your timing, tone, and message. There may be situations when it is best to have a follow up conversation and address incorrect information at a later time. However, as a general recommendation, it is best to address incorrect information as it occurs and to do so in a direct, thoughtful, and non-confrontational manner. Use a polite tone and neutral language to respond. Never respond in an accusatory or demeaning manner.

Think about what types of misinformation is most important to correct. In some cases you may encounter so much misinformation that you will need to prioritize and correct that misinformation that could be the most damaging or become problematic rumors or hearsay. If you begin to detect widespread misinformation from multiple individuals, it will be important to produce corrective press releases through local media or hold public meetings to provide the correct information to the public. It may also be useful to have a fact sheet or to follow up with a letter.
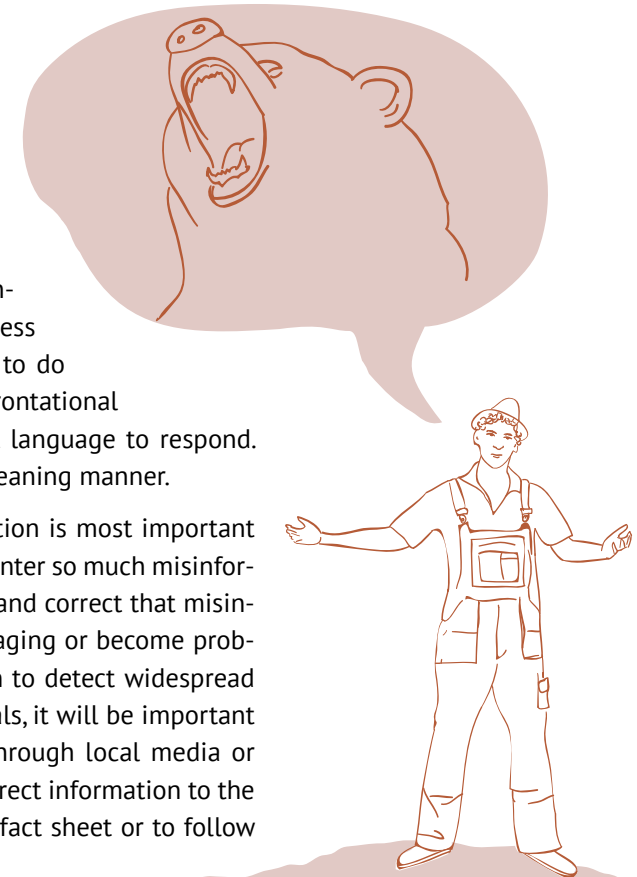
KEY POINTS

- **Remember that people may have stories about bears and wolves that they take as their reality.**
- **Carefully assess the veracity of stories about carnivores and avoid perpetuating any incorrect information.**
- **Use a direct and thoughtful approach to correcting misunderstandings or misinformation about carnivores.**
- **If misunderstanding or misinformation is widespread, issue press releases or hold public meetings to correct the situation.**
- **A simple fact sheet or personal letter can be an effective way to follow up with the correct information.**

Conversations During Damage Investigations or Conflict Responses

Some of the most common situations that are stressful involve investigations where livestock have been recently killed by bears or wolves. In these cases, a farmer or sheep breeder may be experiencing multiple emotions ranging from anger, shock, and confusion, to anxiety. In addition to the direct economic loss confronting an individual, there may be non-economic losses for someone who may have a strong emotional bond with their animal(s). It is important to approach someone's loss without judgment or preconceived ideas about what a particular loss might mean to someone.

Other stressful situations include investigations where there has been human injury by bears, close encounters, or bears frequenting homes or villages. In these cases people may be extremely agitated, fearful, stressed, or worried about their personal safety and that of their families especially children.

The following tips can be used for those initial discussions where individuals have suffered damage or have been involved in a conflict.

Tips for Initial Conversations Involving Damages or Conflicts

1. EMPATHIZE

- Express empathy to the individual early in the conversation for the damage or conflict that they have suffered.

  The Benefits: Saying and showing that you are sorry for someone's loss or for a conflict can be a powerful way to diffuse the situation quickly and to establish that you are there to help and that you genuinely care.

2. LISTEN

- Listen to the full story regarding the damage or conflict.
- Avoid cutting people off and let them take their time.
- Emotions may run high in these situations.
- Let people tell you how they feel and simply acknowledge their emotions.
- Initial outpourings are natural for people.
- Do not judge the veracity of initial stories or version of events—just listen.

The Benefits: Listening to someone's entire story or version of events is critical for allowing people to "burn off some steam" or to express their emotions. By giving people your full attention in these situations you are demonstrating empathy and your willingness to understand their perspective.

3. CLARIFY

- After initial discussions regarding the damage or loss, it will be important to clarify events and establish the facts.
- Use active listening skills to question, clarify, reflect, and summarize.

  The Benefits: Clarifying the story or version of events will help separate out facts from emotions and to establish a mutually agreed upon version of the events. This is important in order to avoid future confusion and to stop rumors from developing.

4. FOLLOW UP

- Depending on each case, it may be important to have a follow up conversation either by phone or in-person to summarize the version of events that you discussed and to add any missing information.

  The Benefits: A follow up phone call or in-person meeting is a positive way to show your professional commitment to that individual and to ensure an accurate understanding of the events.

From the Field: A North American Perspective

An Interview with Wolf Management Specialist, Elizabeth Bradley, Montana Department of Fish, Wildlife and Parks - December 4, 2015

How important is effective communication for your day-to-day work with key stakeholders like farmers, landowners, hunters, etc.?

Being an effective communicator is one of the most important jobs I have as a wildlife biologist. I think there is a misconception that becoming a wildlife biologist is all about working with wildlife. Well, yes you get to work with wildlife but a bigger part of the job is working with the people who live and interact with wildlife. People ultimately decide the fate of wildlife and their habitats. It is important to build relationships and trust with people because this will lead to more effective communication.

Do you have any specific communication techniques or overall approaches that you have found useful when talking or visiting with people for your work?

I think it is important to be a good listener and to have realistic expectations about your communications goals. People will often not hear anything until they themselves feel like they have been heard. Take the time to truly listen and try to understand the other person's point of view. Sometimes effective communication can take years and so it is important to not get discouraged, but to try to take the long view. Take the time to get to know people and follow-up on what you say you're going to do.

What practical advice can you give Slovenian, Croatian, Italian, and Austrian damage inspectors and intervention team members when they are in stressful situations?

Hear the individual out first and let them explain their frustration. Then try to explain to them how you can help them and present options or tools that may be available for helping them.

Do not tell them what they should or shouldn't do. Present ideas and ask for their thoughts on what would best help them. I have found that more often than not, there is not a clear answer or solution to any given situation. Some of the best outcomes were situations where we sat down and worked it out together.

How do you deal with people confronting you or becoming aggressive?

It's really important to keep cool and not become confrontational in response. Let people blow their steam. If a threat becomes physical, or too personal, it's ok to walk away. Then you may want to reach out to them later once the initial conversation has cooled off. Some people will never work with you, but most eventually will if they see you as someone who can help them.

When you look back over your career, what is the most important advice you would give a brand new damage inspector or intervention team member in terms of communicating effectively?

Be sincere in everything you do. People recognize sincerity and will respond to it.

From the Field: A North American Perspective

An Interview with Grizzly Bear Management Specialist, James J. Jonkel, Montana Department of Fish, Wildlife and Parks - December 10, 2015

How important is effective communication for your day-to-day work with key stakeholders like farmers, landowners, hunters, etc.?

With high profile wildlife species like grizzlies and wolves, communication is extremely important—in order to gain trust and have a firm standing with stakeholders it is important that managers collaborate with other agencies and non-governmental (NGOs) entities and involve local communities and landowners at all levels, keep them informed, respond to their questions and needs and communicate at regular intervals by effective means.

Do you have any specific communication techniques or overall approaches that you have found useful when talking or visiting with people for your work?

Working collaboratively with communities is the key to success. We have worked with NGOs, landowners, local governments, farmers, ranchers, and landowners on dozen of projects using a partnership approach that helps to reduce conflicts with carnivores.

What practical advice can you give Slovenian, Croatian, Italian, and Austrian damage inspectors and intervention team members when they are in stressful situations?

Stressful situations are part of the job and it's really important to have general support from the community and respected individuals from the community when certain individuals may be angry.

Treat everyone the same and stick to the protocol when it comes to making decisions. Be fair but firm and make every effort to help solve the problem when possible.

How do you deal with people confronting you or becoming aggressive?

When in doubt, let people vent. Don't argue with them just listen—but always get back to them with a written response that addresses their concerns to the best of your ability. It never hurts to have information and written documentation of who's in charge, what the current regulations are, and how decisions are made and what are the public's rights. I have several letters that I can provide to irate citizens that want to know "who's in charge" and "what are my rights?"

When you look back over your career, what is the most important advice you would give a brand new damage inspector or intervention team member in terms of communicating effectively?

Take the time to meet people one-on-one. Find the common ground and make a concerted effort to gain trust and always be straight forward. Always tell the truth and let folks know how it all works----"never beat around the bush."

Keeping Calm in Conversations

If a situation becomes contentious, an individual becomes aggressive, or if *you begin to feel uncomfortable, angry, or defensive* it will be important to *stay calm and to maintain a professional demeanor*. Maintaining self-control during stressful situations and personal attacks or insults is an important goal to maintain throughout one's career. The following tool, "Stop, Challenge, Choose", can be practiced and used effectively during stressful situations (Training Resources for the Environmental Community (TREC) 2014).

However, to use this simple technique *will require a basic level of self-awareness or emotional intelligence in order to detect and identify* that you are feeling uncomfortable in a situation before you react with an automatic response that may be unhelpful. *In other words, you can't stop what you can't identify.*

Tips for Maintaining Self-Control Using Stop, Challenge, Choose*

**1. AN INDIVIDUAL CONFRONTS YOU
OR YOU BEGIN TO FEEL UNCOMFORTABLE....**

- Stop. Take a deep breath and drop your shoulders. Breathe again.
- Recognize that an unpleasant situation is developing
- Slow down before you respond.

STOP

2. CHALLENGE YOURSELF TO ASK...

- Do I need to respond?
- What am I feeling?
- What am I experiencing?
- What is the underlying condition or objective data in this situation?

CHALLENGE

3. CHOOSE...

- How do I want to respond in this situation?
- What is the long-term outcome I want to have?
- What response will lead to the best long-term outcome?

CHOOSE

Note: In reality, one will rarely have the capacity to ask all of these questions as a stressful situation unfolds. ***However, simply remembering to stop oneself from reacting during the beginning of a confrontation is a huge advantage in maintaining self-control.*** Even if you simply tell yourself to "stop" and "think" about how you might react, you will have created enough space to maintain your composure and to calmly address the situation.

Adapted from TREC (2014).

When It's Time to Press Pause

Unfortunately there will be situations when individuals become hostile, insulting, or even physically threatening. In these situations, it is unlikely that any meaningful or thoughtful discussion will result. In fact the opposite can occur particularly if both parties become angry or incensed.

If someone is become personally insulting or enraged, it will be important to press pause and to remove yourself from the situation and follow up at a future time. Report the incident to your superiors so that there is a record. This will be important for future outreach and safety, particularly if an individual was physically threatening.

It will be important to clearly articulate why you are leaving using direct and non-inflammatory language. It will also be important to follow up so that you are not closing the door on the conversation. Some examples are:

- **"I think that we can have a more productive discussion at a future time."**
- **"I can sense that you are extremely frustrated right now. I would be happy to discuss this with you at a future time."**
- **"This situation is becoming uncomfortable and I would like to continue talking with you at a different time."**
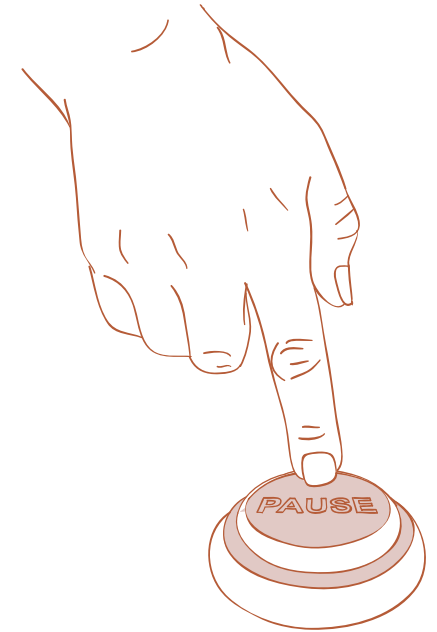
KEY POINTS
- **If an individual is becoming hostile, aggressive, or is physically threatening, it's time to press pause and to leave the scene.**
- **It may be important to report an event as described above, especially if there are concerns about safety.**
- **A follow up should be done depending on your judgment and can be in-person, over the phone, or in writing.**

Accepting Criticism

Expect criticism of you, the institution you represent, your profession, or the authorities in general when it comes to carnivore management. People will blame you or the government for their individual situations. Some example of concerns may be the following:

"Why have you let the bear population get so big?"

"Why can't the government manage bears properly?"

"There are too many bears!"

"These are your bears, not our bears, you should solve the problem."

"We manage the forests and the grasslands properly, can't you manage the bears?"

People may be worried about their personal safety or their children, feel anxious about economic impacts from carnivores, or carnivores may symbolize underlying frustrations people have with government authority in general (Primm and Murray 2005, Madden and McQuinn 2014).

It will be important to react to criticism in a professional manner and to be prepared for criticism over the long-term. It is important to acknowledge and understand people's concerns and also to remain impartial and neutral.

It is important to clarify and distinguish between criticisms focused on actions that you have the authority to change versus those that you cannot. For example, if a person tells you that you have been slow in responding to their damage claim you can pledge to do a better job next time. If someone wants bear or wolf hunting quotas changed or the protection status of bears changed, you can polity explain that you will relay their concerns to the appropriate institution through established protocols but that you do not have the authority to make those types of decisions.

It will be useful to have official letters or fact sheets that simply and clearly provide specific information about current carnivore populations, legal regulations, key management plans, and relevant contact information so that local stakeholders learn more.

It will be important to be professional and not take sides—it may be tempting to join in with negative bashing the government or relevant institution by local people—avoid this. Additionally, it may be tempting to join in and to criticize NGOs groups that local communities are particularly critical of—avoid this. If you maintain a fair and impartial approach to your professional practice you will earn respect and trust from stakeholders from all sides of the issue and ultimately have a holistic understanding of how people think about the issue—an invaluable tool for eventually helping to solve the problem.

KEY POINTS

- **Expect criticism of you and the institution or profession you represent.**
- **Expect to be blamed for certain situations.**
- **Do not take sides or join in with negative bashing of government or the institution you represent.**
- **Work hard to earn respect and trust from all stakeholders involved in the issue.**
- **Seek a holistic understanding of how people think about the issue—this will be an invaluable tool for eventually helping to solve the problem.**

Create Opportunities to Talk about Carnivores in Non-conflict Situations

When possible, it will be important to create opportunities to talk about carnivores in non-conflict situations. Remember that during conflict or damage claim investigations, people may not be thinking about preventative tools for long-term solutions for living with carnivores. Their attention is focused on the immediate situation at hand—their loss. For example, if the hull on a sail boat was just punctured, the crew would be focused on fixing the leak, not on discussing the best ways to avoid hitting the rock that caused the problem. That conversation is best had when safely back in port. Creating opportunities to discuss how people perceive carnivores and how to find solutions to reduce conflict is best done in a non-stressful and positive atmosphere. While time constraints and funding limitations may be a challenge, it is vital to create these types of opportunities.

KEY POINT

- **It may take time but it is important to create opportunities to talk about carnivores in non-conflict situations.**

General Strategies and Practical Tips to Work Effectively with Communities to Address Human-Carnivore Conflict

Introduction

Section III is based on the underlying assumption that local communities who live with large carnivores should have a meaningful role in understanding the problem of conflict, setting goals, and deciding how to craft solutions that are long-lasting.

This section is organized as a chronology to illustrate several strategies and practical tips for working with communities. As a general recommendation, there are four overarching functions that can be applied to the social and ecological context of a specific place that are important for a successful community supported effort. These include:

1) Coordination of resources.

2) The use of science to inform efforts.

3) The importance of incorporating stakeholder values.

4) Inclusive decision making.

The section includes recommendations for working at the correct scale using prototypes, the role of partnerships, and concludes with suggestions on sustaining community efforts to coexist with large carnivores.

The Importance of Coordination of Resources, Decision Making, Science, and Incorporating Stakeholder Values

Working with communities in Slovenia, Croatia, Italy, and Austria will take context-sensitive approaches that reflect unique histories, ecology, cultures, laws, and wildlife management plans that are relevant to each country. There is no "one-size-fits-all" approach to follow. However, a general strategy for working effectively with local communities within a specific ecological and social context relies on four important "legs of the table" that serve as a foundation. These are: 1) coordination of resources, 2) efforts should be informed by science, 3) stakeholder values must be incorporated, and 4) a decision making process must be present in order to rationally discuss the issues, make decisions, and implement actions (Wilson et al. 2013, Burnett 2013).

A Framework for Effective Collaboration with Communities

Coordination of Resources

It is important that some form of coordination framework exists or be developed in order to effectively share complex information, resources (monetary; leadership; intellectual; technical skills) manage competing values, and ultimately to make decisions. It is critical to carefully to consider who or what entity can provide coordination. Key questions to ask:

1. **"Is there existing local capacity for coordination?"**

2. **"Who is best suited to provide coordination?"**

3. **"Are their key opinion leaders from within the community that can provide coordination?"**

4. **"Will some form of new coordination need to be developed?"**

Additionally, adequate resources will be needed to pay for actual projects necessary to reduce conflicts with large carnivores. Careful consideration should be made in terms of how resources are to be distributed, who will decide, and whether local communities will be asked to contribute resources to projects.

Informed with Science

Valid scientific information is essential for informing a successful effort. It is important that valid scientific information support activities that are relevant to the specific context. Scientific information that is available to all stakeholders involved in the effort can serve as a basis for understanding current ecological and social conditions, key aspects of carnivore biology (e.g. population trends, causes and spatial and temporal nature of conflicts, bear behaviors) to pinpointing how different values, perspectives, or attitudes towards large carnivores shape how people conceive of the problem or what goals they may pursue.

Stakeholder Values

Whether one is in the rural mountain village of San Lorenzo in Banale in the Trentino region of Italy or in the communities of Slovenia's Ribniško-Kočevsko region, the values of local people will be critical for understanding how to effectively collaborate and solve human-carnivore conflicts. Additionally, it will be important to recognize that people, NGOs, and other stakeholders who live outside the area will also have valid interests in carnivores. It will be important to think about a long-term strategy that incorporates a diversity of values from multiple stakeholders.

A Decision Making Process

Working collaboratively with communities will require some type of forum or process that helps brings people together to recognize and discuss the problems associated with large carnivores and to devise solutions. This may be one of the most important aspects of working with local communities in meaningful ways. This aspect of community based conservation will be discussed in greater detail shortly.

The Importance of Ecological and Social Context

Unfortunately there is no smart phone app to solve human-carnivore conflict. Slovenia, Croatia, Italy, and Austria all have unique ecological and sociological conditions that should be understood to develop context-based solutions to carnivore conflict that involve local people and communities.

There are three general factors to consider when assessing the ecological and social context: 1) current conditions, 2) trends, and 3) future projections (Clark 2002). If possible, having scientific information about the status of both ecological and sociological conditions will help develop a foundation for developing solutions to the unique context and working effectively with communities. Specific research or existing scientific information may be needed depending on the context for understanding bear population dynamics, bear behaviors, habitat conditions, and human activities and social systems.

photo credit: Matija Stergar

Bear Population Dynamics

It is important to understand whether the resident bear population is increasing, decreasing, stable, or unknown as these trends can influence the frequency of conflict with people and how people perceive and respond to bears. For example, in the western United States, a slowly expanding brown (grizzly) bear population has resulted in grizzly bears re-colonizing former habitats leading to increases in conflicts in new areas and has required interventions (Jonkel 2006). Additionally, local community members may

have very different perceptions of what the actual bear population may be. Whenever possible it will be important to have reliable scientific knowledge about the population status as that will inform appropriate management responses and help direct the types of solutions to be used.

Bear Behaviors

Secondly, understanding bear behavior with attention to movements and foraging patterns, age and sex classes of bears likely to be involved in conflict, and attractant preferences (individual bears can develop

photo credit: Matija Stergar

learned behaviors and seek specific foods) will influence where conflicts occur over time and space and will help develop appropriate and cost-effective management activities (Linnell et al. 1999, Steyaert et al. 2013, Elfström et al. 2014a, Wilson et al. 2006).

Habitat Conditions

There are five recommended areas to focus on in terms of understanding how current and future habitat conditions influence the frequency and intensity of conflicts in a given landscape: 1) quantity of habitat (increasing, decreasing, or stable trends), 2) quality of habitat (increasing, decreasing, or stable trends), 3) abundance of natural bears foods, 4) variation of natural bear foods, and 5) other carnivores and wildlife in the system that may cause conflicts.

While in practice it is difficult and costly to rigorously assess all conditions mentioned above, some consideration should be placed on these factors since both increases or decreases in habitat quantity and quality can influence the frequency of conflicts. It is also important to understand the role that other carnivores or wildlife play in causing indirect and direct conflicts with bears.

Human Activities and Social Systems

For any given place it will be important to understand all relevant stakeholders (governments, industry, local communities, NGOs. etc.) that have vested interests in that particular context and focus on how their different perspectives, values, and demands help or hinder carnivore conflict reduction efforts (Clark 2002).

The greatest challenge to any successful effort may be balancing the often competing value demands at play in a given context. These value demands will result in specific land uses and activities that will influence the behaviors and practices of people and influence the causes and frequency of conflict. Developing effective communication forums is critical for understanding competing values and ideally, developing a shared sense of the problem, formulating collective goals, and generating solutions that serve the common, not special interests (Brunner et al. 2002). It will be important to build on existing capacity or generate opportunities for regular communication exchange between stakeholders involved in the issue.
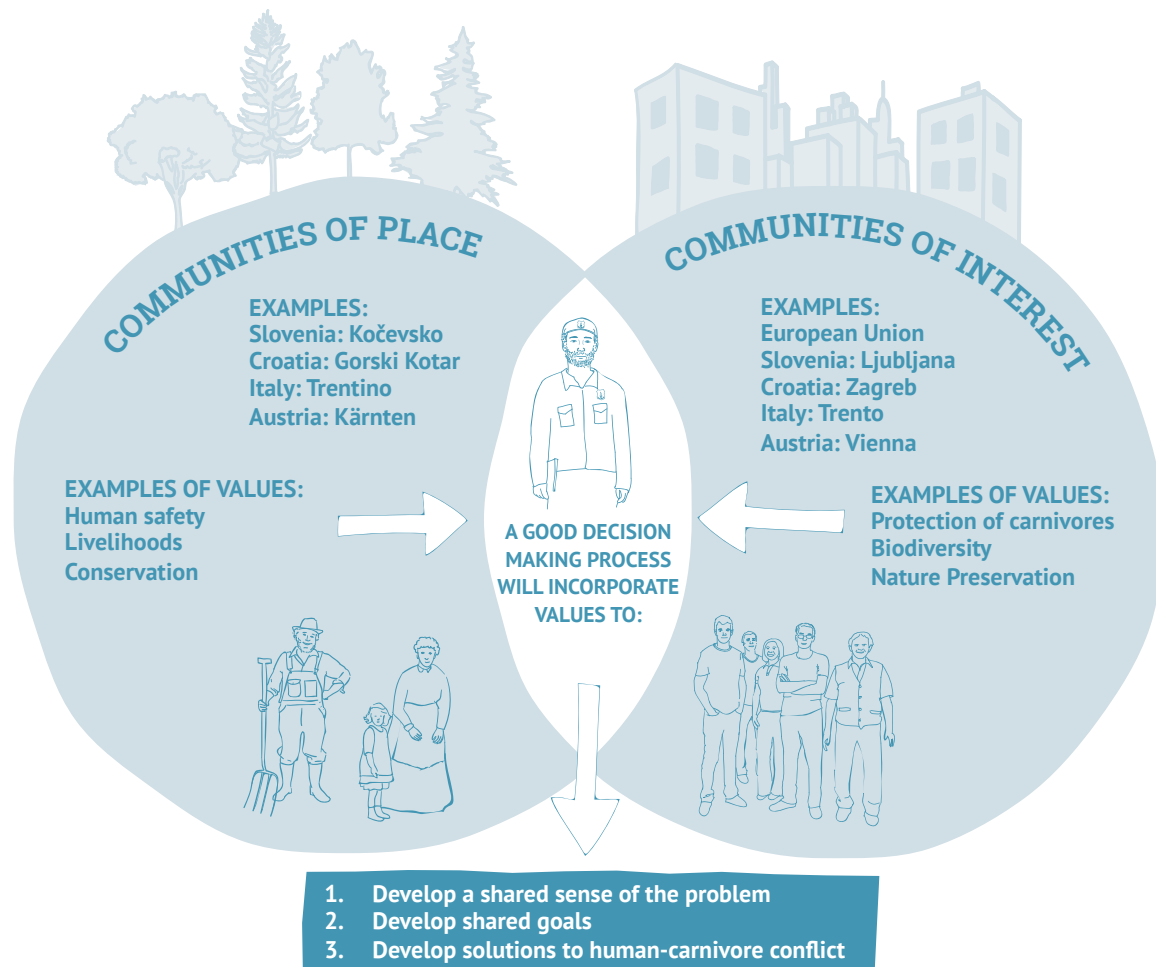
At the most basic level, some level of in-person meeting forum, work group, or stakeholder round-table should be used or developed if meaningful collaboration with communities is expected. This may require professional facilitation and or coordination by a mutually agreed upon stakeholder.

Ideally, a good community-based intervention will incorporate values shared by *communities of place* and *communities of interest*. This is critical in the arena of large carnivore conservation since bears and wolves are charismatic flagship species and attract national and international interests from urban centers whose values and activities may be at odds with rural, local communities who bear the risks of living with large carnivores.

Communities of Place and Communities of Interest: A Heuristic for Addressing Competing Values in Human-Carnivore Conflict

As a general strategy for working with communities, it is important to consider that values that originate from particular places will be different from the values that come from external communities of interest. For example, community members from rural villages or regions in Slovenia, Croatia, Italy, and Austria will likely have strong anthropocentric values that demand attention to human safety, livelihoods, and resource use. Values originating from communities of interests as represented in European Union (EU) law or policy and urban NGOs interests will tend to emphasize carnivore protection, nature preservation, and broader concerns about biodiversity.

Ideally it will be important to define a shared sense of the problem, to establish shared goals, and *to generate solutions that incorporate and satisfy enough shared values for both communities of place and communities of interest so that agreement or consensus can be found on how to solve the problem at hand.*

This can also be thought about in terms of working to find solutions that serve common interests not special interests. For example, communities of place may define the problem of carnivore conflict narrowly, as a matter of "having too many bears" and solutions therefore require culling or population harvest and reduction. Communities of interest may find this problem definition and solution untenable and in stark contrast to their values that desire carnivore protection—or in some cases, even larger populations of carnivores. It will be important to think carefully about how to reconcile or manage these types of competing values that are manifested in different ways to understand the problem of human-carnivore conflict.

Develop a Decision Making Process

Although time-consuming and challenging to develop and coordinate, a good decision making process is important for a long-term approach for working successfully with communities (Lasswell 1971, Clark 2002). Carnivore conflict reduction, like other decision making processes, is mainly about people: what we value, how we interact, how we make choices, and how we set up and carry out our day-to-day practices. Essentially, we make decisions about how we manage ourselves as well as how we deal with carnivores. Outcomes of a decision process affect what happens to carnivores and people. Ideally, a good decision process should be 1) inclusive, 2) factual, 3) fair, and 4) produce results that work. A good decision process is inclusive and invites all stakeholders with different perspectives to take part. It is also transparent and fosters trust by all participants.


A Heuristic for Recognizing Different Stakeholder Values (adapted from Wilson et al., 2013)

COMMUNITIES OF PLACE

EXAMPLES:
Slovenia: Kočevsko
Croatia: Gorski Kotar
Italy: Trentino
Austria: Kärnten

EXAMPLES OF VALUES:
Human safety
Livelihoods
Conservation

COMMUNITIES OF INTEREST

EXAMPLES:
European Union
Slovenia: Ljubljana
Croatia: Zagreb
Italy: Trento
Austria: Vienna

EXAMPLES OF VALUES:
Protection of carnivores
Biodiversity
Nature Preservation

A GOOD DECISION MAKING PROCESS WILL INCORPORATE VALUES TO:

1. Develop a shared sense of the problem
2. Develop shared goals
3. Develop solutions to human-carnivore conflict

A Key Component of a Good Decision Making Process Relies on Inclusivity

Key Components for Decision Making Process*

GATHER RELEVANT INFORMATION FOR PROBLEM SOLVING BY STAKEHOLDERS

- Recognize key information needs (biological and social)
- Define the problem collectively
- Set goals to solve the problem
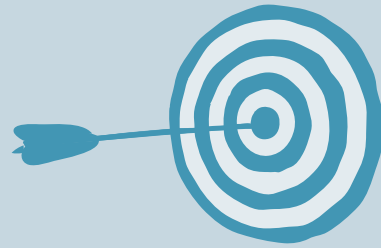
> **KEY QUESTIONS OR STANDARDS TO CONSIDER**
> 1. "Is the information dependable?"
> 2. "Is the information comprehensive?"
> 3. "Will the information be specific enough to guide problem solving?"
> 4. "Is the information open and available to all stakeholders?"

DEVELOP SUPPORT FOR ACTIONS

- Develop open and inclusive discussion forum(s).
- Develop collectively supported actions for reducing carnivore conflict.

> **KEY QUESTIONS OR STANDARDS TO CONSIDER:**
> 1. "Is the discussion process rationale?"
> 2. "Are stakeholders able to discuss their values and perspectives in a civil and non-threatening manner?"
> 3. "Can different values from communities of place and communities of interest be integrated to serve common interests?"

MAKE DECISIONS THAT ARE SUPPORTED BY STAKEHOLDERS

- Decide on specific actions.
- Consider actions that are participatory, non-threatening to local communities, and are preventative in nature.

> **KEY QUESTIONS OR STANDARDS TO CONSIDER:**
> 1. "Are the actions likely to be effective (i.e., are they proven tools; cost-effective)?"
> 2. "Are the actions comprehensive and long lasting?"

IMPLEMENT ACTIONS

- Implement projects to reduce carnivore conflict.

> **KEY QUESTIONS OR STANDARDS TO CONSIDER:**
> 1. "Are the projects delivered in a timely manner?"
> 2. "Are project personnel dependable?"
> 3. "Are projects realistic?"
> 4. "Can projects be monitored for effectiveness?"

MONITOR EFFORTS

- Project effectiveness should be monitored.
- Decision making process should be periodically monitored.

> **KEY QUESTIONS OR STANDARDS TO CONSIDER:**
> 1. "Are projects effective?"
> 2. "Are overall goals being met?"
> 3. "Is the overall decision-making process working for all stakeholders?"

Adapted from Laswell (1971); Clark (2002).

Develop a Shared Understanding of the Problem

As mentioned in the decision making process, it will be important to develop a shared sense of what specifically "the problem" is for a given human-carnivore conflict situation. Often multiple and competing problem definitions espoused by different stakeholders will make collective goal setting and management activities difficult to achieve. It is important to take the necessary time to carefully define a problem (Weiss 1989). Definitions suggest the causes and consequences of "the problem" and propose actions for solutions. Thus, the definition in fact configures its solution (Wilson and Clark 2007). Targeted social science survey work can be a useful tool for gathering base line information about different definitions of the problem.

Problem definitions that focus on reducing the risk of human injury and minimizing economic impacts from bears appear to be a good foundation from which to garner participation, and implement solutions with communities (Wilson and Clark 2007). Barlow et al. (2010) have also suggested a focus on risk reduction and have developed a useful heuristic for understanding and defining human-carnivore conflict and suggest that stakeholders collectively develop a "conflict profile" for better understanding the causes and spatial and temporal characteristics of conflict.

An Example Framework for Developing a Conflict Profile and Identifying and Prioritizing Solutions to Human-Carnivore Conflict
(Barlow et al., 2010)

SET OBJECTIVES WITH STAKEHOLDERS

- Define in terms of livestock lives saved, property protected, number of villages not visited frequently by bears, etc. over a specific time period.

- Objectives should be context-specific. For example, objectives might be: beehives not damaged or residential nuisance bear complaints reduced, etc.
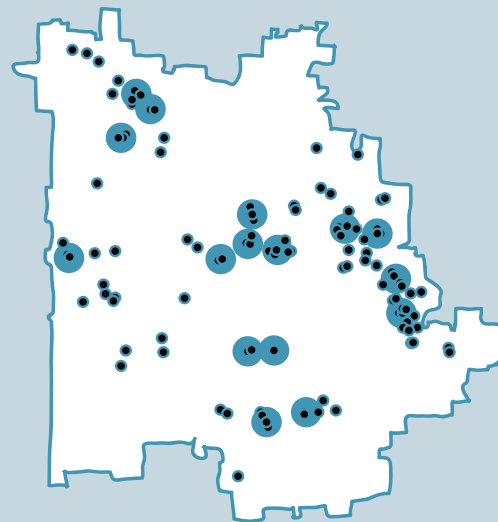
BUILD A CONFLICT PROFILE

- Identify causes of conflict.

- Include description of conflicts with information on scale, temporal, spatial, and social characteristics.

- A conflict hotspot analysis can be conducted to identify high risk areas in the landscape (see Wilson et al. 2006, Miller 2015).

IDENTIFY POSSIBLE SOLUTIONS

- List all possible mitigating actions.

- Potential actions must be practical and socially acceptable for stakeholders.
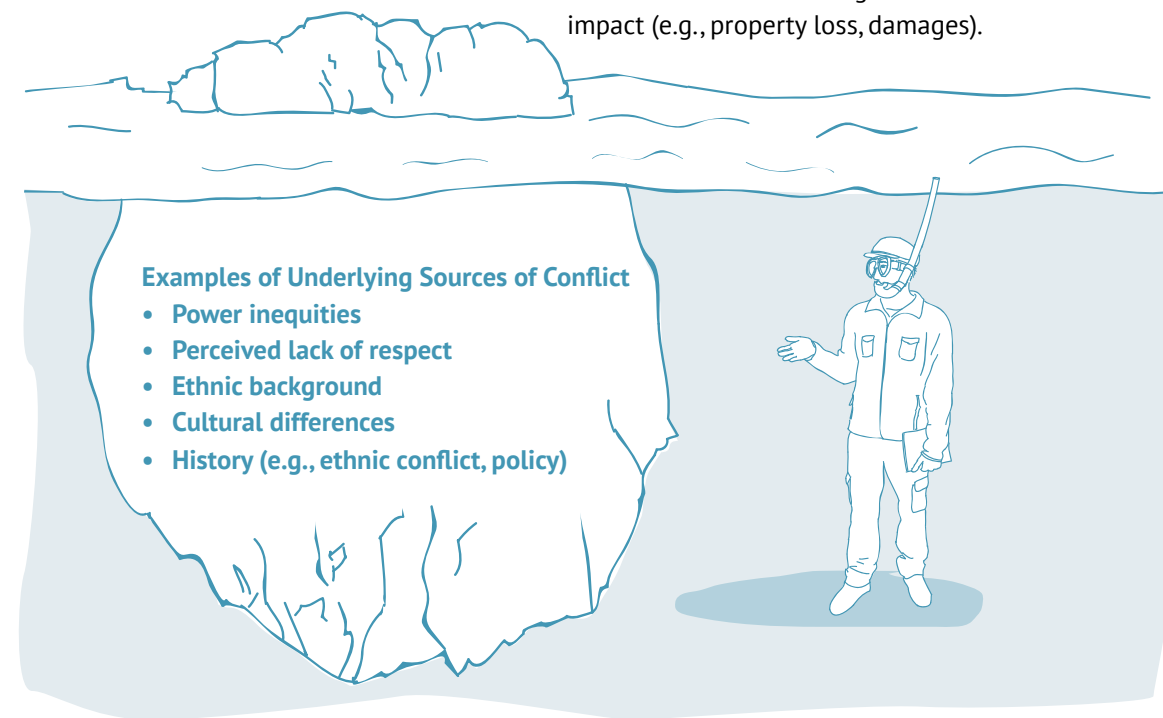
GIS mapping is a useful way to display conflicts or damages with brown bears to identify conflict hotspots—areas in the landscape that are at risk for human-bear conflict. This map shows the distribution and density of conflicts from a research project in Montana, USA (Wilson et al. 2006).

map credit: Seth Wilson

PRIORITIZE SOLUTIONS

- Rank solutions based on estimated numbers of livestock saved, homes protected, human-injuries prevented, beehives protected, etc. (solutions will be context-specific)

- Rank solutions on cost-effectiveness

- Rank solutions on combined impact and cost-effectiveness

Do Not Ignore Underlying Socially-Driven Conflicts

In certain cases, identifying and addressing the underlying conditions that are socially-driven and influence conflict may be necessary before addressing the immediate issue of carnivore conflict. In some contexts, there may be deep rooted social conflicts, historical events, or even ethnic and cultural divides that may cause individuals and groups of people to be unwilling to work together (Madden and McQuinn 2014). Failure to address these underlying sources of conflict may hinder well meaning efforts and may require facilitated processes that can expose, explore, and transform existing relationships so that meaningful change can occur (Madden and McQuinn 2014).

Traditional approaches to human-wildlife conflict management tend to operate at the surface level in terms of understanding conflict as a material impact (e.g., property loss, damages).

Examples of Underlying Sources of Conflict
- **Power inequities**
- **Perceived lack of respect**
- **Ethnic background**
- **Cultural differences**
- **History (e.g., ethnic conflict, policy)**

Develop a Shared Set of Goals

Like developing a shared definition of the problem, developing shared goals are critical for working effectively with communities. While it may appear obvious, understanding the different values and perspectives of stakeholders is critical for setting goals. At a more basic level, it is important to have a process that provides community members and all interested parties the ability to regularly meet to address the issues. When necessary, these forums or stakeholder meetings may need to be professional facilitated or integrated into existing

community capacity when possible. For example, hunting societies, hiking clubs, or even local volunteer fire brigades may provide opportunities to bring carnivore issues to communities for discussion and for their help in finding solutions. Pay special attention and develop an understanding of the community, community leaders, and who may have leadership qualities that bring people together. Leadership and local expertise can come in different forms.

Developing goals that reflect the values of both communities of place and communities of interest will be important for long-term success. Goals that reflect an anthropocentric framing with respect to risk and ways to protect human safety, property, and livelihoods can be discussed in terms of conflict prevention—this has direct benefits to people who live with large carnivores and for those communities of interest whose values seek protection of bears. Using preventative tools like electric fencing or bear resistant trash bins are non-lethal means to reduce risk of repeated conflicts with bears and the subsequent need to remove bears that become "problem" individuals. Framing goals with an emphasis on prevention not only helps to bridge competing values, but is also: 1) cost-effective, 2) can provide long-term benefits, and 3) is a future oriented approach.
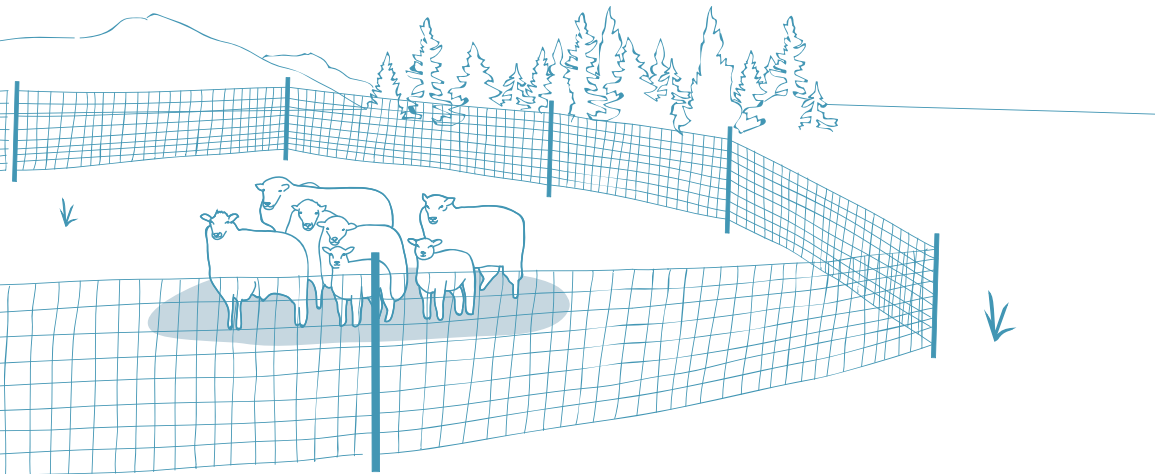
The Importance of Scale and Prototypes for Project Implementation

If there is agreement among stakeholders about what "the problem" is, how to address it (solutions), and shared overall goals, the next steps from the decision making process involve implementing projects and monitoring efforts. It will be important to consider the biological scale at which conflicts are playing out in a specific context relative to land use practices. This will influence how selective versus comprehensive one can be in terms of implementing on-the-ground projects.

Today's geographic information system (GIS) mapping, modeling, and spatial analysis capabilities can rapidly shed light on the scale of conflict locations at a spatial and temporal (seasonal) levels. It will be important to consider how prepared a community is, whether sufficient resources are available, and whether there is the overall capacity to "match a community-level response" to biological reality.

Bear composite home ranges, travel corridors, or core activity areas and wolf pack territories, denning locations and rendezvous site locations will be important to compare to human land use practices that influence conflict likelihood. A few examples include locations of attractants like beehives, sheep pastures, wildlife feeding stations, livestock pastures, or home sites.
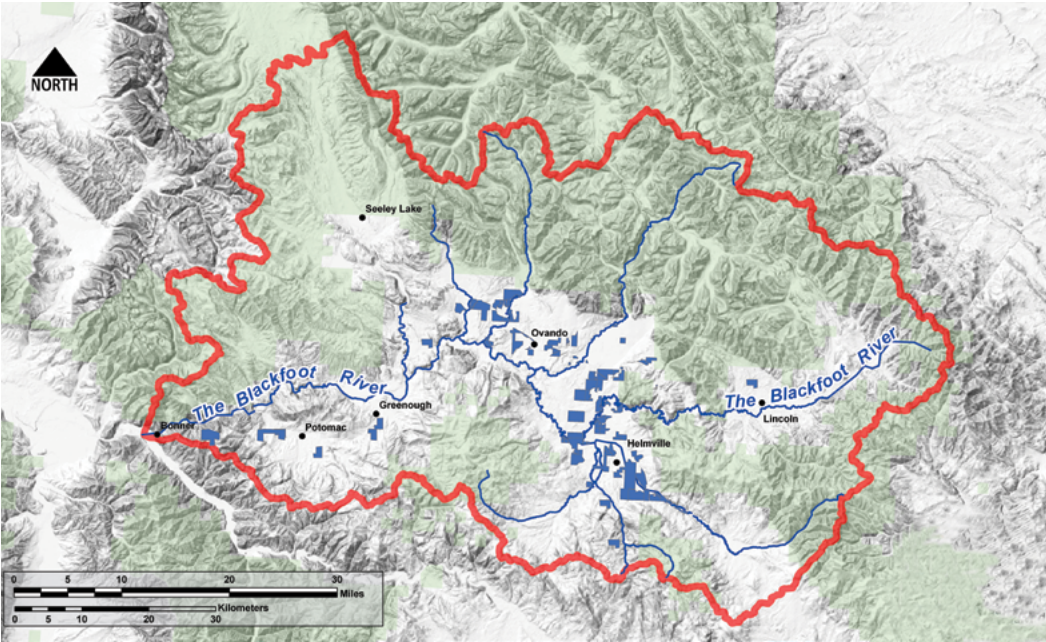
This map, from a project in Montana, USA, shows cattle pastures (in blue) where newborn calves are born each year and can attract brown bears near farms/settlements. Electric fences have been erected around the majority of these pastures to protect cattle from brown bears and wolves.

map credit: Seth Wilson

Blackfoot Watershed

Federal Lands in MT

Calving Areas

Depending on resources and willingness of community members to adopt specific prevention measures, it may be useful to consider developing prototypes at smaller scales that have a high likelihood of success. This can be thought of as "picking the low hanging fruit" when possible.
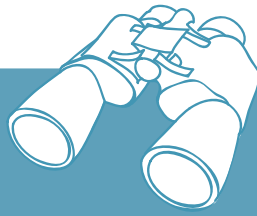
- Carefully choose the individuals you work with—think of them as "Focal People."
- Seek out individuals who are key opinion leaders and well respected.
- If your projects are successful, let these individual promote the success of the project in the local media and within informal communication networks.
- Field tours of projects with supportive individuals can be a powerful way to "show" versus "tell" other community members about specific tools to reduce conflict.
- Field tours also increase peer to peer (e.g. farmer to farmer) communication.
- Field tours can help increase the rate of adoption of specific practices to others.

BENEFITS OF PROTOTYPES

An investment in a specific prototype with an individual or a small group of individuals can become a powerful example for others and has four key outcomes:

1. A direct reduction in carnivore conflict:
   - fewer damage claims
   - fewer impacts to carnivores (e.g., trapping, relocation, or removal)

2. Trust created with individuals and groups who implement projects.

3. A testing-ground for promising new technologies, practices, and social processes.

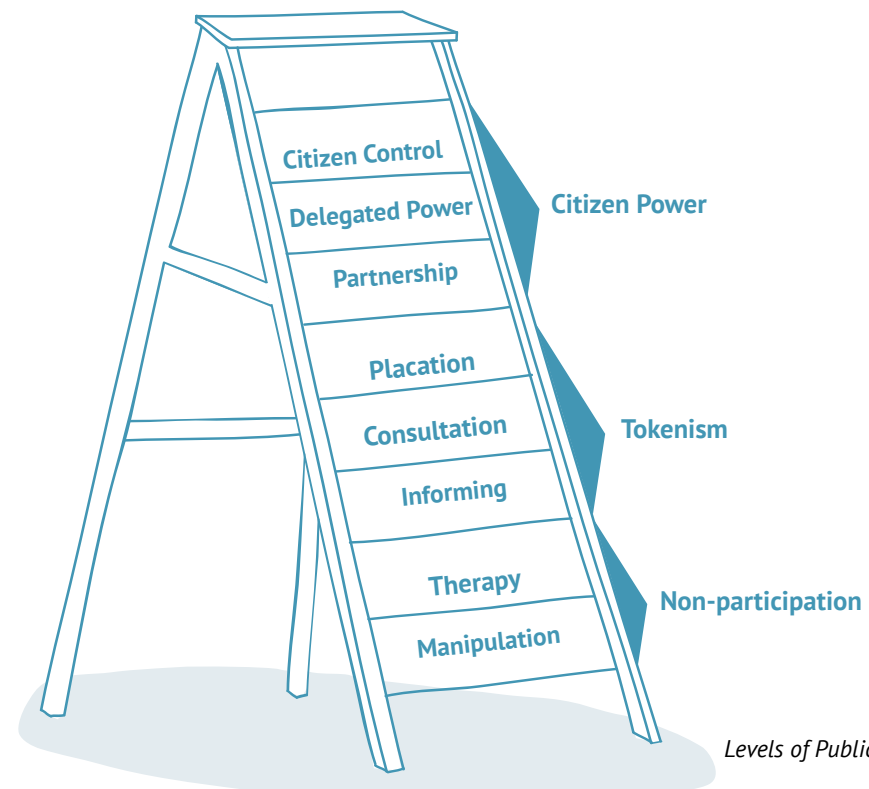4. A model to serve as proven examples and to diffuse prevention innovations to other areas.

The Importance of Partnerships

Partnerships that meaningful involve the diversity of stakeholders in a given context can have important benefits for local communities and carnivores. A partnership-based approach that encourages power sharing arrangements can foster collaborations and coordination among individuals, institutions, and governments. While it might take time initially to build a strong partnership, the investment in relationships can bring good ideas, skills, and resources to the task of reducing conflicts with carnivores. Scientific knowledge, diverse skill sets (e.g., local experts, hunters, damage inspectors), and financial resources can be leveraged for maximum impact. A diverse partnership may also reflect the values of communities of place and communities of interest.

It will be critical for ministries and agencies that have the legal responsibility and authority over carnivore management in Slovenia, Croatia, Italy, and Austria to consider how they wish to work with individuals and local communities and to clearly understand their role in what meaningful citizen participation is.

The Ladder of Participation

Arnstein's (1969) "Ladder of Participation" is a useful way to visualize the different levels of participation that governments afford a citizenry in the planning process. As shown in the schematic, partnerships require a significant level of power sharing by a government.

Citizen Control
Delegated Power
Partnership
Citizen Power

Placation
Consultation
Informing
Tokenism

Therapy
Manipulation
Non-participation

Levels of Public Participation

Strive for Long-Term Approaches that are Sustainable

Reducing human-carnivore conflict will ultimately depend on local people's tolerance for bears and wolves and whether people are willing to exert a degree of ownership of the problem. Ownership will entail having people take a share of responsibility for living with bears and wolves, rather than the traditional management model, a top-down approach, where people passively rely on an outside entity or authority to intervene.

This is not to suggest that there is no role for appropriate government or NGO involvement. Indeed, *more governmental and NGO capacity is necessary* in many places to provide resources and support in a participatory manner to address the issue. Sustainable solutions will ultimately need to be practical, cost-effective, and tailored to the specific context where human-carnivore conflict plays out. Ideally, practices and methods for reducing human-carnivore conflict can be developed and transferred among individuals and communities by and for local people in a peer-to-peer approach where coexistence with bears and wolves becomes a culturally accepted norm.

Effectiveness for Reducing Human-Carnivore Conflicts				
	Less effective	More effective		Most effective
Form of Local Involvement	"You're on your own"	"Tell them how"	Expert dependency model - "do it for them"	Technology Transfer - "show them how"	Ownership - Peer-educators
Outcome	People eliminate bears	People slowly eliminate bears	Program may be successful but costly and likely unsustainable	More sustainable	Coexistence becomes part of local culture

(Adapted from Wilson et al. 2013)

Conclusions

Effective communication is critical to large carnivore conservation and management in both informal and formal settings. At the informal level, damage inspectors and intervention team members have daily opportunities to build trusting relationships and to earn respect within communities. At the formal level, overall coordination and a well designed decision making process will help disseminate scientific information to all stakeholders for discussion, debate, and eventual action. Effective communication will elucidate the different values from communities of place and communities of interest. Overall, communication should be based on non-threatening language choices and a "non-advocacy" approach. Being highly attuned to the values and needs of local communities through regular communication, and being willing to "listen from the ground up" is an important way to frame overall communication strategies.

Sustainable coexistence with large carnivores in the long-term will ultimately depend on how engaged local people are in solving the problem. Ideally, effective collaboration with communities will lead to coexistence practices that are part of cultural expectations in Slovenia, Croatia, Italy, and Austria.

As the face of large carnivore management, damage inspectors and intervention team member have a unique niche. Use the opportunity to be an effective ambassador for large carnivores and for the communities who live with them. Take the time to listen to local people and develop a broad understanding of how different communities understand the problem of living with large carnivores. And whenever possible, seek preventative, proactive, and sustainable solutions that serve common, not special interests.

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About the project

About this guidebook

About the author

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Project beneficiaries

Cofinancers

This guidebook offers new tools and innovative approaches for field-level practitioners who want to conserve and manage brown bears and wolves that inhabit human-modified landscapes. This guide offers practical tips for effective communication and proven strategies for building partnerships and collaborations with the people who live with large carnivores. A positive working relationship among wildlife managers, local communities, and other stakeholders is fundamental for addressing, reducing, and preventing human-carnivore conflict in a meaningful way.

This guide targets those who inspect damages by large carnivores and those who directly manage these challenging animals. It prepares them in their critically important roles as wildlife ambassadors by providing communication skills and knowledge to work with a diversity of stakeholders. Ultimately, this guide will prepare the reader to engage with communities using a participatory approach that bridges theory and practice in a clear and understandable manner.