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Author(s): Leo Douglas, Loraine Cook, and Rose-Ann Smith

Source: Lessons in Conservation, Vol. 12, Issue 1, pp. 51-61

Published by: Network of Conservation Educators and Practitioners, Center for Biodiversity and Conservation, American Museum of Natural History

Stable URL: ncep.amnh.org/linc

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Human-Wildlife Conflict: Assessing the Complexity of Stakeholder Perspectives

Leo Douglasⁱ, Loraine Cookⁱⁱ, and Rose-Ann Smithⁱⁱ

ⁱCenter for Biodiversity and Conservation, American Museum of Natural History, New York, USA; ⁱⁱUniversity of the West Indies, Mona, Jamaica

ABSTRACT

This collection of case study-based exercises presents a fictional case study of a community facing conflict related to living with carnivores. The activities provide an opportunity for students to explore diverse stakeholder perspectives on living with wildlife, predator conservation, and how interests, values, and needs might vary within a community. Also included is a guide to facilitate use of the student activities in a virtual or remote learning setting [to download the adaptation,ⁱ see this module's page on the NCEP collection (<https://ncep.amnh.org>)]. Activity 1 asks students to use a brainstorming tool called a spider map to illustrate the disparate perspectives and contributing factors that are involved in a situation of conflict. Activity 2 has students adopt the roles of the various stakeholders and examine their diverse perspectives. Activity 3 asks students to reflect upon and analyze the conflict critically to determine the basic interests, values, and needs that produce conflict.

INTRODUCTION

Human-wildlife conflicts (HWCs) are widely perceived as unfavorable interactions between people and wild animals, but they also include concurrent disputes between groups of people about wild animals. Because of this, HWCs are inherently complex social phenomena, strongly influenced and contextualized by local culture, identities, local history, values, and politics; and, by extension, they may be difficult to both comprehend and effectively resolve. Even the simplest intergroup conflict about wildlife can have many elements. Therefore, approaches to conflict management that occur within a social and political vacuum can be ineffective and even aggravate, rather than mitigate, conflict. It is important to understand the cultural and social issues surrounding conflicts with wild animals in order to identify the best approaches to improving human-wildlife coexistence.

Here we will examine a fictional case study of a community facing conflict related to living with carnivores (in this case, jaguars; Figure 1). The accompanying collection of case study-based exercises provides an opportunity to understand how local perspectives on predator conservation and disagreement between stakeholders about the place, value, and management of predators can vary within a community. Many stakeholders will have conflicting positions related to the issue, irrespective of what type of predator is involved. Despite this, their interests can frequently overlap and understanding these shared interests is important for consensus or compromise about how to handle predator-related conflict in support of conservation objectives.

Activity 1 asks students to use a brainstorming tool called a spider map to illustrate the disparate perspectives and contributing factors that are involved in a situation of conflict. Then in Activity 2 (a role-play exercise), students delve into the different interests represented in this fictional case and adopt the roles of the various stakeholders. Activity 3 asks students to reflect upon and analyze the conflict critically to determine the basic interests, values, and needs that produce conflict.

ⁱ Moore, A. 2002. Human-wildlife conflict: assessing the complexity of stakeholder perspectives – Remote learning adaptation. Network of Conservation Educators and Practitioners, Center for Biodiversity and Conservation, American Museum of Natural History, New York, NY. Available from <https://ncep.amnh.org>.

LEARNING OBJECTIVES

After completing the various activities, students will be able to:

1. Identify the different dimensions of HWC in a diverse and changing community.
2. Compare and contrast the different potential perspectives of local stakeholders when facing conflict about living with predators.
3. Identify where stakeholder interests overlap and use this information to recommend possible solutions.

BACKGROUND: UPROAR AT LION'S GATEⁱⁱ

It has been a stress-filled time in Lion's Gate, a town in the northernmost section of Belize (Figure 2). Everyone is still working on repairs after a Category 1 Hurricane hit the region the month before. People have also been talking about the recent name-change of the town. For as long as everyone knew, the name of the town (and entire area) was Corozal, a name of Spanish colonial origin; but recently the town name was changed to "Lion's Gate." This was spurred by the release of a new blockbuster feature film about a pet mountain lionⁱⁱⁱ that rescues tourists in an area that the film calls Lion's Gate. The aim in changing the name was to capitalize on the area's new tourism potential. Soon, the newly refurbished entrance to the town's local zoo and animal rescue center would be unveiled in a grand re-opening ceremony. The new entrance features a visitor's center, a mural (depicting scenes from the feature film), and a pillared gateway crowned by cat faces carved out of stones. Additionally, Lion's Gate is home to a growing community of North American and western European retirees. This morning, the town's local newspaper ran a story based on a press release from the New York Post titled "Jaguar Kills Yank" (see the press release re-printed below).



Figure 1. Jaguars (*Panthera onca*) are the largest cat species in the Americas, and they are categorized as Near Threatened by the International Union for the Conservation of Nature (IUCN Red List 2017; <https://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T15953A50658693.en>)
Image credit: Tambako The Jaguar (CC BY-ND 2.0).



Figure 2. A map of Belize. Belize is an English-speaking country that borders Guatemala and Mexico. The town of Corozal is located in the north, close to the Mexican border. Image credit: CIA World Factbook (public domain).

ⁱⁱ Please note that while this case study is intended to illustrate the different dimensions of a human-wildlife conflict (in this case involving predators), this conflict is **imagined** taking place within a **fictionalized** community.

ⁱⁱⁱ Both mountain lions (also called pumas or cougars) and jaguars are found in Mesoamerica.

----- PRESS RELEASE -----

BELIZE CITYⁱⁱⁱ — A jaguar that escaped from its cage at a Belize animal rescue center during Hurricane Richard has been blamed in the mauling death of a US citizen whose body was found on Tuesday.

The four-year-old male jaguar, named Max, escaped when a tree fell on his cage during the Category 1 Hurricane Richard that hit the country's Caribbean coast with howling winds and rain.

Authorities found the victim's body near the animal center on Tuesday. It had bite marks on the forearm and neck and had apparently been attacked the day before and dragged for some distance into the bushes.

Kelly McCarthy, a spokeswoman for the US Embassy in Belize, confirmed that "...a US citizen died from a jaguar attack." McCarthy could not provide any information on the man's hometown or name.

The center's operators regularly rescue animals and attempt to return many of them to the wild. But it is unclear whether Max would be allowed to return to the wild if he is recaptured. Jaguars have also been responsible for the killing of livestock throughout the region and human-jaguar conflict appears to be on the rise. As a result, the number of jaguars killed in retaliation for actual or perceived threat to livestock or human lives is to be investigated.

MAJOR STAKEHOLDERS

You will be assigned to act as one of the following major stakeholders in a town hall meeting. Study the bios for these stakeholders carefully with a focus on the stakeholder group to which you have been assigned. Use the guiding questions to think more critically about the values and perspectives of your assigned group. Later in the exercises you will represent this stakeholder group in class activities.

Guiding questions

- What are your main goals and values?
- With whom do your goals and values most closely align?
- With whom do you most likely disagree?
- How might members of your stakeholder group agree/disagree with one another?
- What does the jaguar represent to you?
- In what way would this recent event impact your work and objectives?
- What is your biggest concern following this recent event?

Mayan Community Heritage Trust (MCHT)

This group of stakeholders is defined by their collective interest in preserving the traditional ways and customs of the people of the Yucatan Peninsula (Mexico and Belize). As a group they are generally older and led by individuals over 40 years of age. They value jaguars for their sacred importance and spiritual significance. While a majority of Belize's residents are Christians, cultural practices and the worship of the ancestral deities still continue. These traditions have been communicated through the

^{iv} Adapted from: Post Staff Report, Oct. 27, 2010. Belize big cat kills yank. New York Post. Available from <https://nypost.com/2010/10/27/belize-big-cat-kills-yank/>.

retention of several indigenous languages of the area. This group opposes the capture of jaguars and has long advocated for the release of all captive jaguars in the country with the exception of those that have been injured and could not survive in the wild on their own. Furthermore, the Trust has long lobbied for the name of the town to be changed to *Chactemal*—the name that Mayan history suggests the site was called before the area was colonized by European nations.

National Park Service (NPS)

The NPS is a government-funded entity whose mandate is to manage issues related to wildlife, national parks, and protected areas in the country. Rank-and-file staff members are citizens of Belize while the management is dominated by American citizens who live in the country and a few Belizeans who have lived and studied at universities in the United States. Overall, the organization has focused on public education, scientific study, captive breeding of jaguars, and the legal export of jaguars to other institutions involved in big cat conservation worldwide. The NPS is in charge of the rescue center. They have been trying to encourage ecotourism as a conservation strategy. Recently they sent a letter to the Mayan Community Heritage Trust requesting a dance performance in native dress for the opening of the new Lion's Gate mural and visitor's center.

Ministry of Labor and Development (MLD)

The stated mission of this government ministry is to create an enabling environment for the economic and social development of communities, through the provision of services that help the local workforce gain the right jobs to compete successfully in the marketplace. The MLD oversees projects in agriculture, manufacturing, and commercial tourism. The work plan of the MLD has been driven by the urgency of economic development. Seeing the success of their close partners to the north (in the Cancun area), the MLD has increasingly encouraged the development of tourism ventures. The more recent employees of the MLD have overwhelmingly been individuals with backgrounds in resort development and hospitality management.

Chactemal Livestock and Youth Development Program (CLYDP)

This NGO group is dominated by working age individuals involved in the business and tradition of raising livestock and is mostly composed of men between 17–35 years of age. Many of them have at least some high school education and some have obtained a one-year associate degree in Agricultural Practices and Farm Extension Service Training. Over the last two years, their monthly meetings have been dominated by discussions, fundraising, and strategies to appeal to the central government for better support services and for funding to support their efforts to become self-sufficient and profitable. Over the long term, they would like to expand their operations to capture more of the region's unemployed youth. It is an election year and they have heard rumors that, in an effort to stimulate economic development and bolster support, the government may be reallocating funding promised to the CLYDP in the national budget to further tourism developments instead.

While CLYDP members have been influenced by their elders (supporters of the Mayan Community Heritage Trust), they are also concerned about jaguars (who sometimes injure or kill goats among other form of livestock). Protecting livestock from predators, such as jaguars, adds to their costs in time and money. They would like to find ways of eliminating livestock raiding by predators and are divided about jaguar conservation.

Belize News Network (BNN)

The local correspondents for BNN have their ears on the ground and occasionally attend meetings of the various groups. They are very interested in the current state of affairs as disputes encourage greater public interest on media items and create more demand for their work. BNN is a private organization, which means that their general positions and values are fluid and determined by those who make up the organization.

ACTIVITY 1: SPIDER MAP EXERCISE

In this exercise, the class will work in their assigned stakeholder groups to examine each group's inherent values and what factors are contributing to the conflict through a brainstorming activity: a "spider map."

Instructions

As your assigned stakeholder role, create a spider map that details your group's major concerns, values, and objectives. Refer back to the guiding questions to help you complete this activity.

1. Place your assigned stakeholder group name in the center of the page and list **at least five** factors that influence your stakeholder's perspective in the conflict.
2. For each factor that you identify, add a rank from 1 to 3, with "1" as Most Important, "2" as Somewhat Important, and "3" as Less Important.
3. Additionally, for each factor, provide additional detail exploring how this might impact your role in this HWC, and indicating how this factor may relate to other factors influencing your perspective. See Figure 3 for an example.

ACTIVITY 2: ROLE PLAY

Background to town hall meeting

Grand Opening of New Lion's Gate Zoo/ Rescue Center Mural and Visitor's Center

When the day for the grand opening of the new mural and visitor's center arrives, a scuffle develops during the ceremony. A fire starts to blaze, and the newly created structures are badly damaged. Participants are injured in the confusion and the police and the crowd clash. The NPS director remarks that they had received threatening communications and she suspects that individuals related to the MCHT were most likely involved. She said that she felt fearful and called on the government to provide protection to her and NPS management as they might be at risk.

As if overnight, the volatility of the situation appears to have escalated and the MLD is very concerned that the negative publicity could spell doom for their massive all-out investment promoting Lion's Gate as a place where tranquil wildlife and welcoming people live in harmony. The MLD calls for a town hall meeting and representatives from all the major stakeholder groups, along with other concerned citizens, attend. The goal of this meeting is for each stakeholder group to have an opportunity to communicate their central concerns, and to voice ideas and opinions.

Prepare for the Meeting

To prepare for role play in class, read the key definitions below, think back to the guiding questions, then reflect and prepare brief points in response to the questions below. Answering these questions will help you contribute to the class activity (Activity 3). You will have time before the town hall

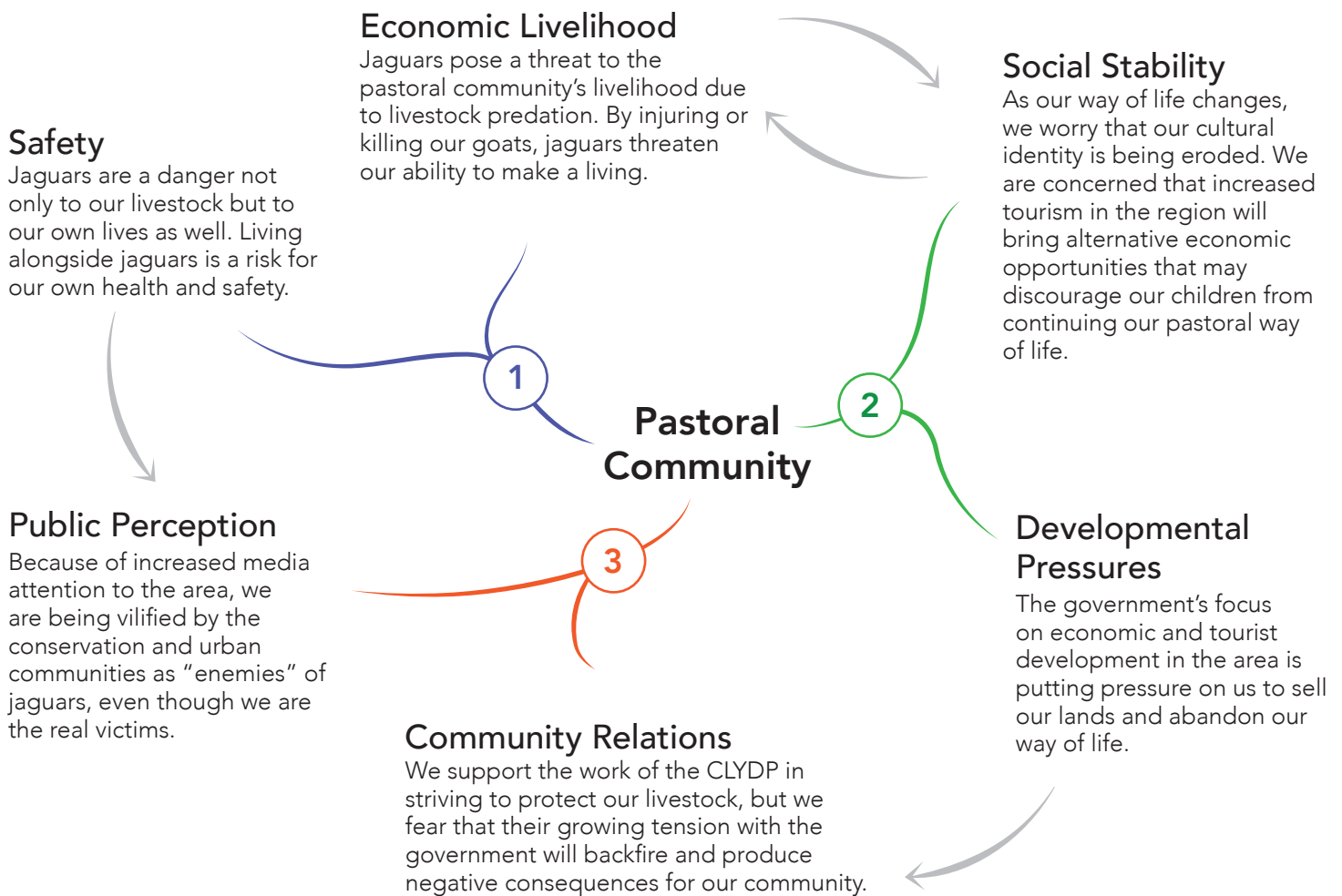


Figure 3. Example spider map for local pastoralists (an additional stakeholder group).

meeting to discuss, agree on, and practice the general points you wish to make with your stakeholder group. Each stakeholder group is also encouraged to investigate what the other groups might be like and the relationships that they might have with one another, using information from the major stakeholder descriptions found earlier in the text.

Key definitions [from Engel and Korf (2005) unless otherwise indicated]:

- **Conflict analysis:** the identification and comparison of the positions, values, aims, issues, interests, and needs of conflict parties.
- **Dialogue:** a process for sharing and learning about another party's beliefs, feelings, interests, and/or needs in a non-adversarial, open way, usually with the help of a third-party facilitator. Unlike mediation, in which the goal is usually to reach a resolution or settlement to a dispute, the goal of dialogue is usually simply to improve interpersonal understanding and trust.
- **Interests:** the underlying desires and concerns that motivate people to take a position. While people's *positions* are what they say they want, their *interests* are the reasons why they take a particular position. Parties' interests are often compatible, and hence negotiable, even when their positions seem to be in complete opposition.
- **Identity:** the way in which people see themselves, i.e., the groups that they feel part of, and the significant aspects of themselves that they use to describe themselves to others.

- **Needs:** Psychologist Abraham Maslow suggested that all people are driven to attain certain biological and psychological requirements, which he called “fundamental human needs.” Several conflict theorists (e.g., John Burton and Herbert Kelman) have applied this idea to conflict theory, suggesting that the needs for security, identity and recognition underlie most deep-rooted and protracted conflicts. Most ethnic and racial conflicts, they argue, are not interest-based (and hence cannot be negotiated) but are driven by the subordinate group’s claiming of fundamental needs. The only way of resolving needs conflicts is to restructure the society so that the fundamental needs of all groups are met (Conflict Research Consortium 1998).
- **Parties:** the people who are involved in the dispute. Most parties are “disputants”—they are the people who are in conflict with each other.
- **Positions:** what people say they want, or the superficial demands they make of their opponents. *Positions* are what people have decided, while their *interests* are what caused them to make that decision. One side’s position will often be the opposite of their opponent’s, but their interests may actually be compatible.
- **Values:** the ideas that people have about what is good, what is bad, and how things should be. People have values about family relationships (e.g., regarding the role of the husband with respect to the wife), work relationships (e.g., regarding how employers should treat employees), and other personal and relationships issues (e.g., regarding how children should behave towards adults, or how people should follow particular religious beliefs).

References

- Engel, A., and B. Korf. 2005. Negotiation and mediation techniques for natural resource management (Vol. 3). Rome: Food and Agriculture Organization of the United Nations. Available from https://peacemaker.un.org/sites/peacemaker.un.org/files/NegotiationandMediationTechniquesforNaturalResourceManagement_FAO2005.pdf (accessed December 2, 2022).
- Conflict Research Consortium. 1998 “International online training program on intractable conflict.” University of Colorado, CO, USA.

Questions

1. What demands did you come here to make of the other parties? (These are your **positions**.)
2. What would you hope that this session will achieve for you personally and others in your stakeholder group? In other words, what did you hope to gain out of it? (These are your **interests**.)
3. What are the **values** of your assigned stakeholder group?
4. What can you not live without (physically, culturally)? In particular, what are the things that you feel are threatened directly or indirectly to this dispute? (These are your fundamental **needs**.)

The town hall meeting

The script below is intended as a **general guide** that you should develop further and adapt based on your own understanding of the situation and your specific stakeholder role. It is deliberately not prepared as a complete script—each group should discuss their current understanding of the conflict and their stakeholders’ positions, interests, and values. They should then review their own speaking points for the town hall meeting. This information may then be supplemented, for instance through an online search for similar groups within the same geographic region (i.e., Central America). Each stakeholder group should discuss, agree on, and practice the general points that they wish to make prior to the town hall meeting. During this discussion, revisit and reflect on the various presumed causes and contributing factors of HWC identified through your spider map (Activity 1), and how they might result in grievances or points of contention.

Your instructor will act as the facilitator for the town hall meeting and will explain the basic guidelines or rules of the town hall meeting. By the end of the town hall meeting, each stakeholder group will have had the opportunity to speak freely about the conflict. The groups will be graded based on how well they have represented their respective groups, including communicating their central concerns, delivered their arguments, and researched their case. Remember that this an opportunity for the stakeholder groups to voice ideas and opinions; it is not a court hearing and a resolution is not required.

Mayan Community Heritage Trust (MCHT) Leaders:

Why does the MCHT's name get called whenever there are incidents of this nature?

The jaguar does not belong to the park service. We need to be part of what is happening to them and our community.

These meetings are pointless because what we have to say is disregarded even before it comes out of our mouth.

What has happened is your own doing! You brought this on all of us, but our hands are clean!

Further Context:

MCHT stakeholders are frustrated and angry at being implicated or blamed for not doing enough to convince other residents to support the objective of the Ministry of Labor and Development (MLD) and the work of the National Park Service (NPS).

National Park Service (NPS) Director and Staff:

We have worked tirelessly for this community, and we are doing our very best to help Belize conserve its globally endangered biodiversity.

These species (jaguar) are critically endangered and if they go extinct, they will be lost forever! Livestock farmers or poachers are killing them in the wild.

This community cannot protect the jaguar alone and your meddling stirs up trouble.

Further Context:

The majority of NPS cash income is from the tourists coming to see the jaguars, who buy NPS goods, such as baskets and carvings.

Ministry of Labor and Development (MLD) Representatives:

We are outraged by these acts of vandalism and call on anyone with information that could lead to the arrest of the perpetrator(s) to come forward! The authorities are here to take your information.

We are trying to make life better for the town and build our community, why can you not see that?

We all know that wild predators will eat whatever food they can catch—why do you think that this is our responsibility all the time?

You people have no vision or business experience and we have heard enough of your endless complaints!

We even tried a compensation program, and your greed and dishonesty made the program bankrupt!

Further Context:

The MLD is responsible for receiving complaints of damages caused by wildlife. They send field officers out to farms to assess these claims and compensate farmers in either cash or by replacing crops or livestock that have been damaged or destroyed/ killed.

Chactemal Livestock and Youth Development Program (CLYDP) Spokespersons:

The police broke into our meeting once and assaulted several of our members. This was never investigated—why should we help now?

Why is so much money being invested in building a colorful mural, etc., when we cannot get loans to build fences to protect our goat pens?

You all work 9 to 5 in your air-conditioned offices while we have to watch our animals, day and night in the field, often risking our lives!

You bus your tourists through our villages to see wildlife. You secretly encourage these animals to come out of the forest to show to tourists.

If you never come to our community meetings or visit the MCHT, what do you know about how we live?

Further Context:

The youth of the CLYDP are possibly the most disenfranchised of the stakeholder groups. Often there are tensions about whether wild animals are being valued more than people by State and park officials.

Belize News Network (BNN):

The local correspondents for BNN have their ears on the ground and occasionally attend meetings of the various groups. They are very interested in the current state of affairs as disputes encourage greater public interest in media items and create more demand for their work. BNN is a private organization.

Note:

The media group will determine their own position and interests. At the end of the town hall meeting there will be approximately 10 minutes where the media can ask questions of the different stakeholders.

After the town hall, you will write a report reflecting on the meeting. In order to capture the key components of the discussion, use the following Conflict Matrix to note the various positions, interests, values, and fundamental needs that are part of this conflict. A Conflict Matrix can be used to map the conflict's elements. By using this tool, all parties can better understand the current state of the conflict and later exchange ideas on how to best achieve the alternatives for amicable management. This matrix is for your own use and will not be turned in, unless requested by your instructor.

Conflict matrix

	MCHT Leader	NPS	MLD	CLYDP
Values				
Positions				
Interests				
Needs				

ACTIVITY 3: ANALYZING THE CONFLICT

Conflict report

At home, write a report (one-page minimum) describing the role play activity that was completed in class. Be sure to address the following questions, and use evidence from the role play to support your explanations:

- What are the different parts of the conflict? What were the different issues that were discussed?
- What are the values, positions, interests, and needs of each stakeholder group? How do these influence their individual context and assumptions?
- How did the values, positions, interests, and needs of the stakeholder groups overlap? Which groups were most aligned, and which groups were most opposed?
- What was your role like in the activity? What would you do differently, if anything? What do you wish you knew about your stakeholder or other stakeholders?
- How did this activity influence your perceptions of the different stakeholders and the conflict itself?

ACKNOWLEDGMENTS

Some sections of this module were adapted from or inspired by: Madden, F. 2009. Human-Wildlife Conflict Collaboration (HWCC) Resource Guide Version 2.0. Human-Wildlife Conflict Collaboration. Thank you to Alex Moore for adapting this module for a virtual or remote learning setting. To download the adaptation see this module's page on the NCEP collection (<https://ncep.amnh.org>).