



Human-Wildlife Conflict (or how to integrate the human element in conservation planning)

Participant list

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Introduction

Working group facilitator Silvio Marchini briefly explained the rationale behind the working group, highlighting the growing recognition of the importance of incorporating the human dimensions - human-wildlife conflict issues, in particular - into conservation planning. The exponential growth of scientific publications on human-wildlife conflicts (HWC) and the two independent working groups on human dimensions conducted during the last annual meeting (facilitated by Sarah Long and Phil Miller) were cited as evidence of the growing attention dedicated to this issue.

The introduction lecture addressed then the following topics:

I. The conceptualization of HWC as a complex issue composed of three parts: wildlife damage, persecution, and disagreement between stakeholders over how to deal with damage and persecution (Figure 1A). Damage is ultimately an ecological phenomenon (predation, herbivory, competition), therefore it can be understood and managed based on ecology; because most researchers interested in HWC have a background in the ecological sciences, it is no surprise that this is the part of the conflict that has received most attention. Persecution, however, is ultimately a human behavior, and disagreements between stakeholders are social conflicts. Behavioral and social sciences are, therefore, also vital for the proper assessment of HWC (Figure 1B);

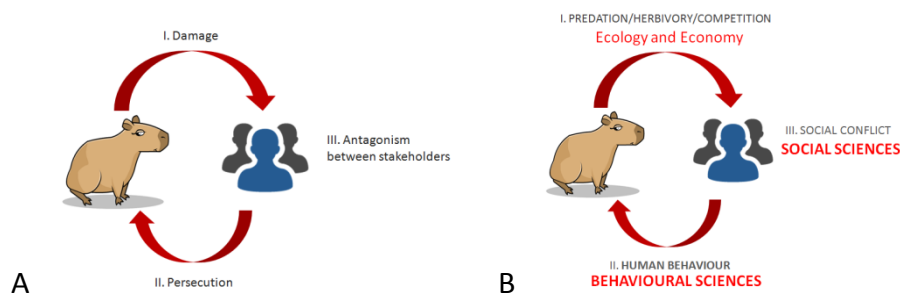


Figure 1. Diagrammatic representation of (A) the three fundamental components of human-wildlife conflict, namely i. wildlife damage, ii. preventative and retaliatory persecution (e.g. killing), and iii. disagreements between stakeholders over management (of damage and persecution) objectives, and (B) the disciplines required to understand and manage each component of human-wildlife conflict.

II. How the proper assessment of HWC - one that includes behavioral and social research - can contribute to action decision making (Figure 2). The emphasis was on social marketing, with the brief description of a project that successfully decreased the consumption of wild meat in the rural community in Amazonia by promoting the consumption of chicken (without educating the public about ecology or wildlife!).

HOW TO CHANGE BEHAVIOUR	
IF PEOPLE...	THEN
Do not know enough to understand the problem	Provide information (e.g. Environmental Education)
Know about the problem, BUT do not care about it	Change feelings and social norms (e.g. Persuasive communication, Social Marketing)
Care, BUT have no alternatives	Find alternatives
Have alternatives, BUT lack necessary skills to adopt new practice	Offer training
Have the skills, BUT face external barriers (e.g. lack of financial resources)	Remove barriers (e.g. Collaborations, sponsorship)

Figure 2. Example of decision tree to help planners and decision makers to design behavior change interventions based on the results from social research.

And III. The importance of looking at higher levels of decision making and broader spatial scales than the usual individual level and local scale (Figure 3), and the challenges of incorporating behavioral and social data (typically scarce) into spatial modeling.

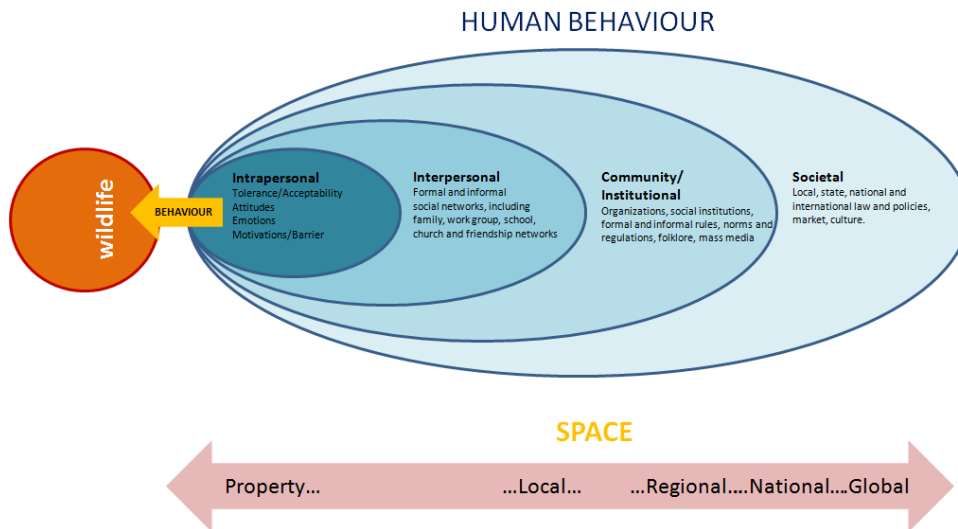


Figure 3. Diagrammatic representation of the hierarchical levels, and corresponding spatial scales, of the factors determining human behavior toward wildlife. Current challenges in research and application, including planning, are to upscale from the intrapersonal level and property/local scale, and to integrate the behavioral and spatial dimensions of human-wildlife conflict.

Discussion

Participants were split into three groups, corresponding to the three components of HWC:

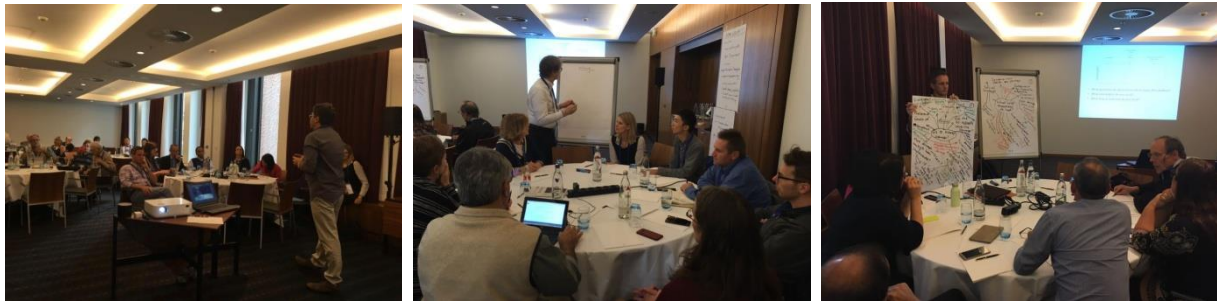
Group 1 - Damage,

Group 2 - Persecution, and

Group 3 - Disagreements between Stakeholders

Three questions were then posited to help participants reflect upon their specific component of HWC:

- What questions do we (conservation planners) need to ask to assess H/W conflict?
- What information do we need?
- What help or expertise do we need?



Participants were given 30 minutes to prepare an oral presentation of their thoughts and then each group was given 5 minutes to present it. The following is a summary of what was presented by each group.

Group 1- Damage:

Reality vs. perception

- To what extent is it financial, fear, human life loss, nuisance?
- To what extent have mitigation methods been put into practice? If not, why not?
- Is there a system in place to assess loss?
- Is there an acceptable time-frame when losses can be compensated?
- How does prior relationship with that species impact human behavior?
- What expertise do we need to assess (social scientists, ecological and species experts, economists, government officials, human demographics, observers, Specialist Groups)

Group 2 - Persecution:

Real world example: Human/Elephant conflict:

- Oil palm plantation owners must put in electric fences to protect crops from Asian elephants (sometimes forget to turn on fences)
- Poison put in coconuts slowly kill elephants (can kill entire family groups)
- One solution - keep elephant population at a size that protected area can support to minimize

crop damage (no incentive for elephants to leave protected area)

Questions:

- Do retaliators want specific animal(s) killed (e.g., the crop raiders) or any elephants killed?
- Is there an “acceptable” level of damage that plantation owners would tolerate without retaliation?
- Why do the elephants go into plantations? What is the cause of the crop depredation?
- Is killing: 1) preventative 2) retaliatory or 3) consumptive (e.g., meat, tusks, or for other species the pet trade)?
- How many animals get killed, how many survive, and what is the overall impact on the population?
- Do we have baseline on population size, range use, activity and spatial distribution?
- Who is doing the killing, how are they killing the animal, and is the killing impacting other species (e.g., non-target animals caught in snares)?
- How receptive would people be to non-lethal methods?
- Is the H/W conflict real or perceived?
- Is there over-blaming or wrong-blaming?
- Is the killing acceptable/condoned/traditional?

Group 3 - Disagreement between stakeholders:

Population:

- Species’ status
- People and their needs

What we need:

- Google analytics
- Chief (local)
- Historical assessment
- Demographics
- Migrations (new populations)
- Timing

Skills:

- Listening
- Species knowledge (historical)
- Trust/justice/engagement/respect
- Investigation

Conclusion, recommendations and next steps

The exercise of getting the working groups just to think very precisely about specific sub-questions gave them (and us, the facilitators!) valuable insight. The process we went through was to tackle the complexity of human-wildlife conflict by deconstructing it, and then re-assembling it again. That, in essence, is planning. The process of deconstructing a complex issue revealed two useful things: 1) the participants themselves gained insight into very important aspects of conflict they hadn’t previously thought much about; and 2) we the facilitators gained better insight into what aspects of conflict analysis a group of people/planners might struggle with and/or find straightforward.

We observed that their human dimensions-related observations were limited, and took a lot of time to emerge out of the conversation process. Despite the assistance provided by the facilitators during the

discussion, groups varied greatly in their understanding of the workshop process, as reflected in the information generated by each group and the way the information was structured. Next piloting workshops will certainly benefit from a more detailed briefing and more time for the participatory action research (PRA) session. The results are also very valuable for the IUCN SSC Task Force on Human-Wildlife Conflict (<http://www.hwctf.org>) members (facilitators Alexandra Zimmermann, chair of the TF, and Silvio Marchini) to understand, as it helps inform our TF about areas for capacity building – a key component of what we do.

The working group was the starting point - the prototype - for the design and development of a HWC assessment workshop (with emphasis on human behavior and conflicts of interest between stakeholders). Next steps include:

- Improve the HWC assessment workshop process.
- Expand the scope of the workshop to include the next step of the planning process: action decision making.
- Explore with CPSG staff the links between HWC assessment (and more broadly, social/behavioral science input) and other analytical components of the planning process (e.g. spatial modeling, PVA), as well as with HPVA workshops.