

“I NO LONGER FEEL ALONE”: INTRODUCING A DECISION MODELLING APPROACH TO ADDRESSING WOLF CONFLICTS IN ITALY

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1. Background to a multi-dimensional conflict

The persecution of wolves in Italy reduced their numbers to fewer than 100 individuals in the 1970s (Zimen and Boitani, 1975). A combination of national and European legislation protecting wolves, urbanisation and abandonment of rural areas, and the increase of wild prey led to an increase in the wolf population in the 1980s and recolonization of areas from which it had disappeared or remained at very low densities, such as the Grosseto Province of Tuscany (Boitani and Ciucci, 1993). Grosseto has a strong economic focus on agricultural production and a tradition of free-ranging livestock breeding and rearing (Pacciani, 2003). The high quality of local products has resulted in many of its dairy products gaining the Protected Denomination of Origin (PDO) designation.

Whilst the main prey of wolves in the area are roe deer (*Capreolus capreolus*) and wild boar (*Sus scrofa*), livestock represents a secondary item in their

diet (Bargagli, 2006). The impact of wolves on sheep may be compounded in the Province by the fact that, following the initial extermination of wolves, many local livestock owners lost the knowledge and implementation of traditional husbandry practices that had alleviated the impacts of wolves on livestock in the past (Fritts et al., 2003; Gazzola et al., 2008; Naughton-Treves et al., 2003). Whilst ex-post direct compensation is provided regionally, a recent study suggests that such a scheme, applied through different management solutions, has not been successful in mitigating the levels of discontent among livestock raisers suffering losses (Marino et al., 2016), and claims for damage compensation continue to be forwarded to the Regional administration while the conflict among different sectors of the society is often represented in the local press. For some, the expansion in the numbers and range of wolves can be perceived as a conservation success. However, not everyone shares this perception. As a consequence, the impact of wolves on economic activities in the area has led



Sheep milk production and transformation has a high economic importance in Grosseto. Photos: Luisa Vielmi.

to an intense conflict, resulting in retaliatory killing of wolves and social tension around wolf management (Marino et al., 2016).

As part of the LIFE MEDWOLF Project (www.medwolf.eu), and following a process of trust-building with all relevant local stakeholders, an approach was taken to promote social debate around wolf management in the Grosseto Province, encouraging key stakeholders to discuss the main issues around wolf conservation openly, before jointly identifying management approaches that could be implemented by local decision-makers.



The Italian wolf is endangered and protected in Italy. Photo: Mauro Rotisciani.

2. Methodological approach

The approach used was Multi-Criteria Decision Analysis (MCDA), a step-wise decision support tool whose aim is to evaluate management options based on multiple objectives (for a complete overview of the MCDA process, see Davies et al., 2013). The expectation of participatory MCDA processes is that they bring groups with competing interests and world-views together with the objective of sharing understanding and openly discussing difficult and complex issues – such as conservation conflicts.

The LIFE MEDWOLF team approached the MCDA through a series of three workshops (following the methodology set out in Redpath et al., 2004). In brief, the methodology comprises seven steps: 1) establish context and identify participants; 2) define criteria; 3) rank and weight criteria; 4) define management options; 5) score management options against criteria; 6) multi-criteria evaluation; and 7) deliberate options based on results.

In the first workshop, held during one day in May 2017 in Grosseto, a total of 15 experts and managers involved in local wolf management helped to define the main ecological, economic and social criteria relevant to wolf management in the Grosseto Province, with the support of a professional facilitator (step 2 of the methodology above). The criteria were related to the following factors:

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- i) Economic – e.g. work opportunities/livestock owners' income, work opportunities/commercial trade of livestock products – not tied with tourism, work opportunities/income from tourism sector;
- ii) Social – e.g. local traditions, relationships between stakeholder groups;
- iii) Knowledge about wolves;
- iv) Importance of biodiversity (existence value);
- v) Wolves as a danger to humans and properties;
- vi) Landscape – e.g. landscape composition, aesthetics;
- vii) Ecological – e.g. trophic ecology, interactions with wild prey, genetic identity, density of wolves, other predators;
- viii) Animal welfare;
- ix) Political/administrative – e.g. efficacy of legislation, acceptability of policies.

The second two-day workshop, held in May 2017 in Grosseto and moderated by the same professional facilitator, convened 15 individuals from various sectors (livestock owners, environmentalists, animal rights activists, recreationalists, hunters) with strong and potential conflicting views on wolf management to rank and weight the criteria identified in the first workshop and to jointly define management options (steps 2–4 of the methodology). Participants were selected in an opportunistic manner and in a totally experimental approach, to test the applicability of the

methodology in Grosseto. In order to keep the group at a manageable size and to ensure productive discussions, a set of three participants per sector were invited and selected through informal channels: people known to have strong opinions but willing to discuss and listen to others.

3. A process for debate

The literature on conflict refers to the potential for conflicts to increase democratic legitimacy and public trust in politics and decision-making, thereby framing conflict management as the creation of a process where people can share their opinions on conservation and better understand different values, attitudes



Photos: Luisa Vielmi.



and goals and the potential to seek shared solutions to conflicts (Young et al., 2012; 2016). In addition, much of the debate in the conflict literature has pointed to the need to engage with stakeholders in the conflict, based on critiques of traditional top-down approaches to conflicts, including those around large carnivores (Redpath et al., 2017; Mishra et al., 2017). The MCDA process implemented in Grosseto aimed to bring together actors in the conflicts with very different and often conflicting views on wolves and their conservation, and encourage initial dialogue and debate from grass-roots up as part of a longer process of conflict management.

At the beginning of the workshop, all participants were asked to set out their expectations. Although one hunter was sceptical about progressing simply by bringing together environmentalists, hunters and livestock owners, all the hunters acknowledged the need to find a common solution, potentially leading to co-existence between wolves and people. One hunter also voiced the need for increased knowledge on the situation – not only to better guide the role of hunters in the conflict: “Can the environment be managed, and what can hunters do?” but also to raise awareness more broadly about the conflict – an issue also raised by the environmentalist.

During the opening session of the workshop, when participants voiced their expectations, there was already a high level of openness exhibited by participants. The environmentalist, for example, acknowledged that the workshop would be a “personal challenge, because sitting with hunters is the opposite of what my association represents”. Similarly, one of the livestock owners admitted that he needed “to exchange ideas with the other stakeholders because livestock owners feel they have been abandoned [...] We feel we are alone in dealing with the problem”.

Perhaps because of this openness, the dialogue and debate during the workshop was dynamic and inclusive, albeit at times heated. A number of issues sparked lively debate, in particular the management of wolf-dog hybrids, the potential loss of PDO accreditation due to wolves having an impact on farming practices and the symbolic value of the wolf and its representation through the media. The process of the MCDA allowed participants to cover the areas they perceived as being critical to the wolf management issue through a number of different outlets – including thematic outlets (discussion of the criteria, discussion of the management option), but also procedurally through plenaries and smaller working groups.

4. Management options

By the end of the second day, a set of five management options were identified and agreed on by the group. The management options identified by the group are not necessarily options that all participants support, but rather best summarize the shared views on factors that most characterize the conflict. The management options identified included:

1. Efficient damage prevention;
2. Satisfactory damage compensation;
3. Effective management of the wolf and other predators – e.g. wolf-dog hybrids (through either lethal or non-lethal measures);
4. Higher levels of poaching control through enhanced rule enforcement and anti-poaching patrols;
5. Incentives to either limit or promote livestock raising activities and rural development in general.

Participants also identified a number of transversal elements, such as research, monitoring, communication and funding that were felt to be essential to ensure the success of any management option. In the following workshop, the management options that reached higher consensus from across the different stakeholders were the first two, while in principle the management of predators is supported, the way it will be implemented will require further debate. Such encouraging results were presented to a wider audience during the final project symposium held in Grosseto on 9th November 2017.

When asked whether their expectations from the workshop had been met, the response from participants was positive. Most participants highlighted that their expectations had in fact been surpassed, and all of them stated they were willing to be involved in a longer-term participatory process if it would lead to some concrete solution. One of the benefits of the workshop was that it was “different from when I meet with other hunters because it allowed me to listen to other perspectives. It's interesting to hear people speaking from a scientific perspective, from an emotional perspective, because that is how we progress on this issue”. The perception of the process having allowed them to listen to others was repeated by the other participants who said that they were “surprised with our result, and how environmentalists acted, as I expected a different behaviour from them”. This led one participant



Stakeholder discussion during the MCDA workshop in Grosseto. Photos: Juliette Young.

to say he was “looking forward to coming back, with less prejudice”. In addition to being surprised by the views of others, there was also a recognition of commonalities (albeit unlinked to wolf management...): “I’m sorry if sometimes I disagreed with [the animal right group representative] – but we have something in common, we both like wine!”

There was an acknowledgement that such an exercise can be demanding and emotional. One participant highlighted that, whilst her point of view had been emotional, “I think contributing with emotions is good. I felt everybody is also emotionally involved”. This highlighted again the openness witnessed at the start of the workshop. Perhaps the most positive response to the workshop was from the livestock owner, who summarised the outcomes of the workshop as follows: “I no longer feel alone. I realise we share ideas, we got to a joint understanding. This was the first time I took part in such an event and this method really helps you to express what you think. It helps you talk about things with regards to what other people think. I discovered new things, new points of view, and am completely satisfied, even if it was tiring!” All participants called for dissemination and sharing of the work they had done over the two days and for action to follow the work done in the workshop.

Following on from this process, which is long-term and ongoing, the next steps will be:

- i) Raising funds for more structured identification of first level and second level stakeholders;
- ii) Involving larger groups from different sectors, including the Regional administration, which has expressed high interest in the process.

5. Lessons learned for MCDA processes

Although the above approach has been developed at a small local scale, the potential for such a participatory approach could be considered with larger groups, in other regions and contexts where a species is protected and expanding in numbers, causing negative impacts on economic activities. This was identified early on by participants as a desired outcome of the process and repeated at the end of the workshop, with one participant stressing “it should be the starting point to something bigger”.

The approach was implemented in an area where the project team had invested effort in building trust with local stakeholders through collaboration and involvement in LIFE MEDWOLF activities. We suspect that this was essential not only in creating an environment in which stakeholders could debate and share information and views, but also for the selection of stakeholders attending the workshop. The organisers took great care in inviting individuals who they knew held strong views and represented the views of others, but could also clearly put forward these views and be constructive. Such knowledge of individuals takes time to gather, which should not be underestimated. The result in this case was a group who, whilst vocal, was still able to engage in the process.

The workshops were also carried out following the realisation from the stakeholders themselves that the conflict was complex, revolved around social dimensions, not easily resolved through the implementation of technical fixes or increased research. There was a sense among stakeholders that something needed to be done, but not just anything. The stakeholders had

obviously already tried a number of technical tools (e.g. fences, livestock guarding dogs), but realised that the conflict went deeper than the implementation of such approaches. This led to a situation in which stakeholders took ownership of their problem.

A key aspect that impacted on the success of this workshop was professional facilitation. Whilst this may be seen as a given, it is not always implemented. Often, scientists involved in a conflict will take it upon themselves to lead such processes, without acknowledging that they themselves are a stakeholder. Having a professional facilitator, perceived as being independent (although not necessarily neutral), can help ensure that all stakeholders can express their views and can encourage fair processes in which stakeholders feel they have a say. In addition, the facilitator was knowledgeable about the local culture – another important aspect to consider, not only in terms of understanding the pers-

pectives of stakeholders but also in terms of managing the process in a culturally sensitive manner.

Finally, the workshops also allowed sufficient time for informal interactions, not only during the breaks but also through the smaller group interactions. By the end of the two days, group members clearly knew each other far better and were less formal than when they first met, allowing certain barriers to be reduced. Whether this leads to a reduction in conflict remains to be seen. To conclude, these workshops are the start of a long process, and an effort will be made to obtain further funds to continue the process with the direct involvement of Regional administrators. Whilst progress seems encouraging so far, there is a need in all MCDA processes to include a more long-term formal evaluation that can assess the process and outcomes, including an understanding of how these processes affect behaviour.

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