

Addressing the Swedish Large **Carnivore Controversy: Identifying Roadblocks in Collaborative** Governance to Reduce Conflict

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In Europe, and many places throughout the world, the return, and preservation of large carnivores is escalating tensions between stakeholder groups, as well as between local actors and authorities. In Sweden, despite policies aimed at reducing conflict surrounding wildlife management, tensions seem to have intensified. This research investigates the collaborative governance model within Swedish wildlife management and what dampens the capacity to reduce ongoing tensions. In-depth interviews were conducted with stakeholders at different levels of wildlife management. Through an abductive approach combining empirical data from interviews and theories from the human-wildlife conflict and collaborative governance literature, we problematize the role of regional wildlife managers in this multilevel governance context, in exploration of ways to advance collaboration. Our model analyzes the challenges for wildlife managers to implement government policies based on broad international conventions while remaining accountable to local concerns. The results reveal that issues within the governance structure and relationships within management in terms of lack of legitimacy, trust, and participation, need to be addressed to create a socially viable collaborative governance regime capable of managing conflict.

Keywords: human-wildlife conflicts, rewilding, collaborative governance, multi-level governance, large carnivores, Sweden

1 INTRODUCTION

Since the implementation of the first Swedish wolf policy over 50 years ago, which listed the wolf as a protected species in 1966, the country is witnessing the formation of a stable and growing wolf population. This change has enlivened debates between different societal groups and further enhanced human-wildlife conflicts (Eriksson, 2016). Human wildlife conflicts can be between humans and wildlife, but more often are between humans about wildlife (compare IUCN SSC HWCTF, 2020)—for example when it is presumed that wildlife conservation efforts are prioritized over human needs, or when local people and institutions are "inadequately empowered to deal with

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conflict" (Madden, 2004, 248). The return of large carnivores to the Swedish landscape can be seen as part of a wider debate on the 'rewilding' of natural spaces, in particular since the official plan is to let the wolf spread from its core area in mid-Sweden towards the southern parts of Sweden. Rewilding is a "reorganization or regeneration of wildness in an ecologically degraded landscape with minimal ongoing intervention" (Butler et al., 2021, 1). These rewilding initiatives are often controversial among stakeholders, since the implementation of such measures focuses mainly on mitigating ecological risks, despite the consequences of change for humans living in areas of restoration or rewilding (Butler et al., 2021). In this context of rewilding, human-wildlife conflicts are accompanied by eroded trust for decision-makers, starker divides between different stakeholder groups and conflicting norms and values (Sjölander-Lindqvist et al., 2015; Sjölander-Lindqvist et al., 2020).

Forms of collaborative governance, where wildlife management is decentralized to the local levels, hoped to create a more inclusive and transparent process to quell increasing tensions surrounding large carnivore presence in Sweden (Swedish Government Bill 2012/13:191). Despite national strategies that strive for a collaborative governance design, conflict continues to permeate wildlife management (Duit and Löf, 2015; Hallgren and Westberg, 2015; Sjölander-Lindqvist et al., 2020; Sjölander-Lindqvist et al., 2021). This continued conflict begs us to critically explore how the collaborative governance model can be improved when policy is implemented within a multi-level governance context. We highlight the challenges for wildlife managers and delegates involved in wildlife governance to navigate a governance context where a multitude of different interests and stark value divides should be appeased. As recognized in previous studies, social conflict is often counterproductive to conservation efforts, and can therefore become categorized as destructive, or "pathological" (Harrison and Loring, 2020) when it leads to actions that oppose conservation efforts, as seen in Scandinavia with the prevalence of illegal hunting (Pohja-Mykrä and Kurki, 2014; Von Essen and Hansen, 2015), as well as dysfunction within management in terms of disengagement and mistrust (compare Young et al., 2016). Emerson and Nabatchi (2015) for example, assert that more needs to be done to advance theoretical explanations as to why governance measures do not encourage and yield consensual solutions and fail to provide empowerment in state politics and policy implementation. Colebatch (2006) similarly contends that the situation and the conditions surrounding changes to governance should be highlighted in order to explain its outcome. These changes in governance are also relevant to rewilding issues, seeing as, "there has been little consideration of how rewilding could alter the human components of the social-ecological systems concerned, nor governance arrangements that can manage these dynamics" (Butler et al., 2021, 1).

This paper takes as its point of departure, that, addressing challenges where human livelihoods are understood to be at stake, demands a governance structure where ideas can be exchanged, relationships can be established, common interests can be identified, power can be distributed, and options on how to work together can be explored (Emerson and Nabatchi, 2015). These ideas are made explicit in the Aarhus Convention (1998), and in the Swedish Government Bill (2008/09:210, 2012/13:191, see also 2016:5), in that the governance structure should be a practical implementation of the ideas of legitimacy, transparency, and accountability. However, researchers recognize an inherent conflict between collaborative governance and accountability, as decisions made in collaboration between actors make the decision-making process challenging to trace and jeopardize the checks and balances between governmental bodies (San Martín-Rodríguez et al., 2005, Larsson and Sjölander Lindqvist 2022).

Collaboration within a multi-level governance structure that seeks to include many actors is further complicated due to the nature of this 'wicked problem' – societal problems that are never solved, but rather "re-solved – over and over again" (Rittel and Webber, 1973, 160). Our analytical model explores roadblocks to managing conflict in a Swedish county, from the global to the local levels, focusing on the contentious issues within a context of rewilding.

2 POLICY DEVELOPMENT OF LARGE CARNIVORE MANAGEMENT IN SWEDEN

Several key policy initiatives on the international and EU level have shaped Swedish policies pertaining to the recovery of large carnivores. For example, the Convention on Biological Diversity (1993) is a legally binding international treaty with the main objectives of the conservation of and sustainable use of biodiversity, and sharing equitably the benefits arising from genetic resources. Two other highly important conventions are the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1983) and the Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) (European Commission, 1992). The Bern Convention obliges Contracting Parties to take measures to maintain populations of wild flora and fauna at appropriate levels according to ecological, scientific, and cultural criteria. The Habitats Directive requires Sweden as a Member State of the EU to take measures to reach or maintain Favourable Conservation Status of natural habitats and wild plants and animals while also accounting for the economic, social, cultural, and regional dimensions. The latest inventories of large carnivore species in Sweden (i.e., wolves (Canis lupis), bear (Ursus arctos), lynx (Lynx lynx), wolverine (Gulo gulo), and golden eagle (Aquila chrysaetos)) estimate population levels for each species to be above the minimum level set by SEPA that is needed to maintain a Favourable Conservation Status (Swedish Government Bill 2012/13:191). In terms of the effects of increasing population levels on public attitudes, a longitudinal study conducted in Sweden between 2004 and 2020, shows that there are regional differences in acceptance for large carnivore population levels, but that these attitudes have been relatively stable over time (Dressel et al., 2021). The report finds that there

are more people living in areas with higher concentrations of large carnivores that think population levels should be reduced, compared to those living in areas with lower levels. The report also finds that there is an increased acceptance among the public over time for hunting large carnivores that cause problems for humans (though with the exception if the reason is due to fear, or that it competes with hunting ungulate species) (Dressel et al., 2021).

Due to the increasing population levels of large carnivores and criticism of the "top-down" nature of the 2001 large carnivore policy (Eriksson, 2016, 12), the Swedish Parliament passed "A New Large Carnivore Management" policy in 2009 (Swedish Government Bill 2008/09:210). This policy was based on a collaborative governance approach that awarded more influence to regional and local levels by handing over some management decisions to the newly established Wildlife Management Delegations (WMD) at the county level and administered by the County Administrative Boards (CAB) (Eriksson, 2016). The aim of this policy change was to increase acceptance and legitimacy at the local level (Swedish Government Official Reports 2012:22). The WMDs are comprised accordingly: Chairing each delegation is the county governor (landshövding); included in the delegation are five politicians (to represent the general public), one illegal hunting expert recommended by the police authority, and representatives from each of the following interest groups: agriculture, forestry, conservation, hunting/game management, outdoor life and local trade/tourism. In 2019, two additional representatives were added, one for the conservation interest, and one for the nature/ecotourism interest (Swedish Code of Statutes 2019:1078). Each representative is elected for a four-year period and can then apply to be reappointed for another such period (Swedish Code of Statutes 2013:1131).

An additional point of contention central to the wolf debate globally is the socio-economic factor of rural-urban and class divide. A study in Norway revealed that rural communities were particularly distressed by wildlife-imposed damages, as they perceive that wildlife is being protected by the "urban elites" (Skogen et al., 2008, 106). Skogen et al. (2008) describe these urban elites as those living in cities who many rural residents perceive as carrying out the state's conservation agenda see also Skogen and Krange, 2020). In a Swedish study by Eriksson (2017), the effects of 'political alienation', which was expressed more distinctly amongst residents of rural areas, factored into participants being less likely to accept the current wolf policy. As wolves more often inhabit rural areas, people living in these areas will by default, be more affected by the increasing numbers. Both 'proximity' to and 'direct experience' with wolves have been discovered to lead to overall decreased acceptance of the species, and as such will likely increase the often-opposing opinions between urban and rural residents over time (Eriksson, 2016). The study by Eriksson (2017, 1374) highlights the need to include an assessment of the social context in policies on natural resource management since addressing the power imbalances felt between rural and urban areas can lead to increased "policy legitimacy and management efficiency".

3 UNDERSTANDING POLICY CONFLICTS AND COLLABORATIVE POTENTIAL: A PROPOSED MODEL

Designing policies that are acceptable across actors first requires understanding the underlying problem before addressing structural issues within management (Burton, 1990; Johansson et al., 2020). We argue that by not taking into greater account issues in the relationships between authorities and the collaborative governance process within large carnivore management, existing divides may deepen and further complicate the conflict (compare Madden and McQuinn, 2014). Section 3.1 outlines the methods used in our abductive research approach, and section 3.2 outlines the analytical model we developed from the governance context, the scholarly literature, and our empirical data.

3.1 Method

A total of 43 interviews were conducted in two rounds between 2016 and 2020. In 2016, 21 in-depth, open-ended, and semistructured interviews were conducted with CAB officers and managers, and members in the WMD. Between 2019-2020, 22 interviews were conducted with CAB officers and managers, and WMD members, as well as at the Swedish Environmental Protection Agency (SEPA/Naturvårdsverket). Collecting the interview data over two periods shows that the controversy is ongoing despite political changes over the years. All interviewees were anonymized due to the sensitivity of the topic, and thus were not assigned labels within the results section. All interviewees were asked questions related to challenges and incentives to collaborative governance and perceived legitimacy, such as whether they feel there is an open discussion climate in their respective organization, and how they feel about their role in relation to other management bodies (for example, their role within WMD in relation to SEPA and CAB). This method of posing open-ended questions meant that interview 'guides' were more interactive, and that the researchers could take initiative in choosing follow-up questions to ask based on previous interview and field experiences. In this way, the interviews could become more precise over the period of data collection between 2016 and 2020. Points of conflict were derived from open-ended interview questions around the following main themes: the set-up and structure of their role, how they feel about the decision-making process in their respective role, and opinions and experience regarding the working relationship they have with other forms of wildlife management. The researchers ascertained contributing factors to conflicts in collaborative governance from respondents' experiences and opinions as expressed through feelings of tension or frustration.

The majority of interviews in 2016 were in-person with six done over the phone, each lasting between one to two hours. One delegate from each represented interest group and political party within the delegation was interviewed. Additionally, four CAB officials, each with different responsibilities (e.g. wildlife tracking, population inventory), and the county governor were interviewed.

The interviews conducted between 2019-2020 were with nine WMD members, twelve CAB officers, and one employee at SEPA. Interviews were all conducted in Swedish and were over the phone due to the Covid-19 pandemic. The majority of the interviews were audio recorded and transcribed into Swedish. Those that were not audio recorded were annotated by hand by the respective interviewer. The interviews with WMD members included questions focused on how they understand the role of the WMD, their interpretation of their role, as well as their expectations and hopes within that role. The interview with the SEPA employee posed questions about their role within SEPA and about collaboration with the WMDs and CABs, in addition to communication with and involvement of the public in large carnivore questions.

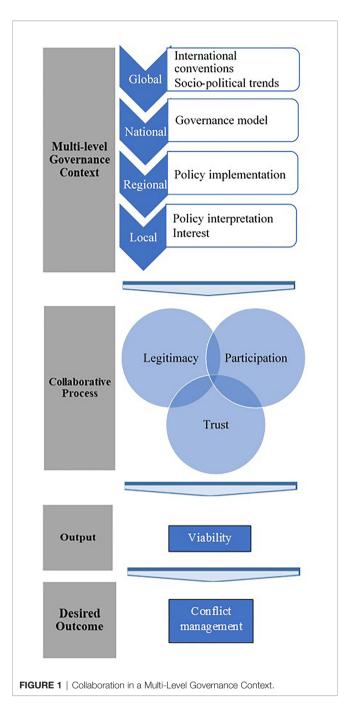
The analytical method used for this research was a thematic analysis of interview data relying on a guide by Braun and Clarke (2006). The results are thematized based on respondents' statements and opinions regarding the set-up (governance) and process (management) based on their role within the wildlife governance. Our study began by analyzing the interview transcripts in Swedish and searching for "patterns of meaning and issues of potential interest" across all the interviews using the NVivo 12 software program. The next phase involved generating codes (n=17) out of the patterns that arose from a first read through the data, such as "trust", "communication", "conflict", and "influence". Subsequent steps involved defining the codes into three overarching themes presented in the results section and translating the selected interview data into English. This next section discusses the identified themes from the scholarly literature which were incorporated into our analytical model. These themes will be elaborated upon in section 4 based on interview data.

3.2 Model

Our analytical model is inspired by theories and frameworks within the literature on collaborative governance and conservation conflicts (compare Madden and McQuinn, 2014; Emerson and Nabatchi, 2015; Harrison and Loring, 2020). The three central aspects within the literature of *trust, legitimacy, and participation* were also identified within interviews as significant factors affecting collaboration, and thus became the *collaborative process* part of the model (**Figure 1**). The empirical significance of these themes became evident once placed within the theoretical context of what is deemed necessary within the scholarly literature for successful collaboration – highlighting the challenges both internally and externally for managers to a) find the right tools for collaboration within the system context, and b) be able to use them to effectively manage human-human and human-wildlife conflict.

3.2.1 Multi-Level Governance Context

Understanding the controversy within wildlife and how elements have interacted over time is essential to finding an appropriate intervention to conservation conflicts (Harrison and Loring, 2020). Similarly, Madden and McQuinn (2014) argue that conservation conflicts are often deep-rooted due to previous history between stakeholders. Therefore, getting from policy



formation to achieving a goal within said policy involves an assessment of the entire chain of interactions, and cannot be analyzed solely from a collective level, nor an individual level, and rather should be looked at from a combination of both. Accordingly, neither stakeholders nor exacerbating variables will necessarily always be at the local level, even if conflict is localized (Young et al., 2010). Contextual factors such as the political, social, and economic conditions and international bodies can all influence how partnerships emerge and develop (Gray and Purdy, 2018). Our model in **Figure 1** incorporates the vertical dimension – i.e., the global, national, regional, and local scales

that influence the horizontal dimension – i.e., the collaborative process navigated by members of the WMD and CAB managers.

At the global level, Sweden's joining of several international conventions related to conservation has shaped its national wildlife policies and has produced the current collaborative governance model for wildlife management. Nationally, SEPA is responsible for achieving the country's goals based on the EU Habitats Directive (Hansson-Forman et al., 2018). The Directive is implemented through national hunting laws, and through regulations in the Swedish Environmental Code (miljöbalken) (Naturvårdsverket 2016). The decentralizing of wildlife management decisions in the "new large carnivore management" policy (Swedish Government Bill 2008/09:210), was meant to reduce tensions by involving more actors at the local level (Eriksson, 2016). However, a point of contention becomes how to include different knowledge systems, as it can lead to the marginalization of certain groups rather than inclusion (Sjölander-Lindqvist et al., 2020). A study in Sweden highlights the tough balancing act for regional wildlife managers to adhere to national-level mandates while remaining accountable to the local level since the majority of management are local stakeholders with personal interests at stake (compare Sjölander-Lindqvist and Sandström, 2019; Cinque et al., 2021). Similarly, Ansell and Gash (2008) explain how governance cannot expect people to leave their feelings and previous experiences 'at the door' when entering a dialogue process.

Furthermore, researchers studying conservation conflicts widely determine that constructive conservation processes cannot be achieved by simply addressing the material concerns at the surface level of a conflict, but rather require assessing the underlying values, concerns, and needs of stakeholders (Sjölander-Lindqvist, 2008; Madden and McQuinn, 2014). These conflicts are driven by nonnegotiable needs and values (Burton, 1990), which will produce negative outcomes if threatened, especially if parties experience their cultural identities are at stake by the presence of wolves in their immediate, nearby or more remote surroundings (compare Lederach, 1997; Sjölander-Lindqvist, 2008). Seeing as management is made up of individuals with diverse interests and concerns, studying the social drivers involved in a conflict is critical to creating not only a functional delegation but to producing an effective and sustainable wildlife management process (Dickman, 2010; Bennett, 2019; Cinque et al., 2021). Within a multi-level governance context, the inclusion of diverse actors can itself further complicate collaboration, and thus increases the need to focus on social factors hindering conflict management (compare Gray and Purdy, 2018; Sandström et al., 2020; Larsson and Sjölander-Lindqvist, 2022). These factors are identified and discussed in section 5.

3.2.2 The Collaborative Process

In the *collaborative process* element of the model (see **Figure 1**), the three categories of *legitimacy, trust, and participation* were determined based on theories within the scholarly literature, and due to the connections to these categories that arose in our empirical data. *Legitimacy* (both internal and external) is necessary to complete tasks and to attain agreed upon sets of goals as a functioning unit (Emerson and Nabatchi, 2015, see also Sandström et al., 2020). Internal legitimacy is determined by the perceived credibility of efforts and interactions from inside

management, whereas external legitimacy translates to "whether nonparticipants see the collaborative governance process as legitimate and sufficiently representative" (Human and Provan, 2000, 168). Lundmark and Matti (2015), 156 contend that, in order to increase legitimacy, there needs to be a deliberative design that "promotes understanding and learning amongst participating stakeholders". Internal legitimacy builds off the conviction that the others are trustworthy and have similar interests (Emerson and Nabatchi, 2015). Skogen (2003) argues that adaptive large carnivore governance measures do not increase legitimacy simply by addressing the practical and economic concerns of stakeholders, but rather need to further incorporate the cultural dimension of the conflict.

Within the literature on conservation conflicts and collaborative governance, trust is identified as one of the most important overarching factors for creating an effective process (Senecah, 2004; Emerson and Nabatchi, 2015). Building and maintaining trust with landowners in the conservation debate is considered key to preserving biodiversity (Young et al., 2016). While the structure for deliberative governance can exist, the relationships between stakeholders within this structure can impact its effectiveness (Lundmark and Matti, 2015). In the case of large carnivore management, Sjölander-Lindqvist et al. (2015, 121) delimit five core concepts to include for a successful deliberative governance process: trust between stakeholder groups, "fair representation" of actors' interests, recognition of a multitude of knowledges, "communication, based on dialogue about pluralistic perspectives, to collectively formulate and agree on set goals", and leadership highlighting "empowerment". Burton (1990, 126) refers to the legitimization of authority, which can be examined through the concerned actors' level of "experienced reciprocity". If there is no expressed value in having a mutual relationship or there is a lack of trust, authority will slowly break down, likely leading to "resistance and instability in the relationship" between actors in the context of collaborative governance (Burton, 1990, 126).

Participation is a generally vague term that can produce different interpretations depending on the actor and context. Arnstein (1969) outlined a "Ladder of Citizen Participation" to illustrate the layers between non-participation, and actual influence where citizens are involved in decision-making. Information, consultation, and dialogue are steps that can result in more symbolic participation rather than real influence, and do not guarantee that stakeholder interests and concerns will be addressed (Johansson et al., 2020). Senecah (2004, 23) argues that in order for actors in this process of environmental public participation to meaningfully participate, stakeholders need access to information and education to the extent that they feel they can contribute to a process in an active rather than "reactionary" way. Simply providing a public forum for people to openly discuss does not mean that they have adequate access to participate effectively (Senecah, 2004, 27). Thus, spreading data and information does not always equate to action, as it "can merely inform or confuse", whereas "knowledge guides action" (Groff and Jones, 2003, 30). In Senecah's Trinity of Voice model (2004, 25), influence is explained as a culmination of both access and standing which has allowed for a person's ideas to be thoughtfully and respectfully considered, and transparently debated before reaching

a final decision. Finally, participation itself does not always lead to reduction in conflict, as seen in Sweden, yet remains important to reaching political decisions regarded as legitimate by stakeholders (De Marchi and Ravetz, 2001; Sandström et al., 2020), and to avoid "increasing perceptions of participatory injustice" (Jacobsen and Linell, 2016, 205).

3.2.3 Output and Desired Outcome

Viability is the output that is needed from the collaborative unit (i.e., WMD, CAB) to achieve the desired outcome of conflict management. According to the definition by Emerson and Nabatchi (2015, 204), viability is the "capacity to continue to carry out actions and adapt to changing conditions". In order to strengthen the performance level, or the "actions, outcomes and adaptation", the authors contend that improvement is needed in the collaboration "dynamics", or process (Emerson and Nabatchi, 2015, 202). In the context of our study, if the collaborative process within the WMD is not capable of addressing social conflict and adapting to future challenges surrounding large carnivore management, a long-term solution to reduce conflict will not be achievable (compare Madden and McQuinn, 2014).

The desired outcome of *conflict management* is derived from the Swedish Government Bill 2012/13:191 "A sustainable large carnivore policy". This policy calls for a protection status of large carnivores, with a decrease in the number of damages to livestock and pets, and an increase in trust for the administration by means of the regionalized management structure created in 2010. This is with the end goal that people and large carnivores are able to "live side by side" with minimal conflict. As stated within the policy, management should accordingly be adaptive in order to accommodate for changing conditions. Additionally, the WMDs are responsible for establishing regional goals that consider the impacts of large carnivores on industry, culture, and biological diversity more widely. The collaborative dynamics in our multilevel governance model (Figure 1), are shaped by the global, national, regional, and local frameworks and influence the viability for wildlife managers to attain this policy goal, as outlined in the results.

The following results section is organized by the most prominent themes that arose from interviews pertaining to what wildlife managers have reported is preventing effective collaboration - namely legitimacy, trust, and participation. These components make up the *collaborative dynamics* of our analytical model in **Figure 1**, as they are widely discussed within the collaborative governance literature as necessary for successful collaboration and effective management (compare Emerson and Nabatchi, 2015; Sjölander-Lindqvist et al., 2015; Sandström et al., 2020).

4 ROADBLOCKS TO COLLABORATION

4.1 The Different Layers of Legitimacy

Some interviewees within CAB and WMD stated that increasing the reimbursement amount for livestock damages, and licensed hunting and lethal removal are measures that can help increase policy acceptance among stakeholders living close to large carnivores. One respondent said: "It gives the local society, breeders, livestock farmers a possibility to handle a problem legally—the alternative is that one illegally handles the same problem". Interviewees highlighted the importance of not letting the cost of having these animals around fall solely on the individual, but rather be shared by the state. However, one respondent emphasized that economic compensation alone would not solve the issue. They said: "People are afraid alsoone cannot help that with money". Overall, there are differences of opinion within wildlife management in the county when it comes to a solution to increase public acceptance. Some respondents are of the opinion that there is a general lack of acceptance regarding large carnivore presence, regardless of compensation for economic losses.

Some members within the WMD expressed concern over the dominance that certain interests and/or individuals have over agenda points. Respondents related this to the level of knowledge and/or personal interest that a member may have for specific topics. The lack of time for meetings was reported as an issue in that members feel there is not enough time to air out ongoing issues or debates. When asked whether one needs more time to ventilate the problems, one member replied: "Yes, and to get the chance to ask questions, that others should get the chance to ask questions, that's why maybe one chooses not to say something because there is a time shortage". The same person went on to say: "We don't have time for longer discussions either. I think that the time pressure is a serious problem for the democratic process. These are questions that one would need to discuss a little more". This lack of knowledge/interest in certain topics for some members and lack of time for discussion is presumably hindering the deliberative governance process by affording certain members more voice and control while diminishing that space for others. Similar issues around the deliberative process were found in a study on the former WMDs, known as the Regional Predator Groups (RPGs). In this study, Sjölander-Lindqvist and Cinque (2014) contend that low levels of trust between RPG members and the CAB (due in part to preexisting antagonisms between stakeholder groups), and minimal potential for the RPGs to influence decision-making through this new deliberative set-up, contributed to the failure of the RPGs to handle contradictory perspectives. As stated by Lundmark and Matti (2015) and Sjölander-Lindqvist and Cinque (2014), there needs to be a system that can better accommodate opposing viewpoints in order to increase legitimacy through a deliberative governance model. Sjölander-Lindqvist and Cinque (2014, 377) propose this system be based on the "tangible conditions and associated values of participants and their contexts". Our results show, similar to the above-mentioned studies, that there is an overlapping tendency between trust and legitimacy, with mistrust feeding into a lack of legitimacy.

As contended by Burton (1990), conflict and conflict resolution are both connected to legitimacy of authority in that the relationship can break down if there is not 'mutual reciprocity'. This deterioration in relationships to authority was

acknowledged by many respondents for various reasons. A number of interviewees expressed that the relationship between authorities and local stakeholders has become almost non-existent. WMD members and CAB officers related interactions they had with stakeholders who feel they are not being listened to, as the state is making decisions far away from those who are most affected, and not providing enough compensation for economic loss, or clarification of how they came to a decision or policy. Thus, from some of the stakeholders' side, there was no foreseeable gain in maintaining a relationship with the state.

Some members feel that differences in competency within the WMD affect the legitimacy of the delegation in terms of its reputation as a managing institution, as well as confusion and frustration over the mandate for delegates and the WMD as a whole—that it should in some way be clarified for delegates and communicated to the public more. In not having a clear mandate, some interviewees expressed a sense of resignation for the whole process. When asked what they think could/should be changed to make the process better within WMD, one respondent said:

I don't think changes need to be made. Rather clarify the directive—clarify what assignments the WMD actually has. Today we are thinking about if this [WMD] is something that is worth putting time into. It doesn't feel good when we end up in this situation.

Others contend that low public awareness of what the WMD does and who is sitting there, negatively affects the legitimacy of the delegation. A few interviewees feel that this unawareness by the public on decisions and procedures within wildlife management that are impacting them is affecting the democratic process. They said: "People don't know that the delegation exists—where one lands in the decision-making chain. I didn't know either before. I think that reflects a deficiency in democracy—that one changes things and doesn't inform the public about it". Some reported that people resort instead to getting their information from other sources or within their own social circles.

Additionally, some respondents feel that management is not anchored enough in local conditions as it should be, and that there is an absolute need for an investigation into the socio-economic factors that impact people living in areas with large carnivores. According to one respondent: "The socio-economic lies also as a basis for management plans. We cannot disregard that people are a part of nature and have to be able to exist". The legitimacy as a managing institution is therefore considered questionable by some in terms of overlooking those most affected by large carnivore questions.

While many interviewees feel that there is a good discussion climate within the WMD, respect, and legitimacy for authority are generally considered lacking regarding SEPA. Nearly all respondents within the WMD and CAB expressed a negative opinion of SEPA and their relationship to them as an institution and feel they are not equipped to deal with social conflict over large carnivores. A sentiment across many interviews is that decisions made by SEPA are out of touch with reality and go "over the heads" of the WMD. One CAB officer reported:

I have no trust for them [SEPA] because they don't have any bearing on reality. It doesn't matter that they have moved to Östersund. They don't become more involved because of that. They are the same people. They don't meet the farmers at their kitchen table.

The lack of legitimacy is thus also related to the behavior of other actors in the wildlife governance outside the WMD and highlights the importance of trust for building legitimacy.

4.2 Trust and Participation

The lack of trust between authorities and affected stakeholders, and between SEPA and the WMD is regarded by most interviewees as one of the biggest issues affecting wildlife management. Combined with the feeling of having little to no influence over one's surroundings, lack of trust reportedly leads people to forego contacting the authorities responsible for handling incidents with large carnivores. One CAB officer believes that this is due to the authorities not effectively addressing people's questions and concerns regarding the presence of large carnivores. The same person goes on to say that it is not clear "whether affected stakeholders have ever had trust for the state, but it is still important to listen when they say they do not have this trust". It is thus not necessarily the case that this distrust is a consequence of the collaborative governance model, but at the very least it indicates that the level of trust has not increased.

Many delegates feel that they lack decision-making power and are constricted by the legal framework of SEPA and the EU. One member said: "It [WMD] is steered from above: SEPA and the EU. In this case, it is a masquerade. It is the clearest example where one doesn't, in reality, have any space for action". Interviewees also discussed how, particularly those living close to large carnivores, lack influence. On the management side, there is an overall sentiment that one does not have as much influence as one would need in order to feel they are meaningfully participating in the decision-making process. Many delegates expressed uncertainty about their role within the WMD, or frustration and disillusionment with the administration for not meeting their expectations. As one member related:

Different bases simply. Different pictures of what their assignments include. Different experiences of how one conducts a session, how one makes decisions, which mandates do we have to make a decision—it is very curtailed, some are frustrated that they can't do what they want within the regulatory framework.

The interviewee was careful to not criticize the WMD and felt positive about their dealing with wildlife management questions. However, in terms of the intended goal that the WMD should be representative of society and include the perspectives of affected stakeholders (see Swedish Government Bill 2012/13:191), they were critical towards how this works in practice. They said:

I think that one sees in the document that it is about clearly communicating what our goals are to this countryside population that lives close to these animals, or? But nowhere does it say that one intends to consider their views, and it leads to no discussion, and there isn't an interest in knowing either//So there is nothing wrong with the WMD, but it is not enough to say that one has from the authority side, taken in viewpoints from those who are affected by the large carnivore question.

Additionally, this respondent argued that it is necessary to involve people who are generally not in contact with the authorities and vice versa by listening to and communicating with them before a decision is made that will affect them—which involves meeting local people in their environment. They are skeptical about how this could be achieved in practice—arguing that it is not due to a lack of motivation but rather due to limited resources.

When asked about whether the delegation needs to be more anchored in local conditions, one member said:

Yes, it has to be. The decisions that are made are in line with it [local conditions]—exactly that which the decisions say, but nothing happens. The whole administration has become a laughingstock. It is joked about and people are shaking their heads. It has resulted in no trust whatsoever for what politicians decide and say in these questions—this is dangerous—it can contaminate other questions.

Again, we find that there is an overlap between trust and legitimacy, as evidenced in the above quote. The next section discusses the potential for conflict management through collaboration, using our analytical model for understanding the roadblocks to collaboration in a multi-level governance context.

5 ADDRESSING POTENTIAL FOR CONFLICT MANAGEMENT THROUGH COLLABORATION

5.1 Finding Common Ground

For wildlife managers' continued engagement and motivation to collaborate, it is vital that they feel their time and effort in the process is beneficial to their own interests and/or that of their represented group (Emerson and Nabatchi, 2015). In Table 1 below, we provide an overview of our recommended actions for addressing the hinders to collaborative governance, as a result of our abductive approach. In the context of decentralized wildlife management, where diversity of stakeholder interests and motivations vary widely, "mutual understanding" becomes an essential component to successful collaboration. Here, trust is the basis for the ability of stakeholders to "comprehend and respect others' positions and interests, despite disagreeing with them" (Emerson and Nabatchi, 2015, 66). Failing to recognize that wildlife managers also act upon their own "value-laden and socially constructed perspectives about nature" (Frank and Glikman, 2019, 16) will result in oversight in the conflict, as has been the case in Scandinavia (compare Skogen, 2003; Cinque et al., 2021). Wildlife managers are tasked with balancing personal/ group interests with policy, and these can be contradictory (Sjölander-Lindqvist et al., 2020). Dealing with this 'wicked problem'-where there are differences both in knowledge and values among stakeholders (Emerson and Nabatchi, 2015), makes consensus around defining the problem, let alone how to solve it, distinctly complex (Johansson et al., 2020). Coming to the table to

deliberate and being open to finding shared goals rather than focusing on differences is an important starting point in such a polarized debate (Lundmark and Matti, 2015; St. John et al., 2018).

Successful collaboration, in this case, involves collectively defining what conflict management within this group should look like while recognizing value differences and finding ways to accommodate them (Emerson and Nabatchi, 2015). If there is a rural-urban normative division represented within the WMD, such a historical divide is not easily or quickly overcome and may even always be a point of contention (Jacobsen and Linnell, 2016). The difficulties are further cemented by the fact that actors have different views of what is expected of themselves and others (i.e., reciprocity); it is recognized in the previous research literature that this is a crucial aspect of legitimacy (Scott, 1976). From the perspective of the collaborative process, the aim is not always to solve differences but rather to see how the discourse could change surrounding different interest groups so that groups can better understand each other's values to create a more effective and sustainable management system. While the division may be everlasting in terms of having limited agreement with each other, it is more important to attempt to understand the other side and the person behind the represented interest.

Within wildlife management in the county, there is a lack of trust within management levels, and between authorities and the public—though expressed to different extents among respondents. Many respondents related that a lack of influence and trust was impacting the relationship especially between affected stakeholders and authorities, and leading people to act in counterproductive ways to society and the environment. Several mentioned that this is hindering the delegation from being able to effectively address social conflict surrounding large carnivore presence and is resulting in a break-down in communication and interaction within and between levels. One CAB officer suggested in an interview that they on the authorities' side need to at least show that they care about the concerns of affected stakeholders by taking the time to listen. In general, there is an apparent need to change the way that the public is involved and informed regarding wildlife decisions. Within deeprooted conflicts where there is a history of divide between stakeholders and authorities as seen in the Swedish case, policy acceptance cannot be built up until there is legitimation of authorities. And legitimacy can only be gained through a feeling of reciprocity, where both sides feel they are gaining from the relationship. Thus, a task for researchers and practitioners seeking to transform conflict into a more productive social space, will be to find factors within the relationships that are driving conflict to determine ways to build legitimacy. Bringing social dimensions driving conflict to the forefront could lead to a feeling of greater influence, transparency, equality, and reasoned debate, which are at the core of successful collaborative governance (Lundmark and Matti, 2015). Reaching a form of agreement within management regarding shared goals, requires a clear mandate that specifies the terms and conditions of stakeholder participation, with a more obvious way to understand one's options to influence.

5.2 Terms of Participation: Defined

A step towards increasing trust and legitimacy within the collaborative process is to focus on rewarding more influence

TABLE 1 | Addressing hinders and potential for conflict management through collaboration.

Successful Governance Needs	Hinders	Negative output	Recommended actions	Positive output	Desired outcome
Finding common ground	Existing normative divisions	Continued conflict	Recognize leaderships and participants different perspectives, positions, and interests	Improved understanding of each other's values	Conflict management
	Differences in knowledge and values among participants and leadership	Counterproductive decisions and actions	Collective exploration of normative discourses	Improved social relations and increased trust	More effective and sustainable management system
	Disrespect of others' positions and interests	Collaboration does not support conflict management Break-down in communication and interaction within and between levels	Discussion and agreement on goals for the group Collective definition of routes towards conflict management		
Clarified terms for	Unclear mandate	Continued skepticism	Clarify terms and conditions of collaboration	Increased sense of inclusiveness	Feeling of 'mutual reciprocity'
participation	Lack of actual influence	Frustration and disappointment	Addressing deep-rooted concerns	Optimized management	More effective and sustainable management system
	Lack of information	Low level of legitimacy	Providing space for longer discussions		,
		Ineffective management	Exploration of how views and concerns are deliberated Training of wildlife managers and collaboration participants		

to the regional levels through power-sharing and increased communication, and that more clearly incorporates and acknowledges diverse interests and knowledge within regional wildlife management. This could involve, as according to a study by Cinque et al. (2021), more resources and training for wildlife managers to be 'responsive' in terms of active inclusion of and the quest for shared understanding between different interests as part of the collaborative governance process. With the exception of a few, the majority of WMD members and CAB officers related the feeling that wildlife management is not functioning optimally. A reportedly low level of legitimacy for the WMD, doubt among several respondents about how they are able to represent their interest group now and in the future within the WMD, and members feeling a low level of influence over wildlife decisions, is for many, fostering skepticism for the overall process. Some respondents related that the current WMD set-up is more representative of efforts to decentralize wildlife management than it is effective. Various members related that an unclear mandate is affecting the efficiency and legitimacy of the WMD, as it is uncertain the extent of influence they can have and over what. Clarifying the policy directive could help reduce frustrations and disappointment within members' and managers' roles.

Most respondents acknowledged that those who are most affected by the presence of large carnivores need to be compensated and should not be paying for the consequences of the large carnivore policy themselves. Some believe that people will not build up trust for authorities or acceptance for large carnivore policies until those who are affected by large carnivore presence see a notable improvement in the way their lives are being impacted. When asked what measures such as lethal

removal of problem animals and licensed hunting could be useful for, many feel that it is a way to let the local population feel they have some control over their situation. In terms of participation, further research should look at who is included in discussions and decision-making, and also how their views and concerns are deliberated within management. Providing space for longer discussions where members can exchange their perspectives and values rather than addressing practical agenda points, can be a step towards addressing the deeper-rooted issues present in wildlife management. Several respondents are unsure whether an effective wildlife management process in Sweden is possible given the current governance model, as they feel both time and resources for this are lacking. These practical limitations contribute to the overall structural constraints faced by regional authorities to effectively manage conflict.

This table provides an overview of our analysis through our abductive work of going between theory, empirics, and analysis. We have provided the following 'recommended actions' for how to handle these hinders and have a positive output that results in the desired outcome. If these hinders remain, we contend that this will result in continued negative outputs, making the desired outcome unattainable.

6 CONCLUSION

Based on an analysis of wildlife management in Sweden, challenges within the collaborative process, as well as demands within current policy that are under-supported or unclear, reveal that the current wildlife governance structure is not socially viable for managing conflict. Within its current form of multi-

level governance, the process on the regional level is set up to be deliberative, but in practice has many shortcomings regarding the participation and inclusion of stakeholders. Collaboration is hindered by a lack of legitimacy, trust, and participation that enables actual influence. Our research reveals that initiatives aimed to establish collaborative governance structures, might further increase conflict and decrease trust if participants feel that they are not afforded any real influence.

The hope is that our study will enhance conflict understanding from a perspective that includes challenges from the global to the local levels, as well as within management due to underlying and unaddressed social conflict. Within these widely acknowledged and largely sought-after resolutions, our study reveals doubts about whether there is a "best practice" for which countries ought to follow to fulfill policy goals. In this case, we determine that collaborative governance is not in itself a means to resolve conflict within wildlife management but rather a structure that stakeholders have to navigate and act within. Not addressing the underlying factors contributing to conflict within management will only further hinder arriving at shared solutions to emerging problems. This is a process that requires continuous time and effort to adapt to changing circumstances and obstacles in order to achieve social viability We determine from our study, that trust, legitimacy and participation that includes actual influence are essential to social viability. In looking for practical solutions to resource conflicts such as this, the existing governance landscape as well as the central drivers to conflict will determine whether aspects are addressed by policy change, a third-party neutral, or by wildlife managers themselves (Harrison and Loring, 2020). Creating an effective and socially viable wildlife governance structure thus depends on policies amenable to each country's unique conflict storyline.

REFERENCES

- Aarhus Convention on Access to Information. (1998). Public Participation in Decision-Making and Access to Justice in Environmental Matters. Available at: https://www.unece.org/fileadmin/DAM/env/pp/documents/cep43e.pdf (Accessed September 21, 2020).
- Ansell, C., and Gash, A. (2008). Collaborative Governance in Theory and Practice; *J. Public Adm. Res. Theor.* 18 (4), 543–571. doi: 10.1093/jopart/mum032
- Arnstein, S. R. (1969). A Ladder of Citizen Participation. *JAIP* 35 (4), 216–224. doi: 10.1080/01944366908977225
- Bennett, J. (2019). "Using Conservation Conflict Transformation as a Framework to Address Social Conflict Over Wildlife in a Swedish County," in *M.Sc. Thesis* (Sweden: University of Gothenburg).
- Braun, V., and Clarke, V. (2006). Using Thematic Analysis in Psychology. Qual. Res. Psychol. 3 (2), 77–101. doi: 10.1191/1478088706qp063oa
- Burton, J. W. (1990). "Conflict: Human Needs Theory," in *The Conflict Series*, vol. Volume 2. (St. Martin's Press).
- Butler, J. R., Marzano, M., Pettorelli, N., Durant, S. M., Du Toit, J. T., Young, et al. (2021). Decision-Making for Rewilding: An Adaptive Governance Framework for Social-Ecological Complexity. Front. Conserv. Sci. 2, 681545. doi: 10.3389/ fcosc.2021.681545
- Cinque, S., Sjölander-Lindqvist, A., and Sandström, C. (2022). Frontline Bureaucrats in Wildlife Management: Caught in the Dilemma Between Effectiveness and Responsiveness. *Environ. Policy Gov.* 32 (1), 1–12. doi: 10.1002/eet.1956

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/supplementary material. Further inquiries can be directed to the corresponding author.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

All authors contributed to conception and design of the study. JB, AS-L, and SL conducted the interviews. JB wrote the first draft of the manuscript. All authors contributed to manuscript revision, read, and approved the submitted version.

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- Colebatch, H. K. (2006). Governing the Use of Water: The Institutional Context. Desalination 187 (1), 17–27. doi: 10.1016/j.desal.2005.04.064
- De Marchi, B., and Ravetz, J. R. (2001). "Participatory Approaches to Environmental Policy," in *EVE Concerted Action*. (Cambridge: Cambridge Research for the Environment, Department of Land Economy, University of Cambridge)
- Dickman, A. J. (2010). Complexities of Conflict: The Importance of Considering Social Factors for Effectively Resolving Human–Wildlife Conflict. *Anim. Conserv.* 13 (1), 458–466. doi: 10.1111/j.1469-1795.2010.00368.x
- Dressel, S., Sandström, C., Bennett, J., and Ericsson, G. (2021). En Attitydundersökning Om Stora Rovdjur Och Rovdjursförvaltning (SLU Rapport 2021 Vol. 8 (Umeå: SLU).
- Duit, A., and Löf, A. (2015). Dealing With a Wicked Problem? A Dark Tale of Carnivore Management in Sweden 2007-2011. Adm. Soc. 50 (8), 1072–1096. doi: 10.1177/0095399715595668
- Emerson, K., and Nabatchi, T. (2015). *Collaborative Governance Regimes* (Washington, DC:Georgetown University Press).
- Eriksson, M. (2016). Changing Attitudes to Swedish Wolf Policy: Wolf Return, Rural Areas, and Political Alienation (Sweden: Ph.D. thesis. Umeå University).
 Eriksson, M. (2017). Political Alienation, Rurality and the Symbolic Role of Swedish Wolf. Policy. Soc Nat. Resour. 30 11), 1374–1388. doi: 10.1080/08941920.2017.1347970
- European Commission. (1992). Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora. (Brussels:European Union) Frank, B., and Glikman, J. (2019). "Human–Wildlife Conflicts and the Need to Include Coexistence," in Human–Wildlife Interactions: Turning Conflict Into

- Coexistence. Ed. B. Frank, J. Glikman and S. Marchini (Cambridge:Cambridge University Press), pp. 1–19. doi: 10.1017/9781108235730.004
- Gray, B., and Purdy, J. (2018). Collaborating for Our Future: Multistakeholder Partnerships for Solving Complex Problems (New York:University Press).
- Groff, T. R., and Jones, T. P. (2003). Introduction to Knowledge Management: KM in Business (LondonRoutledge).
- Hallgren, L., and Westberg, L. (2015). Adaptive Management? Observations of Knowledge Coordination in the Communication Practice of Swedish Game Management. Wildlife Biol. 21 (3), 165–174. doi: 10.2981/wlb.00005
- Hansson-Forman, K., Reimerson, E., Sjölander-Lindqvist, A., and Sandström, C. (2018). Governing Large Carnivores: Comparative Insights From Three Different Countries. Soc. Natural Resour. 31 (7), 837–852. doi: 10.1080/ 08941920.2018.1447179
- Harrison, H., and Loring, P. (2020). Seeing Beneath Disputes: A Transdisciplinary Framework for Diagnosing Complex Conservation Conflicts. *Biol. Conserv.* 248, 108670. doi: 10.1016/j.biocon.2020.108670
- Human, S. E., and Provan, K. G. (2000). Legitimacy Building in the Evolution of Small-Firm Multilateral Networks: A Comparative Study of Success and Demise. Adm. Sci. Q. 45 (2), 327–365. doi: 10.2307/2667074
- IUCN SSC HWCTF (2020) What Is Human-Wildlife Conflict? In: Briefing Paper by the IUCN SSC Human-Wildlife Conflict Task Force. Available at: www. hwctf.org (Accessed May 28, 2021).
- Jacobsen, K., and Linnell, J. (2016). Perceptions of Environmental Justice and the Conflict Surrounding Large Carnivore Management in Norway — Implications for Conflict Management. *Biol. Conserv.* 203, 197–206. doi: 10.1016/j.biocon.2016.08.041
- Johansson, J., Bärstig, T., and Sandström, C.. (2020). "Vägar Till Effektiva Samverkansprocesser – Styrning, Deltagande Och Dialog Inom Skogspolitikens Ramar," in Future Forests Rapportserie, vol. 2020. (Umeå: Sveriges lantbruksuniversitet). 3.
- Larsson, S., and Sjölander-Lindqvist, A. (2022). ""The Sea Has No Boundaries": Collaboration and Communication Between Actors in Coastal Planning on the Swedish West Coast," in Anthropological Perspectives on Environmental Communication. Palgrave Studies in Anthropology of Sustainability. Eds. A. Sjölander-Lindqvist, I. Murin and M. E. Dove (Cham: Palgrave Macmillan).
- Lederach, J. P. (1997). Building Peace: Sustainable Reconciliation in Divided Societies (Washington, D.C:United States Institute of Peace Press).
- Lundmark, C., and Matti, S. (2015). Exploring the Prospects for Deliberative Practices as a Conflict-Reducing and Legitimacy-Enhancing Tool: The Case of Swedish Carnivore Management. Wildlife Biol. 21 (3), 147–156. doi: 10.2981/wlb.00009
- Madden, F. (2004). Creating Coexistence Between Humans and Wildlife: Global Perspectives on Local Efforts to Address Human–Wildlife Conflict. Hum. Dimens. Wildl. 9 (4), 247–257. doi: 10.1080/10871200490505675
- Madden, F., and McQuinn, B. (2014). Conservation's Blind Spot: The Case for Conflict Transformation in Wildlife Conservation. *Biol. Conserv.* 178, 97–106. doi: 10.1016/j.biocon.2014.07.015
- Naturvårdsverket and Swedish Environmental Protection Agency (2016). "Nationell Förvaltningsplan För Varg," in *Förvaltningsperioden 2014–2019* (Stockholm (in Swedish:Naturvårdsverket, or Swedish Environmental Protection Agency).
- Pohja-Mykrä, M., and Kurki, S. (2014). Strong Community Support for Illegal Killing Challenges Wolf Management. Eur. J. Wildl Res. 60, 759–770. doi: 10.1007/s10344-014-0845-9
- Rittel, H. W. J., and Webber, M. M. (1973). "Dilemmas in a General Theory of Planning". in *Policy Sci.* (Amsterdam:Elsevier Scientific Publishing Company) 4(2)155–169.
- Sandström, A., Söderberg, C., and Nilsson, J. (2020). Adaptive Capacity in Different Multi-Level Governance Models: A Comparative Analysis of Swedish Water and Large Carnivore Management. J. Environ. Manage. 270. doi: 10.1016/j.jenvman.2020.110890
- San Martín-Rodríguez, L., Beaulieu, M. D., D'Amour, D., and Ferrada-Videla, M. (2005). The Determinants of Successful Collaboration: A Review of Theoretical and Empirical Studies. J. Interprofessional Care 19), 132–147. doi: 10.1080/13561820500082677
- Scott, J. C. (1976). The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia (New Haven: Yale University Press).
- Senecah, S. L. (2004). "The Trinity of Voice: The Role of Practical Theory in Planning and Evaluating the Effectiveness of Environmental Participatory Processes," in

- Communication and Public Participation in Environmental Decision Making. Ed. S. P. Depoe, et al. (State University of New York Press), 13–33.
- Sjölander-Lindqvist, A. (2008). Local Identity, Science and Politics Indivisible: The Swedish Wolf Controversy Deconstructed. J. Environ. Policy Plan. 10 (1), 71– 94. doi: 10.1080/15239080701652672
- Sjölander-Lindqvist, A., and Cinque, S. (2014). Dynamics of Participation: Access, Standing and Influence in Contested Natural Resource Management. *Open J. Soc Stud.* 6609 (7), 360-383. doi: 10.1285/i20356609v7i2p360
- Sjölander-Lindqvist, A., Johansson, M., and Sandström, C. (2015). Individual and Collective Responses to Large Carnivore Management: The Roles of Trust, Representation, Knowledge Spheres, Communication and Leadership. Wildlife Biol. 21 (3), 175–185. doi: 10.2981/wlb.00065
- Sjölander-Lindqvist, A., Risvoll, C., Kaarhus, R., Lundberg, A., and Sandström, C. (2020). Knowledge Claims and Struggles in Decentralized Large Carnivore Governance: Insights From Norway and Sweden. Front. Ecol. Evol. 8, 1–18. doi: 10.3389/fevo.2020.00120
- Sjölander-Lindqvist, A., Larsson, S., and Bennett, J. (2021). Att Leva Nära Stora Rovdjur: Perspektiv På Psykosociala Och Socioekonomiska Konsekvenser (Stockholm: Naturvårdsverket).
- Sjölander-Lindqvist, A., and Sandström, C. (2019). Shaking Hands: Balancing Tensions in the Swedish Forested Landscape. Conserv. Soc 17 (319), 319–330. doi: 10.4103/cs.cs_18_112
- Skogen, K. (2003). Adapting Adaptive Management to a Cultural Understanding of Land Use Conflicts. Soc Nat. Resour. 16 (5), 435–450. doi: 10.1080/ 08941920309180
- Skogen, K., Mauz, I., and Krane, O. (2008). Cry Wolf!: Narratives of Wolf Recovery in France and Norway. Rural Sociol. 73 (1), 105–133. doi: 10.1526/ 003601108783575916
- Skogen, K., and Krange, O. (2020). The Political Dimensions of Illegal Wolf Hunting: Anti-Elitism, Lack of Trust in Institutions and Acceptance of Illegal Wolf Killing Among Norwegian Hunters. Sociologia Ruralis 60, 551–573. doi: 10.1111/soru.12309
- St. John, F., Linkie, M., Martyr, D., Milliyanawati, B., McKay, J., Mangunjaya, F, et al. (2018). Intention to Kill: Tolerance and Illegal Persecution of Sumatran Tigers and Sympatric Species. Conserv. Lett. 11 (4), 1–8. doi: 10.1111/conl.12451
- Von Essen, E., and Hansen, H. P. (2015). How Stakeholder Co-Management Reproduces Conservation Conflicts: Revealing Rationality Problems in Swedish Wolf Conservation. Conservat. Soc 13, 332–344. doi: 10.4103/0972-4923.179881
- Young, J. C., Marzano, M., White, R., McCracken, D., Redpath, S., Carss, D, et al. (2010). The Emergence of Biodiversity Conflicts From Biodiversity Impacts: Characteristics and Management Strategies. *Biodivers. Conserv.* 19 (14), 3973–3990. doi: 10.1007/s10531-010-9941-7
- Young, J. C., Searle, K., Butler, A., Simmons, P., Watt, A., and and Jordan, A.. (2016). The Role of Trust in the Resolution of Conservation Conflicts. *Biol. Conserv.* 195, 196–202. doi: 10.1016/j.biocon.2015.12.030

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