Approaches to conflict management and brokering between groups

JULIETTE YOUNG

NERC Centre for Ecology and Hydrology

CLIVE MITCHELL

Scottish Natural Heritage

and

STEPHEN MARK REDPATH

University of Aberdeen

14.1 What do we mean by conservation conflicts and their management?

Conflicts in conservation arise between individuals or groups of stakeholders whose strongly held opinions clash over conservation objectives and when one party is perceived to assert its interests at the expense of another (Redpath et al., 2013). Such conflicts can take many forms. For example, conflicts may occur between those wanting to conserve large carnivores and those wanting to control them due to their impacts on livestock, or between those wanting to conserve habitats in protected areas and the communities being moved out of those areas. In light of the potential negative impacts on conservation, livelihoods and well-being, managing such conflicts is key to enabling effective conservation.

Conflicts around conservation derive from the fact that the state of nature is socially constructed and has different meanings to different people. Conflicts arise from issues of identity and choices about how the land and sea are used, as well as the uneven distribution of the associated costs and benefits associated with the conservation of biodiversity and ecosystems. These issues reflect the power relations acting across societies over time (Radkau, 2008). The state of nature, which ties into ideas of what is 'natural' and 'acceptable', is therefore inherently mainly a political matter. As such, conflict, defined as 'the pursuit of incompatible goals by different groups' (Ramsbotham et al., 2011, p. 30), is intrinsic to its conservation (Adams, 2015).

Redpath et al. (2013, 2015a) discuss several types of conflict in the field of nature conservation: conflicts of interest, conflicts over beliefs and values, over process or over information, structural conflicts (often involving power relations) and interpersonal conflicts. Often the characteristics of a conflict between people over nature are unclear and it may take considerable expertise to unpick them, but unless we do this, significant time and resources may be invested into one aspect of a problem (e.g. gathering information and evidence), when the conflict is really about something else (e.g. beliefs and values). Another key aspect of defining a conflict is understanding that the people involved will have different and varied values, worldviews and perspectives on the situation and how it should be managed, depending on their roles and agendas. Exploring the different perspectives and goals of people involved in conflicts, and being clear about the problem, its character and various dimensions, are the first steps towards finding a solution.

Finding 'solutions' to these problems is, however, almost as contentious as the conflicts themselves. In certain situations some stakeholders may see the solution as maintaining the status quo, if this fits with their agenda. In others, stakeholders may seek to 'win' the battle by imposing their own approach or views at the expense of the other party. Nevertheless, many stakeholders seek an improvement on the current situation through conflict resolution, transformation or management. In the field of peace studies, the paradigm is shifting from conflict resolution, where the emphasis is on reaching jointly agreed long-term outcomes to conflicts, to the more challenging transformation of conflicts, involving profound change in terms of outcome and process (Mitchell, 2002). This implies fundamental shifts in the ways in which the people involved in the conflict reflect on the real point of conflict and the paradigms and approaches used to mitigate it, leading to the transformation of the institutions and discourses, as well as in the relationships within and between the conflict parties (Ramsbotham et al., 2011). Such shifts have yet to occur in the conservation world.

14.2 General approaches to conflict in practice

There are several challenges to understanding and managing conflict. Conflict management usually refers to the containment of conflict, but can also be used generically, to refer to all handling of conflict. We use management here to refer to any positive approach to handling a conflict (Ramsbotham et al., 2011).

Many of the challenges revolve around issues related to knowledge, communication, representation, trust and leadership (Sjölander-Lindqvist et al., 2015). However, problems can arise at the outset from the way these issues are framed. For instance, in the field of human–wildlife conflicts they are often presented as a struggle between animals and people, and the conflict

between different human interest groups is ignored (Peterson et al., 2010; Redpath et al., 2013). In reality, most of these conflicts are between conservation interests and other human interests, such as farming, hunting or fishing (Redpath et al., 2015b). Representing these issues as conflicts between farmers and predators is misleading and limits the opportunities for management. To help delineate these two dimensions, Young et al. (2010) distinguished between human–wildlife impacts and human–human conflicts.

The problem of framing is further compounded by the fact that it is often the conservationists who, although not neutral in such settings, are the ones driving the development of management strategies. Clearly, they are likely to be biased in seeking outcomes that benefit conservation, and may not be trusted by the other party or parties. For example, a government conservation organisation may decide to tackle a conflict around a protected species. Because of the background of that organisation, other stakeholders, such as hunters, may assume that the goals are biased towards conservation interests and opposed to hunting interests, and may decide either not to engage in the process or to actively fight against it. A critical step, then, is to be aware of the framing of conflicts around the state of nature and the position different parties take. Having neutral, trusted facilitators, mediators or negotiators can help in the search for potential solutions.

Traditionally, approaches to dealing with human–wildlife conflict have largely been driven by the knowledge created by ecological research and technical fixes. Consequently, efforts to understand and manage conflicts over predators have tended to focus on monitoring, collecting genetic material, estimating predation rates and mitigation methods (such as chilli fences to discourage elephants from destroying crops, diversionary feeding of hen harriers to minimise their impacts on grouse, adapted fishing gear to reduce accidental by-catch). While ecological and technical factors are important aspects of conflict management, social aspects must also be considered. Without insight into the needs, values and positions of the people involved, it is likely that time and money will be wasted and frustration at the continuing conflict will build. This human dimension needs to be understood at both the individual and the collective scale. How do individuals perceive the conflict and react to the species, the other stakeholders involved and the different types of mitigation proposed (Johansson et al., 2012)? At a collective scale it is important to address how the institutions and governance structures are set up. What roles do government and stakeholders play? Who has a say in the decisions?

Knowledge is not simply a product of research by academics from the natural and social sciences and humanities. Substantial knowledge is held by farmers, fishermen and foresters, arising from their experiences, and is often

called 'local knowledge'. Typically, ecological scientific knowledge drives conflict management, while the perceptions and understanding held by local knowledge-holders is ignored or dismissed as anecdote. This is compounded by the fact that many of the administration or policy advisors also come from an ecological tradition, and may treat local knowledge in a similar way. This can create major problems for conflict management and contribute to perverse outcomes, such as the illegal killing of wolves in Finland (Pohja-Mykrä & Kurki, 2014). One way around this issue is for researchers to collaborate with other stakeholders in transdisciplinary teams (Butler et al., 2015). The essential value of these co-management approaches is that they are likely to broaden the scope and trust in science, and provide stakeholders with some psychological ownership of the results (Matilainen et al., 2017).

Two other barriers to effective management of conflicts can arise at the policy interface. First, the response to conflicts tends to be reactive (Young et al., 2016a). This has been seen clearly in conflicts over geese, where populations of several species have been increasing rapidly in different regions (Fox & Madsen, 2017), with impacts on crops and farmers' livelihoods. Discussions about conflict management only generally begin once the conflicts have become serious. Conflict management will inevitably be more effective if the process starts earlier and invests in building relationships between stakeholder groups, as well as committing to an improved understanding of the conflict, the people involved and their views, perceptions and values (Young et al., 2016a, 2016b). Second, policy-makers often want quick fixes and rapid conflict *resolution*. Yet, these conflicts are ubiquitous and persistent. We know of no example where a wildlife conflict is considered to have been resolved. Indeed, there are very few instances where they have been effectively *managed* in the long term to reduce conflict, although there have been some short-term, local successes. For example, the Moray Firth Seal Management Plan was developed by fishermen and other key stakeholders from conservation, government agencies, science and tourism in the north-east of Scotland striving to reach a balance between seal conservation and salmon fishing (e.g. Young et al., 2012; Butler et al., 2015). One possible approach to overcome these hurdles would be to horizon scan for emerging conflicts and build relationships, understanding and trust between groups before they escalate.

A further problem is that we currently do not have an informed understanding of which approach to conflict management is most effective under various circumstances. Treves et al. (2017) argue for more top-down approaches, with expert panels, strong policy and enforcement. Conversely, Redpath et al. (2017) argue for more bottom-up governance processes, built on engagement and trust.

To help overcome many of the challenges associated with wildlife conflict management, Young et al. (2016a) developed a decision-support tool with

a government agency using a transdisciplinary approach. The tool uses a systematic stepwise approach when faced with management decisions, with six distinct stages: (i) establishing whether there is a conflict or an impact; (ii) understanding the context of the conflict, including the stakeholders affected; (iii) developing shared understanding of the conflict and goals; (iv) building a consensus on how to reach the goals; (v) implementing measures; and (vi) monitoring the outcomes. The authors argue that this new tool has wide applicability and democratic legitimacy, and offers an exciting and practical approach to improve the management of conservation conflicts (see Figure 14.1).

14.3 The limitations and challenges of conflict management

Policies seek to resolve disputes by establishing practices and standards with which relevant actors must comply. A naïve view, held by many natural scientists, is that as long as they have a working knowledge of how policy-making and
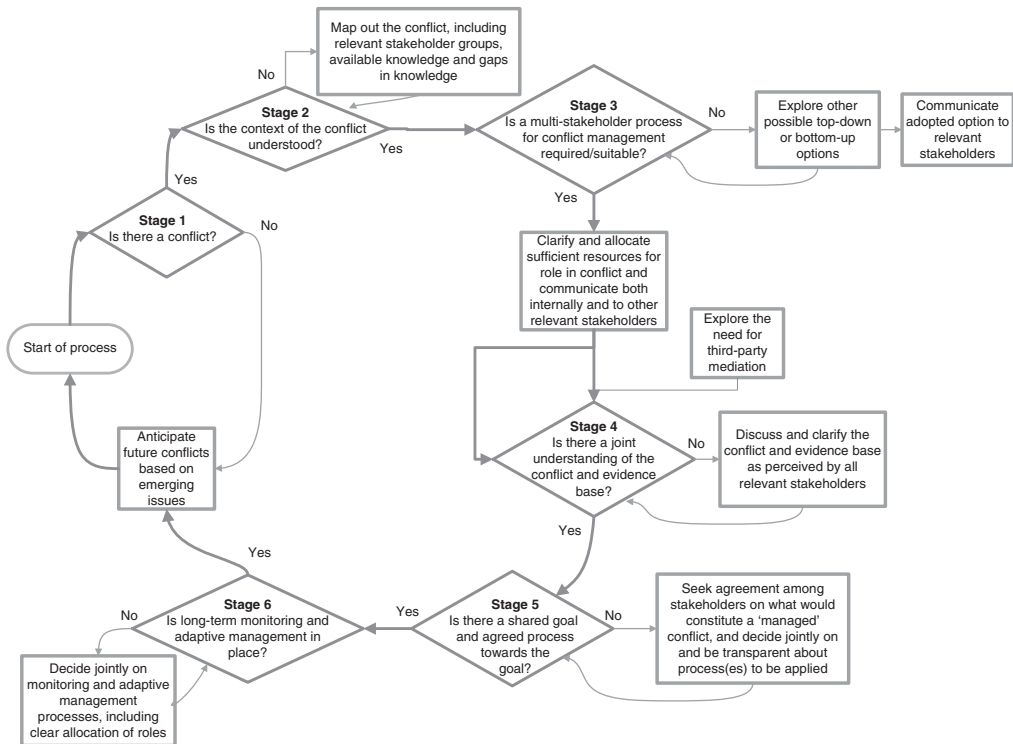
Figure 14.1 Stepwise approach aimed at enabling decision-makers to identify, manage and monitor conservation conflicts. Diamond shapes indicate the six key decision stages. Squares state what needs to happen to go from one decision stage to the next. Adapted from Young et al. (2016a). (A black and white version of this figure will appear in some formats. For the colour version, please refer to the plate section.)

conflict management function and relate to each, they can make timely contributions that will inform and improve decision-making. However, the decision of whether to conserve or exploit nature is a political and value-based choice. While the focus might appear to be on nature, conservation is also about identity, resource allocation and making choices between people. Therefore, it is intimately bound up in the political economy and granularity of governance. This is a messy business and there are many examples where policy has failed to respond to credible early evidence of problems arising across a range of environmental issues, from lead in petrol to climate change to pesticide use.

Despite the existence of more sophisticated frameworks describing the reality of policy-making, such as the Advocacy Coalition Framework (e.g. Jenkins-Smith & Sabatier, 1994) and Multi-systems Approach (e.g. Cairney & Jones, 2016), much of the policy training in the public sector uses the 'policy wheel'. In general, the process is assumed to start with a problem, which provides a rationale for a policy intervention. Objectives are then set, options appraised and a decision made. The policy is implemented and its effectiveness monitored. The outcomes are evaluated, and the lessons learned contribute to refinements of the policy or inform the definition of the next problem and new policy cycle. This schema works well for problems that are well-defined, tightly bounded and relatively uncontroversial, but there are few such examples in conservation. For more complex issues, which typify conflicts over nature, there are potential difficulties at every step in the cycle.

Many disciplines, including ecological science, history, political science, economics, anthropology, law, psychology, ethics, sociology and peace studies, can be drawn upon to understand conflicts in conservation, as well as practice in areas such as farming, forestry, fisheries and infrastructure development (Redpath et al., 2015a). Nevertheless, the natural sciences still tend to dominate in shaping policy and practice (e.g. Stirling, 2015), with many practitioners believing that 'science speaks truth to power' (e.g. Collingridge & Reeve, 1986). There are a number of fundamental problems linked to this belief.

First, the belief that science trades in facts and that these are unambiguous. This is a realist ontological view that there is 'a' truth to reveal to those in power (e.g. Moses & Knutsen, 2012). If there is doubt, further research will fill in the blanks to reveal the true picture. While this may apply in some cases, it does not hold for much of the field of scientific endeavour, which seeks to deepen our understanding of the world and how it works based on theoretical frameworks (e.g. Moon & Blackman, 2014). The natural sciences typically reveal multiple 'truths' supported by evidence, and the most successful of these can be judged based on their explanatory power and degree of consilience. Knowledge is therefore always shifting (Gee et al., 2013), meaning that

conflict can arise from policy and practice that is out of step with current knowledge or specific contexts.

Second, the belief that science and 'facts' are independent of social context. Again, this may be true for some observations, but not for the meanings associated with them (Funtowitz & Ravetz, 1991), and it is often the distinction between observation and meaning that is critical. Many scientists hold that 'matters of fact' lead directly to 'matters of concern', but in practice facts are filtered through individual 'narratives' or worldviews to determine matters of concern (Latour, 2004). These worldviews, which we all have, often remain unspoken, but fuel conflicts of interest. They significantly constrain the scope and relevance of 'expert views' (Sutherland & Burgman, 2015), which are often brought forward to support one position or another in conflicts.

Third, even when science provides a more compelling account of natural phenomena than the alternatives, it requires belief or faith in the scientific method. Many people may struggle to accept a scientific view of an issue over another narrative that reinforces their sense of identity and worldview. Well-reasoned scepticism (Stirling, 2015) is essential to guard against a potential progression to populism, 'fake news' and lobbying for policy that flies in the face of evidence (Corner, 2017).

Marquand (2004) observed the paradox of the requirement for both a strong citizenry, needed for an inclusive public domain, as well as the availability of expert professional viewpoints, which are by definition exclusive, to achieve evidence-based and accountable decision-making. The paradox is how professional views, where knowledge is held by the few rather than the many, contribute to the public domain. This is not necessarily a problem if professional views are in alignment with the public interest, but various checks and balances are required to control for professional interests/institutions and associated power relations. This paradox can be resolved if professionals, including ecologists and conservationists, earn and retain the trust of citizens. Funtowicz and Ravetz (1991), Marquand (2004), Radkau (2008) and Stirling (2015) are among many who advocate for a more participatory approach by which science can act in the public interest on complex issues, in which the evidence from science (including social science) *and* local knowledge is co-created and co-produced (e.g. Fazey et al., 2018) or co-assessed (Sutherland et al., 2017). This potentially allows stakeholders in conflicts to give legitimacy to the authority of professionals (Fazey et al., 2018), thereby addressing issues of trust, bias and power.

14.4 Trust, bias and power in conflicts

Power is the uneven distribution of agency (Stirling, 2016), and is a defining and unavoidable characteristic of all social interactions. It is not necessarily

bad, as it can get things done. However, whether power is 'good' or 'bad' depends on your viewpoint and, hence, power and politics are intimately linked. Criticism is valid when power is neglected or denied. Similarly, everyone is biased to some extent. This is as true in science as any other field. Like power, bias is problematic when it is neglected or denied.

Decisions about natural resource use and the state of nature involve issues of trust, bias and power, which are inevitable in any set of social interactions (e.g. Young et al., 2016b). How well they are resolved depends on the governance contexts in which decisions are taken. These bring together the personal relationships of the private domain, access to wealth and power in the market domain, and the public interest of the public domain (Marquand, 2004). The more diverse, plural and different the views from stakeholders that are expressed and integrated into decisions about the natural environment the better (e.g. Young et al., 2016b), with power relations and biases acknowledged to keep incumbent hegemonies and vested interests in check (Stirling, 2015). This is not to argue that the process is easy or that everyone can always agree, but that people can agree to differ through a well-structured process and move on from conflict: a 'solution' that involves winners and losers will always resurface as a conflict (Young et al., 2016a). This argues directly against centralisation, often a dominant force in 'command-and-control' politics (e.g. Cooke & Muir, 2012).

The extent to which administrative and institutional arrangements are able to respond flexibly, in a scale-appropriate manner, and quickly to reflect the character of real-world problems, is a critical factor in successfully translating evidence into effective policy and practice (e.g. Sparrow, 2011). However, there is a great deal of inertia in institutions, often as a result of their structures, processes and associated habits and ways of working. Internal arrangements designed for one set of problems may be ill-suited to others. An important distinction is whether organisations (including government) exist to 'deliver' or 'enable'. The latter is essential when creating the conditions that facilitate participative approaches and the development of trusting relations.

14.5 An outlook on conflict management: focusing on worldviews around the state of nature

Identity, and specifically the worldviews on the state of nature, are of critical importance in conflict management, including the question of whether people are seen or see themselves as a part of, or apart from, nature (Fischer & Young, 2007). This can influence the understanding and mental constructs around terms such as biodiversity, nature, ecosystem health, native, naturalness, integrity, sustainability, resilience, stability, balance, wild, land-sparing and land-sharing. In short, all of the language, concepts and ideas of conservation are open to different interpretations, which perhaps testifies to the idea

that the state of 'nature' and 'conservation' are social constructs. In turn, this has implications for the institutional arrangements and approaches to conservation (e.g. what we measure, performance management frameworks). The idea that nature is unambiguous and categorical sits comfortably with more rigid measurement frameworks informed by authoritative science and used to 'deliver' conservation objectives. In contrast, a more fluid relationship between people and nature, based on a broad range of knowledge and possible truths, is better aligned to situational, participative and co-produced approaches.

This is not to suggest that worldviews (whether people are part of, or apart from, nature) and their consequences can be readily polarised. Indeed, these worldviews are not necessarily mutually exclusive: some people may gravitate more to one than the other, while others may hold both simultaneously. Similarly, while debates between utilitarian and intrinsic values greatly exercise many conservationists, many people hold both together without conflict. However, it appears that utilitarian values are often associated with general and replicable issues and intrinsic values are often more situational and associated with personal experience and knowledge. This serves only to illustrate that worldviews can and do shape evidence, institutional arrangements and approaches to conservation, including the way in which conflicts are managed.

References

Adams, W. 2015. The political ecology of conservation conflicts. In Redpath, S. M., Gutierrez, R. J., Wood, K. A., et al., editors. *Conflicts in Conservation: Navigating Towards Solutions*. Ecological Reviews (pp. 64–75). Cambridge: Cambridge University Press.

Butler, J. R. A., Young, J. C., McMyn, I. A. G., et al. 2015. Evaluating adaptive co-management as conservation conflict resolution: learning from seals and salmon. *Journal of Environmental Management*, 160, 212–225.

Cairney, P. & Jones, M. D. 2016. Kingdon's Multiple Streams Approach: what is the empirical impact of this universal theory? *Policy Studies Journal*, 44, 37–58.

Collingridge, D. & Reeve, C. 1986. *Science Speaks Truth to Power: The Role of Experts in Policy Making*. London: Frances Pinter.

Cooke, G. & Muir, R., editors. 2012. *The Relational State: How Recognising the Importance of Human Relationships Could Revolutionise the Role of the State*. London: IPPR.

Corner, J. 2017. Fake news, post-truth and media – political change. *Media, Culture & Society*, 39, 1100–1107.

Fazey, I., Moug, P., Allen, S., et al. 2018. Transformation in a changing climate: a research agenda. *Climate and Development*, 10, 197–217.

Fischer, A. & Young, J. C. 2007. Understanding mental constructs of biodiversity: implications for biodiversity management and conservation. *Biological Conservation*, 136, 271–282.

Fox, A. D. & Madsen, J. 2017. Threatened species to super-abundance: the unexpected international implications of successful goose conservation. *Ambio*, 46, 179–187.

Funtowicz, S. O. & Ravetz, J. R. 1991. A new scientific methodology for global environmental issues. In Costanza, R.,

editor, *Ecological Economics: The Science and Management of Sustainability* (pp. 137–152). New York, NY: Columbia University Press.

Gee, D., Grandjean, P., Hansen, S. F., et al. 2013. Late Lessons from Early Warnings: Science, Precaution, Innovation. Copenhagen: European Environment Agency.

Jenkins-Smith, H. C. & Sabatier, P. A. 1994. Evaluating the advocacy coalition framework. *Journal of Public Policy*, 14, 175–203.

Johansson, M., Karlsson, J., Pedersen, E., et al. 2012. Factors governing human fear of brown bear and wolf. *Human Dimensions in Wildlife*, 17, 58–74.

Latour, B. 2004. Why has critique run out of steam? From matters of fact to matters of concern. *Critical Inquiry*, 30, 225–248.

Marquand, D. 2004. False friend: the state and the public domain. *The Political Quarterly*, 75 (S1), 51–62.

Matilainen, A., Pohja-Mykrä, M., Lähdesmäki, M., et al. 2017. "I feel it is mine!" – Psychological ownership in relation to natural resources. *Journal of Environmental Psychology*, 51, 31–45.

Mitchell, C. 2002. Beyond resolution: what does conflict transformation actually transform? *Peace and Conflict Studies*, 9(1), 1–23.

Moon, K. & Blackman, D. 2014. A guide to understanding social science research for natural scientists. *Conservation Biology*, 28, 1167–1177.

Moses, J. W. & Knutsen, T. 2012. *Ways of Knowing: Competing Methodologies in Social and Political Research*. Bsingstoke: Palgrave Macmillan.

Peterson, M. N., Birckhead, J. L., Leong, K., et al. 2010. Rearticulating the myth of human–wildlife conflict. *Conservation Letters*, 3, 74–82.

Pohja-Mykrä, M. & Kurki, S. 2014. Strong community support for illegal killing challenges wolf management. *European Journal of Wildlife Research*, 60, 759–770.

Radkau, J. 2008. World history and environmental history. *Encyclopedia of Life Support Systems (EOLSS)*, 976–86.

Ramsbotham, O., Miall, H. & Woodhouse, T. 2011. *Contemporary Conflict Resolution*. Cambridge: Polity.

Redpath, S. M., Bhatia, S. & Young, J. 2015b. Tilting at wildlife: reconsidering human–wildlife conflict. *Oryx*, 49, 222–225.

Redpath, S. M., Gutiérrez, R. J., Wood, K. A., et al., editors. 2015a. *Conflicts in Conservation: Navigating Towards Solutions*. Camabridge: Cambridge University Press.

Redpath, S., Linnell, J., Festa-Bianchet, M., et al. 2017. Don't forget to look down – collaborative approaches to predator conservation. *Biological Reviews*, 92, 2157–2163.

Redpath, S., Young, J., Evely, A., et al. 2013. Understanding and managing conflicts in biodiversity conservation. *Trends in Ecology and Evolution*, 28, 100–109.

Sjölander-Lindqvist, A., Johansson, M. & Sandström, C. 2015. Individual and collective responses to large carnivore management: the roles of trust, representation, knowledge spheres, communication and leadership. *Wildlife Biology*, 21, 175–185.

Sparrow, M. K. 2011. *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance*. Washington, DC: Brookings Institution Press.

Stirling, A. 2015. Emancipating transformations: from controlling 'the transition' to culturing plural radical progress. In Scoones, I., Leach, M. & Newell, P., editors, *The Politics of Green Transformations* (pp. 54–67). Abingdon: Routledge.

Stirling, A. 2016. Knowing doing governing: realizing heterodyne democracies. In Voß, J.-P. & Freeman, R., editors, *Knowing Governance* (pp. 259–289). Basingstoke: Palgrave Macmillan.

Sutherland, W. J. & Burgman, M. A. 2015. Use experts wisely. *Nature*, 526(7573), 317–318.

Sutherland, W. J., Shackleford, G. & Rose, D. C. 2017. Collaborating with

communities: co-production or co-assessment? *Oryx*, 51, 569–570. doi:10.1017/S0030605317001296

Treves, A., Chapron, G., López-Bao, J. V., et al. 2017. Predators and the public trust. *Biological Reviews*, 92, 248–270.

Young, J., Butler, J. R. A., Jordan, A., et al. 2012. Less government intervention in biodiversity management: risks and opportunities. *Biodiversity and Conservation*, 21, 1095–1100.

Young, J., Marzano, M., White, R. M., et al. 2010. The emergence of biodiversity conflicts from biodiversity impacts: characteristics and management strategies. *Biodiversity & Conservation*, 19, 3973–3990.

Young, J. C., Searle, K. R., Butler, A., et al. 2016b. The role of trust in the resolution of conservation conflicts. *Biological Conservation* 195, 196–202.

Young, J. C., Thompson, D., Moore, P., et al. 2016a. A conflict management tool for conservation agencies. *Journal of Applied Ecology*, 53, 705–711.