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Less government intervention in biodiversity management: risks and opportunities

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Abstract In a changing global environment, with increasing pressure on ecosystem goods and services, biodiversity conservation is likely to become increasingly important. However, with the current global financial crisis, governments are increasingly trying to stabilise economies through spending cuts aiming to reduce national deficits. Within such an economic climate, the devolution of governance through public participation is an intrinsically appealing concept. We outline a number of challenges that explain why increased participation in biodiversity management has been and may continue to be problematic. Using as a case study the local stakeholder-driven Moray Firth Seal Management Plan in Scotland, we identify four key conditions that were crucial to the successful participatory management of a biodiversity conflict: a local champion, the emergence of a crisis point, the involvement of decision-makers, and long-term financial and institutional support. Three of the four conditions point to the role of direct government involvement, highlighting the risk of devolving responsibility for biodiversity conflict management to local communities. We argue that without an informed debate, the move towards a more participatory approach could pose a danger to hard-won policy gains in relation to public participation, biodiversity conservation and conflict management.

Keywords Big Society · Biodiversity · Conflict management · Moray Firth · Governance · Participation · Seal-salmon conflict · Stakeholder involvement

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The Big Society: a recurring political discourse

In a speech given on the 19th July 2010, the UK Prime Minister David Cameron outlined his vision of a Big Society, describing it as "a huge culture change where people […] don't always turn to officials, local authorities or central government for answers to the problems they face but instead feel both free and powerful enough to help themselves and their own communities" (Cameron 2010). The move towards increasing participation of local actors in decision-making and management is, however, not a new phenomenon. Indeed, since the 'participation explosion' of the 1960s (Steelman and Ascher 1997), there has been a growing recognition amongst governments, businesses and individuals of the importance of greater participation across all aspects of policy. This move towards increased participation is also noticeable in environmental policy, where the first major international landmark occurred at the Rio Summit of 1992 in the form of Agenda 21. A central feature of Agenda 21 is public participation, viewed as "one of the fundamental prerequisites for the achievement of sustainable development" (UNCED 1992, paragraph 23.2). This led to the adoption of the 'Convention on access to information, public participation in decision-making and access to justice in environmental matters' (or Aarhus Convention) in 1998, which set out specific requirements, including an obligation on the decision-making body to take due account of the outcome of public participation. At the European level, the European Commission has developed a number of new ways to allow citizens to participate in the decision-making process (European Commission 2005). Participation also appears strongly in the specific context of EU environmental governance, through its Environment Programmes, the European Commission's ratification of the Aarhus Convention in 2005 and the 'Water Framework Directive' (2000/60/EC). In addition to international and European agreements on participation, individual Member States, including the UK, have also in many cases made provisions for public participation. This has also permeated into environmental policy, with public participation emphasised in both the current White Paper on the natural environment (2011) and in sustainable development strategies, including the most recent (DEFRA 2005).

The appeal and challenges of a Big Society approach to biodiversity conservation

The characteristics of the natural environment, namely complexity, uncertainty, large temporal and spatial scales and irreversibility, have led the scientific community to make the case for the increased involvement of local actors in environmental management (Van den Hove 2000). This is underlined by the fact that changes in ecosystems are most likely to be observed at the community scale, and responses are most effective when executed locally (Milliennium Ecosystem Assessment 2005). Increasing the involvement of local actors is, however, also appealing to decision-makers due to the important substantive and instrumental benefits of such an approach.

Substantive arguments include the improvement of the quality of decisions by adding new or different types of knowledges (Huntington 2000), values (Beierle and Konisky 2001) and interests (Primmer and Kyllonen 2006) in the decision-making process. In turn, decisions that are agreed upon collectively and acknowledge local concerns and knowledge have a greater chance of being better socially and politically accepted (Harrison and Burgess 2000). Instrumental benefits of increased involvement include relieving the financial and organisational pressure from decision-makers and central government, and improving relationship building not only between practitioners and the public, but also

between experts and the public (McCool and Guthrie 2001). The process of bringing people together can lead to a deeper understanding of different perspectives thus increasing trust between participants (Parkins and Mitchell 2005). A strong instrumental argument for participation in biodiversity management is therefore minimising conflicts (Tuler and Webler 1999; Beierle and Konisky 2001). Importantly, participation can also build capacity through learning (McCool and Guthrie 2001) or the creation of groups or organisations. This is particularly important in cases where the problem at hand is either too complex to be resolved by a single agency through traditional regulatory programs (Beierle and Konisky 2001) or requires a long-term response.

Despite the potential benefits of participation, it seems, however, that "genuine engagement of, and with, the public remains a profound challenge" (Owens 2000). Firstly, there is no clear definition of how or why 'people' should become more engaged. Secondly, who the 'people' are or should be is equally ambiguous. While some authors advocate the inclusion of the wider public (including stakeholders, experts and citizens) in the decision-making process, this can prove complex in practice. Indeed, natural resource decision-making can exclude non-scientific contributions, thus promoting discussions dominated by 'experts' (Eden 1996). In addition, to include all stakeholders can lead to costly processes in terms of time and extra spending (Involve 2005), often at the personal cost of individuals participating in these exercises. In practice therefore, it is often common to see specific 'publics' participating, the selection of which is often determined by wider societal barriers. Thirdly, 'consultation fatigue' (Richards et al. 2004) and disenchantment can develop because of participation, leading to increased mistrust and suspicion amongst stakeholders (Mutamba 2004). These arguments have led certain authors to suggest that increased participation can be a highly formulaic and empty process dominated by pragmatic policy interests (Mosse 2001).

Despite these challenges, participation of the public in a 'Bigger Society' remains an appealing prospect, relieving financial and organisational pressure from central government. Using the example of a bottom-up initiative in Northern Scotland, we outline the range of conditions needed to make a 'Bigger Society' concept compatible with biodiversity conservation, and question whether the costs (both financial and social) justify the means.

The Moray Firth Seal Management Plan: the Big Society in practice?

The Moray Firth in north-east Scotland has a complex biodiversity conservation setting, with Special Areas of Conservation (SACs) established for three protected species (bottlenose dolphin *Tursiops truncates*, harbour seal *Phoca vitulina*, and Atlantic salmon *Salmo salar*). The Firth is therefore home to protected populations of both predators (dolphins and seals) and prey (salmon), and a wide range of local stakeholders including wildlife tourism and conservation groups supporting seal conservation, and rod and net fisheries viewing seal predation as having a major impact on their livelihoods (Butler et al. 2011).

A combination of top-down and bottom-up drivers led to a watershed in the management of seals and salmon fisheries in the early 2000s. Declining numbers of harbour seals, potentially caused by intensive shooting of seals by local District Salmon Fishery Boards (DSFBs) (Thompson et al. 2007), combined with the risk of a Phocine Distemper Virus outbreak, led to the introduction of a Conservation Order by the Scottish Government in 2002 that prohibited the killing, injuring or taking of harbour seals. Faced with declining catches of salmon, and the imperative to protect salmon SACs, salmon fishery stakeholders

sought to find a compromise between protecting salmon from seal predation while maintaining the favourable conservation status of the harbour seal SAC. As a consequence local DSFBs collaborated to develop the Moray Firth Seal Management Plan (MFSMP), based on annual license applications by DSFBs to shoot a limited number of seals around river mouths and netting stations, which are most likely to be impacting on fisheries (Graham et al. 2011; Butler 2005; Butler et al. 2008).

Negotiation of the MFSMP began in 2002, following initial consultations between the DSFBs, the Scottish Government, the Government's Fisheries Research Services, Scottish Natural Heritage, the Sea Mammal Research Unit (SMRU) and the Moray Firth Partnership (a forum representing local wildlife tourism operators, conservation groups and marine fishery interests). Discussions also took place through the Government-coordinated Seals Working Group. The initiation of the MFSMP was therefore bottom-up, triggered by local salmon fishery stakeholders wanting to balance seal and salmon conservation.

Interviews carried out in 2009 with 20 representatives of the stakeholder groups identified above suggested that there were four primary conditions that enabled the successful negotiation and implementation of the MFSMP. The first was the emergence of a local 'champion'. This role was filled by a scientist employed by the Spey DSFB, who had a background in wildlife conflict resolution, and salmon management experience with DSFBs. A combination of a window of opportunity, his scientific background and sense of empathy for all interests made him the lynchpin of the process. His facilitation enabled the integration of all relevant stakeholders on an equal footing. By integrating different perspectives, including scientists and fishery stakeholders that were strongly resistant to seal conservation (Butler et al. 2011), the MFSMP was broadly endorsed by all stakeholders.

The second condition was the perceived emergence of a crisis point, or situation in which all stakeholders felt directly affected and hence the need to become engaged. By imposing a Conservation Order in 2002 the Scottish Government triggered this crisis point. This led to the direct involvement of government in the bottom-up process, which produced the MFSMP. In the case of biodiversity conservation more broadly this is particularly important. Many species and habitats are designated under the EU Habitats and Birds Directives, and consequently member states such as the UK are required to ensure the protection of listed species and habitats, and face heavy fines for non-compliance. As such, this represents an important and necessary imperative for top-down government involvement in biodiversity conservation, which must complement and even catalyze local stakeholders to "help themselves and their own communities (Cameron 2010)".

The third condition was the involvement of decision-makers (i.e., the Scottish Government) not only in triggering the local stakeholder-driven initiative, but in the process of developing the MFSMP. While the government did not lead the process, it ensured that the scope of the plan was realistically bounded by the specific issues defining the seal-salmon fishery conflict, and that agreements reached could and would be implemented with government endorsement and facilitation. Consequently, while the confines within which negotiations could take place were narrow, they were clear to stakeholders, and allowed them to make targeted contributions to the plan.

The fourth condition, and one that has not yet been resolved by the MFSMP, is the provision of financial and institutional support to ensure long-term implementation of the plan. This is often achieved by the creation of organisations or structures, which can institutionalise and execute activities agreed by stakeholders (Beierle and Konisky 2001). For the MFSMP this role was initially carried out by the existing Seals Working Group, which included decision-makers capable of implementing agreements. However, there was a strong emphasis from Moray Firth stakeholders on the need for a local-scale coordination

group to facilitate links between Moray Firth stakeholders and take a lead role in integrating science into management. This group would also provide local evaluation and adaptive learning for the plan. While this knowledge integration, monitoring and evaluation is crucial for effective environmental management, the costs associated with such a group would require some government support.

Concluding remarks

In order to achieve his vision of the Big Society, the UK Prime Minister David Cameron identified three primary policies: decentralisation from central government to the 'nano' level; greater transparency; and providing finance justified by outcomes (i.e., "paying public service providers by results" (Cameron 2010)). While these may be laudable, in the context of biodiversity conservation and conflict management there are a number of additional conditions that may also need to be fulfilled. The first is the need for a local champion, capable of bridging and integrating opposing stakeholder groups. The second and third are the need for government to take a catalyzing role in creating opportunities for local initiatives (either by legislative or other means) and, by establishing realistic boundaries for these initiatives, ensuring that activities identified can be government-endorsed and therefore implemented. Finally, as mentioned by David Cameron, there is a need for government funding to maintain local stakeholder coordination, although in the case of biodiversity conservation there are inherent difficulties associated with providing 'results' that can justify financial support. While increased involvement of local actors may lead to improved biodiversity outcomes, only a few studies have focussed on this critical issue, none of which has found direct links between public participation and improved biodiversity outcomes (e.g., Beierle and Konisky 2001; Sultana and Abeyasekera 2008; Newig and Fritsch 2009). Acknowledging that 'results' might be difficult to quantify, the success of the 'Big Society' in conservation would require long-term state investment in bottom-up initiatives through funding of increased research, adaptive monitoring and evaluation. To conclude, the characteristics of the natural environment, and of biodiversity conflicts in particular, and EU-level requirements under the Birds and Habitats Directives, make the Big Society concept a potentially risky strategy for biodiversity conservation. We recommend that this issue requires focussed debate beyond the current agenda of reducing public spending while simultaneously achieving improved societal outcomes.

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