Landscape scale conservation: incentives for cross-property action

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Abstract

Production landscapes are critical for biodiversity conservation. Individual landholders can contribute but the real challenge is coordinated cross-property action at a landscape scale. This paper describes 2 projects through which we have attempted to better understand that challenge. The 'Communities in Landscapes' project (Caring for Our Country 2009-2012) provided coordinated advice and training to develop cross-property biodiversity plans and \$70k for each of 7 landholder groups for the initial phase of the implementation. The project generated collaboration on landscape scale biodiversity conservation, but without ongoing support the benefits achieved could be soon lost. The 'Increasing landholder collaboration for landscape scale conservation' project (NSW Environmental Trust 2016-2017) is exploring the nature and extent of collaboration, and the opportunities provided by collaboration for public and private benefit. The vision is for landholders to develop 'Landscape Corporations' which are the vehicle for integrating production and conservation for landholders sharing the same landscape.

Introduction

Achieving coordinated landscape-scale conservation is both critical and complex. It is critical because biodiversity remains in decline largely because our production landscapes lack connectivity and suitable habitat in more productive areas. It is complex because productive areas are also valuable for agriculture. This means that the opportunity cost for taking these areas out of production is high. This is exacerbated by low farm incomes, increasing debt, decline in rural communities, and fragmentary, episodic and inadequate policy responses of governments (Hutchings & Nordblom 2011, Ikin et al 2016). The Australian Government Environment Stewardship Program in its various iterations provided support for successful landholders to manage key areas of endangered ecological communities for conservation. This included the opportunity cost of avoided grazing as well as the cost of fencing, planting and management. However, it required landholders to apply individually, competing with each other for least cost conservation. While existing stewardship contracts will be honoured, the program has now been discontinued. Landscape scale conservation has been a high profile objective of ongoing programs, such as the Greater Eastern Ranges Initiative, which seek to build corridors between the ranges and the coast to facilitate the movement of species. They rely largely on the altruistic actions of landholders with some small grant support from a number of sources to fence off areas from livestock, undertake conservation plantings and manage weeds and pest animals. It is widely recognised that, while these and other actions are worthwhile, their impacts are too small and fragmented to make a significant impact at a landscape scale (Natural Resource Management Ministerial Council 2010; Biodiversity Working Group 2016). In order to address these concerns, we have been active in two projects which we have summarized in this paper. Both are action research projects based on the idea that landscape scale conservation across production landscapes can best be achieved by engaged, connected and empowered communities.

Method

Two case studies are analyzed; the first is 'Communities in Landscapes' (2009-2012), a \$4.2million (AUD) project funded by the Australian Governments 'Caring for Our Country program to 'integrate conservation and production across Box-Gum woodlands'. It was managed by Landcare NSW and brought farmers, extensionists and researchers together from 8 community, research, government and non-government organisations to work with people living in and managing Box-Gum Woodlands. Through this project 7 cross property groups were established, and training and facilitation provided to help each group develop landscape scale biodiversity plans. They then had \$70,000 in project funds to undertake on-ground works to begin implementing their plan. The short-term success of this initiative stimulated us to look for longer term approaches to maintain successful collaboration. The second is 'Increasing landholder collaboration for landscape scale conservation' (2016-2017), a \$150,000 project funded by NSW Environmental Trust. We aim to better understand how to support greater landholder collaboration on landscape scale conservation and sustainable agriculture. It is a partnership between 3 universities actively supported by Local Land Services and Landcare (NSW, Watershed, Little River and Hovell's Creek). Both projects used participatory rural appraisal (PRA) which consists of: key informant interviews for orientation and recruitment of participants; forming a team of researchers and locals to conduct semi-structured interviews of community members; team meetings to build a 'rich picture' of the local situation; and a community meeting to present findings and generate dialogue. In the first project, the PRA consisted of 84 interviews across 3 locations focused on identifying key eco-innovations and eco-innovators. This was followed by selection of groups for cross property biodiversity planning, then working with those groups to develop and implement their plans. At the conclusion of the project, participants joined a focus group discussion to evaluate its success of the

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cross property component. In the second, 10 key informant interviews set the scene for 55 interviews across 2 locations focused on identifying examples of collaboration, barriers to collaboration and issues on which landholders perceived more collaboration was needed.

Results

The cross property component of the Communities in Landscapes project resulted in 7 locations with cross property biodiversity plans and on-ground works completed according to each plan which impacted on 66,000ha. It built awareness in participants of the need for landscape scale management, and it increased landholders' ownership of the issues in that they viewed themselves as key to implementation. It also generated a thirst for knowledge about how to achieve better landscapes for production and conservation and provided a new purpose for existing Landcare groups, generating ongoing engagement which opened up opportunities for collaboration and social interaction.

The key informant interviews for the landholder collaboration project uncovered the following themes and challenges for incentivising cross-property action including: the need to develop flexible and transferable models of collaboration; the constantly changing and fragmentary role of government was a significant frustration and the availability of funding for groups was critical; the role of industry is becoming more critical due to the diminution and inconsistency of government actions; the role of education is critical in broadening minds, catalysing and stabilising collaboration; the need to market strategies well; the importance of social cohesion as a catalyst for collaboration and an enabler of group success; the importance of broader community involvement such as from absentee landlords and urban people; the need to facilitate succession of groups by having a large enough pool of people to help transition from one leader to the next; and integrating production and conservation in that participants need to be economically viable, using strategies that are both environmentally and economically beneficial.

The PRA process identified evidence of strong collaboration on: biodiversity management; fire safety and management; cross-property grazing; and pest and weed control. The major barriers to collaboration were: lack of time and burnout; individualistic mentality of some landholders; social dynamics; lack of trust and contact; and lack of fast and reliable telecommunications. Analysis of the information gathered through the PRAs suggests that communities would benefit from greater collaboration to achieve: greater habitat connectivity; shared costs for pest and weed management; shared branding and marketing of produce; development of mobile chicken and bee hive business models; and developing eco-tourism opportunities such as bird-watching, cultural tourism, agricultural tourism and mountain biking.

Discussion and conclusions

It is local communities that maintain continuity in a natural resource management environment that is dominated by projects conducted by people employed on short-term contracts with no real career trajectory. We aimed to support communities to integrate production and conservation using strategies that maintain or improve complex ecosystems and the services they provide, while generating marketable products and services that support livelihoods. A key component is to support communities to generate the social capital needed to collaborate across properties. We found that cross property collaboration is already happening and is highly motivating for those involved. There is great potential for enhanced levels of collaboration to have both private and public benefits. Some landholders are looking for greater collaboration and there is a role for government to support landholder groups who have capability in and motivation for delivering landscape scale conservation. We call for financial incentives for collaboration to catalyse action towards landscape scale conservation, such as a grant providing ongoing support for established groups following a successful participatory process. Such incentives would facilitate the development of 'landscape corporations': legal entities comprising landholders sharing the same landscape and collaborating for a combination of public and private benefits.

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