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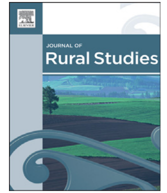

A new perspective on the trust power nexus from rural Australia

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ABSTRACT

Many of the world's most challenging environmental problems are trans-boundary in nature, requiring the cooperation of diverse actors. This study aims to assess the roles of trust and power in achieving environmental collective action among rural land managers. The empirical example used is serrated tussock (*Nassella trichotoma*), a highly invasive, noxious weed that covers more than two million hectares in south-eastern Australia. Semi-structured interviews were used to explore relations among the suite of actors responsible for controlling this weed in two case studies—Cooma, NSW and Bacchus Marsh, Victoria. Interactions between trust and power were found to be useful for explaining the development of positive and negative relations among these diverse actors. When trust and power worked in synergy, land managers and government staff were more likely to share information, provide support and defer to enforcement. When trust and power acted as substitutes avoidance, disengagement, resistance and retaliation ensued. The author argues that long-term collective weed control will only be achieved when the focus shifts from enforcement to building stronger rural social relations in which trust and power work in synergy.

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1. Introduction

Many of the world's environmental problems are challenging, not only because of their persistence, but because they represent collective action problems. For example, climate change, losses of biodiversity and the invasion of pest plants are all trans-boundary problems—they are not contained within property, state or national borders—creating interdependencies among social actors. Resolution of these environmental problems requires diverse actors to be willing to cooperate and coordinate their activities (Ravnborg and Westermann, 2002). Understanding the social relations that underpin collective action holds a key to explaining if and how these environmental problems might be resolved.

In rural Australia, invasive plants present a significant agricultural and environmental problem. Almost three-quarters of Australian farms are affected by weed-related issues and four-fifths of farms undertake activities to prevent or manage weeds (ABS, 2006). More than $1.5 billion is spent each year in control activities in addition to $2.5 billion in lost production (DSEWPC, 2012). The costs of weeds on Australia's natural environment are estimated to be similar to, or greater than, the costs to agriculture. Looking forward, the agricultural and environmental problems caused by weeds are predicted to increase because weeds are spreading faster than they can be controlled, despite the considerable effort and resources being invested (DSEWPC, 2012).

Despite the scale of the problem presented by weeds, their control has primarily been addressed at an individual property level for the last century. Current and historic weed policy across Australia involves government officers inspecting individual properties and engaging with a myriad of property owners. Similarly, much of the social research focuses on the individual motivations that shape perceptions and use of a variety of weed management practices (e.g. Llewellyn et al., 2004, 2007). Given that 90,000 agricultural establishments are infested with weeds in Australia it is evident that such an individualistic approach has had limited success.

Past research into environmental collective action problems reveals that individuals' willingness to cooperate is strongly related to their expectations about the behaviours of others (Lundqvist, 2001; Marshall, 2004; Pretty, 2003). In particular, trust is argued to be of central importance for achieving cooperation (Ostrom, 2010). Trust leads to expectations that others will reciprocate and when these expectations are met, long-term obligations develop (Pretty, 2003). Thus, trust provides a mechanism for *depending* upon others, whose future behaviour is unpredictable and uncontrollable (Govier, 1993).

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The emphasis on trust in collective action research means that less attention has been given to other concepts that may influence an individual's expectations of others. Some collective action research recognises that power is significant because it *influences* others to act as expected. However, these researchers tend to view power: 1) from a limited structural, rather than an agent-centred perspective (e.g. Adhikari and Goldey, 2010); and 2) as a constraining, rather than an enabling force (e.g. Theesfeld, 2011). This indicates a limited understanding of the role power plays in the social relations that underpin collective action.

Serrated tussock (*Nassella trichotoma*) is one weed currently wreaking havoc in Australia. It is a highly invasive plant—each adult plant can produce up to 100,000 seeds per year—capable of withstanding a range of soil and climatic conditions. Its seeds can be carried up to 15–20 km by wind and can remain viable for more than a decade (Michelmore, 2003). This plant was accidentally introduced at the turn of last century and is now pervasive across two million hectares of south-eastern Australia despite $45 million being spent annually in weed control and lost production (Osmond et al., 2008). It out-competes native pastures, reduces biodiversity and diminishes the productivity of grazing lands.

The biophysical characteristics of serrated tussock make it ideal for the study of collective action because of the implications they have for social relations. First, it covers a large geographical area. This means that a diverse range of actors are responsible for controlling the weed including private and public land managers; comprising individuals, businesses and government agencies. Second, the highly invasive nature of the weed creates social interdependencies. If land managers choose to control weeds on their property, their success in maintaining weed-free properties will not only depend on their own efforts but also those of their neighbours. Third, the weed's persistence means that eradication can only be achieved if *every* affected land manager remains committed to a decade-long weed control program. Given these characteristics and the current individualistic policy approach it is unsurprising that community-wide cooperation on serrated tussock is yet to be achieved anywhere in Australia. This suggests the potential value of conceptualising the problem as one of collective action and exploring how individual land manager's expectations about the behaviour of others affect their willingness to cooperate.

The overarching aim of this article is to explore the combined significance of power and trust to a rural, environmental collective action problem. It considers the nature of the interactions between trust and power, and the effects of these interactions, if any, on expectations of cooperation in rural social relations. It will begin by explaining the three main conceptualisations of environmental collective action problems and the reason for adopting a social relations approach to collective action in this study. It then reviews the rural and sociological literatures on trust, power and the trust-power nexus that are relevant to understanding the collective action problem presented. It will then describe the study, the results, and their implications for advancing our understanding of the roles trust, power, and their nexus play in achieving cooperation.

2. Collective action, trust and power

The existing literature offers three main ways of conceptualising environmental collective action problems like serrated tussock: the rational choice approach (advocated by Olson (1965) and Hardin (1968)); the boundedly-rational, norm-based behavioural approach (proposed by Ostrom (1998, 2009, 2010)); and the social capital approach (encapsulated by Sobels et al., 2001). The rational choice approach focuses on short-term, self-interested decision-making by rational individuals and argues that rewards and sanctions can make cooperation more rational and prevent free-riding. It is insufficient for assessing the serrated tussock problem because successive governments have been unsuccessfully using incentives and fines to persuade land managers to control this weed since the 1930s.

Despite the limited applicability of the rational choice approach it has some heuristic value because it draws a distinction between common pool resource and public good collective action problems. Common pool resources require individuals to exercise *restraint* and the benefits are *subtractable* whereas public goods are provided through active *contribution* and the benefits are *nonrivalrous* (Kollock, 1998). Social researchers have previously found differences in the ways individuals respond to public good and common pool problems (Van Vugt and Snyder, 2002). Thus it is important to note that the control of serrated tussock, and other weeds, is a public good problem (Perrings et al., 2002).

Ostrom's bounded-rationality approach attempts to overcome the limitations of the rational choice approach. It focuses on the heuristics, norms and past experiences with others that individuals draw on when making decisions about whether or not to cooperate (Ostrom, 2010). There are three key issues with applying the bounded-rationality, norm-based approach to serrated tussock. First, the approach draws heavily on findings from common pool resource problems rather than public good problems. Second, trust is considered to be the primary mechanism that affects cooperation (Ostrom et al., 2007). While trust has been shown to be highly significant for achieving cooperation in a range of contexts, rural research identifies other relational variables, such as power, affecting cooperation (e.g. Lyon, 2000, 2003, 2006; Tillmar and Lindkvist, 2007). Third, the approach is primarily focused on the decisions made by individuals, rather than the relations among individuals.

The social capital approach focuses on interactions among individuals to explain systematic factors that enable and/or constrain aspects of relations. Phillips and Gray (1995) and Scott (2000) argue that a social relations approach better explains behaviour that is unconscious, influenced by habits or norms, or a sense of obligation or commitment. The social capital approach has been useful for explaining the establishment of reciprocal social obligations among farmers (Sutherland and Burton, 2011) and land managers' willingness to work collaboratively on small-scale natural resource management projects (Sobels et al., 2001). This suggests that the social capital approach may be usefully applied to the problem presented by serrated tussock. However, the approach is not without its limitations. Critics argue that the 'dark side' of social capital is frequently ignored and that it is important to study power as well as trust in social relations (Putzel, 1997). This indicates a potential gap in our understanding of the role power may play in the social relations that underpin collective action.

The aim of this paper is to take a broader social relations approach to studying the rural, environmental collective action problem presented by serrated tussock. The conceptualisations of trust, power and the trust-power nexus adopted in this approach will be discussed next.

2.1. Trust

The sociological literature explains that interpersonal[1] trust enables the achievement of collective action through its cohesive

[1] Trust has been conceptualised to exist as a personality trait, a quality of interpersonal relations, a belief about organisations and as an emergent property of societies. These are known as generalised, interpersonal, institutional and cultural trust, respectively. Since this study is taking a social relations approach to collective action, the focus will be on interpersonal trust. All subsequent references to trust refer to interpersonal trust.

and collaborative mechanisms (Misztal, 1998). Trust is cohesive because it encourages acceptance of strangers, tolerance and reconciliation of diverse interests, and contributes to an individual's feelings of identity and solidarity (Lewis and Weigert, 1985; Sztompka, 1999). Trust is also collaborative (Gambetta, 1988) because it keeps individuals' minds open to all evidence, thereby facilitating communication and dialogue (Lachapelle et al., 2003; Sligo and Massey, 2007). Thus the function of trust, in both its cohesive and collaborative capacities, is to provide individuals with a means of dealing with the freedom of others (as argued by Luhmann, 1979). This function is important for collective action problems because it enables individuals to simplify the problem to one of contributing to the public good under the assumption that others will contribute too, i.e. it enables mutual cooperation.

Beyond understanding the mechanisms and functions of trust it is useful to specify the basis upon which evaluations of trust are made (Barber, 1983; Lyon, 2000, 2003). Barber (1983) and Nooteboom and Six (2003) argue that trust comes in two types: one that is based on technical competencies, and another based on goodwill and the absence of opportunism. A number of authors (e.g. Purdue, 2001; Sako, 1991) refer to these as competence and goodwill trust, respectively. This distinction is important because it explains the basis upon which individuals make the 'leap of faith' (Brownlie and Howson, 2005; Lee-Treweek, 2002; Sztompka, 1999; Tillmar and Lindkvist, 2007) to trust others.

Taking into consideration the way trust has previously been conceptualised and operationalised in rural sociological, collective action and trust-power research, for the purposes of this study, trust will be defined as follows:

Competence trust – belief that other actors have the <u>*ability*</u> *to contribute to the provision of the public good (control of serrated tussock)*

Goodwill trust – belief that other actors have the <u>*motivation*</u> *to contribute to the provision of the public good (control of serrated tussock)*

2.2. Power

The conflictual perspective of power assumes power to involve some form of influence that effects a change in the behaviour of others (Bachrach and Baratz, 1963; Dahl, 1968; Held, 1972; Oppenheim, 1978a) or changes in others' attitudes, values, needs (French and Raven, 1959), desires and wants (Lukes, 2005). It is also usually assumed that: there is some resistance to change (e.g. French and Raven, 1959); and the change reflects the power-holder's interests and intentions (e.g. Goldhamer and Shils, 1939) and/or affects the interests of others (Lukes, 2005). Lukes (2005, p. 26) argues that the effects of power may be hidden and caused by "collective forces and structural arrangements" in addition to individual actions. This study acknowledges, but does not focus on, such a structural view of power.

The policies currently used by governments to manage noxious weeds are designed to influence the values, attitudes and behaviour of individuals (Reid et al., 2009). This indicates that a conflictual view of power may be useful for understanding the ways that government staff engage with land managers, and the ways land managers engage with one another, regarding serrated tussock. Adopting such an approach to power is consistent with past research into the linkages between trust and power (e.g. Dapiran and Hogarth-Scott, 2003). Therefore for the purposes of this study power will be defined as:

An actor's ability to influence the behaviour or opinions of others with respect to the provision of a public good, despite resistance.

Literature on the trust-power nexus also often specifies the basis upon which an actor's power derives, drawing on the five bases of power proposed by French and Raven (1959, p. 155–156, italics added):

(1) *reward power*, based on P's perception that O has the ability to mediate rewards for him [sic];
(2) *coercive power*, based on P's perception that O has the ability to mediate punishments for him;
(3) *legitimate power*, based on the perception by P that O has a legitimate right to prescribe behaviour for him;
(4) *referent power*, based on P's identification with O;
(5) *expert power*, based on the perception that O has some special knowledge or expertness

Note that: 'P' refers to a person, 'O' refers to a social agent, and the bases of power are not mutually exclusive. Given the conceptual utility of one or more of these bases of power in other studies on the trust-power nexus (Dapiran and Hogarth-Scott, 2003; Ireland and Webb, 2007), this study deliberately assessed these bases of power, in the context of the trust-power nexus, for understanding the nature of social relations associated with controlling serrated tussock.

2.3. Trust-power nexus

Most of the literature on trust and power exists in isolation from one another. A notable exception is the organisational management field, which over the last decade has been explicitly examining the interactions between these two concepts and their joint effects on cooperation. The four principal conceptualisations of trust and power encountered in this body of research are: substitution; supplementary; synergetic; and duality (Fig. 1). The substitution perspective assumes that trust *or* power is required to achieve cooperation; the remaining three perspectives assume that trust *and* power are required to achieve cooperation.

Within the literature on the trust-power nexus, trust is often conceptualised as being a substitute for power (Grey and Garsten, 2001). There are two key assumptions associated with this perspective. First, trust represents an alternative route to power for achieving cooperation (Costa and Bijisma-Frankema, 2007; Raymond, 2006). This is because both trust and power represent mechanisms for dealing with the risks associated with the free will of others (Luhmann, 1979). The second key assumption is that there exists inverse relationships between trust and power (Costa and Bijisma-Frankema, 2007). It is argued that the use of power erodes trust and that increases in trust reduce the need for power (Lubell, 2007).

There is some evidence that a substitution approach to the trust-power nexus may be useful for understanding rural cooperation. Vollan (2008) found that sanctions, i.e. coercive power, are more effective at achieving cooperation among farmers where low personal trust exists. Similarly, Lyon (2000, 2003) found that the use of coercion undermined trust among farmers, traders and agricultural suppliers engaged in collaborative endeavours.

The supplementary perspective provides the simplest conceptualisation of how trust and power can achieve cooperation together. The underlying argument is that trust and power jointly but independently contribute to cooperation. Das and Teng (1998) are the main proponents of this view. They argue that trust and power need not have a negative effect on one another and that they

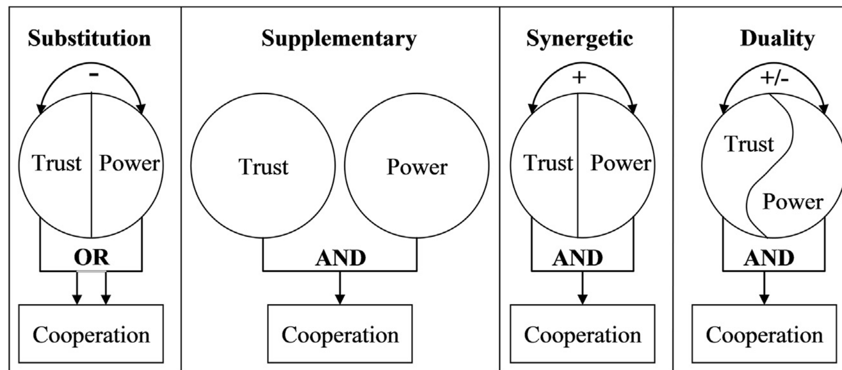

Fig. 1. Diagrammatic representations of the key conceptualisations of the trust-power nexus.

can exist in parallel. Knights et al. (2001) argue that the supplementary perspective is rarely discussed because once trust and power are believed to co-exist, they are also assumed to be interdependent (Knights et al., 2001). This is consistent with empirical research on collective action; when trust and power have been studied together in situations that simulate social dilemmas interactions are usually found.

The synergetic view of the trust-power nexus argues that these concepts not only co-exist but are mutually reinforcing and that both contribute to the amount of cooperation in a relationship (Bijisma-Frankema and Costa, 2005). The synergetic perspective resonates with some empirical rural research. Mostly there is evidence that trust has a synergetic relationship with non-coercive forms of power. Vollan (2008) found that rewards resulted in greater cooperation among farming communities when high, rather than low, personal trust existed. Similarly, Lyon (2000, 2003) found that punishments tied to referent and legitimate power increased trust among farmers in collaborative endeavours. This indicates that the synergetic, and substitution, models may be useful for explaining relations between trust and power at an interpersonal tier and their combined effects on rural collective action. It also indicates that the model that applies may depend on the base of power being employed.

The final model that has been proposed to describe the trust-power nexus is a duality, rather than a dualism. A dualism assumes there are two distinct concepts that have some connections but are mostly independent (Möllering, 2005), which is implied by the substitution, supplementary and synergetic perspectives. A duality assumes that the distinction between the concepts is much less sharp and that there are strong interdependencies. Möllering (2005), who is the main proponent of the duality perspective, argues that trust and power form a duality because they assume each other's existence, refer to each other, create each other, and are irreducible to each other. Möllering (2005) argues that taking such a perspective paves the way for deconstruction of one-sided accounts of both trust and power by “recognizing complexity, reflexivity and contingency where other approaches remain simplistic, linear and deterministic” (p. 300).

3. Methods

This project employed a case study approach and semi-structured interviews to explore the social relations of rural collective action pertaining to the control of serrated tussock. Two case studies—Cooma, NSW and Bacchus Marsh, Victoria—were selected to evaluate whether trust and power interacted in different ways under contrasting institutional settings.

In Victoria, the most significant infestation of serrated tussock is located around the town of Bacchus Marsh, in the region bounded by the towns of Melbourne, Geelong and Ballarat (Fig. 2). The state government department responsible for managing serrated tussock, the Department of Primary Industries (DPI), adopts a litigious approach. It predominantly relies on formal notices, fines and litigation to inform land managers of their responsibilities to control serrated tussock and force them to comply if necessary.

In NSW, serrated tussock is widespread across the tablelands, which run the length of the state, and each local council has its own approach to controlling serrated tussock. One region that strongly promotes a cooperative, rather than litigious, approach is the Cooma-Monaro Shire Council (Tracy, 2005). This region also has climatic, geological, environmental and demographic characteristics that resemble those of the Victorian case (Graham, 2012). This suggests that any differences in the social relations between Cooma and Bacchus Marsh can be attributed to institutional, rather than contextual, differences.

In each case 21 land managers were interviewed as well as 12 government staff in Bacchus Marsh and 18 government staff in Cooma. The snowball sample (Sarantakos, 2004) included people who had farming and non-farming backgrounds and who had always lived in, or recently moved to, the area. Of the land managers interviewed, twenty-three used their farm for primary production, twelve had hobby farms and seven earned no income from their land. The size of properties owned by landholders ranged from 4 to 7000 ha. Three-fifths of the land managers were Landcare[2] members. More than twice as many men (51) than women (21) were interviewed.

Two interview schedules were used; one for land managers and another for government staff. Both schedules moved from specific questions about the interviewee's role in serrated tussock control to their perceptions regarding the key issues surrounding its management. All the interviews were digitally recorded, transcribed and then imported into the qualitative data analysis software, NVivo. The process for coding and analysing the transcripts followed the methodology described by Layder (1998).

[2] Since 1989 the Australian Commonwealth government has supported the development of community conservation groups through the National Landcare Program. These Landcare groups are an international success story because they encourage land managers to form groups to address and support one another in sustainable land management (Curtis and De Lacy, 1996). In NSW and Victoria 45% of land managers are members of Landcare (Hodges and Goesch, 2006).

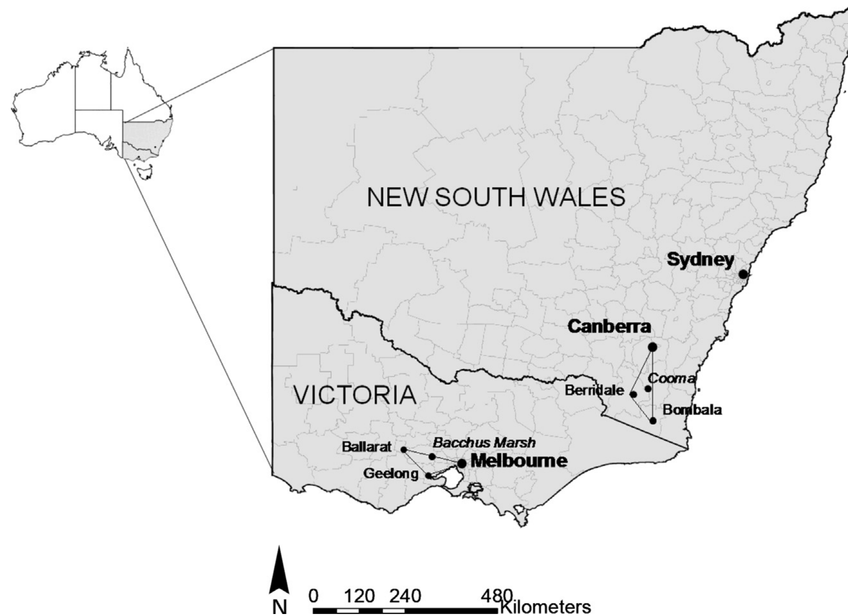

Fig. 2. Location of the case study areas. The Bacchus Marsh and Cooma case studies were bounded by the regions defined by the cities and towns of Melbourne, Geelong and Ballarat, and Canberra, Bombala and Berridale, respectively.

4. Relations between trust and power in a rural collective action problem

At least one type of trust and one type of power was evident in almost every social interaction interviewees discussed with respect to managing serrated tussock. The particular type (or types) of trust and power that were apparent and the nature of the relationship between them depended on the purpose of the social interaction; whether it was to share information, provide support or apply pressure. The remainder of this section will discuss the particular types of trust and power that were salient for each of these interactions as well as the mechanisms and relationships between them.

4.1. Sharing information

When land managers and government staff discussed the collective action problem presented by serrated tussock, they consistently described the need for everyone to know about the existence of the weed, how to identify it, the control methods available and how to apply them. Land managers and government staff alike suggested that it was highly unlikely that individuals would independently seek such information from online and material resources and that the transfer of tacit knowledge through social relationships was vital.

> The significant issues [for managing serrated tussock] – definitely education – you've got to meet with everyone … [You need] people who have the communication skills to actually connect with people. You can be the best technical person in regards to serrated tussock and what it is and how it all grows and all that sort of thing, but if you can't talk to someone you're never going to get anything happening (Government staff, Cooma)

Long-term land managers were the only group consistently sought out for advice. Land managers and government staff who were new to the area assumed that they could (competence) trust long-term land managers because they had years of local experience managing serrated tussock. For longer-term land managers competence trust was based on more than just experience controlling weeds, they sought evidence that other land managers were 'good' farmers generally. They also evaluated the farming styles of other land managers, searching for evidence that they shared similar values and land management practices—referent power.

> One day I thought … I wonder what on earth those things are … some weeks later [another land manager] was talking about serrated tussocks, and I said, "I've got these funny looking things at my place," and he said "it sounds like serrated tussock to me" … he said "they're almost on top of us." And I thought well that's strange, because I know you are such good farmers; you're not sitting on your backside doing nothing. And if you're saying that it's hard to control, then it is. So I started [weed control] then. (Land manager, Bacchus Marsh)

Occasionally they sought out evidence that they could (goodwill) trust other land managers not to report them to weed officers.

> I heard this thing from my family [who own a property with serrated tussock], where … there's like a black market in weed identification … landowners in some areas they don't want to pull in the weeds officer to find out if they've got something [because of their enforcement powers]. So they pull in someone they know who they trust—another landowner—and say, "is this serrated tussock?" and they go [nods head] and they go [silent movement indicating acknowledgement]. (Government staff, Cooma).

Where such competence trust, goodwill trust and referent power co-existed among long-term land managers, reciprocal and ongoing flows of information ensued.

In both case studies land managers rarely sought weed advice from government staff because of a lack of trust (competence and goodwill) and expert power, and concerns regarding coercive power. Land managers distrusted government staff that lacked locally-relevant

expertise. This was particularly evident in Bacchus Marsh where weed officers were more likely to be young, with little farming experience.

> Some of the DPI officers that I've been working with onsite don't know the spraying part of the business. They can't advise the landowner how to eradicate the weed. They don't teach them all they need to know … and the trust only comes with someone who really knows … Good working relationships is an appropriate understanding of how to apply the appropriate chemical, otherwise their credibility is shot (Land manager, Bacchus Marsh)

Land managers also questioned the motivations of government staff when they ignored the broader values and goals that land managers had for their properties.

> Land manager 1: My aim now is not to have anything to do with the DPI.
>
> Land manager 2: … [They've] just got their tunnel vision on this, got one problem without working out what other problems. It's just not the big picture, they're just doing their little bit that was their job and the rest is not important … there was no after care or after thought of what would happen next at all. (Bacchus Marsh)

Land managers were also reluctant to approach government staff with regulatory power because they doubted whether they would be treated fairly; they exhibited goodwill distrust. The only land manager interviewed who reported seeking advice on weed identification from government staff approached staff from an agency that did not have regulatory power.

> A neighbour said that we had some [serrated tussock] on the property and I couldn't identify it then. So I got in staff from what is now DSE [Department of Sustainability and Environment] … And she came out from Geelong, identified some of the locations for it and then gradually showed me how to identify it. (Land manager, Bacchus Marsh).

None of the government staff reflected on the extent to which their own knowledge and experience with weed identification or other land management practices affected their relationships with land managers. The only information-sharing issue that they identified as impacting on their relationships with land managers pertained to providing advice about herbicide application. Government staff in Bacchus Marsh were had been advised not to give chemical advice by their department because of the possibility of being sued by land managers. Government staff were concerned that not being able to provide such advice hampered their ability to build working relationships with land managers, who expected staff to provide herbicide advice, and so some officers ignored the department's counsel.

> I tend to give chemical advice, a lot of people don't … I'm more about getting the job done and helping people than I am about being worried about perhaps being sued … So I'm aware of that but I'm also very much keen to assist the people … "If I owned this property," which is my standard line. "If I owned this property," which tends, in my pathetic mind gets me out of the legal obligation of not giving advice … A lot of people are very grateful … [because] you've given good advice, you've helped them. (Government staff, Bacchus Marsh)

In Cooma, almost all government staff actively provided land managers with chemical advice. Some spoke of a "buddy" system where they walked side-by-side with new land managers to teach them how to prepare and apply the herbicides. They believed that they could not simply provide information and trust new land managers had the ability to apply the information themselves, even if they were motivated to do the right thing; rather, a working relationship was required to ensure better knowledge sharing and weed control results.

There are at least two reasons why such relationships were possible in Cooma but not Bacchus Marsh. First, the institutional setting was more conducive to the development of productive partnerships in Cooma; there was no ban on providing chemical advice and the council was committed to helping land managers develop land management plans. Second, almost all the staff in Bacchus Marsh tended not to be from farming backgrounds and were either at the start or end of the career, which meant that land managers perceived them to have lots of enthusiasm but no knowledge or vice versa, respectively. In Cooma almost all the staff had farming backgrounds, were local to the area, and were in their 40s. This meant they were more likely to be attributed with expert and referent power by land managers.

At the core of information-sharing relationships was a belief in the special knowledge or expertise of others. However, simply knowing who is attributed with expert power is not sufficient for understanding who will be sought out for advice on weed control and whether advice will be provided. Effective flows of information are highly contingent on referent power, goodwill trust and competence trust. Land managers not only needed to attribute others with special knowledge, they also needed to believe that the knowledge was relevant to them—that the advice they were seeking fit with their values, would achieve the desired results, and would allow them to avoid regulatory sanctions. Similarly, government staff not only needed to believe that they had expert knowledge to share but that land managers had the ability and motivation to act on the advice provided and that they would not sue the government if the information provided did not achieve with the desired results. Thus, in information-sharing relationships expert power worked in synergy with referent power, and competence and goodwill trust.

Coercive power did not have a direct role to play in the social relations that enabled the sharing of information regarding serrated tussock. However, land managers were cautious about seeking advice from other land managers who might report them to the authorities, and they were unlikely to seek and accept advice from government staff who were attributed with coercive power. Thus coercive power overshadowed the sharing of information in some rural relations by undermining the establishment of competence and goodwill trust as well as expert and referent power.

4.2. Providing support

The second main type of interaction that occurred, in striving to achieve widespread serrated tussock control, was the provision of support among land managers and between land managers and government staff. This took the form of providing encouragement and offering incentives. In Cooma, examples of mutual aid also existed. It was suggested by interviewees that providing support was needed to keep land managers motivated to continue managing this long-term problem. As per sharing information, the extent to which offers of encouragement, aid and incentives were made and accepted depended on the nature of interpersonal relationships.

Reward power was essential to the success of supportive relationships; land managers seeking and receiving support needed to believe in the ability of others to provide them with benefits. These benefits could be financial, such as those available through

funding programs, or non-material, such as words of encouragement or a smaller weed burden coming from neighbouring properties.

Across both case studies reward power on its own was usually insufficient for land managers to accept support being offered by government departments. Land managers needed to believe the government agency providing funding had the right motivations, would respect land managers goals and approaches, and had a legitimate right to prescribe behaviour for them. They were less likely to agree to the terms of the funding agreement if these beliefs did not exist.

> The relationship with Grow West[3] is good … probably because they're happy to come out and actually work with land managers … anyone that comes out and is prepared to work with you and offer you a bit of financial incentives to do things well that's obviously going to be streets ahead of anyone else, but the fact is they seem to be open to modify their methods or adapt and evolve … [so we] just more or less sort of support them in doing those projects. (Land manager, Bacchus Marsh)

> They're trying to help, but you have to do it their way. It can't be done your way. If [there are] things you'd like to do and you'd like to just go ahead and be able to do it, but you can't because there's all sorts of criteria and things that have got to be met and it all becomes too bureaucratic. (Land manager, Cooma)

Government staff in both case studies mentioned that if land managers attributed them with coercive power that this would make land managers less likely to seek and accept funding. Government staff indicated that in order to overcome these concerns they needed to be patient with land managers, build trust, and make it clear that their funding and regulatory responsibilities were separate.

> Some of the feedback that came from the other catchments was that people thought, "Well, what's the catch?" And those that sort of applied for it and got the funding realised, well the point was put out there, that you're on the radar anyway—we'll be inspecting your properties whether you go for the funding or not … The areas I was in last year, no one was interested … they were a bit more interested the second time around. (Government staff, Bacchus Marsh)

> People seem to be a little bit nervous about taking up that money. So if you attached a precondition on it that if you don't clean up your weeds properly then you might get fined, well then they'll definitely not go for it. (Government staff, Cooma)

> In terms of getting revegetation work happening, there's a bit of time involved in allowing a land manager the time to get to know you and trust you … Land managers generally, I believe, won't commit to anything unless they have a face or individual that they know and they can trust. (Government staff, Bacchus Marsh)

In discussing the provision of financial incentives government staff not only talked about the need for land managers to trust them but also the need to be able to trust land managers to: 1) use funding in the way it was intended; and 2) continue the work after funding had ceased. The extent to which government staff trusted land managers to use finances as intended depended on the core business of the organisation that they belonged to. The greater their legislative powers for enforcing weed control the less they relied on (goodwill and competence) trust.

Government staff in agencies that provided financial incentives were concerned that using reward power in the short-term would reduce land managers' motivation to control weeds in the long-term. To some extent these concerns were substantiated by land managers' comments. Land managers who had received considerable government assistance in the past expected this level of assistance to continue into the future. However, there was no clear evidence that land managers with such expectations were less motivated to continue to control weeds in the long-term.

A small number of support-providing relationships developed among land managers, rather than between land managers and government staff. In these cases reward power combined with goodwill trust, competent trust, referent power and legitimate power enabled the establishment of long-term, mutually-beneficial reciprocal relationships. Seven long-term land managers in Cooma, five of whom belonged to Landcare, provided examples of how they and their neighbours helped one another control serrated tussock by identifying and spraying weeds for one another.

> Land manager 1 – Well this side we have a very good relationship with [our neighbour].

> Land manager 2 – Yeah, good; they do the work.

> Land manager 1 – And they don't mind if you ring up and say, "There's a bad patch [of weeds] so and so [location]". (Cooma)

> Land manager 2 – Yeah I saw some nodding thistles from the road one day and I rang him up. He said, "I found them yesterday". (Cooma)

> Land manager 1 – So you can do that, you can do that with them and they could do it with us. And if [our neighbour] saw something he'd speak up. But on the other side … We've got to the stage of not really talking to [our other neighbour] about tussocks …

> Interviewer – Do you have a sense why it's easier to talk to some of your neighbours about it and not others?

> Land manager 2 – I suppose it's a bit how you get on with the people. (Cooma)

Overall, reward power was essential to support-providing relationships but it rarely operated in isolation of trust (competence and goodwill) and legitimate power. In the case of financial incentives, land managers not only needed to know which government agencies had funding available but also needed to believe in the land management practices being prescribed, believe that government staff would recognise their efforts and not engage in punitive actions. Similarly, government staff needed to have trust that land managers had the ability and motivation to use the funding as intended and that they would continue the work after funding had ceased, although staff in government agencies with enforcement responsibilities were less concerned about trust. For non-financial support referent power was important; land managers needed to believe that they shared farming styles and values and that the provision of aid would be met with reciprocity. Thus, in support-providing relationships reward power mostly worked in synergy with legitimate and reward power, and goodwill and competence trust.

Coercive power did not have a direct role to play in the social relations that enabled the provision of support. However, comments made by land managers revealed that they were less likely to

[3] Grow West is a government funded landscape change program in Victoria launched in response to community pressure striving for more assistance with controlling serrated tussock. It funds revegetation projects with the aim of: 1) controlling serrated tussock; and 2) addressing other environmental issues such as salinity and erosion.

seek and accept support from agency staff attributed with coercive power. This was particularly evident in the provision of financial inducements where coercive power overshadowed land managers' estimations of reward and legitimate power as well as competence and goodwill trust.

4.3. Applying pressure

When land managers and government staff believed collective action on serrated tussock was not being achieved through the provision of information and support, the final recourse they discussed was applying pressure on uncooperative land managers. This took the form of peer pressure—through leading by example and monitoring over-the-fence—as well as formal enforcement actions—inspections, notices, fines, forced entry and spray,[4] and litigation. The way in which this occurred, and whether it was deemed necessary, depended on the nature of interpersonal relationships among land managers and between land managers and government staff.

Decisions on whether the application of pressure was necessary were underpinned by evaluations of competence and goodwill trust. When 'cooperative' land managers and government staff believed that 'uncooperative' land managers had the ability to control weeds—competence trust—but were not sufficiently motivated to act—goodwill distrust—then the application of pressure was deemed appropriate. If land managers did not have the ability to cooperate then the provision of advice or support was deemed to be more appropriate than the application of pressure.

There were two main ways that cooperative land managers engaged in the application of pressure. The first was to rely on referent power; they expected that if they controlled serrated tussock on their own properties that neighbouring land managers would feel pressured to follow suit. Six government staff observed that peer pressure directly motivated some land managers to control weeds on their property. This observation was supported by two land managers who acknowledged that they had begun controlling weeds as a result of comparing their own weed control efforts against their neighbours.

> You'll get the land manager out there that is so diligent and a model land manager and his next door neighbour is an absolute disaster. Well it's only time before the next door neighbour becomes embarrassed, shamed or forced to take on the solution. (Government staff, B2M)

Land managers primarily relied on peer pressure because they did not feel that they had a legitimate right to prescribe behaviour for other land managers. They were concerned that approaching their neighbours about weeds would create tensions in their relationships. This meant that their alternative course of action involved bringing uncooperative land managers to the attention of government staff because they believed that staff had a legitimate right to prescribe behaviour for land managers and, if necessary, apply punishments.

> I keep saying to DPI that it's not up to the farmer to go and talk to the neighbour. And they encourage you do that, but it's really not healthy because I really did fall out with these people [next door], which is sad. (Land manager, Bacchus Marsh)

> If there was a big problem there [on the neighbour's property] then I'd be using my influence with the council, as they are the body responsible for the control of those weeds. So I would become more active in that area and I would be demanding an inspection be made … I'd be interested in the outcomes of what was being done because that's also in my interest. (Land manager, Cooma)

Land managers only involved government staff when they had goodwill trust that the government staff member would maintain confidentiality and protect their neighbourly relationship.

Weeds officers always believed that they had a legitimate right to prescribe behaviour and punishments to land managers, because they had been given the responsibility to do so under the relevant noxious weeds legislation. However, they were aware that land managers were more likely to attribute them with legitimate power if could demonstrate that they were good land managers. Controlling weeds on public land allowed government staff to apply a form of peer pressure by leading by example, build trust by showing their commitment to provision of the public good, thereby giving them greater credibility when they undertook enforcement actions.

> We as a council can't do all our weeds all at once either, we have to set priorities and work it out … I think it has helped too that we've got fairly stuck into the [weed control on] roads over the last couple of years … we're sort of leading by example, we're starting to become a good neighbour and I think that is definitely helping. We've perhaps got a leg to stand on there when you can say that the road's been done and you look across the fence and say, "it's time to help us out." (Government staff, Cooma)

In the context of applying pressure, weed officers in Bacchus Marsh were particularly concerned about building and maintaining trust with cooperative land managers. They were determined to build good working relationships with these land managers so that: 1) cooperative land managers will continue to provide them with information on uncooperative land managers; and 2) cooperative land managers' efforts in controlling weeds are rewarded by ensuring adjoining properties are also doing weed control.

> [A cooperative land manager] comes to me. "I slog my guts on my property. I do a mighty job on it, can you help me?" "Yeah, of course I can help you, that's my job." [I] see [their] neighbour … "This is a complaint that has come from the shire" …. The only way you can ever get told anything in the country is by respecting all confidentiality … [The cooperative land manager] says, "can you help me?" "Too right I can. The barbed wire fence won't stop the weed seed from blowing into your place … This is a big ship and it's a slow process but I can help you and you ring me whenever you like." (Government staff, Bacchus Marsh)

The consequence of taking such an approach, where land managers are treated differently depending on their commitment to controlling weeds, is that occasionally the weed officers get caught in the middle of disputes between neighbours. Thus government staff in Bacchus Marsh who engage in these behaviours needed to have goodwill trust in the cooperative land managers who reported their neighbours. In Cooma, weed officers circumvented this situation by treating all land managers equally; if one land manager reported another then both were inspected.

Land managers who were at the receiving end of enforcement actions usually did not believe that weed officers had legitimate and coercive power. This was particularly true when land managers

[4] In Australia, government staff can authorise weed control works to be performed at the land manager's expense if the land manager has failed to comply with previous weed control requests. This process is referred to as forced entry and spray because contractors are hired to enter the property and spray weeds.

did not have an established, long-term working relationship with the government staff. Land managers' rejection of these powers was usually expressed through disengagement, resistance and retaliation.

> You know what they were doing was coming and saying there are a couple of tussocks over there, you don't get your rebate and that particular person worked their guts controlling the weeds on their property. I mean [my friend] chased someone off his property. (Land manager, Bacchus Marsh)

> I've had a gun pointed at me and one of my field officers, he rang me up one day and said, “when you've got a loaded double barrelled shot gun pointing at you from about 10 paces the barrels look the size of railway tunnels” … We've had to get police to come when we go around to some of these properties. We had to get police protection. (Government staff, Cooma)

Relationships that involved applying pressure involved a delicate balance of legitimate and coercive power, and goodwill trust. Referent power and competence trust were occasionally invoked but were more peripheral. When goodwill distrust existed between land managers, weeds officers were likely to be requested to use their legitimate and coercive powers if they had the goodwill trust of land managers. When weed officers attempted to use their legitimate and coercive powers, they were most likely to be successful in influencing the behaviour of ‘uncooperative’ land managers if the land managers trusted them. Employing these powers was also likely to reinforce goodwill trust with ‘cooperative’ land managers. These multifarious interactions suggest that the relationship between legitimate and coercive power and goodwill trust are not easily categorised as substitutable or synergetic. Instead they imply more of a duality-type relationship because these concepts refer to and are irreducible to each other.

5. Discussion

The extent to which land managers were willing to share information, provide support, and apply pressure was highly contingent on both trust and power and the synergetic and/or substitutable interactions between them. In successful information-sharing and support-providing relationships, referent power, competence trust and goodwill trust were essential pre-conditions for attributions of expert power, and reward and legitimate power, respectively. In relationships that involved the application of pressure, goodwill trust either negated or affirmed the need for legitimate and coercive power. This section will begin by briefly discussing the roles trust and power had in this collective action problem compared to previous understandings of their roles. It will then go beyond these one-sided accounts of trust and power to explain how the dynamics of the trust-power nexus operated in a real-world collective action problem, rather than an organisational setting. In doing so it identifies new lines of inquiry that are needed on weeds and other rural collective action problems.

5.1. Trust

Competence and goodwill trust acted as social lubricants and glues that enabled land managers to approach one another and government staff on the subject of weeds. Both types of trust provided land managers with grounds for: judging and accepting information provided by others; accepting the support offered by others; and was a key factor in determining whether attempts would be made to pressure others into controlling the weed. No land managers reported that their decision to control weeds was predicated on the trust that they placed in others controlling weeds, although they did express exasperation when others were not cooperating. For government staff, goodwill trust determined whether funding would be offered, the conditions of the funding, and the manner in which enforcement was undertaken. These findings indicate that trust is important in addressing the public good dilemma presented by serrated tussock; however, its main role is not to provide assurances that others are cooperating, as suggested by the bounded-rationality approach to collective action (Ostrom, 2010). Rather, trust enables land managers and government staff to engage with others and address the collective action problem within and beyond their own (public and private) property boundaries. This suggests that future research needs to consider the role that competence and goodwill trust plays in the suite of actions that enable achievement of collective action, not just the decision to contribute or not.

Previously, the rural collective action literature primarily focused on the positive effects of trust (e.g. Lyon, 2000; Tillmar and Lindkvist, 2007). Indeed much of the literature on trust implicitly assumes that it is ‘good’ (Sztompka, 1999). The results indicate that there is a ‘dark’ side of trust that requires greater consideration. In the case of serrated tussock, strong goodwill trust between ‘cooperative’ land managers and government staff came at the expense of working relationships among neighbouring land managers. Land managers and government staff alike need to be aware that investing in such exclusive relationships has significant opportunity costs; the rural public good could be self-sustaining if there were more land managers deliberately and persistently engaging with one another and sharing their knowledge, expertise, and support. The key to achieving this lies in recognising and addressing the intricate nexus that exists between the ‘dark’ side of trust and legitimate and coercive power.

5.2. Power

Power had an important role to play in interpersonal relations relating to the control of serrated tussock. Mostly, power acted as a social attractant; when land managers attributed others with expert, referent, reward or legitimate power they were more likely to engage with them on the subject of weeds. Thereby, power facilitated the achievement of collective goals by enabling the sharing of information and the provision of support. In addition, referent power directly influenced land managers to control weeds on their own properties. The peer pressure identified is consistent with the findings of previous Australian rural research. Phillips (1999) found that poor weed control is a source of shame for farmers because good weed control is a proxy for farming ability, which influences social standing in farming communities. Occasionally, power acted as a social deterrent and diminished opportunities for working relationships to build. On these occasions legitimate and coercive power could be considered unsuccessful (Oppenheim, 1978b) because it resulted in resistance rather than influence. Overall, power served to promote the achievement of collective action by influencing the behaviour of others, as predicted by past sociological research (Dahl, 1968; Held, 1972), but only when the land manager was open to being influenced.

Previously in collective action research power has been primarily considered from a rational choice perspective, where sanctions and rewards are used to encourage greater contribution to a public good (e.g. Yamagishi, 1986). To some extent the findings of this vast literature are confirmed in the study here. Reward and coercive power can have a positive or negative influence on cooperation depending on the way it is received. However, this research goes beyond experimental studies on the effects of reward and coercive power by showing that rewards and sanctions are only

Table 1
Types of trust and power that interacted in synergetic (light grey) or substitutable (dark grey) ways in informative, supportive and pressure-based social relations. Where cells are empty, there were no substitutable or synergetic interactions found between trust and power.

<table>
<tr><th></th><th colspan="2">Sharing information</th><th colspan="2">Providing support</th><th colspan="2">Applying pressure</th></tr>
<tr><th></th><th>Competence</th><th>Goodwill</th><th>Competence</th><th>Goodwill</th><th>Competence</th><th>Goodwill</th></tr>
<tr><td>Expert</td><td rowspan="2">Synergetic</td><td rowspan="2">Synergetic</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Referent</td><td></td><td rowspan="3">Synergetic</td><td>Substitutable</td><td>Synergetic</td></tr>
<tr><td>Reward</td><td></td><td></td><td rowspan="2">Synergetic</td><td></td><td></td></tr>
<tr><td>Legitimate</td><td></td><td></td><td></td><td rowspan="2">Synergetic or substitutable</td></tr>
<tr><td>Coercive</td><td colspan="2">Substitutable</td><td colspan="2">Substitutable</td><td>Synergetic</td></tr>
</table>

two of five types of power that influence collective action in a real-world setting. The findings also suggest that future research needs to consider the role that these types of power play in the suite of actions that enable achievement of collective action, not just the decision to contribute or not.

5.3. *Trust-power nexus and collective action*

While it is possible to discuss the individual roles that trust and power played in interpersonal relations it is difficult to explain the mechanisms through which they evolved without discussing the two concepts together. This is because in almost every instance that trust and power were identified they clearly referred to and were irreducible to each other. This means that there was no evidence of a supplementary relationship between trust and power (as proposed by Das and Teng, 1998) and that there is preliminary empirical support for Möllering's (2005) duality perspective in the context of collective action. However, while Möllering (2005) argues that past accounts of trust and power are simplistic, linear and deterministic we find it useful to consider the interactions between particular types of trust and power and whether they are substitutable or synergetic (Table 1). Focussing on these categories helps to untangle the complex web of relationships that exist between trust and power, which are otherwise indistinguishable if seen from a pure duality perspective, and provide insights into how to encourage more cooperative weed control in future.

Most types of trust and power existed in synergy. In information-sharing relationships referent power facilitated the development of competence and goodwill trust, which in turn enabled the attribution, and acceptance of expert power. This is consistent with collective action and diffusion research which has found that shared values and beliefs encourage the establishment of trust (Tillmar and Lindkvist, 2007), and that acceptance of advice about new technologies is more likely when individuals share common meanings and are alike in personal and social characteristics (Ingram, 2008; Rogers, 1995). Such findings are of particular concern in rural regions that are experiencing high levels of property turnover because new residents have considerably different occupations, values, knowledge and willingness to adopt changes in land management compared to longer-term land managers (Mendham and Curtis, 2010). This means that information sharing on weed control requires providing forums in which new and existing land managers can interact and develop shared goals and interests. While Landcare could provide one avenue for fostering such interactions, many newcomers tend to avoid involvement in Landcare (Klepeis et al., 2009) and so multiple forums are required that appeal to both new and existing landholders.

Mutually synergetic relationships between competence trust and expert power also existed in information-sharing relationships. This supports findings from NRM and diffusion research that trust not only supports attributions of expertness but also the converse. For example, Leahy and Anderson (2008) found that community members' perceptions of expertness of NRM government staff engender competence trust.[5] On the flip side, Oreszczyn et al. (2010) found that when land managers do not believe government departments have operational knowledge (i.e. expert power) that staff were judged to be ineffective in terms of providing useful information (i.e. competence distrust). The difference in respect shown for staff in Bacchus Marsh compared to Cooma indicate that the recruitment strategies of government departments are important for land manager—government staff relations; competence trust and expert power can be significantly enhanced through the employment of local staff with farming skills who are neither too young nor too old. However, staff with such backgrounds can have difficulty building goodwill trust with land managers if they simultaneously have extension and enforcement roles.

In support-providing relationships, referent power enabled goodwill trust, and competence and goodwill trust facilitated the attribution, and acceptance, of reward and legitimate power. While other research has identified links between goodwill trust and reward (Vollan, 2008) and legitimate power (Misztal, 1998), what was significant about some support-providing relationships was the way in which multiple types of trust—competence and goodwill—and power—reward, referent and legitimate—coalesced to enable the spontaneous development of mutual aid. There are at least three steps that governments can take to encourage the co-evolution of these types of trust and power and enable more supportive rural social relations. First, land managers could be encouraged to prioritise weed control along property boundaries. This policy strategy has already been adopted by Bombala council in an attempt to improve neighbourly relations. Second, organising coordinated, region-wide weed control activities would provide land managers with new opportunities to engage with one another, jointly control weeds, and see the benefits of collective action. Third, efforts need to be made to ensure that enforcement does not

[5] Leahy and Anderson (2008) did not use the terms 'expert power' and 'competence trust' but did they find that community members' trust in government staff was related to perceived technical competence, which in turn was founded on perceptions of expert knowledge (p. 104).

continue to overshadow neighbourly relations. For example, the less litigious approach currently being taken by Cooma-Monaro Shire Council has provided an environment that enables neighbourly mutual aid.

Interactions between trust and power in the application of pressure were more complex. There existed substitutable and synergetic interactions depending on the actors in question. The existence of goodwill trust among 'cooperative' land managers and government staff negated the need for pressure to be applied. When goodwill distrust existed among land managers, weed officers were more likely to be requested to use their legitimate and coercive powers. This is consistent Dapiran and Hogarth-Scott (2003)'s empirical research, which found that in low-trust situations parties are likely to refer to and invoke the legitimate power of others. The use of such power reinforced goodwill trust with 'cooperative' land managers, which confirms the argument made by Buskens and Raub (2002) and Luhmann (1979) that coercive power can build trust by providing reassurance. However, where such goodwill trust did not exist, coercive power was more likely to be used and resisted.

These multifarious interactions suggest that, in the context of applying pressure, attributions of goodwill trust and legitimate and coercive power cannot be understood independently of each other nor can their dynamics in one interpersonal relationship be understood in isolation of their dynamics in other interpersonal relationships. The consequences of this are twofold. Theoretically, the duality perspective is the only conceptualisation of the trust-power nexus that can take into account such interconnected interactions across multiple social relations because it recognises complexity, reflexivity and contingency (Möllering, 2005). Practically, land managers and government staff need to be aware that invoking legitimate and coercive power at the expense of building trust can have ramifications throughout social networks with negative consequences for the achievement of collective action.

6. Conclusions

There are two main ways of viewing the trust-power nexus as it has been understood in this study. First, the trust-power nexus can be described as comprising substitutable or synergetic interactions between trust and power depending on the context of the social relation in question. Different social types of social relations—those that involve sharing information, providing support and applying pressure—heighten the importance of particular types of trust and power, which in turn have unique interactions. This explains why previous research into the trust-power nexus presents conflicting findings about trust and power being substitutable, supplementary or synergetic. It also suggests that instead of setting out to confirm or reject which of these perspectives is most universally applicable, we need to be open to the possibility of many kinds of interactions.

The alternative is to consider trust and power to exist as a duality. Doing so would involve recognising that trust and power are intimately intertwined and together can act in multifarious ways (as argued by Möllering, 2005) across multiple interpersonal relationships. This explains why it was often difficult to tease these two concepts apart in the accounts of land managers and government staff interviewed. As Möllering (2005) would predict, analysis of the social relations among these actors revealed that trust and power did not exist without one another and neither could be fully explained without the other. Adopting a duality approach would take the emphasis off delineating where these concepts start and finish or explaining the nature of their interactions, instead it would focus on the outcomes of the trust-power nexus (Möllering, 2005). While there may be benefit in shifting the focus of attention from categorising the interactions that exist between trust and power to the outcomes of these interactions, the results indicate that both types of analyses are necessary.

In either case, the results demonstrate that the trust-power nexus has considerable explanatory power beyond the field of organisational management. This strengthens the case for developing solid theoretical frameworks for understanding how these concepts relate in general (Costa and Bijisma-Frankema, 2007) and opens new avenues of research within the field of collective action.

At a practical level there is clearly much to be gained from delineating between various types of trust and power, explaining their interactions, and understanding their joint effects on cooperation. Exploring the interactions between various types of trust and power provided a richer understanding as to why land managers and government staff do and do not engage with one another on the topic of weeds. Understanding nuances in the trust-power nexus provided new perspectives on how to successfully manage weeds, and other public goods, in rural Australia and elsewhere. In the case of weeds, the greatest benefits can be achieved by shifting the focus from enforcement to fostering neighbourly relations because this enables flows of information and support to become self-sustaining, rather than relying on a small number of government staff to encourage and monitor weed control efforts across large rural areas.

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