
Blackberry control is more than science: understanding community engagement in pest management

Michael Reid^A, Lyn Coulston^A, Brian Furze^B, Dawn Parker^A and Penny Grey^C

^AVictorian Blackberry Taskforce, 1 McKoy Street, Wodonga, Victoria 3690, Australia.

^BLaTrobe University, Humanities and Social Sciences, PO Box 821, Wodonga, Victoria 3690, Australia.

^CFar East Gippsland Landcare Network, PO Box 260, Orbost, Victoria 3888, Australia.

The methods for controlling blackberry are well established, however, blackberry continues to be a significant issue for many land managers. This highlights that there are a variety of socio-economic factors inhibiting on ground change. Community-led approaches have a proven record (see for example Hickey and Mohan 2004, Saul 1997) in providing a holistic approach to natural resource management.

The Victorian Blackberry Taskforce (VBT), a multi-agency taskforce, is charged with providing direction to the community and government for blackberry control. A significant role is facilitating and supporting community-led projects. Based on the VBT experiences, this paper outlines some lessons and principles for meaningful engagement with communities for effective pest management. The North East Blackberry Action Group and Far East Community Blackberry Action Group formed in 2005 and 2008 respectively, have been used as case studies to begin to explore the complexities around a community-led response for managing blackberry.

Approach

This paper is aimed at sharing insights to groups or individuals involved in pest management programs that have participation from the community. Based within the social science discipline, the paper will argue that blackberry control is more than science. Rather than viewing blackberry management as a purely technical based issue, it begins to address blackberry management as a socio-economic issue.

The methodology draws on an iterative approach, emphasising community based land management (Furze *et al.* 1996) and grounding social reality from the various perspectives and experiences of communities.

A framework, outlining the community-led approach has been developed to provide context for the community partnership program. Brief case studies are used to highlight the socio-economic components of blackberry management, and

how the community has addressed their issues within their area. As the focus of the paper is on the human actor element, learning's based on their experiences will be provided. These are supported through a variety of key academic literature.

A brief background: blackberry

European blackberry, belonging to the *Rubus fruticosus* aggregate, was first introduced into Australia in the 1830s. Similar to the introduction of many pests into Australia, the origins of its introduction can be traced back to the cultural needs of the earlier settlers, with plantings occurring in Sydney gardens to produce hedgerows, and provide fruits for jams and pies. In 1851, the Government Botanist in Victoria, Baron von Mueller, and the first Curator of the Gardens at Melbourne University, Alexander Elliot, recommended that blackberry be planted to control soil erosion along creek banks. With its preference as a plant for erosion control, assistance from the earlier settlers, combined with its invasiveness, blackberry's status as a pest grew exponentially.

Currently blackberry covers significant tracts of land across Victoria, and is considered to have established to its climatic limits. It has created significant concern for both public and private land managers, with boundary fences between properties often being points of contention.

Blackberry infestations have significant detrimental effects on the landscape. It reduces productivity of primary industries, particularly grazing and forestry, degrades natural environments, hindering the provision of eco-system services, provides a harbour for vermin and hinders the recreation and ascetic value of regions. Under the *Catchment and Land Protection (CaLP) Act 1994* blackberry is declared as noxious and in Victoria is categorised as a Regionally Controlled Weed and responsibility for its control lies with the land owner (Melville 2008).

There are a variety of control measures available for land managers to manage

blackberry, such as slashing, mechanical removal, grazing, fire, herbicide application and biological control. Although a variety of options exist to effectively manage blackberry, it still remains prevalent across much of the state, indicating that blackberry control is more than science. There are a variety of socio-economic barriers inhibiting its control. That is, farming and pest management are framed within a wide variety of social, economic, cultural, perceptual and situational reasons (eg Vanclay and Lawrence 1995, Vanclay 2004)

The community-led approach: a way forward

'Never doubt that a group of concerned citizens can change the world... indeed it is the only thing that ever has.'

Margaret Mead, Anthropologist

Incorporating local people and communities into natural resource management has become a global conservation and development orthodoxy. It has brought with it a re-thinking of conservation, natural resource management and landscape protection and where it works well, has facilitated a more inclusive approach to searches for sustainable futures (Furze *et al.* 2008). The community-led approach, being facilitated by the Victorian Department of Primary Industries (DPI), has emerged to encourage greater participation of community for the management of widely established invasive plants, namely, blackberry, gorse and serrated tussock.

The approach has evolved in Victoria from a desire by communities to take increasing control of weed issues that are of greatest concern to them. It has effectively created a process by which the efforts of the people themselves are united with those of governmental authorities to improve the economic, social and cultural conditions of communities (Setty 2002, Kenny 2006). The unity between government authorities and community has been identified as essential (Green 2008, Ros-souw 1996) for the longevity and success of such programs.

The Victorian Blackberry Taskforce (VBT) acts to mediate and facilitate relationships between community groups and government (refer Figure 1). It is comprised of five community members from across Victoria, and representatives from DPI (research and policy), Department of Sustainability and Environment and Parks Victoria. The position of Chair is held by a community member, and the Executive Officer to the VBT is provided by the DPI. In addition to providing clerical and leadership responsibilities for the VBT, the Executive Officer is involved with supporting the community partnership groups.

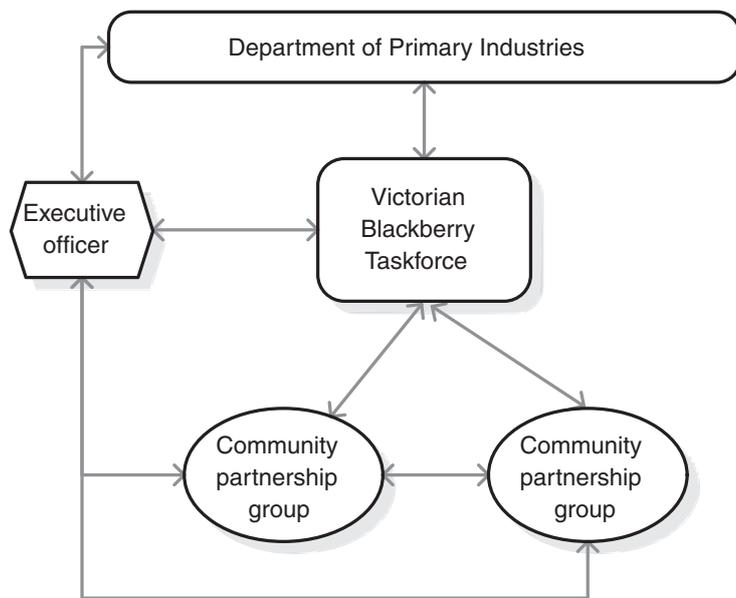


Figure 1. Basic conceptual model outlining the Victorian Blackberry Taskforce as a mediating structure.

Reflections from community-driven projects

North East Blackberry Action Group

The North East Blackberry Action Group (NEBAG) was formed in February 2005 as a result of community desire to address the impacts of blackberry on agricultural productivity and biodiversity in north east Victoria. The region is home to some of the most pristine natural regions of Victoria, and also is the birthplace of the Murray River. However, much of the private and public land has large infestations of blackberry.

Initially, members of the local Landcare network lobbied State government to provide support in the form of a Pest Management Officer. The request was unsuccessful due to changing priorities placing a greater focus on new and emerging weeds. For private land managers in the Upper Murray, blackberry was a clear and visible threat and perceived by them as a higher priority because of their impact on the landscape values and on farm profitability.

Blackberry due to its visibility and vigorous spread across usable farmland was locally-identified as a significant issue in terms of lost productivity, landscape values and biodiversity conservation – it was seen as an economic issue (lost farm productivity), a socio-cultural issue (lost landscape values) and an ecological issue (lost biodiversity). Even without government support, blackberry still remained an important multi-dimensional issue within the community. A pivotal point in the group's establishment and success was persistence in developing partnership approaches for blackberry management with the community and other stakeholders.

A meeting of key stakeholders including Landcare representatives, public land managers, local government representatives, the plantation industry and Vicroads identified the need for the establishment of a group to manage blackberry. A facilitator was used to help draft a basic action plan. This formal process and the development of an action plan consolidated the vision of the group and also allowed a reality check in the form of recognition that blackberry will never be eradicated from the region, but that it could be managed. The group found this important as a realistic goal for their objectives.

Attracting funding became easier due to the collective nature of the group and investors seeing significant value in supporting community led action for pest management. The consolidation of ideas, structure and sense of direction by the group has since manifested into community enthusiasm for the management of blackberry and ability to lobby agencies for future funding.

The group have managed to attract funding from various sources, which have gone towards funding a Project Officer who is employed a few weeks a year to map infestations and develop work contracts with land managers. This structure has also meant greater effort via public land managers to coordinate their weed control activities with the group.

Today, NEBAG has achieved significant success in the management of blackberry and their strong on-ground focus has ensured growing respect from those land managers not directly involved in the group.

Blackberry is still an issue within the region, but the group has provided a

platform to seek alternative funding to address other land management issues. One particular project which has gained success has been the establishment and regeneration of native species in areas previously uninfested by blackberry.

A documentary has been produced capturing the north east experience from the perspective of the community (Ruralia 2008) and is currently being used to share the north east experience with other interested communities¹.

Far-East Gippsland Blackberry Action Group

Unlike the Upper Murray region, the far East Gippsland landscape is better described as containing vast tracks of public land, interspersed with pockets of free hold land. It contains several sites of national and international significance, having high eco-system values of old growth forests and diverse vegetation communities (East Gippsland Shire Council 2008). Blackberry infestations occur frequently on both freehold and public land.

Members from the Far East Victoria Landcare (FEVL) heard about the VBT's community partnership approach in 2008. With blackberry listed as a priority by all Landcare groups, the Landcare network organised a variety of community meetings in which the community-led approach and other communities' experiences in managing blackberry were shared.

There was initial interest from several communities; however, there was also some reluctance from community members in establishing a community-led project as it seemed too large for their communities to successfully manage. With support of FEVL, a coalition of these communities was established, known as the Far East Community Blackberry Action Group (FECBAG) with membership open to both non-Landcare and Landcare members. An action plan was then facilitated for the region.

The Goongerah region was selected as a pilot area for FECBAG as previous work has been initiated by community through the development of a local blackberry management plan. Previously, the community was exploring using the compliance services offered by DPI to assist them with their management plan, however, when presented the option of a community-led approach, the group believed a voluntary compliance approach would be a more appropriate option for their region.

The demographics of the pilot region comprise a variety of non-traditional agricultural drivers. Blocks sizes maybe described as 'lifestyle' size, with a large

¹The NEBAG documentary can be viewed online at www.vicblackberrytaskforce.com.au/documentary.

percentage of residents being strongly embedded in an environmental ethos - passionate about their natural surroundings, and politically active in organising grass roots action.

A local action plan was then facilitated for the pilot region with a local pilot project steering committee reporting to FECBAG.

Seeding funding was provided by the VBT and a project officer was then employed. The group's project officer worked together with private landholders to manage their blackberry infestations, and also assist the group in working closely with government agencies to coordinate on ground works. This commitment and coordination of public works has encouraged efforts from private land managers to manage their blackberry infestations.

The FECBAG Project Officer works with freehold land managers to establish formalised three-year property management plans. Face-to-face engagement by the Project Officer has been well accepted and has often transformed an overwhelming problem into manageable steps. Difficulty in locating some absentee land managers has posed a problem as they are not living in the community and are unaware of their legal responsibility to control blackberry. Where some landholders are reluctant to commit to a written management agreement, due to the formality of the process and the binding implications, the Project Officer continues to negotiate with them. Others believe an agreement is unnecessary because their independent initiatives are already successful. Where this is the case, it is acknowledged. Compliance may eventually be necessary for land managers who are unwilling to acknowledge responsibility and take voluntary action.

Since the initial investment from the VBT, the group has explored other opportunities for co-investment into their project. Funding was sought and received from a not-for profit organisation for FECBAG to continue to provide funding for the Project Officer. The group also successfully lobbied the local catchment management authority for funding to be used as incentives for on-ground work.

FECBAG have initiated and convened workshops with key government land managers to improve coordination of works and communication. In the future they plan to expand their program into other valleys in the region, which contain demographics of a mixture of traditional agricultural and lifestyle drivers.

Reflections from the approach

In order to reduce the impact of blackberry, or other widely established weeds, private land managers who live, own land and work directly with the problem have a major role to play in collaboration with the broader community, industry and government who have land management

responsibilities. Both the Victorian Blackberry Taskforce and other community groups provide platforms to bring both affected and effective people together to exercise their self-determination, share power within decision making, and share their experiences and learn from different perspectives.

There have been a variety of lessons learnt, both from community and the VBT, these include:

Community-led approaches are collective

A community-led approach promotes collective action rather than individual land managers operating in isolation. Typically, a compliance driven approach emphasises individual responsibility, and may set up frequent oppositional attitudes and actions between government agencies and local communities. Initially, within the NEBAG area, land managers with significant infestations were reported as seeing no way forward in regards to their blackberry problem. They received very little encouragement from external parties and neighbours to take affirmative action, being cast as bad land managers that resulting in despondency to the situation (DPI 2008). Through greater inclusion of community members, and also negotiation with key agencies, focus has shifted from land managers with severe infestations being 'their problem' towards blackberry being 'our' problem. It is this form of collective action which is necessary if head way is to be made against blackberry, which fails to delineate at the fence line.

Community-led approaches cater for diversity

Communities are not homogenous, and neither are blackberry infestations. Centrally designed programs and projects often fail to capture the nuances and diversity that exist across communities. Tailoring to individual requirements and regional issues is an important aspect of the community led approach. Farmers come from different demographic backgrounds and they may have:

- High or low levels of cash liquidation;
- Different levels of education;
- Different values towards the landscape and sustainability (prefer organic over chemical control);
- Highly productive operations or more less-economically viable land;
- Agricultural drivers or they maintain a strong environmental/lifestyle focus for their property;
- Received the farm through generational transfer or a recent purchase and are not familiar with appropriate land management practice;
- Varying access to information and knowledge; and
- Strong farming experience or low knowledge of agricultural practice.

To further complicate the socio-economic dynamic, blackberry infestations vary across the landscape, with some properties bordering dense blackberry infestations, inheriting blackberry infestations from previous land owners, having high infestations on extremely steep country or may have undulating landscapes with small pockets of infestation. A community-led approach allows for proper representation of these needs, allowing the groups and project officers to cater for this diversity in working with land managers. For example, the NEBAG has blackberry infestations on steep hill slopes, with access to spraying chemicals being reported back to the group as a barrier for control. The group addressed this issue by using external funding to offer incentives to construct access tracks in a cost sharing approach, with the group remunerating the land manager for half of the cost of a constructing a track by bulldozer. This successful approach has constructed 25 kilometres in previously inaccessible land, allowing land managers to access blackberry infestations with spray units. Also, the flexibility of the project officers to negotiate the issues, not simply as a technical problem, but within a broader socio-economic context of the farm has been essential for achieving on-ground results.

Community-led approaches are trusted

Whether based on perceived or real experiences, there can often be a growing divide between government departments and community. This is by no means a new phenomenon. Botterill and Mazur (2004) cite a variety of studies which indicate declining trust of individuals and communities towards scientific based public institutions. One of the key learnings from the community groups is that because the project is managed by the community there is a greater level of trust, and therefore their commitment to blackberry management is higher. In addition, the project officers are well received by individual landholders because they are not associated with a government department or selling a particular product.

Community-led approaches build capacity

With more directed government funding into widely established weeds, communities require the skills and knowledge to respond for a long-term solution. The community-led approach lends itself towards building capacity of the individuals and community to improve their understanding of roles and responsibilities of invasive pests and the management of widely established weeds. That is, communities have the capacity and understanding about managing pests and ability (Chaskin *et al.* 2001) to help promote or sustain their landscape. It is important

to note within this discussion that people cannot be developed; they can only develop themselves with external parties playing a supporting role.

Capacity building from the program can be witnessed at both an individual, organisational and leadership level. Individually, farmer's technical capacity to manage blackberry has increased through developing and improving technical knowledge of blackberry management. Reports from the Project Officer in the NEBAG region indicated some land managers using inappropriate chemical practices for managing their blackberry, such as dirty water and cocktail mixtures of chemicals, which resulted in despondency due to poor kill rates. In addition to providing best practice advice, the group established chemical trial sites to showcase the various mixtures of chemical groups, and their effectiveness for controlling blackberry, which can differ across species.

Within both regions, the groups have demonstrated their leadership and organisational capacity. That is, individuals and the groups are building their skills, commitment and confidence, as a collective to motivate both their communities and other stakeholders towards achieving goals. Both groups have, and continue to convene meetings and develop action plans. The groups have also address their on-going sustainability through seeking funding to address blackberry issue within their region, with FECBAG attracting a four-fold increase in funding from their initial investment by the VBT.

Community-led approaches need to integrate community and government priorities

Community and government need to work together to achieve results. Green (2008) metaphorically describes this as marching to different rhythms, the steady grind of state machineries contracting with the ebb and flow of civil society activism. The Victorian Blackberry Taskforce acts as a mediating body between various government departments and the community to facilitate partnerships. Through participation of the various government and community representatives at the state-wide level, community interests are able to be presented and government priorities communicated in mediated environment. However, the relationship between government agencies and farmers can also be contested and problematic.

For community led approaches to be successful power in decision making needs to be shared, that is communities play a key role in identifying the problem and developing the solution. Shared decision making between government and community is one of the key ingredients for success of this program and contributes to the community taking ownership

of the issues and having more control of their future. Land managers must be able to identify problems, reflect on solutions as they see them and not as selected by outsiders. They do, however need the ability to accept the assistance and guidance from others. Friere's (1976) work highlights that the control and reflection of knowledge determine our ability to act that (that is our control over decision making) must also include control over problem posing, and time for reflection. Forcing issues onto community, which they have not identified, or failing to involve communities in project development will, more likely than not, result in on-ground failure, or fail to achieve significant results when community are included. This can often be difficult for government, as engaging community can be perceived as an arduous process, with key outcomes that have already been negotiated. If engagement becomes tokenistic, post decision making, or is perceived as tokenistic, social actors will become disenfranchised (Lockie and Vanclay 2006).

In assessing ways in which inclusive or participatory approaches have contributed to the goal of sustainability, policy makers and natural resource managers have tended to emphasise specific economic and strategic outcomes (Furze *et al.* 2008). Such measures do not necessarily align with community expectations of success, and is often a source of frustration. A land manager, from the Upper Murray region comments on a documentary as saying 'It doesn't matter how many little maps we put out with red dots all over them, that is really secondary. We won't kill any blackberries by covering them with paper reports, we need to spray them and kill em' (Ruralia 2008). Land managers and their communities have longer term priorities that may differ from long term goals of government. There are opportunities, which the groups are pursuing, to address longer term landscape scale change, managing life after blackberry. Continuing to support locally-based networks and structures to develop a strategy for coordinating and improving their landscape is critical. It is important that State government involvement in such programs continues to remain flexible and supportive of community partnerships, maintaining fiscal accountability, without over burdening communities 'terms of reference' with government requirements. If pursued, there is a significant risk of programs resulting in failure through shear frustration, contributing to community burn-out (Furze *et al.* 2008).

Conclusion

To provide long-term changes in the management of blackberry, those who live and work directly with the issue have a major role to play with government and other

land managers. The community-led approaches being facilitated by the Victorian Blackberry Taskforce provide an example of the success such approaches can achieve if meaningful engagement occurs. Communities are complex and these approaches allow communities to begin to address this complexity. In addition, it allows the promotion of collective action and contributes to the capacity of communities. The successful integration of government and community priorities remain critical to the on-going success of the program.

Acknowledgments

The authors would like to thank the communities and Project Officers in North Eastern Victoria and East Gippsland who have been involved in the community-led project and Steve Young for his input.

References

- Botterill, L. and Mazur, N. (2004). Risk and risk perception: a literature review, p. 5. Rural Industries Research and Development Corporation, Canberra.
- Chaskin, R., Brown, P., Venkatesh, S. and Vidal, A. (2001). 'Building community capacity'. (Aldine de Gruyter, New York).
- Departments of Agriculture, Fisheries and Forestry (2002). Natural resource management capacity building framework. DAFF, Canberra.
- Department of Primary Industries (2008). Victorian blackberry taskforce progress report 2005-07, p. 7. Department of Primary Industries, Wodonga.
- East Gippsland Shire Council (2008). East Gippsland environmental sustainability strategy 2008-13, p. 2. East Gippsland Shire.
- Freire, P. (1976). 'Education: the practice of freedom'. (Writers and Readers, London).
- Furze, B., Boyle, D. and Reid, M. (2008). Providing flexibility in land management policy: the case of the community weed model, in Victoria. *In* OECD Social Inclusions Conference Proceedings, Melbourne.
- Furze, B., De Lacey, T. and Birkhead, J. (1996). 'Culture conservation, biodiversity'. (Wiley, New York).
- Gray, I. and Lawrence, G. (2001). 'A future for regional Australia: escaping global misfortune'. (Cambridge University Press, Cambridge).
- Green, D. (2008). 'From poverty to power: how active citizens and effective states can change the world', p. 13. (Oxfam International, Oxford).
- Hickey, S. and Mohan, G. (eds) (2004). 'Participation - from tyranny to transformation? Exploring new approaches to participation in development.' (Zed Books, London).
- Kenny, S. (2006). 'Developing communities for the future: community

- development in Australia'. (Thomson Learning, Melbourne).
- Lockie, S. and Vanclay, F. (eds) (1997). *Critical Landcare, Key Papers Series, Number 5*, Centre for Rural Social Research, Charles Sturt University, Wagga Wagga, New South Wales.
- Melville, R. (2008). *Landcare note: Declared Noxious Weeds – listed by common name*, Department of Primary Industries, Melbourne.
- Rossouw, A. (1996). *Community development: a concept for social change and development*. University of Port Elizabeth, Port Elizabeth.
- Ruralia (2008). *Community voices: blackberry control is more than science*. Ruralia Consulting, Albury.
- Saul, J. (1997). *'The unconscious civilization'*. (Penguin, Ringwood, Victoria).
- Setty, D. (2002). *'New approaches to rural development'*. (Anmol Publications, New Delhi, India).
- Vanclay, F. and Lawrence, G. (1995). *'The environmental imperative'*. (Central Queensland University Press, Rockhampton).
- Vanclay, F. (2004). Social principles for agricultural extension to assist in the promotion of natural resource management. *Australian Journal of Experimental Agriculture* 44, 213-22.