

Why don't they manage their weeds? 'Behaviour Change' research

Karen Alexander¹, Julie Thompson², Marianne Sawyer³ and Rosalie Cooper⁴

¹ PO Box 309, Emerald VIC 3782

² 16 Miller Street, Berwick VIC 3806

³ Cardinia Shire Council Offices, Pakenham VIC 3810

⁴ Tuscan Hill, Ridge Rd East, Emerald VIC 3782
(jstat@bigpond.com)

Summary The collaboration of Cardinia Shire Council and Johns Hill Landcare, working together with the local community towards weed control outcomes has been successful for both partners.

This 'behaviour change' research project has examined, through a variety of research methods, the barriers and benefits to landholders carrying out weed control work on private land. Alongside the research project, Cardinia Shire Council has undertaken on-ground projects to reduce roadside weeds on public land.

Keywords Behaviour change, community, weed control, local government, landcare.

INTRODUCTION

The germination of the idea for this project occurred in 2005 when two members of the project team attended the Douglas McKenzie-Mohr workshop on Fostering Sustainable Behaviour. From 2007, two streams of work have developed: on-ground weed works and weed research. This effort has been sustained by the crucial collaboration between the two key stakeholders: Cardinia Shire Council and Johns Hill Landcare Group.

The 'behaviour change' research project has examined, through a variety of research methods, the barriers and benefits to landholders carrying out weed control work on private land. The on-ground works program of weed control to reduce roadside weeds on public land has dramatically reduced weed population. To sustain the reduction of the weed population, Cardinia Shire Council and Johns Hill Landcare Group plan to utilise the research to develop a community based weed program.

METHODS

The Fostering Sustainable Behaviour methodology was adopted as it primarily focused on community-based 'behaviour change' programs; provided a clear process; costs were within the available resources; and, could be dovetailed with Cardinia Shire Council's evaluation of 6 Towns Weed Control Project.

The Fostering Sustainable Behaviour methods are:

- select behaviours that you want to encourage and your target audience
- list and prioritise the barriers and benefits for the behaviour you want
- research the barriers and benefits to the behaviours you want
- from this information map the tools and strategies that will encourage the benefits and overcome the barriers for the desired behaviours
- select a pilot to test strategy.

RESULTS

The results include: postal survey analysis, telephone survey analysis, results of the focus group discussions, and the comparison of behaviour change programs.

The initial postal survey (2009) to over 2000 Emerald residents with a 25% response rate was followed by a telephone survey (2009) of 58 residents and two focus groups (2010). The intention of the whole program was to assess the various benefits and barriers to managing weeds on private property and guide the project on possible steps to establishing 'behaviour change' programs in the community.

Select behaviours and target audience Selecting behaviours to be encouraged was a straight forward discussion in the project team. These were behaviours that would improve weed management on private land. The project team decided that the target audience was to be those residents with a high likelihood of actually changing their behaviour and this was tested for in the postal survey.

List barriers and benefits Barriers and benefits of the desired behaviour were tested for *via* a postal survey. It tested for recognition of major weeds, awareness of 4 Towns Weed Control Project, and benefits and barriers to removal of weeds on private property.

Most respondents knew blackberry, holly and ivy, about 70% also knew ragwort and sweet pittosporum, about half knew cotoneaster and cape wattle and 10% knew boneseed.

The information in the postal survey and from other sources stimulated and encouraged 345 (69%) people to consider weed removal, 148 (30%) saw no benefit as they had already removed their weeds and 8 (1%) did not consider weed removal a priority.

Priority of barriers and benefits The postal survey then looked at the priority of the listed barriers and benefits. Of the respondents who considered weed removal important, major barriers were time constraints and lack of finances to pay for services or to buy sprays. Physical restrictions to undertake weed control, invasion by neighbours' weeds and lack of information on how to approach the control were reported less often but still were significant factors.

Research chosen barriers and benefits The telephone survey of a sample of the target audience was undertaken; and two focus group discussions with the target audience were conducted.

Identify tools In the telephone survey the 58 respondents were asked to rank a range of possible tools or weed control assistance methods. One striking result shows that over two thirds (39 or 67%) believed that a consultant home visit would make a great difference to removing weeds.

In the focus group discussions, a number of initiatives which could be offered and their reactions to these were freely explored. The two proposals that received the most positive reception were:

- (a) offer of advice from a weed expert
- (b) offer of help from Landcare volunteers to clear weeds.

Identify strategies Five community programs were chosen for comparison. Two of the five programs had elements that were suitable to be utilised for the Weed Management Program. Sustainability Street program could be translated to weed management, biodiversity, and native vegetation. Community Fireguard could similarly be translated to each neighbour managing their own weeds. Both require bridging to Landcare or similar groups for technical knowledge. Both indicate a strong need for skilled facilitators to assist in organising contiguous neighbours, where some neighbours may be government agencies.

Pilot to test strategy This is the next stage of the project, for which the plan is currently being scoped. Cardinia Shire Council has committed funds towards the project for 2013–2014 with the expectation of additional external funds to complement.

Measurement methods for positive impact may include:

- (a) weed audits before the project starts and after it finishes
- (b) project areas to be compared with identical audit of another chosen site in the township and all to be conducted by a person(s) who does not know the project areas.

DISCUSSION

Key findings of the research show that neighbourhood based programs are likely to be effective in changing behaviour of private landholders but need skilled facilitators, sources of expertise, and ongoing funding.

ACKNOWLEDGMENTS

Staff at Cardinia Shire Council. Members of the 6 Towns Reference Group. Doug McKenzie-Mohr. Community members who have contributed to both postal and telephone surveys and all others who like to discuss weeds!

REFERENCES

- Cardinia Shire Council, (2007). Weeds Management Strategy.
- McKenzie-Mohr, D. and Smith, W. (1999). 'Fostering Sustainable Behaviour, An Introduction to Community-Based Social Marketing'. New Society Publishers, Canada. <http://www.cbsm.com/>
- Alexander, K. (2005). 'Report on Fostering Sustainable Behaviour Workshop, May 2005'. Sent to Port Phillip and Westernport CMA. <http://www.johnshill.org.au/>
- Cooper, Roger, (2010). 'Cardinia Shire Council – Weed Survey Analysis – May 2010'.
- Smith, E. of Motive Market Research (2010). 'Cardinia Shire Council Weeds Project – Communications Development'. Qualitative Research Report.
- Thompson, J. (2011). 'Report on Community 'Behaviour Change' Programs'.
- Madill, J. (2005). 'Review of Social Marketing'. From Dr. J. Madill, Social Marketing Workshop, January 2005.