

Small and lifestyle farmers: has the horse bolted for biodiversity gains?

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Abstract

Rural landscapes are changing as many Australians are seeking rural lifestyles on small parcels of the land around and beyond the peri-urban fringe. In Victoria small farms greatly outnumber large farms, and clusters of small properties dominate the landscape in some areas. Off-farm work has been associated with limited time for involvement in traditional extension programs and Landcare work. There is a poor understanding of the need for improved natural resource management in this sector of the rural community.

This paper reports progress towards developing our understanding of the needs in the small and lifestyle farm sector and on constraints to adoption of sustainable management. We report on the location of small farms in Victoria and explore the current attitudes and opinions of the small farm sector to natural resource management, extension delivery, resources and opportunities for conservation. A study using focus groups, questionnaires, and secondary data analysis has been used to collect preliminary data. This data indicates that the small and lifestyle farm sector has been largely overlooked in mainstream industry extension activities, and marginalised in some farming communities. The sector has a strong interest in developing skills in sustainable agriculture and biodiversity. The aesthetic attributes of small and lifestyle properties and associated biodiversity values presents a challenge to traditional extension and skill development strategies.

Keywords

agricultural extension, biodiversity conservation, lifestyle, environmental education, small farms

Introduction

Small and lifestyle farms greatly out-number large farms in Victoria. This sector, defined as rural properties less than 100 ha in size and with an estimated value of agriculture operations (EVAO) of less than \$75 000, makes up about 37% of the rural holdings in the state. The landscape impact of small and lifestyle farms from a social, economic and environmental perspective is high. Despite occupying a small fraction of the agricultural landscape, small farms dominate some parts of the Victorian landscape (Barr and Karunaratne 2001).

Small farms are the most numerous agricultural establishments along the slopes of the Great Dividing Range from the New South Wales border to the Grampians, and in the peri-urban surroundings of Melbourne, Bendigo, Ballarat, Benalla, Wodonga, Bairnsdale and Morwell.

The traditional family farm still dominates Australian agriculture (Martin 1997). The number of farms has declined by 25% in twenty-five years (Gleeson and Topp 1997), and there has been speculation about a change in the distribution of farm sizes. Rates of change have varied. It is not the small farms that are disappearing the fastest from agriculture (Barr and Karunaratne 2001). In north-east Victoria, medium farms have been divided into small block allotments rather than taken over by larger farmers. Farm subdivision has increased as more people seek rural lifestyles supported by off-farm income. In some shires in the north-east of Victoria, small and lifestyle farming is now the dominate land use (P. O'Dwyer, pers. comm). Off-farm income is critical to the welfare of farming families that operate small farms. In north-east Victoria less than 10% of farm land is managed by farms with a gross income greater than \$300 000 (Barr and Karunaratne 2001).

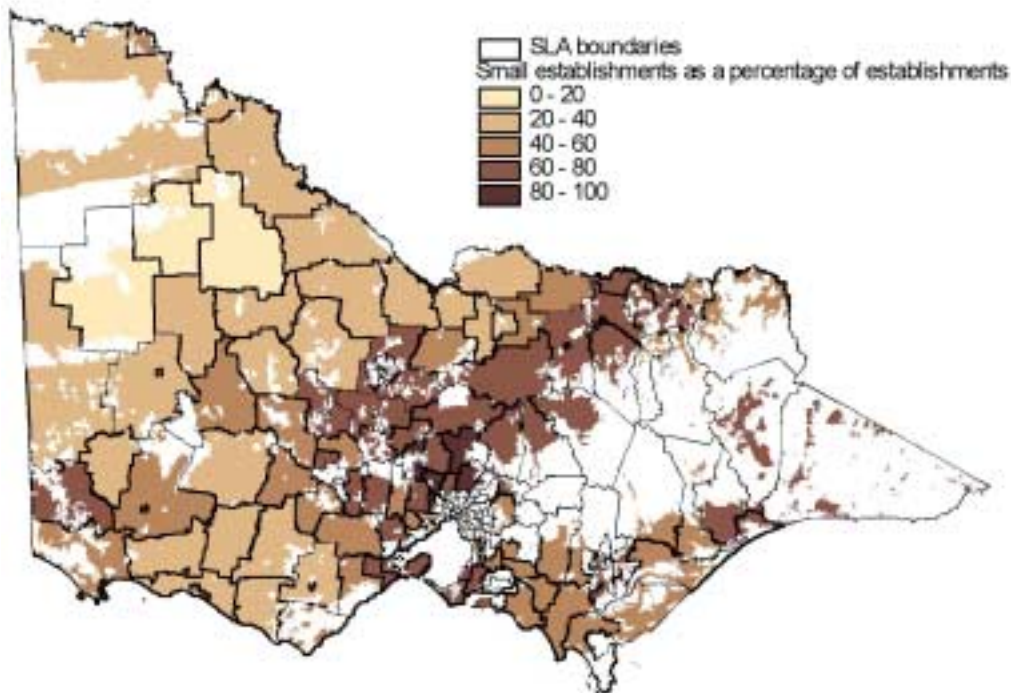


Figure 1 Small farms (EVAO <\$75 000) as a percentage of all farms (Barr and Karunaratne 2001).

People are being increasingly attracted to the ‘rural’ lifestyle. Real estate and property sellers romanticise the rural lifestyle and prospects for business success. This romanticism is portrayed through property guides of major rural newspapers (e.g. *Weekly Times* 24 July 2002, pp 45–52 and *Stock and Land* 25 July 2002, pp. 37–43). The new marketing language often highlights ‘the delightful rural setting’ or encourages city folk to ‘escape the rat race’ or ‘get away from the hustle and bustle of everyday work’ (see Figure 4). For many, the move to the country is made attractive with advertisements such as ‘only 40 mins from the city’ or ‘handy to the snowfields and wineries’ or ‘peaceful rural lifestyle’. Anecdotal evidence suggests that many buyers of small and lifestyle farms have limited knowledge about agriculture and natural resource management but strong environmental values. Newcomers to farming often have a limited agricultural background, romanticise country living and find it difficult to participate in group learning activities, as found by previous work (Collier, 1995, Curtis et. al. 1997). Off-farm work means less time for the newcomers to participate in traditional extension activities.

The loss of biodiversity is widely recognised as one of the most significant environmental problems facing Australia (Vanclay and Lawrence 1995). The Victorian Biodiversity Strategy defines biodiversity as ‘the natural diversity of all life: the sum of all our native species of flora and fauna, the genetic variation within them, their habitats and the ecosystems of which they are an integral part’ (NRE 1997). Local and overseas research suggests that biodiversity, both the term and concept signified by it, are poorly understood (Watson and Pryor 2002, Williams and Cary 2001). This has major implications for government policy and extension development opportunities. It has been argued that the term ‘biodiversity’ itself has significant meaning to humans, and the actions to protect biodiversity (while varied) are motivated by diverse human values and experiences (Vanclay and Lawrence, 1995). Actions of land managers to protect, enhance or restore natural resource assets are often motivated by financial outcomes. This presents a significant challenge for sustainable development within the context of on-farm biodiversity protection and agricultural production in view of the perceived trade-offs. However, less tangible benefits may also motivate biodiversity protection (Vanclay and Lawrence 1995). An important catalyst for natural resource protection actions may be the expansion of the definition of ‘wealth’ in rural communities and landscapes to include intrinsic values such as native flora and fauna and functioning ecosystems, in addition to agricultural production (McMichael and Beaglehole 2000).

Vanclay (1992) suggested that the adoption of environmentally sound farming practices must be considered in the social context. Engaging the small and lifestyle sector in extension activities will necessitate a change in the way we do business with this sector. The traditional extension model, based on the 'adoption diffusion' model, has been criticised for being a largely top-down process about the transfer of information and ideas (Buttel et al. 1990). It has also been recognised as being reductionist in approach for the imposition of technical solutions for complex problems that are often largely people-based problems (Vanclay and Lawrence 1995). Kloppenburg (1991) argues that extension has become the handmaiden of the scientific-industrial agribusiness complex. Solutions to all farming problems have been framed within the paradigm that more science must be harnessed in the discovery of the solutions (Kloppenburg 1991).

Land-use change models suggest that we respond to cues from both our physical environment and our socio-cultural context, and behave to increase both economic and socio-cultural well being. Socio-economic and biophysical variables may also be viewed as driving factors for land-use change. Vanclay and Lawrence (1995) have argued that understanding farming subcultures and developing improved mechanisms to facilitate adoption of resource protection is necessary. Understanding the subculture attributes and values of the small and lifestyle farm sector may influence the development of appropriate delivery mechanisms for biodiversity conservation.

The concept of a land ethic and stewardship gained popularity in Australia the early 1980s when it became an objective of the former National Soil Conservation Program. While land ethic and stewardship are frequently mentioned by advocates of natural resource protection at all levels, like biodiversity conservation it may mean many things to many people. Vanclay and Lawrence (1995) suggest that more attention needs to be given to landholders' concerns and opinions, particularly in regard to environmental management and sustainable agriculture. Pretty (2002) has argued that sustainability should be seen as a process of social learning focused on building the capacity of land managers and their communities. The irreversibility feature of biodiversity loss sets it apart from other natural resource issues (Anderson et al. 2001) and may require specific extension techniques and improved delivery mechanisms to engage the small and lifestyle farm sector.

The Future Family Farms Initiative recognises the small and lifestyle farm sector as important in building vibrant, rural communities. The Initiative originates directly from the Victorian government's agriculture policy, which identifies that small family farms have been the mainstay of many rural towns. The policy supports the growth of the small farm sector, and the provision of production, marketing and environmental advice to the sector. Our research is part of a program supported by the state government's Ecologically Sustainable Agriculture Sustainable Initiative and the Commonwealth's Rural Industries Research and Development Corporation, investigating the 'Development of appropriate environmental education training for the small and lifestyle sector' and 'Improved delivery mechanisms for sustainable land management'. The research will assist in the exploration of the awareness, values, views and constraints of the small and lifestyle farm sector in relation to natural resource protection, as these will ultimately influence land use practice. Understanding the small and lifestyle farm sector's views, priorities and cultural contexts will be a valuable contribution to the development of new policies and extension programs based on capacity-building and the facilitation of environmental problem-solving at the local level.

Methodology and preliminary results

Qualitative methods involving on-farm interviews, discussion groups and workshops will be the primary data collection methods. A strength of qualitative data is their richness and holism, with a strong potential for revealing complexity nested in a real context (Miles and Huberman 1994). Qualitative data, with their emphasis on people's 'lived experience' are suited to explore the meanings of people's place, processes and structures of their lives: their perceptions, assumptions, prejudgments and connecting these meanings to the social world. The data will be collected from a stratified sample of small and lifestyle landholders so that a cross-section of

people involved in a range of different lifestyle approaches can contribute to the findings. Mixed-method studies combining the qualitative and quantitative approaches into the research methodology have been successfully used to understand communities (Tashakkori and Teddlie 1998).

As part of the project scoping, a preliminary survey was conducted to assist in our understanding of the small and lifestyle farm sector. Participants at a small-farm field day held in the Seymour district were invited to complete a questionnaire. The questionnaire included closed-end questions about the demographics of the participants and their environmental concerns. Respondents were also invited to provide comments. Likert scales were used to gauge attitudes towards sustainability and land management. Participants ranked issues of concerns and the perceived value of the sources of environmental information to enable improved land management decisions. In order to obtain more in-depth information, we also conducted a discussion group with small and lifestyle farmers from the north-eastern region of Victoria.

The major environmental issues identified in the survey by small and lifestyle farmers included the threat of salinity and other soil degradation issues. Declining native habitat, weed and pest issues accounted for 46% of environmental concerns. All questionnaire and discussion group respondents valued rural lifestyle, had a strong land stewardship belief, and recognised the value of conserving biodiversity. The majority of participants had significant off-farm income.

The preliminary study also highlighted a belief that natural resource management information pathways were 'difficult to access' and that the landholders felt marginalised when they participated in extension activities with larger property owners. Traditional extension programs were rarely used. Scheduling of extension activities and time pressures due to off-farm work were cited as the main reasons for lack of involvement. Most land managers nominated 'lifestyle' before farm profit as a driver for investing in the land. There was a high level of enthusiasm to attend learning-based activities in land management, especially if the activities were targeted at the small and lifestyle sector. A total of 82% of small and lifestyle farmers who took part in the study had off-farm income (see Figure 2).

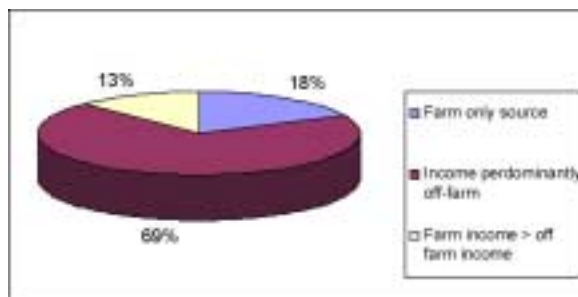


Figure 2 Income sources of small lifestyle farmers in north-eastern Victoria.

The results from the preliminary survey and discussion group revealed that newsletters, neighbours and newspapers were the major sources of natural resource management information exchange (see Figure 2). Contrary to popular belief, the Internet was not well used as an information source or decision-support tool. Consultants were rarely used. Neighbours with large farms played a significant role in providing technical information to newcomers. Social networks were acknowledged as important for information exchange because of time constraints associated with off-farm work and the lack of opportunity to attend learning activities. The study suggests that social networks play an important role in natural resource management practice within the sector, and this warrants further exploration.

Preliminary data from the focus groups suggest that 'newcomers' in rural farming communities rarely seek expert advice on land purchase in terms of land capacity and capability. Views and vegetation (specifically trees) are keenly sought after.

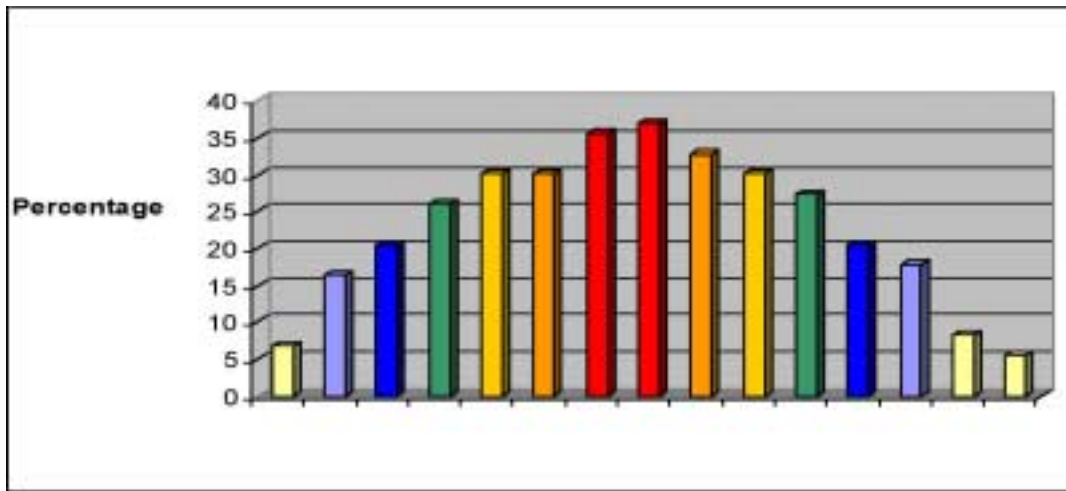


Figure 3 Information sources for small lifestyle farmers.

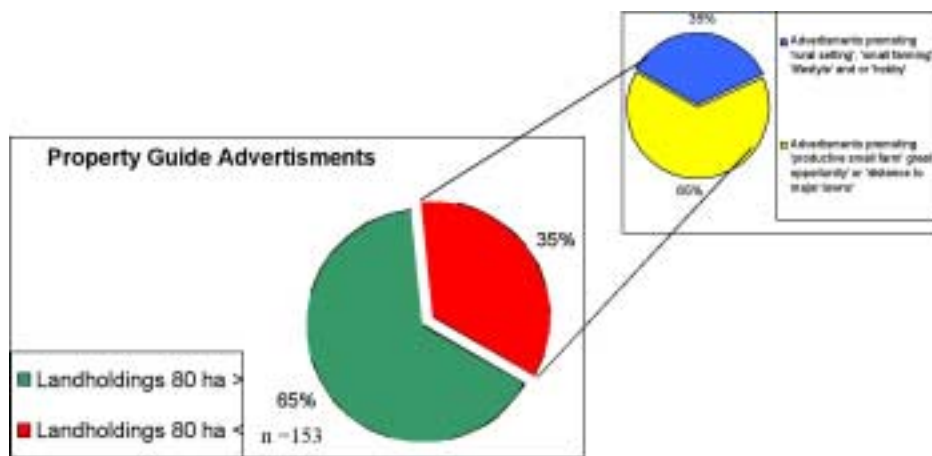


Figure 4 Secondary data analysis of rural press.

Discussion

Our preliminary findings support Australian research that has shown that community interaction suffers because newcomers from the city, seeking a ‘rural lifestyle’, do not participate in traditional institutions and are thought, at least by ‘locals’, not to possess environmental values consistent with farming (Passfield et. al. 1996).

For some small and lifestyle farmers, productive agriculture is often secondary to land stewardship and preserving and improving natural vegetation and ecosystems. The perceived limited pathways to extension, an issue that has been highlighted in the preliminary research, presents a challenging opportunity for state government departments to develop appropriate mechanisms for sustainable small rural property management in partnership with local communities. The preliminary scoping study suggests that the sector is keenly interested in being part of ‘new’ work to provide improved pathways to participate in skill development and extension activities. All participants recognised the need for more active recognition of the small and lifestyle sector in catchment management and industry development programs. Our initial findings support previous work (Gray and Lawrence, 2001) suggesting that the sector has traditionally been marginalised but still holds strong views that it should have a caretaker role for the land both for future generations and for wildlife, with the opportunity to leave the land in a condition that is the same or better than at present.

Implementing appropriate land management decisions to reverse native habitat decline, revegetate, or retain remnant vegetation requires appropriate knowledge and skills. Our

preliminary work suggests that human feelings and value placed on landscapes may also play a pivotal role in developing targeted extension strategies. This supports the view of Vanclay and Lawrence (1995) that aesthetic appreciation of the environment requires both knowledge and feeling (intellect and emotion) — a subject that needs to be further explored.

It has been argued that while there may be a growing awareness of environmental issues and a growing desire to address the actual impacts of environmental degradation, there has been a failure to understand the causes of the problem (Barr & Cary 2000). Whilst Land for Wildlife supports all property owners who register, there is no extension program in Victoria that specifically targets the small and lifestyle farm sector to improve the understanding of the causes of environmental degradation and its impact on biodiversity. The irreversibility feature of biodiversity loss sets it apart from other natural resource management issues (Anderson et al., 2001) and may require specific extension techniques and resources designed for the small and lifestyle farm sector. Small lifestyle farmers have a major stake in catchment resource management due to the appeal of owning land in areas with high amenity and biodiversity values. There is a need to provide improved education and training opportunities to the sector.

Our recommendations to improve the engagement of small lifestyle farmers in information exchange programs for sustainable land management, specifically the management of biodiversity, are as follows:

- develop appropriate and targeted extension activities or messages to meet the need of the sector
- match learning activities to time availability
- acknowledge the small and lifestyle sector as contributors to sustainable land management.

Testing these ideas is the subject of the full research project.

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