

The practice of the weed policies, do they work?

Frances Overmars, Pinkerton Landcare and Environment Group,
1383 Doherty's Road, Mt. Cotterel, Victoria 3024, Australia.

Summary

The National, State, Local Government and the Port Phillip and Westernport Catchment Management Authority's weed policies are discussed in relation to Chilean needle grass and serrated tussock management. Integrated weed control methods are described with an emphasis on managing both native grass and weed seed production in order to favour the competing pasture species. The need for an extension to the Land Management Notice, such as a provision for a pasture management course and a pasture extension officer is explained from an integrated land management perspective. Training of registered weed control practitioners to increase proficiency in identification of grass species and effective targeted herbicide application is recommended.

Introduction

This paper provides an overview of the policies and the effectiveness of their implementation in a rural community. This community consists of small and large landholders, from lifestyle residents to broad-acre farmers, and is located north/north-west of Melbourne on the volcanic plains within the Werribee River and Kororoit Creek Catchments. The annual rainfall is approximately 450 mm. The major natural vegetation of the area is native grass and the major introduced weeds are Chilean needle grass (*Nassella neesiana*) and serrated tussock (*Nassella trichotoma*). These grassy weeds are the main invaders of the Australian native grasslands which have been reduced to less than 1% of their original area and are the most threatened natural vegetation system on the volcanic plains. The relationship of the grasslands to the weed policies is described, from both the agricultural and biodiversity perspective, emphasizing how an integrated weed management approach effects landscape management.

The aim of this paper is to examine the National and State weed policies noting in particular the references to natural ecosystems and land management. These references are then linked to current weed control actions.

Policies

The National Weeds Strategy was developed in the context of the National Strategy for the Conservation of Australia's Biological Diversity and the National Strategy

for Ecologically Sustainable Development. The goals of the (National) Strategy are threefold:

- to prevent the development of new weed problems;
- to reduce the impact of existing weed problems of national significance; and
- to provide a framework and capacity for ongoing management of weed problems of national significance' (quoted from Anon 1998).

In 1997 a list of twenty Weeds of National Significance (WONS) was developed, which included Chilean needle grass (CNG) and serrated tussock (ST). CNG is a threat to 'Australian native grassland communities and agricultural grasslands in general. It has been described as being the worst environmental weed of native grasslands in southeastern Australia.' (quoted from Chilean needle grass, National Strategy 2001). Both CNG and ST are listed as environmental weeds in Victoria (Carr *et al.* 1992).

'In 1997 environmental weed invasion was listed as a Potentially Threatening Process' and 'weed invasion is mentioned as a threatening process for numerous plant and animal species' 'for which Action Statements have been prepared under the Act' (quoted from Anon 1998).

In Victoria The *Catchment and Land Protection Act 1994* (CaLP Act) provides a legislative framework for the management of land including the control of declared noxious weeds and pest animals.' (Anon. 2003). The act sets out the responsibilities land managers:

- Avoid causing or contributing to land degradation which causes or may cause damage to land of another land owner
- Conserve soil
- Protect water resources
- Eradicate regionally prohibited weeds
- Prevent the growth and spread of regionally controlled weeds
- Prevent the spread of, and as far as possible eradicate, established pest animals (Anon. 2003).

The recent changes to the Act (Anon. 2003) have increased the maximum penalties to reflect the costs of remedial action and increased the powers to improve administration, they also reflect a need for more stringent controls, and should facilitate weed control action.

'A Land Management Notice can be issued to a landowner where the Department of Primary Industry (DPI) is satisfied that measures need to be taken by the land

owner to eradicate or prevent the growth or spread of Regionally Controlled or Prohibited weeds.' and

'There are four categories of noxious weeds defined under the Act: State Prohibited, Regionally Prohibited, Regionally Controlled, and Restricted' (Anon. 2003).

Serrated tussock is listed as a Regionally Controlled Weed in four regions, including the area described, and is a Regionally Prohibited weed in six regions. Notably Chilean needle grass is not a declared noxious weed, which appears to be inconsistent with the policies stated in the legislative framework for the management of weeds in the biological diversity context at national level, and with the prevention of land degradation at state level.

'A list of declared noxious weeds in Victoria can be found in the Government Gazette, 18 December 1997' (Anon. 2003) or on the web at www.weeds.org.au.

Landcare notes are available electronically detailing specific control techniques for CNG and ST. It would further assist the community if the Landcare note containing the noxious weed list was made more readily available, noting the noxious weeds in each bioregion, as many rural and urban landholders are unaware of the noxious weeds and their responsibility to control weeds under the Act.

Both the National and State strategies are linked to other strategies. Those at National level have been mentioned. At State level the *Flora and Fauna Guarantee Act 1988* states 'The management objectives of the Act include the conservation of Victoria's communities of flora and fauna' and 'provides mechanisms for management, conservation and control of flora and fauna and potentially threatening processes' (Anon. 1998). The *National Parks Act 1975* has similar objectives.

Yet at local level CNG has been growing for fourteen years in the nationally significant Laverton North Grassland Reserve, it was described as being present in 1990, in the publication *Remnant Native Grasslands and Grassy Woodlands of the Melbourne Area DCE 1990*. 'It has been sprayed periodically, however more resources are needed for monitoring and control of CNG' (Mike Cusack, Parks Victoria, personal communication).

The Victorian Pest Management – A Framework for Action 2002 (VPMF) is an extension of the National policies. This framework provides strategic direction for the declared and potential pests over the next five years, starting from 2002. It reflects current knowledge and will be reviewed as progress is made in understanding weed control.

Some of the relevant sections on land management are quoted.

'3. Pest Management Principles

3.2 The effective management of pests requires an integrated approach as part

of the broader management of land and water resources.

3.5 Pest management activities must be in accordance with established standards of best practice:

- Management program results need to be monitored, procedures modified if required, and community understanding and support developed.
- All techniques will be the most effective, safe and humane methods available and best practice will focus on overall objective of limiting damage to biodiversity and production.
- Management programs will take into consideration methods that do not have adverse on-site and off-site impacts' (Anon. 2002).

All of the VPMF policies present positive goals to achieve success in weed control within a land management context. The interpretation and implementation of these policies, and the appropriate level of funding to achieve these goals is what concerns the community.

Interpretation and implementation of the VPMF

Integrated weed control

The manner in which the VPMF policies have been interpreted varies widely. In the main this interpretation has reflected a short term perspective, with a reliance on an herbicide approach, rather than a multi-pronged approach using a range of available methods. This approach has adversely effected many hundreds of hectares of native grass pastures which are now useless for grazing or other purposes.

A native grass base underpins many of the pastures on the basalt plains. This base may be of varying quality depending on its previous management. When there is scattered tussock interspersed with native grasses often the herbicide flupropanate is used for tussock control. However, experiments in NSW in 1996 quote 'show that wallaby grass, weeping grass and three-awn spear grass are severely damaged by even low rates of Frenock applied at any time of the year.' (from Campbell and Van de Ven, Tolerance of Native Grasses to Frenock and Roundup.). Flupropanate was a component of Frenock, a herbicide now replaced by new brand names.

Flupropanate is a residual herbicide which has often lain on the ground for months during the past seven years of drought, effectively preventing the germination of native grass seeds as well as serrated tussock seeds. Taking into consideration that well managed perennial native pastures on stony ground are regarded as a means of drought proofing properties it is interesting to note the thoughts of Derek Eamus (2005) that drought can be considered normal, as for most of the time the rainfall is below average. The implications for use of this herbicide in periods

of drought are far reaching in respect to native pastures.

Following blanket herbicide application areas of bare ground have enabled thistles and flat weed to establish and over time a new influx of ST seeds have germinated as there is now no competition from the native grasses, and so the cycle continues.

The emphasis has been and still is, on one herbicide, flupropanate, except for the few years when it was withdrawn from the market. It has been promoted as a quick-fix herbicide and used for aerial spraying since the mid-nineties on both cultivated and undisturbed ground. On cultivated ground, the ST can be ploughed in and a competitive crop can be established. On stony undisturbed ground where native grasses grow this is not possible, hence the ongoing depletion of this natural resource. On some properties herbicide has been re-applied aerially every five years, thereby continuing the expensive and non-sustainable process.

Integrated weed seed control methods of burning, spray topping and strategic grazing can all be applied to stony ground. These methods reduce weed seed recruitment, giving the landholder much need-edtime for targeting mature ST plants, providing the opportunity to achieve long term weed control.

There are private and public landowners, Parks Victoria, Councils and weed contractors who are controlling ST in these native grass areas using integrated methods on stony ground. Some use 20 m and 60 m retractable hoses for spot spraying, others spot spray from their tractors, and others abseil down cliffs to reach areas which are difficult to access.

Non government organizations using 'integrated weed control' initiatives at a local level with a focus on native vegetation effecting private land are Melbourne Water, with the successful Stream Frontage Management Program now into its second year. The Catchment Management Authorities (Port Phillip, Corangamite, North Central and Glenelg Hopkins) Victorian Volcanic Plains Land Stewardship Project where landholders are recompensed for weed control above the duty of care as a component of an agreed Management Plan based on the condition of the native vegetation (Anne Buchan, personal communication).

Another integrated weed control initiative was the Roadside Conservation Advisory Committee (now disbanded) which facilitated roadside management plans for local councils. Native vegetation was mapped, as well as the weeds, and a works plan decided upon by a range of interested organizations, including the CFA. As many weeds invade from the roadsides, with cars and water being the carriers, it would assist if roadside management plans were required of all councils in the

Port Phillip Region.

Integrated weed control methods blend well with the introduction of Environment Management Systems (EMS) on farms which focus on product quality control as well as environmental protection. A flexible approach will also diminish the likelihood of ST and CNG developing herbicide resistance.

The national and state weed polices are fulfilled when integrated weed control methods are used providing benefits for water resources, soil retention and indigenous flora and fauna biodiversity.

Need for more land management information on undisturbed native pastures

There is a gradual change in attitude in acknowledging the impact of some agricultural practices on the broad landscape/catchment area and the need to retain native vegetation as a means of mitigating adverse impacts of weeds on water quality, soil erosion and salinity and agricultural production.

According to Jann Williams, scientist, from Land and Water Australia 'A long running national research program (started in 1994) into remnant and native vegetation... has found, for example that areas where less than 10% of the original plant cover remains are going into "extinction debt"...ecological collapse can destabilize the local environment enough to damage or even end its capacity for agricultural use. In areas prone to salinity, for instance, the end result is often a wasteland.' A useful benchmark has been provided by the program, 'despite great variations in climate, habitat and flora and fauna throughout Australia, it seems that a good rule of thumb is for landscapes to retain 30% of their original plant cover' (Williams 2001).

Others scientists have found that when the combined factors of native perennial grass cover (particularly over summer) are present, these being less than 5-10% bare ground in spring, and 1.5 t ha⁻¹ of dry matter, they will prevent ST seedlings from establishing, (Warwick Badgery, NSW). And that by using strategic grazing methods, annual grasses can be depleted and the native grasses increased (Zhongnan Nie, VIC).

Local land managers have also led the way in recognizing the link between retention of NG and agricultural production. Native pastures are known as low input pastures useful for drought proofing properties. Various anecdotal reports over the years have related 'that where kangaroo grass persists no ST has invaded' and, 'when we burnt a large ST infested paddock at Balling the ST was less dense in the NG areas'.

The benefits of using NG in farming are 'in fine wool production with rotation

grazing on native pastures over summer'. In discussion of the practice of mulesing 'there is less need for it with sheep on the dry feed of the native grass pastures' compared with the 'flush growth of rye and clover pastures'. Presumably the drier pastures are less likely to promote the blow fly infestations. There is also less likelihood of scouring in sheep feeding on the 'dry' native pastures.

However, good land management is difficult in the smaller land holdings, as paddocks need to be rested periodically and stock moved to nearby paddocks. As well, there is often a pattern of set stocking or over grazing which is continued despite the bare patches supplying perfect germinating areas for weeds. Education can promote the expectation of increased pasture resistance to new ST outbreaks.

The policy of the Serrated Tussock Working Party in 1998 of 'no seed set' has worked well and has given hope, combined with the knowledge that with decreasing viability of the soil-stored ST seed for 13 years (Campbell 1982), we know that control will become incrementally easier.

The Regional Catchment Strategy 2004 (RCS) produced by the Port Phillip and Westernport Catchment Management Authority (PP&W CMA) acknowledges the ST infestation in the west/north west of Melbourne and serves as a guide for spending on natural resources. Weeds are specifically mentioned in the chapter on LAND and both the Targets LT4 'No establishment of "new and emerging weed species"', and no further spread of "high-priority established" weeds' and Actions LA9 'To implement the regional Weed and Rabbit Action Plans.'

Also in the BIODIVERSITY chapter, the Action BA8 'Assess the risks to biodiversity from pest plants and animals, and establish integrated management programs to reduce the impact of environmental weeds and pest animals on native vegetation and fauna'. In the Key Risks to biodiversity both CNG and ST are mentioned as being risks to NG.

The PP&W CMA has also produced the Weed Action Plan 2003 which has expanded on the Werribee Catchment Action Plan 1999. The weeds have been categorized into 'New and emerging weeds', 'High priority established weeds' and 'Other established weeds'. Both CNG and ST have been rated as High priority established weeds.

It is pleasing to note that 'within the proposed review of the noxious weed lists, there will be an opportunity to align the noxious weed list with the lists in this plan. This will provide a single system nominating priority weeds in this region and will enable rapid response to new and emerging weeds.' (PP & CMA Weed Action Plan 2003, p. 17).

Both these initiatives by the CMA are needed given the Annual Report

2003–2004 summary of a two year natural resource assessment of the Port Phillip and Westernport Catchments condition in relation to the 'number of new weed species in the region', that this situation 'is declining in condition'.

The Department of Primary Industry (DPI) is assisting landowners with identification of weeds and enforcement of the policies often under difficult circumstances. This effort is appreciated. It takes between four to twelve months for administration to gain results from a non-compliant landowner. This process could be facilitated if there were less referrals for officers to process, or there were more officers available to process the referrals.

When a Land Management Notice (LMN) is issued locally for control of ST in an undisturbed native grass paddock and effective spot spraying is undertaken, a good outcome is achieved. However, when the previous management practices continue, such as land being overstocked, over-grazed native grasses become bare patches, new ST seeds germinate and the weed problem continues. For the LMN to be effective, some form of extension, or link to this notice needs to be created (see above), inspections and education for on-going management of land are needed, to ensure a long-term approach is taken.

A pasture extension officer who is experienced in pasture management, particularly grazing in low rainfall areas, both in native and introduced grass pastures, would extend the land management link, ensuring the weeds were not treated in isolation. Such an appointment would be the logical extension of the ST control programs and would also benefit CNG control.

It would also assist if there was a requirement for landowners in certain instances, to attend Prograze courses which have been structured to provide information on low rainfall NG and introduced pastures. This could possibly be linked to a section of the Agricultural Chemical Users Permit (ACUP) course where integrated weed management is mentioned.

DPI initiates the aerial spraying program amongst landholders. Sometimes the herbicide is applied every three years, rather than the recommended five years. As such it is an unsustainable and expensive program, if not followed by appropriate preventive management. While recognizing that there are steep gorges, which are difficult to access, a requirement of the program could include that the initial aerial spraying be followed by a spot spraying program. This would be more likely to achieve a cheaper outcome in the long term.

Appointing a specialist New and Emerging Weeds Officer has greatly assisted the community and local government with identifying weed outbreaks, such as cane

needle grass and closely related species.

If all of the noxious weeds on a particular property were required to be controlled, rather than selecting one noxious weed at a time, there would be an effective use of limited resources.

'Tackling Weeds on Private Land, is a \$9 million, three-year initiative by the State Government to tackle Victoria's weed problem. The initiative will assist in the implementation of the governments Victorian Pest Management – a Framework for Action (VPMF),' (see Plants and Animals DSE web page), and is aimed at assisting private landowners who own 60% of Victoria's land. Some of this money will be spent on more field staff to support land managers and for a larger enforcement program. This initiative is welcomed. It is hoped that the officers will be practically trained in all aspects of integrated land management.

Public Utilities have until recently erected high-tension pylons, laid optic fibre cables and railway lines leaving behind a trail of weeds over the landscape. Now, with the Native Vegetation Framework in use there is protection of the native grasslands prior to works commencing, and requirements to rehabilitate disturbed land.

Local government policies

Interpretation and implementation

It is recognized that there were fewer weeds present thirty years ago, compared with our highly mobile lifestyle now, which has facilitated the spread of ST and CNG to many more properties. Councils have responded to the increased numbers of weeds and are acting effectively in the educative and enforcement role.

City of Wyndham

Under Section 169 of the Local Government Act 1989, Council has made a commitment to protect the community's key assets in the natural environment. A Land Management Rebate (LMR) was introduced in 2000. 'The objective of the Land Management Policy 2004–2007 is to reduce the level of infestations of specific priority weeds and pest animals in Wyndham. The LMR recognizes land management initiatives including the preparation and implementation of a property management plan for ongoing maintenance and improvement' (Anon. 2004). It is required for a three-year period to encourage landowners to plan for long-term weed control. Participation in the LMR is voluntary. The weed species relevant to the rebate include serrated tussock and Chilean needle grass.

Results Overall this approach has been very successful in educating and raising the level of awareness of the status of weeds amongst the rural landowners in Wyndham, particularly amongst the participants in the LMR scheme. The

average level of participation of landowners is 84%. Of the 164 non-participants, 32 are known developers or industrial companies (2003/2004). It should be noted in 2004/2005 that 'a substantial percentage of non-participants are absentee landowners.' This percentage is 68% (Anon. 2005).

As a component of a General Local Law, No. 6 relates to Part 4. Fire Prevention and Unightly or Dangerous Premises. 'Dangerous Land 4.4 (1) b An owner or occupier must not allow his or her premises to be: (b) a haven for vermin, noxious weeds or insects.' The Local Law is used for properties not participating in the LMR. It is currently being revised with the view to facilitate its implementation. One view would be to increase the fines and make the clause unambiguous while not replicating the CaLP Act requirements (Peter Gibbs, Environment Officer, City of Wyndham, personal communication).

Recently (21/3/05) Council voted to increase its enforcement of noxious weeds and vermin under Local Law No.6. It is proposed that 'enforcement of the Law would be undertaken by...authorized officers throughout the year, and not just when non-compliance has been determined' (Anon. 2005).

There exists another necessary land management action, which has broad community acceptance, the construction of fire breaks. When fire prevention notices are sent out to all rural landholders, there is an expectation of compliance and the right to enter the property, with expense of compliance born by the landowner or occupier. These actions are based on Local Law No.6, the same law under which council can enforce weed control. A precedent is already in place.

Wyndham is planning to reduce the time taken to process weed enforcement procedures for non-participating landowners in the LMR, from nearly three months to two months.

Discussion Wyndham conducted a survey on the rate rebate scheme, one of the questions sent to the participants in the LMR, asked 'Are you more likely to contact Council or the Department of Primary Industries (DPI) for information and/or assistance with your land management questions?' Response = Council 45%, DPI 5%, both 19%, neither 20% and no response 11%. It would appear that people are more likely to approach their council than DPI, effectively demonstrating that probably the community either feels more comfortable in approaching their local council, or that the role of DPI is less well known.

Shire of Melton

Melton's policies and the enactment of the Environmental Enhancement Policy (EEP) introduced in 1994 are in many instances

similar to the LMR of Wyndham. The EEP weed control works are undertaken on an annual basis. Both councils include ST and CNG on their list of pest plants, these do differ, as prairie ground cherry, boxthorn, prickly pear, and spear thistle are found on Melton's list and not on Wyndham's, and Wyndham has included the pest animals of rabbits and foxes. Wyndham also has a policy of a curfew on cats.

The control of ST in Melton has been successful when comparing the areas of infestation in the late nineties with those of 2005. Melton has noted that the cost of administering the EEP is considerable, that there are difficulties in monitoring compliance, that weed control has been implicated in loss of biodiversity, and that the rebate cannot be provided up-front and cannot be applied to non-rateable land, such as Crown Land (Alan Brennan, Environment Officer, personal communication).

Melton's evaluation of success in compliance reveals varied figures, averaging 90%. The landowners are required to comply with the annual work plan and to have prevented seed-set of ST. Landholders lose their rebate within two to three months of ST setting seed.

Melton has received an NHT Grant 'Implementing the Regional Catchment Strategy and the Native Vegetation Plan in the Shire of Melton', This will complement the EEP and assist landowners with weed prevention by maintaining healthy competitive pastures.

Recently (31/01/05) council has adopted recommendations from an EEP Policy Report. Some of the new directions are:

- (a) The Policy should aim to prevent land degradation by rewarding sustainable land management. Promoting and rewarding good pasture management is an effective means of preventing land degradation. Healthy pastures, whether introduced or native, will bind soil thus preventing erosion and will be less prone to weed invasion. It is proposed to reward sustainable pasture management.
- (e) Throughout 2004 Council received numerous calls from residents concerned about the widespread application of herbicides. Council is keen to see landholders move away from potentially environmentally damaging and inappropriate activities such as broad-acre aerial spraying. It is proposed to promote targeted spot spraying of weeds, non-chemical weed control and prevention measures over broad-acre spraying.
- (h) Many rural landholders lack a holistic view of land management. The proposal seeks to promote a holistic view of land management by, for example, linking weed and rabbit control within the policy.

However, Melton Council has recently amended the EEP (18/04/05):

- Council does not take a zero tolerance approach to weed control, but rather encourages landholders to reach agreed outcomes and arrangements.
- DPI is responsible for noxious weed control enforcement.
- Council has sought a review of native vegetation laws by State Government.
- Council acts only as an advisory body when seeking planning permits.
- Council will not request DPI take action under appropriate legislation.
- Requirements relating to landfill, rock removal and native vegetation have been removed.
- Council at all times will strictly adhere to the Information Privacy Act 2000.

Council's EEP is less robust with the recent changes. It is recommended that the broad community is consulted before changes are made to this important policy.

Comment

There is a need to accelerate the weed control/enforcement process, as in the case of both councils it can take almost a year and sometimes longer, from when the first letters of commitment to the rebate schemes are received, and control works are undertaken, or not. The time taken from when councils notify DPI and the infringement/LMN notices are sent, can extend to a second 12 months. Two years of weed seed-set should not be permitted. The process of enforcement urgently needs to be accelerated, as an extension of the good work which has occurred in the previous ten years.

Enforcement can be undertaken throughout the year, not necessarily only in spring when the ST is seeding.

In contrast, almost any rural landholder will tell you about the time 30 years ago, when there was rapid weed control action, within six weeks, following a visit by the locally based weed inspector from the then known Lands Department. This notification and visit was an accepted part of living on the land. The wheel needs to turn again.

Local government in association with the DPI provides the basic mechanism for control of weeds on private property. Facilitation at both levels of government in the administration of enforcement procedures needs to be brought forwards. There is broad community support, indeed a demand for this measure to be taken.

Training for land management

Local field days provide the opportunity for interaction with local rural communities, and provide a means of disseminating information and stimulating discussion. More of these are needed.

Wyndham has subsidized landcare members to attend the ACUP course, this

has brought a greater understanding of the need for the measures required when applying herbicides. The course also emphasizes the need for an integrated weed control program, of which herbicide application forms a part. Melton has provided free information sessions on weed identification and management and assisted in seminars.

Training weed control practitioners in identification of grass species and targeted herbicide application

The community and local government authorities are sometimes frustrated with the varying level of expertise regarding the Parks and Gardens staff and private contractors skills in identification of ST and CNG from the native grasses. Particularly from the native poa grasses (*Poa labillardieri*) and ST and native spear grasses (e.g. *Austrostipa bigeniculata*) and CNG. There is a need for an annual review for registered practitioners, both in species identification training and the practical skill of selective herbicide application.

Conclusion

This paper has attempted to provide a balanced comment on how weed policies are interpreted and implemented at 'ground level'. In the main, the rural community, particularly those involved in Landcare and Friends groups, is well aware of the need for weed control. Those that aren't would have received weed information from their respective councils and need encouragement. Weed control is gradually becoming accepted as a necessary part of land management by new rural landowners.

The practice of the policies, do they work? Yes, to a point, they have worked quite well with serrated tussock in regard to short term eradication and less well in relation to long term land sustainability and productivity, particularly in relation to the native pastures.

We as a community, both urban and rural, need more information on the impact that weeds have on habitat and farmland. We also need to know the fact that weeds cost us all in rates, loss of topsoil, loss of water quality, in degraded farmland and that there are fewer local animals and birds as a consequence. A more informed community will reach the point where weeds are viewed as a public nuisance issue, and then it will become unacceptable by community standards for weeds to exist.

Acknowledgments

Thank you to Richard Rowe, Pinkerton Landcare and Environment Group, Peter Gibbs, City of Wyndham and Alan Brennan, Shire of Melton, for their information and assistance and also to Randall Robinson for his constructive comments.

References

- Anon. (1998). Weeds in Victoria. Report of the Environment and Natural Resources Committee for the Parliament of Victoria. (Government Printer, Victoria).
- Anon. (2002). The Victorian Pest Management – A Framework for Action 2002. (VPMF) pp 13-14.
- Anon. (2003). Department of Sustainability and Environment, Pest Plant Control publication CALP Act 1994 – Amendments 2003.
- Anon. (2004). Land Management Policy 2004–2007, Wyndham Council.
- Anon. (2005). Report, Granting the 2002/2005 Land Management Rebate, Wyndham City Council Ordinary Meeting 21/03/05.
- Carr, G.W., Yugovic, J.V. and Robinson, K.E. (1992). 'Environmental weed invasion in Victoria: Conservation and management implications'. (Department of Conservation and Environment and Ecological Horticulture, Melbourne).
- Eamus, Derek (2003). The real cost of agriculture. *Australasian Science* 2003, p. 35.
- Williams, Jann (2001). In *The Bulletin*, Nov. 20, p. 38.