

Victorian Landcare

Issue 1 Volume 1 Spring 1996

**Victoria prepares for
strategic RCD release**



**Powlett Project builds on
regional success**



*Celebrating 10 Years
of Landcare*





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*The Department of Natural Resources and Environment proudly supports
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Cover Photograph

Barry Stewart Bass Valley Landcare -
Blue Gum Country Weed Control Group.
One of the major issues facing this group is
the control of ragwort. Photo: Trevor Foon

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'Victorian Landcare' magazine is a joint publication of the Victorian Farmers' Federation, Alcoa of Australia Limited and the Department of Natural Resources and Environment, with the support of the Catchment and Land Protection Council, Greening Australia Victoria and Farmsmart.



VICTORIAN Landcare Editorial

The Landcare movement is an Australian phenomenon. Now 10 years old, Landcare was conceptualised in Victoria through an initiative of Joan Kirner, then Minister for Conservation, and Heather Mitchell, President of the Victorian Farmers Federation. The first group was formed at Winjallock near St Arnaud on 23 November 1986.

Taken nationally in 1989 by Phillip Toyne of the ACF and Rick Farley the Executive Officer of the National Farmers Federation, Landcare spread across the nation like wildfire. There are now over 650 groups in Victoria and 3,000 in Australia, involving more than a quarter of the farming community.

Landcare is autonomous and community based. Emphasising planning and monitoring, it is multi-disciplinary and takes in a broader view of the environment. It also involves schools and community education.

Landcare seeks to combine productivity and conservation to attain sustainable productivity and improved water quality.

It is very fitting that in the tenth year of Landcare we are launching the first issue of the new Victorian Landcare magazine.

In response to calls for one statewide Landcare communication channel, this magazine replaces the two former newsletters, 'Trunkline', produced by the Victorian Farmers Federation for over 14 years and 'Salt Force News', the Department of Natural Resources and Environment's salinity journal, which was in circulation for nearly 12 years.

Victorian Landcare will provide the Landcare movement in Victoria with a focal point for communicating information on issues relating to catchment, land and water management.

The magazine ambitiously seeks to:

- Increase the awareness of solutions to

land and water management issues in Victoria;

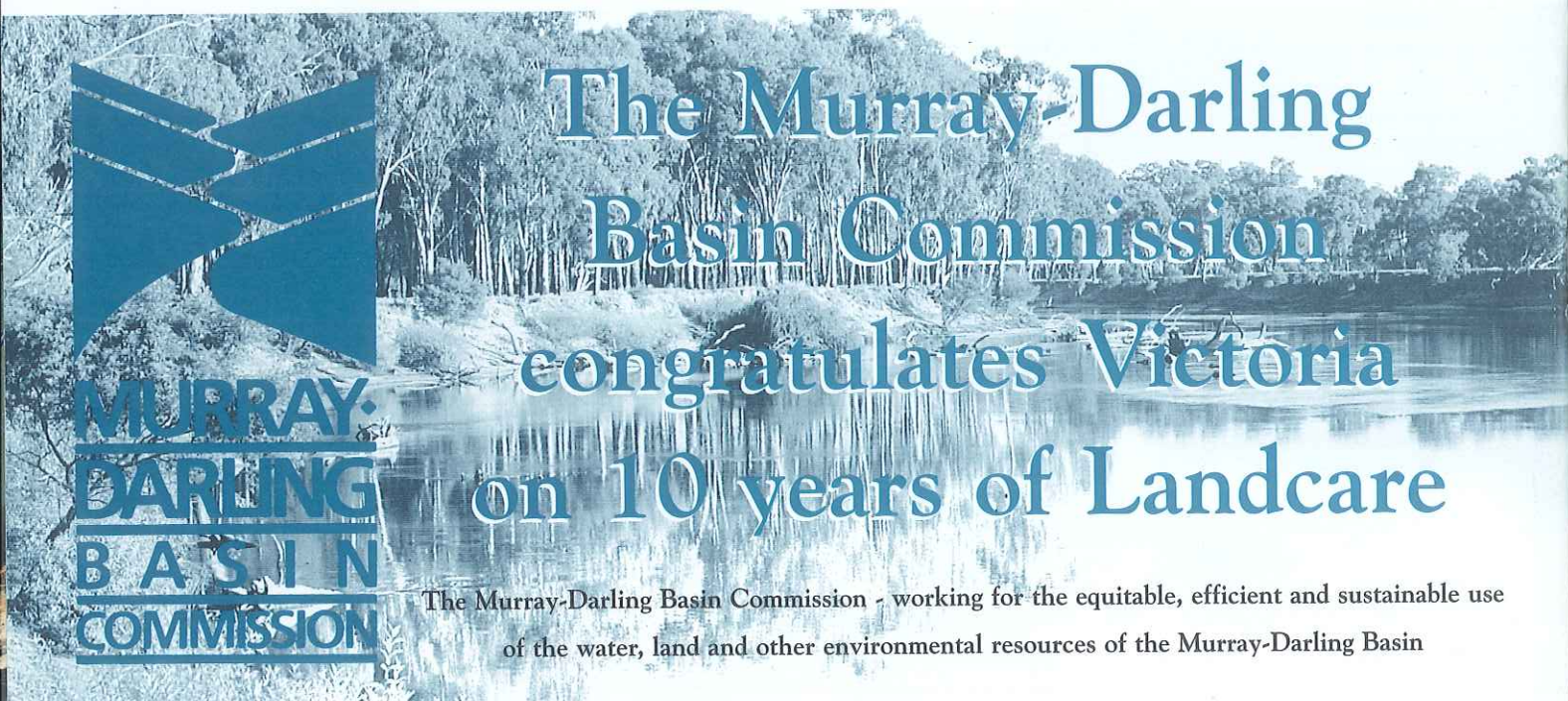
- Facilitate the flow of useful Landcare information;
- Provide a vehicle for groups to communicate with other groups;
- Provide a single focus for statewide Landcare information;
- Highlight the importance of Landcare to the non-farming sector;
- Demonstrate the importance of combining conservation and production.

We urge farmers, researchers, community groups and agency staff to contribute to the magazine and make it their own. Victorian Landcare will hit 30,000 kitchen tables four times each year, with the aim to increase circulation to over 40,000.

Victorian Landcare is produced by the Victorian Farmers Federation, the Department of Natural Resources and Environment, Alcoa of Australia Limited and the Victorian Catchment and Land Protection Council.

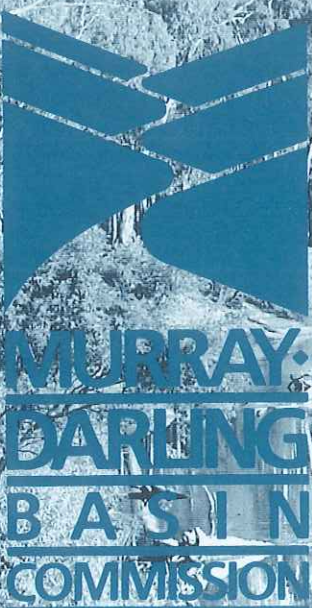
We hope you enjoy the first issue!

The Editors:
Paul Crock, Greg King and Carri Tiffany



**The Murray-Darling
Basin Commission
congratulates Victoria
on 10 years of Landcare**

The Murray-Darling Basin Commission - working for the equitable, efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin



A letter of congratulations from the Deputy Premier and the Minister for Conservation and Land Management

To all members of the Landcare community,

On behalf of the Government of Victoria and as the Ministers jointly responsible for Landcare, may we take this opportunity to introduce you to the first edition of Victoria's new Landcare magazine.

The release of this magazine is a landmark event. It heralds a new era in communicating with a single voice about Landcare to all members of the Landcare community.

We applaud this initiative and congratulate the Victorian Farmers Federation, Alcoa of Australia, staff from the Department of Natural Resources and Environment and the Catchment and Land Protection Council in bringing this new magazine to fruition.

The Victorian Government is committed to improved service delivery aimed at

sustainable development of our vital primary industries and protection of the state's natural resources and environmental values for the benefit of all Victorians.



The formation of the new Department will

achieve this goal by integrating management of natural resources at the catchment, regional and farm level to achieve both productivity and conservation outcomes.

This magazine will communicate achievements at each of these levels.

Victoria is now better placed to support Landcare because of this integrated approach to Salinity, Landcare, Catchment Management and Sustainable Regional Development Programs.



The strong partnership between the community and government remains critical to achieving outcomes, however we must never lose sight of the fact that Landcare groups and individual farmers are the real drivers of Landcare.

This year is the tenth anniversary of Landcare in Victoria and it is appropriate that such an important communication vehicle as this new magazine be launched as we embark on the next decade of achievement across a movement that is vital to Victoria's future.

Hon Patrick McNamara
Deputy Premier and
Minister for Agriculture and Resources

Hon Marie Tehan
Minister for Conservation
and Land Management

Three Projects from three thousand

By Rob Youl,
Landcare Publicity Co-ordinator

There are now 3,000 diverse Landcare groups across Australia, with over 670 in Victoria.

Victorian groups are increasingly forming themselves into regional networks to exchange ideas, develop visionary regional catchment projects for sponsorship, mount large scale community monitoring programs and improve communications, especially through newsletters, regional forums and farm-gate signs.

These regional Landcare groupings readily interact with the state-wide system of Catchment and Land Protection Boards, formed two years ago to plan the sustainable management of our rural resources.

A further sign of the maturity of the Landcare movement is its ability to plan and carry out complex long-term projects, working with sponsors large and small, coping well with shortages of resources

and fully involving local communities, including schools.

Three Victorian projects illustrating the power of local commitment are the Dellicknora fence, and the Archies Creek and Caddens Creek streamside corridors.

In the rugged Dellicknora valley, near the magnificent Snowy gorges in East Gippsland the local landcare group has erected over ten kilometres of electric fence to protect farms from animal pests such as dingoes, foxes and wombats.

Among the rounded evergreen hills surrounding Archies Creek near Wonthaggi, a dedicated group of part time farmers has worked quietly for several years to create over six kilometres of revegetated streamside. Members plant up their own frontages and negotiate with the local dairy farmers to fill in the gaps. The farmers erect fences and help the Landcarers when they come in during

winter to do their planting of both trees and understorey.

This is very sophisticated revegetation, employing only seedlings raised from seed collected around Archies Creek. The group aims to plant the corridor well into the neighbouring Bass River catchment, as well as continuing similar treatment for other local streams.

Caddens Creek Landcare Group operates in the areas around Balmoral in Victoria's far west, a district noted for magnificent merino wool, towering red gums - and serious salinity. Inspired by a retired horticulturist the group had a similar vision to its counterpart at Archies Creek - fence off and plant all the local streams. This has happened with great precision, thoroughness and speed, and is very obvious to passing travellers.

The Landcare

STORY

By David Clark

Ten years ago farmers and politicians got together to lead the way in agriculture. They believed they could work in a manner that was both more profitable and more sustainable. This community approach has now become Landcare.

In ten years 670 Landcare groups have formed in Victoria, more than one a week since 1986. So when does Landcare happen to a community?

The fundamental steps in Landcare are when one or more of the following happen:

1. Groups begin to look at land management impacts beyond their own farm boundaries.
2. Individuals realise that they alone cannot solve the land management challenges they face.
3. Single issues of salinity, weeds and productivity are not seen individually, but as interrelated.
4. On-ground action is recognised by the community as essential to its future.

In the light of this first ten years, an anniversary conference has just been held for the Victorian Landcare community in Ballarat from Monday 30 September to Wednesday 2 October, 1996.

The conference program was drawn together by the Victorian Catchment and Land Protection Council and the local Landcare groups of the Ballarat region.

The aims of this the tenth anniversary Landcare conference were to:

- Celebrate ten years of achievement
- See and learn from the best practices happening in Landcare
- Make friends and networks among other Landcarers from Victoria and interstate, but most importantly
- Concentrate on developing actions for the future success of Landcare in this state.

In the lead up to the Ballarat conference several regional gatherings took place looking at what they believe has made Landcare a success. These comments

cover issues of community empowerment, local ownership, and on ground action.

The question of where Landcare should be beyond the year 2000 was also canvassed at these events. Responses covered the sharing and linking of knowledge, the sustainability of our farming base in both financial and ecological terms and the strength of our knowledge base as land managers.

The State conference followed the theme "why is landcare working?" and "what can be done to make it work better?". Developing these into specific actions for each commodity group (dairy, wool, horticulture and so on) was the object of the conference.

In recognising that each industry has different parameters to land management, the program of the conference is designed to get specific approaches and actions that individuals and groups can work within their own industry and area.

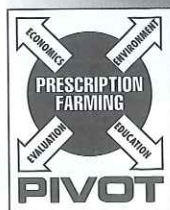
Conference outcomes will be utilised by individuals, groups, agency staff and the Catchment and Land Protection Council and Boards in planning and achieving better Landcare throughout Victoria.

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THE OTWAY AGROFORESTRY Network

A tree group initiative

By Andrew Stewart, co-ordinator of the
Otway Agroforestry Network

The Otway Agroforestry Network is an initiative of the Barwon Valley Farm Tree Group and the Heytesbury - Otway - Colac Tree Group. The network is governed by a consultative committee elected at the annual general meeting from members throughout the Otway region. One of the strengths of the group is the involvement of landowners and other organisations at the 'tree roots' level.

Agroforestry is simply a term used to describe commercial tree growing activities which are carefully integrated into the farming system for a multitude of benefits including:

- shelter
- assisting in control of soil erosion, salinity and waterlogging
- improving water quality
- income diversification
- development of a resource for local industry
- creation of wildlife habitats
- improving aesthetics and land value

The aim of the Otway Agroforestry Network is to encourage landowners to consider farm forestry and agroforestry as legitimate farming activities which complement their production systems. This will largely be achieved by developing a farm forestry culture and skills base within the region's farming community. The plantations will be owned and managed by the landowners or in partnership with industry.

The Otway Agroforestry Network commenced in 1993 when a federal grant was awarded as part of the Farm Forestry Program administered by the Department of Primary Industries and Energy. A successful program is operating to raise awareness of the opportunities of

agroforestry in the Otways. Field days with large attendances have been held and demonstration sites have been established on a range of farming systems.

A major conference was held in Lorne and a book, 'Agroforestry - Productive Trees for Shelter and Land Protection in the Otways' has been published and sold over 1,200 copies (books can be purchased for \$18 by phoning or faxing Andrew Stewart on (052) 363 206).

"Well designed agroforestry can turn land management problems into solutions which create environmental stability and commercial opportunity."

The Otway Agroforestry Network has also been active in promoting agroforestry on a national basis with a 17 minute story featuring activities of the network on ABC TV's national program 'Landline'. Recognition of the network's vision has been acknowledged with a front page story and picture in the 'Age' newspaper.

This year a further \$150,000 was received by the network from the Federal Government's Farm Forestry Program. The grant is to be spent over a four year period, however as the network requires more funding for its activities, it is actively pursuing sponsorship.

Apart from running field days and conferences the focus of this second phase of the program will be to develop an extensive Farm Forestry Adviser Program.

A number of landholders have great experience in the establishment, management, harvesting and marketing of farm trees within the region, but there are also individuals in the network with specialist knowledge. These people will participate in a training course and will then be paid to visit sites and prepare project plans for landowners.

As the Otway Agroforestry Network is a private initiative of local tree groups there is a lack of administrative support that other government department Farm Forestry Program grantees enjoy. As a result, the following administrative structures have been put in place:

1. Incorporation

The Otway Agroforestry Network is incorporated under the Victorian Farmers Federation Farm Tree and Management Group's umbrella organisation - the VFF Farm Tree and Land Association.

The VFF have negotiated insurance with QBE for Landcare/Farm Tree Groups who incorporate under the Farm Trees and Land Association. Under this scheme the Otway Agroforestry Network is comprehensively insured for a relatively low premium - the cover including group meetings, social gatherings and Landcare activities.

2. Employees

The network employs a permanent part time coordinator and contracts others, including farm forestry advisers at strategic times.

A visit to the local accounting firm, auditors of the network's finances, was



most beneficial and suggested the following steps be taken:

- registration of the network as a group leader
- ensure work cover forms were completed
- superannuation options were discussed and employer registrations completed
- calculation of tax to be taken out of wages.

3. Payment of wages

The network banks with the National Australia Bank where an arrangement has been made to transfer wages on a

fortnightly basis to the employees bank account. This is done for a minimal fee.

4. Professional indemnity

Taking out professional indemnity to cover negligent or misleading advice is proving difficult. In order to fulfil contractual requirements of the grant, the network must take out professional indemnity insurance.

Problems arise as the premium cannot be paid from the grant monies. Not only are the premiums expensive for such cover, but inquiries made to one firm said there would be difficulties in developing an appropriate policy.

There must be other groups and organisations facing a similar predicament, and perhaps on a collective basis an approach could be made through VFF to develop suitable arrangements to insure groups employing coordinators or facilitators for professional indemnity as is the case for public liability insurance through the Farm Trees and Land Association.

To contact Andrew Stewart, the coordinator of the Otway Agroforestry Network Phone or fax him on (052) 363 206

FARMERS

gain from river bank rethink

The profitability of livestock enterprises can be lifted by watering animals from troughs rather than creeks, dams and rivers, according to a new Kondinin Group report.

By limiting direct access to river frontage, farmers can not only improve the health of their animals but also protect the environment from the impact of erosion and water pollution.

The report, published in *Farming Ahead* magazine, showed farmers who limited stock access to rivers can benefit in a number of ways including increasing the capital values of their land and expanding their opportunities for timber production.

Kondinin Group chief executive officer, Peter Cooke, said many Australian farmers could improve their returns and protect the environment by fencing off the land adjacent to creeks and streams.

"Allowing stock access to streams leads to trampling of riparian vegetation and pugging of the banks leaving these sensitive areas prone to erosion," Mr Cooke said.

"Contamination through deposition of animal manure and urine directly into the waterway impacts on the water quality by increasing the nutrient and bacterial loads in the water, which leads to possible blue green algal outbreaks and increased health risks to other farms and towns downstream."

"Canadian research has shown cattle drinking from a piped water source gained 20 per cent more weight than those drinking from unrestricted water holes," Mr Cooke said.

There were a number of options landholders could consider for restricting animal access to natural waterways, including fencing to either limit access points (which are relatively inexpensive but do not completely exclude stock from the stream). Another option is to completely excluding stock from the streams and rivers, in which case pumping or piping water can be used to water stock.

"Installing a pumping system to move the water from a creek into a dam or a trough is a reliable and efficient way of watering stock and preserving water quality and stock health."



Mr Cooke said there were many options which could be used for delivering water to stock, the cost being dependant on the power source and type of pump installed.

"The cheapest form of power is mains electricity if accessible but if not, it can be expensive to install.

"Natural power supplies such as solar, wind and water all have their advantages depending on the location and the number of stock to be watered," Mr Cooke said.

The Kondinin Group's stock watering report describes the advantages and disadvantages of the different power sources and pump types.

The report, supported by the Land and Water Resources Research and Development Corporation, also provides a cost comparison of common pumping systems to help farmers make purchasing decisions.

For more details on the report phone the Kondinin Group's FarmLine information service on 1800 677 761.

CATCHMENT management structures to be reviewed

A working party has been established to review the operations of Victoria's Catchment Management Structures, Minister for Conservation and Land Management Marie Tehan and Minister for Agriculture and Resources Pat McNamara announced last month.

The Ministers said the State Government wanted to ensure services provided by the large number of groups, authorities and organisations involved in catchment management issues were maximised, rather than duplicated which often occurred under the existing structures.

"The important and challenging work of our land and water management organisations is valued by the Government. By improving the co-ordination between those involved we can ensure significant efficiency gains and less confusion for farmers and regional communities."

Local knowledge of issues was vital to the review and community input was being encouraged during the process, the Ministers said.

Mrs Tehan said the working party would investigate existing relationships between authorities and examine the opportunity for improved integration of advisory and implementation groups including CALP Boards, river management authorities, Regional Coastal Management Boards sustainable regional development committees, salinity and water quality management groups.

"It will set the framework for catchment management for Victoria into the next century."

Mr McNamara said the structure of Catchment Management advisory arrangements needed to be reviewed to ensure strategies could be implemented effectively and delivery streamlined.

Regional Catchment strategies are currently being developed to set broad directions for resource management in each region. It is the first time an integrated and objective view has been taken identifying key resource management issues which have a major impact on the health of our catchments and the

competitiveness of our agriculture and food industries. The strategies will be submitted to Government by October this year.

"The boards are progressing well in developing the strategies however their successful implementation will depend on the effective co-ordination of groups and the DNRE in carrying out the work," Mr McNamara said.

The working party will be led by the chairperson of the Catchment and Land Protection Council, Jeremy Gaylard, and include representatives from the CALP Council and Boards, salinity groups, the Victorian Farmers Federation, local government, river management authority representatives, Coastal Boards and officers from the Department of Natural Resources and Environment.

The working party will consult widely with interested groups during the review process. As a first step the group has released a discussion paper aimed at stimulating thought and debate about future catchment management arrangements in Victoria. Copies of the discussion paper have been circulated widely and are available from NRE offices around the state.

The working party is expected to make its recommendations to the State Government by the end of the year.



The CRA Group supports Landcare

We believe that a co-operative community approach can reverse much land degradation and help achieve sustainability.

The success of Landcare depends on the wise use of modern technology and the co-ordination of many willing hands in partnership.

CRA congratulates the Landcare movement and pledges to continue its help.

new voice for LANDCARE in South Gippsland

Landcare in South Gippsland has evolved at an incredible rate. Slow to start, South Gippsland landholders have taken Landcare to a new dimension. In the last seven years the number of Landcare groups in the area has increased from four to twenty. The most impressive development has been the recent establishment of the South Gippsland Landcare Network which formed to allow members of all groups to share information and represent the interests of all Landcare groups in the South Gippsland area.

With 20 Landcare Groups now representing approximately 380 landholders in the region, some members felt that a cohesive voice was required to act on issues of regional importance.

The Network has conducted three meetings and established the following critical objectives:

- To further promote Landcare across South Gippsland
- To provide a forum for sharing ideas and promoting issues
- To coordinate funding submissions
- To provide a link between Landcare groups and the Catchment and Land Protection Boards
- To liaise with the relevant agencies on behalf of South Gippsland Landcare groups.

The Landcare Network is made up of two members from each Landcare group, two members of the Catchment and Land

Protection Boards as well as a representative from each of the shire, NRE, South Gippsland Region Water Authority, and the Tarwin River Management Board.

Bruce Standfield from the Fish Creek Landcare Group has been appointed Chairman of the Network.

The Network has recently been successful in obtaining funding to employ a coordinator who will work with all groups across the district as well as coordinating activities of the Network itself.

Further information about the South Gippsland Landcare Network can be obtained from David Ziebell at NRE Leongatha, on (056) 622195 or (056) 622 204.



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Photo: T. Foon

Weed inquiry Victorian first

Landcare and weed control groups are set to benefit from the high priority given to weeds.

One of Victoria's significant environmental and agricultural problems is about to be tackled by the State Government.

Minister for Conservation and Land Management Marie Tehan has announced an inquiry will be held to determine the extent of damage caused by weeds on private and public land.

It's the first time in the State's history a Government has attempted to address the economic impact of the weed problem.

Mrs Tehan said the State Government was serious about weeds and had made tackling the problem a priority issue. It is expected the State's Catchment and Land Protection Boards will increase their focus

on weed control and the Inquiry will give the Government a broad range of options for addressing this deep-rooted problem.

"Weeds cause an estimated \$360 million each year in lost agricultural production and environmental damage in Victoria, and are an increasing problem on rural roadsides. This is a major issue facing all Victorians and we have taken a significant step in combating this long-recognised problem."

Mrs Tehan said the Parliamentary Environment and Natural Resources Committee has been asked to determine the extent, cost and priorities for mounting a forceful attack on the losses caused by weeds, and report its findings in 1997.

"The Committee will also assess the adequacy of current information and research on pest plant control strategies, advise on the rationale for classification of pest plants and suggest statewide priorities for pest plant control."

The roles of, and cost sharing arrangements between State and local Governments, industry and landholders in research, education, and implementing control strategies will also be considered.



Photo: T. Foon

Groups/individuals must obtain an Agricultural Chemical User Permit before using some farm chemicals.

Landcare groups across the state must be aware of their requirements under new chemical regulations before embarking on any activities requiring the use of S7, some residual and ester formation chemicals.

From August 1, 1996 people or groups wishing to use the following agricultural chemicals must obtain an Agricultural Chemical Users Permit (ACUP) from the Department of Natural Resources and Environment or be under the direct supervision of a person holding a permit.

New Chemical Regulations

- A. Any schedule 7 poison (eg Diquat, Endosulfan, Paraquat, Parathion, Omethoate)
- B. Atrazine, metham sodium and ester formulations of MCPA; 2,4-D; 2,4-DB.

To obtain an Agricultural Chemical User Permit you must have completed the required training program, such as a Farm Chemical User Course (FCUC) for your industry, or a recognised equivalent.

The user must also hold an insurance policy for at least \$30,000 including liability cover for property damage and bodily injury. Many Landcare groups may not have such insurance, and therefore must look into this issue before embarking on any spraying projects.

The Victorian Farmers Federation has been facilitating Chemical Users Courses over the last 18 months, during which time more than 10,000 people have obtained the necessary knowledge to obtain their ACUP.

The three year licences are available from the Department of Natural Resources and Environment at a cost of \$38. Once one person in a Landcare group has obtained his or her licence, they can supervise other group members undertaking projects which require the use of these chemicals.

For more information on the Chemical Users Courses, contact Mim Monkovitch at the Victorian Farmers Federation on (03) 9207 5555.

RABBIT Calicivirus LANDHOLDER ACTION ESSENTIAL

South Wales, south-western Queensland and Victoria. It has now been confirmed on every State and Territory on the mainland of Australia.

In Victoria over 100 RCD sites have been verified stretching over most of the north-west and south-west of the state.

Victorian landholders have been warned not to rely on the rabbit calicivirus disease (RCD) for complete rabbit control.

Rosemary James, Program Manager of Pest Plants and Animals with the Department of Natural Resources and Environment reported that not all rabbits in virus areas are affected by the disease.

"The virus has proved highly effective in many areas, killing up to 95 per cent of rabbits, however unlike myxomatosis, RCD will not persist in the field all year round, and may not be effective on moderate to low rabbit densities," she said.

Ms James warned landholders not to become complacent

and reiterated the message that all RCD offers is a unique opportunity to reduce rabbit populations.

"Landholders must continue their planned rabbit control programs and be ready to maximise the benefits of the virus as it passes through."

"Most importantly, after the virus reduces rabbit numbers, traditional follow-up control is essential to eliminate the remaining animals."

She said the virus is having the same effect in many areas as a good poison campaign. "Like poisoning, follow-up control is essential, preferably on a coordinated group basis including ripping warrens, removal of surface harbour and fumigation."

Following RCD's escape from the CSIRO research trials on Wardang Island, the virus has spread rapidly throughout South Australia, New



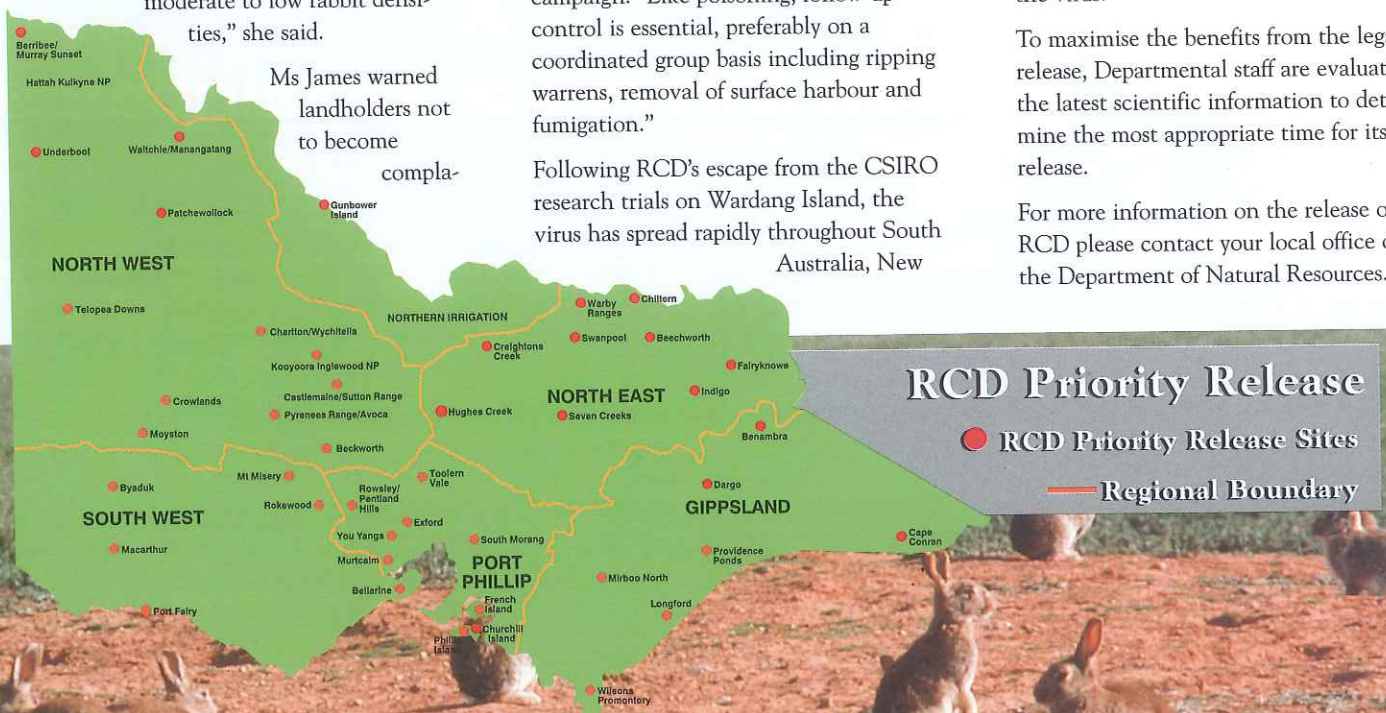
Extent of Spread of Accidental Release October 1996

In addition to these locations, the virus is due to be released in 250 strategic sites throughout Victoria once all legislative requirements have been completed.

"The Department has developed a strategy preparing for the release including follow up work and monitoring of the spread of the virus."

To maximise the benefits from the legal release, Departmental staff are evaluating the latest scientific information to determine the most appropriate time for its release.

For more information on the release of the RCD please contact your local office of the Department of Natural Resources.



RCD Priority Release

● RCD Priority Release Sites

— Regional Boundary

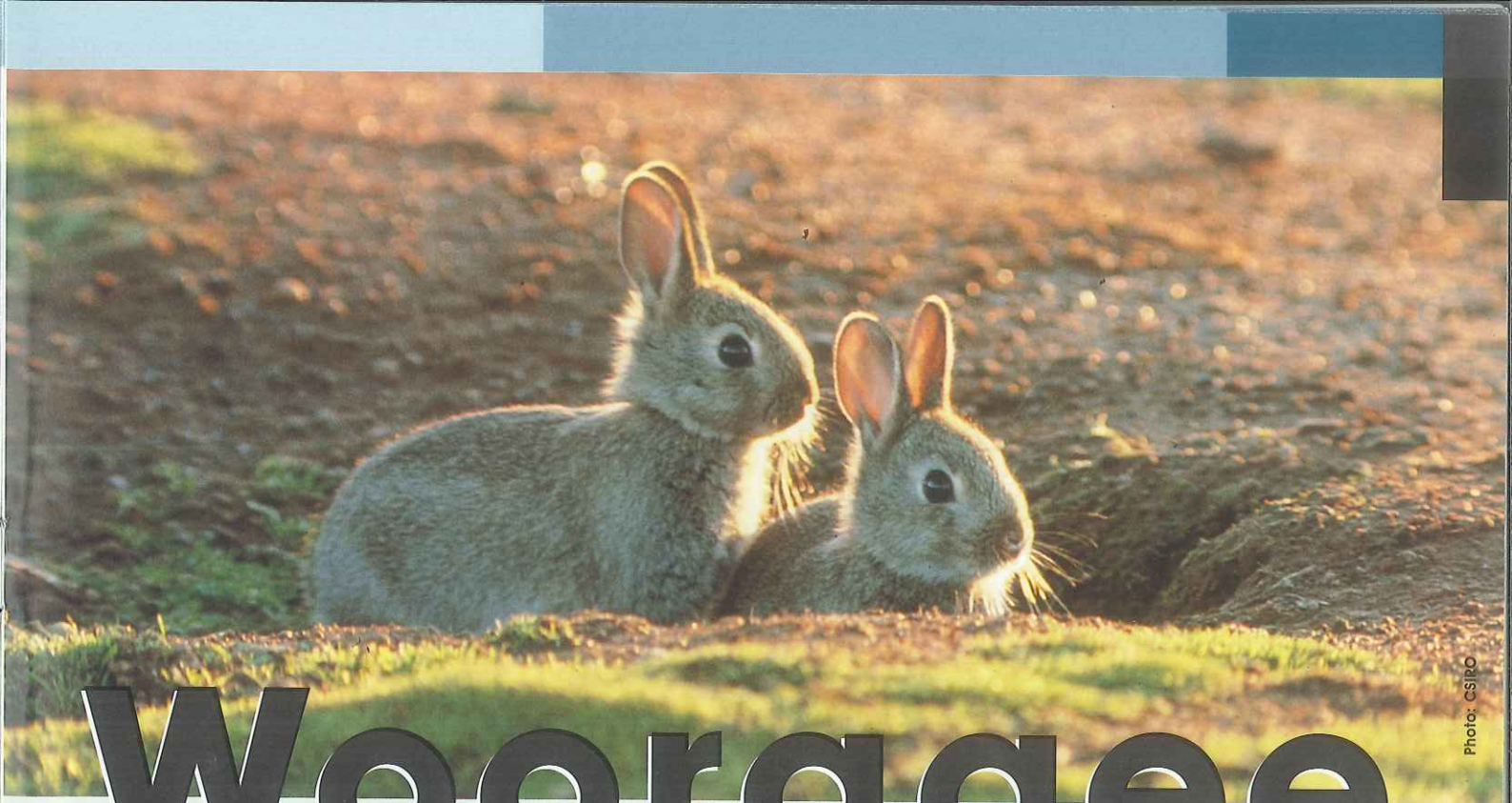


Photo: CSIRO

Wooragee

ready for RCD release

The strategic release of RCD provides the opportunity for:

- Landholders and groups involved in rabbit control projects to allocate resources, and to time conventional rabbit controls to be undertaken in conjunction with the virus to ensure rabbit numbers are not allowed to rebuild;
- Predator controls to be planned and implemented in areas where native animals may be threatened by foxes and feral cats following a major drop in rabbit numbers;
- Information to be gathered on how the virus works in different land systems so that the virus can be used in a way that will achieve maximum, long term benefits for Australia's pastoral, agricultural and conservation lands;
- Minimise the chance of rabbits developing genetic resistance or the virus becoming less effective which may occur if the virus is allowed to gradually spread across the state.



The Wooragee Landcare Group is eagerly awaiting the arrival of the rabbit calicivirus disease (RCD) and plans to join forces with NRE staff in a concerted effort to maximise the impact of the virus on the rabbit population.

Rabbits have long been a serious problem in North East Victoria causing untold damage to the land and environment. They have caused great losses in production on agricultural land by reducing stocking rates, impacting on crop yields and affecting the natural environment by reducing numbers of native plant species.

When the myxoma virus was released, the lack of follow up work at the time meant the sharp reduction in rabbit numbers did not last long and resistant populations

soon built up. This time it is planned that rabbit control will be high on the priorities of the landholders in the area.

The region is lucky in that it has had time to prepare for the arrival of the RCD, and has studied rabbit numbers over the past two years by counting a transect through Wooragee. This information has given the group an idea of rabbit numbers and population densities and will assist in ensuring a coordinated approach to the control of rabbits in the area.

A number of activities are planned to coincide with the virus release including hiring a professional contractor to fumigate warrens, and undertake an enhanced 1080 campaign in the area. Access to rippers and advice on warren destruction will also be made available to interested landholders.

The Wooragee group will work with other Landcare groups in the region carrying out similar projects to reduce the chance of rabbit numbers breeding up resistance to RCD in North East Victoria.



Celebrating 10 Years



Photo: T. Foon

Farmers delight in proudly telling their stories which capture the essence of Landcare.

Catchment plans need to be resourced to move into implementation programs.



Photo: P. Crock

By Barry Clugston
Former chair of the State
Landcare Committee.
Stawell

I remember the historic occasion for the launch of Landcare at a field day at Winjallock in 1986. Historic because it was to give new meaning to looking after our land and historic because there was a female Labour Government Conservation minister, Mrs Kirner and a female president of the Victorian Farmers Federation, Mrs Mitchell, jointly breaking new ground with their respective roles.

On that day Landcare was presented as a partnership between the community, the farm lobby and state government.

In just ten years Landcare has now been used as a vehicle and network to form hundreds of district groups, make many new friends, develop plans, plant millions of trees and improve the dollar return on many hundreds of farms.

Since that time Landcare has gone from strength to strength, with more than 3,000

known groups operating across Australia under the Landcare umbrella.

These groups have formed to tackle local issues such as erosion, loss of soil, lack of vegetation, pest weeds and pest animals, new techniques, and even urban issues like rubbish disposal.

Landcare has helped fulfill numerous social changes, and districts that have faced losses of populations and withdrawal of services have often taken up the challenge to try and maintain social cohesion.

Hobby farmers have brought new skills to many districts and often these small farm owners are heavily involved with the local Landcare groups. Schools have acted as resource agents with meeting spaces, willing helpers and a new generation of farmers eager to learn.

Urban communities have joined by growing and planting trees and learning about the some of the problems associated with the production of food and fibre.

Landcare has held a staggering number of field days, seminars and conferences to

present new ideas, successes and failures and to develop that essential network of interest groups and flow of information.

There are government driven programs called Landcare initiatives which provide support, resources and assistance to some of the many operating groups.

Over the years government agencies have fought pitched battles for dollar resources in the name of Landcare and salinity. In the 1996 the state government brought two of the key agencies together from Agriculture and Conservation which could work in favour of Landcare to broaden the outlook of many department people to encompass an integrated approach.

Group driven Landcare has been a positive force, often without any government assistance, because the demand has grown from the local district.

Years of Landcare



There are still great challenges ahead with erosion and salinity spreading rapidly.

Advisory Committees, National Landcare Programs, Murray Darling Basin programs and water/nutrient based programs.

Some governments have tried to re-arrange Landcare but it has endured because it is logical, it is community driven and it is a real

partnership with all levels of government.

But governments need to be constantly involved, not always with direct hands on but as partners, planners, resource agents and often ideas merchants and supporters of the approach.

Victoria has many advantages in its favour and we should ensure this direction is not lost.

There is a good spread of Landcare groups, there are other farm discussion groups, Meycheck and Topcrop, native vegetation controls, conservation covenants, salinity plans for dryland and irrigation areas. Some local governments have conservation strategies, land for wildlife, farm tree groups, farm forest groups and a real awareness of the need to look after our land and many other supportive actions.

There is still a great challenge for Landcare with future directions. Biodiversity is being lost from our farmlands at an alarming rate and if we are to keep what remains then a greater understanding and level of protection needs to take place.

It has been great challenge to market Landcare in a way that encourages people to join in and feel positive about themselves and their involvement but Landcare can play an even greater role in future.

The new challenge still ahead involves managing the biodiversity and learning to incorporate the ideas into farming systems.

Many districts still face a massive loss of their young people, salinity is still expanding its area of impact, lots of farmers have not changed their cultural and agricultural practices to keep up with the Landcare philosophy and governments are trying hard to avoid spending and money on staff and resources.

Governments must be constantly encouraged to support and work in partnership with the catchments and Landcare.

Local government must be drawn further into the process in a variety of ways.

Catchment plans need to be resourced to move into implementation programs. We have moved rapidly ahead since the groups conservation programs of years gone by but we must learn from past mistakes and not lose the valuable gains and certainly not repeat old problems.

Thinking globally and acting locally is entirely relevant as a message for Landcare.

Landcare has been used to form friendships, plant millions of trees and improve the profitability of hundreds of farming enterprises.



Photo: DNRE

To outsiders the concept of Landcare has often appeared vague and non effective but to delve inside and appreciate the real picture reveals a different story.

To hear two former neighbours who have not spoken to one another for 30 years and would wave shotguns at each other on chance meetings now talk of co-operation, sharing and making amends is a credit to the logical approach of Landcare.

To see the delight in the eyes of any farmer as they proudly tell the story of new endeavours, ideas and farm plans that have changed the working face of their farm.

Hearing a farmer explain how the local shire has been pushed into action to repair roadside vegetation, or the government agency has been forced to involve itself with planning and resources, is to see a positive partnership developing.

Landcare has become a vehicle for action, for whole farm planning, district plans, district actions, sub-catchment plans and works and whole of catchment strategies.

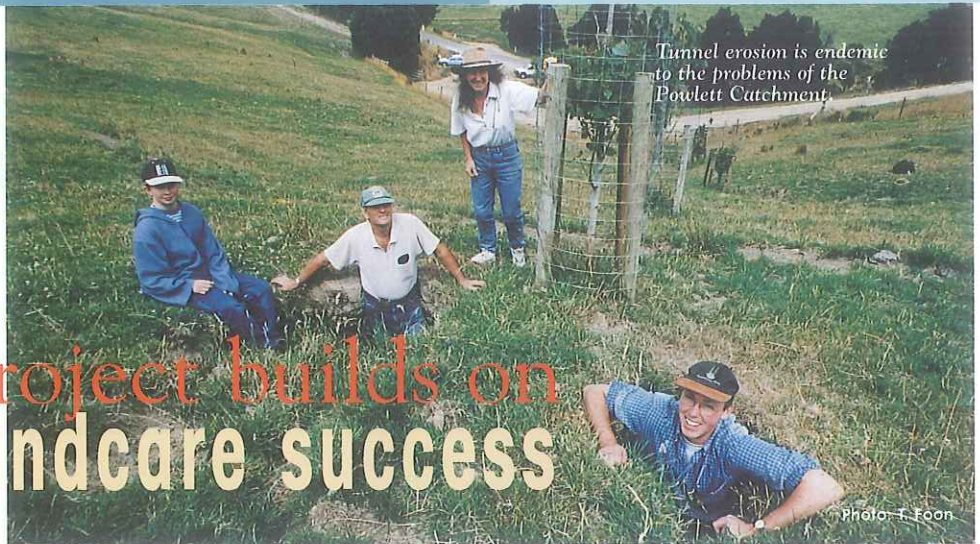
Often the two issues of Landcare and catchment strategies are confused in some minds, but Landcare is a vital component of catchment planning and is a great avenue for drawing all of the issues together to be tackled on a broader basis.

We now have regional assessment panels, state assessment panels, National Landcare



Photo: DNRE

Powlett Project builds on regional Landcare success



Tunnel erosion is endemic to the problems of the Powlett Catchment.

Photo: T. Foon

Following the success of the Bass Valley Landcare Group at last year's State Landcare Awards and the example set by the winners of the National Landcare Primary Producer Award, Tom and Sue Loughridge from Jeetho West, Landcare members in South Gippsland have embarked on an ambitious Landcare project focusing on the Powlett River catchment.

The project has brought together local groups throughout the area and large numbers of urban volunteers who will work together to help rehabilitate the Powlett River and its tributaries.

Located in the heart of South Gippsland, the Powlett catchment rises within the township of Korumburra and discharges into Bass Strait, west of Wonthaggi. Although some land protection works have occurred within the catchment, notably around Lance Creek and Archies Creek, it has generally suffered in the past.

Much of the degradation is due to over-clearing by pioneer dairy farmers and heavy demand for timber the Wonthaggi mines early this century. The result has been diminished water quality, loss of wildlife habitat and wide spread soil erosion.

The project has financial and technical support from Landcare Australia Limited, the Department of Natural Resources and Environment, the Bass Coast

Shire and the South Gippsland Region Water Authority. Corporate sponsorship from L'Oreal haircare products has been obtained and a number of other large companies have also shown a keen interest.

Although the beneficiaries from such a large scale project would be farmers, the involvement of local fishing, tourism and educational bodies has been welcome.

This year the project will see over 300 visitors from Melbourne congregate within the Powlett catchment over the weekend of November 9 and 10. With the help of local Landcare groups a number of major activities will be undertaken. It is anticipated that over 25,000 trees will be planted over the weekend, weed control works undertaken, seed collection, direct seeding and water quality monitored.

Anyone interested in participating in the project can contact Martin Fuller, the Bass Landcare Coordinator on (056) 743 516 or David Ziebell at DNRE Leongatha on (056) 622 195.



T. Foon

Everyone from school children to local anglers have joined in the project.

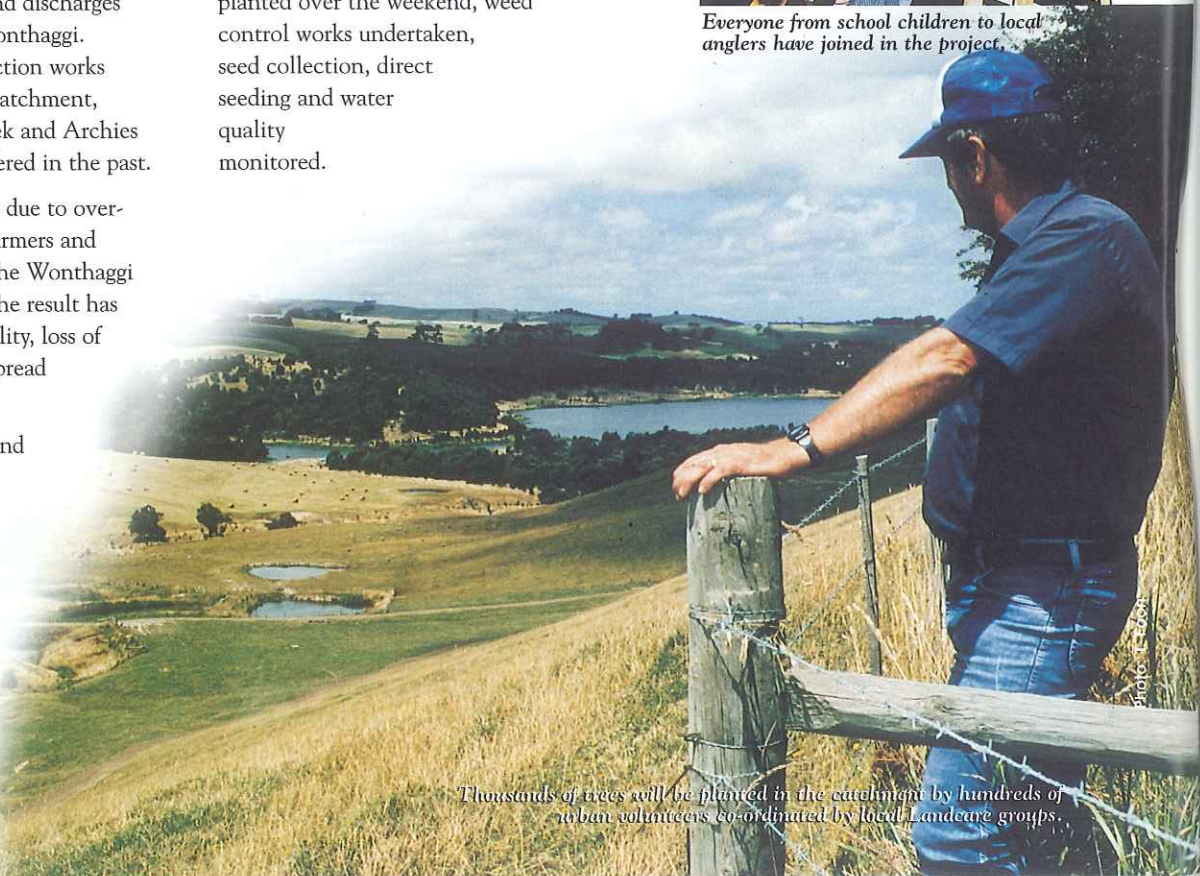


Photo: T. Foon

Thousands of trees will be planted in the catchment by hundreds of urban volunteers co-ordinated by local Landcare groups.

Landcare Education Rolls On

Over three hundred people from in and around Geelong took to the highways and by-ways in their vintage cars recently to have an interactive Landcare experience at the Alcoa Warrambeen Landcare Education Centre and Demonstration Farm.

The education centre has proved to be one of the best facilities in Victoria to introduce people to the intricacies of Landcare, the problems faced by farmers and the innovative solutions which have been devised to tackle them.

Managed by Greening Australia Victoria, the centre boasts accommodation for groups up to 24, full catering facilities in a modern kitchen area, audio visual equipment and most importantly of all fantastic interactive displays outlining the problems and solutions to Landcare.

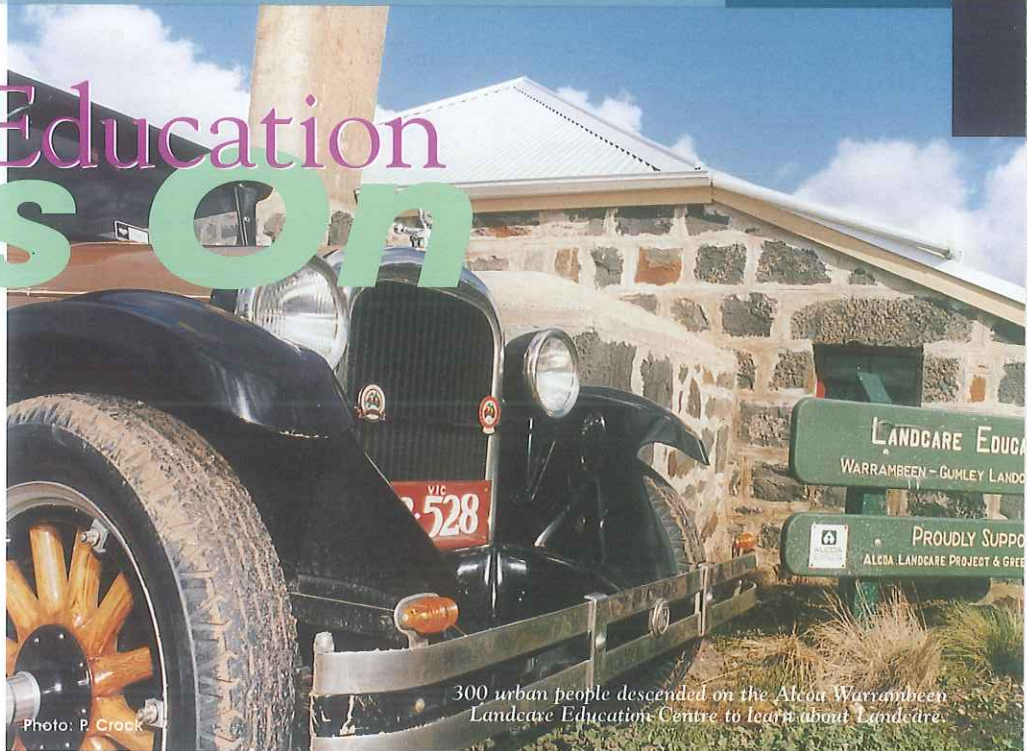
Situated on the historic woolgrowing property of Warrambeen, the centre provides school children with the opportunity to experience life on a commercial farm, and get an insight into how links between productivity and conservation can be achieved.

For more information about the Alcoa Warrambeen Landcare Education Centre and Demonstration Farm, contact Greening Australia Victoria on (03) 9457 3024.

Biological Control Seminar Leads the Way

Over recent months, Warrambeen has hosted numerous seminars and workshops relating to Landcare activities, the most recent of which was the Grasslands Society Biological Control Seminar.

The seminar, supported by Alcoa Landcare, involved some of this country's foremost research scientists, all seeking solutions to Landcare problems which will result in treatments which are kinder on the environment, and more species specific.



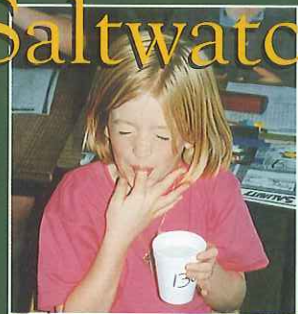
Dr Cor Lenghaus, the head of the CSIRO RCD Research Team, explained the path the new rabbit virus had to take prior to its release onto Wardang Island, and stressed the need for landholders to follow up with conventional rabbit control after the virus had passed through their area. "After all," he said, "we only started with 12 rabbits."

Having flown in from Canberra for the seminar, Dr Richard Milner revealed his new secret weapon against black field crickets. His research into a fungal biological control agent for the crickets will continue after successful field trials held at Warrambeen. With support from Alcoa Landcare, Richard has isolated a fungus which may one day replace the present chemical treatment for the pest - a treatment which currently kills much more than just the pests.

Dr Peter Bird, from the CSIRO Division of wildlife and ecology told the group they were losing the battle against the fox. "Traditional baiting and shooting has not controlled the fox," he said. His innovative project aims to find a way to make foxes allergic to sexual proteins, and hence reduce reproduction rates in the fox.

Proceedings of the seminar have been produced, and can be obtained from Lisa Miller at NRE Geelong on (052) 264 667.

Saltwatch



Saltwatch 1996 was launched at Darraweit Guim in early May and saw a whole new generation of saltwatchers getting out and monitoring their local environment.

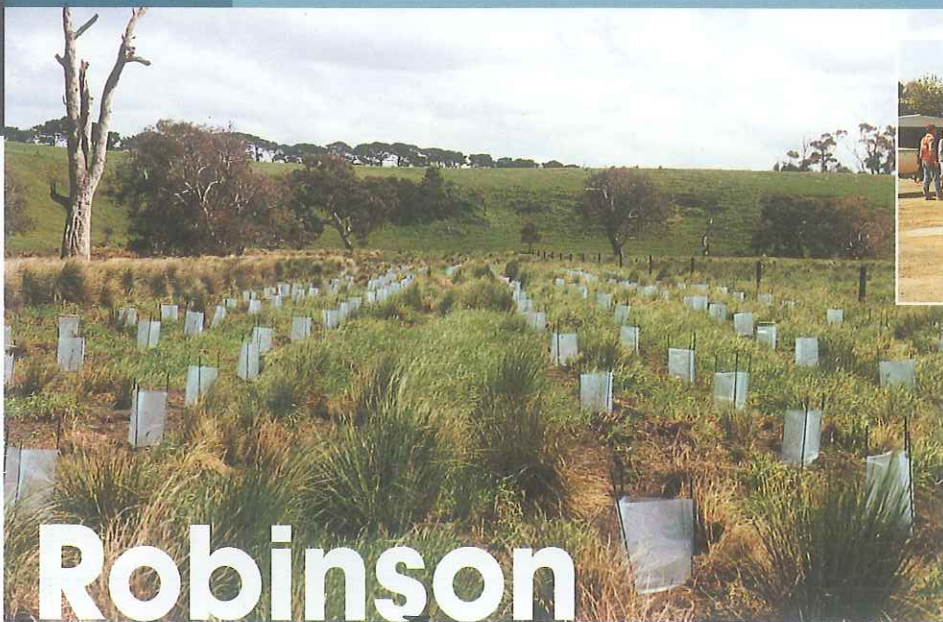
During saltwatch week 285 schools and community groups collected water samples to check the salinity levels of their local rivers, creeks, dams and bores.

Feedback from the schools has shown the highlight of Saltwatch is the visit from staff of the Department of Natural Resources and Environment or Regional Water Boards.

School students loved having a special visitor with the expertise to help them test their samples and answer their questions.

In return, the community has occasion to thank the saltwatchers. An enormous amount of important data is collected by the teams of students and teachers.

For more information about Saltwatch contact Tarnya Kruger on (03) 9412 4369.



Robinson at Large

By Jim Robinson,
Greening Australia Victoria
(With apologies to Wheels)

Hopkins River Corridor Project Underway

The Hopkins River Corridor of Green Project, announced by the Federal Government in June last year (see Trunkline Issue 49, June 1995) is now well underway.

GAV, the project managers under contract to the Australian Nature Conservation Agency in Canberra, have appointed James Scholfield as the project facilitator in the Hopkins River catchment. His job is to assist the formation of a regional consortium of Landcare Groups, other interested people and organisations and to help develop large-scale regional vegetation corridor projects and funding bids to support their implementation.

Approximately \$160,000 should be available for regional consortium projects to be carried out from 1996 - 98.

The Hopkins project is part of a National Corridors of Green Program which operates in all States and Territories with the support of the Federal Government. It is based on the River Murray Corridor of Green Program managed by GA in Victoria, NSW and South Australia from 1993 - 97.

The Next Step Up

The basis of the River Murray and Hopkins River Corridor of Green projects was to support the formation of group consortium or group networks which take

a broader regional view rather than a single Landcare group view of their area.

Most Landcare groups would have worked cooperatively with other groups in their region over the years. However, in recent times, there has been a trend for many groups of groups in Victoria to formally develop regional consortia or group networks to actively work on projects with a common regional vision.

Some consortium of groups have been catchment based such as the Woody Yaloak Catchment Group which is made up of the seven Landcare groups in the catchment. Similarly, the Ovens Valley Network, the Glenthompson Catchment group and the groups involved in Project Platypus in the upper catchments of the Wimmera River are looking across their catchments as well as their immediate Landcare area.

Other Landcare consortia have convened using geographic boundaries other than river catchments such as the newly formed Heytesbury Network, the South Gippsland Landcare Network and the Combined Dundas Tablelands Land Management Group.

Group networks have also formed on the basis of the new local government areas, for example, the Mitchell Landcare and Environment Network and the Gannawarra Shire Groups Network. (In this regard, I reckon that, with 700

Landcare groups throughout the state, a case may be made for all of the new Shires to appoint Landcare-environmental officers to work with and support the Landcare movement in their shire! A number have already!).

Landcare group networks are effectively a step down from the broad Salinity and Catchment and Land Protection Regional strategy-planning forums and a step up from the individual Landcare group. They are an evolutionary phase of the Landcare movement to be encouraged without denying the continued role of individual groups.

At the end of the day, most activity will still continue to be at the farm level and the individual Landcare Group level but by forming regional networks, we can see how it all fits and where the dollars will work hardest.

1986 - 1996 Ten Years of Landcare

1996 marks the tenth anniversary of the first official 'LandCare' Group, Winjallock, in 1986 (though there had been a range of land protection discussion groups for many years prior and the first four Farm Trees Groups formed in 1981).

And now, I believe, there are more than 700 Landcare Groups in Victoria!!

700 - hell's bells, that's phenomenal!! Aside from the onground achievements, it bears a little thinking about.

For example, 700 groups means that there are an average of nearly two AGMs every day of the year. 700 secretaries and chair-people - now, there are 1,400 very important people! And if executive committees average, say, about 7 people each, we have a further 5,000 key folk in the future of sustainable agriculture in Victoria!

Think of the combined practical common-sense and wisdom in the contributions of these folk to the vast array of strategies, forums and planning committees.

And think of all the late-finishing night meetings since 1986! And all the field days and organising the field days!
And all the afternoon teas and suppers!
And how many tea bags and rounds of sandwiches and scones!

And how many filing cabinets and lever-arch folders full of landcare paperwork in home offices around the state! And how many applications for funding assistance?

Also spare a thought for the often unstated but crucial contribution of those hard working state agency staff over the years, particularly Landcare support people. The success of Landcare obviously reflects this partnership of the farming community and government working together. In my

experience, agency staff have been central to the development of most groups and to the ongoing achievements of groups through their advice, assistance, ideas, encouragement and information.

700 groups also means a hell of a lot of night meetings for agency folk too, often effectively with no possibility of time-in-lieu and a commitment matching that of their community.

Thankfully, a number of groups have been fortunate to have paid coordinators who have 'oiled the wheels' and hopefully taken the pressure off.

Anyway, to you all - well done! I wonder where we and 'sustainable agriculture' will be in 2006?

More Murray Corridor PROJECTS in Northern Victoria

Two more regional corridor projects in northern Victoria have received funding through the River Murray Corridor program.

Lake Mokoan-Warby Range Corridor Network Project

The project, targeted largely at the problem of blue green algae in Lake Mokoan near Wangaratta, is being undertaken by a large consortium of the Warby Range, Greta Valley and Mollyullah Tatong Landcare Groups and the Community Working Group for the Restoration of Lake Mokoan with the support of the local ACF, LEAP crews, Goulburn Murray Water, State and local government agency staff.

Centred around the catchment and foreshore of the lake and including major feeder streams with high nutrient and

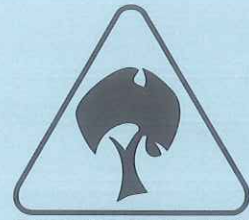
sediment loads, it proposes a range of works including establishment of 50,000 trees and shrubs and 35 km of double fencing and fencing of creek margins.

Lake Bael Bael to Loddon River Corridor Network

This consortium of two Landcare groups, the Shire of Gannawarra and Kerang Primary School, assisted by staff from the NRE proposes to re-establish corridors of local native trees and shrubs along roadsides and on private property that will form an approximately 40 metre wide corridor from the Loddon River to Lake Bael Bael via Reedy Lake, Lake Elizabeth and Duck Lake. The project should help control salinity in the region as well as provide connected habitat for native fauna.



Photo: MDBC



**Greening Australia™
Victoria**

Greening Australia Victoria are proud supporters of the 1996 State Landcare Conference.

We offer the community a wide range of support through regional seedbanks, direct seeding and mechanical planting equipment hire, remnant vegetation management training, schools education and teacher professional development.

Queries relating to these services are welcome throughout the state. Our regional contacts are:

Corangamite

**Claire Dennis (052) 362 399
North East**

Dennis Martin (057) 282 191

Avoca-Loddon-Campaspe

Kerry Reid (054) 353 891

Gippsland

Kate Walsh (056) 595 236

Glenelg

David Warne (055) 217 854

Wimmera

Ron Dodds (053) 918 207

Hopkins (Glenelg)

James Scholfield

(055) 778 205

Port Phillip

Head Office (03)9457 3024

River Murray Corridors

North East

Dennis Martin (057) 282 191

Upper Avoca

David Millsom (054) 557 458

Mallee

Daryl Walters (050) 253 402

Catchment & Land Protection new strategic approach

Regional Catchment and Land Protection Boards across Victoria have formulated Regional Catchment Strategies for priority works in their respective areas. All strategies have been through a public consultation phase and will be presented to the Government for final approval by the end of the year.

For more information about your Regional Catchment Strategy, and how it affects you or your group, please contact your local Catchment and Land Protection Board executive officer. All the boards have summary documents which will expand on the issues outlined here if you don't feel comfortable reading through the entire strategy for your region.

Catchment and Land Protection Council

The Council's immediate priorities are to:

- Ensure that funds are directed to on-ground needs as set out in regional catchment strategies;
- Further promote Landcare throughout Victoria;
- Establish a coordinated system of assessing the condition of land and water;
- Ensure that local government works closely with the ten Regional Catchment and Land Protection Boards through complimentary regional planning;
- Get the broader urban and rural communities directly involved by raising awareness of the critical need to address issues of land degradation, water quality and supply and protection of our native plants and animals.

For more information on the Catchment and Land Protection Council and its activities, please contact Ern Cattach, the council's executive officer at 4/115 Victoria Parade Fitzroy 3065, or Phone (03) 9412 6513 Fax (03) 9412 4271

Mallee

All matters concerned with land and water management
Identify areas requiring special plans
Assess and subsequently manage public land
Environmental flows in Murray and Wimmera Rivers
Nutrient run off from urban areas
Assist bodies already involved in works, such as Salinity implementation groups and government departments.

Executive Officer: Jim Sisson
253 Eleventh Street
Mildura 3500
Phone: (050) 223 040
Fax: (050) 223 061

Wimmera

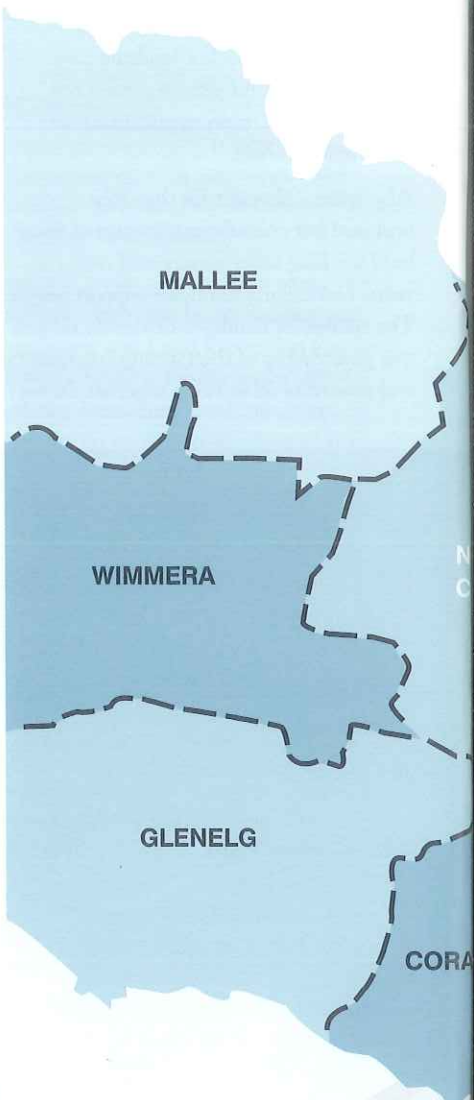
Water erosion
Gully tunnel erosion
Dryland salinity
Chemical contamination
Pest plants
Pest animals
Water quality - surface and groundwater
Flora and fauna loss
Drainage/flood plain management

Executive Officer: John Young
State Public Offices
PO Box 479
Horsham 3400
Phone: (053) 821 544
Fax: (053) 826 076

Glennelg

Changed fire regimes
Chemical contamination
Water erosion
Eutrophication/nutrients
Habitat loss
Pest animals
Pest plants
Dryland salinity
Salinity in waterways

Executive Officer: Colin Dunkley
17 Thompson Street
Hamilton 3300
Phone: (055) 723 033
Fax: (055) 725 215



Corangamite

Pest plant control
Review of land use planning schemes
Waterway management
Soil management
Pest animals

Executive Officer: Don Forsyth
83 Gellibrand Street
Colac 3250
Phone: (052) 335 541
Fax: (052) 313 823

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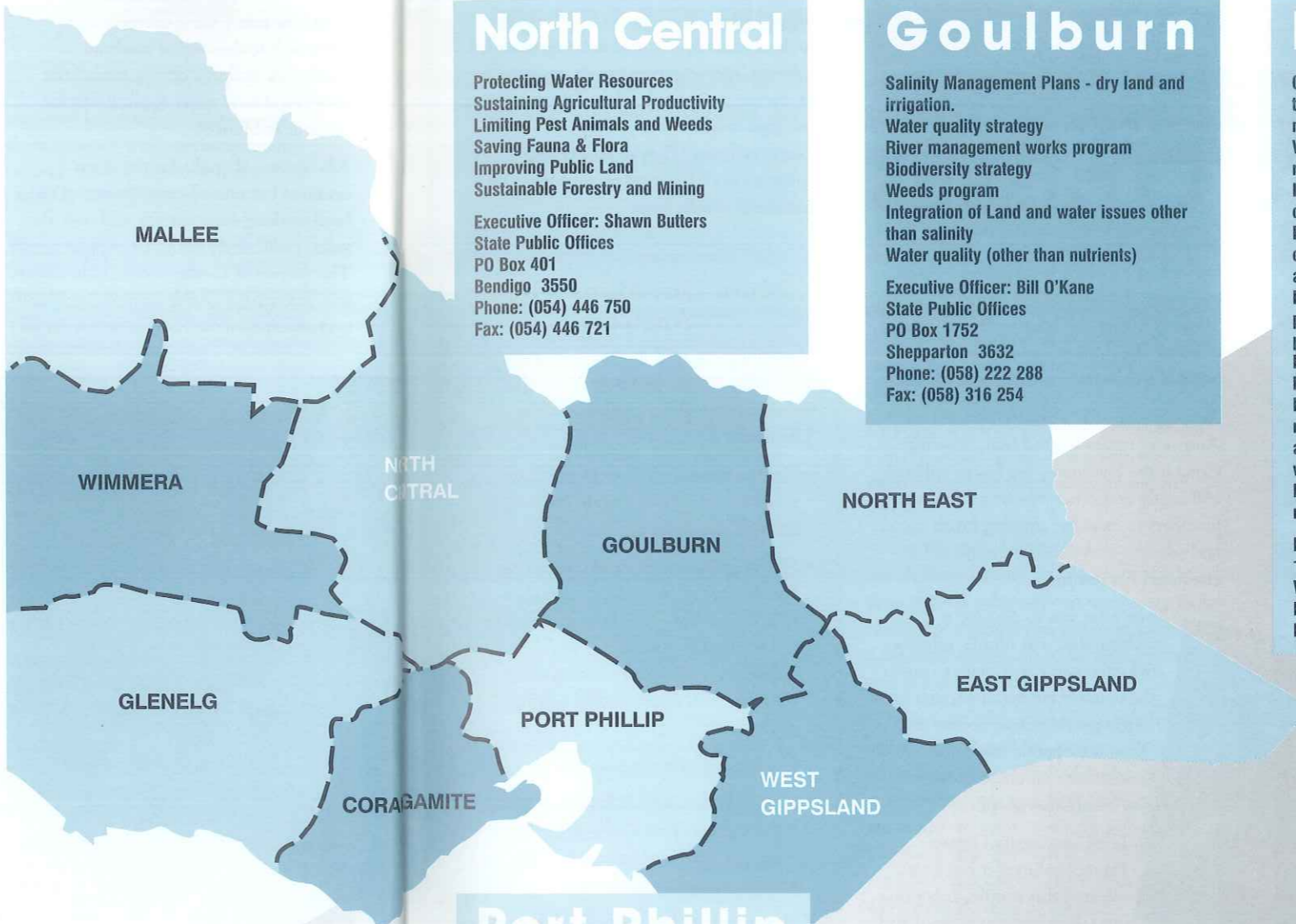
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North Central

Protecting Water Resources
Sustaining Agricultural Productivity
Limiting Pest Animals and Weeds
Saving Fauna & Flora
Improving Public Land
Sustainable Forestry and Mining

Executive Officer: Shawn Butlers
State Public Offices
PO Box 401
Bendigo 3550
Phone: (054) 446 750
Fax: (054) 446 721

Goulburn

Salinity Management Plans - dry land and irrigation.
Water quality strategy
River management works program
Biodiversity strategy
Weeds program
Integration of Land and water issues other than salinity
Water quality (other than nutrients)

Executive Officer: Bill O'Kane
State Public Offices
PO Box 1752
Shepparton 3632
Phone: (058) 222 288
Fax: (058) 316 254

North East

Co-operation and co-ordination with others to ensure sustainable resource management
Water quality - improve the region's water resources in the Murray-Darling Basin
Land Management - increase the adoption of best management practices
Pest Plants - reduce the spread and eradicate where possible pest plants threatening agriculture and the environment
Pest Animals - control pest animal populations on public and private land in partnership with landholders
Biodiversity - maintain and enhance biodiversity
Fire management - ensure fire management regimes protect human life and property and natural environment whilst reducing fire hazard
Land Use Planning - implement resource management guideline in land use planning

Executive Officer: Jan Palmer
1 McKoy Street
Wodonga 3690
Phone: (060) 556 124
Fax: (060) 556 119

Port Phillip

Implement a co-ordinated water quality improvement program
Establish responsibilities for waterway management in the five catchment regions
Halt the spread of pest plants and reduce infestations of some species threatening natural environment and agriculture
Monitor and control pest animal populations in key natural and agricultural areas in the region

Executive Officer: Bill Thomas
KTRI
PO Box 48
Frankston 3199
Phone: (03) 9785 0187
Fax: (03) 9785 0143

West Gippsland

Water quality decline
Pest plant and animal infestation
Vegetation and habitat loss
Soil structure decline
Soil erosion
Salinity - both dryland and irrigation
Waterway degradation
Tourism and recreation pressures
Urbanisation impacts

Executive Officer: Dirk Holwerda
71 Hotham Street
Traralgon 3844
Phone: (051) 722 174
Fax: (051) 722 100

East Gippsland

Water erosion
Pest plants
Fire (protection and regimes)
Biodiversity conservation
Pest animals

Executive Officer: Chris Barry
177 Main Street
Bairnsdale 3875
Phone: (051) 530 444
Fax: (051) 530 458

Victorian
Catchment
and Land
Protection
Council





The Golden Harvest of Native Grasses

By Gib Wettenhall

To the first white settlers, the rippling ocean of tall tufted native grasses stretching in a broad swathe from the Darling Downs in Queensland into Victoria presented seemingly limitless pastoral possibilities.

All around Australia, land managers are reassessing the possibilities for bringing native grasses back as a means of fighting salinity, lowering soil acidity and reducing the dependence on fertilisers. In regions such as the Murray Darling Basin, research into native grasses at paddock level has given new direction to Landcare group activity.

After 200 years of pasture improvement only remnants of native grassland cling to hilltops or persist in open woodlands. That they have persisted at all is – many landholders have come to believe – a tribute to their ability to survive despite drought, fire and neglect.

Gathering seed from these local stands, large or small, has until recently proven impractical due to a lack of harvesting equipment. Without plentiful quantities of inexpensive seed, Landcare groups have found it difficult to establish trial patches – a necessary precursor to learning how and when native grasses ought to be sown to ensure their widespread establishment once again.

Major Research Project

A major research project into perennial native grasses, the Community Grasses Project, identified their first task as

developing an extensive grass-seed harvesting capacity. Established by land managers and land holders from NSW and Victoria within the Murray Darling Basin in 1994, the project was allocated \$485,000 over its first three year phase.

An engineer with a Snowy Mountains Authority career behind him, Steering Committee chairman, Jim Ryan, enlisted colleagues and other Steering Committee members to examine existing brush cutters and see how they could be adapted for grass-seed harvesting.



Their brief was to develop a machine that was simple, reliable and effective; big enough to cover the country but small enough for a single gateway; easy to tow and legal on a public road; and within the purchasing capacity of a Landcare group.

The Community Grasses Project believes it has now cleared this hurdle, according to Clive Thomas, a wool and grain producer from Forbes in central NSW who is the co-ordinator for the Community Grasses Project.

“We have developed two new grass seed harvesters, a simplified brush harvester and a four wheel motor-bike mounted unit which operates by suction.

“Both units have undergone successful trials. The brush harvester is ready for action. A beautiful machine, it works as well as it looks: 1.8 metres wide, it operates with such a gentle action you hardly know it’s been over the sward.

“For economy reasons, the suction model is undergoing changes to incorporate commonly available components.”

Clive Thomas believes that when grass-seed harvesters are available in every catchment, rebuilding the native grasslands from local provenance seed will make good sense.

Active growers throughout summer, the deep rooted native grasses tap the water table constantly. As well as being acid-soil tolerant, native grasses are an essential part of the native habitat. Clive Thomas points out that unlike many of their exotic cousins: “They’re an existing component of the local environment and not going to take over.”

More Questions Than Answers

Harvesting the seed, however, is only the beginning. Still to be resolved are the following impediments, claims Clive Thomas:

- How to store seed on-farm so it can maintain its viability while awaiting a suitable season for sowing;
- Native grass seed is fragile. Cleaning seed can damage it. Some land managers believe we should be devising methods to broadcast the seeds the way they are at harvest, rather than forcing them to conform with conventional sowing equipment;
- Finding out when to sow;
- How to encourage seeds to germinate. Native grasses dance to a different drummer than European perennial grasses;
- How to create a weed-free window in which native grasses might establish themselves without lethal competition;
- How to manage immature pastures. Some native grasses are slow growing in their juvenile stage and easily pulled up by grazing animals.

“With all these impediments to solve you can see why the accumulation of inexpensive, plentiful seed is important,” comments Clive Thomas.

Built by Monaro Engineering and Technical Services of Cooma, the brush harvester’s design and details are available by phoning Clive Thomas on 068 522 176; or fax 068 524 082.



The Golden Harvest of Native Grasses

By Gib Wettenhall

To the first white settlers, the rippling ocean of tall tufted native grasses stretching in a broad swathe from the Darling Downs in Queensland into Victoria presented seemingly limitless pastoral possibilities.

All around Australia, land managers are reassessing the possibilities for bringing native grasses back as a means of fighting salinity, lowering soil acidity and reducing the dependence on fertilisers. In regions such as the Murray Darling Basin, research into native grasses at paddock level has given new direction to Landcare group activity.

After 200 years of pasture improvement only remnants of native grassland cling to hilltops or persist in open woodlands. That they have persisted at all is – many landholders have come to believe – a tribute to their ability to survive despite drought, fire and neglect.

Gathering seed from these local stands, large or small, has until recently proven impractical due to a lack of harvesting equipment. Without plentiful quantities of inexpensive seed, Landcare groups have found it difficult to establish trial patches – a necessary precursor to learning how and when native grasses ought to be sown to ensure their widespread establishment once again.

Major Research Project

A major research project into perennial native grasses, the Community Grasses Project, identified their first task as

developing an extensive grass-seed harvesting capacity. Established by land managers and land holders from NSW and Victoria within the Murray Darling Basin in 1994, the project was allocated \$485,000 over its first three year phase.

An engineer with a Snowy Mountains Authority career behind him, Steering Committee chairman, Jim Ryan, enlisted colleagues and other Steering Committee members to examine existing brush cutters and see how they could be adapted for grass-seed harvesting.



Their brief was to develop a machine that was simple, reliable and effective; big enough to cover the country but small enough for a single gateway; easy to tow and legal on a public road; and within the purchasing capacity of a Landcare group.

The Community Grasses Project believes it has now cleared this hurdle, according to Clive Thomas, a wool and grain producer from Forbes in central NSW who is the co-ordinator for the Community Grasses Project.

“We have developed two new grass seed harvesters, a simplified brush harvester and a four wheel motor-bike mounted unit which operates by suction.

“Both units have undergone successful trials. The brush harvester is ready for action. A beautiful machine, it works as well as it looks: 1.8 metres wide, it operates with such a gentle action you hardly know it’s been over the sward.

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Salinity damages wetland plants and animals

A research project being conducted by Monash University has demonstrated that increasing salinity can have serious effects on wetland plants and animals.

Dr Paul Bailey, the project leader, claims, “Wetlands are important for maintaining biodiversity in plants and animals. They remove nutrients from agricultural runoff, provide habitat for large numbers of native birds and animals as well as being a place for recreational activities such as fishing and camping.”

“In the past, wetlands had often been seen as places to be drained, or to store saline groundwater.”

Salinity levels in wetlands are increasing as saline watertables rise or saline water is diverted from groundwater pumping.

The aims of the research project are to find out what was known about the salt sensitivity of wetland and riverine plants and animals; undertake field and glasshouse studies on the effect of increasing salinity on wetland plant and animals; and to formulate tentative management regimes to help land managers minimise the damage to wetlands from increasing salt.

Field experiments have been carried out in the Raftery State Forest wetland simulating an increase in salinity levels to those found in the local groundwater. Raftery was chosen for the experiment because it is not currently affected by salt so the plants and animals are not adapted to salinity.

The Raftery wetland floods once a year and then dries out. During the dry phase the wetland has a pasture of amphibromus grass. After flooding, plants such as water milfoil emerge and grow rapidly to flower, produce seed and form new overwintering tubers and buds.

Wetland Plastic-Wrapped

The wetland was encased in plastic lined enclosures during the dry phase. When the wetland flooded the plastic skirts were pulled up to seal the area. Salt was added to the enclosures to raise the salinity to the same level as the local groundwater, and the survival and growth of the plants and animals were measured. Further detailed experiments have also been carried out in the laboratory and glasshouse.

Dr Nigel Warwick said that wetlands like Raftery, which flood once a year, are affected by huge fluctuations in salinity levels.

While the initial salinity of the water which flows in may be low, as the wetland dries out the salinities can reach very high levels. For example, an initial salinity of 1,800 mg/l can reach 6,000 mg/l by the end of the summer.

“The research has shown that salt levels of around 6,000 mg/l can prevent the growth of wetland plants. Plants like floating pond weed grow weakly at 6,000 mg/l and are unable to form tubers for growth in following year. Salt levels of 2,000-3,000 mg/l can completely prevent floating pond weed from flowering,” he said.

Salt increases fly and mosquito numbers

The research shows that most insect numbers decreased in the saline enclosures, but there was a noticeable increase in flies and mosquitoes. Dr Warwick said the increasing salinity of wetlands may have public health implications.

“We now have a better idea of how some wetland species within the Murray-Darling Basin are affected by salt, the next step is to formulate strategies to minimise damage by salt.”

Dr Warwick said that more wetlands need to be studied and further research is needed to tie in with management decisions on disposal of saline water to rivers and wetlands.

“That way we can more effectively determine ways to minimise the damage that salt will do to wetlands,” he said.

The research, part of a four year grant from the Land and Water Resources Research and Development Corporation, was conducted by Dr Nigel Warwick and Dr Paul Bailey from the Department of Ecology and Evolutionary Biology, and the CRC for Freshwater Ecology at Monash University.

More information is available from Nigel Warwick on (03) 9905 5649.



GOULBURN MURRAY LANDCARE NETWORK WATERTABLE WATCH PROJECT

The project area covers approximately 3,000 square kms of highly productive farming land of which 280,000 hectares are under irrigation, using 1.4 million megalitres of water annually.

Rapidly rising water tables and salinity are posing a major threat to future productivity and sustainability.

The area currently has a food production value of \$420,000,000 per annum. Included are 3,000 dairy farms, 640 horticultural farms and 3,500 mixed farms. 12 major food processors are also based in the area.

If no action is taken it has been estimated that production losses would be \$40,000,000 per annum by the year 2050.

With funding from the William Buckland Foundation, the GMLN has established a program in 14 of its 23 member groups. This funding covers the first year of a three year project.

Test wells have been installed to form grids across these Landcare group areas.

An unpaid coordinator and a monitor for each group have been appointed. To ensure uniformity of readings GMLN held two training days for the monitors.

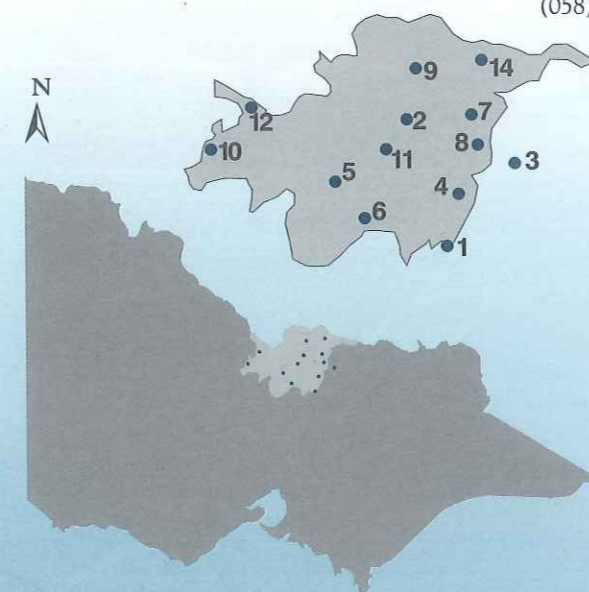
The monitors are paid \$2 per well per reading to read every test well on a set day on a monthly basis. Twice a year they bale the test wells out four days prior to taking their readings and on the reading day take a sample and test it for salinity.

Each month after the readings are completed the data collected is entered on to computer disc and forwarded to Geographic Information Systems at the Institute for Sustainable Irrigated Agriculture, Tatura.

GIS collates this information and produce a water table map for each participating Landcare group on a bi-monthly basis.

GIS is able to add overlays containing further information such as - soil types, channels, drains, road, vegetation and topography to these maps. This combined information format has incalculable value to everyone involved - from the individual farmer, Landcare groups, Network, Catchment Boards, all agency personnel to advisory groups concerned with combating the rapidly escalating problems of rising water tables and salinity.

For more information on the Goulburn Murray Landcare Network, or the Watertable Watch program, contact Earle Phillips, publicity officer of the GMLN on (058) 594 204.



Goulburn Murray Watertable Network Groups

1. Arcadia Landcare Group
2. Bunbartha Kaarimba Landcare Group
3. Dookie Land Management Group
4. East Shepparton Landcare Group
5. Girgarre Stanhope Landcare Group
6. Harston Community Landcare Group
7. Invergordon District Environment & Landcare Group
8. Katandra West Landcare Group
9. Katunga Landcare Group
10. Lockington & District Landcare Group
11. Dookie Land Management Group
12. Wharparilla West Landcare Group
13. Wyuna Landcare Group
14. Yarrawooyah Watertable Management Group

Landcare Supports Revegetation



The Southern Mallee Trees on Farms Group received a grant of \$2,000 from the Lance Reichstein Foundation via the Landcare Foundation in January 1995.

The project on the Culgoa-Ultima road was for revegetation of road corridors and is the third project of this kind the group has been involved in.

Commencing at Culgoa on the Tyrrell Creek, there were intermittent patches of remnant mallee and grassland on the 21 kms stretch north from Culgoa to the Lalbert Creek. The Reichstein Foundation funding will enable the group to revegetate the areas between these patches joining them to make a corridor which will leave only 3.1 km to complete the gaps on the section between the Tyrrell and Lalbert Creeks. A Government grant of \$4,950 has been received to carry out this work in the late winter or early spring of 1996.

From the Lalbert Creek to Ultima, the roadsides are treed with a wide variety of the trees and shrubs which occur in the Mallee.

From Ultima to Swan Hill, there is only 1 km of roadside which is not treed, however there is a link up through private property which covers this section of the corridor.

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Landcare Foundation Supports Mallee Revegetation



This project was carried out with the assistance of the Culgoa Lions Club, 10 members and others taking part in the tree planting in September 1995.

Grants received by the group are used to purchase fencing materials, seedlings and treeguards, with all other works being carried out by volunteers. The site preparation is usually

arranged with abutting landowners, and the watering with the aid of the Berriwillock and Culgoa Rural Fire

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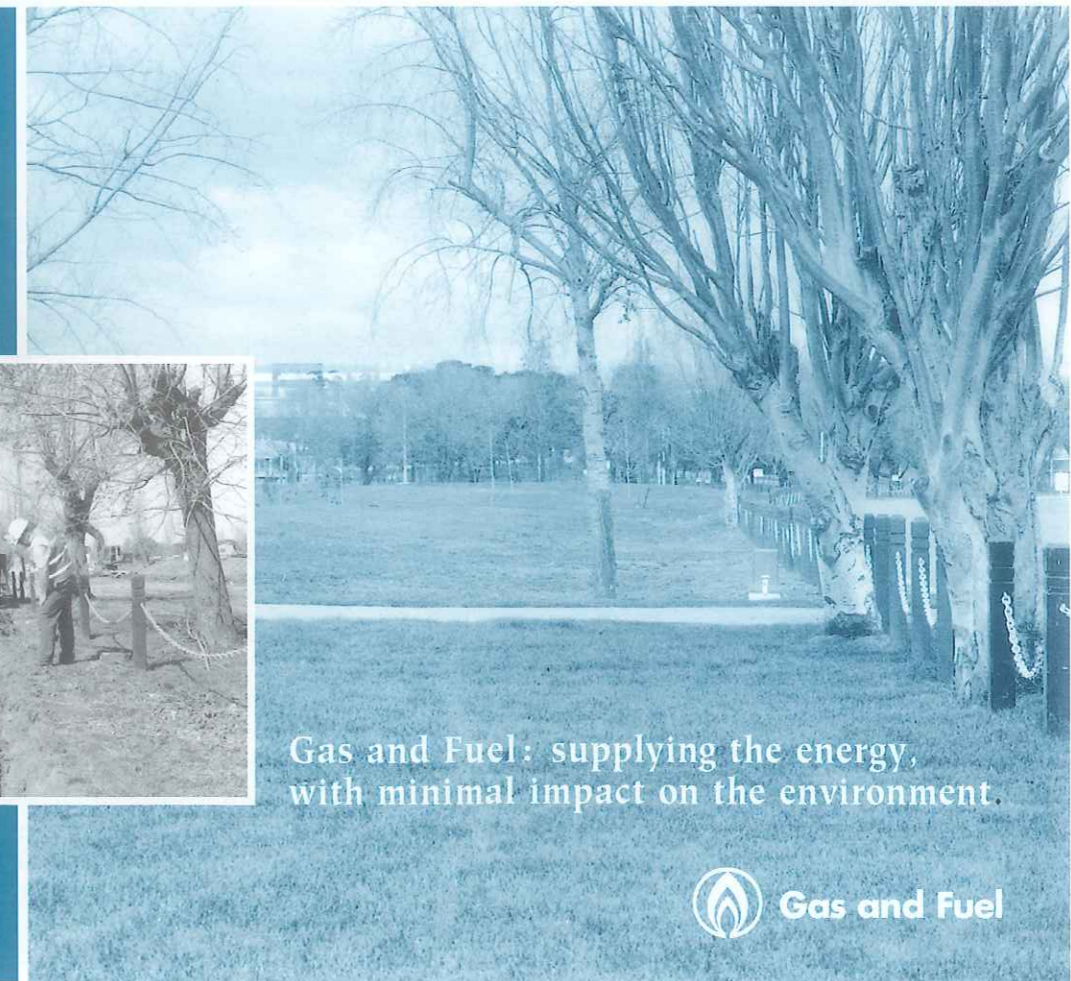
Brigades. Unfortunately part of the site preparation will not be carried out in time for the tree planting in September 1996. The seedlings and tree guards on hand were used to plant an extra row of trees on 'Bull's' section for which we had a Government grant. Since then the preliminary working up has been carried out on 'Witney's' and 'Guy's' sections. All the fencing material is on hand and the seedlings for 1996 planting are on order and paid for.

The expenditure to date on fencing materials, seedlings (95/96), and tree guards (95) has cost \$1,830. The balance of \$169, will be spent on tree guards and freight. It is intended to plant 500 seedlings on Witney's and Guy's sections (see photos), in conjunction with the 1,500 seedlings to be planted on the 'Springfield' section with the recently received Government grant.

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Book Reviews

There is so much written information to digest, lot's of it good and helping to inform us, to promote best practice and to stay viable in the Landcare work we are undertaking. It is easy to fill this column every issue with book-publication reviews for your information.

An Environmental Handbook For The Mid Loddon District

This excellent book produced by the local community with assistance of Save The Bush and DNRE is a model for similar publications in many regions in Victoria. It has a wealth of scientific and practical environmental information including the economic and other uses of environmental resources in the region. A must for landholders in the Mid Loddon district; highly recommended for others. Available from Paul Haw, Mid Loddon Tree Group at \$12.00 copy (054 552 476).

Making Farm Trees Pay & Putting Back The Bush

Two recent 60 page (ie. pretty skinny and easily read in one sitting!) workbooks which are also highly recommended are 'Making Farm Trees Pay' (Guest editor: Rowan Reid) and 'Putting Back The Bush' (Guest editor: Nan Oates). These workbooks were developed from the papers presented to a national conference on 'The Role of Trees in Sustainable Agriculture' held in 1991. Available from GAV at \$7.99 copy plus \$2 postage. (Phone (03) 9457 3024).

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This pamphlet provides a guide to the identification of numerous species of perennial native grasses which may usefully be encouraged and managed in pastures for their productivity. Available from Agriculture Victoria, Warren Vogel (060) 556 222 or Meredith Mitchell (060) 304 500.

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Farm Forestry Explained

The Department of Natural Resources and Environment has produced a new user-friendly information kit on all aspects of farm forestry. The Farm Forestry Extension Kit is a practical guide for landholders starting out on tree growing ventures.

Experts from around Australia have contributed information for the kit which attempts to answer landholders 'most asked questions.' The kit includes sections on:

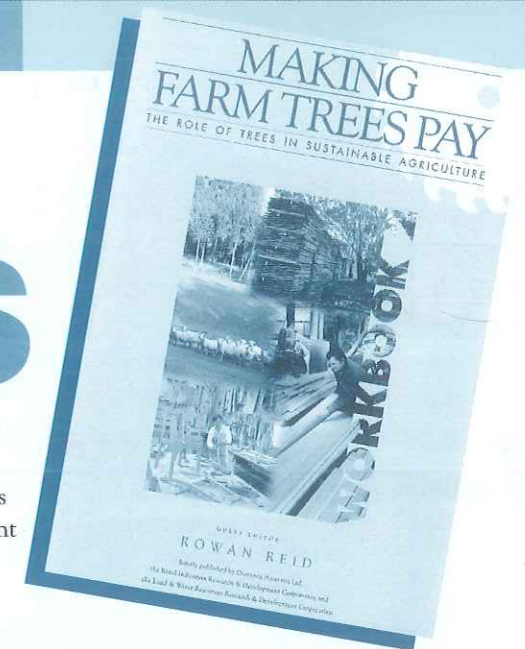
- Legislation and planning controls
- Species selection and establishment
- Management
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The kit comes in a sturdy ringbound folder and can be expanded as detailed chapters on additional species and topics are produced. It is a valuable information resource which looks at the practicalities, potential and realities of farm forestry.

Kits are available from the Outdoors Information Centre at 240 Victoria Parade, East Melbourne, 3002. Telephone (03) 9412 4795.

Blue-green Algae and Nutrients in Victoria - A Resource Handbook

This new resource handbook has been produced as part of Victoria's Nutrient Management Strategy. The Strategy was developed in response to the emerging problems associated with toxic blooms of blue-green algae in Victoria. It recognises that nutrient enrichment (principally phosphorous and nitrogen) of inland waters is a major cause of algal blooms.



The Resource Handbook provides background information on:

- blue-green algae and the problems they cause;
- factors causing algal blooms, particularly nutrients;
- nutrient dynamics, particularly phosphorus and nitrogen;
- diffuse, point and internal sources of nutrients;
- techniques for controlling nutrient sources, including information on available best management practice guidelines;
- statutory control of nutrients; and
- the catchment analysis process.

Action to reduce nutrient levels and algal blooms in Victorian waterbodies is required at both a statewide and local level. This handbook is a valuable reference document for communities, government agencies and educational groups involved in algal bloom and nutrient management by providing general information to assist in the management of nutrient and algal blooms.

Copies of the Resource Handbook (\$12.00 per copy plus \$4.00 postage) can be obtained from the Outdoor Centre, Department of Natural Resources and Environment at 240 Victoria Parade, East Melbourne 3002. Queries should be directed to the Outdoor Centre on (03) 9412 4158.

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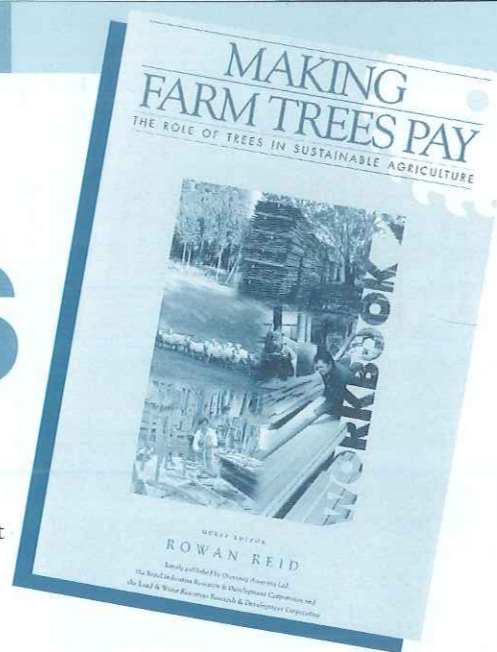
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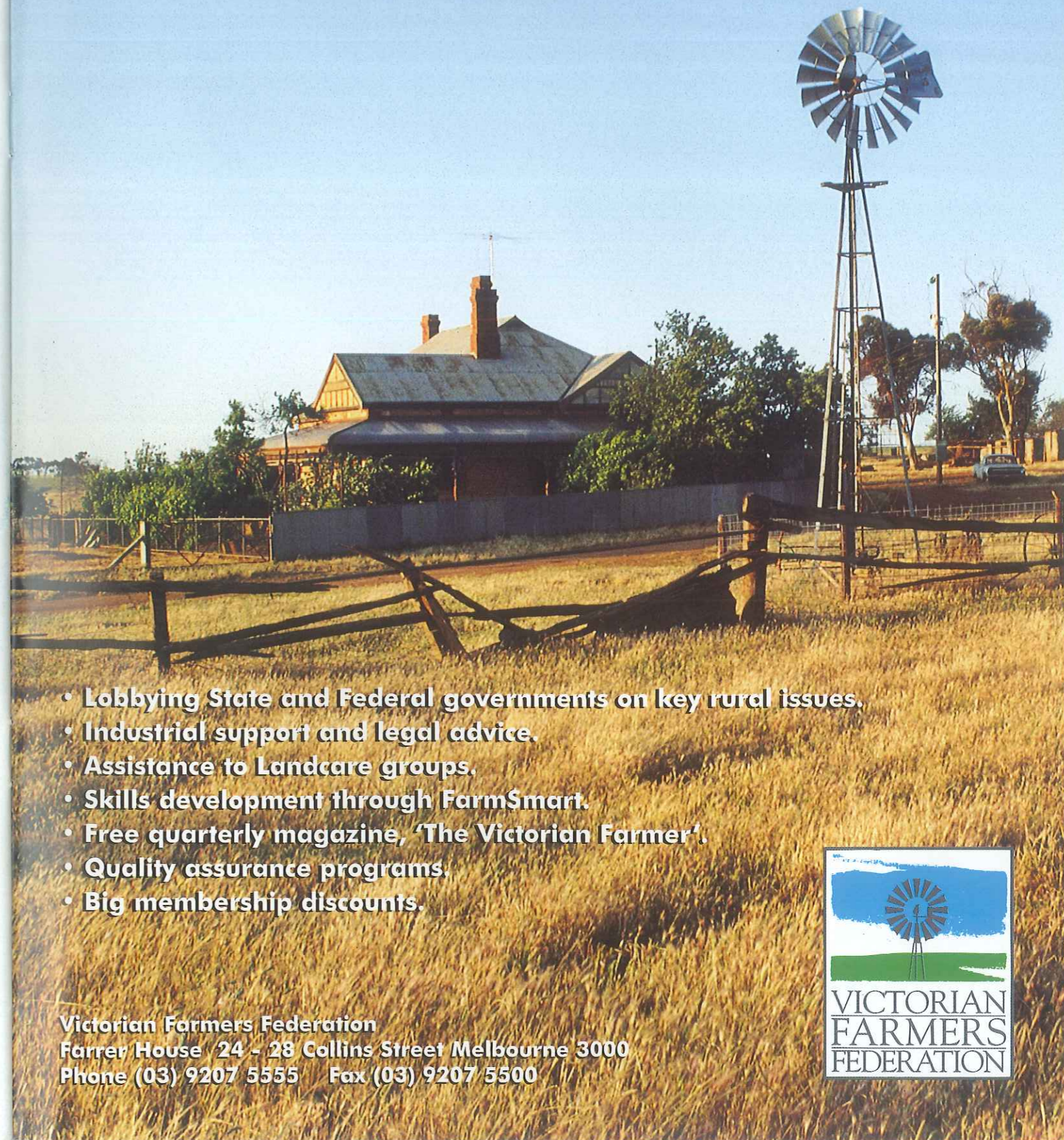
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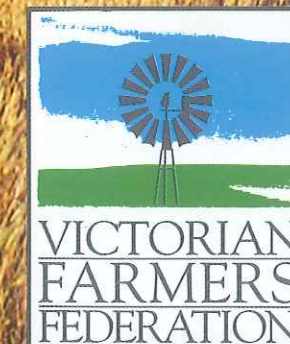
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and to supporting the community in
reclaiming our future.

For more information about the Alcoa Landcare Project
contact Paul Crock on (03) 9207 5555

