

# CONTENTS

### **B**usiness Management

Wade Hughes Peter Walsh Peter Sutherland

### Editorial Group

Paul Crock (03) 9207 5555 Jo Safstrom (03) 9412 4382 Sally Gibson (03) 9412 5048 Phil Roberts (03) 9207 5555

### ditorial Consultant

Tiffany & Associates (03) 9894 2169

### Advertising Manager

Mark Saunders Phone 0418 505 938

### Design

Bouquet Productions Pty. Ltd. Phone (03) 9376 0911, Fax (03) 9376 0922

### Printing

Henry Thacker Print Group Breakwater, Geelong. Phone (03) 5248 3333, Fax (03) 5248 7222

### Cover Photograph

Dairy cows on Spring Pasture - Andrew Chapman

## Contributions and mailing list enquiries

Victorian Farmers Federation Landcare Section, Level 6 24-28 Collins Street, Melbourne 3000 Phone (03) 9207 5555 Fax (03) 9207 5500 E-mail: paul.crock@vff.org.au

Victorian Landcare is published for the Victorian Landcare Community by the Victorian Farmers Federation, 24-28 Collins Street, Melbourne 3000. Articles may be reprinted provided Victorian Landcare is acknowledged. While every effort has been made to ensure the accuracy of statements in Victorian Landcare the Victorian Farmers Federation, its partners, agents, servants and contractors disclaim all responsibility for the statements quoted herein.

ISSN: 1327 5496

Letters
Page 5, 26



Kangaroos: fact and fiction

Page 7

Sow 'n' Grow Page 9



New fly first for Australia

Page 13

Rio Tinto remote sensing

Page 16



Why grow grapes?
Page 18

Saline soils at Yarram Page 24



Junior Landcare Page 31

The 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 and Greening Australia Victoria.









## From the editors

There has been plenty of activity over the winter period that can't pass without comment.

July saw the departure from office of one of Victoria's staunchest Landcare supporters and dedicated farm leaders, Wally Shaw. Wally's departure from the Victorian Farmers Federation sees the end of a thirty year career representing the interests of Victoria's farming community.

On behalf of the Landcare movement in Victoria, we thank Wally for his support over the years. However, we must all especially thank Wendy for supporting him in his endeavours for, without her support, Wally would not have achieved as much as he has.

We welcome Peter Walsh to the post of VFF President. Peter is currently President of the VFF Farm Trees & Landcare Association, and hence brings knowledge and support for Landcare into office.

On World Environment Day, the United Nations Environment Program (UNEP) elected Greening Australia to the ranks of its Global 500 Roll of Honour, one of the world's most prestigious environmental awards.

Mark Thomas received the award on behalf of GA in Moscow, from UNEP's Executive Director Klaüs Töpfer, who praised GA for their efforts in helping revegetate Australia.

"These environmental defenders have demonstrated that it is at the community and local level where action to protect the environment acquires its full meaning. In honouring them, UNEP hopes that their examples will inspire and guide many other men, women and young people to join the global coalition dedicated to protecting the environment," he said.



Mark Thomas, GAL, receiving the award in Moscow

GA joins an elite group of environmentally focused groups, companies and individuals including the likes of French marine explorer Jacques Cousteau and Sir David Attenborough.

Lastly, on behalf of all the team, we would like to thank former *Landcare magazine* editor and NRE Manager Community Education and Customer Research, Mal Brown, for his dedication to salinity, Landcare and education over the years. He has been actively involved in the magazine since its inception and we have all benefited from his creativity and expertise. We wish him well in his new career in the private sector.

Paul Crock, Sally Gibson, Phil Roberts, Jo Safstrom



### FINANCING BETTER FARM BUSINESSES



### A RESPONSIBLE LENDER

Are you considering a new land purchase, productivity improvements or property developments?

Ask Rural Finance to

Ask Rural Finance to design a flexible loan package to meet your individual needs.

Central 350 Collins St Melbourne, 3000 Telephone: (03) 9243 2668 Facsimile: (03) 9243 2666 Gippsland 16 Kay St Traralgon, 3844 Telephone: (03) 5176 1761 Facsimile: (03) 5176 1682 South West 132 Koroit St Warrnambool, 3280 Telephone: (03) 5562 9611 Facsimile: (03) 5562 0744 North East 2/164 Welsford St Shepparton, 3630 Telephone: (03) 5821 2655 Facsimile: (03) 5831 2097 North West 118 Curlewis St Swan Hill, 3585 Telephone: (03) 5032 9900 Facsimile: (03) 5032 4471 Also at Mildura Telephone: (03) 5023 3025 Wimmera 17 Darlot St Horsham, 3400 Telephone: (03) 5381 0052 Facsimile: (03) 5381 0065

## Letters LETTERS Letters



### Feedback on NHT Debate

### Dear Editors.

I am writing to you to express community concerns of the Natural Heritage Trust.

Originally hailed as the greatest environmental restoration project ever, the Natural Heritage Trust is beginning to translate to those on the land as a program that is failing to deliver.

From our perspective, there are many problems with this scheme, almost too numerous to mention. The convoluted assessment process, the time delays, payments in instalments and the different priorities of the various government departments, have all detracted from a scheme that promised so much.

However, it's the thread of mistrust running through the whole process that has the greatest potential to damage the partnerships that are essential for Landcare to work. Why doesn't any bugger trust anyone any more?

For many years now Landcare groups throughout Australia have been performing vital on-ground land restoration works - with small amounts of Federal funding - on sites that are obviously degraded. In most cases the labour and machinery costs are carried by the landholder for projects of public benefit. Let's face it, there aren't too many ways taxpayers' dollars can be spread further than through grants to Landcare groups.

Of course accountability is important, but it's got to the stage now where accountability, evaluation and monitoring have become mantras. Those outside the bureaucratic process can't understand what all the chanting is about.

Our feeling is that rather than agonise over as many as 85 questions on a form, those involved in the assessment process need first-hand experience of the on-ground works being accomplished by the groups and an understanding and trust of community plans for the future.

State Government grants to Landcare groups, in contrast, seem to be able to get the job done with a minimum of fuss.

The Weed Initiative program in particular has been a well targeted and very successful program in South Gippsland. Proving to us that government and farmers can form very effective partnerships to achieve great on-ground outcomes.

As a program that promised on-ground outcomes as one of its major objectives, time is running out before that precious commodity of good will evaporates amongst the Landcare groups. The very ones who are in the best position to achieve an on-ground result.

Rather than just sit back and criticise, our community has been working through possible solutions.

We see one of the main problems with NHT as being the complicated system of communicating between Landcare groups and Canberra.

One option may be to have the Catchment Management Authorities write the submissions for Landcare groups. If Canberra mistrusts Landcare groups and co-ordinated bids from Networks - as demonstrated so far - perhaps integrated bids professionally written will be more successful.

This would take one link out of the chain, albeit community ownership through Landcare networks, but it may stop the large number of extra 'go it alone' bids by each Landcare group arising from present frustrations.

Another (wishful) approach could be to extend the community voice that is the Landcare network system up the chain to Canberra. Such a structure could involve

Currently, if you look at the flow chart of where our applications go and where and when the money comes back, it's a bit of a crazy maze. This letter may create some interesting discussion and idea generation, but let's have them heard, Please!

Yours in Landcare David Ziebell South Gippsland Landcare Co-ordinator

### Frog Update

### Dear Editors,

I would like to suggest that through the Victorian Landcare magazine people be notified that Roundup kills frogs as well as weeds.

Some people may be using the weed killer, ignorant of what else it kills. Some people may be able to be more careful of where and when it is used.

I don't expect a radical change of lifestyle for people from this knowledge, but it may enable people to be more careful and selective when using weed killers.

Thank you for your consideration on this.

A.M. Hayson Shelbourne

In response to this community concern, the manufacturers of Roundup and Glyphosate have changed the surfactant which was causing the problems with frogs and have released frog-friendly glyphosate mixes for use near waterways.





An excavator is the latest weapon used by the Goulburn Murray Landcare Network (GMLN) in its fight against rabbits. The 20 tonne machine fitted with a four-foot ripper has proved very effective in difficult ripping situations, including under fences and around trees.

Most of the network's area is irrigated so the rabbits are confined to isolated infestations. However, remnant stands of murray pine and yellow box provide attractive harbour. Ripping with tractors in these areas has been difficult in the past as most warrens are concentrated at the base of trees. Overhanging branches and tree roots made the job complex, time consuming and ineffective, as the whole warren was often not destroyed.

The excavator can easily access these areas, even in dense pine stands. Damage to tree roots and overhanging branches is minimised by careful operation and by using the excavator's flexible arm.

In most cases we have destroyed the warrens first with the excavator and then followed-up by fumigating any reopenings with Gastoxin tablets. Ripping before fumigating has two advantages. Firstly, it saves time. Instead of spending several days fumigating warrens farmers only have to monitor the sites and fumigate reopenings. Secondly, because the entrance to the warrens is not filled in, the area to be ripped can be better assessed by looking at the direction the hole takes.

### By Matt O'Hare

This results in fewer reopenings.

GMLN's pest plant and animal committee are offering an incentive scheme which pays 20% of the costs of excavation and free Gastoxin tablets. Some farmers are also taking advantage of the 34c in the dollar Landcare Rebate. All farmers who have used the excavator are more than impressed by the speed and effectiveness of the process.

For further information contact Matt O'Hare, the GMLN's Rabbit Buster Facilitator, on (03) 5864 1075.

### Excavator benefits

- Rips under fences.
- Removes/relocates stumps and logs ripping warrens underneath.
- Removes boxthorns and peppercorns.
- Crushes hollow logs or piles up for burning.
- Less time/labour required for fumigating.
- No need to cross-rip.

## Goulburn Murray Weed Alert



The Goulburn Murray Landcare Network's Pest Plant and Animal Committee is advising farmers to identify weeds early or suffer the consequences.

The committee is undertaking a major weed campaign during 1998/99. Fiona Fisher, GMLN's Pest Plant Facilitator, says it's all about raising community awareness of new invasive weeds spreading in the region.

Fiona encourages farmers to get weeds identified early.

"In the past farmers have failed to have weeds identified before losses in productivity occur. This has become a serious issue more recently as some of the newer weeds are immune to the usual control methods."

An infestation of prairie ground cherry in the Northern Irrigation Region.

Fiona says Kyllinga is a good example. There is no known control method available and it is decimating pasture in the Northern Irrigation Region.

"Getting in early and eradicating weeds when only a few plants are present can save a lot of time, money and heartache."

For further information contact Fiona Fisher on (03) 5866 2164.



Harvesting of red and grey kangaroos has a scientifically legitimate, ecological and economic role in Australian rangelands, according to Dr David Freudenberger of CSIRO Wildlife & Ecology.

Dr Freudenberger, who has spent decades studying the grazing impact of kangaroos and sheep on Australia's vast rangelands says the kangaroo industry is an important component of the economy in many parts of regional Australia yet many Australians carry misconceptions about the roo's impact.

"On average, every four properties support a roo shooter," he said.

"Each shooter could be considered a small business feeding into the rural economy, so it's important that the kangaroo's place in the environment is understood."

Dr Freudenberger says there are several commonly held misconceptions about kangaroos.

### Fiction: Kangaroos are in balance with nature.

Kangaroos have been a part of Australia for nearly five million years, but the land has changed dramatically in the past 200 years. In some places, kangaroo numbers and impact are far greater than ever before.

### Fiction: Kangaroos are at risk of extinction.

Red and grey kangaroos are not facing extinction! Indeed, their numbers are booming thanks to the absence of dingoes from many areas and easy access to water.

Prior to the development of a livestock industry, vast areas of Australia were once without drinking water for a majority of the time. Scientists believe kangaroo numbers went through cycles. During the wetter years that usually followed an El Nino event, roo numbers increased dramatically. When the El Nino returned, they quickly died of thirst with just a few survivors at isolated billabongs.

Today, thanks to bores and dams, most areas of Australia are less than 8km from water - an easy hop for a kangaroo. Where there is drinking water, kangaroos thrive until they starve.

### Fiction: Kangaroos are kept in check by dingoes all over Australia.

If dingoes were still widely spread they might control kangaroo populations but the dingo has been exterminated from most areas except central and northern Australia.

### Fiction: Kangaroos are okay because they are soft-footed.

Kangaroos have two long, soft feet. Sheep, cattle and goats all have four hard hooves that chip away at the soil. Regardless of what sort of feet they have, one kangaroo or one sheep has a negligible impact in a 1000ha paddock. However, 100 kangaroos or 100 sheep can equally damage a landscape. It's the total number tearing away at vegetation, exposing it to erosion by wind and water that matters.

In the absence of dingoes and in the presence of drinking water, kangaroos can become a significant (30-40%) part of total grazing pressure. When there are a lot of grazing mouths, the land is at risk of falling apart. It's the number of mouths (and stomachs) that are important. The hardness of the feet is of secondary importance.

### Fiction: Humans are not the normal predators of kangaroos.

Humans have been a predator of kangaroos for at least 50,000 years.

Our predatory skills have changed: we now use high-powered rifles rather than spears and dogs. Without predation, the only other controlling factors are starvation and disease. Starving animals, be they kangaroos or sheep, over-graze by necessity. Commercial harvesting of kangaroos is a modern form of predation. Eliminating harvesting would only increase the risk of overgrazing, land degradation and rural poverty.

Young Weedbusters



The Urban Rural Links program, in conjunction with the National Weedbuster Week initiative and the Victorian Government's 'Win the War Against Weeds' campaign, co-ordinated a weed poster or project competition for schools involved in the links program.

Ingrid Duncan, the URL Co-ordinator, highlighted the rationale behind the competition.

"Weeds are not exactly a most riveting topic - but the extent of the weed problem in Australia today compels us to reach out to the younger generation in an effort to lift awareness of the problem and help stem the tide in the future," Ingrid said.

"Students were invited to enter a project or poster depicting weed or a weed issue. These posters or projects were produced individually or in groups of up to four students, using any medium, on up to A3 size paper."

Ingrid was encouraged by the way in which schools tackled the issue of weeds in the environment.

"Many classroom activities were supported by the excellent Weedbuster campaign materials, providing students with the starting point," she said.

"The Reservoir East Primary School, for example, took their grade four children on a walk of the Darebin Creek (an important metropolitan waterway), collecting samples of weeds to be pressed, later identified and mounted in 3D presentations," she said.

"More importantly, from that point the children went on to study the waterway in general and the effects of weed invasion and litter pollution. Developing an understanding of the creek and the threats to its health, the children now value it as an important part of their environment," Ingrid said.

An interesting array of entries, including some in languages other than English, highlighted an important aspect of the Urban Rural Links program, providing opportunities for participation in Landcare by non-English speaking and Koori groups.

After lengthy deliberations, competition judge, Mal Brown, then Manager Community Education and Customer Research for NRE, awarded prizes in six categories.

Presentation ceremonies at each of the four winning schools saw the award winners presented with their prizes by Mayors and representatives of their respective municipalities (Hume, Darebin, Moira and



School, with the best 3D Presentation.

### **Award Winners**

Best Poster Presentation

Jane Kerr - Axedale Primary School

Best Project Presentation

Mehtap Yurter - Dallas Primary School

**Best 3D Presentation** 

James Butler - Reservoir East Primary School

Best Environmental Message

Gulcan Sert - Dallas Primary School

Most Original Entry

Lauren Reynolds & La Cinta Hurdle -Axedale Primary School

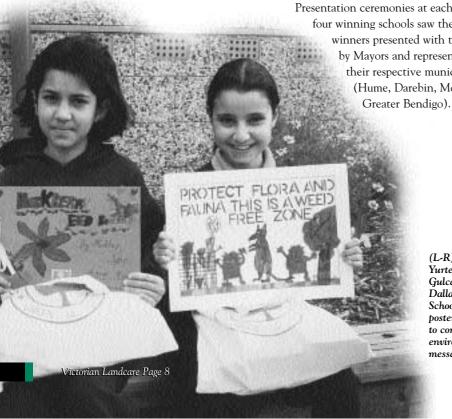
Weeds Campaign Award

Goodie Brennan, Eleanor Brennan & Natasha Stedman -

Katunga South Primary School

Ingrid acknowledged competition sponsors Monsanto Australia, the Department of Natural Resources and Environment and Safeway Stores and sincerely thanked each of them for their assistance in providing excellent prizes for the winners and their schools.

For more information about the Urban Rural Links program, contact Ingrid Duncan on (03) 9468 3209.



(L-R) Mehtab Yurter and Gulcan Sert from Dallas Primary School. Gulcan's poster was judged to contain the best environmental message.

## Sow'n' Grow

By Margareta Osborn





How can we involve more women in Landcare? was the question raised by the dedicated men of the Nambrok and Districts and Clydebank Landcare groups.

With my eyebrows raised pondering their motives and after some discussion, we came up with a simple but effective idea.

Sow 'n' Grow workshops teach participants to propagate native trees and shrubs for planting at little or no cost. While initially aimed at women, the success of the workshops has had the men clambering to be involved.

Greening Australia's Kate Walsh and Jim Robinson provided technical expertise and used seeds and fruits from local native trees to give participants practical experience in the identification, collection and germination of seed.

Joined by Donna Bebbington from West Gippsland Catchment Management Authority (CMA), they also showed participants the processes of 'pricking out' using a 'dibble stick'. This involves transplanting tiny seedlings into prepared tree tubesusing a stick sharpened to a tapering point. They also showed how to 'pinch a seedling's legs off' to eliminate 'J' curves in the root system and how to plant and water down the 'amputees' with lots of TLC.

The interaction between people was amazing.



Robyn Scott, Marie Barrett, Gale Dowsett and Andrea Killeen 'pricking-out' seedlings.

During the practical activities, help and ideas were traded, new friendships made (though no marriages yet!) and water fights added plenty of hilarity.

Robyn Scott, a participant in the first workshop said, "Landcare is also 'people care'. If the smiles and laughter were anything to go by, Sow 'n' Grow certainly proved that!"

Initially some people came because they felt obligated; others were dragged along by friends. Many came because they wanted to learn how to grow their own trees at low cost, which is particularly relevant in these times where dollars are as scarce as rain.

Sow 'n' Grow has gained community credibility through the 'bush telegraph', with an overwhelming public response.

With the support of the CMA which has provided facilities, potting mix, fertiliser and utensils, at least 60 people now know how to Sow 'n' Grow their own trees. Over a dozen people have already reserved a spot for the upcoming workshops in spring.

Sow 'n' Grow has been a huge success, 'sow' much 'sow' that a mystery bus tour was organised with 35 super sleuths as a follow-up activity. The sleuths spied out and collected seed from roadsides as the bus toured the area. They also visited two local farmers who propagate native trees in their own backyards using the simplest of facilities.

"I found Sow 'n' Grow very informative," said Alf Ezunger, a participant in the second workshop. "I didn't realise it was so simple to collect seed and grow my own trees."

For more information contact Maffra and Districts Landcare Network Co-ordinator, Margareta Osborn, on (03) 5139 0152.

### Checklist to Sow 'n' Grow

- Collect ripe native seed pods.
- Dry out in warm place.
- Germinate seed in trays until seedlings are about 1cm high.
- Fill tree tubes with potting mix and a few granules of fertiliser.
- 'Prick out' seedlings into tree tubes.
- Label seedlings.
- Water down seedlings.
- Place in sheltered place to grow.
- REMEMBER to water frequently.



Jim Robinson, GAV, explaining how to Sow 'n' Grow.



Rudy Novotny feeding out with some guests.

By the age of three, both of my children declared their intention to be farmers. Unfortunately we live in suburbia, so in the interest of a little early work-experience we got in touch with the Host Farms Association.

The Association produces a detailed brochure and, using it as our guide, we have spent many cheap and enjoyable weekends at Victorian farms. The children recall the farms by their favourite animals: Sandy the toothless old goat at Euroa; Maneater the rabbit from Castlemaine; Soldier and Captain, the Clydesdales at Dimboola. but I remember the care and attention we received from our hosts, the time they spent showing us their farms and often, their Landcare projects.

One of our hosts said running a host farm is like being inside a huge funnel along which information, knowledge and attitudes are constantly being exchanged between the country and the city. "It's a mind expanding experience," he said.

### Good business

According to Hank van Apeldoorn from the Host Farms Association of Victoria, farm accommodation is also an incomeexpanding experience. The provision of farm accommodation is an effective way to diversify farm income and, with many properties, it's the only part of the farm income that's growing.

There are 147 farms listed with the Association in Victoria and many unlisted. Hank's figures suggest that around 45,000 people stay at member host farms each year for a gross accommodation turnover of around three million dollars.

Hank says making a success out of a host farm business depends greatly on the personality and attitudes of the farmers.

"You have to like people and like talking about what you do," he said.

"People visit host farms because they want a slice of rural life. If they just wanted a bed they would stay in a motel. Visiting a farm is an experience and enthusiastic hosts can really make that experience come alive."

### A view of Landcare at Hillview

Alison and Rudy Novotny have been members of the Host Farms Association for nine years. They retired from Ballarat to Hillview, a 33ha beef property at Creswick. The cottage was already in place but they are continually improving and upgrading it and have created a healthy business along the way.

## Mein h

### By Carrie Tiffany

Rudy Novotny is an active member of the Bald Hills Creswick Landcare Group and he sees host farming as being an extension of the Landcare idea.

"Being host farmers means we get to keep in touch with city people while they get a taste of farming. It's about bringing people together to talk about the land. I see myself as an ambassador for Landcare."

Rudy says a lot of people come back over and over again and they are always thrilled to see how the property is changing.

"We've planted many, many trees - often with the help of guests - and they love to see how they've grown and how the landscape is changing."

"We really appreciate the friendships we've made as host farmers. One of our current guests works in computing so he was up at the house last night helping me upgrade my computer system - it's all about sharing skills and knowledge."

### Farming and fishing

When the Noble family purchased their property, Brimin Lodge at Rutherglen, they saw immediate potential for the cabin on the river. The Noble's knocked up a brochure on their computer and did their own advertising in the *Weekly Times*. Now, as well as running a mixed farm with agroforestry, prime lambs, crops and aquaculture, they have a successful host farm business.

Simon Noble says: "Last year the cabin was occupied for 300 nights. Most of our business is repeat or referral so advertising is minimal. The cabin brought in around 30% of our total farm income. We are serious about making sure people have a good time and want to come back."

Simon's wife, Phillippa, is the President of the local Landcare Group and the family have done a lot of work revegetating their river frontage to improve the property and create an

## ost, the farmer!

idyllic holiday setting. The Nobles leave a copy of the Brimin Lodge Wildlife Register in the cabin for people to add to and, according to Simon, most do.

"Our guests are really interested in both the farm and the wildlife. I try to gauge the level of involvement they want and to provide it. We leave written information about the farm in the cabin and many of our guests buy some of the Murray Cod we raise in our aquaculture operation."

If you are thinking of offering accommodation on your property Hank van Apeldoorn says the first thing you should do is visit a local host farm. The Host Farm Association has a detailed membership kit and can offer advertising, advice and assistance.

The Association can be contacted at Level 6, 230 Collins Street, Melbourne 3000. Telephone (03) 9650 2922.

The Noble's cabin on the Murray River at Rutherglen offers a farm experience and great fishing.

The Noble's have both the self-contained river cabin and a B&B cottage at Brimin Lodge near Rutherglen. The cabin is \$50 per night. For bookings phone (02) 6035 7245.

The Novotny's farm Hillview offers a self contained cottage that sleeps six from \$55 per night. For bookings phone (03) 5345 2690.

Hank van Apeldoorn from the Host Farms Association.



### Tips for prospective host farmers

- Prepare a business plan. Consider what standard of accommodation you want to offer and the costs involved in providing it.
- Don't overcapitalise. Most successful host farms use existing buildings that can be converted into suitable accommodation without enormous cost.
- Don't consider host farming unless you like talking to people and are comfortable sharing your property with visitors.
- Manage all of your risks. Farm safety
  is a key issue, particularly with
  children roaming about. If you are
  going to provide meals, hygiene (food
  safety) must also be considered.
- Be realistic about the time you will need to put into the business. Talking to people, cleaning accommodation and maintaining your property at a presentable standard will all take time away from your other farming duties.



### Free legal advice for Landcare groups

By Phil Roberts, Executive Officer VFF Farm Tree and Landcare Association

Free legal advice on employment is now available to Landcare groups in Victoria. The Victorian Farmers Federation has recognised the growing need for this vital service as the Landcare movement continues to evolve.

In a move that will help many Landcare groups and networks across the state, the VFF will assist member groups of the Association with advice on employment issues, including the drafting of new employment contracts. At the moment many groups don't have access to this information and are working in the dark when it comes to employing people.

There is a huge amount of work involved for groups who employ people. Groups need to know their obligations as employers on issues such as WorkCover, taxation and superannuation. The VFF can help groups work though the employment maze by providing free advice on the options available.

All groups need to do to take part is be a member of the Association.

Once they have informed the Association of their contracts, work can begin on ensuring groups are fully covered.

Peter Walsh, VFF and association President, said that this type of information and support is really needed by groups.

"We have some treasurers of groups who are spending so much voluntary time on the administration of their employees. What we would like to do is provide advice and information to make this a lot easier, at no cost. The great thing for groups is that they have access to the experience and expertise of the VFF Legal Department and don't need to feel so isolated," Peter said.

For more information on how your group can obtain this legal service, please call Phil Roberts at the VFF on (03) 9207 5561.

## From the inventors shed



Friends of Wattle Park have developed a new 'Spot Weeder' making relatively heavy weeding easier. Designed for 'friends of' groups, Landcare groups, farmers, parks and gardens staff, the 'Spot Weeder' solves the problems associated with bending or kneeling if you've got a crook back or gammy knees.

It is also handy where you can't spray, being able to pull out well-established deeprooted weeds and large clumps. It's heavily galvanised and should last for years.

For more information contact the inventor, Howard Hodgens, on (03) 9833 4732.





### Pivot Prescription Farming helps you profit from it

- A complete yet simple approach to improving profitability of your farm.
- A new competitive state-of-the-art Soil and Plant Tissue testing service from the Pivotest Laboratory.
- A new computer based "nutrient decision support system" exclusive to Pivot, and a first in Australian Agriculture.

Pivot Prescription Farming is being progressively introduced throughout Australia. For more detailed information contact your local Pivot Service Outlet or Pivot Agriculture staff.

**PIVOT LIMITED.** ACN 004 080 264 160 Queen Street, Melbourne 3001. Tel: [03] 9605 0400

PIVOT PROMOTING PRODUCTIVITY

PVT2856

## New bio control for boneseed



A new biological control agent has been released to attack boneseed, one of Victoria's worst environmental weeds. NRE liberated the first lacy-winged seed flies to be released in Australia at the You Yangs Regional Park, west of Melbourne.

Minister for Conservation and Land Management, Marie Tehan, said that the You Yangs has one of Victoria's worst infestations.

"Boneseed infestations eventually eliminate all native plants and the fauna which depend on them. Even the gum trees have been killed off and are unable to regenerate," Mrs Tehan said.

"Boneseed produces large numbers of hard seeds which accumulate in the soil and remain viable for many years. Seed fly larvae eat the weed's fruits and prevent the formation of this seed."

The seed fly, known to scientists as *Mesoclanis magnipalpis*, has been collected in South Africa, where boneseed is a native plant, and bred in the quarantine laboratories of the Keith Turnbull Research Institute (KTRI) at Frankston.

"It is hoped that in Australia, where the fly has no natural enemies, it will dramatically reduce seed production. Release of the seed fly is a new phase in the co-ordinated biological control campaign against boneseed and its near-relative, bitou bush," Mrs Tehan said.

KTRI released another species of seed fly for bitou bush in New South Wales in 1996.

This tiny insect dispersed at an amazing rate - over 400km per month - and is now attacking bitou bush throughout NSW. Up to 80% of buds are infested with eggs and around 40% of the seed is being destroyed. Continued build-up of fly populations is expected to increase the damage.

Leader of the Institute's Weeds of Natural Ecosystems program, Robin Adair, is overseeing the release of the seed fly. "The plan is to attack the weed with a number of natural enemies. So far, four species of leaf beetles, a moth and another species of seed fly have been released. The tip moth, which destroys developing buds, and the tortoise beetle, which eats the leaves, have established in NSW and are starting to control the weed. Other biological control agents being studied include a rust fungus and a leaf roller moth.

Both show great promise and are expected to have a devastating effect," Robin Adair said.

"The scientific team at KTRI have thoroughly tested the seed fly to ensure that it only attacks boneseed. In order to meet Australian safety standards, the flies were reared under quarantine conditions in the laboratory before release. Strict procedures were followed to ensure that the flies are free of parasites and diseases - which could have been imported with them from South Africa."

Adult Mesoclanis magnipalpis on a flower of boneseed.

# Alcoans help tackle and the Swan Bay project.

Families from Alcoa and KAAL Australia's Pt Henry works near Geelong, joined members of a Green Corps team, volunteers from the Alcoa weekend program and community group members to make up an army of over 40 people at a Swan Bay family day recently.

Before the family Day

The group planted nearly 2000 trees and shrubs along Anderson's Creek in the Swan Bay catchment, near Queenscliff,

where erosion of the creek banks has contributed to water quality problems and siltation in Swan Bay for many years.

Thanks to the efforts of the landholders in fencing off the creek from stock access and the volunteers who lent the farmers a hand in planting the trees, this problem should be able to slowly fix itself.

In what was a first for Alcoa's Victorian operations, employees and staff were invited to help with Landcare projects in a practical sense. Presentations were made to shift crews and articles in internal newsletters promoted Landcare

Bernie Niven from Alcoa said it was a great opportunity to contribute to the environment in their local area.

"We really enjoyed ourselves. The erosion on the site was terrible and by lending the farmer a hand, we have helped him fix the problem. We now understand how hard it is for the farming community to tackle these problems on their own when commodity prices are so low."

"Not only was it rewarding to see the thousands of trees in the ground by the end of the day, but as we live close by, we will be able to visit the site and watch the trees progress," Bernie said.







World Geoscience Corporation's Britten Norman Trislander aircraft. This aircraft is now fitted with the SALTMAP system developed by World Geoscience and CSIRO for Landcare applications.

In 1996, mining giant Rio Tinto started to look at the Western District geology hoping to discover hidden gold and base metals deposits. The company started their search by studying old maps and looking into what the old-timers had found.

Rio Tinto Exploration's Chief Geologist, Tim McConachy, said the results from the early prospectors were once a good indication but new discoveries relied on a much more technical approach.

"When we started our search, we used a plane heavily equipped with the latest technology, which let us look far below the surface to any potential hidden mineral deposits," he said.

"We flew over the area, sending weak electromagnetic waves deep below the surface. The return signal gives us an idea of what minerals might lie below."

"Unfortunately we did not find any significant new mineral deposits. However, we did find a gold mine of information for the local Landcare groups," Tim said.

Prior to the flying part of the project, David Morgan, External Affairs Manager with Rio Tinto Exploration, had met with several local landholders who outlined their salinity problems and expressed interest in the survey.

"The data we collected to look for minerals could be easily adapted to understand salinity," David said. "The raw data is the same but the interpretation of it is different," he said.

Rio Tinto agreed to have the data interpreted and presented the technical report to the local Landcare community.

### The report

The report, compiled by Perth-based World Geoscience Corporation, also involved interpretation of aerial photographs, satellite images, topographic, drainage and remnant vegetation maps. In 1996, World Geoscience received a National Landcare award for their pioneering work in this field.

Greg Street of World Geoscience said the technology measures the conductivity of the ground. The benefit for Landcare is that not only can it detect deep conductivity changes, of interest to mineral explorers, but areas with a high conductivity shallow in the soil profile which may be due to salt.

"The survey was designed to detect large conductive bodies in the ground. With flight line spacing set at 200m, the spacing does not completely define the salt storage levels close to the surface," he said.

"It does, however, show general patterns and provides a good idea as to the locations of high and low salt concentrations in the soil, allowing the position of the salt in the landscape to be mapped," he said.

Tim McConarchy and David Morgan study the results of the survey.

"By combining with information from other data sets such as topographic maps, we can create a model forecasting the effect of increasing recharge and watertable levels on land and stream salinisation," he said.

The interpretation of the data from Rio Tinto was mostly office-based, involving only one short field trip. Greg pointed out that better interpretation could be made with additional maps outlining the present extent of salinity, water quality data and access to better models on the process causing localised salinity.

"If remedial works are to be designed, the Rio Tinto data should be reinterpreted at 1:20,000 or 1:10,000 scale in conjunction with other data sets such as soils, topography, cadastral, vegetation climate and drainage," he said.



## Landcare





### By Paul Crock

### The results

The report gives no on-ground recommendations. These could only be made after more detailed interpretation and in consultation with farmers, Landcare co-ordinators, consultants, NRE, Rio Tinto and World Geoscience.

The general findings of the report, however, are outlined below:

### Casterton survey area

In the Casterton survey, the report identifies areas of higher conductivity associated with the sediments of the Otway Basin, laterite profiles of the western edge of the Dundas Tablelands and deeply weathered zones in the palaeozoic basement rocks.

The area north-east of Casterton has the highest conductivities. It is mostly cleared for agriculture and rising watertables are highly likely to mobilise salts stored in the Otway Basin sediments and laterite profiles.

The report warns that scalds are likely to form, particularly where valleys cross shallow bedrock or other barriers to groundwater flow.

The Otway Basin sediments are high in conductivity due primarily to salt stored in the weathered rock profile. Further investigation into the distribution of salt is recommended by detailed ground surveys and drilling at selected sites.

The laterite profiles at the edge of the Dundas Tablelands also need further investigation as do the deeply weathered sections of palaeozoic basement. Ground geophysical surveys at selected sites followed by drilling and monitoring would assist in understanding of the local conditions.

The report suggests management of recharge is needed on all areas of Otway Basin sediments and laterite profile as well as the deeply weathered zones in the palaeozoic basement rocks.

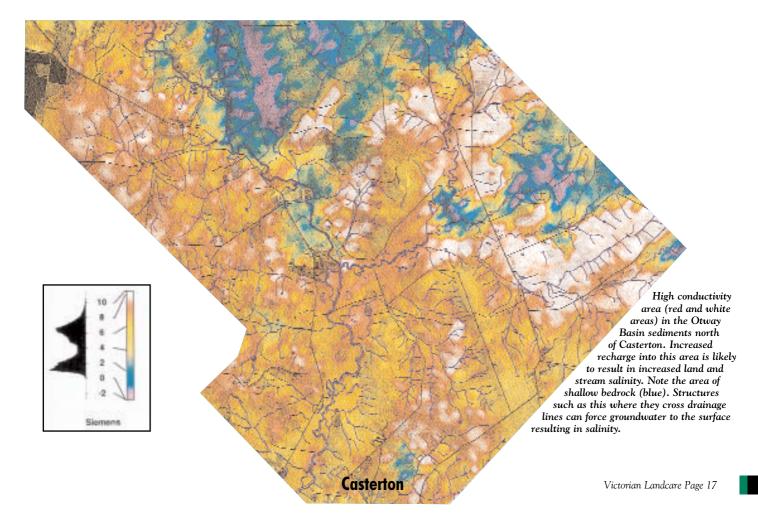
The outbreak of saline areas is highly likely along the edges of the Otway Basin. The report recommends that these areas are investigated and closely monitored.

### Conclusion

The report has shown how such imagery can be used as another tool for CMAs and state and federal governments to give a better idea of underlying salinity threats. They can then assist the community by providing a better guide as to where to strategically identify areas which need closer monitoring and evaluation.

This targeted effort will help ensure remedial works are concentrated in the areas which will deliver the best results for the investment.

For more information about airborne electromagnetic surveys, contact Greg Street on (08) 9273 6400, or the Western District survey, contact David Morgan on (03) 5787 1277.



# Why grow

Chris Etheridge and his family grow grapes in the Yarra Valley under contract to a major winemaker. For many small property holders, vines provide income and an opportunity to be part of an exciting industry.

**Feature** 

### By Carrie Tiffany

No-one could accuse Chris Etheridge of poor planning in his vineyard, Yarra Walla, near Gruyere. Chris used to work in Gippsland at the Victorian College of Agriculture and Horticulture, running farm management and financial planning courses. After 12 years, he decided it was time to practise what he preached and returned to the family's Yarra Valley property to consider its future. At only 250ha Yarra Walla was too small to continue as a viable grazing property. Chris did some research and decided to plant 40ha in vines.

"One of the problems with vines is that it can take four to five years before your decisions bear fruit. We planted in 1994. Our first decent crop wasn't until 1998. When we decided to plant we knew there were a lot of other people with the same idea. Because of this we decided to sign a long-term contract to supply grapes to Southcorp for Coldstream Hills and their other labels."

"There are enough uncertainties in farming without having to worry about product prices, so locking in the grape price makes a lot of sense. Most grape supply contracts have a base price with quality bonuses and penalties to encourage us to keep improving the product."

### Romance and hard work

Chris says people can get caught up in the romance of the wine industry but it is a very expensive business to get into and it requires a great deal of planning and hard work.

"With vines, it's constant activity. We started ploughing and preparing rows the autumn before we first planted. During winter, we erected the trellis and laid the irrigation. The vines were planted as rootlings in spring and for the first season are allowed to grow and sprawl. After that, they are pruned and trained onto the trellis. Pruning alone can take three months. Over summer there is constant watering, weeding and spraying. We harvest during March, April and May. Our red grapes (pinot noir) and any chardonnay which is used for sparkling wine are hand-picked, the rest are machine-harvested. And then the whole cycle starts again..."





Pests and diseases are a constant problem for viticulturists. With young vines, rabbits can be a major problem, then, when fruit is ripening, hoards of starlings and Indian Mynas descend. Chris uses plastic guards to protect young vines from rabbits and uses a scare gun for the birds - but in such a well-populated area he has to consider noise complaints from the neighbours.

Another constant worry is late spring frosts. In early October 1997, a number of Yarra Valley vineyards suffered major frost losses. Frosts burn the young tissue on the vine. The vines will rebloom but produce much poorer yields. To avoid frost damage, viticulturists must keep the ground weed-free. Some of the bigger operations have occasionally employed helicopters to hover around vineyards on frosty nights to keep the air circulating.

### Sabotage rumour

It is disease that viticulturists are most fearful of. In the late 1800s, the vine root disease phylloxera wiped out the Yarra Valley's wine industry. Rumour states the disease was intentionally brought in from Europe after Yarra Valley wine was acclaimed at a Paris competition. Chris Etheridge believes an economic downturn was the more likely cause of the industry's failure at that time but he says phylloxera and other diseases like grape vine yellows are still a real threat. And, whether introduced accidentally, or on purpose, these diseases could cause the industry great harm.

"Viticulturists need to be very, very careful when sourcing root stock. Some of the new vine plantings are on phylloxera-resistant root stocks, but a great bulk of the existing vines are potentially susceptible to phylloxera. It's issues like disease that there are great benefits to be had from growers working together and sharing knowledge.

Unfortunately, it can be difficult for new growers to get good advice. The Department of Agriculture has had some very good people, but these days they are just too thin on the ground, so people should seek professional advice."

Chris says that being a contracted grower helps to get around some of these problems as the wine companies can provide advice about what to grow and where to get good, disease-free root stock.

### Viticulture and Landcare

Chris shares his viticultural knowledge through the Yarra Valley Landcare Group, of which he was one of the founding committee members. He is hard pressed to find many 'Landcare negatives' with viticulture.

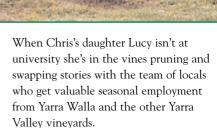
"When vines are being established topsoil can be lost, but it is always possible to stabilise soil between rows. Vines are deep-rooted so they probably assist in reducing the watertable and reducing salinity problems. We are in a high rainfall area but water use must still be planned. We provide all of our water from farm dams but many growers are looking to tap into local rivers and watercourses."

"Our use of chemicals probably has the most potential for damaging soil and water but it is not in our interests to let that happen. I believe all growers are extremely careful about chemical use. Firstly, because chemicals are very expensive, using them wisely is always the best option and, secondly, because the wine companies demand a clean, chemical-residue-free product."

### In for the long haul

Chris Etheridge believes the wine industry will be a key part of the Yarra Valley's future. And of his family's future too.

Chris Etheridge, 'practising what he used to preach'.



Vineyards are an important source of seasonal employment in the Yarra Valley.

Chris says, "We are in for the long haul. Most of the big wine companies are now represented in the Yarra Valley. This brings stability and benefits to smaller growers like us."

"Internationally Australia has a well regarded product, yet we only produce 3% of the world's wine. There is plenty of room for expansion."

Wine made from Yarra Walla grapes can be tasted in the Coldstream Hills label.





There is a new catchphrase on the rabbit busting front: long-term strategic rabbit management.

Tim Bloomfield from the Victorian Institute of Animal Science reports that this new program, supervised by Steve McPhee, RCD Monitoring Program Co-ordinator, is trying to find the best ways in which existing rabbit control methods and strategies can be integrated with RCD to optimise the long-term environmental and economic benefits for all landholders.

"The ultimate goal is to be rabbit-free and with RCD, myxomatosis and using the very effective traditional control measures of harbour destruction (warren ripping), fumigation, weed removal, poisoning and rabbit proof fencing, this is a possibility," Steve McPhee said.

There are two parts to the program: a revised way of monitoring RCD; and a landholder-based group action program taking advantage of the biological control methods of RCD and myxomatosis along with the traditional rabbit control methods in a co-ordinated and planned manner.

### Revised RCD monitoring

The new RCD monitoring program will involve monitoring a smaller number of sites, from 114 down to 20, more intensively and with standardised procedures.

The program commenced in January 1998 prior to the annual baiting programs. Blood taken from samples of shot rabbits is used to determine the level of RCD immunity within a population of rabbits. This information will help groups to make informed decisions on whether to release RCD if the immune status is low, or to implement conventional integrated control measures if the immune status is high.

**RABBIT-FREE:** 

Levels of infection to RCD vary across Victoria with recent surveys (May 1998) showing an average 40-60% of rabbits in the RCD monitor sites immune to the virus. The revised monitoring program aims to better understand the

interactions between RCD, the rabbit and the many environmental variables that affect the kill rate of RCD in Victoria. Blood and eye samples (to determine age) are taken on a quarterly basis, along with spotlight transects and warren monitoring to get a snapshot of the rabbit, RCD and the value of traditional control measures across all the 20 Victorian monitor sites.

### Long-term management

Tim Bloomfield says, in the wake of RCD, landholders have a real opportunity to create long-term strategic rabbit management with the tools currently lavailable. Twenty-one Landcare groups are involved in the integrated program which involves intensive planning and monitoring.

The works are funded and carried out jointly between the group and NRE. Each group has set its own basic guidelines for allocation of Rabbit Buster funds with their own mix of landholder/Rabbit Buster dollars. The Landcare group allocates Rabbit Buster funding to Landcare group members to do ripping, harbour removal (control of boxthorn, furze, bracken and removal of fallen timber) and the all-important follow up fumigation.

Monitoring the effects of the groups' rabbit control is an essential part of the program and each Landcare group, with help from NRE, undertakes spotlight transects, warren monitoring and grazing/cropping exclusion plot surveys four times a year. NRE also does a yearly sociological survey and ongoing cost/hepefit

and ongoing cost/benefit analysis of rabbit control.

Tim is keen for landholders to take full advantage of the opportunities RCD offers by using all the control methods available, not just relying on the 1990s magic bullet of RCD or the mid 20th century magic bullet of poisoning.

### What does rabbit-free look like?

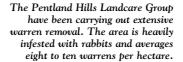
Both Tim and Steve believe that rabbit free is no rabbits seen on your spotlight transects and no active burrows or warren systems. Landcare groups like Manangatang believe this is achievable in their part of Victoria, traditionally the home of the rabbit. Many of the Landcare groups involved in the program are aiming to destroy every burrow, urged on with the catch cry: 'leave no home for the rabbit'.

### Why aim for rabbit-free?

Steve McPhee says the right number of rabbits is zero. "Remember that Thomas Austin only had about 24 wild rabbits in 1859, so if you allow two or six or 20 on your place you will only get more rabbits and waste money, time and effort. Like zero toll, rabbit-free is a goal we must always strive for because the alternative is unacceptable."

For further information contact Tim Bloomfield or Steve McPhee at VIAS on (03) 9217 4200.

"If we are going to clear the rabbit out of this country it will be a job for all together, otherwise we will be doing it still in the days of our great-great grandchildren. And in the days of their posterity if we keep on with the foolish poisoning game." David G. Stead, Special Rabbit Menace Enquiry Commissioner to the New South Wales Government, 1935.

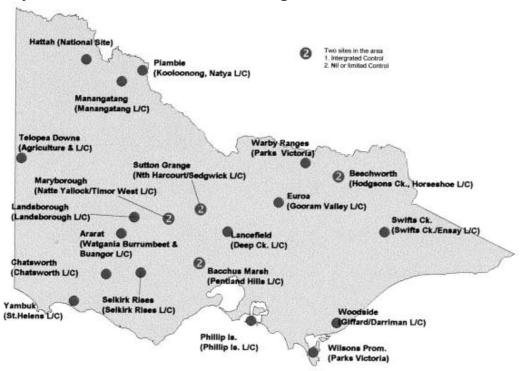




## is it really possible?



Where are you? RCD/Landcare monitoring sites across Victoria.



## Furze fortnight

Furze is a regionally prohibited weed in Gippsland, which means landholders must eradicate it or control it on their land. In the rest of the state it is a regionally controlled weed and landholders must take all reasonable steps to control it and prevent its spread.

Furze infests nearly one million hectares of Victoria. It grows on a wide range of soil types and is common on roadsides, creek banks, neglected areas and forest margins.

Furze is a very competitive species which reduces the productivity of pasture and forest areas. Furze seedlings and young shoots are eaten by stock but the sharp spines cause injury to stock, wildlife and people. Furze grows into dense thickets which restrict stock movement and provide harbour for rabbits and other pests.

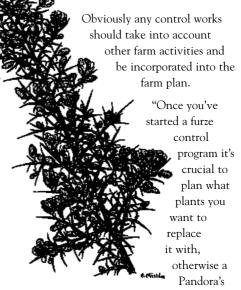
Rowan Hore, Catchment Management Officer, NRE's Port Phillip Region, says these thickets also pose a considerable fire threat and can act like a fuse along watercourses. "In the Whittlesea area, north of Melbourne, extensive areas of furze have been identified from aerial photography," he said.

"As well as being a fire hazard, furze smothers remnant streamside vegetation, often the last bastions of biodiversity."

To effectively control furze an integrated program of manual control, cultivation, grazing and chemical spraying works best. Rowan advises that control can be expensive but procrastination can increase the final expense.

Because furze is so visible, easily identified and results are obtained relatively quickly, it can provide short-term reward for the fruits of your labour. It can often be the first of a whole series of pests that need some sort of control. It could be a catalyst for the development of a whole farm plan and a group approach to pest control.

Furze, or gorse, was introduced to Australia as an ornamental. It is listed in a Tasmanian nursery catalogue from 1845.



box of new weeds will just move in," Rowan said.

Groups of landholders could promote their activity to the optimum time of year for their locality and call it 'Furze Fortnight.'

## **Catchment Conference: Landcarers the**

Conference

network over

delegates



а сирра. Mrs Tehan said the

community now had a key role to play in helping to resolve the difficult local decisions which will be necessary to achieve sustainability.

Keynote speaker and President of the Murray Darling Basin Commission, Professor John Lovering, passed

on lessons learned from that mega-catchment to Victoria. He said that most of all, what the commission had learned is that the community must play a leading role because most of the solutions will need to be implemented on private land.

"Any structure that is created needs to involve the owners and managers of the land - you," he said.

Landcare and the role of the community in restoring our catchments was high on the agenda at Victoria's first catchment management conference held in Shepparton and Mooroopna in June.

Run by the Victorian Catchment Management Council, 270 delegates attended the conference, some travelling from surrounding States as well as from throughout Victoria.

It was believed to be the first conference of its type and size to be held in regional Victoria.

Sectors represented included Catchment Management Authorities; Federal, State and Local governments; peak conservation and industry bodies involved in natural resource management, other non-government organisations, and industry and business.

"The response from such a wide range of sectors was very encouraging for the success and future of the concept of managing our natural resources on a catchment basis," VCMC Chairman, Jeremy Gaylard said.

### Landcare the linchpin

Co-hosted by the Goulburn-Broken Catchment Management Authority and the City of Greater Shepparton, 'leadership and action' was the conference theme.

Minister for Conservation and Land Management, Marie Tehan, opened the conference and identified individual landholders and community groups as the 'linchpin' of Victoria's catchment management system.

### Community benefits

Secretary of NRE, Michael Taylor, was able to tell the delegates that, this year, responsibility for regional NHT and Landcare co-ordination and implementation committee support will be transferred from NRE to CMAs. One million dollars in annual funding will be allocated across the CMAs for these additional functions currently undertaken by NRE regionally.

He said CMAs need to raise understanding in the community of the benefits of their work and the reasons why all members of the catchment community should contribute to the costs of these programs.

The Environment Protection Authority's Director of Policy, Rob Joy, also acknowledged the role of Landcare groups as an integral stakeholder with the Authority in the catchment management structure.

He saw the role of EPA with its legally enforceable environment protection policies as strengthened by communitybased regional catchment strategies.

He said this integrated approach had already resulted in a very strong commitment by stakeholders to catchment management and improved environmental outcomes.

Victoria was well placed to implement the biodiversity strategy released earlier this year because of its land management approach involving Landcare, former director of NRE's Flora and Fauna Program, Ms Diana Patterson, told delegates.

The strategy is based on a system of dividing Victoria into biological regions which are defined by ecological characteristics.

"There are currently numerous examples of co-operation between Landcare groups and others working together to turn around the status of threatened species," she said and attributed landscape improvements over the past decade to the growth of hundreds of Landcare groups.

Those groups, together with CMAs, she said had a 'critical' role to play in attaining a biodiverse landscape in Victoria.

### World class Landcare projects

Landcare Foundation Victoria Chairman, Wellington Lee, spoke at the conference dinner.

He outlined several roles for the foundation over the next five years including some world-class Landcare projects which the foundation will get underway by working closely with the catchment management system.

"I see Landcare groups, especially those networked in a region, as the shock troops of the restoration of catchments," he said.

Deputy Premier and Minister for Agriculture and Resources, Patrick McNamara, the main speaker at the dinner, talked of programs at the State level for pursuing economic and ecological sustainability.

He attributed progress to date in the management of land and water to the farming community's commitment through Landcare, salinity management and other programs. And he said it was this which provided the inspiration for work to improve the future of regional life in Victoria.

## 'shock troops' of catchment restoration

Chairman, Australian Landcare Council, Mr Bruce Lloyd, said it was important that landcarers knew that this was the body to take up national policy issues. The Victorian representative is Moolort landcarer, Alison Teese, also a member of the VCMC, the State Assessment Panel and the Council for Sustainable Vegetation Management.

A growing interest in Landcare internationally was also noted by Bruce "as we develop a better, more co-operative and cost/beneficial system."

He believed Landcare's positive, voluntary process and its ability to change attitudes and practices also meant that it had much to offer national Greenhouse reduction programs.

Bruce, however, noted the potential for volunteer loss with the greater regionalisation of Landcare projects. He said while the council generally supported regionalisation with its better cost-benefits over individual projects, it would watch Victoria's catchment arrangements with interest with their emphasis on regional projects.

### Landcare and planning

Landcare plans would be taken into account by planning authorities under the new State Planning Policy Framework, Chief Panel Member of the Department of Infrastructure, Helen Gibson, told delegates.

She said under the framework, planning authorities had to have regard to any approved catchment strategies and any associated implementation plan

Natural Resources Conservation League members

or strategy which includes Landcare plans as well as others.

She said suites of overlays also gave the schemes the ability to schedule in or out buildings or works for which a permit was required. They had great flexibility to be used, she said, with other plans such as salinity management plans and wholefarm plans.

Participation in Landcare was a key step for landholders in demonstrating community leadership, according to the paper on leadership by Jeremy Gaylard.

For CMAs, he said leadership was facilitating the growth of Landcare within the region and ensuring that resources were directed to widely understood priorities.

The future development of Landcare, he said would be aligned to council's high priority concerns for the next three years: river health and sustainable primary production.

The legal costs to farmers and organisations of being ignorant of good catchment management were identified by VCMC Member and Director of the Monash University Water Studies Centre, Professor Barry Hart.

He called for land managers to have a knowledge strategy to protect them from legal laibility for catchment degradation.

"Legal liabilities could be high, particularly if it was shown that they were not operating with state-of-the-art practices," he said.



### CMAs and Landcare

The relationship between CMAs and stakeholders such as Landcare was regarded as 'critical' to their success, according to Glenelg-Hopkins CMA Chairman, David Koch.

David said the recent 'Listening to Landcare' forum at Glenelg-Hopkins had demonstrated this to his authority.

He also talked about the need to explain to stakeholders, including Landcarers, the rating being extended across Victoria and its key elements of fairness, affordability and equity and transparency.

Overall, the conference was a great opportunity to bring together Victoria's catchment community and to hear its leaders ideas and observations of the system to date. Next year, an issues-based forum will be held in a catchment region where, no doubt, Landcare issues will have a special place.



## Helping trees to grow in saline soil

By Steve Ronaldson, Yarram Salinity Co-ordinator





Yarram and Wellington Salinity Groups have been looking to CSIRO and other leading authorities to help identify trees for saline land in their area.

Dr Nico Marcar, a plant scientist with CSIRO, Canberra, has been involved in evaluating over 40 different species of native trees and shrubs growing in saline soils since 1988.

Over this time, he has established a central database of all results from his trials, including information on climate and soil parameters, to try and identify promising species. Different provenances have also been compared and, where possible, clonal materials were also tested.

"Selecting the right tree species and giving them every chance to survive after planting is crucial," Dr Marcar said.

"This includes appropriate before and after planting strategies that need to be undertaken to reduce the stress on the newly established trees."

Dr Marcar outlined a variety of these strategies to the group including:

- time planting to coincide with the period of maximum leaching of salts - late winter or early spring;
- mounding (at least 25cm high) in addition to ripping of the site especially where waterlogging occurs (double ridge mounds are best and should be constructed 4-6 months before planting);
- mulching with rice husks, straw or plastic sheeting to decrease water stress during dry periods, helps promote leaching and minimises upward movement of dissolved salts. Mulch also helps with weed control;

 use plastic tree guards to increase relative air humidity around the plant and to stop animals, especially rabbits, from eating the seedlings.

Dr Marcar highlighted to the group that combinations of the above usually have a greater impact than single treatments.

"Fertiliser may have no effect by itself but when trees are also mulched or tree-guarded, a significant response has been found," he said.

Group members Rob and Jenny Davies have a moderately saline site, where over 500 local native trees and shrubs had been planted in September 1996. The group showed Dr Marcar over the site.

The area had been mounded five months before planting and sprayed with Roundup and Simazene, two weeks before planting. Some trees were guarded to see if this made any difference to growth, or offered protection from rabbits or hares.

The trees were showing good growth, given that the district has just had the driest 10 month period on record. Dr Marcar pointed out that, when considering planting a moderate to severely affected site such as the Davies', people should not only consider indigenous species.

"Other natives from around Australia have been shown as growing well in similar salinity, rainfall, soil, frost tolerance," Dr Marcar said.

"The purpose of the trees should also be considered, be it for beautification, to lower watertables or timber production and species planted to realise the necessary outcomes," he said.



Dr Nico Marcar demonstrates the EM38 salinity meter to the group.

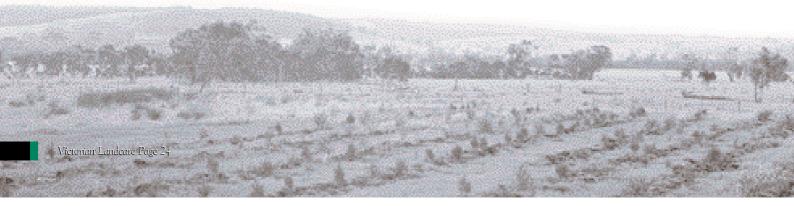
Also evident on the site was the amount of *Melaleuca ericifolia* regrowth since the site had been fenced from stock and how quickly it can recolonise an area through seed and suckering.

Altogether, the trees and *Melaleuca* regrowth on the site had combined to make a previously unproductive area productive by providing shelter for stock and helping to reduce the high watertable in the area. The plantation also made the area's aesthetics much more appealing.

Dr Marcar is a co-author of *Trees for Saltland*, a book which documents results from trials and research over the past 10 years and is a valuable resource for groups wishing to know more about salinity and the best ways to help trees to grow in it.

For more information about the tree trials contact Steve Ronaldson, Yarram Salinity Co-ordinator, on (03) 5182 5155.

The Davies' salinity planting site June 1997



## New and old photographs at Merton

The Merton Landcare Group is running a photofest and historical exhibition at the Merton Memorial Hall from 30 October - 1 November 1998. The theme of the photo competition is Landcare. It will include whole farm planning, tree planting, Landcare meetings, social occasions, landscapes and portraits.

There are two classes - beginners and advanced photographers - with a black and white and colour category in each. Prizes are cash and film. The competition is being held in conjunction with a display of historic photographs of Merton and the surrounding district.

The group is keen to discover any photographs of the Merton area which could be loaned for the display. John Fraser from the Merton Landcare Group says any photographs, framed or unframed, would be greatly appreciated. As well as the display, John plans to record all of the photographs for historical purposes.

"Even if people have photographs that are torn or faded they should still consider loaning them to the group as they can be scanned into the computer and repaired."

Entry forms can be obtained from John Fraser at Merton on (03) 5778 9540, or by writing to PO Box 1, Merton 3715.

Does anyone remember the Merton store in 1915?



## Rid-a-Rabbit Woof! No more bunnies!

A new Australian invention is designed to help farmers beat the rabbit problem in an easy, safe and cost-effective manner.

Using only LP gas, the operator releases a charge of gas down the burrow and ignites it with an electronic probe. The ignition of the gas produces a rush of hot air or bleve through the burrow and burns up all the oxygen.

The rabbits in the burrows die between 45 seconds and two minutes. An autopsy performed by the University of Melbourne Veterinary Science Department following trials of the device showed cause of death to be primarily from hypoxia (that is, a sudden loss of oxygen).

The small portable unit makes access to difficult sites, such as under fences, trees or rocky areas very easy. Using LP gas makes the system one of the quickest, safest and most cost-effective rabbit control mechanisms available.

In summary, Rid-a-Rabbit:

- kills rabbits quickly and humanely;
- has no effect on the operator;
- is environmentally friendly as it does not affect other birds of prey or other animals such as dogs;
- is safer to use than other fumigation methods:
- is portable; and
- cost-effective at about two cents a hole.

Some feedback from the users...

Peter Cook of Yanac saw the portability of the unit a big plus. "Eighty per cent of my rabbits have been killed and I will keep using the Rid-a-Rabbit unit until they are all gone."

Ian Lang of Barongarook, near Colac, is a rabbiting contractor who has used the unit for over eight months. "One transect count of 134 rabbits was reduced to seven after two applications of the Rid-a-Rabbit unit."

For more information contact John Hardiman, Rid-a-Rabbit Marketing, on (03) 9841 4507 or 018 533 432 or drop a line to PO Box 423, Bulleen, Victoria 3105.

## Letters LETTERS Letters



### Landcare nightmare

### Dear Editors,

It's a bit of a landcare nightmare here in East Gippsland.

We have had a 1/6 of our annual rainfall (91.5mm out of 627.5mm) and are half way through the year. No decent rains have hit us since winter 1996.

Landholders have culled their stock to bare minimum, holding on to their breeders as best they can. Most are spending between \$40-80,000 on fodder, but still young stock are dying everywhere.

In the Tambo Valley catchment, 80% of freehold land is bare. When the rain does come, conservative sheet erosion figures, based on 40% of the catchment at 2mm loss, equals 80,000 tonnes of topsoil to be potentially washed away.

The cost from the loss of fertility (super and urea) at \$48 per hectare will be more than \$1.5 million, while pasture establishment and/or renovation including seed and super will be over \$5.8 million.

Things will probably get worse before they will get any better. I wish I could give you a more positive story.

Regards

Catherine Clancy Catchment Management Officer Swifts Creek



Note

The Swifts Creek - Ensay area had 258mm of rain in June. This is on top of a grand total of 13mm in May. As we all heard at the time, the area experienced some of the worst floods in living memory. In the next edition, we will do a follow-up on Landcare after the floods.

Fds

### Junior Landcare support

### Dear Editors,

Educators in schools and leaders of youth organisations have been given a boost for the continuing development of projects that focus on involving young people in Landcare.

The Junior Landcare funding initiative gives recognition of the work already done by people such as Geoff Park, Geoff McFarlane, Trish Kevin, Vera Lubczenko and Tarnya Kruger.

Thank you Mr. Kennett. The many years of effort to encourage and skill Landcare educators is at last being supported at the project level.

Translating talk into action usually requires dollars. Organising, networking, tapping into resources, setting up and carrying out tasks takes time, energy, commitment and a sound knowledge of the appropriate people to assist with a project.

Teachers are incredibly overstretched with their workloads. Landcare members are also struggling with work commitments and the level of voluntary work being asked of them is increasing as NRE services are decreasing.

Many great landcaring ideas between schools and the broader community just do not happen because the paid support needed to guide and assist them through projects is not usually allowed in funding applications.

This has been made clear to me on the many occasions I have sought funding for a project officer to work as a linking person between schools and their local Landcare group. However, the recent Junior Landcare initiative did not make it clear if this funding was permissible.

While I appreciate the funding we receive, we desperately need funds to provide support people to Junior Landcare and to Landcare in general.

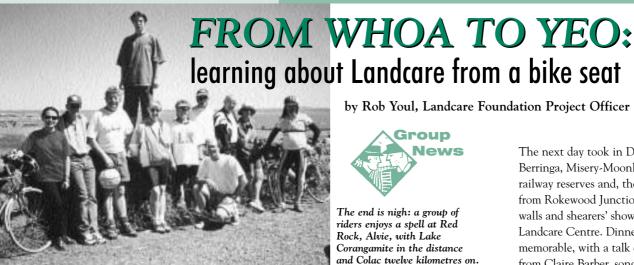
I would like to think that next year, in the Junior Landcare initiative, specific criteria is included to allow for the funding of support people.

The support I have received from NRE staff at Creswick and Wangaratta has been invaluable and most appreciated.

Continued support from this Department is critical to communities taking on Landcare tasks - specifically the one of encouraging a Landcare ethic in young Victorians.

Yours in Landcare Fran Sorensen Young Landcare Project Officer Wangaratta Region





by Rob Youl, Landcare Foundation Project Officer



The end is nigh: a group of riders enjoys a spell at Red Rock, Alvie, with Lake Corangamite in the distance and Colac twelve kilometres on.

Victoria's third catchment bike ride followed the Woady Yaloak Creek from whoa to Yeo! Yeodene, that is.

The theory's simple: rivers flow from high points to low ones under the influence of gravity. So a bike ride from the source to the mouth should be a breeze!

Not entirely so! You still get your appendicitis-inducing, long, hard hills, but overall a catchment bike ride is a delight.

So say the 21 riders who pedalled throughout last Labour Day weekend between Ballarat and Yeodene (well Colac actually, but 'Yeo' rhymes too well with 'whoa' for our headline!).

Organisers Trish Taylor and Rob Youl ran the third such event to show off the achievements of Landcare in the Western District - the first two catchment rides tracked the Hopkins from Ararat to Warrnambool.

Most riders took the train from Spencer Street for Ballarat where, after coffees and pies and last-minute checks, the group rolled through the suburbs to the old Ballarat-Skipton right-of-way, now a rail trail. Tim D'Ombrain and family were the guides to Linton, some 35km or so down the line. The scenery made up for the sometimes bumpy going.

Highlights included the basalt grassland remnants, the superb trestle bridge over the Woady Yaloak just west of Newtown and the beauties of the forest and the spectacular cuttings between the bridge and Linton.

Alice and Kevin Knight hosted a typically marvellous dinner, with Golden Plains Mayor, Des Phelan, an interesting guest. Linton Sports Centre formed a basic barracks overnight.

The next day took in Devil's Kitchen, Berringa, Misery-Moonlight, more old railway reserves and, then, a long hot haul from Rokewood Junction to the bluestone walls and shearers' showers of Warrambeen Landcare Centre. Dinner was again memorable, with a talk on local history from Claire Barber, songs and poems and the Ian and Trish Taylor ambience.

After a 20km portage to the mouth of the Woady Yaloak, at the northern end of Lake Corangamite, the riders set off for Colac, following the eastern lakeshore.

Most Victorians are unaware of this amazing broken basaltic landscape with its west-of-Ireland feel (small stone-fenced paddocks and tiny cottages), fertile volcanic croplands and the astonishingly recent cones, craters and stony rises. And the azure expanse of Lake Corangamite is always nearby.

The group reached Colac in dribs and drabs, but elated, and enjoyed the comfortable compartment allocated it for the trip back to Melbourne. You can't beat first-class railway seats after three days on a treadley!

We recommend the ride as a community-education event for fellowship and a profound encounter with the land.

### Weedbuster Week

National Weedbuster Week is underway again from 11 - 18 October 1998. The theme is weed recognition and identification. During the week groups are encouraged to undertake a weed control activity and involve as many people as possible. Woody Weed, the Weedbuster icon (a character-suit) can be loaned

out to groups as attraction.



Victoria's Weedbuster Co-ordinator is Carolyn Munckton from NRE. Carolyn can be contacted on (03) 9637 8273.

### Landcare tax rebates

The Federal Government's budget move to provide tax rebates on Landcare spending has been welcomed by farmers. About \$80 million has been set aside from the Natural Heritage Trust to fund the rebate. There will be an annual limit of \$10,000 for eligible expenditure: \$5000 for land degradation works and \$5000 for water projects. The rebate will be restricted to producers with incomes of up to \$20,700 a year from primary production.

### Bushcare boost

The protection of Victoria's native vegetation has been boosted with the appointment of ten Bushcare facilitators across the state.

Bushcare aims to reverse the long-term decline in Australia's native vegetation by conserving remnants, conserving biodiversity and vegetation restoration.

The Minister for Conservation and Land Management, Marie Tehan, said the facilitators will play a crucial role in promoting Bushcare and providing strategic direction and advice.

## ON THE SHELF-New Publications



### Catchment Education Resource Book

NRE has a very talented group of Education Officers and those working in the area of catchment management have scored another goal with the production of the Catchment Education Resource Book.

The book is a compilation of materials drawn from many sources. The best thing about it is its organisation. Each activity is presented in a clear and well-thought-out manner and all of the references and materials are listed (in fact, many are actually included). The activities are broken into sections under the science and environment curriculum.

The book covers both primary and secondary levels and would be a boon for any school library or Landcare group keen to involve youngsters in its work.

The Catchment Education Resource Book is available from the NRE Information Centre for \$20. Call (03) 9637 8080.

ssociation Inc

### Sustaining Environmental Education

The South Australian version of Victoria's Catchment Education Resource Book focuses on ecologically sustainable development. Many teachers were involved in the preparation of the book using a 'whole school programs' approach. The inclusion of environmental education plans from actual schools is great to see. The plans cover all year levels and have been tried and tested over time.

Obviously Sustaining Environmental Education

has a South Australian focus, but it is still a very useful educational publication.

Sustaining Environmental Education is available from The Curriculum Corporation for \$27.95. Call (03) 9207 9600.

The MacLennan's from Gippsland feature in the NFF publication Hand in Hand: Farming Sustainably.

### Hand in Hand: farming sustainably

This National Farmers Federation publication offers some interesting case studies of sustainable farming enterprises across Australia. It provides a good snap shot of the state of agriculture in the 1990s.

Graeme and Frankie MacLennan from Woodside in Gippsland ably represent Victoria with their story of conquering wool prices and creative value-adding.

The story on the Gabby Quoi Quoi farmers battling land degradation in

WA also makes fascinating reading. Gabby Quoi Quoi means 'water plenty, plenty' and they have worked hard to ensure it stays that way.

All in all, an uplifting read. Copies of *Hand in Hand:* farming sustainably are free from the NFF.
Call (02) 6273 3855.





Election of committee and office bearers.

For more information and RSVP Please contact

Phil Roberts

Phone: (03) 9207 5561Fax: (03) 9207 5500

# Junior Land Care



The Wooragee Rural School outside their bird hide. The School has been involved in Junior Landcare since 1989.

# Wooragee kids are away with the birds!

There aren't many students at Wooragee Rural School; in fact there are 19 and one teacher. But their commitment to Landcare is staggering. The school started Victoria's first Junior Landcare Group back in 1997 and they are still going strong.

The school grounds have been completely redesigned with a native garden, hot house and greenhouse, recycling station and compost bins. As with most rural schools, it has a bush area 'outback'. The students have reclaimed this land as a reservation. They work in teams to weed, prune, plant, propagate and mulch their reservation.

The students use the philosophy of Chief Seattle for inspiration: "...to hurt the earth is to pour contempt upon its Creator. The end of living and the beginning of survival."

Wooragee teacher Di Tyrell says the focus for this year is birdwatching and the students are reaping the rewards of the hard work planting and caring for the grounds now that so many fantastic birds make it their home.

"We have been watching a pair of tawny frogmouths nesting," Di Tyrell said.

"After two terms of waiting we were playing ball outside one day and a baby tawny frogmouth was perched on the BBQ watching us. It was wonderful."

Birdwatching is a daily activity at Wooragee.

"Every day we listen for our bird clock. On the hour it whistles bird calls for three seconds. There is complete silence in the school as we listen, then the children form into teams and birdwatch for five minutes. We also do class birdwatching from our bird hide."

Di says the children enjoy birdwatching immensely and have learned to distinguish many different species of birds. So if you drive through Wooragee, be quiet!

## **Premier announces grants**

The Premier, Jeff Kennett, was the centre of attention at Rutherglen recently when he announced funding for the Junior Landcare Initiative of \$250,000 per year for the next two years.

Mr Kennett said funding of up to \$5,000 would be available for groups for on-ground works, equipment and special learning projects.

He encouraged schools, church groups, scouts, brownies, cubs, YMCA and YWCA to participate.

"We have 900 adult Landcare Groups across Victoria and they provide a great resource for our junior Landcarers with, advice, assistance and support for their efforts," Mr Kennett said.

Tarnya Kruger from the Creswick Landcare Centre is co-ordinating Junior Landcare. When applications closed at the end of June, nearly 200 submissions for funding had been received.

Premier, Jeff Kennett with school children from around Rutherglen at the launch of the Junior Landcare Initiative.

