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Lyn Mitchard – Our top primary producer

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for the statements quoted herein. VICTORIA Letters

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The Victorian Landcare and Catchment Management magazine is a joint publication of the Victorian Farmers Federation, Alcoa World Alumina Australia and the Department of Natural Resources and Environment, with the support of the Victorian Catchment Management Council and The Natural Heritage Trust.











From the editors



Welcome to the summer 1999 edition of Victorian Landcare and Catchment Management Magazine.

December celebrates the end of the 'Decade of Landcare' with the announcement of the 1999 Landcare and Farm Management Award winners. Congratulations to everyone who received an award and to all landcarers who have done such magnificent job in Victoria over the last decade.

The awards reaffirm the strength and vitality of the Landcare movement and give recognition to those who have made an outstanding contribution. The judges commented on the high standard of entries and the great variety of projects that now exist within the Landcare movement in Victoria.

In the next two editions we tell the stories of a selection of the winners. As in other years, Victorian Landcare Award winners are now finalists in their respective fields at the national level, and we wish them the best of luck.

This spring saw a great variety of works undertaken as Natural Heritage Trust funding momentum builds. Over the next few editions, we will be seeking to track the success of many of these projects.

In the last edition, we asked you to

return the fly-sheet with your details, and asked you to tick the box if you wanted to continue receiving the magazine.

We had thousands of returns, however many people continue to ring asking if it is too late to reply. To give you a chance, we have repeated the offer. If you want to continue receiving the magazine, but did not reply last time, tick the YES box and send it back

Following every edition we receive many letters and faxes regarding story ideas or feedback on articles. We encourage lively discussion on all issues, and welcome such interest in the magazine. Please keep them coming.

On behalf of the Victorian Landcare and Catchment Management Magazine, we wish you all a merry and safe Christmas, and a happy 'bug-free' New Year! See you all next century.

Paul Crock Jo Safstrom Gabrielle Sheehan Carrie Tiffany

Landcare loses one of its mothers

Former VFF
President and
co-founder of
the Landcare
movement,
Heather Mitchell
passed away on the
12th of November,
following a fight
with cancer.



Perhaps best known in her role as the first woman to hold the VFF Presidency, Heather took the helm at a time when rural industries where experiencing very depressed economic and challenging environmental conditions.

She worked tirelessly with the then Labor Government, changing their perception of agricultural industries which led to a better situation where the rural community and the Government could work together to resolve some of the significant challenges facing farmers.

Heather's efforts with Joan Kirner, the then Minister for Conservation, Forests and Lands, saw the birth of the Landcare concept.

Heather and Joan launched the first 'LandCare' group at Winjallock, near St Arnaud in November 1986. Thirteen years later, there are now 4,600 Landcare groups across Australia, and Landcare movements

established in South Africa, New Zealand, the Philippines, North America, and Wales in the UK.

Heather is survived by her Husband, the Hon. Gordon Carmichael, her three daughters, one son and eight grandchildren.

May she rest in peace.

Paul Crock

Bass salutes Landcare pioneer

Two years ago saw the passing of Arthur Farvis, the inaugural President of the Bass Valley Landcare Group.

In recognition of Arthur's efforts in initiating and leading the Bass Group for the best part of seven years, the local community has named one of its first and most visible project successes after him

Arthur's children came from near and far to attend, with grandchildren galore to help unveil the plaque.

Next time you are heading past Bass, drop in and have a look at the plantation along the banks of the Bass River and spare a thought for Arthur.



Letters LETTERS Et et le s'etters

Rabbit Busting – more than busting rabbits!

Dear Editors,

Just a quick note to highlight a concern regarding the Rabbit Buster advice '10 steps to long-term rabbit control' on page 26 of the Spring '99 edition.

Points five and six suggest destroying aboveground harbour and burn/remove fallen timber. If rabbit control is the most important thing in the world, then fine. However, as biodiversity is also a key catchment issue, a slash and burn approach will further impoverish our landscape.

By all means remove/destroy noxious weeds, but remnant shrubby vegetation and native grasses are a high priority for protection and fallen timber is essential habitat for birds such as the Bush Stone Curlew and of course reptiles.

Please try to promote balanced and more 'biodiversity-aware' rabbit control strategies.

Bruce Gill Tatura

Magazine responses

Dear Editors.

With reference to your note requesting whether or not we require a copy of the Victorian Landcare & Catchment Management Magazine the answer is YES.

We find the magazine very interesting with regards to what other people are achieving throughout Victoria.

If the magazine was only sent to secretaries of Landcare groups many of the members would never see the publication as when we meet as a group for meetings or working days we don't have time to read magazines.

Keep up the good work.

Kind regards,

Linda Elliot Arthurs Creek



Some 'take home' messages from Europe

Dear Editors.

My wife and I were fortunate enough to recently travel in Europe for the first time. It was a fascinating and thoroughly enjoyable visit and we particularly enjoyed exploring rural regions in France, Belgium, Spain, England, Ireland and Turkey.

One has to marvel at the history and the splendour of so many things in Europe – but there are some very stark memories of environmental degradation that are ingrained in our minds, such as –

- Quality and availability of water. It is sad that one cannot trust local water supplies in Europe, so you resort to bottled water all the time.
- Air quality visibility in major cities is very poor due to air pollution. In fact the sky was always clouded by a pollution haze no matter where one travelled – even in remote, rural areas.
- Wildlife wild animals seemed to be non-existent and there was little sign of bird life, presumably due to loss of habitat and hunting.

The 'take home' message was obviously that water, air quality and wildlife are very precious resources that we in Australia must strive to protect and enhance, because time to do this is rapidly running out.

On the other hand, several countries we visited showed obvious signs of 'regional prosperity' – no doubt as a result of governments and people being serious about rural and regional development – again, a clear message for us in Australia.

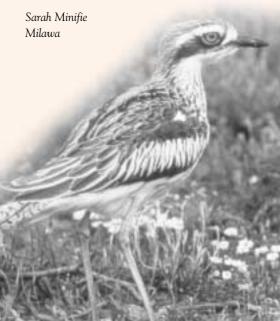
Greg Smith Rutherglen Dear Editors,

I read with interest the article in the winter edition on the north-east catchment region and the mention of a new wetland which has been created in the city centre of Wangaratta with the help of the North East CMA, the rural city of Wangaratta and the NLP Urban Water Quality Initiative.

In the rural city of Wangaratta I know of several wetlands which have been lost recently or are threatened by degradation due to agricultural pursuits on private land. The wetlands have either been drained or lost due to the illegal or permitted removal of remnant vegetation and the land has been levelled out. One large wetland is threatened by degradation.

I am aware that large-scale horticulture and agribusiness development is being promoted north of the divide with consequent loss of remnant vegetation and wetlands. Local government, NRE and the North East CMA need to ensure through the planning process that the remaining wetlands on private land are not degraded and lost.

It seems logical to save and preserve the remaining wetlands on private land rather than creating new wetlands – just as it is logical to stop all land clearing of native vegetation rather than funding replanting whilst clearing is still occurring at a higher rate than revegetation.



Interview with Alex Arbuthnot, AM

An edited interview with Alex Arbuthnot AM, member of the Victorian Catchment Management Council, chief judge of the 1999 Victorian Landcare Awards and cojudge of the 1999 Cotton Australia Primary Producer Award, on his impressions of farmers, Landcare and the future of sustainable agriculture following a tour of Hanslow Cup winners' properties.

On behalf of the judging panel for the 1999 Cotton Australia Primary Producer Award, I would like to congratulate this year's entrants. They were outstanding.

Our top farmers are also our top landcarers or, put another way, our high production farmers are also very aware of the need for good land and water management.

Standing out this year was the innovative land use of our top farmers across diverse commodities, regions and land types.

I can't say that any one commodity is addressing land management issues better than others but it is quite obvious that some of the larger issues are going to have to be addressed with new cropping techniques, and in our dryland areas.

People employing direct tilling techniques – we saw this on two or three properties – are, without doubt, forerunners in what I believe will become the norm for stable land management in the next decade. In particular, we saw one property where direct seeding of lucerne into pastures was followed by direct seeding of annual crops such as wheat and oats over the top. I think this is the future of sustainable agriculture.

My experience over several days of visiting the properties of the Hanslow Cup winners reaffirmed that farmers are great innovators, great researchers. If research institutes can work effectively with these farmers, I believe that we will address the big issues of sustainability.

The Cotton Australia Primary Producer Award is judged by visiting and selecting from the 10 Pivot Landcare Hanslow Cup winners drawn from each catchment region.

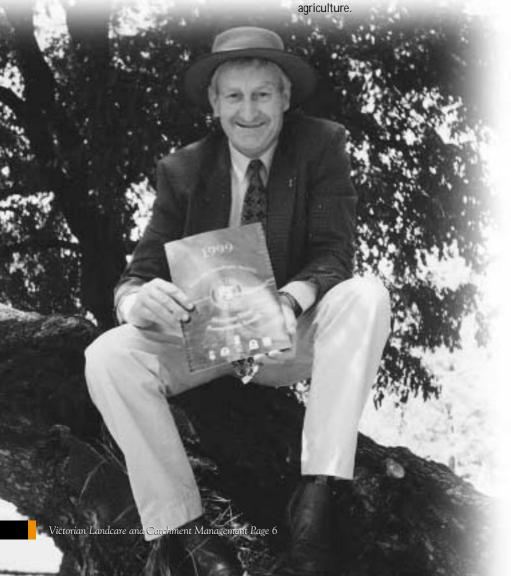
The judging method associates the regional Pivot Hanslow Landcare Cup award with the prestigious national Cotton Australia Primary Producer Award. This year Nyora dairy farmer Lyn Mitchard becomes Victoria's representative in the national award.

The Hanslow Cup was, for many years, regarded as the most prestigious award for soil conservation in Victoria. I can clearly recall as a young man being taken across Victoria to a field day on a winning Hanslow Cup property. It was a very impressive way to demonstrate good land management and I am very pleased that that award has now become associated with the latest innovation in land management – Landcare.

To help revitalise the historical Hanslow Cup, the sponsorship of agribusiness leaders Pivot Limited was secured.

The regional Hanslow Cup winners will be encouraged to hold field days to show their outstanding properties to interested farmers from both their region and throughout the State.

Our tour demonstrated that most farmers farm for future generations. That is why it is important that the corporate world, and indeed governments, offer whatever assistance they can because people out there are working for future generations at immediate personal expense to themselves.



Introducing Sherryl Garbutt

Minister for Environment and Conservation

As the new Minister for Environment and Conservation, I am proud to have the task of encouraging and overseeing Landcare in Victoria.

Firstly I would like to congratulate the winners of the 1999 Victorian Landcare and Farm Management Awards. The volume and quality of entries received indicates the spirit of Landcare is very much alive in Victoria. I am delighted to be a part of such a vital community-based movement achieving real progress in restoring our environment.

It is an exciting time for Landcare in this State with Landcare 2000 coming up in March. International delegates, interested in land and water management, will be coming to Victoria so the spotlight will be on our Landcare efforts. Victorians should be proud of their achievements and be ready to learn from our visitors about their progress and innovations.

I am also pleased to hear about the growth of networking and collaborative efforts between Victorian Landcare groups. This demonstrates that the Landcare community is dedicated to making a difference both locally and at the landscape and catchment scale. As the Minister responsible for Landcare, I will reinforce these efforts by supporting works and research into the effectiveness and future direction of the program.



Over the coming months I am keen to meet with Landcare groups in regional Victoria to see first hand the vital work they are doing to shape a sustainable future. I will be keen to listen to Landcare groups about how Government can work effectively in partnership to support a second generation of Landcare in this State.

herry SAST

Sherryl Garbutt Minister for Environment and Conservation



Catchment management in Victoria: Message from NRE

By Peter Sutherland, Executive Director, CMSA Division, NRE

New vision for dryland agriculture

Dryland agricultural industries make up 70% of Victoria's agricultural production, generating around \$3.6 billion annually. Significant natural resource issues face dryland Victoria and threaten the development of these industries.

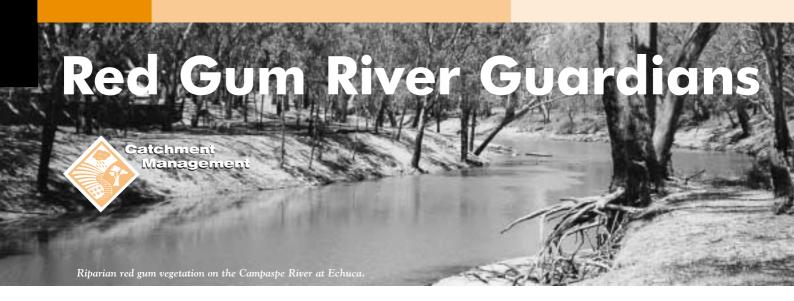
To assist in combatting these issues the State Government has invested

\$8.3 million a year and the Federal Government around \$6.8 million into the Sustainable Dryland Agriculture and Land Management Key Project. Landholders have also made a significant investment through Landcare, Salinity Management Plans and on-farm measures.

NRE has recently completed a strategic review of the Key Project, which aims to maximise Victoria's sustainability and prosperity in dryland agriculture. The report will be used as the basis for developing a new vision for Victoria's land management in dryland areas.

The review showed that a significant boost in prosperity could be achieved by addressing natural resource issues. It is estimated that the Key Project could yield benefits of up to \$340 million as a result of improved dryland salinity management alone.





A seminar promoting better understanding of the ecology, conservation and management of Red Gum ecosystems was held in Echuca during October 1999.

Organised by the Shire of Campaspe, NRE and the North Central Catchment Management Authority, the seminar saw leading scientists and land managers sharing their knowledge about this important ecosystem.

The River Red Gum is firmly etched into Australian culture through literature and folklore. Its timber has powered the paddle steamers of the Murray; its sleepers have paved the nation's railways, and the foundations of millions of homes. Furniture builders and tourists keenly seek

its beautiful rich, red timber. It is also a key species in a rare ecosystem.

Most of the major creeklines and rivers of northern Victoria are lined with Red Gums. They provide a vital link between waterways and the surrounding dry country. Without the Red Gum our native fish would have no snags in which to live. The role of River Red Gums in the conservation of fauna is only just being understood.

Widespread clearing of the northern plains has left isolated pockets of vegetation crossed with Red Gum lined creeks and rivers. The woodland vegetation has been highly modified so that few natural areas remain with the original understorey of

native grasses, herbs and scattered shrubs.

The Red Gum River Guardians seminar was opened by Mayor of Campaspe, Cathie Halliday. Tim Fisher from the Australian Conservation Foundation gave the keynote address. Scientists and landholders presented sessions on Red Gum history, birds of the Murray corridor, flight-paths through the farm, carpet pythons and gliders and other mammals.

A final session looked at future directions for the conservation and management of Red Gum ecosystems in northern Victoria.

For more information and copies of the proceedings contact Geoff Park at NCCMA on (03) 5448 7124.

Landcare Australia on-line

Landcare Australia has put a great deal of effort into its website. The site, which was launched in July this year, is slick and colourful with a mixture of hard facts and fun gimmicks.

Start at the 'who's who' where you meet the Landcare Australia team Brady-bunch style, and find out exactly what they do.

You can get on the soapbox, respond to Landcare Australia's topic of the month ('does Landcare Month work?' is the current topic), or send a general message or request for information.

The sponsorship pages concentrate on 'the partnership' between Landcare Australia and sponsors. Some of the major corporations talk about what they get out of supporting Landcare and the LAL sponsorship team provides some detail

on how they service sponsors.

The kids' stuff is bright and interesting and they promise more to come. You can send someone a 'virtual tree' to add to the cyber forest (over 200 trees have been 'virtually' planted since the website was launched), play a memory game and download some stunning screensavers.

LAL has received a very positive response to the launch of the site and it's popular with visitors. The site had 2048 hits in July, 30,788 in August and 27,685 in September.

Stop Press: Second Generation Landcare Grants

Sherryl Garbutt, the Minister for Environment and Conservation, has announced the Second Generation Landcare Grants. The closing date for applications is February 25, 2000. For copies of guidelines, contact your Catchment Management Authority or ring the NRE Customer Service Centre on 136 186.



Go to www.landcareaustralia.com.au

We are the Landcare generation

Acclaimed scientist and author, Dr Tim Flannery, believes Landcare is strategically one of the most important things that has happened to the Australian environment for a long time.

Tim Flannery is the keynote speaker at the International Landcare 2000 Conference to be held in Melbourne from 2-5 March 2000. He says that today's Landcarers are the first generation of Australians with the community behind them.

"People now understand that it is not only acceptable, but desirable to care about the land. It is only since the 1960s and 1970s that we have realised, and been appalled by, the destructive early phase of white history – now we are starting to turn that around."

Landcare and social change

Flannery says he is supportive of Landcare because it is social as well as scientific

By David Beckingsale

"Landcare is a very powerful engine of social change. It helps people come to terms with the nature of the problems they are facing and to learn from each other."

While Flannery believes we are going in the right direction after centuries of catastrophes he says we are still at a very early stage in terms of outcomes.

"Probably 90% of programs are on the wrong track, but it's all part of learning and it's valuable experience. I don't think Landcare will change the world overnight, but I do think it will change the world eventually. It will certainly change the way that we think, which is a major achievement."

For further information and registration details for the International Landcare 2000 Conference visit the conference website



Scientist and author Dr Tim Flannery is one of the keynote speakers at the upcoming International Landcare 2000 Conference.

Wanted: 100 'Victorian hosts'

The organisers of the International Landcare 2000 Conference are asking for Victorian Landcarers to volunteer as conference bosts

There are no formal duties, just a willingness to be approached by people from interstate and overseas to talk about what you do in Landcare. A host may simply chat with other delegates, provide them leads and ideas about places to visit and perhaps share a lunch with them.

Being a host is a great way to meet with other conference delegates and do some informal networking. Hosts will be identified in some way, possibly by wearing a T-shirt.

To be a conference host you must be a registered delegate of the conference. Being a host is open to people who have already registered and people yet to register who are community co-ordinators/facilitators or community group members. Simply complete this coupon and attach it to your registration, or send it to: International Landcare 2000 Conference, Waldron Smith Convention Network, 93 Victoria Avenue, Albert Park 3206, by 31 January 2000.

Victoria Hosts	Registration of interest		
Name:		Phone:	LANDCARE
Group:			2000
Address:		F	P/Code:
Simply complete this coupon and attach it to your registration, or send it to: International Landcare 2000 Conference, Waldron Smith Convention Network, 93 Victoria Avenue, Albert Park 3206, by 31 January 2000.			

Olympic Landcare stretches for Gold



October saw another project under the Olympic Landcare banner successfully accomplished at Ravenswood, albeit under trying climatic conditions.

One thousand local and urban-based volunteers - 700 getting to the site in two V/Line Passenger trains - planted over 10,000 plants and direct seeded another 40,000.

Among the volunteers were one hundred migrant students from Somalia, Sudan, Ethiopia, Eritrea, Vietnam, Yugoslavia, China and Japan, giving the day a truly international feel.

Eight Olympians were also involved in the festivities including John Landy, Damian Brown, Des Duquid, Simone Ingram, Simon Heffernan, Kerri Tepper, Faith Leech and Phillip Sawyer.

John Landy, the Victorian Olympic Landcare Patron and President of Greening Australia Victoria, said that the need for such large-scale projects was critical.

"The Gold Tree symbolises the loss of vegetation since European settlement. Now we have to make sure that we can put a good percentage of it back if we are to reverse the threat of salinity and biodiversity decline," he said.

James Blundell sang a few of his wellknown songs as the Rotary Clubs of Bendigo and Bendigo South supplied a sumptuous BBQ lunch for the wet and weary volunteers.

Landcare, contact Katie McCracken at GA on (03) 9457 3024



Above: One thousand volunteers braved the elements.

> Lalith Gunasekera inspects a plot of Alligator weed in a backyard at Doveton.



Alligator Weed mix-up is sorted out

A plant-swap by scientists and members of the City of Casey Aquatic Weed Community Action Group has helped control the spread of one of the world's worst weeds.

Dr Lalith Gunasekera, a scientist at the Keith Turnbull Research Institute, says Alligator Weed originates from the Parana River system in Argentina and came to Australia through ship ballast in 1946.

"It has become widespread in tropical and warm temperate regions where it infests waterways, causing problems with water flow, flooding and sedimentation and providing habitat for disease carriers like mosquitoes."

In 1996 it was discovered that the Australian Sri Lankan community was growing Alligator Weed as a leafy vegetable. Alligator Weed was wrongly thought to be the plant Mukunuwenna, a popular leafy vegetable grown widely in Sri Lanka and used in a curry recipe.

Lalith Gunasekera says some older people unknowingly cultivated and used the weed as a regular part of their diet for over 25 years.

> "The plant was considered to have high rates of vitamins, minerals and fibre and was spread from family to family as a very valuable backyard herb."

A public awareness campaign and survey uncovered more than 750 infestations of Alligator Weed in 130 suburban backyards. Lalith Gunasekera says one-third of these sites have now been treated and all known infestations will be eradicated within the next year.

The key to controlling the spread of Alligator Weed was the promotion of a suitable replacement plant. An Australian native species Alternanthera denticulata (Lesser joyweed) in the same family was grown and trialled. It has been widely accepted by the Sri Lankan community as an alternative to Mukunu-wenna. More than 3000 replacement plants have been distributed through Buddhist temples and personal contacts.

According to Lalith Gunasekera the Sri Lankan community is very keen to grow this new plant in their backyards and have already started to distribute them from family to family.



Who's there to lend a hand?

Is your Landcare group finding it hard to motivate the troops, or are you doing large projects and would really appreciate a hand?

You may have heard or read about the Australian Trust for Conservation Volunteers (more often referred to as the ATCV). You may not really know what they do or have to offer, so we caught up with the ATCV's Victorian State Manager, Ian Smith, to find out what and why they do what they do.

According to Ian, since the ATCV started in 1982, the organisation has grown to be the largest organised volunteer group in the country, with over 1300 volunteers in the field on any given day, supported by 170 highly qualified staff.

- "Since we started, we have grown with the success of the Landcare movement because our volunteers provide some of the valuable elbow grease to keep the Landcare machine moving.
- "Every day we have volunteers in the field working on environmental projects to assist in anything from endangered species monitoring, to Landcare group works or restoration of heritage buildings."

Ian is quick to emphasise that all the volunteers contribute to cover their own costs of being at a project, highlighting their dedication to the environmental cause.

"The ATCV provides the team supervisor and transport and the project managers or landowners provide tools and materials," lan said.

The ATCV manage an impressive network of programs both statewide and nationally, all involving volunteer management. Ian says all are based on the philosophy of the ATCV providing the in-kind management support.

Some of these programs include: the Federal Government's Green Corps – Young Australians for the Environment Program; Tree Victoria; the ATCV Remote Coastcare Program in partnership with Environment Australia; National Tree Day with Planet Ark; Arbor Week in association with the NRCL; Clean Up Australia in the Melbourne area; and the Alcoa Weekend Landcare Program.

The biggest of the programs by far is the Green Corps Program. Now in its third year, the Green Corps Program is designed to provide selected volunteers with the opportunity to join a team for six-month periods to help the environment.

- "Green Corps focuses on 17 to 20 year olds who are committed to helping the environment." Ian said.
- "Like other project teams, the ATCV, through Green Corps, provides a team of volunteers, transport, supervision and safety training.
- "The project runs for six months, with the proponents responsible for organising the works schedule and keeping projects and materials ahead of the team," Ian said.

While this seems like a great opportunity to get some extra hands on the ground, the ATCV struggle to get enough applications for Green Corps grants.

"Green Corps projects run for six months, and while we understand some groups may find it difficult to keep six months work ahead of the volunteers, larger Landcare projects are ideally suited for Green Corps teams," he said.

Ian also made an important point that Landcare groups can apply for Green Corps or ATCV support by contacting the ATCV directly, or apply to have projects funded through the Natural Heritage Trust.

"Landcare groups should think of the ATCV as a key stakeholder in their Natural Heritage Trust projects, as we can provide the people power that smaller rural communities don't readily have access to."

Ian said there were numerous ways people could get more information about the ATCV and Green Corps.

"We have information and application forms on the ATCV website, WWW.ATCV.com.au or if people ring the ATCV South Melbourne office, Trudy will be able to send them out some information."

The number for the ATCV is (03) 9686 5554.

Australian Trust for Conservation Volunteers upgrading tracks and fences in the Arthur's Seat State Park





Cheap, effective GIS aids catchment planning by Paul Crock





Farmers throughout the Woady Yaloak catchment will soon be able to enjoy the benefits of GIS-based farm plans in a new and exciting community-led project being undertaken in partnership with Alcoa, University of Ballarat Centre for Rural and Regional Information, Corangamite Catchment Management Authority, NRE and the Golden Plains Shire.

The new project is an extension of one of the earliest Landcare group-based GIS projects funded under the National Landcare Program. In 1994, the Pittong Hoyles Creek Landcare Group, located in the upper reaches of the Woady Yaloak catchment, initiated the project with Rick Pope, a student of the Graduate Diploma in Land Rehabilitation Program at the University of Ballarat.

The farm plans developed from this initial project proved to be a valuable resource to the farmers, so the decision to develop a cheap and effective GIS package for the whole catchment was made.

Alice Knight, Chair of the Woady Yaloak Catchment Committee, said the Pittong-Hoyles Creek Project had given them another management tool for their farm at Linton, but also one for their local neighbourhood.

"We found the GIS very useful for planning in terms of prioritising areas for works on our property and a useful means of identifying potential linkages of works between neighbours to form a truly integrated approach to catchment management in our area.

to do the job," she said.

Since completing his Graduate Diploma,
Rick Pope has remained in contact with
the group and is happy to see the Woady
steering committee continuing his work by

expanding the GIS model across the whole

of the catchment.

"The only drawback was the somewhat

expensive software. For this new project to work, we needed a simple cheap package

"The new model is great. It revolves around the development of a CD-ROM that the farmers can either have access to or purchase cheaply, that contains all the relevant information for their farming system and land rehabilitation efforts at a catchment level, but with enough resolution to go to the individual farm

"As Alice said, the stumbling block was the cost of the software, but by using free 'public domain' software, with links to higher resolution maps for the whole catchment, we hope to make it cheaper and easier to use for everyone," Rick said.

The Woady Yaloak group, with support from Alcoa and other sponsors, has now produced the CD-ROM with data covering the Woady Yaloak catchment from Ballarat to Cressy that can be viewed on any modern home computer.

"The base layer is a satellite image," Rick said.

The group's Neighbourhood Project Facilitator, Jen Clarke, works with individual farmers to update their information, before sending it through to be updated on the main GIS by local farmer Susie Ellis. Susie is in charge of inputting the data to the GIS and she said the benefits of the GIS package were more than first thought.

"We can collect all the data for proposed rehabilitation projects and combine them to use in grant applications, or to give the Woady Yaloak Steering Committee a better picture of the works proposed, in progress and completed," she said.

Susie pointed out that the mapping of the achievements of the five years of the Woady Yaloak Project is another integral component of the new GIS.

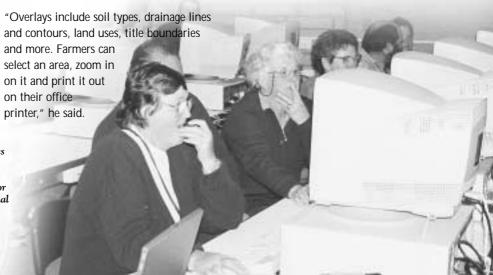
"The GIS gives us a chance to give a pictorial representation of the works undertaken with Alcoa's support, so we can show our sponsor how much has been achieved at a catchment level." she said.

"But more importantly for the community, it gives individuals a chance to see what they have achieved at their farm level over the last few years – something that is very easy to lose track of," she said.

For more information regarding the Woady GIS Project, contact Cam Nicholson on 0417 311 098 or Susie Ellis on (03) 5340 3583.



Learning the ropes of the GIS at the University of Ballarat Centre for Rural and Regional Information





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DuPont Agricultural Products

1999 Victorian Landcare &

Winner of the Cotton Australia Landcare Primary Producer Award and the Pivot Landcare Hanslow Cup for Port Phillip Region

Lyn Mitchard runs a 180 hectare dairy farm at Nyora in South Gippsland. She farmed with her husband until he passed away in 1995 and has continued since then with a sharefarmer.

Lyn is an active member of the Mt Lyall Landcare Group. She represents the group on the committee of the South Gippsland Landcare Network and on the seed bank committee. Lyn says she has gleaned much of her knowledge about farming from the Landcare group.

"In 1991, the group ran a property management planning course. We participated in the course and upgraded our farm plan."

Since then, Lyn has been working hard to put the plan into action. A systematic program of pasture improvement is underway. Techniques have included deep

Lyn Mitchard, Nyora

ripping and aeration to overcome compaction, improve soil structure and soil biodiversity. Pasture mixes have changed and a combination of traditional and organic fertilisers are used.

Lyn says they used to fertilise annually in one overall farm application. "Now we fertilise according to the results of soil tests."

The farm plan has been invaluable in reorganising fencing and tracks across the property. At present, there are 43 paddocks of around four hectares each. Fences separate soils of differing moisture and productivity regimes.

An area of remnant vegetation has been fenced from stock while the creek that passes through the property has been planted to trees and understorey of local provenance.

Lyn says the changes on the farm are aimed at achieving a system of sustainable management. They have also greatly improved productivity. Production per hectare of the dairy herd has nearly doubled in the last ten years.

"This year we are leasing an additional 100 hectares on lighter well-drained soils to carry young and dry stock. This will reduce feeding-out, traffic and compaction on the dairy pasture in winter."

Lyn has recently participated in a Farm\$mart farm planning course. She says the work on the farm is nowhere near completed and there is still a great deal she would like to achieve.

"The more we learn, the more we realise what needs to be done."



Farm Management Awards

Winner of the National Landcare Program Individual Landcarer Award

Robert McColl, Bamganie

A heart operation was the jolt that got Robert McColl heavily involved in Landcare. Robert was recuperating from major surgery in 1992 when the Bamganie/Meredith and Districts Landcare Group was looking for a new president.

"They couldn't find anyone to take it on so I thought I'd give it a go."

The Bamganie/Meredith area is part of the Corangamite catchment. It has suffered severe erosion problems, heavy rabbit infestation, rising watertables and salinity at the head of catchment for streams flowing into the Leigh and Barwon rivers.

Under Robert's guidance the Landcare group has tackled all of these problems and significant improvements have been made.

Robert has devoted an incredible amount of time and attention to Landcare as well as doing much to improve his own family farm. With his detailed knowledge of the area's topography and geography, he has personally urged, motivated and cajoled large numbers of landholders to address problems of weed control, rabbit and fox eradication, tree decline, protection of remnant vegetation, erosion control and replanting with indigenous species to improve water quality. He has also been a leader in the establishment of farm forestry.

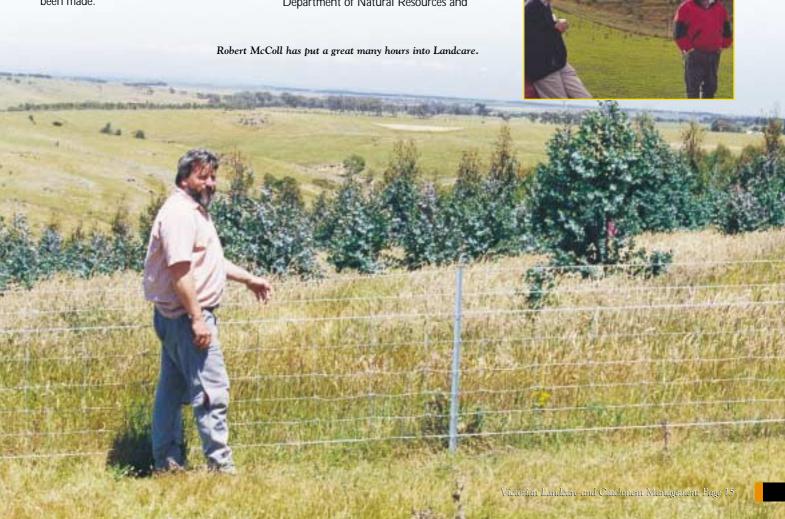
Robert has nurtured Junior Landcare through a water monitoring and tree planting project on the Coolebarghurk Creek with the Meredith School. He actively liaises with Barwon Water and the Department of Natural Resources and

Environment and he has organised a bevy of courses in the area such that now every landholder has a whole-farm plan and the Landcare group has a whole area plan.

Robert admits he has put a great many hours into Landcare. He says the reward is simply driving around the place and seeing how it's improving.

"I'm a fifth generation local so this is my chance to put something back into the area. Landcare is really about bringing people together – conservation, productivity and co-operation.

It's a great thing to do with your life."



1999 Victorian Landcare &

Winner of the Alcoa Landcare Community Group Award

Lexton Landcare Group

How many Landcare groups set goals for the next 30 years? The Lexton Landcare Group, centred around the town of Lexton, 50 kilometres north-west of Ballarat, is constantly looking to the future. They also have good reason to look at the past.

David Clark, the group's co-ordinator, says by the end of this year the group will have planted 8% of all recharge areas to trees; stabilised 85% of all stream and gully

sides. On the people front, 25% of all landholders will have completed a farm planning course and group membership will be at over 75%.

The group is large, with over 100 members across 60,000 hectares of grasslands. Their biggest concerns are erosion and salinity. Rabbit control is another constant job. The group was formed in 1988 because of concerns about these issues.

David Clark says running parallel to

The group is currently reviewing its goals and priorities for the next ten years. It is examining targets for 2010 and 2020 and the broader role the Landcare group might play in the community.

David says the group's success comes from a number of factors. "They are a dynamic bunch - progressive in both action and thought. Also having a large group means the work is spread further and there are more points of view."



Farm Management Awards



Winner of the BP Landcare Catchment Award

Swan Bay Integrated Catchment Management Committee

Now in its third year, the Swan Bay Integrated Catchment Management Plan demonstrates an innovative, holistic approach to catchment management driven by the local community.

Swan Bay is one of the most intact areas of wetland and marine ecosystems within Port Phillip Bay. Over 90% of the catchment has been cleared for intensive agriculture and urban settlement.

In 1996, Landcare and conservation groups working on independent projects within Swan Bay recognised the need to combine their skills and energies and create a 'whole catchment care' approach. The Swan Bay Integrated Catchment

Management Committee was formed and a detailed Catchment Management Plan was developed.

The plan is a flexible, dynamic document that is constantly being updated and amended. It addresses the key issues for the catchment: water quality; stormwater; remnant vegetation and wildlife corridors; pest plants and animals; sustainable agricultural practices; and community participation.

According to the Committee Secretary, Sue Longmore, the visibility of numerous on-ground projects across the catchment captures the attention of the local community and fuels further interest and activity. "It's the doing that matters. People can't ignore the fencing, weed control, creek bank stabilisation, wildlife corridors, dune restoration and wetland protection that is being done."

Sue says the success of the project lies with the Catchment Management Committee.

"They are a very dedicated group who put in many hours on-the-ground and behind the scenes to make our vision of holistic catchment management a reality. It's the committee who have inspired the community to get involved."



How to collect native seed

Capsules - found on species such as Eucalpts.



Follicles - Found on species such as Banksias.

© Below left:
Pods - found on species such as Acacias.

As summer rolls on, now is the time to

▲ Background:

As summer rolls on, now is the time to collect seed from many species. If you want to start growing your own trees, or if you would like a nursery to grow plants from your immediate area on contract, we thought we would look at how you go about collecting the seed you need.

What is the seed and where do I find it?

All flowering plants produce fruit, inside which is found the seed. Fruit can be anything from berries, pods, nuts to succulent stone fruits such as a peach.

Native plants produce many different types of fruits, but we will focus on the more common types of native fruit – capsules, follicles and pods.

- Capsules are usually relatively small, dry and woody, and stay on the plant for a couple of years. When mature, the capsules split open and release lots of little seeds. Capsules can be found on Eucalypt and Melaleuca species (to name a couple).
- Follicles are like big woody nuts and can remain on the plant for many years. They usually split in two, releasing one or two larger seeds, often with a paper-thin 'wing' to help the seeds disperse in the wind. Species such as Hakea, Grevillea, Banksia all have follicles.
- Pods are self-explanatory. 'Like peas in a pod', native legumes also produce pods to house their seed. Plants that produce pods often give their seed a special hard coat to protect them against the elements which needs special treatment before they will germinate. Pods are found on Acacia species.

I now know what seed is but how should I collect it?

Firstly, you should collect seed from as many plants as possible. Like any livestock enterprise, seed from different plants will vary genetically. By collecting from only one plant, you will limit the genetic variation in the plants you propagate, so a handy rule of thumb is never to collect more than about 10% of seed from any one parent plant.

Knowing this, then how do I go about collecting the seed?

Species with seeds in capsules can be a bit difficult to collect. Seed from low branches can be picked relatively easily without damaging the plant, but a few things have to be taken into account first. Many trees with capsules produce flowers, immature capsules and mature capsules on the same branchlet (small branch). In this case, only the mature capsules from nearest the trunk should be picked as the immature capsules and flowers are the seed source for future years.

A fruit picking bag with a strap that goes over the head and around the neck, with a big pouch, is a good way to collect capsules. With both hands free, it lets you reach in and get the mature capsules quickly.

Taller trees are trickier targets and branchlets often have to be cut off to collect the seed. Some people use long-handled pruners and saws to remove branchlets with seed capsules connected. (One innovative Landcare group used an old chainsaw chain with a rope attached at both ends. The idea was that you throw the rope over the branchlet, pull the chainsaw blade up and gently saw it off – avoiding getting whacked in the head by standing well clear of the drop zone.)

A safer means of getting to larger/taller trees involves talking to the local power company contractors that prune around power lines. With their cherry pickers, they can reach the tallest of trees and remove the branchlets and capsules much more safely.

Collecting follicles is easy if you can reach in and twist off the older nuts close to the

With the expansion of large-scale Landcare

projects such as the Greater Glenelg

Biolink and the Powlett Project, the

pressure on local nurseries to deliver is

strained. Being able to collect seed and

grow trees for your own use is not too

difficult and worth a try.

on your farm

trunk. Knocking the follicles off with a stick is also a good way of collecting them. For species such as Casuarinas, a useful hint is to climb the tree so you don't get whacked on the head with the nuts as they fall off (but try and go a bit easy on the tree).

Plants with pods are the easiest to collect. Quite simply, you can pull the pods off the plant like picking peas. This can be done with minimal damage to the parent plant.

It is important that you don't pick immature pods. Check the seed in some of the older pods to see if they look ripe. If the pod contains large plump shiny seeds with firm white flesh inside the seed, chances are it is viable.

I have bags of pods, capsules and follicles – what next?

The next step is to clearly label a paper bag with where and when and from how many plants you collected the seed. Fill the bag with the follicles, the capsules or the pods and seal them up and leave them in the sun to dry out and open up. If you use a plastic bag, the fruit will sweat and become mouldy rather than open up as required. Open fertiliser bags are good for larger branchlets and for lots of seed.

An excellent place for drying seed is in the back of a car under the rear window, as this is most often in the sun and can get quite hot. Other options include next to a window or in a still place where the wind won't blow the bags away.

Eventually, the seed will fall out of the fruit and be ready to sow.

Seeds from pod-producing plants such as Acacia species have a seed coat that will need to be treated prior to sowing.

A most effective method of treating hard seed coats found in many such species, is to soak the seeds in just-boiled water for an hour or so while the water cools. This softens the outer coat and the seed should germinate much easier. Once soaked, the

seed can be dried and stored for sowing at a later date.

How do I store the seed if I don't need to use it all at once?

Once the seed is harvested from the fruit, it can be all stored the same way.

Firstly, it pays to give the seed a light spray with some insecticide, to kill any bugs or weevils from eating the seed in storage. Mothballs or naptholine can help protect the seed, but should not be left in the jars for too long as it has been known to affect the viability of some species.

Storage containers can be anything with a tight-fitting lid. Jars, tins and plastic containers all make useful storage containers. These should be kept in a cool, dark place where the temperature and humidity are not going to change much.

Another option for you is to give the seed to a seedbank for them to store for you. Greening Australia operate seedbanks throughout Victoria and it would pay to ring GAV to find your closest one.

Seedbanks are a good source of seed for direct seeding or for sourcing seed from your area if you don't have time to collect it yourself. They also provide germination testing and other useful advice.

One last thing that is important if you intend collecting seed in bushland reserves, is that you check with your local NRE office to see if you need a permit to do so.

Hopefully this has given you enough information to start collecting your own seed. For more information regarding species information, seed collecting, storage or other



revegetation assistance, contact Greening Australia on (03) 9457 3024 or David Warne at the GAV/Alcoa Portland Seedbank on (03) 5521 7856.



North-east farmers' plan for clean water





Vicki, who lives on the family dryland grazing farm with husband Craig and children Carissa and Jarrod, is representative of the growing number of people who are becoming more concerned about the environment and issues such as land degradation and soil erosion. She readily admits that she went on the working party because she saw it as a way to learn more about land/water management and the quality of water in her area.

"I came in blind but I've learnt there are just so many issues when it comes to water quality," says Vicki. "At first I felt totally out of my league – I don't have any kind of technical background – but after a while I started asking questions and voicing my opinion."

Vicki says the strategy not only helps businesses and the community become aware of water quality issues, it also lists actions that the individual can undertake to help water quality.

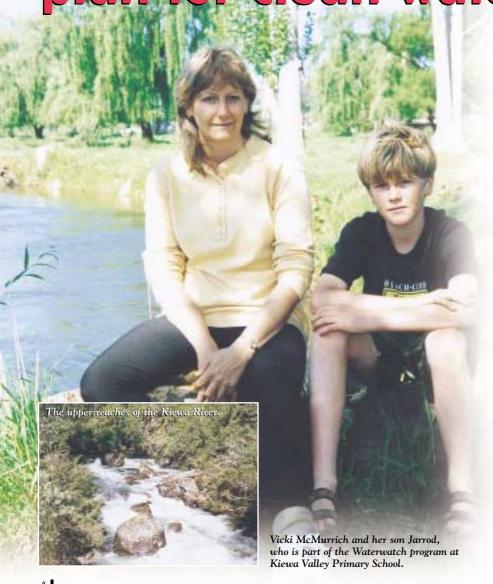
"On our place we fenced off a creek and planted trees to help stabilise the bank before it became a problem. Another thing we can do is rotational grazing to reduce bare paddocks in summer."

Like the other community members of the working party, Vicki's time attending meetings was voluntary. As well, she was heavily involved in the proofreading and editing of the draft strategy.

The strategy comprises a number of major programs including community education, agricultural industries, forest management, stream management and gully stabilisation.

Estimates have suggested that the strategy will decrease phosphorus loads to the Murray River by a total of 75 tonnes.

Copies are available from Veronica Lanigan, the North East Catchment Management Authority's Water Quality Officer on (02) 6055 6133.



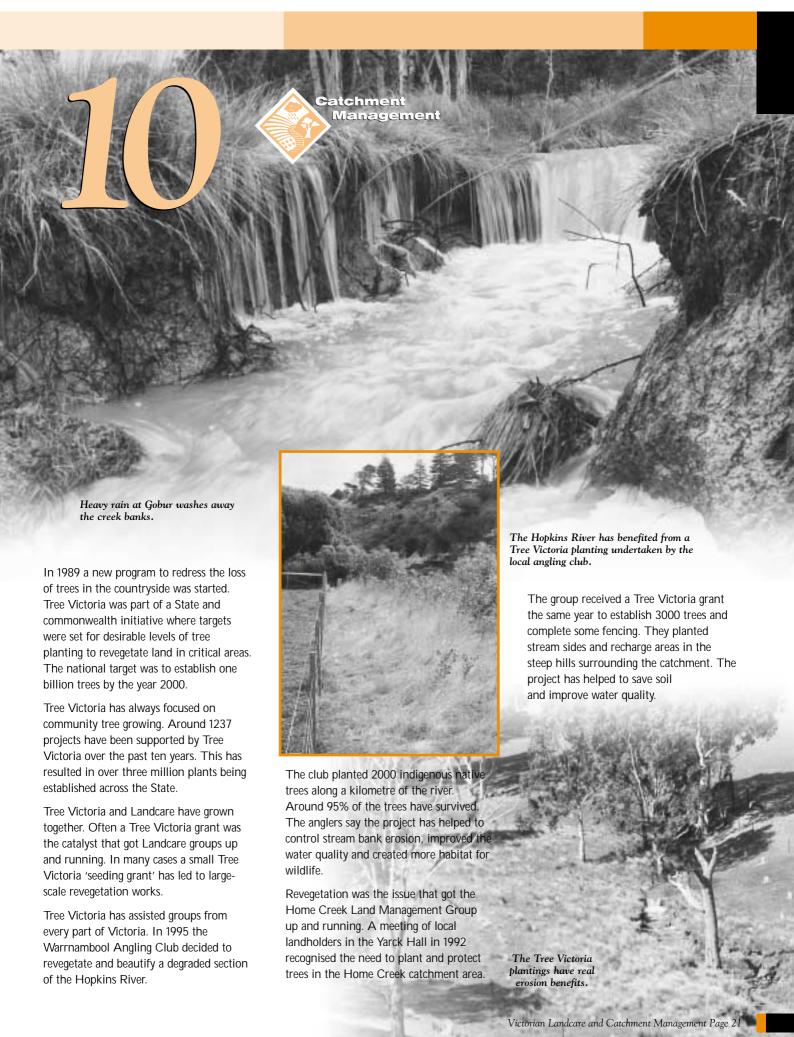
If nothing gets done now, what will happen in the future? It will only get worse."

Vicki McMurrich, from Kiewa in northeast Victoria, is talking about why they have a strategy to look after water quality.

"I hope it will make people think and be aware of how important water quality really is," says Vicki, who has lived in the Kiewa Valley all her life. "Every one of us is partly responsible for water quality in one way or the other. All run-off water – whether it be from the farm, from households in town, or from industry – ends up in our waterways at some stage."

Vicki was a member of a community-based working party which helped develop the Upper North East Water Quality Strategy. The strategy is now being implemented by the North East Catchment Management Authority under the direction of three geographically-based implementation committees.

The strategy applies to two basins – the Kiewa Basin and the Victorian portion of the Upper Murray Basin. Together they contribute 24% of the total Victorian discharge to the total Murray-Darling Basin system. Both basins supply water for use downstream in Victoria, NSW and South Australia.







Improving native fish habitat

Four fishways have been installed by the Corangamite CMA in partnership with NRE, as part of the State Fishway Program, which aims to improve fish access to critical spawning and habitat areas. The fishways will allow necessary migrations of native fish between freshwater and the ocean to complete their lifecycle. Studies have identified that 70% of fish species in the coastal catchments of south-eastern Australia require such migrations.

Construction occurred during May and June 1999 on fishways at Pollocksford Weir (Barwon River) and at other stream-flow gauging stations on Loves and Kennedys creeks, and on the Curdies River. To ensure that the fishways meet their objectives, monitoring of fish usage will occur in early December 1999. This period has been identified as a crucial time for native fish migration in this region.

Together with NRE, the Corangamite CMA will continue fishway construction

over the next two years, improving breeding and rearing opportunities for the region's native fish stock and reinstating the range of many species.

Fishways will be constructed on the Gellibrand, East Barham, Barwon and Moorabool rivers, along with two sites on Thompsons Creek. Eight sites on the Moorabool River have been identified for fishway construction, opening up more than 20 kilometres of the river to fish migration. The removal of barriers to fish migration is an integral component of ensuring the long-term viability of native fish species in this region.

Corangamite CMA (03) 5232 9100



Fishway at Pollocksford Weir (Barwon River).

A decade of Landcare in the Mallee

The Mallee CMA recently hosted a Regional Landcare Conference for Landcare group members, co-ordinators, facilitators and representatives of NRE, celebrating a decade of Landcare in the region. The conference presented the community with the information necessary to move forward with their Landcare efforts into the next millennium.

The emphasis for the conference was on local issues and local solutions. Communication was the key to the conference with ample opportunities for sharing ideas and projects as well as networking with other participants.

The conference commenced with a tour of the Ouyen area and was followed by a large dinner held at the Ouyen Golf Club.

A series of workshops were held over the course of the second day with pest plants and animals, dryland salinity, biodiversity on the common farm, farming systems for sustainability and personal health issues of particular focus.

It is now ten years since the first Landcare group was launched in the Mallee.
The Millewa-Carwarp Landcare Group was launched in August 1989 by Minister K. Setches at Werrimull.

The Mallee region now has 22 Landcare groups involving over 1200 members, covering 2.4 million hectares of land.

Mallee CMA (03) 5022 4377

Landcarers on tour, Mallee Research Station, Walpeup.

Regional forum established

The new South East
Australia Landcare Forum
was launched at a conference in Bairnsdale
featuring Landcare members from
throughout the region and several highprofile guest speakers.

Conference goers had the opportunity to discuss the benefits of all Landcare groups in the region joining together under one 'umbrella' group, before voting to elect forum members from diverse geographical areas.

Spokesman Rob Belcher said it was important the South East Australia Landcare Forum had representatives from the 41 Landcare groups active in East Gippsland.

"It's the first time such a group has been formed," Rob said.

"We believe the East Gippsland region needed better co-ordination of some of its Landcare activities. The opportunity to develop the South East Australia Landcare Forum came about through discussions with East Gippsland CMA.

"There is a strong partnership between the CMA and the Landcare groups and while the Authority is offering its support in the background, it is up to the Landcare groups to make this forum work.

"The CMA will assist Landcare groups with their activities by offering advice, support, and improved co-ordination between the various groups as they seek funding for projects and other initiatives."

The conference in Bairnsdale included presentations from newly elected Independent Member for Gippsland East, Craig Ingram and one of Landcare's stalwarts, Rob Youl.

East Gippsland CMA (03) 5153 0462



South Gippsland is high on trees





More than 180 sites in South Gippsland are sharing \$260,000 in funding with landcarers adding

approximately \$500,000 in materials and inkind support.

This equates to 110,000 trees planted, nine kilometres of fencing erected, 100 hectares of remnant vegetation protected and close to 100 hectares of farmland restored. With the announcement of a further \$280,000 from the National Heritage Trust for the year 2000, the huge size of this project clearly shows the need for good project management.

With over 30 groups in the South Gippsland Network and 15 of these participating in the Hills To Ocean Project, the need for on-ground and technical support was quickly realised.

Network Co-ordinator, Emma Bennett, and the West Gippsland Catchment Management Authority's South Gippsland Manager, John Turner, took on the challenge. The result was the appointment of Craig Watsford, CMA Supervisor and Grants Officer, who will spend 60% of his time providing support to the project.

South Gippsland is a leading example of the community, through Landcare, working with the West Gippsland CMA and others to achieve improved catchment resources

With partnerships between Landcare networks and other CMAs and funding



CMA staff member planting trees on the Bass River.

from NHT and corporate Australia, the health of our catchment will be the winner.

Keep an eye on the changing landscape of South Gippsland in the new millennium.

West Gippsland CMA (03) 5175 7800

Blueprint for protecting remnant vegetation



The Port Phillip and Westernport region is fortunate to have around 29% of its original native vegetation remaining

which makes a significant contribution to land and water quality and biodiversity conservation.

The Port Phillip Catchment and Land Protection (CaLP) Board is preparing a Regional Vegetation Strategy (RVS), with State Government departments, local government and the community, to assess the importance of remnant stands and prioritise targets for protection and revegetation.

The RVS will bring together an extensive range of data collected over many years on the flora and fauna of the region. Data used in the analysis of priorities will include areas of habitat for threatened species, areas of vegetation supporting migratory bird species, and coastal and wetland vegetation providing important

habitat for Ramsar sites. Priorities for revegetation will also take into consideration the benefits of lowering saline watertables, controlling erosion and improving water quality through stream bank buffer plantings.

The strategy will be used to highlight the need for remnant vegetation management and protection across all land tenure and set revegetation targets. It will also guide investment in vegetation protection, enhancement and revegetation and focus the works of community, business and Government towards priority areas.

Overall the RVS will provide a consistent approach to integrated management of vegetation across both public and private land in the Port Phillip and Westernport region.

CaLP Board (03) 9785 0187

Landcare in the north-east



Representatives of most Landcare groups in the region attended the 1999 North East Landcare Forum at Beechworth in August. This third annual forum organised by local Landcare networks and supported by the North East CMA and local councils, provided a wide range of facilitated workshops. Dr Sharman Stone was the plenary speaker, with Dr Allan Curtis from Charles Sturt University speaking at a workshop on the future of Landcare.

Greening Australia is co-ordinating a range of regional training days for Landcare members in the north-east. A training day on environmental monitoring and evaluation will give participants skills in assessing, measuring and monitoring land management projects. Training days on understanding vegetation types provide skills to understand and recognise vegetation types and ecological classes.

At the time of going to print, the North East CMA was planning another integration workshop in November. This is a meeting of all project managers in the region, including Landcare, NRE and CMA representatives, to ensure that all those managing on-ground works projects are familiar with all other projects underway and to maximise the opportunities for integration.

North East CMA (02) 6055 6133



Country and city co-operate in Project Hindmarsh



On 15 and 16 August over 300 people came together near Nhill, western Victoria, for the Project Hindmarsh Planting Weekend. As well as a great turnout by the local community, about 150 people made the journey from Melbourne to assist in the project. In excess of 22,000 trees were planted over the weekend.

The main aim of the Planting Weekend was to plant trees for Project Hindmarsh, but there was also a terrific social aspect to the occasion with a Saturday night party. The Project Hindmarsh Planting Weekend is an excellent example of how the city and the country can work together to improve and conserve Victoria's natural resources.

Hindmarsh Shire displayed great leadership in bringing the community together for the weekend with representatives of NRE, Wimmera CMA, Greening Australia (Victoria) and others to discuss and plan for this major vegetation management project.

The Hindmarsh Landcare Network was formed by 12 Landcare groups in Hindmarsh Shire. Project Hindmarsh is the name given to a series of projects currently being undertaken by the network with support from the Natural Heritage Trust's Bushcare Program and corporate sponsors. Project Hindmarsh consists of remnant protection fencing and management and revegetation projects on roadsides and private land to create a web of biolinks from the Little Desert National Park to the Big Desert National Park.

Wimmera CMA (03) 5382 1544



And at the end of the day, everyone rested.



Landcare support in Glenelg-Hopkins

Over 75% of Landcare groups in the Glenelg-Hopkins region have responded to a pilot project which offers groups the opportunity to apply for \$300 towards the costs of group administration.

The project recognises the contributions made by Landcare groups and acknowledges lack of administration support as a problem for some groups. Costs that can be covered by administration assistance include photocopying, faxing, postage, general secretarial work, laminating, scanning, GIS maps, computer hire, incorporation costs and insurance costs.

Glenelg-Hopkins CMA helped regional Landcare groups with the Administration

Support Project. Landcare groups, facilitators, service providers and NRE were all involved with the development of the project.

Glenelg-Hopkins CMA Chief Executive Officer, Colin Dunkley, said that this is the first time a project like this has been tried in Victoria.

"Landcare groups really appreciate the support because the funds help cover the administration costs involved with facilitating works and keep communications between volunteer members and between groups moving," said Mr Dunkley.

Glenelg-Hopkins CMA (03) 5571 2526

Helping hand for native fish



Fishladders are being installed on waterways in the Goulburn Broken catchment enabling native fish to move upstream through weirs to breed.

In the Shepparton Irrigation Region (SIR) four vertical-slot fishways (or fishladders) were installed on the Broken Creek this year bringing to seven the number of weirs modified on the creek with another two planned. The creek is a significant breeding site of the Murray cod, now threatened with extinction.

"The fishladders are part of an environmental program that had continued to develop a more targeted approach dealing with wetlands, remnant vegetation and high recharge areas," said Ken Sampson, the SIR Implementation Committee Co-ordinator.

While initiated as part of the drainage program, these works also have significant environmental benefit and are linked with the Goulburn Broken CMA Nutrient Strategy.

A similar fishladder at Lake Benalla is also being constructed. The \$200,000 project will enable native fish to swim upstream from the lake into the Broken River to breed. The river is home to self-sustaining populations of Macquarie perch and Murray cod.

Funding for the projects was provided following a study by NRE identifying major barriers to fish migration throughout the State. The Goulburn Broken CMA has managed all the fishway projects with design and construction undertaken by Goulburn-Murray Water.

Goulburn Broken CMA (03) 5822 2288



Vertical-slot fishway on the Broken Creek.

Catchment plans launched

In the north-central region implementation committees have been appointed for the four primary river catchments - the Avon-Richardson. Avoca, Loddon and Campaspe catchments.

Each committee has developed a draft 'whole of catchment' plan that draws together resource management strategies relating to their particular catchment and describes catchment priorities under the six program areas in the North Central Regional Catchment Strategy. The draft plans also provide a framework for developing future options in line with identified priorities and for managing new and emerging issues.

The six priority program areas for the north-central region are salinity, biodiversity, waterways and water resources, soil health, pest plants and animals and regional development.

The draft plans were released for public comment in September 1999 with all comments to be considered for inclusion in the final plans. A primary role of the four committees will be to implement the whole of catchment plans by enabling the community, agencies, Government, businesses and individuals to manage natural resources in a co-ordinated and effective way.

Final plans incorporating public comment are due to be released in March.

North Central CMA (03) 5448 7124







NCCMA Chair, Drew English (centre) with Campaspe Implementation Committee Chair, Ron Brooks (left) and Loddon Implementation Committee Chair, James Williams (right) at the September launch of the draft Loddon and Campaspe plans.





Natural Heritage Trust Helping Communities Helping Australia

NATURAL HERITAGE TRUST NEWS -

- The announcement of successful 1999/2000 Victorian projects was made on 1 October 1999. Groups who have not been notified of the outcome of their 1999 submission should contact their regional NHT Co-ordinator immediately.
- The call for 2000/2001 has opened, with the closing date for new applications being 25 February 2000.
- Continuing project applications in Victoria will close on 11 February 2000.
- · Guidelines and application forms are available from regional Catchment Management Authorities.
- Groups proposing new projects in 2000/2001 are strongly encouraged to contact their regional NHT Co-ordinator for advice prior to developing project applications.
- Applications not received on or before the closing date will be returned absolutely no late applications will be received.

Hints for better applications:

- Groups should liaise with regional NHT Co-ordinators to ensure projects are strategic and address regional priorities.
- Ensure aims and objectives are clear, meaningful and achievable.
- Applications should focus on meeting the objectives of funding programs as detailed in the guidelines booklet.
- Budgets need to be considered carefully, with each item explained/justified. This is one time when the more information provided, the better!
- Monitoring and evaluation are critical to projects - consider and explain the 'why, how, when and who.' Natural Resource Monitoring Guide is a helpful booklet on this subject and is available at a cost of \$15 from the NRE Information Centre (03) 9637 8325 or seek advice from your regional NHT Co-ordinator.

- The protection of our remaining native grasslands is critical. Groups should seek advice on the most appropriate techniques, particularly for revegetation and regeneration.
- · In developing projects, groups should consult as widely as possible with appropriate organsisations and utilise any technical advice available.

And finally:

If in doubt, seek advice from your regional NHT Co-ordinator. It will save you time and effort, lead to a better project submission and hence improve your project's chances of being funded.

Enquiries: (03) 5430 4471



When the First Fleet arrived at Sydney Cove in 1788, its cargo included five rabbits. A hundred years later rabbits had colonised Australia, bringing irreversible change to the country's ecology.

Tooth & Nail is a beautifully written and wonderfully entertaining history about human reactions to the rabbit. Brian Coman describes everything from 19th century poisoning techniques to destroying rabbit warrens with explosives, from the many weird theories circulating as to how to destroy the rabbit, to Louis Pasteur's attempts to infect Australian rabbits with chicken cholera.

It also tells the story of a Geelong grazier who was one of the first to bring rabbits to Australia.

The book is an indispensable history of how Europeans, through the introduction of a single species, changed Australia forever. It is also a great read and is often very funny.

Many readers will know of Brian Coman. He worked as a research scientist with the Victorian Department of Natural Resources and Environment for 23 years, much of it spent helping landholders wage the war against rabbits.

Tooth & Nail is published by Text, it costs \$24.95 and is available through



most bookshops.

Country Matters: social atlas of rural and regional Australia

This new social atlas provides some revealing insights into the social landscape of rural Australia.

This book makes available for the first time, easy-to-read, map-based information on a range of rural, social and demographic conditions including population, labour force and employment, income, education and health.

Some of the trends and conditions across rural Australia reported in the atlas include:

- the proportion of rural Australians gaining tertiary qualifications has increased since 1991;
- the proportion of women employed in the agriculture industry has increased;
- unemployment rates have declined in many areas since the mid-1990s;
- population has declined across all age groups in many rural and regional areas; and
- rural and regional Australia have comparatively low levels of mean taxable income, particularly in the wheat and sheep zones and the coastal areas of the eastern states (reflecting lower commodity prices).

The atlas will be of assistance to groups putting together grant applications, submissions and proposals. Social data is often difficult to come by. The atlas provides good quotable information on social and demographic trends relevant to rural industries and communities.

Country Matters: social atlas of rural and regional Australia costs \$40.00. Contact the Bureau of Resource Sciences on (02) 6272 4690.

Farm\$mart workshop prompts the question:

Do you remember the curlew?

by Dave Munday, Farm\$mart Project Leader, NW Victoria

During a recent Farm\$mart Series B Natural Resources day, there was some serious questioning about the meaning of sustainability.

Of the ten farmers present, three definitely thought they were sustainable, three were unsure and four thought they weren't.

The discussion led on to what is sustainability, the system in balance, future generations taking on the farm in a good condition and increasing production.

The question "what natural resources are important in relationship to farming?" brought quite a varied response. Answers included soil, water, sun, rain, native vegetation, birds and about 15 other issues. Of these, the priorities were seen to be soil, water (through catchment management) and remnant vegetation.

Participants undertook a self-assessment of their current management and the health of the three priorities.

During discussions on remnant vegetation, one of the group, Geoff, said, "I rate our patch of remnant vegetation as moderate to good".

Questioned as to why he thought this, Geoff replied, "There is still good ground cover and the trees are pretty healthy".

When asked if had he ever taken firewood out of the area, he replied, "Yes of course we have, and we got rid of the rabbit harbour as well".

The explanation I gave on the importance of logs, sticks, understorey and leaf litter led discussion onto some of the small birds that need these items for survival. The group mentioned wrens, thornbills and robins among others.



I suggested that curlews were once common in the woodland areas of the district, but now are not so, and how important the logs, sticks and other ground cover is for them to nest.

Geoff responded, "Now that you mention it, we used to hear the curlews all the time on the farm when I was young".

He was asked when did that change? and replied, "I'm not sure but probably about the time we cleaned all the rubbish up from within the patch and got rid of the rabbits".

The discussion went on for a short time with other participants, then out of blue Geoff joined in.

"Now that I think about it, I did hear some curlews calling last spring and that's the first time for a long time. I haven't had the time to clean up the branches in there for a couple of years, not that I would have made the connection until now," he said.

At the end of the workshop Geoff and I talked about the effect we have on the natural resources and the need to try to maintain a balanced approach. He was intrigued about the relationship with

cleaning up and the curlews not being around and undertook to take more notice of the things that are important to him and weigh up the impacts of his management.

Geoff's action plan at the end of the day reflected the discussions and his insights. His plan included:

- establishing 'filter strips' around the catchment dams on the farm:
- taking a good look at the remnant vegetation patch – maybe fence it off;
- take into account the 'whole picture' before making a decision.

For more information regarding Farm\$mart programs contact Greg Smith on (03) 9207 5564 or Ian Voigt or Dave Munday on (03) 5381 1255.



IN BRIEF

Trees with Love

Trees with Love is a new fundraising program from Landcare Australia which will plant a tree where it



is really needed for a special occasion. The trees can be planted as a gift to someone on a special birthday or anniversary, or as a unique way of remembering a loved one.

People can choose to have their tree planted in the National Landcare Forest in Canberra or in a State grove. A portion of the proceeds from the sale of every tree will go towards Landcare.

For \$29.95 a native tree is planted in a degraded area of your home State and you receive a beautiful card and CD of environmental music. For \$99 a native tree is planted with a personalised message

on a brass plaque in the National Landcare Forest. The same card and CD is sent on your behalf.

For more information about *Trees with Love* call 1800 638 733.

Above Pic: Ita Buttrose is the patron of Trees with Love.

Weed training

Natural Resources and Environment have produced a CD and booklet on preventing the spread of weeds. They are part of a training program that NRE has been running with local government to train contractors how to prevent the spread of weeds.

Leigh Dennis from NRE Geelong says 90% of weed spread is caused by man, a large percentage of this is through the transportation of weed seeds or plant parts on vehicles and machinery.

The training course aims to raise the awareness of machinery operators as to their responsibilities regarding the spread of weeds. It also outlines some methodologies that can be put into place to reduce the likelihood of weed spread by machinery operations.

The course covers weed reproduction, methodology of weed spread, planning works to prevent weed spread, machinery hygiene, remedial action and legal responsibilities.

For more information contact Leigh Dennis on (03) 9637 8392.

Phone in for answers

Do you want to find out about fox or rabbit control measures? Perhaps prickly pear or spear thistle have invaded your property? Where do you go for the information?

NRE's Customer Service Centre now provides a single point of contact for NRE products, services, publications and events and can put you in touch with experts when you need specialist information and advice.

Victorians can access the service from anywhere in the State for the cost of a local call (excluding public and mobile phones). Call 136 186 8am to 8pm, Monday to Friday or e-mail customer.service@nre.vic.gov.au



NDSP supports project on local government and dryland salinity

by Mal Brown

Dryland salinity is a major environmental issue in Australia. Currently about 2.5 million hectares is affected. The potential is for this to increase to more than 15 million hectares.

Dryland salinity affects infrastructure such as roads, fencing and pipes and the important natural assets managed by local government. Dryland salinity costs Australia more than \$100 million per annum from damage to infrastructure alone.

Local government can play a vital role in natural resource management by managing open spaces, maintaining community infrastructure and assets, and controlling local planning and development. But the capacity of Australia's 774 (1995-96) local governments to contribute to the management of dryland salinity varies considerably. From large and complex organisations with large populations and large budgets, to small councils in remote rural areas with small populations, small budgets, yet covering large areas of land.

NDSP is supporting a project to investigate the capacity of local government to contribute to the management of dryland salinity. More effective management of salinity by local government offers considerable savings to the community.

The project will document a range of case studies of Australian local government councils. The case studies cover councils with a comprehensive approach to natural

resource management, councils with innovative programs - including incentive programs, councils working with Landcare, and councils involved in regional co-operation to enhance their action on a catchment scale. The project also involves a survey, a series of forums and a national workshop.

The project is being conducted by a team of consultants in close cooperation with the Murray Darling Association.

The project team is being led by Trevor Budge of the Research Planning Design Group based in Bendigo and is utilising a Reference Group comprising specialist members drawn from all mainland states.

For information contact Trevor Budge, RPD Group, PO Box 2750, Bendigo 3554, Ph: (03) 5441 6552

Julion Land Care The winners from Mildurg West

Mildura West Primary School have won the 1999 North Landcare Education Award for their innovative environmental project at Lock Island.

The students from Mildura West Primary School have the best 'classroom' any child could dream of. They have adopted a small island in the channel of the Murray River and spend much of their school days studying and rehabilitating it.

Lock Island has suffered serious weed infestation and loss of vegetation. It has important historical links to the

city of Mildura. Much illegal liquor was consumed there in Mildura's 'temperance years' during the 1880s.

Mildura West Principal, Richard Wood, says the island has created a focus for the school and the community. "Through caring for the plants and animals of the island we are creating an ethos of caring where caring for the environment and for each other becomes a way of thinking."

The students have planted trees they have propagated from seed, produced brochures for the local community and developed a

rubbish disposal and recycling system.

Richard Wood says the greatest outcome of the Lock Island project has been the pride on the faces of the children. "It has shown the students that they can do something about the environment at a time when doing everything for the environment is out of their reach."

The school is continuing to demonstrate leadership and innovation in environmental education. They are hosting a National Young People's River Health Conference to be held in



Junior Landcare - a step in the right direction

By Tarnya Kruger, NRE Catchment Education Co-ordinator

Junior Landcare in schools and community groups is continuing to grow and there are new and innovative ideas being developed all the time.

Nurturing and enhancing young people's understanding of their environment is an essential step toward a better future – the decision makers of tomorrow!

We've had a terrific response to the Junior Landcare Initiative funding this year. Over half of the groups who applied for funding were new groups. There are now more than 250 groups across Victoria involved with the Junior Landcare Initiative.

A number of the schools have sent in some great photographs of their projects. There has certainly been a terrific community collaboration and we are sure to see links between schools and Landcare groups continue to develop.

For further enquiries about Junior Landcare contact Tarnya Kruger at NRE Creswick on (03) 5345 2200.

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scouts do the job!

The corridor stretches for 16 kilometres from the Penguin Reserve on the west end of the island, meandering through 11 farms, linking up previous group plantings and patches of remnant bush ending at the Koala Conservation Centre and the Oswin Roberts Reserve.

Moragh Mackay, the group's co-ordinator, was happy that the scouts could contribute so much to the project.

"There were over 350 scouts from across the state. We grouped them into teams, gave each team a local bird or animal name, and then set them to work across four sites along the corridor's path," she said.

The most important site was the Kitty Miller Wetlands, a huge area excavated to create artificial wetlands and a trout farm in the late 1960s but never finished. New owners Faye and David Forder saw the importance of the wetlands for bird habitat and set aside many hectares of the land for revegetation and habitat establishment.

"We have made a great start in revegetating an area that has been in desperate need of work for over 30 years - the vision the late Len Lukey had for it but never lived to see," Moragh said.

In addition to the scores of scouts, the Australian Trust for Conservation Volunteers also lent a hand, sending a team of international volunteers to help in the lead up and after the main planting weekend.

"The ATCV had volunteers on exchange from California, New Zealand and New South Wales, who worked alongside landcare group members prior to the weekend preparing ground, digging holes and distributing plants and guards," Moragh said.

"The organisation of such a big event was made all the less stressful with such great helpers," she said.

For more information about the Phillip Island Landcare Group or the Wildlife Corridor Project, contact Moragh or Kirsty on (03) 5952 5403.



Moragh Mackay with a few of the international volunteers at the Kitty Miller site.

The Kitty Miller Wetlands – 30 years late but better than never.



Rabbit Back page ad