Summer 2005

# Victorian SCATCHMENT MANAGEMENT

Restoring our mosslands

Horses and Landcare



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Horses in summer grass by Andrew Chapman.

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Victorian Landcare and Catchment Management is published for the Victorian Landcare community by the Victorian Farmers Federation in partnership with the Department of Sustainability and Environment, Alcoa World Alumina Australia and the Victorian Catchment Management Council.











## Letters

Dear Editors.

I refer to 'A further history of direct seeding,' in Victorian Landcare (Spring 2004). I am not disputing that direct seeding is more cost-effective than planting out tubestock. However, not all of us, whether it be individuals or Landcare groups, have access to such machinery; neither is there access to many areas with any machinery at all.

We have about 3000 trees planted on our property, a number that began as zero some four years ago and is steadily increasing. We have planted them all ourselves, with help from family members, but – horror of horrors, we received fifty percent funding for 400 of these.

Since they were planted as tubestock, and plastic guarded against rabbits, kangaroos and strong winds, should we feel foolish? Should we not have planted any, as direct seeding wasn't readily available to us? Cost effective maybe not, but foolish? I don't think so.

S. Roxburgh Miners Rest

# From the editors

We hope you enjoy this issue of Victorian Landcare – hopefully while having a well-earned summer break with family and friends.

In this issue you'll find some interesting stories. We look at the challenge of keeping horse pastures healthy, how the humble Sugar Gum is being recast as fashionable furniture timber as well as many updates from Landcare groups across the State.

One of the great things about editing this magazine is getting to read all of your Landcare group and network newsletters. Good communication is vital to the future of Landcare and the quantity and quality of these newsletters is impressive — especially considering that many of them are put together by volunteers on the kitchen table.

Please keep your newsletters coming. If we are not currently receiving your newsletter

consider putting us on the mailing list as we often follow up stories that we think may have a broader interest.

#### Farewell, Mark Costello

Many people will be sorry to learn that Mark Costello, DSE's Statewide Landcare Co-ordinator based in Bendigo, has recently resigned his position.

Mark has been with Landcare in head office and the regions for many years and his enthusiasm and commitment have been noticed by all who have worked with him.

Mark was responsible for the very successful Victorian Landcare Forum held last year in Bendigo and Melbourne. He had a vision for Landcare as a true grass-roots community organisation and lobbied tirelessly for resources and support.

Keen to have a break from the demands of the public service, Mark is planning



Mark Costello has championed Landcare during his time as Victoria's Statewide Landcare Co-ordinator.

to travel overseas and also sees some study on the horizon. We wish him well with all of his future endeavours.

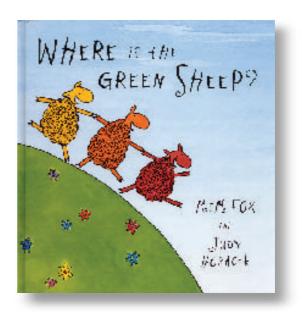
Carrie Tiffany and Joanne Green

#### **Best letter**

We received several brief letters for this issue. An unidentified correspondent from the Gannawarra Shire Council area has raised the issue of cats and the environment. Urban people bringing their domestic cats to rural properties are raising the ire of locals who consider them as damaging to the environment as feral cats. If you have anything to share on this subject please feel free to write a letter or contribute an article.

Also one of our readers is concerned about tree guards. She heard some discussion at the Elmore Field Days last year on the problems with tree guards 'cooking' seedlings and young plants over the summer. Victorian Landcare is not in a position to recommend one type of tree guard over another, but our readers are welcome to share their knowledge on this subject.

The prize for the best letter in this issue goes to S. Roxburgh of Miners Rest. A copy of Mem Fox's latest children's book, *Where is the Green Sheep*? will be sent out shortly. A new book is now up for grabs so send your letters to Carrie Tiffany (address on page 2) by Friday 18 February 2005. Letters must include a name, address and telephone number and be less than 300 words. Letters may be edited for clarity and length.



# Greenfleet seeks land for trees



Scouts provide the people power for Murray Darling Rescue, Greenfleet's largest tree-planting project.

Green*fleet* Australia is seeking sites across Victoria that landholders have earmarked for revegetation.

According to Greenfleet forester Jackie Waring, a growing number of Victorian organisations are subscribing to the program and Greenfleet is keen to identify additional sites.

"We are looking for ten hectares or more on public or private land for large-scale plantings next year," she said.

Green*fleet* is a Victorian-based organisation with a national program to reduce the impact of transport on the environment. So far, over 1.7 million trees have been planted on behalf of individual motorists and fleets to help neutralise greenhouse gas emissions (CO<sup>2</sup>) from vehicles.

On suitable sites Greenfleet provides the trees as well as the labour and equipment to plant them. Greenfleet enters into a carbon agreement with the landholder, which specifies that the trees will not be harvested and that Greenfleet maintains the right to count the carbon soaked up by those trees during their lifetime – and so assure that forest sinks are established on behalf of motorists.

According to Greenfleet, transport is Australia's fastest-growing source of greenhouse emissions, the primary cause of climate change and global warming.

"In addition to absorbing greenhouse gases, the forests also help to reduce salinity and soil erosion, and provide wildlife habitat for native species," Jackie Waring said.

If you know of land that might be suitable please contact Green*fleet* on 5664 2220 or email jackie@greenfleet.com.au

#### How Greenfleet works

For \$40 a year (tax deductible) Greenfleet plants 17 native trees on the motorist's behalf. Over their lifetime, those trees will soak up the greenhouse emissions that the average car produces in one year (based on 4.3 tonnes of CO<sup>2</sup>).

Individual motorists and organisations are invited to subscribe to Greenfleet's program – for more information go to www.greenfleet.com.au



# Gorse in the spotlight at Purnim





#### By Keith Davis

Controlling gorse is a challenging exercise, but the Moyne Weed Eradication Network has responded with an integrated program of gorse control works in conjunction with DPI around the Warrnambool area.

To highlight the best management practices for integrated control of gorse the Moyne Weed Eradication Network held a Gorse Control Field Day at Purnim, north of Warrnambool.

The event was well attended with around 40 people including local landholders, CFA brigade members, Landcare groups, Moyne Shire, VicRoads and TAFE Natural Resource Management students coming along.

Ben Foster, Regional Manager for Dow Agro Sciences, gave a talk on the different chemical treatment trials that were set up especially for the field day. There was a demonstration of mechanical control using an excavator with grab attachment, and information on chemical treatment methods and costs from local contractors.

Dave Warne from Greening Australia gave a presentation on planning integrated gorse and weed control to get the best results for revegetation projects.

Tania Parker, Glenelg Hopkins CMA Lower Hopkins Basin Project Coordinator, outlined opportunities for revegetation funding support for landholders following an integrated program of gorse control.



Mechanical options for gorse control are demonstrated at the Purnim field day.

DPI Catchment Officer Mark Doueal said the field day was an excellent forum to learn about the gorse problem.

"People were able to work out the best options for their properties and to think about how the different tools – such as spraying and mechanical removal – can be used together.

"Gorse is not a once-a-year job, it is something landholders need a strategy for over several years."

The Moyne Weed Eradication Network is determined to continue its work of tackling the prickly problem of gorse head on. Further control works are planned for the Lower Hopkins area in the months ahead.

### Mt William wins

### battle of the rabbits



#### By John Robinson

In 1996 an 11-square-kilometre area near Mt William, east of Lancefield in the Upper Maribyrnong Catchment, was identified as being one of the worst rabbit plague areas in Australia.

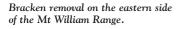
Local landholders succeeded in having the area chosen as a Rabbit Calicivirus Disease (RCD) virus release point and obtained initial funding for a three-year rabbit management project.

Now, after more than eight years, the rabbit count is down from an average of over 77 in 1996 (with over 120 recorded in one half-kilometre section) to less than two rabbits per spotlight kilometre.

According to John Blamey, Facilitator of the Mt William Rabbit Action Group, the initial spotlight counts were like looking at a moving sea of grey fur.

"There was embarrassment amongst some farmers who got lost on their own land when fog rolled in during one of the spotlight counts," John said.

The Mt William Rabbit Action Group's strategy has been to create a rabbit-hostile environment. This has been achieved by







Gary Talbot guides the bulldozer.

using a combination of strategies including controlled release of RCD, warren ripping, baiting, fumigation, harbour removal and shooting co-operatively across all the properties in the control area.

The rabbit-hostile environment that was established in the paddocks of landholders caused an increase in rabbits along the roadsides. To tackle this problem roadside surface harbour was targeted through blackberry spraying and removal.

Contractors with heavy machinery were brought in to rip the roadside warrens.

John Blamey said that for the project to be

successful it had to be a community effort, with a high level of co-operation from all landholders within the control area.

"Some of the locals estimate that their holding capacity has tripled and there has been an observable increase in natural regeneration of indigenous flora.

"Landholders in this area are now better positioned to keep rabbit numbers low than at any time since myxo was introduced, all it needs is vigilance and persistence."

For further information contact John Robinson on 5429 9629.

# Strawberry growers embrace Landcare

Catchment Management

By Ian Linley

Around a third of Australia's strawberries are produced in Victoria's Port Phillip and Westernport CMA region. While not a traditional 'Landcare group' the industry has recently embraced Landcare principles in developing productive and sustainable farming practices.

The optimum growing conditions for strawberries require intensive use of soil, water and nutrients. The potential for soil loss and nutrient runoff is high and the industry, with the support of the Port Phillip and Westernport CMA, was keen to address these issues.

Best management practices such as deep ripping, green manure cropping, grassing between rows, drip irrigation and soil and sap testing are implemented by many strawberry producers, but the Victorian Strawberry Growers Association who are members of the VFF, Victorian Strawberry Industry Development Committee and

DPI identified that practices that manage water once it has left the cropped area were less widely implemented.

Using whole farm planning processes common to Landcarers in many other farming industries, action plans for onground works are under development on ten pilot properties. Information from the pilot program will be distributed throughout the strawberry industry via farm walks, published property management and action plans, industry fact sheets and a strawberry industry field day.

Strawberry growers participating in the project have indicated that the activities undertaken will complement their QA processes and have opened up opportunities for activities such as use of aquatic plant species in drainage lines and incorporating native vegetation to mop up wet areas and provide wind protection and spray drift control.

The project was supported by National Landcare Program funding. In the next phase the strawberry industry is looking to implement and demonstrate aspects of the action plans and also to recruit new growers into the action planning stage.

For further information contact Ian Linley on 0428 330 122.

DPI Project Officer Mark Hincksman with grower Eddie Di Pietro examining aerial photos and action plans.



A strawberry farm at Yellingbo showing best practice use of grasses to better manage runoff and riparian revegetation for habitat and crop production benefits.



## **SMARTimbers**

#### By Andrew Lang

success with

A recent field day near Lismore in the Western District saw over 80 people investigating the value-adding activities of the three-year-old SMARTimbers co-operative.

SMARTimbers (standing for Sustainably Managed Australian Regional Timbers) has been focusing on adding value to plantation timber. The field day showed how well the models of management, harvesting and value adding have developed towards a full-scale commercial process.

As well as harvesting on members' properties, the SMARTimbers co-operative is currently buying good Sugar Gum mill logs from firewood cutters for about \$75 per tonne. On display at the field day were some of the value-added product, aspects of its current activities with member landowners and the flow-on results of new woodlot plantings.

#### Titanga plantations impress

The field day was held at Titanga, thought to be the site of the first extensive direct

Sugar Gum plantations in Victoria. The trees along Titanga's Hamilton Highway frontage were sown in 1888, as were the trees harvested from plantations at the site in 2003 and 2004.

Sugar Gum was originally sown as part of a mix of over 20 species. Within a few years the landowners involved were impressed by the rapid growth and dominance of the South Australian native. By 1904 they were planting Sugar Gum separate to the mix and soon after they were planting it exclusively.

Titanga is on the way to becoming a good example of integrated farm forestry. The property has about 15% tree cover, with 50 hectares of recent plantings in strategically sited sawlog woodlots of three to six hectares, laid out for easier harvest and mustering.

The profits from the first two harvests have confirmed the economic validity of the new plantings, with better planning and management also being applied to the concurrent annual Landcare plantings. The management plan for the property is

the template for the development of other co-operative members' farm forestry management plans.

#### Stock levels increasing

The SMARTimbers co-operative, its members and allied mills have now built up a stock level of about 200 tonnes of milled Sugar Gum, mostly in sizes suited to decking and flooring, and at all points between green sawn and kiln dried. The co-operative is also selling the timber as exterior and interior cladding, boardwalk decking, for cabinetry, stairtreads, overlay flooring, bench tops and as veneer.

The impact of this commercialising work over the last five years on the general profile of the species has been dramatic. Six years ago Sugar Gum was not on any recommended species list, now it is the most planted species for 2004 in the Plantations for Greenhouse scheme.

Plantations for Greenhouse is a cost share between farmers and the State Government, designed to encourage production of sawlogs on cleared agricultural land. About 500 hectares a year of plantations have been established under this scheme since 2002 in western Victoria. Around 10% of this has been established in the Lismore area and almost all of it is Sugar Gum.

Graeme Anderson, Plantations for Greenhouse Manager with DPI at Geelong, says that applications for this year's scheme saw Sugar Gum leading the two main commercial timber species: Radiata Pine and Tasmanian Bluegum.

#### Multiple benefits

John Reed, SMARTimbers field officer, says that the Titanga Plantations for





150 tonnes of firewood from the 2004 harvest waiting to be sold.

Greenhouse projects have been strategically located to act as off-shears and lambing havens as well as for producing good returns from thinning and final harvest.

"Final harvest will be in 30-35 years. With best practice management and timely thinning, some other species could be harvested in as little as 25 years. Soils and rainfall obviously play an important role."

According to John Reed, SMARTimbers is galvanising the farm forestry movement in Australia by lifting members' net returns five to tenfold – toward \$30,000 net per hectare harvested.

"At the same time hollow-bearing trees and the best form small diameter trees are being retained to provide habitat, shade and a source of seed for improving regeneration of the site.

Coppice growth on the 2003 harvest site and retained

Coppice growth on the 2003 harvest site and retained habitat hollow bearing trees on the 2004 harvest site.

"It is this value adding and high net return that is largely responsible for the interest in Sugar Gum. Without proving the timber's quality and value to the log producer, it would still not be on anyone's list," he says.

SMARTimbers is keen to apply their models to developing the marketing

for other sustainably produced native species with commercial potential and to develop better links with other groups interested in following the same path.

For further information contact John Reed on 1300 360 368, or visit the website at www.smartimbers.com.au



The bushfires that swept over the Victorian high country in January 2003 burnt much of the mosslands on the Bogong High Plains, putting at risk the vast amount of high-quality water produced by the largest area of alpine country in Victoria.

This mossland on the Bogong High Plains was burnt in the 1939 fires and subsequently fenced off from cattle. When this photograph was taken in 1982 its condition had improved remarkably with wetland shrubs and sphagnum moss dominating and many small ponds. This is what mossland restoration aims to achieve.



The loss of water and habitat also put many very rare plants and animals at risk. Plants such as the moss *Bartramia bogongia* and animals such as the Alpine Water Skink, which are confined to the very highest alpine mosslands.

Ecologists who have been studying the mosslands for many years believe that the mosslands may take a century or more to recover to their original state – a full cover of wetland shrubs, sedges and mosses, with enclosed pools and streams. Even now the burnt mosslands have hardly begun to recover. About one-third of their area is still bare peat and rapid water run-off and stream-bank erosion are continuing.

Fortunately, help for the mosslands is at hand. Since 1992 a volunteer team of ecologists, students and local enthusiasts has been developing techniques for restoring degraded alpine mosslands.

The Bogong High Plains Restoration Alliance, based at La Trobe University, honed its skills on a long-term project to re-establish a mossland destroyed during the construction of the Kiewa hydroelectric scheme.

Careful re-establishment of the topography, revegetation with plants grown from seed and cuttings obtained close to the site, and stream calming weirs have transformed the pit. The team is confident that it will eventually become a fully functioning mossland once more.

On the Wellington Plains in the southern part of the Victorian Alps the team has been recreating pools and revegetating streams in a heavily overgrazed valley burnt in the Caledonia bushfire in 1998.

With funds from the World Wide Fund for Nature and support from Parks Victoria, the team propagated and planted a suite of species selected for their ability to repair the damage and recolonise the expanding wetland. An essential factor in the recovery of this site was the total exclusion of livestock, which trample



Ecologist Henrik Wahren inspects a burnt and badly trampled mossland on the Wellington Plains after the 1998 Caledonia fire. Livestock were excluded soon after the fire and the Alliance has a long-term project to restore this mossland.

mosslands and trigger degrading processes.

The team is now focusing on the burnt mosslands on the Bogong High Plains, with the help of grants from the Natural Heritage Trust and Parks Victoria.

The techniques developed over the last 13 years will be used to rescue the mosslands from their perilous condition so that they once again become stable systems, providing critical habitat and high-quality water. Protection from livestock, stream calming and targeted species propagation and planting will be major aspects of this work.

For further information contact Anne-Marie Tenni on 9482 2508 or email the Alliance at alpine.ecology@latrobe.edu.au

### Visit the

### Woodland Web

Are you looking for information about the native grasslands and woodlands of southern Australia and the animals and plants that live in them?

The Woodland Web is a handy new website designed by researchers from Charles Sturt University to store and distribute articles describing recent research on the ecology, conservation, management and restoration of native woodlands and grasslands.

Dr Ian Lunt from the university's School of Environmental Science and Information at Thurgoona said the site is a good resource for the general community and will be particularly useful for school assignments and people involved in Landcare and bush regeneration.

The website, which is linked to the university's highly successful Virtual Herbarium, contains articles on a

variety of topics including native grasslands, protecting woodland remnants, restoring kangaroo grass understorey, mistletoe and rare plants.

All articles were originally written for community newsletters, conference proceedings and other publications.

"Many of the articles went into publications with a limited circulation and as such had a limited lifespan," Dr Lunt said.

"By collating them all on the web, the information they contain is now available to a much broader audience and for a much longer time."

The articles are written in simple language with links to detailed scientific results.

Visit the Woodland Web at http://www.csu.edu.au/herbarium/woodlandweb/

The Woodland Web provides good, clear information on native woodlands





Given the nature of horse grazing it is not surprising that pasture management problems emerged when man first began to confine horses. These problems have increased as horses are kept in an intensified manner both for profit and pleasure.

Horses are browsers. In nature horses tend to select grasses, clovers and herbs and then move to new areas. They can travel over five kilometres a day and sometimes never return to the same area to graze. Horses prefer not to graze areas soiled by manure. This self-imposed lax grazing enables them to avoid manure-contaminated pasture that minimises their parasite burdens.

When small holdings are heavily stocked or horses are kept on very small blocks, the balance of pasture species will change due to the selective grazing habits of horses. These areas will grow little more than weeds if the pasture is not spelled, fertilised and renovated regularly.

#### Pasture selection and quantity

Horses spend between 16 and 18 hours a day grazing. Pasture selection is based on smell, touch and taste. Smell is the most important and is critical in determining the palatability of pasture. The smell and avoidance of pasture soiled by manure causes horse-sick pastures.

Horses tend to defecate in the same area. In contrast, other animals such as cattle drop their dung haphazardly throughout the grazing process.

Manure and, to a lesser extent, urine affect pasture composition by directly increasing growth (transfer of nutrients) and by the rejection of pasture around manure by horses. The pasture around

manure therefore grows rapidly due to increased nutrients and a lack of grazing. These areas quickly become tall and rank and are further avoided. Paddocks develop a pattern of tall undergrazed areas (roughs) and short overgrazed areas (lawns) – frequently described as being horse-sick.

Horses break up the pasture sward and expose bare ground through overgrazing and exercise. Galloping horses can damage the soil with their hooves and cause soil compaction, making conditions more favourable for weeds. Any exposure of bare ground provides an opportunity for weeds to enter and spread in a pasture.

#### Managing horse pastures

Manure management is important in the prevention of horse-sick pastures. Manure should be collected every 24 hours.

## and Landcare

#### By Mal Brown

Pasture harrowing – trailing an implement to spread manure evenly across a paddock and to desiccate parasite larvae – should only be done in hot weather after rain.

Rotational grazing (when grazing is followed by a period of rest) can reduce the rate by which a paddock becomes horse-sick. The length of this rest is normally determined by the growth rate of pasture (two weeks grazing and six weeks rest is a good general rule). Cross or mixed grazing with sheep and cattle offers advantages for pasture and hygiene management.

Pasture management can also include slashing to remove poor quality clumps of pasture, which recover and grow pasture of improved quality that is more palatable to horses. The aim for all horse pastures is to maintain an even ground cover ranging between 5 and 12 centimetres throughout the year.

#### Access to water

Horses require fresh, clean water at all times. Horses are known to refuse to drink substandard water. Dam water is often not clean enough, especially in dry periods when algae can form. It is better to fence off a dam and reticulate the water than allow access. Fencing off a dam also allows vegetation to grow which helps to filter the water.



#### Carrying capacity

The carrying capacity of a pasture depends on the soil type, the composition of the pasture and its fertiliser and grazing management, as well as water management if the pasture is irrigated. Well-managed irrigated pastures can carry

between 20 and 40 dry sheep equivalents per hectare over summer. That is, 20 to 40 wethers or two to four horses can be carried on each hectare without hand feeding. With hand feeding, the stocking rate can be doubled.

Animal equivalents for calculating stocking rates

Type of livestock	Weight (kg) and animal type	Dry sheep equivalent
Sheep	50 kg Wether, ewe	1.0
	40 – 45 kg Lambing ewe (ewe and lamb)	1.5
	75 kg Ram	1.5
Horses	450 kg Light	10.0
	1000 kg Draught	20.0
	250 kg Pony	5.0

(Source: Stocking Rate Guidelines for Rural Small Holdings. Agriculture WA, 2000)

#### Horses and weeds

Horses are fussy eaters and without proper management most paddocks end up having a fairly high weed burden. Although this may look unsightly, a paddock with lots of weeds is not necessarily dangerous to horses. Most of the time they will ignore the weeds, particularly if there is plenty of grass. So while the paddock next door that has sheep in it may look better, remember the sheep are eating the weeds as well.

Some weed species are particularly noxious if a horse does eat them. These include Paterson's Curse, St John's Wort and young Bathurst burrs.

If noxious plants are present on your property you should either remove them or exclude the horse's access to the plants. Weeds can be managed by spot spraying with the appropriate herbicide and/or hand hoeing. Sprinkling pasture seed in the resulting vacant areas and lightly raking to provide a seed bed will help to exclude any further weed growth.

#### Recommended reading:

- Small Horse Properties in Australia and New Zealand; Sustainable Management of Horses and Land, Jane Myers et al. (CSIRO Publishing due for release in 2005)
- Small Farm: Pastures for horses, AG1058, Angela Avery, Rutherglen, 2003 available from: http://www.dpi.vic.gov.au
- Horses and bushfires, Patricia Ellis and Hilary Pope, DPI, Attwood available from: http://www.horsecouncil.org.au/bushfires.pdf



# Kids teach kids at Wimmera

#### By Melissa Pouliot

The delighted giggles and cheers of more than 350 grade five and six students resounded across Dimboola's picturesque recreation reserve at the recent inaugural Wimmera Kids Conference – A Kids View of the Environment.

Wimmera Catchment Management Authority welcomed the 14 schools in near-perfect conditions to the conference, made possible by a Young Wimmera Landcarers Fund and the State Government's Second Generation Landcare Grant Program.

The giggles continued with leading Australian environmental performers Vox Bandicoot who welcomed 'all ladles and jelly spoons' to Dimboola for the hands-on learning experience.

#### Drama at Dimboola

School groups from Warracknabeal, Jeparit, Horsham, Dimboola, Edenhope, Glenorchy, Laharum, Goroke, Beulah and Kaniva performed their own take on the Wimmera environment and took part in an exciting workshop program.

Looking after the Wimmera River, protecting red-tailed black cockatoos and growing canola were among performances that struck a chord among the group.

"I liked the water thing from Glenorchy," Lauren Smith from Goroke College said of Glenorchy Primary School's play about looking after the Wimmera River.

"The Edenhope act about the black cockatoos was cool," Torri Moore, also of Goroke, said.

Ian McBurney from Melbourne-based entertainment duo Vox Bandicoot runs through the crowd of excited children.

## conference



Ben Nash from Kaniva Primary School was impressed with a performance by Wallup Mara Traditional Dancing Group and Kellie Becker from Horsham West Primary School said she learnt 'heaps' about keeping the environment clean and helping the environment.

#### Young people and Landcare

The Kids Conference was supported by the Young Wimmera Landcarers Fund, which Wimmera CMA launched in March 2003. The idea behind the fund, which has attracted support from the Norman Wettenhall Foundation, is to provide increased opportunities for young people in Landcare and environmental activities.

The conference program was busy and diverse. Afternoon workshops included a bush sense skills workshop that encouraged pupils to use their senses to identify clues about different plants and

animals, a bush profile activity showing the importance of the many layers in the bush to local birds, mammals and reptiles, a waste-wise session and a look at native fish and their habitat.

Dave Nicholls from Glenelg-Hopkins CMA brought a collection of wetland plant and animal specimens including platypuses, water birds, water rats and birds of prey to discuss different aspects of wetlands such as their value to food chains, river health and threats facing them. Wimmera CMA staff also led sessions on water bugs, tree planting, the Wimmera River, bird watching, dot-painting and Koori culture.

#### Future looks good

Wimmera CMA board chairman Jo Bourke said it was an inspiration to be among the dynamic group of young people for the day.

Horsham West Primary School grade five students Mykel Dwan and Stephanie Meyer have a laugh with 'Compost' – Vox Bandicoot's Frank Ryan.





Dave Nicholls from Glenelg-Hopkins CMA running the wetlands workshop.

"These young people are the future caretakers of our precious environment and it's fantastic to see such enthusiasm on such a grand scale," she said.

Jo Bourke praised organiser Angela Ward and other Wimmera CMA staff for their hard work in staging the event.

"Wimmera CMA is thrilled to be able to bring all these children together with the focus on kids teaching kids. We have been planning this for almost 12 months and it's an event that we're keen to continue in future years."

## Save a river for a song

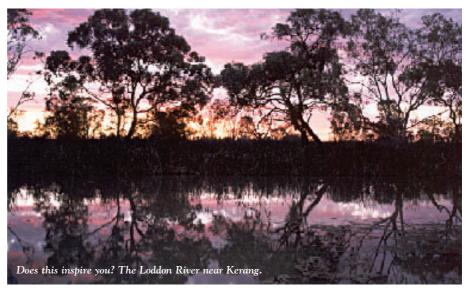
By Sandra Volk

While the North Central CMA is working to restore the health of the Loddon River, the community is being asked to raise the roof in a musical celebration of the value of the river and the efforts to improve its health.

Do you have a creative flair and a river health story to tell? If so, you are invited to participate in the inaugural Guildford Green Guitar Songwriting competition. Up for grabs is the environmentally prestigious Green Guitar award and \$1000.

The Green Guitar award will be presented to the artist(s) who creates a song that best shares a message about river health with a focus on the Loddon River – any part of its winding path from Glenlyon to Swan Hill.

Song entries will be judged upon the appeal of the sound, the inclusion of local content and the feel for the issue. Songwriters are encouraged to use local



place names, include their future visions, refer to the past, create stories about our country and our journey to today.

Entries should be submitted by 1 February

2005 to PO Box 473, Guildford 3451 (no entry fee applies).

For further information contact Penny Larkins on 5473 4158.

Wooragee Landcare Group is working alongside Parks Victoria and scientists from DSE to track the rare Spot-tailed Quoll in the Chiltern-Mt Pilot National Park.

The last recorded sighting of Spot-tailed Quoll in the park occurred in 2001, although a scat from a quoll was identified in August 2002.

Since then the 2003 Eldorado fire burnt the park, severely damaging the habitat of many species.

Andrew Murray demonstrates hair tubes at a Wooragee Landcare Group training day.



## Wooragee group goes quoll hunting

The Wooragee Landcare Group has volunteered to conduct hair tube surveys of the National Park and hopefully detect the animal's presence.

Andrew Murray, convenor of the South East Forests Spot-tailed Quoll Working Group, was invited to talk to volunteers from Wooragee Landcare Group and in collaboration with Jerry Alexander, from DSE, members were trained to search for quoll habitats.

The Landcare group members have laid out a series of hair tubes along nine of the major rocky outcrop complexes. These tubes attract animals with bait consisting of sardines, flour and tuna oil.

Double-sided tape on the walls of the tube catch hair from any curious small animal.

According to Ray Henderson, President of the Wooragee Landcare Group, the hair tubes were left out for a couple of weeks and have now been retrieved and sent off for analysis.

"We will be using fauna identification expert Barbara Triggs to analyse the hair samples. We are really looking forward to getting the results. It would be wonderful to also find out if quolls have survived the effects of the fire."

Brian Pritchard, Ranger-in-charge at Beechworth, said that the future of the Spot-tailed Quoll in the park is uncertain.

"Although there is evidence of kangaroos, wallabies and wombats returning, there isn't enough information at the moment to determine if the quolls and other smaller marsupials have survived in the park," he said.

## Women's Trust launches Watermark Australia

The Victorian Women's Trust has recently launched an ambitious and exciting national project called Watermark Australia.

Watermark Australia aims to bring together thousands of people in a farreaching and close examination of the water fundamentals in this the driest inhabited continent on earth.

#### Creating momentum for change

Mary Crooks, Executive Director of the Victorian Women's Trust, believes that as a nation we lack effective national processes that encourage public debate, ownership of issues and the resolution of important national problems.

"Party politics dominate, usually in an adversarial climate," she said.

"Much needed, broad public debates rarely get a start, let alone a proper grounding in the issues and the search for solutions. Water is one of these. The involvement and inclusion of people nationally and at the grass-roots level will make all the difference."

Watermark Australia is based on the highly successful Purple Sage model initiated by the Victorian Women's Trust in the late nineties across Victoria. During that time around 6000 people gathered in small groups in their local communities to discuss and develop responses to issues of concern. Many participants in the Purple Sage project identified water as the main environmental concern.

Watermark Australia's objective is to create national momentum that changes the way Australians think and act about water.



Watermark Australia was launched at the Alphington wetlands on the Yarra, just seven kilometres from the centre of Melbourne.

The project is scheduled to run for up to 18 months and aims to build a base of 15,000 group leaders who will convene regular meetings in their neighbourhoods, communities or regions.

#### Water Charter

The output from all local discussions will be processed and integrated with the expertise of professional, scientific and By Liz McAloon



academic experts, culminating in a Water Charter. This will be a practical document that captures all the scope for actions from the year-long learning and the deliberations of those involved.

A number of companies and public sector organisations have already joined the project and are promoting it widely throughout their customer bases as well as encouraging staff to run their own Watermark Australia Groups.

City West Water, South East Water, Yarra Valley Water, Western Water, Museum Victoria, DSE, Foundation for Rural and Regional Renewal, The Adidem Group (The Body Shop and Accessorise), Plan Book Travel and Futureye are all involved.

Information sessions are underway to introduce the project across Victoria. To find out about the sessions, or how to become a group convenor contact Watermark on 9642 0422 or go to the website watermarkaustralia.org.au

The Victorian Women's Trust is an independent, not-for-profit organisation. Since its establishment in 1985, the Trust has worked to improve conditions for women, advocating on key issues and fostering networks for the exchange of skills, ideas and information.

## Good news

### for Good Neighbour



The Good Neighbour Program was established in the early 1990s to provide Government with a strategic approach to pest management on public land; in particular, along the private land boundary.

DSE manages the Good Neighbour Program to address damage caused to private land by noxious weeds and pest animals that originate on public land.

The Good Neighbour Program provides the basis for all pest managers to work together to develop and implement agreed long-term, effective, safe, humane and integrated management processes that protect and improve Victoria's biodiversity, natural values and productive capacity of both public and private land across the State.

#### Hazards removed at Chewton

The Good Neighbour Program has achieved a great deal since the early 1990s. One of the recent success stories is the Forest Creek Joint Hazard Removal Project in the north-west.

The Forest Creek Project was a joint project between Parks Victoria, DSE and the Golden Point Landcare Group. The aim of the project was to eliminate the fire hazard (fuel loads) in the area, control noxious weeds and reduce harbour for rabbits and foxes.

Weeds were a particular problem with a wide range of species present including blackberry, gorse, spiny rush, cape broom, pampas grass, willows, hawthorns, tree of heaven, elm suckers and periwinkle.

The project got underway early in 2004 when a 12-tonne excavator with a mower head attachment was hired. Weed regrowth was sprayed and slashed and indigenous trees and shrubs were planted.



Good Neighbour Program blackberry control on river frontage at Porepunkah.

The 30-hectare area has now been cleared of all noxious weeds which has reduced the fuel accumulation and removed harbour for pest animals.

The project has enhanced the environmental quality, aesthetic values and recreation use of the area and gained a positive response from the local community and neighbours. Residents have commented on how pleasing it is to be able to walk down to the creek's edge again.

Follow up work will continue on the site for the next three years.

#### Blackberry success in the north-east

A successful Good Neighbour Program blackberry control project has been carried out in the north-east. Implemented by the DPI and endorsed by the local CMA, the project covered an area of about 14,000 hectares and included more than 100 landholders. An extension person was employed to identify and map blackberry infestations across the area. Landholders were enthusiastic in their approach, developing individual work plans to strategically manage blackberry control on their land.

The project area included public land managed by Forests, Crown Land Management, Parks Victoria, Murrindindi Shire and Goulburn Murray Water.

Following consultation all of the parties worked together on a co-ordinated control program.

The project has been very successful and demonstrates the benefits of partnerships across agencies managing public land and effective community participation of private landholders.

For further information about the Good Neighbour Program contact the Catchment Management Officer at your local DSE/DPI office.

### Will Rabbit Free

#### benefit our native animals?





The Rabbit Free program has been immensely successful at reducing rabbit numbers in the north-east, with 27 properties now accredited as Rabbit Free.

The benefits of reducing rabbit infestations are well known; increased production, reduced erosion and salinity, improved soil and water condition and increased recruitment of both native vegetation and pasture.

It has also been assumed that native animals must be benefiting from reduced rabbit numbers, but this has not been well documented.

A fauna survey was recently conducted on accredited Rabbit Free properties between Springhurst and Eldorado in north-east Victoria to provide base data on native animal activity in these areas.

The survey was a joint project between DPI, the Springhurst Byawatha Hills Landcare Group, private landholders and LaTrobe University student Craig Hamilton.

Alby and Colleen McIntosh from the Springhurst Byawatha Hills Landcare Group were a driving force behind the Rabbit Free campaign in the region and were also involved in the survey.

Craig Hamilton said that Alby McIntosh has been inspirational in the local area with his work on rabbits and weeds.

"Alby has turned his property around. The transformation is incredible and he has encouraged many other people to get involved."

The survey was carried out on Alby McIntosh's property and two other properties in the area. Techniques involved using hair tubes for hair analysis, spotlighting and scat identification.

Transects were taken over five different sites on both Rabbit Free and non-Rabbit Free properties with varying native tree and vegetation cover.

The survey was designed to create base data for ongoing surveys that will help document the progress of the Rabbit Free properties in regards to the re-colonisation of native animals.

The survey confirmed that there were no rabbits on the Rabbit Free properties, while some remained on the non-Rabbit Free properties. Native fauna was distributed over both the Rabbit Free and non-Rabbit Free properties without showing a clear pattern.

The results could be due to the drought

having an adverse effect on the distribution of native animals. The regeneration of native vegetation could also take some time and therefore the re-colonisation of native fauna into these areas may be delayed.

It is hoped that subsequent surveys will show that once the rabbits have been removed and the weeds controlled native fauna will move back into the available space.

Craig Hamilton said he learned a great deal from doing the survey and working with the local landholders.

"I realise now that rabbit and weed control takes an enormous amount of hard work and perseverance," he said.

Alby McIntosh helps Craig Hamilton set a hair tube as part of the Byawatha fauna recovery project.



## Recognition



## for North Central's environmental achievers

By Sandra Volk

Environmental achievers come in all shapes and sizes — landholders who use their own resources to improve the health of their farms, schools that introduce environmental initiatives into their curriculum, individuals who spend their free time planting trees, businesses who voluntarily introduce practices to reduce their impact on the environment.

They often expect little in return but if you ask them what they would like to receive, they often answer 'just some recognition'.

In response to the enormous community contribution to natural resource management in Victoria's North Central region, the Government and the community have been working together on an event to celebrate our environmental achievers.

The North Central CMA, Landcare Victoria, National Action Plan for Salinity and Water Quality, City of Greater Bendigo, DPI, DSE, Coliban Water, Goulburn-Murray Water, Parks Victoria, EPA Victoria, Loddon Murray Land and Water Management Strategy, North Central Waterwatch and Loddon Murray Community Leadership Program each provided a representative on the event organising committee.

The committee agreed that a strong community focus was essential and community members were asked to help identify the many important voluntary – and often unsung – environmental efforts in the region through a nomination process.

The celebration was held at Bendigo Town Hall last August with 90 community members, groups and organisations being recognised for their voluntary efforts to improve the environment.

Over 300 people attended the event and listened to an inspiring keynote address by Amos Brandeis from the Alexander River Restoration Project in Israel and the winner of last year's International Riverprize.

Amos Brandeis put the environmental challenges faced in this region into perspective as he described the Alexander River in Israel as a small stream with big problems. The river had been used as a sewer by the local community but has now been transformed into a picture

of river health thanks to a special partnership between Israelis and Palestinians.

Amos Brandeis stressed that community involvement is the key to a healthy environment.

"Ecology knows no political borders," he said.

Amos Brandeis was impressed at the magnitude of community involvement in Victoria through movements such as Landcare and the willingness of community, Government and industry to work in partnership for the health of our environment.

The recognition event was an overwhelming success and plans are underway to repeat it in the future.

Environmental achievers from the North Central community were honoured in Bendigo recently.



# Yea group steps up the action



By Natalie Fulford

The Yellow Creek Dairy Creek Landcare Group, in the Upper Goulburn Catchment near Yea, has re-energised after a few years of little or no activity and this year completed two revegetation projects of which we are immensely proud.

The group held two successful community planting days in August this year where around 45 enthusiastic volunteers planted over 350 trees along Triangle Road and a further 550 at the Homewood Station site.

Andrew Fulford, the group's treasurer, was able to secure funding from the Australian Government's Envirofund for the Homewood Station project. Including the trees planted last year, the total number of trees planted at Homewood Station is now some 1200, highlighting the group's commitment to improving this community asset.

The Homewood Station site forms part of the rail trail planned for the area, and we have future plans for the site with a proposal to obtain funding to erect an information display.

Last year we also planted the Old Ghin Ghin Roadside with approximately 800 seedlings. This is an area where the Striped Legless Lizard can be found.



Kids outnumbered adults at the Yellow Creek Dairy Creek Landcare Group's recent tree-planting days.

A feature of both planting days this year was the fantastic family atmosphere with the number of children participating almost outnumbering the adults. The kids, their parents and other community members all relaxed and had a wonderful time together while helping the local environment. We can now sit back and watch the kids and the trees grow together.

On a less positive note, the theft of several tree guards and stakes at one of the sites recently was very disappointing for the group, especially given the time and effort put in by the local community and executive members to secure the funding and to carry out the works.

A fun planting day at Homewood Station.





# Sarie studies a much

Meadow Creek beef farmer Bobby Bowers has a strong memory of the creek that meanders for a couple of kilometres through the middle of his family farm.

"As a boy I used to catch black fish and red fin. It was really good fishing," recalls Bobby.

"There used to be a series of deep waterholes that you could swim in and it used to flow all year unless there was a major drought."

Over the years Bobby has seen drastic changes to Meadow Creek, south-east of Wangaratta. Today the creek is classed as an intermittent stream that dries up or goes underground in summer. Most of the deep waterholes have silted up. When there are heavy rains in winter the creek breaks its banks and floods low-lying land.

#### Devastating floods

In 1993 floods deposited tonnes of silt and debris along the lower reaches of the creek that feeds into the King River.

"It wasn't too bad until the floods," says Bobby.

"From then on, though, the changes have been pretty rapid. The waterholes are less than 50% the depth they used to be; the creek stops running in summer; and the fish-life is non-existent."

Bobby says he loves the little creek and, like others including Marj and Bob Falconer who have a farm at the lower end of the catchment, is hoping that something can be done to prevent it becoming worse.

LaTrobe University student Sarie Los collecting data for her Index of Stream Condition study of Meadow Creek.

## loved creek

#### By Margrit Beemster



First step to finding a solution is the research work that has been undertaken by third-year LaTrobe University student Sarie Los.

Sarie, from Wodonga has done Index of Stream Condition sampling this year on the creek for the Edi-Black Ranges Landcare Group as part of her studies for a Bachelor of Science degree in Environmental Management and Ecology.

Sarie has looked at the hydrology, structural intactness, streamside zone, water quality and biotic life at seven sites along the 20 kilometres of the creek.

#### Index of Stream Condition used

Dr Phil Suter, head of the Department of Environment Management and Ecology, LaTrobe University, Wodonga campus, says Sarie's use of the Index of Stream Condition would highlight areas of concern and show where the best bang for the buck could be achieved.

"Sarie's work may well provide the impetus for a Meadow Creek Landcare group to become established," he says.

"This would highlight the major issues associated with Meadow Creek and provide a source of funding through Natural Heritage Trust and North East CMA for remedial works."

Sarie says while it was usual to have at least 12 months worth of data on water quality and biotic life, what she has done will at least give the group a starting point. From what she can ascertain, there has been no previous sampling done on the creek.

"This is probably because all of the creek,

apart from around 500 metres, runs through freehold land and because the creek is not a major contributor of water to the King River," she says.

Sarie has presented a report with recommendations on her research to the Landcare group and is hoping that monitoring of the creek will continue.

According to Sarie, the condition of the creek varies greatly along its length.

"Overall there was a lack of streamside vegetation which was contributing to the streambank erosion, particularly at the top end of the catchment and was causing silting further downstream.

"There has been minimal natural revegetation. Where grazing has been light, some River Red Gums have regenerated but what is really missing is the understorey shrubs."

#### Poor SIGNAL scores

Sarie says the creek has very low SIGNAL scores, which indicate that there may be severe pollution in some areas. SIGNAL scores are found by collecting aquatic macro-invertebrates and identifying them to family level.

"Again, lack of streamside vegetation which acts as a buffer zone is contributing to this," says Sarie.

Sarie is recommending suitable riparian vegetation be planted along the creek in targeted areas where there is active erosion and that a hydrologist be consulted to find structural solutions to stabilise the banks in really bad erosion areas. She also feels that off-stream waterpoints for stock would be helpful.



Bobby Bowers shares his memories of the Meadow Creek with Sarie Los.

"Where one landholder has provided stock troughs the streambank is much more stable as the stock prefer to drink from the troughs than the creek," she says.

#### Streambank protection

One way of protecting streambanks is to fence them out to allow for revegetation. However, as Meadow Creek floods regularly the fences get washed out and replacing them is time-consuming and costly.

"It might be better to look at temporary fencing or tree guards that can be removed when the trees are established," she says.

"Alternatively, you could fence around groups or pockets of trees and vegetation."

Sarie says, for the future, she would like to work at a professional level to help the environment.

"I'm particularly interested in whole farm planning and sustainability. Water is just one part of it all."

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