

NESSI NEWSLETTER

Providing land management
information to the community.



Summer 2007/2008

EDITION 34

Welcome to the summer edition of the NESSI newsletter. In this issue we continue the discussion on weeds in our landscape as well as the importance of a good farm water supply. Hear from our Greta Survey winner, learn if firewood is carbon neutral, plus heaps of other great articles!!

The recent rain has been great for many people and it is nice to have that extra water in the tank. However rain at this time of the year also brings summer weeds and reduces the nutritional value of standing dry feed. One weed to look out for is heliotrope, which gives paddocks a grey-blue tinge. Heliotrope causes liver damage in any age of sheep, in horses and occasionally cattle, if eaten in sufficient quantity. Contact DPI if you require further information.

We would like to thank all the staff and participants from the Landmate Program from both Beechworth and Dhuringal Correctional Centres. Their fantastic work this last year, has been responsible for repairing and building fences in the bushfire affected areas, revegetation fencing, tree planting and support to Landcare groups.

Editor: Kylie Macreadie

Landholder Profile: Don, Jane and Chris Lindsay

Don, Jane and their son Chris Lindsay from Greta South have won the \$200 fuel voucher offered to a land owner that returned the recent DPI and Greta Valley Landcare Group (GVLG) Residents Survey. Jane said "the fuel voucher was a very nice Christmas present!" The Residents Survey, posted to over 600 people that own land within the Greta Valley, aims to help DPI and the GVLG better tailor land management services offered to land owners in the area. DPI and GVLG also hope the survey is a way of making contact with newer land owners.

The Lindsay family has owned the 730 acre (287ha) property "Thistledale" at Greta South since 1902. Nearly a year ago over half of the property was burnt in the Tatong

Fire, including 4km of fencing and pines ready for harvest. However the 21ha of trees, established under DPI's North East Firewood Plantation Project in 2006, survived. The trees, some of which are over 1 metre tall, despite low rainfall, are a testament to the Lindsay's good management. Jane says the key to a successful project is "spending the extra time on preparation to do things properly, whether that is putting up a fence or spraying weeds".

Undaunted by the fires and the work already in front of them, the Lindsay's have continued with land management projects including the fencing and planned revegetation of 2 km of Fifteen Mile Creek frontage. Assistance from the Landmate Crew of Dhuringal Correctional Centre at Shepparton in repairing fire damaged fences and running wires for the new creek fencing was invaluable. "Enough can't be said about the Landmate Crew" says Jane.

If you have received a Resident Survey and have not returned it yet, there is still time. All land owners that return the Residents Survey can receive a free aerial photo of their property! For more information contact Mary Anderson at DPI Wangaratta on (03) 5723 8655.



Key Messages From The Steep Hills Management Field Day

This field day was held at Murrungee in the Ovens Valley on the 25th October 2007 and attended by 44 people. The focus of the field day was on research & practical management of native based pastures.

One research project presented was the Sustainable Farming Systems for Steep Hills Project, conducted over 4 years, and based at Ararat. This project was managed by Dr Zhongnan Nie, Research Scientist, DPI Hamilton, Victoria.

This project studied the management of degraded native or 'naturalised' pasture to increase the desirable perennial species and reduce the annual grasses and broadleaf weeds. Degraded pastures caused by the loss of deep rooted perennial native grasses result in low groundcover on steep hills. This is a major problem due to the dominance of annual grass species and weeds which lead to risks of water & nutrient runoff, soil erosion, increased recharge / dryland salinity and reduced water quality.

One way to manage degraded native pastures is with strategic grazing. This approach matches plant phenology with the timing of grazing. 'Deferred grazing' is one such strategy which purposely withholds grazing at critical times of plant development. Withholding grazing from mid-spring to mid-summer allows native grass species to set seed and increase their energy reserves, leading to higher recruitment rates of new plants and tillers in the following autumn and winter.

Aims of the Project:

- to increase plant density and ground cover of deep rooted perennial native grasses.
- to reduce water and nutrient runoff and deep drainage.
- to develop a low input farming system that

provides increased capacity of landowners to manage hill pastures in both a profitable & sustainable way.

Treatments

Three deferred grazing treatments of;
SD = Short Term Deferred grazing (October to January period not being grazed)
LD = Long Term Deferred grazing (October to autumn period not being grazed)
LSD = Late Start Deferred grazing (late October/ November to autumn break period not being grazed) were compared with a Set Stocking grazing treatment.

Results of Deferred Grazing versus Set Stocking

Deferred grazing treatments had a 15% to 160% increase in perennial grass seed production and a 30% decrease in annual grass seed produced (LSD treatment), but a 70% to 85% increase for SD and LD treatments.

- Deferred grazing had a 30% increase in perennial grass density and a 25% decline in annual grass density.
- Fertiliser increased legume density by 100% and broadleaf weed density by 80% but had no effect on the density of grass.
- Deferred grazing increased groundcover in autumn by 30 to 50%.
- Groundcover under deferred grazing remained at 80% to 90% from January to May.
- Groundcover under set stocking declined significantly from January to March (75% down to 55%) and then increased to 70% by May.
- Deferred grazing increased herbage yield by 10% to 30%.

If you would like more information then contact Ian Gamble, DPI Wangaratta on Ph (03) 57238671.

Carbon Neutral Firewood?

Not many people are aware that plantation timber when burnt correctly, is a carbon neutral form of heating. When North East Water needed to remove their plantations at North Wangaratta they made contact with the Rural City of Wangaratta to find a use for the unwanted timber. As part of this partnership Council and the North East Firewood Steering Committee has been able to distribute 186m³ of plantation grown blue gum, casuarina and eucalypt firewood to local Wangaratta, Tarrawingee and Eldorado residents.

This project is part of the North East Firewood Strategy and is implementing the actions of educating residents to collect their firewood early, to store it correctly and to consider a range of firewood species.

Residents are also encouraged to grow their own firewood. For further information please contact the Rural City of Wangaratta on ph (03) 5722 0888.



Drought - Where To Get More Help?

Do you have questions about feed, animal health or paddock protection? For information on these topics contact the Department of Primary Industries on 136 186.

Are you suffering financial hardship or are you aware of the drought assistance that is available? Contact Centrelink Drought Hotline on 132316.

Are you doing it a bit tough emotionally or concerned about someone's well being? Contact Beyondblue on 1300 22 4636 or Lifeline on 13 11 14.

Are you interested in establishing a Stock Containment Area? Stock Containment Areas are permanent infrastructure established for emergency management of stock feeding. They help to protect vegetation cover on the property, control weed contamination from imported stock feed and facilitate stock feeding, watering and monitoring. Expressions of interest are sought from landholders who may like to apply for financial incentives to establish stock containment areas. Contact Ian Gamble at DPI Wangaratta Ph 0357238671.

Getting Your Water Requirements Right.

Implementing a reliable farm water supply that suits both stock and domestic needs is a critical part of managing a large or small property.

The big question is; how to collect, store and reticulate the water available on your property? Water can be sourced from a variety of sources such as catchment dams, bores, springs, rivers-streams or rainwater supplies. The water collected can be used for a range of stock needs as well as domestic supplies, fire fighting reserves and environmental benefits. Irrigation proposals have different requirements and approvals necessary to implement a program. In this article I have focused on stock and domestic needs.

Dams come in all sorts of forms including gully, hillside, ring tanks, turkey nests, excavated tanks or weirs. Properly developed water conservation schemes will make an important contribution to good land management. Some of the benefits include; protection of rivers and streams; better animal health, less damage to soil and vegetation by trafficking stock, more controlled grazing techniques, improved biodiversity and aesthetic improvement.

The total water balance for the farm is an important consideration in deciding what to do. What is the supply requirement versus how much is available. Livestock vary in their requirements, for example beef cattle require a lot of water compared to sheep,. Various charts are available to determine specific requirements. Water availability is the next big issue, can you collect it and follow the relevant regulations.

Does this all fit in with your Whole of Farm Plan. Does it meet the following criteria;

- **If reticulation is planned then it needs to be strategically located**

- **Accessible to stock**
- **Not lead to erosion or pollution**
- **Adequate for proposed usage**
- **Better to have one large dam with reticulation to safe access points in paddocks.**

Water quality is an important component, Can you;

- **Plan to collect good quality water**
- **Avoid catchments that are eroded and produce high sediment loads**
- **Avoid stock camps above the storage**
- **Avoid highly saline flows**
- **Prevent or reduce algal blooms developing**
- **Fence the storage to prevent direct stock access.**

If you are planning a dam have you determined if a;

- **Planning Permit is needed-check with your local Shire.**
- **Is a stream or waterway involved - Get a determination from Goulburn Murray Water.**

Are you considering constructing a groundwater bore? This requires approval from Goulburn Murray Water (GMW). Do you need a works license (bore construction)? If you are planning a bore greater than three metres in depth you must obtain a works license prior to commencing works. A groundwater license is needed if you intend to use the water other than for stock or domestic purposes.

There is a range of resource material available within DPI and GMW. If you have access to the web it is relatively easy to search for this material. Or people can call DPI on telephone 136 186. Peter Ockenden, DPI Wangaratta.

Some Water Hints

Water is a continuing topic across the region. Here are some thought starters on managing water supplies in a drought.

- Water loss through evaporation is substantial. If you have a number of shallow dams, think about pumping water to a single dam to minimise evaporation losses.
- Water harvested from farm sheds in excess of domestic requirements can contribute to overall stock supplies by piping to nearby paddocks from tanks.
- When piping around the farm remember doubling the pipe diameter will increase the flow rate four times. 50mm pipe will deliver four times the supply compared to 25mm pipe.
- Large water troughs located centrally reduce the walking distance for stock, minimising the creation of stock tracks that can erode.
- The relatively new technology of "air well pumps" increase the options of supplying water around the farm from a reliable source, either dam or bore by means of compressed air, without any requirement for wind. These pumps also have the capacity to pump water to considerable heights.
- If sheep are held in containment areas over summer, cheap water troughs can be constructed from PVC pipes.
- Water carting is often a last resort option. Bigger loads can enhance time and cost efficiency.
- Water troughs need to be flushed out periodically as evaporation will lead to a concentration of any salts present.

Blue-Green Algae- is it a Risk?

Blue-green algae is naturally occurring but in certain conditions populations can explode causing water quality issues. Thick scum occurs on the water surface and shorelines of a water storage which can reduce oxygen levels for aquatic plants and animals. Some species of blue-green algae produce toxins during decomposition which lead to respiratory and neuro-muscular disorders in livestock.

What to Look for:-

- Inky looking, green, blue-green or khaki green stain in the water, turning brown/green or white once it is dying off.
- Scum may appear at dusk or dawn and disappear during the day.
- A strong earth smell, or if the bloom is breaking down it may produce a strong rotting smell.

What to do:

- Get your water tested by a laboratory to determine if it is toxic.
- Remove stock from paddock or have an alternative water source and restrict access to affected area.

Weed Alert: Cross-border Approach To Tackling Weeds

The Department of Primary Industries (DPI) delivered a cross-border noxious weed display and information stand at the Henty Machinery Field Days. The weed display was a coordinated effort between weed management staff from southern NSW and staff from DPI's Weed Alert team.

NSW Weed Officers hold a weed display at the field days each year and the stand is always a popular one for visitors. However, DPI's representation at the field days this year gave Victorian visitors the chance to ask weed-related



questions, get information and see live specimens of the weeds that are high risk for Victoria. People visiting the stand were also given the chance to sign up as volunteer Weed Spotters, with sixteen people registering with the Weed Alert team.

Having DPI representation at Henty and other cross-border events is important because weeds don't respect state boundaries. NSW Weeds Officer, Paula Ash, was pleased to have the Victorian DPI's display of State Prohibited Weeds alongside other more common weeds from both sides of the border.

DPI is raising public awareness of new and emerging weed species for Victoria, and Weed Alert Contact Officers (WACOs) are regularly taking their live weed displays on the road and attending field days, markets, community meetings and conferences. If your community group or organisation would like to host a Weed Alert plant display or information session, or if you would like to become a Weed Spotter, please contact Stuart Roberton, WACO for the North East, on (02) 6043 7965 or email stuart.roberton@dpi.vic.gov.au

Wangaratta Receives State WeedBuster Award

The weed-busting efforts of the Rural City of Wangaratta were recently acknowledged at the Victorian State WeedBuster Awards. The Award recognised Council's efforts on Public Land with the following achievements:

- Coordinated 12,620 volunteer hours (Green corps, LandMates, Schools, Guides, Scouts, church groups and individuals)
- Removed 560 Tonnes of weedy weeds from Wangaratta's waterways
- Developed 4 information guides ('You and Your Land', Waterway fact sheets and weed brochure)
- Planted 15,000 indigenous understorey species along Wangaratta's waterways
- Supported local Landcare groups with roadside weed control
- Installed roadside EnviroMark signage for Chilean Needle Grass
- Hosted vehicle hygiene and roadside environmental training courses for field staff and contractors
- Developed 'Keeping Roadside Secrets Safe' film

These works are part of Wangaratta's Waterway Action Plan, Roadside Management Strategy and Council's support to Landcare. This Award recognises the value of partnerships and Council acknowledges the North East Catchment Management Authority (NECMA), the Department of Sustainability and Environment (DSE), the Department of Primary Industries (DPI), Beechworth Prison (LandMates), Greening Australia and Conservation Volunteers Australia (Green corps), Landcare and local individuals for their involvement. For further information please contact the Rural City of Wangaratta on ph (03) 5722 0888.



Target weed: Coolatai grass *Hypparrhenia hirta*

A Victorian Alert Weed to be on the look out for right now is Coolatai grass. This plant is a new and emerging weed for Victoria. Early identification of outbreaks may help us to prevent this species from becoming another common weed in our region. Coolatai grass is spreading to Victoria from the north and is established in scattered patches along the Murray River. Locally there are several outbreaks on the Hume Highway near the Chiltern and Springhurst areas, so it is vital that we all keep a watch for this invasive grass weed to stop it spreading further.

Coolatai grass is tall and forms dense tussocks that can spread and dominate pastures and native grasslands. The bulkiness of the plant's growth also poses a considerable fire risk over the summer months. Coolatai grass, like many other grassy weeds, spreads by seed and can be assisted by mowing/slashing and water movement.

Coolatai grass can be distinguished by its paired, hairy flower racemes (spikes containing seeds) which form a 'V' at the branch tips, not unlike small rabbit ears. The ligule at

the junction of the leaf and stem is a membrane 2-4 mm long. Note that grass species can be hard to identify. If you notice an unusual tussock grass, please notify your local WACO at the Wodonga DPI office.

For more information on Coolatai grass or to report a suspected outbreak, please contact WACO Stuart Roberton on (02) 6043 7965, stuart.roberton@dpi.vic.gov.au. More information on Coolatai grass is also available on the Weed CRC Fact Sheet: <http://www.weeds.crc.org.au>

Coolatai grass



Farm Fire Safety This Season



Farms often have special fire safety issues. Given the recent rain events, one such risk is haystack fires this summer.

CFA has been called out to numerous haystack fires in the past few weeks. These

fires not only destroy valuable feed, they are difficult to put out and can smoulder for days. It only takes one damp hay bale to cause a haystack fire.

More information on hay storage is available in the Information Notes Series on the Department Primary Industries website (www.dpi.vic.gov.au).

In mid November 2007, a number of rural residents in the North East would have received a small booklet titled 'On the Land' as part of a trial on providing this booklet to rural landowners.

CFA developed this booklet to provide information on a range of fire safety issues relevant to farming properties. Additional copies of 'On the Land' are available at local CFA offices, or contact CFA on (03) 57214122.

Alternatively the document is available on the CFA website on www.cfa.vic.gov.au/business/farms/on_the_land.htm



Restoration & Revegetation Guide North-east Catchment, Victoria

This guide was launched in October and provides practical information about vegetation in the region. The purpose of the guide is primarily to assist with the selection of locally native trees, shrubs and ground cover plants that may suit particular parts of the landscape, for a given area or 'zone'.

The brochures developed for each zone contains:

- Background information on planning a restoration or revegetation project,
- Illustrated landscape profiles with descriptions of the land-form, geology, and soils,
- Native Plant lists for each predominant Ecological Vegetation Class (EVC) that is found on private land,
- A map to give an indication of which EVCs occurs where in that area.

If you would like a brochure contact the Wodonga office on 0260437900 or visit the DSE web www.dse.vic.gov.au and type in 'Restoration and Revegetation' in the search box and then select the North-east Guide.

If you would like further information on geology and soils used in the development of this guide visit:

Soil and land survey report for NE Victoria-
www.dpi.vic.gov.au/dpi/vro/soilsurv.nsf/HTML/Index.

The Australian Soil Classification System -
www.clw.csiro.au/aclep/asc_re_on_line/soilhome.htm

Geological Survey of Victoria (GSV) -

www.dpi.vic.gov.au

Biodiversity - EVC Maps

www.dse.vic.gov.au (from onlines services on the home page, select interactive maps, then biodiversity interactive map and then zoom to select area).

5 Minutes With A BushTender Field Officer

Kate Hill is a BushTender Field Officer with the Department of Sustainability and Environment based at the Wodonga Office.

What is BushTender?

BushTender is an opportunity for landholders to receive some financial assistance for protecting and managing native vegetation. The difference from other incentive schemes is that the landholder submits their own price in a competitive tender style against other landholders from northern Victoria.

What is your role in BushTender?

As a Field Officer, my role is to meet with landholders and look at any native vegetation on their property and discuss potential management options. From this I draw up a management plan for that area of native vegetation.

What is a typical day like for you?

When I'm meeting with a landholder, I usually greet them at their house and have a cuppa, while looking over aerial photographs of their property. We chat about the areas of native vegetation that they want to include in BushTender and what they are hoping to do/or have been doing with these areas i.e. fencing, excluding stock, revegetating, weed control, introducing logs, fox and rabbit control etc.

We then go for a drive around the property, looking at these areas and talk about plants, animals, site boundaries and any management issues. I then proceed to map and score the site using a method known as

"Habitat Hectares" using a pocket-sized computer and GPS. Following this, I meet back up with the landholder and go over some suggestions for the draft management plan. The landholder uses the management plan as the basis for their BushTender bid i.e. the amount of money they require to manage their vegetation.

What do you enjoy most about your job?

My favourite part of my job is meeting with the landholders and seeing new landscapes and vegetation types. I always learn something new on each property, either finding new plants I haven't seen before, or finding out about different ways people have managed their property or responded to threats such as weeds. Landholders always have something special on their properties that they want to show you – it could be anything from a favourite view to a bird's nest, a plant they don't recognise or even a new piglet! I like helping people learn more about managing their native vegetation better and giving them the opportunity to get paid for it.

What do you enjoy least about your job?

The worst part about my job is that sometimes it might be 40°C, and I have to walk 4km up steep slopes and then run out of drinking water.

How can people get in touch with you?

People should ring DSE customer service centre if they are interested in becoming part of BushTender or BushBroker on 136 186.



Farm Photographs.

Everyone likes air photographs of their property; they provide a great talking point, a 'bird's eye view' of the farm, a record of farm layout and they enable farm planning. Over the past two years new aerial photography has been taken of the North East CMA area with at least four times better detail. The resolution allows farm photo maps to be printed up to 1:2,000 (1cm = 20m). The scaled photographs are overlaid with contours lines, drainage lines and property boundaries.

Landholders who are involved in DPI land management projects may be provided with maps as part of their project. The cost to other landholders is \$100 for an A1 (60cm x 40cm) laminated map.

Contact Geoff Holloway at DPI Wodonga, 02 60437927.



If undeliverable please return to
Department of Primary Industries
PO BOX 1084
WANGARATTA VIC 3676

To The Landholder

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DSE staff also provide assistance in the development and content of this newsletter. For more information contact:

Peter Ockenden, Team Leader - Land.....**Ph:**(03) 57238674

Ian Gamble, Salinity / Pastures**Ph:**(03) 57238671

Kylie Macreadie, Salinity / Revegetation ..**Ph:**(02) 60437922

Philippa Noble, Private Forestry Officer...**Ph:** (03) 57238686

Jane Roots, Bush Tender**Ph:**(02) 60437619

Kristy Youman, Soil Health**Ph:**(02) 60437968

Geoff Holloway, Biolink Leader.....**Ph:**(02) 60437927

Mary Anderson, Salinity /Revegetation..**Ph:**(03) 57238655

Sarah Kelly (Wang) CORIS/LFW.....**Ph:**(03) 57238659

Mary Titcumb (Wod), CORIS/LFW.....**Ph:**(02) 60437956

DPI/DSE Wangaratta Office

62-68 Ovens Street
Wangaratta

Phone: (03)57238600

Fax: (03)57214423

DPI/DSE Wodonga Office

1 McKoy Street
Wodonga

Phone: (02)60437900

Fax: (02)60437910

Customer Service Centre

Phone: 136186

web site www.dpi.vic.gov.au

www.dse.vic.gov.au

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