



Community Network News

Mid Loddon-CMN & West Marong, Upper Spring Creek, Ravenswood Valley,
Nuggetty, Baringhup, Eddington, Kangderaar/Murphy Creeks Landcare
Groups & other community friends



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MEETINGS & EVENTS- 2013

Upper Spring Creek Landcare Group Meeting will be held at 8.00pm Tuesday 9th April at the Lockwood South Primary School. Speaker – David Gimmell – Photographing endangered raptors.

West Marong Landcare Group meeting will be held at 7.00pm Tuesday 16th April (3rd Tuesday) at the Woodstock Hall. The meeting will commence with a light meal at 6.00pm.
Speaker- Alison Pouliot – ‘Fungi in the farm landscape Seminar’

Seminar Summary

This seminar will introduce participants to the diversity and important role of fungi in soils. It will address ways in which fungi promote decomposition, recycling processes, soil formation, water retention capacity and greatly improve nutrient and water uptake in plants, as well as suppress disease. We will look at both micro and macro fungi and their responses to events such as fire and climate change as well as ecologically-sympathetic agricultural approaches that promote fungi in soils. The session will include both an illustrated seminar and an interactive hands-on session where participants will examine various fungal specimens and resources.

Baringhup Landcare Group will host a Pasture and Grazing information event from 9.30am to 12.30pm on Wednesday 10th April at the Baringhup Hall Supper Room – Speaker James Whale

Baringhup Landcare Group meets second Thursday of every second month. Next meeting is at 8.00pm on the 11th April. (AGM) The evening will begin by viewing an inspiring talk by Allan Savory - an advocate of Holistic farming, who overviews transforming deserts, into highly productive grazing landscapes,

Lockwood South Primary School will hold a Kitchen Garden Working Bee commencing at 9.30am until noon Saturday 20th April. The event is being arranged and supported by the Bendigo Rotary Club who are hoping landcare and other community groups members will assist. Food and drinks will be supplied.

The kitchen garden program is also being supported by the Mid Loddon Landcare Network’s Farming for Sustainable Soils Project. *Any donations of top soil, manure or straw bales or just some time, would be greatly appreciated. Contact 5435 3412.*

Ravenswood Valley Landcare Group- meets last Wednesday of every second month. Next meeting 29th May

Eddington Landcare Group- Next meeting at 10.30am Saturday 13th April at the Red Gum Forest. Enter from the Maryborough Road entrance.

Advance notice - Upper Spring Creek Landcare Group meeting at 7.00pm on Tuesday 14th May at the Lockwood South School: Speaker Alison Pouliot – wild life photography. Participants to bring a memory stick with 5-6 photos – all those difficult shots that didn’t quite work or certainly wouldn’t win a competition prize. Alison will show how to improve your use of your camera and how to set up a photo. (Please make sure your memory sticks do not have any virus contamination)

Advance notice: Biodiversity Across the Borders Conference 2013 at the Mt Helen Campus of the University of Ballarat. All day conference on Friday 7th June 2013

Key note address – Professor David Lindenmayer, ANU Fenner School of Environment & Society

Other speakers – Professor Mike Clarke – La Trobe University & Professor Ian Lunt (Charles Stuart University)

For natural resource managers, it is an excellent opportunity to learn about new applied research outcomes and what they mean for you. For researchers it is a great way to communicate your work in a way that can

make a real difference. 'Biodiversity Across the Borders' continues to build and strengthen collaborative networks so as to enhance both research and land management into the future. All attendees must register beforehand. There will be no registration fee for attending this conference. Morning tea, afternoon tea and lunch will be provided. A full itinerary will be published in the coming months.

Register by email (preferred) s.florentine@ballarat.edu.au or 03/5327 9231

Advance Notice: **Digital Rural Futures Conference** - planning is well underway, with key content support from CRCSI, the Regional Universities Network, CSIRO and Regional Development Australia. The conference is scheduled for 26 – 28 June at UNE in Armidale NSW. A national forum to exchange ideas and provide updates on the opportunities and challenges for agriculture in Australia's digital economic future. Conference website for registration www.une.edu.au/smart

Landcare & Community News of the month:

Shelbourne Nature Conservation Reserve

Restoration Project- Permission has been granted by DSE Crown Lands Department for the Mid Loddon Landcare Network & CMN to apply to the City of Greater Bendigo for a planning permit application to remove native vegetation as a part of a thinning and restoration program.

Thanks to our landcare volunteers Janis Stewart and Irene Punton who have completed the task of setting up monitoring transects on the site. Bird monitoring on these sites can now proceed while we wait for the council permit to begin the forest restoration.

Successful Dept of Sustainability & Environment- Communities for Nature Grant application for the protection and restoration of woodlands on two local properties, has been successful. The participating landholders will be notified and the project can proceed in the near future.

Farming Sustainable Soils Project's 2nd Soil Forum was successfully held at the Eddington Hall on the 26th March and was attended by over 50 local farmers. Senator Bridget McKenzie also joined members for dinner and to learn more about our productive agricultural area. It was a long but informative evening with speakers providing a taste of the program to be delivered this season to project participating farmers, including covering precision agriculture, our historic landscape soils, ground truthing satellite images, the importance of soil health, IPM, update on the cell grazing trials. Copies of the information sheets handed out at the forum will be delivered or sent to those farmers unable to attend.

Baringhup Landcare Group will hold a pasture and grazing workshop commencing at 9.00am on Wednesday 10th April at the Baringhup Hall. Speaker will be James Whale from M.S & Assoc., Ballarat. James has provided guidance and advice for the Farming for Sustainable Soil Project's Cell grazing trial at the property of Rob Pollock at Derby.

West Marong Landcare Group will host a fungi information evening, following a social meal

Upper Spring Creek Landcare Group's next meeting will feature a presentation by David Miemmell who has a strong interest in monitoring and photographing endangered raptors. Wider community members interested in learning more about these birds are very welcome.

School pilot program:

The delivery of a landcare trial Box Ironbark information course has been completed at the Lockwood South Primary School with students enjoying learning about the inhabitants of our local forests, including vegetation, birds, animals and insects. Rosemary Davies presented the course and will continue to work with the students next term to cover soil health subjects.

Part of the continuation of the trial course will include the kitchen garden working bee planned for the 20th April which is being supported by the Bendigo Rotary Club. The Upper Spring Creek and the Mid Loddon Landcare Network & CMN have shared a strong supportive partnership with the school for many years.

Eucalypts deadly condition - Mundulla Yellows

The first symptoms of impending death are the yellowing leaves. 30 years ago, scientists identified the condition as a form of dieback. They labelled it Mundulla Yellows, not really a badge of honour for the small hamlet of Mundulla, south of Bordertown where the condition was first diagnosed.

It is first identified as healthy trees with small patches of yellow foliage up in the crown. The condition was researched and it was found that the common factor was the presence of carbonates, dissolved from the limestone soils. Elsewhere in the world, tree decline has been linked to changes in soil composition, but nowhere had scientists made the vital link to the role of carbonates.

According to Dr Jo Luck "the dissolved carbonates actually block the uptake of certain nutrients in the soil. In this case a possible blocking of iron and manganese. We're often

asked why now? The trees may be well over 100 years old, and why suddenly in the seventies did they start to die? It was believed that there was something wrong with the soil, but the trees had been growing on the soil for many, many years and particularly on limestone soil, and that the increased in CO₂ in the atmosphere, which coincidentally dramatically rose around the same time that tree health declined and this may be playing a role in Mundulla Yellows and other tree declines around the world. So the CO₂ is involved in weathering and dissolving the limestone and this releases bicarbonates, which block the uptake of iron.”

For a giant eucalypt, the first signs of yellowing to its slow insidious death can take up to 15 years. The presence of drought may speed up the process by concentrating minerals in the soil. It has been found that an iron supplement drilled into affected trees can reverse the condition.

Just as the health of trees is a barometer for the health of the environment, the Australian research is emerging as further evidence that the planet has undergone long-term and detrimental climate change.

Note: David Smith, DPI Biosecurity Scientist, Knoxfield, will be in our local area next month surveying local eucalyptus health.

Soil Carbon Sequestration Potential

The majority of available field data comes from a fairly narrow range of management options for the dominant agricultural systems of Australia and little data exists on numerous management options which hold potential to sequester large quantities of Soil Organic Carbon.

Within an existing agricultural system, the greatest theoretical potential for carbon sequestration will likely come from large additions of organic materials (manure & green wastes etc.), maximising pasture phases in mixed cropping systems and shifting from annual to perennial species in permanent pastures. Perhaps the greatest gains can be expected from more radical management shifts such as conversion from cropping to permanent pasture and retirement and restoration of degraded land. Many of the management options that may increase soil organic carbon tend to also increase overall farm productivity, profitability and sustainability, and as such are being rapidly adopted in various regions of Australia.

Extract from Soil Carbon Sequestration Potential: A Review for Australian Agriculture. A report prepared for the

*Department of Climate Change and Energy Efficiency
(available on line)*

Sustainably produced and manufactured foods are rapidly becoming as important to consumers as healthy, convenient, high quality and 'as-fresh' foods. Sustainable food production and manufacturing minimises:

- the impact on the environment
- water use
- greenhouse gas emissions
- waste generation
- energy requirements.

Responding to increasingly environmentally-conscious consumers as well as reducing your environmental impact and your operational costs are just some of the benefits of sustainable manufacturing.

Book of the Month:

Precision Agriculture for Grain Production

Systems. By Brett Whelan & James Taylor (Eds)

The Book explains general Precision Ag. theory, identifies and describes essential tools and techniques, and includes practical examples from the grains industry. The book will empower readers to critically analyse the impact of observed variation in resources on crop production and management decisions. Readers will gain an understanding of the magnitude, spatial scale and seasonality of measurable variability in soil attributes, plant growth and environmental conditions.

Available from CSIRO publishers on line - \$89.95

Grazing and pasture Management

Pasture is a critical resource in grazing operations. The interaction between grazing and pasture management influences the profitability and sustainability of an enterprise.

Pasture management is the process of ensuring pasture persistence, maintaining soil nutrition for growth and making the best use of the pasture. Grazing management is the total process of organising livestock to make the best use of the pastures grown.

Improved pasture

Improved pastures can play an important role in lifting the productivity and profitability of an enterprise. Management considerations for improved pasture include:

- Pasture growth - by understanding pasture growth, producers are able to maximise pasture utilisation while maintaining good land and pasture condition.
- Pasture establishment - preparing and sowing or seeding an improved pasture.
- Pasture management - ongoing management of the pasture to maximise the productivity and persistence of the pasture.
- Grazing management - organising livestock to make the best use of the pastures grown.

Management of Native pasture – in areas that cannot be cropped – such as rocky rises.

A native pasture is a permanent or semi-permanent pasture made up of plant species that are normally found growing wild in a particular area. Management considerations for a native pasture include:

- Pasture growth - understanding the different phases of native pasture growth and how grazing pressure can affect plants at different times during their life cycle.
- Grazing management - organising livestock to make the best use of native pastures without adversely impacting on the pasture composition or land condition.

Weed control

Weeds cost Australian agriculture in excess of \$4billion annually through their effects on the quality and quantity of the pasture resource base, physical animal injury and plant toxins consumed in the grazing process.

Producers should look out for new weed infestations before they become too large and difficult to contain.

Bare or sparse ground, and weak remaining perennial plants, allow weeds to get ahead quickly. Many weeds have seeds that last in the soil for several years, so producers should be particularly wary when conditions may lead to extensive areas of bare ground, such as after a drought.

Producers will find it useful to prioritise weeds and paddocks for control. For example, weeds with some forage value, such as annual grasses, may be contained below an upper limit, while noxious weeds or highly aggressive and invasive unpalatable weeds should preferably be eradicated.

Spiny Leaf Insects – introducing children to nature:

They make great pets because they are so different. Lots of people have cats and birds but not many have a spiny leaf insect. They are really easy to look after, and if handled carefully can become a very friendly pet that appreciates your attention. Spiny Leaf Insects don't bite.

(The Mid Loddon Landcare Network has donated three insects to the Lockwood South Primary School students)

To take care of your spiny leaf insect, give them fresh eucalyptus leaves very 2-3 days, which you can leave in a vase of water in their tank or cage. It is best for the insects to have a vertical (rather than a horizontal) aquarium to live in. And just spray the leaves with water about twice a day.

Spiny Leaf Insect Facts:

Spiny leaf insects and stick insects are phasmids. Phasmids are generally insects that eat leaves and resemble leaves or sticks.

Males can fly (have wings), females can't.

The female insects can lay eggs without the help of a male. This biological miracle is called parthenogenesis and means that all the phasmids born will be female.

Females live to about 18months old, males to only 6-8 months.

Females can lay thousands of eggs in their lifetime.

The eggs have a knob which attracts ants. The ants carry the eggs to their underground nest, eat only the knob and leave the rest of the egg in the nest, protected from other animals that may eat it.

The young look like small species of ants with tiny curly bits on their tails.

Eggs can take up to two years to hatch.

The longest Australian phasmid is the Titan Stick Insect which can grow to 25cm long.

150 species of phasmids are found in Australia

When disturbed, a phasmid may sway, imitating a dead leaf or stick swaying in the breeze.

A baby spiny leaf insect is called a nymph.

Local species of spiny leaf insects can be found in rose bushes and also in wattle. If you feed them rose bush or wattle leaves they will become a bright green. If you feed them eucalyptus they generally turn a shade of brown.

Available at good pet supply shops. A wildlife permit is not necessary when they are purchased from captivity bred stock.

Wise Words:

I have always said that there is only one thing that can bring our nation down - our dependence on foreign countries for food and energy. Agriculture is the backbone of our economy. *John Salaza*