Community Network News

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

NEWSLETTER VOL. 21 - No. 3- April 2015 - Incorporation No: A0061417V

Contact information : c/- Secretary, PO Box 2197 Bendigo DC. Victoria

MEETINGS & EVENTS - 2015

Upper Spring Creek Landcare Group

Next Meeting will be held at 7.30pm on Tuesday 14th April.
Special meeting held at the Boyds Road home of Frank & Jenny Steele, (landcare event sign at from gate)where members can get up close and personal with our first Curlew breeding pair.

Infra-red camera photo

West Marong Landcare Group next meeting to be held at 8.00pm on Tuesday 21st April 2015 at the Woodstock Hall. **Agenda**: Funding and future meetings incl. follow up to kitchen table meeting trial

North Central CMA Volunteer Recognition Event in Smeaton

Landcare and Waterwatch volunteers from across north central Victoria are invited to a volunteer recognition event in Smeaton on **Friday 1st May**.

Times:

4.00 pm – Guided tour

5.30 pm – Twilight picnic and moonlight cinema

9.00 pm – Event close

Where: Anderson's Mill, Creswick-Newstead Road, Smeaton VIC 3364

Cost: FREE. BYO warm clothing, picnic and drinks.

Note: BBQ dinner and cheese platters available for purchase.

RSVP: Is essential to the North Central CMA by Wednesday 29 April 2015 via email info@nccma.vic.gov.au or phone 03 5448 7124.

Please advise if you are buying dinner and/or cheese platters on the night.

Baringhup Landcare Group - next meeting to be held at 7.30pm at the Baringhup Hall Supper room on **Tuesday 7th April** – Agenda: Final arrangements for the 21st Birthday celebrations & **Presentation** - Revegetation methods in our changing climatic conditions (Judy)

Cactus Control event to be held at the Maryborough Road property of Geoff & Noreen Gill (behind the shearing shed) at 10.00am on Sunday 19th April.
Learn how to poison cactus via the round-up injection method. Bring your own safety gear and assist Geoff with cleaning up the cactus.
A BBQ lunch will be provided

A Tafe student is currently mapping all wheel cactus infestations across the Mid Loddon Landcare Network area and would appreciate any site information. Ring Judy 5435 3412.

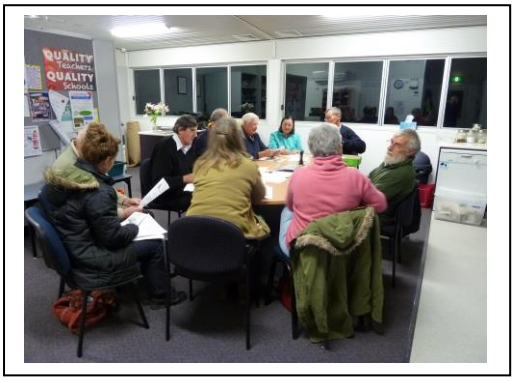
Nuggetty Land Protection Group next meeting will be held at 7.30pm on Wednesday 6th May at the winery meeting room.

Eddington Landcare Group- meet in the Red Gum Forest seasonally - Next meeting Saturday 11th April at 10.00am

The Fungi Hunt at the Eddington Red Gum Forest on Sunday 26th April 1-5pm - cancelled due to lack of rain

Ravenswood Valley Landcare Group.
Next meeting to be held at 7.30pm on Wednesday 29th April 2015

Mid Loddon Landcare Network Management Committee meeting to be held at the Lockwood South Primary School at 7.30pm on **Monday** 25th May 2015.



Eddington/Baringhup/Community Landcare Event - Monday 4th May 7-9 pm at Eddington Community Hall
Presentation – ***Fungi in the Landscape*** with Alison Pouliot
What exactly are all those fungi doing out there in the landscape? The short answer is, probably a whole lot more that we could ever imagine!

Ecologist E.O Wilson famously reminded us that it is the little guys that run the world. It is true that it is the fungi, invertebrates and micro-organisms that drive most of the ecological processes in our local woodlands and farms. Fungi for example, build architecture in the soil. Influence hydrology. Sequence carbon. Recycle organic matter. Provide habitat. Form relationships with most plants and innumerable animals.
Fungi drive biochemical cycles, engineering atmospheric, geospheric and oceanic chemistry. They are seriously busy!

The value of fungi in soils is greater than we often acknowledge. Ensuring the best care of soil fungi is vital to the health of our agro-ecosystems and forest ecosystems. Understanding the role of fungi in soils and ways to maximise their function, benefits not just the soil but all the associated organisms including humans. The seminar will explore the diversity and importance of fungi and how we can offer them the best chance of survival in our local landscapes – Alison Pouliot

Old Growth Trees Declining Health Advice:

Dr Glynn Percival, who runs the Bartlett Tree Research Lab, says that the best thing that can be done for a tree is to add mulch, which will boost oxygen levels, as well as worm and microorganism populations, in the soil. At the Mortin Arboretum in Illinois, they have found that mulching trees has a huge impact on soil microbe populations, increasing those that favour healthy growth.

One of the most amazing discoveries is from some ailing oaks with many of these ancient oaks looking stressed and it was thought they were suffering from oak decline, a complex disorder that can severely weaken the trees.

Peter Glassey, the head forester applied a wide deep mulch of deciduous bark around the base of the trees that stretched out to the edge of their spreading canopies.

The positive effects were stunning. Trees that were treated, looked green and healthy within a period of a year or so, while those untreated declined further.

When the soil was tested with a probe to see how consolidated it was on treated and untreated trees, the soil under treated trees was found to be less compacted and the probe slid in more easily

New Network Partnership with the CFA

The Network is currently working with the CFA to complete some trial burning beside McKenzie Road at the Western end (see below) and the eastern end at the endangered Spiny rice flower degraded site in 2016 - following further planning and site monitoring that will be assisted by Bendigo Tafe Conservation and Land Management students.

McKenzie Road, Western end – Themeda (Kangaroo Grass) grassland triangle

This area is planned for burning in Autumn 2015. It exhibits predominantly grassland with some scattered trees at the southern end. The grassland has a co-dominance of Themeda and Wild Oats, with very dense biomass.

Monitoring will be undertaken by Adrian Doye (COGB) and Justine Leahy (CFA Environmental Officer), and possibly a DELWP Threatened Species Officer. Adrian and Justine will develop a monitoring method that will:

- record the current species presence and cover abundance
- record percentage burn cover
- record species presence and cover abundance 6 months, 12 months, 18 months and 24 months post-burn
- provide recommendations for future planned burns based on monitoring

The burn will be undertaken with spot ignition to manage the fire spread. Trees at the southern end will be rakehoed around to remove fuel around the trunks to ensure that fire does not run up the trunks. Some canopy scorch may occur, but this will be minimised through ignition techniques and wetting down during burning. If the burn results in a patchy burn in the treed area, this would not be a bad thing. The aim for this site will be no more than 80% burn cover.

It may be possible that the site may benefit from another burn 18 months to 2 years after the Autumn 2015 burn. The aim would be to target Wild Oats management by timing the burn to halt seed set, and to kill what seed is in the soil. Improving the quality of this native Kangaroo Grass site won't be a short-term, quick fix – it will be a longer term outcome that will need to be adaptable based on monitoring and burning opportunities.

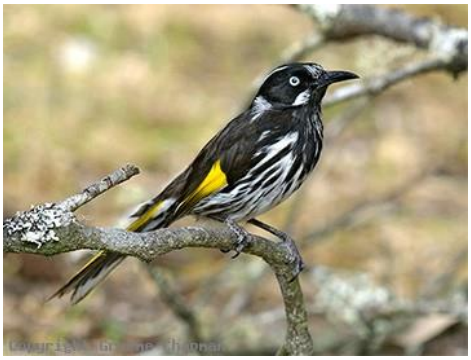
Burning and Fungi health:

Despite their importance, fungi are generally poorly studied and understood. Fungi are essential components of all ecosystems. Their various roles include acting as symbiotic partners, decomposers, nutrient cyclers and as sources of food for vertebrates and invertebrates. Management of fire in Australia is based mainly on knowledge of the effect of fire on vegetation. Studies of fungal communities in Australian vegetation types show that the effects of fire are highly variable and depend on factors such as soil and vegetation type and variation in fire intensity and history, including the length of time between burns. Fire changes the environment in which the fungi function: including affects on soil structure, nutrient availability, organic and inorganic substrates and other biotic components including plants and animals with which fungi interact, particularly their interdependent vertebrate vectors. Many saprotrophic fungi grow only on specific substrates (i.e. litter, woody debris, burnt soil). Modification or loss of a substrate due to fire will impact on all components of the fungal environment.

For informed adaptive management decisions to be made, it is necessary to include macro fungi in monitoring and research programs. The close correlation between substrate condition (including quality and quantity) and time since fire suggests that management of substrate diversity in different vegetation types may be an effective interim measure while specific requirements of fungi are being investigated.

Extract from - Fungi and fire in Australian ecosystems: a review of current knowledge, management implications and research gaps and solutions
Sapphire J.M. McMullan-Fisher, Tom W. May, Richard M. Robinson, Tina L. Bell,Teresa Lebel, Pam Catcheside, and Alan York

Bird of the Month: New Holland Honeyeater



Habitat: Eucalypt forest/woodlands with shrubby understory, Creekside, coastal shrubs, healthlands, mallee-spinifex, golf courses, parks and gardens. Breeds – mostly July-January. Nest – rough small cup of twigs, grass, stems, spiders web, plant down, in fork of low, dense shrub. Rarely seen, unless there is an abundance of understorey.

Enhancing microbial activity contributes to the remediation of soil and groundwater contaminated with pesticides.

The addition of carbon, which is required as a nutrient by the microorganisms in soil and groundwater, was found to be the most promising remediation method of soil and groundwater contaminated with atrazine. There is a demand for the remediation method, as atrazine is the most common pollutant in groundwater in Finland.

In Finland the use of atrazine was discontinued approximately 25 years ago. Regardless of this, it continues to be the most common pesticide found in groundwater in Finland. Atrazine has been studied as an endocrine disrupter was found in 26% of groundwater samples studies in 2002-2005. The EU banned its use in 2004.

Atrazine is still used in the USA & Australia.

What is perennial agriculture?

Perennial species (crops, forages, shrubs and trees) are those able to regrow and continue to reproduce grains, seeds, fruits, and biomass after a single harvest. They can be harvested numerous times for up to 10 years for crops and much longer for forages, shrubs and trees.

Building perenniality into agriculture systems is the intentional integration of perennialized crops (grains, oilseeds, legumes etc.), forages, shrubs and trees in diverse farming systems, landscapes and agro-ecosystems to:

• provide more consistent, abundant and affordable food, feed, fibre, and fuel;

• enhance the natural-resource base and environment that underpins productivity;

• make farming more financially viable; and

• contribute to the overall well-being of farmers, farm workers, and rural communities.

Do we need to shift agriculture and transform cropping systems?

For decades, the sustainable agriculture community has called for diverse, innovative farming systems and landscapes that mimic nature and enhance resilience while providing food and nutritional security, livelihood and ecosystem service benefits. Today some 50 percent of the world's population is supported by largely intensive production on 35 percent of the global land area, which in large part is degraded. Agriculture needs to provide sufficient food and nutritional security to meet the demands of future generations in the context of unprecedented global environmental and socio-economic change.

The yields of annual crops, currently grown on 70 percent of the world's cropland area, vary widely based on stresses and availability of productive inputs (irrigation, nutrients, pest management, technical support, etc.). Although these yields have more than doubled over past decades, this has degraded fertile land, depleted groundwater provoked pest upsurges, eroded biodiversity and polluted air, soil and water.
To reinvigorate agriculture in a sustainable and productive way while meeting multiple society and land environmental demands on a vast scale, will take a significant shift and considerable investment and a vision that new perennialized crops can be integrated into agricultural systems along with perennial forages, shrubs and trees to provide increased food, feed, fodder and fuel per unit area while bringing the multiple benefits of perenniality.

Perennial-integrated agriculture

Year round soil protection & lack of soil disturbance

Deep rooting systems, stable soil structure & soil health

Increased nutrient availability & efficiency with deeper roots

Yields not consistently high but consistent, but overall farm income is higher from diverse sources such as multi-purpose crops.

Increased water infiltration & more effective water cycle

Extract from Perennial Policy brief S, Africa