



Mid Loddon Landcare Network News

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



NEWSLETTER VOL. 21 - No. 8- July 2015 - Incorporation No: A0061417V

**Contact information : c/- Secretary, PO Box 2197 Bendigo DC. Victoria
blog: uslandcare.org.au**

MEETINGS & EVENTS - 2015

Upper Spring Creek Landcare Group

Meeting held at the Lockwood South Primary School at 8.00pm on Tuesday 11th August

Agenda: Landcare Partnership projects
Lockwood Cemetery history and restoration
Speaker – Bernard White

West Marong Landcare Group

Meeting to be held at 8.00pm on Tuesday 18th August 2015 at the Woodstock Hall.

Agenda: Productive farm planning

Baringhup Landcare Group - next meeting to be held at 7.30pm at the Baringhup Hall Supper room on Monday 5th October . 2015

Agenda: Climate Change

Nuggetty Land Protection Group next meeting will be held at 7.30pm on Wednesday 2nd September at the winery meeting room.

Eddington Landcare Group- meet in the Red Gum Forest seasonally - Winter meeting will be held at the Eddington store on Saturday 15th August at 10.30am.

Ravenswood Valley Landcare Group.

Next meeting to be held at 7.30pm on Wednesday 30th September 2015 at the North Harcourt Hall,

Bendigo Tafe 1080 course dates. Tuesday 25th August & Tuesday 17th November 9am to 1pm at the Charleston Road campus. Cost \$260 all inclusive. Enrol at 1300 554 248.

NCCMA supporting a Rabbit Control Forum

TO be held on the 16th September at Belvoir Gold Club. Dr Tanya Cox will speak about successful Rabbit management programs and a new strain of Calicivirus.

This Forum will provide a wide range of rabbit control information so that groups/landholders

can begin preparations to begin their control campaigns early in 2016

Echuca Birdlife Group will be welcomed and provided with a tour of the Save our Curlews project sites on Sunday 9th August, with a 9.30am meet-up at the Steele's Boyds Road 'Curlew Captive breeding enclosures' for a 10am start.

Mid Loddon Landcare Network Management Committee Meeting

To be held at the Lockwood South Primary School at 7.30pm on **Monday 28th September 2015**. This Committee involves representatives from the West Marong, Baringhup, Upper Spring Creek, Eddington, Ravenswood Valley & Nuggetty Landcare Groups.

West Marong Landcare Group's Tree Planting Field Day to be held at -

*Lachie Raltons, Neivandts Road property from 10.00am Wednesday 26th August – to complete the planting enhancement of an eroded gully connecting two properties. The planting will be assisted by a team of Bendigo Tafe CALM students.

*A second smaller planting will take place at the Elmsford Road, Langley property from 10.00am on Friday 28th August

These events are sponsored by GJ Gardner Homes via a 'Fifteen Tree' project.

Baringhup Landcare Group's Direct Seeding training and planting event to be held at the properties of Rob & Kerrie Jennings and Ross & Hannah Dohnt commencing at 9.30am on Sunday 30th August at the Jennings Bridgewater/Maldon Road paddock (opposite Kellys Rd.)

*Come along and learn how to direct seed using the Network's machine.

'Community Learning for Environmental Action (CLEA) Workshop' with Ross Colliver from the Vic Landcare Council. The above workshop was held with the Mid Loddon Landcare Network Committee members and involved representatives from most member groups. The discussions were around -

The four Roles of Landcare –

Facilitator of Community Learning and Action and the groups have increased their field days and social events and there are more projects that cross group boundaries. Bringing people together helps maintain their enthusiasm, and creates a flow of ideas across groups.

Provider of Environmental Services:

Members projects are picking up aspects of big environmental issues – soil health, habitat, species protection, control of ferals. These add to an integrated response, even if the funding buckets are all separate and less than usually needed.

Enabler of partnerships:

Although groups are endeavouring to hold current partnerships together, they are losing ground. There are fewer agency staff, fewer who understand our local areas and willing to take action. Managers change, programs change, politicians change.

NRM Planner:

We have our local priorities, and we have priorities across the network, but members are swamped with other people's land use plans that don't understand landscapes from an environmental and farming point of view.

The Network members question without an easy answer was -

How do we get urban folk to understand and appreciate farmer's issues?

People in urban areas, including big regional centres, have little understanding about what's involved in living on the land and food production. Environmental policies are about protecting nature, but without our productive farmers in the picture. Urban environmental groups don't know much about farming and farmers.

The Committee members decided to leave the question on future agendas and to continue to work towards an answer.

Diversity dilemma

Invasive species are one of the most significant known threats to biodiversity and ecosystem services around the world. In Australia invasive vertebrates such as rabbits, feral cats and foxes, impose severe impacts on Australian habitats and wildlife.

But biodiversity is also important in underpinning the ecosystem services for agriculture and the economy. Healthy soil function, pollination, and natural pest control are all driven by biodiversity within agricultural landscapes. Over the past century, crops have lost 75 per cent of their genetic diversity, making them potentially more susceptible to new pathogens or pests

Words of Wisdom:

*In just a few generations we have lost the basic life skills that were second nature to our grandparents. The staggering advancements in modern technology and efficient mass production of consumer goods has made the majority of old fashioned 'know how' obsolete - why darn a sock when you can buy a new pair for under two dollars? It's hard to deny the benefits of this age of convenience but in the process we are losing something invaluable – **human connection.***

Emiko Davies

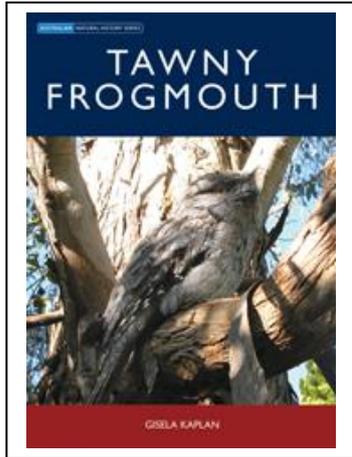
Landcare & Tafe partnership continues:

Our local Landcare Group's long term partnership with the Bendigo Tafe Conservation and Land Management classes has resulted in assistance to complete a fenced and direct seeded corridor of revegetation between two local farms. Howard Hepburn & Lachie Ralton joined forces with Brian & Brad Comer and Warwick Bates to successfully instruct an interested team of students in the art of farm fence building with an excellent result.



Book of the Month - Tawny Frogmouth

written by *Gisela Kaplan*



The tawny frogmouth is both intriguing and endearing. In this new book, well-known author Gisela Kaplan presents us with an easy-to-read account of these unique nocturnal birds of the Australian bush.

This detailed account of life, behaviour and biology of tawny frogmouths is based on the most comprehensive single study ever conducted on tawny frogmouths, including wild and hand-raised birds. It combines ten years of systematic observation with published research to take us across a surprising range of characteristics and special features of this unusual bird. This book also notes insights derived from specific regional bird fauna surveys across Australia.

We are shown this captivating Australian species in completely new and even unexpected ways. We learn that tawny frogmouths are very affectionate, have close bonds with lifelong partners, scream like prowling tomcats when distressed, fight with lightning speed and defend nest sites from reptilian predators by mobbing and spraying pungent faeces at these dangerous opponents. Uncompromising male fights are contrasted with a touching gentleness of males as fathers.

We also learn how resilient and unusual tawny frogmouths are in the way they cope with heat and cold, sit out danger, do without drinking for most of their lives, and can use a large variety of food items.

The developmental stages of nestlings and juveniles are illustrated with a number of stunning visual images accompanying the text, most of which have never before been described or seen.

Australia's Soil

Australia's soils are influenced by its geological history, current climate, and human impacts. Australia was initially part of the supercontinent, Pangaea, 400 – 600 million years ago. Pangaea later split into Laurasia and Gondwana with Australia being part of Gondwana. About 45 – 50 million years ago, Australia broke away to become a separate land mass. Throughout this time, the climates of Australia varied from tropical, to much colder, to arid. For about the past 35 million years, Australia has experienced a warming climate and increased aridity. There has been little formation of new fertile soil, because there has been very little volcanic activity or ice sheets moving over the continent. Australia's soils are, therefore, underlain by salt and among the least fertile in the world (Aplin, 1998; Taylor, 2000).

Humans also influence soil quality. For the past 100 years, governments encouraged settlers and farmers to clear away native vegetation. This has led to water leaching through the soil and increased dryland salinity. Australian farmers' use of traditional European farming methods also have led to "... alarming levels of salinity, soil acidification, wind and water erosion, soil structural decline and loss of fertility, waterlogging, sodicity, non-wetting soils and so on ... " (Taylor, 2000).

Science can drive the sustainability of our precious soils, water and oceans

Unprecedented demands are being placed on the world's soil resources, and by 2050 they need to support a 70% increase in food production. However, arable land is finite and major crops are reaching yield plateaux. Better soil management is needed to conserve nutrients, improve water-use and reduce emissions. Climate change also compounds the situation.

Some of Australia's soil management challenges are immediate and obvious, such as widespread soil acidification of cropping lands. Others are more subtle but just as important, such as erosion and nutrient imbalances.

We need to improve soil management across the continent. This requires new diagnostic systems for determining when and where soil function is being compromised. Australia also needs more effective institutional arrangements for providing

information on the condition of our soil resources.

Research investment in these areas will generate large economic returns through increases in agricultural productivity and avoided costs in other soil-dependent industries. This is before we consider the equally large environmental benefits.

At the global scale, improved soil management is needed in nearly all countries. Without these changes, food-price volatility is likely to increase and this will potentially send millions of people into poverty. This is avoidable but only if there is a concerted response by individuals, the private sector and governments.

Neil McKenzie *Chief Research Scientist, CSIRO Agriculture Flagship at CSIRO*

The Mid Loddon Landcare Network Group

member's farmers have planned a new investigative project to look at how to use local geology, topography, current soil condition and other available information to create Farm Production Plans.

Crops and pasture information.

CSIRO - Crop and Pasture Science Volume 63 Number 8 & 9 2012 Legume Research states that -

Pasture legumes are crucial to Australian agriculture, both as a nutritious feed for livestock and for their ability to add nitrogen to the soil. Australia has no native legumes suited to livestock grazing, but 47 species, particularly from the Mediterranean region, have been domesticated to cover a wide range of environments and farming systems. New pasture legume varieties have the potential to further increase productivity and sustainability of the livestock and grains industries.

The Australian Dampwood Termite -

A native to the cooler regions of South East Australia. The natural spread of the termite is slow as colonies tend to be small and slow growing, inhabiting the same piece of timber for decades.



Hollows that form in trees provide essential breeding and roosting spaces for many native wildlife species. Native Australian trees do not usually develop hollows suitable for use by vertebrates until they are very old. Large hollows, essential for some fauna, do not develop until trees are well over a hundred years old; the development of large hollows being a characteristic feature of tree senescence (Jacobs 1955; Ambrose 1979; Mackowski 1984; Perry *et al.* 1985; Inions *et al.* 1989).

Hollows develop in Australian trees largely as a result of natural branch shedding and damage by wind, lightning, fungi and wood-boring insects, particularly termites.

Relationships between Fungi & Termites

Some vegetation has adapted to these harsh conditions by evolving to withstand the arid environment and infertile soil. Other than just evolutionary processes, plants are aided by other organisms to obtain sufficient nutrients for growth, namely, termites. These insects, too, have adapted to outback conditions and contribute to soil formation and biogeochemical (nutrient) recycling. The major biogeochemical cycles are: hydrologic, carbon, oxygen, nitrogen, sulfur, and phosphorus (Curtis, 1996).

Termites are consumers and detritivores that generally feed on grass, debris, and wood. The condition of the wood they eat is important; termites usually prefer dead or rotting wood to living wood. They lack the specific cellulases to break down cellulose, but are able to digest the cellulose and lignin found in their diet because of symbiotic relationships with flagellate protozoa, bacteria, and fungi (Ratcliffe *et al.*, 1952; Krishna and Weesner, 1969).

Fungi affect termites by decomposing wood for termite consumption. Termites prefer wood that has been partially decayed by fungi. Decaying wood caused by certain fungi is able to "attract" termites by the chemical substances that result from the degradation. Wood-destroying fungi aid in breaking down toxic substances in the wood so termites can consume it safely (Rouland-Lefèvre, 2000). Fungi also are able to decompose lignin to simpler polysaccharides for termites to digest (Lee and Wood, 1971).