



## **Mid Loddon Landcare Network News**

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



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

**blog: [uslandcare.org.au](http://uslandcare.org.au)**

### **MEETINGS & EVENTS – 2015 -2016**

#### **Upper Spring Creek Landcare Group**

Meeting held at the Lockwood South Primary School at **7.30pm** on Tuesday 10<sup>th</sup> November  
Special presentation: Powerful Owls by Emmi  
Other groups welcome to attend.

#### **Upper Spring Creek Landcare Group**

Annual Christmas BBQ will be held on 8<sup>th</sup> December at 6.00pm at the Happy Jack Reserve. Meat & Veggie burgers, bread, tea & coffee will be supplied. Please bring salad or sweet to share if able. Extras will be available for guests. BYG & chair.

**Entertainment:** Story telling, music, poetry and other items. BYO riddles and jokes to share.

#### **West Marong Landcare Group**

Meeting to be held at **8.00pm** on Tuesday 20th February 2016 at the Woodstock Hall.

**Agenda:** TBA

#### **Baringhup Landcare Group –**

Annual Christmas event will be held at 6.00pm socialising and 6.30pm BBQ meal on Monday 7<sup>th</sup> December at the Baringhup Memorial BBQ area beside the Loddon River.

**Baringhup Landcare Group** - next meeting to be held at 7.30pm at the Baringhup Hall Supper room on Monday 5th February . 2016 -

**Agenda:** Bell Swamp & Eddington Red Gum forest current health report – Damien Cook

**Nuggetty Land Protection Group** next meeting will be held at 7.30pm on Wednesday 4<sup>th</sup> November at the winery meeting room.

**Eddington Landcare Group-** meet in the Red Gum Forest seasonally - Summer meeting will be held at the Eddington store .TBA

#### **Ravenswood Valley Landcare Group.**

The next meeting is the Christmas meeting 25 November at 6pm at the North Harcourt Hall. Please bring meat for the BBQ and drinks. Also a salad /nibble / sweet to share.

#### **Mid Loddon Network Landcare Groups**

##### **Annual dinner**

**Date:** Thursday 12<sup>th</sup> November @ 6.00pm for socialising and 6.30pm for dinner which will be a set roast and sweet menu @ \$18.00 each.

**Venue:** Maldon Hotel

**RSVP** to Judy 5435 3412 by 9<sup>th</sup> November

**Key note Speaker:** Dr Dan Harley from Zoos Victoria

“At the heart of fighting wildlife extinction is the need for robust science. As Zoos Victoria’s Threatened Species Biologist, Dan’s work underpins our efforts to save 20 of Australia’s most endangered species from extinction. Dan is part of a 700 strong workforce at Zoos Victoria that is dedicated to fighting wildlife extinction”

#### **Mid Loddon Landcare Network Management Committee Meeting**

The final meeting for 2015 will be held at the Lockwood South Primary School at 7.30pm on **Monday 30<sup>th</sup> November 2015.** **Agenda:** General meeting plus group’s reports on promotional planning

##### **2016**

#### **West Marong landcare Group-**

**Field Day** commencing at 9.30am Thursday 14<sup>th</sup> January at Brian & Brad Comer property and moving on to a second property. Technical support by Soil Scientists, Christian Bannan & Roger Wrigley. Catering provided

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#### **Words of Wisdom:**

If we throw mother-nature out the window she comes back through the door with a pitchfork.

## **Recent landcare events:**

### **West Marong Landcare Group –**

Ray Gatiss and Rob Miller from Australian Renewable Energy Parks Pty Ltd. provided a presentation at the Group's October meeting which has been followed by a proposal directed to interested farmers.

#### **Presentation:**

Australian soils typically demonstrate a carbon deficiency compared to high output agricultural areas in other parts of the World. Carbon levels of 2 to 3 % usually reflect healthy soils and optimal agricultural output whereas Australian soils can be as low as 0.5% and decreasing. The continued use of conventional fertiliser regimes does not address the issue of carbon in soil and has the potential to further harm soil health.

Industrial Ecosystems Pty Ltd (IE) has been researching the use of carbon combined with conventional fertilisers to improve soil health and crop yields. Over the past 10 years IE has invested over \$800,000 in R&D growing trials carried out under the expert direction of Eureka Agrisearch Pty Ltd. The results of these trials demonstrated an increase in growth yields of 15 to 30% in one application and cumulative increases from placement in the same seed slot of up to 89% over several years. The full results are available to validate the above summary.

#### **The Proposal from Rob Miller**

Australian Agribusiness P/L (AA) (a company owned by Ray Gatiss, Bill Beaton and myself) has acquired the exclusive rights to the IE patents and AA is in the process of producing 200 tonnes of pelletised carbon based fertiliser for use in "proof of performance" plantings in 2016. In this case the fertiliser will be branded C1 – Fert, analysis to be provided.

The typical application rate proposed is 200 to 250kgs/hectare, delivered by airseeders. By way of comparison, to increase carbon in soil by 2% to a depth of 200mm would require the addition of a nominal 60 tonnes of carbon, equivalent compost tonnes of over 200 tonnes. The addition of carbon to the seed slot ensures that the plant root zone has adequate carbon for improvement in yield.

The NPK levels historically added by way of conventional fertilisers is maintained so the farmers are keeping with the traditional approach, just adding carbon as well as NPK and trace elements in different ways. The research also

showed significant improvement in the use of NPK and trace elements, and a modified release mechanism of these to the plant. Over time it is believed that P can be reduced, thereby reducing the incidence of P contamination in adjacent water bodies and the proliferation of algal blooms. The carbon presence also promotes moisture retention capability in the soil.

Based on an application rate of 250kgs/hectare, at \$350.00 per tonne for the pelletised fertiliser, the typical cost to the farmer per hectare is \$87.50 per hectare.

We would like to "field prove" approximately 20 farms, with areas planted of at least 10 hectares, and importantly being planted adjacent to traditionally fertilised plots. It would be advantageous to measure the carbon in soil pre the trial, and also measure the yield results from both areas.

We will be preparing a C1 – Fert fact sheet by 4/11/2015 as well as an order form for the 2016 planting season.

Further information will be available to interested farmers. Contact Judy 5435 3412

### **Eddington Landcare Group -**

Damen Cook presented the results of his past and recent monitoring of two local sites. Although very dry and desperate for a water flow, the Red Gum Forest has a good population of small birds and the remnants of swamp plant species. Lets hope there will be a water flow allocated to it soon. Although some trees were lost Bells Swamp had a strong rebirth following the last flood.

Damien visits the site regularly to note the changing plant species and visiting birds.

Due to small numbers who attended the recent presentation, Damien has offered a repeat presentation to provide an opportunity for our farming community to access the latest monitoring information. Refer to our events page.

### **Upper Spring Creek – Devi Shanty & Tim McCaw**

are leading a small mammal nest box research project and they presented their most recent findings to the group including many photos of Tuans and Sugar gliders residing in the boxes with their babies. Some had used sheep's wool as nesting material which must have created wonderful bedding in our recent very cold winter.

Devi & Tim are continuing to install nest boxes on the McKenzie Road site, which has been found to have many tree hollows, manly occupied by birds

### **2015 - International Year of Soils**

Healthy soils can contain up to 25,000 species of microorganisms per gram of soil. Depleted soils might contain only one-fifth as many. Soils also need to contain a healthy mixture of microorganisms, including fungi, yeast and bacteria, if they're to produce large crop yields with minimal disease loss.

### **Reprinted from the Soils Community of Practice Newsletter**

-Dr Samantha Grover, Department of Animal, Plant and Soil Science, La Trobe University sharing some of the her thoughts and experiences with soils and creativity.

Ironic, really, that I've been invited to share my ideas about soils and creativity with you this month. I don't generally consider myself as a creative or artistic person, but rather as a thorough and methodical scientist. So how has this come to be? We find that it is no longer enough to do excellent science, we must also share our passion for our work with the public, so that they too will value knowledge about soil, as we do.

The International Year of Soil has been a great inspiration for me, to spread the word about soil beyond our usual avenues of communication. Soil scientists know that healthy soils are crucial to human survival, but does the general public appreciate this? In Australia, I think we all agree, the answer is a resounding "No". At the Soil

Changes Matters Conference in Bendigo last year, Soil Science Australia called upon each of the delegates to think of one thing that they could do to spread the word about the importance of soil in 2015. I wrote a children's book, currently being published by CSIRO Publishing. Creating the text came easily enough, as I am enmeshed on a daily basis in what small children find fascinating about soil, having two young boys of my own.

Commissioning an illustrator for the project,

Camille Heisler has created beautiful illustrations that share the message of soils in a visual medium with young children. Look out for the book in early 2016.

I will share a sneak preview of the book with children in a series of workshops at Artplay, part

of the World Soils Day celebrations at Federation Square, Melbourne, 5th and 6th of December. Painting with soil, sculpting with soil and drawing with soil crayons will also feature in the workshops with artists Eleanor Butt and Cassandra Smith and soil scientist Miao Miao Cheng. The workshops will share the importance of soils with children and their parents in a fun, creative and hopefully very messy way.

### **Housing Shortages and Wildlife and what we can do about it**

Australia is currently experiencing a housing shortage, not just for people, but for wildlife too. Many of our birds and other animals rely on tree hollows to live and breed in, but trees with hollows are a dwindling resource. Hollows only form in very old trees —at least 100 years old — so with widespread clearing for farming, timber production or development, many old, hollow-bearing trees are simply not there any more. How can we help? By planting more trees for the future and stopping clearance of old trees, but in the meantime we can erect nest boxes to replace tree hollows.

### **All Shapes and Sizes**

Tree hollows, and therefore nest boxes, are used by a wide variety of birds, from tiny Striated Pardalotes and Tree Martins up to Powerful Owls, and including most parrots, and by many mammals as well, such as phascogales, gliders, bats and possums. As they come in all different shapes and sizes and have different specific requirements, no nest box will suit them all, so you will have to choose carefully which wildlife you want to attract, and tailor your nest box to suit. Don't put up any old nest box and hope for the best.

### **Grand Designs**

The different specific requirements of our wildlife necessitate that nest boxes are specially designed to incorporate essential features that mimic the characteristics of their natural nesting hollows. For example, most cockatoos and rosellas need a hollow or nest box which is vertical, while other parrots often prefer theirs to be sloping, and kingfishers, including kookaburras, prefer hollows or nest boxes that are horizontal. Welcome Swallows readily use a simple shelf situated below the eaves of a building. The size of the nest

box is usually determined by the size of the bird you are hoping will nest in it. Pardalotes require long, thin nest boxes which mimic the narrow branches in which they often nest, while nesting boxes for kookaburras, ducks and cockatoos are much larger. The entrance hole also needs to suit the size of its intended inhabitant — a large hole for large birds, and a smaller one for small birds.

Nest boxes can be made of a variety of natural and artificial materials. The best are natural hollow branches or logs attached to a tree, but it is vital that you do not collect these from the wild, where it is probably already being used by another native animal. Hollows are sometimes available from local councils or tree loppers who have removed them from suburban parks or gardens. If none is available, it may be more feasible to make a nest box from sawn wood. It is, of course, best to use recycled wood, such as off-cuts or plywood, or plantation-grown wood, rather than using unsustainably harvested timber. The timber should be thick enough to be sturdy and to provide adequate insulation for the eggs, chicks and the incubating birds. Other materials are also useful, as some species will readily use nest boxes made from PVC piping, but because of the smooth internal surface, it is essential to include some chicken wire or a piece of rough wood to enable the inhabitants to climb in and out. No matter which material you decide to use, make sure that all gaps are filled to exclude draughts. Birdlife Australia

We would like to encourage more people to build and install Nestboxes on their properties to relieve the housing shortage. Try google for a variety of simple nest box plans or - contact 5435 3412

### **Declines in whales, fish, seabirds and large animals are disrupting Earth's nutrient cycle**

In the past, whales, giant land mammals, and other animals played a vital role in keeping the planet fertile by transporting nutrients via their feces. However, massive declines and extinctions of many of these animals has deeply damaged this planetary nutrient recycling system, threatening fisheries and ecosystems on land, a team of scientists reports.

A new study shows that whales and outsized land mammals--as well as seabirds and migrating fish--played a vital role in keeping the planet fertile by

transporting nutrients from ocean depths and spreading them across seas, up rivers, and deep inland, even to mountaintops.

For example, whale densities are estimated to have declined by between 66% and 90% over the last three centuries due to commercial hunting, the study notes. Most grievously, 350,000 blue whales, many over one hundred tons, used to inhabit oceans around the globe. Only a few thousand now remain.

In particular, the new study examined phosphorus, a nutrient critical for plant growth. Prior to the era of commercial hunting, the scientists estimate that whales and other marine mammals annually moved around 750 million pounds of phosphorus from the depths to the surface. Now that figure is about 165 million pounds--some 23% of former capacity.

The team also gathered data on seabird and fish populations that feed in the sea and then come onto land--like ocean-going salmon that move up rivers to defecate, spawn, and die. Movements by these birds and fish once carried more than 300 million pounds of phosphorus onto land each year, but that number has declined to less than four percent of past values as a result of destroyed seabird colonies, habitat loss, and overfishing.

"Phosphorus is a key element in fertilizers and easily accessible phosphate supplies may run out in as little as fifty years," says Oxford's Chris Doughty. "Restoring populations of animals to their former bounty could help to recycle phosphorus from the sea to land, increasing global stocks of available phosphorus in the future."

**Source:** University of Vermont October 26<sup>th</sup> 2015

### **Why do birds sing?**

Many species of bird are more often heard than seen. Most birds have some kind of sound-making ability and they vocalise for a variety of reasons, including: advertising territories, attracting a mate, deterring predators and making alarm calls.

#### **How do they do it?**

Birds generate sounds from a structure called the 'syrinx', which is located at the junction of the two bronchi (air passages) in the respiratory tract (breathing organs). The syrinx is controlled by pairs of muscles. Generally, bird species with more muscle-pairs produce more complex calls.