



## **Community Network News**

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



**NEWSLETTER VOL.19 . No.10 November 2013 (Circulation ~300) Incorporation No: A0011936S**

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### **MEETINGS & EVENTS- 2013/14**

#### **Special event -**

**Bells Swamp wild flower walk** with Damien Cook this Sunday 10<sup>th</sup> November at 10.30am

Perhaps morning tea amongst the gum trees at 10.00am? I will bring the landcare basket of goodies and some large thermoses. Wear appropriate clothing as there are snakes in the area. I suggest rubber boots.

**Upper Spring Creek Landcare Group** meeting will be held at 7.30pm Tuesday 12<sup>th</sup> November at the Lockwood South School (2<sup>nd</sup> Tuesday monthly). Presentation: Freya Mathews story about bringing back the Bettongs

**Public Meeting at Eddington Hall**, Cnr. Playfair and McCoy Sts. 10.00am, Friday 15<sup>th</sup> November , Australian Renewable Energy Parks Pty Ltd is in the process of building a Recycling Park in Carisbrook Victoria, part of the process is the production of an organic fertilizer suitable for broad acre rural production. AREP and Eureka Agrisearch want to extend an invitation to farmers in Central Victoria to present the results of laboratory and field testing conducted over the past five years under the auspices of Eureka Agrisearch.

**Mid Loddon Landcare Network Annual Celebration Dinner** - Wednesday 20<sup>th</sup> November at 6.30pm at the Newbridge Hotel. Sharing your stories from 2013 - the good, the bad & the interesting. Prizes to be won. Two course dinner @ \$24 each. RSVP essential by Friday 15<sup>th</sup> November

**Mid Loddon Landcare Network Executive Committee** meeting at the Lockwood South Primary School at 7.30pm. Monday 3<sup>rd</sup> February 2014

**West Marong Landcare Group** meeting will be held at 8.00pm Tuesday 21<sup>st</sup> February 2014 (3<sup>rd</sup> Tuesday, bi-monthly) at the Woodstock Hall. Speaker to be announced.

**Baringhup Landcare Group** – Christmas BBQ meeting Thursday 5<sup>th</sup> December at 6.00pm at the Loddon River Reserve The group meets second Thursday of every second month at the Baringhup Hall Supper Room.

**Ravenswood Valley Landcare Group**- meets last Wednesday of every second month. Next meeting 29<sup>th</sup> January

**Eddington Landcare Group**- meet in the Red Gum Forest as notified (note signed entrance gate).

#### **Landcare Project Updates:**

##### ***“Save our Curlews”***

The Curlew display pen has been completed and the surrounds landscaped.

Many thanks to Frank & Sylvia for their dedication to the project. Also thanks to Tony for his carpentry support.

We appreciate the ongoing work of our curlew habitat site monitors who regularly check the infra-red cameras and boundary fences. Extra thanks to our sponsors- Citipower and also to the kind people have forwarded cash donations, including a cheque from interstate.



Project support has come from an unexpected source with the NSW, Border Rivers Gwydir CMA providing permission to use their Curlew cartoon characters for promotional purposes.

### **Bush Stone-curlew sighting -**

Although some locals hear the night time call of a Bush Stone-curlew, not many of us have been fortunate enough to spot one of the very few curlews still roaming locally, as Jenny, one of our dedicated infra-red camera monitors did recently as she was checking the boundary fence of one of our protected habitat sites.

**Small native mammals** whose survival locally will be assisted by the Curlew protected habitat sites. Monitoring of these sites will begin next year to establish what populations may be still existing and what can be done to provide support.

### **Dunnarts:**

Dunnarts are furry narrow-footed marsupials the size of a mouse, members of the genus *Sminthopsis*. They are mainly insectivorous. A male dunnart's Y chromosome has only 4 genes, making it the smallest known mammalian Y chromosome.

### **Common Dunnart:**

They prefer to inhabit dry sclerophyll forests and mallee heath land and are nocturnal insectivores whose diet consists mainly of beetles, cricket larvae, roaches and spiders. During the day they sleep in an undercover nest or shallow burrow. They have the ability to become torpid which results in temporary hibernation where the body temperature drops below 15 degrees Celsius. This is believed to be a technique which aids their survival in unfavourable conditions.



### **Fat-tailed Dunnarts:**

They are found in a variety of grasslands, shrub land, and open woodland. They also occur in farmland. Females give birth to between eight and ten young, of which an average of five usually surviving (Morton and Dickman 2008).



### **Antechinus:**

Antechinuses are small, carnivorous animals that primarily prey on invertebrates such as spiders, beetles (including larvae), and weevils. Some are strictly terrestrial and hunt only at ground level, while others are highly scansorial (climbing) in nature. Most species nest communally in tree-hollows.



### **Brushed-tailed Phascogale (Tuan):**

The Brush-tailed Phascogale is a carnivorous, nocturnal marsupial the size of a rat. It is also arboreal in nature, carrying out the majority of activities in trees tops and on trunks.



### **Two small mammals we have already lost:**

**The spot-tailed quoll**- last sighted locally in the 1990's



**Eastern Bettong** - has been extinct from mainland Australia for nearly 100 years.



### **Threats:**

The threats to most of Australia's small mammals include:

- Loss of habitat
- Competition from pest animals
- Predation by feral animals such as cats and foxes

It is also possible that people are mistaking dunnarts for mice and are setting traps for them

### **Actions**

If you live in an area that may have dunnarts &/or other small mammals, there are a few things you can do to help protect them:

Leave habitat on your property as natural as possible; leave logs and rocks, and avoid clearing large areas of leaf litter in areas where there is limited fire danger to assets.

If you have a pet cat, either keep it indoors at night or construct an outdoor cat run. This will prevent the cat from killing small mammals like the dunnart.

Carry out fox, feral cat and rabbit control on your property. This will help alleviate predation pressure and competition for resources.

If you discover small mouse-sized mammals on your property around or after dusk, try to identify the species. It might be a dunnart instead of a mouse!

### ***Farming for Sustainable Soils Project:***

The project's final meetings for 2013 were held at Baringhup and at Woodstock with Andrew Whitlock & Christian Bannan leading discussion. The latest spring satellite images of project participants were shown and interpreted by individual members. Fertilizers trials had been

experimented with. Chicken manure produced the most obvious change to the biomass images.

Christian presented a summary result of the individual soil test segments from the 135 soil tests taken across the sub-catchment and discussed soil condition trends and provided some advice.

Where to from here was discussed –

- There were still some problems with satellite image delivery to be solved
- Technology training was required – computers, ipads etc
- In field satellite imagery interpretation support
- A detailed plan was needed for trialling inputs, sowing widths, the use of a range of machinery including, aerators and deep rippers etc.
- Cropping & pasture trials. Green manuring/cover cropping
- Further landscape geology and soil information is required, including sub-soil investigations.

### **Climate variability on the increase:**

Some suggestions for avoiding frost damage (GRDC) -

### **Manage nutrition**

Ensure crops have an adequate supply of trace elements and macro-nutrients – supplying high levels will not increase frost tolerance. Crops deficient or marginal in potassium and copper are likely to be more susceptible to frost damage, and this may also be the case for molybdenum.

Don't push crops with high nitrogen rates on high frost-risk paddocks.

Crops with access to high nitrogen tend to sustain more frost damage than crops with a lower nitrogen supply.

Frost damage to cereal crops can be similar to damage caused by moisture stress, disease, nutrient damage or herbicides, so accurate identification is required to determine the cause of the symptoms and what action might be appropriate.

It is important to be able to accurately identify frost damage. If misdiagnosed, more money can be spent with no real benefit.

For a free copy of the guide/s contact  
*Ground Cover Direct* on free phone  
1800 11 00 44 or  
ground-cover-direct@canprint.com.au

Cereals – Frost Identification:

The Back Pocket Guide

Pulse & Canola – Frost Identification:

The Back Pocket Guide

## **More frost damage avoidance advice.**

(for next season)

There are a number of practical steps a grower can take to minimise frost damage and increase the concentration of solutes in plant sap.

The crop must be grown in humus-rich soil. Humus reduces the daily (diurnal) temperature fluctuations in the soil. As nutrient uptake is dependant on soil temperature, humus increases the ability of the plant to uptake nutrients. (Note that organic matter is not humus.)

Stable humus is the bi-product of microbes breaking down organic matter. It doesn't move and is insoluble in water.

Ground rich in humus is dark, soft and spongy.

Every plant releases organic compounds (root exudates) through its roots into the surrounding root zone (rhizosphere). These root exudates help release nutrients and feed the surrounding soil microbes. The more attention a manager gives to adequate and balanced nutrition, the more root exudates that will be produced.

As a result of these interactions, plants are able to absorb many nutrients, amino acids and vitamins from the soil. This adds to the ability of a plant leaf to increase its solute concentration and minimise the effects of frost.

What is critical here is the right balance of cations (calcium, magnesium, potassium etc) and anions (sulphate, chlorides etc).

Failure to address this can reduce your production by up to 60%.

*Adam Wilson – Soils Systems Australia*

## **The role of nitrogen in climate change and the impacts of nitrogen–climate interactions in the United States**

*Abstract:*

Producing food, transportation, and energy for seven billion people has led to large and widespread increases in the use of synthetic nitrogen (N) fertilizers and fossil fuel combustion, resulting in a leakage of N into the environment as various forms of air and water pollution. The global N cycle is more severely altered by human activity than the global carbon (C) cycle, and reactive N dynamics affect all aspects of climate change considerations, including mitigation, adaptation, and impacts.

*Complete paper available on the web.*

## **DO'S AND DON'TS SURROUNDING SOIL COMPACTION-** Agrisolutions Information sheet

DO check your soil regularly with a penetrometer - especially during seasonal changes in autumn and spring.

DO measure compaction before any new crop is sown to be sure roots can go deep for moisture and nutrients.

DO dig into the soil with a spade to assess soil moisture, smell, plant root direction, vigour and active growth.

DO check for soil adhesion to plant roots – a measure of active soil biological activity and good structure.

DO encourage earthworm activity by leaving a litter layer of food and shelter.

DO allow adequate rest and recovery time for soils and plants after grazing.

DO manage towards year round perennial growth of plants so active roots continue to explore the soil.

DO select the most appropriate equipment for the job when the decision to aerate or cultivate is made.

DO use aeration as a means of directing early autumn rainfall into the root zone to encourage root depth.

DO check the results of any actions by monitoring the soil before and after the action was taken.

*(This means a site assessment that could extend to soil nutrient and biological testing by a laboratory.)*

DON'T expect soil aeration to fix all soil problems –it is just one tool to help support soil health and production.

DON'T drive all over paddocks with heavy machinery or equipment and not expect compaction.

DON'T use aeration/cultivation equipment that leaves a smeared surface of compaction, eg, rotary hoe, discs, etc

DON'T mechanically work wet soils because this will destroy its structure.

DON'T overwork soils (includes over stocking, over grazing and over cultivation.)

DON'T keep stock on wet soils where pugging takes place unless deliberately done as a sacrifice paddock.

DON'T expect a shallow cultivation or aeration to remedy a deep soil compaction problem.

DON'T remove all vegetative cover from soil – especially during the hot dry months and at flood times.