



Community Network News

*Mid Loddon-CMN & West Marong, Upper Spring Creek,
Ravenswood Valley, Nuggetty, Baringhup, Eddington*

Landcare Groups & other community friends

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MEETINGS & EVENTS - 2014

Upper Spring Creek Landcare Group

Annual General Meeting to be held at 7.30pm on Tuesday 12th August at the Lockwood South Primary School

Agenda: Elect or re-elect office bearers
Planning next steps in Save our Curlews and the Shelbourne NCR projects and applying for next round of grants.

West Marong Landcare Group meeting to be held at 7.30pm on Tuesday 19th August at the Woodstock Hall. Agenda: Confirmation of Group plans, for new round of grants and current trial updates.

Cactus control

Hosting a property tour for Baringhup farmers

Baringhup Landcare Group Farm Bus Tour
Meet at 9.30am on Sunday 24th August at the Hall Supper Room. Morning tea supplied, BYO lunch

Baringhup Landcare Group - Special meeting

Next general meeting will be held at 7.30pm, Monday 6th October at the Baringhup Hall supper room. Speaker – to be notified.

Nuggetty Landcare Group next meeting will be held at 7.30pm on Wednesday 3rd September at the winery meeting room.

Eddington Landcare Group- meet in the Red Gum Forest seasonally. The Spring meeting date is to be announced

Ravenswood Valley Landcare Group.

Next meeting to be held at 7.30pm on Wednesday 24th September

Mid Loddon Landcare Network Management

Committee The next meeting will be an AGM, held at the Lockwood South Primary School at 7.30pm. Monday 29th September 2014.

Bush Stone-curlew Annual Australian Summit:

This year to be held in Albury on Wednesday 20th and on the morning of Thursday 21st August.

We will be providing a presentation about our local 'Save our Bush Stone-curlews' project.

Meetings planned for 2015: Alison Pouliot will return again next year to talk further with our Network groups about the importance of fungi in our forests and private properties. There will also be more Fungi Field Forays in both the Shelbourne & Lockwood forests.

All event dates will be finalised soon.



Natural source of Nitrogen

Thunderstorms play an important part in bringing nitrogen from the atmosphere to the ground.

A natural source of nitrogen oxides occurs from a lightning stroke. The very high temperature in the vicinity of a lightning bolt causes the gases oxygen and nitrogen in the air to react to form nitric oxide.

Because rainwater contains nitrogen in forms that plants can absorb, and plants need nitrogen to grow, farmers have noticed that rainwater stimulates more plant growth than water from other sources. That's good, in that farmers don't need to apply as much artificial fertilizer.

However, in some cases human activities result in an excess of nitrogen in rainwater. That has the effect of throwing off the balance in some fragile ecosystems where some plants -- typically algae -- that are normally limited by a lack of nitrogen now have enough extra nitrogen from rainwater to choke out competition.

Corridor connections:

Connectivity has recently come to the fore as an inspiring conservation concept in Australia. The vision of corridors as conduits for wildlife encourages landholders to plant trees to help create ribbons of green crossing the land. The vision suits governments, who want their spending on conservation matched by contributions from the community.

Tree-planting serves as something practical to do about climate change that benefits Australia in other ways as well. It can help species reach regions that suit them in future while at the same time removing carbon from the air: it is climate adaptation and mitigation combined. Possums, bandicoots, reptiles, frogs, ground-feeding birds, invertebrates and plants may be among a wide range of species to benefit.

Corridors are best suited to agricultural and semi-urban regions where native vegetation survives as scattered remnants.

Linkages between remnants can increase the effective size of animal populations, reducing their risk of extinction.

But how many species benefit?

Gliders can live in narrow strips of vegetation but because they sleep in hollows in old trees, long corridors of young trees might not benefit them much. Thin strips of vegetation suit noisy miners, aggressive honeyeaters that dominate some corridors and drive away and even kill other birds. Nest boxes can be installed for gliders but not until the trees are large enough to support them. Corridors that also include remnant paddock trees create stronger linkages.

Extract from 'Thinking of planting a wildlife corridor?'

Tim Low considers their benefits and limitations.

Very few small mammal diggers seen in the Shelbourne Nature Conservation Reserve.

Whilst working across two catchments in the Reserve during the recent forest restoration project

it was noted that there was evidence of only two naïve digging animals remaining to turn over the forest soils, being -

Black wallabies looking for one of their favourite foods the truffle & Echidnas, although there was a glimpse of a Yellow-footed antechinus.

Antechinus feed on a variety of insects and small vertebrates. They eat plants, small invertebrates, *fungi* and fruit, and are active at night.

Fat-tailed Dunnarts feed on insects, roots, *fungi* and shelter in a communal grass nest under a log or rock.

These small animals and many other wildlife will already be appreciative of the additional litter and logs on the ground in the forest which is already encouraging the return of *fungi*.



Acacia regen.
already obvious
ani Shelb. forest

Fungivory or mycophagy is the process of organisms consuming *fungi*. Many different organisms have been recorded to gain their energy from consuming *fungi*, including birds, mammals, insects, plants, amoeba, gastropods, nematodes and bacteria.

In Australian woodlands and forests, hypogeous *fungi* are widely distributed and macromycetes sporulate predictably. However, with the continued clearing of forest and woodland, the *fungi* are becoming rare. Continued loss of habitat will see the complete disappearance of these *fungi*. Animals that rely on *fungi* for sustenance will become extinct because of insufficient food. Only if restoration deliberately includes these *fungi* will conservation efforts succeed in maintaining animal and fungus communities.

'Australia's mammal fauna is the most distinctive of any continent. It includes many species and groups of remarkable antiquity. At the time of European settlement, many Australian mammal species were extraordinarily abundant, and many had pivotal ecological roles.

We now see only a faint shadow of this richness and abundance. Over the past two centuries, our mammal fauna has collapsed to a greater degree than any other plant or animal group. This degree of loss is far more than that reported for mammal fauna in any other continent over the same period.

What have we lost? Why did it happen? Is it still happening? And, what can we do?

A review incorporated input from more than 200 scientists with expertise in Australian mammal species.

The results are disconcerting. The review concluded that 29 mammal species – of which 28 were endemic – have become extinct in Australia over the last 200 years. This tally represents more than 10 per cent of the pre-European endemic terrestrial mammal fauna, and is notably higher than previously recognised.

In Australia, the most pervasive cause of decline and loss of terrestrial mammals has been predation by introduced cats and foxes, often exacerbated by inappropriate fire regimes

This susceptibility to introduced species is a characteristic of island biodiversity. Australia's isolation resulted in its remarkably distinct biodiversity, as well as the extraordinary vulnerability of its biota to new threats.

The decline and loss of the Australian mammal fauna has gone largely unrecognised by most Australians. This may be because many terrestrial species are small, unobtrusive and nocturnal,

However, there is still hope - With long-term commitment of strategic management actions, some species such as the boodie and bridled nailtail wallaby, once doomed to extinction, are now gradually increasing within fenced-off areas free of cats and foxes and given adequate management of threats, some near-lost species are now increasing. We have both the opportunity and capability to prevent further extinctions of Australia's mammal fauna.

Extract from **Much loss and an uncertain future for Australia's unique mammals** by John Woinarski, Andrew Burbidge and Peter Harrison

What we are doing about it –

The protected areas already established for Curlew habitat around the Shelbourne NCR reserve have additional benefits as safe havens for small mammals and other wildlife. The next large protected area is planned for the thinned area of the reserve, with funds already being compiled. Perhaps more of these herbivore and predator protected areas should be scattered across our farmland to provide safe havens for wildlife that will otherwise become extinct in the near future?

Save our Curlew project: A second permit to hold Curlews for promotional & future breeding purposes has been granted to members of the USC Landcare Group. The construction of the enclosure will begin in the next few weeks.

The two Curlews already installed in the Group's first enclosure are still very unsettled and nervous and it will take some weeks before photos can be taken and a promotional event can be held.

Old trees work faster at storing carbon -

Old trees contribute more to carbon storage than previously thought in a new international study that included Australian researchers.

The study published in the journal *Nature* – demonstrated that tree growth rates increased continuously with size, and in some cases, large trees appeared to be adding the carbon mass equivalent of an entire smaller tree each year. The significance of this study is that big old trees are better at absorbing carbon from the atmosphere than previously thought.

'Our research shatters the long-standing assumption that tree growth declines as individuals get older and larger,' said contributing author, Associate Professor Patrick Baker from the Melbourne School of Land and Environment, University of Melbourne.

Findings suggest that while they are alive, large old trees play a disproportionately important role in a forest's carbon dynamics. It is as if the star players on your favourite sports team were a bunch of 90-year-olds.

Researchers compiled growth measurements of 673,046 trees belonging to 403 species from tropical, subtropical and temperate regions across six continents, calculating the mass growth rates for each species and analysing the trends.

Full story in Ecos - Published: 3 February 2014

Remnant old growth eucalypts are not only lowering groundwater but also reducing carbon.

IPM advice: Contribution from Neil Hives
Follow up to earlier information on aphids in canola.

The article was aimed at trying to explain why there is more to this year than just virus in crops like other years.

We are saying that a primary cause of damage to crops has been feeding damage but that virus is present no question.

The absence of local green bridges does not mean substantial numbers of winged aphids will not move into an area from elsewhere with the potential to build numbers rapidly as colonies

establish under the right conditions. This issue is of great concern to growers looking to establish brassica fodder crops this spring.

□ It's great that initial aphid movements and subsequent colonisation in your area has not given rise to numbers that cause feeding damage but unfortunate that they were carrying virus.

But what to do about it from here? There are some things to consider and several scenarios come to mind.

□ Assess each situation on its merits.

□ It's important to know if aphids are winged or wingless and which way their numbers are trending.

□ What level of beneficials are present and the trends they are showing.

□ Feeding damage will be caused by high numbers of wingless and winged aphids on small plants. Colonies can develop very rapidly.

□ Low numbers of wingless aphids in crops with virus present will not spread virus further as quick as if winged aphids are present – If aphids present at this stage are predominantly wingless, holding off on spraying is good to see what happens in spring.

□ If the low numbers of aphids are winged now with the potential for moving about and carrying virus, then virus is likely to be spread more quickly to other plants so there is argument to treat now.

□ Also consider what types of insecticides may have already been used.

□ What chemicals are registered for the stage of the crop and will work for you.

Green peach aphids and broad spectrum insecticides, secondary pest flare & sampling crops.

Broad spectrum insecticides.

You will have seen from earlier correspondence that we strongly recommended NOT using broad spectrum insecticides to try and control Green peach aphids. There are 2 parts to the reasoning behind this.

1. There is an extremely high risk that GPA will not be cleaned up by broad spectrum insecticides they have high levels of resistance within their populations to these chemical groups - synthetic pyrethroids, organophosphates and carbamates - this includes pirimicarb.

2. Broad spectrum insecticides will however kill off all beneficial species currently present that are already putting downward pressure on the GPA populations. The broad spectrum insecticides

effectively take the brakes off GPA populations.

GPA populations then have the opportunity to build numbers under no biological pressure at all. Their potential to build numbers quickly under the right conditions is very high indeed.

As hard as it may be to understand that there can be biological pressure that works for you, it is probably even harder to understand why not to use a broad spectrum insecticide on GPA. Any thought of simply increasing the rate of application should be dismissed. It is this sort of approach in part that has given rise to the situation that now confronts us, i.e. resistance in what would otherwise be a simple control situation even if beneficial insect activity did not do the job for you.

Chemical control options but with certain risks (secondary pest flare).

As stated in earlier correspondence, Transform is an option however it is relatively expensive compared to commonly used chemicals. It would work but will likely increase the risk of secondary pest flare from other transient pests yet to come this season like Grey & Turnip aphids, Plutella or Diamond backed moth (another insect with high levels of resistance to commonly used broad spectrum insecticides) and 2 species of Heliothis – one species of which also has resistance issues. Transform is an option but undertake chemical control with your eyes wide open. If you use Transform, watch for other pests as the season progresses.

Sampling crops.

A simple yet quite effective sampling process involves counting GPA and other aphid species on the backs of upper and lower leaves on plants. Whatever number of plants chosen, e.g. 100 in a sampling effort, this should be repeated at regular intervals – weekly while still cool. Record numbers of GPA found, the % of GPA mummified and look for trends in numbers and % parasitism.

Other sampling methods like vac sampling will also give very good indications of other beneficial species present. Direct searching leaves tend to over-look quick moving beneficials.

You may well find trend data from sampling different paddocks gives you different outcomes across your property. Some paddocks - or parts of paddocks - may warrant Transform, others not.

Wise Words: "If you think you're too small to have an impact, try going to bed with a mosquito in the room." Author unknown