

## Tarcutta Valley Landcare



**Landcare**  
Murrumbidgee

### Committee's report

**Richard Eggins and Ainsley Wolter, Tarcutta Valley Landcare Group**

Welcome to the Spring newsletter of the Tarcutta Valley Landcare Group. Landcare in Australia is currently undergoing a period of change with the Federal Government reducing the Landcare budget by about \$500 million to fund the "Green Army" volunteer network. I wonder how many local landholders are going to be able to use a "Green Army" volunteer.

The NSW Government has combined the Catchment Management Authorities with the Department of Primary Industry and the Livestock Health & Pest Authority into the Local Land Services department. A feature of this

change is that the LLS districts are no longer "catchment based". I suppose the question has to be asked is Landcare about a network of landholders who share their ideas, experiences, successes and failures, or does Landcare get sucked up into the big bureaucracy where you get put on hold any time you want to talk to somebody?

Our group intends to hold a strategic planning workshop, where Landcare members can prioritise their needs and objectives. Any locals who want to pick up new ideas and have a bit of fellowship are most welcome to attend.

Here's hoping for a long wet week.

### Cross Property Planning project update

**Jacinta Christie, CPP Project Coordinator,  
Murrumbidgee Landcare**

Murrumbidgee Landcare's Cross Property Planning project is still going strong, with 64 landholders involved across the Tarcutta-Humula, Kyeamba Valley and Illabo-Junee regions.

Approximately 55% percent of land holders have so far received funding for their on-ground works, in the following areas: biodiverse plantings, protection and enhancement of existing remnants, and invasive species management.

Hot and dry conditions over spring and summer last year meant that many of the land holders who managed to complete planting last year had reduced survival rates. These land holders have been supplied with additional funds through the project, to purchase replacement trees and shrubs this year.

Workshops and training still continue to be offered through the project, with a Soil Biology Workshop being offered in spring this year (see information at right).

For more information, please contact Jacinta Christie: 0431 953 778, or [jchristie@mli.org.au](mailto:jchristie@mli.org.au).

### FREE Soil Biology Workshop (including 2 free soil tests)

Murrumbidgee Landcare's Cross Property Planning project, in conjunction with Riverina Local Land Services, invite you to participate in a soil biology workshop in your local area this spring.

The workshop will:

- Provide you with techniques to identify and monitor soil biological health;
- Provide management options to encourage soil biota and build soil organic matter on your property;
- Examine the significant role of soil biota for sustainable production;
- Teach participants how to use litter trays and microscopes, to identify different soil organisms; and
- Demonstrate practical on-farm tests.

All participants will be entitled to two free chemical soil tests. The results from these tests can be used to discuss the connections between soil chemical properties and soil biological health on your farm.

If you are interested in participating, please contact Jacinta Christie (Murrumbidgee Landcare): 0431 953 778, or [jchristie@mli.org.au](mailto:jchristie@mli.org.au).

## Frogs on farms

Dr David Hunter, Threatened Species Officer, NSW Office of Environment and Heritage, Albury

### *Frogs of the south west slopes and plains*

The south west slopes and plains region of New South Wales is home to at least 19 frog species, all of which have the capacity to thrive on farms in the agricultural landscape. Frogs can occupy a very broad range of both natural and man-made wetlands. Whether it is a small pond that only fills after rain, or a large permanent dam, there is a good chance that some frogs will call it home.

Frogs need wetlands, because this is where they lay their eggs and where the tadpoles live until they reach metamorphosis and move on to land. Nearly all frogs in our region lay their eggs in water. The only exception is Bibron's Toadlet (*Pseudophryne bibroni*), which lays its eggs on land in a small nest. Bibron's Toadlet eggs hatch during heavy rain, and the tadpoles are then washed into a nearby pool.

Some frog species on the south west slopes and plains are well known, because they have very noisy and distinctive calls, or because they are often found around houses. Farmers are often familiar with the Banjo Frog (*Limnodynastes dumerilii*) because its call is a very loud 'bonk'. This species also lays foamy egg masses which float on the water surface. The Banjo Frog will also bury underground during the day in loose moist soil, and people often find them when they turn over their veggie patch, or dig post-holes. Peron's Tree Frog (*Litoria peroni*) is also well known because this species often lives around houses, where they sit on windows at night and catch bugs that are attracted to the light. This species is easily identified because its body is covered in fine emerald green flecks, and its eye resembles a cross because of a vertical stripe running through its horizontal pupil.

### *Farms are important for frog conservation!*

Many farms are home to threatened frogs that have declined from much of their historic known distribution. Over the past three decades, frogs have been declining and becoming extinct at a very alarming rate throughout the world. This decline is primarily due to habitat degradation and the spread of a pathogen known as the Amphibian Chytrid Fungus (*Batrachochytrium dendrobatidis*), which causes a disease that kills frogs. The Fungus has spread throughout most of Australia, and is the likely cause of the Southern Bell Frog (*Litoria raniformis*) having disappeared from our region. The Southern Bell Frog was known to many property owners and farmers because this species is a large green frog that would bask in the daytime sun and jump into water when approached or disturbed.

One threatened frog still persisting on the south west slopes is the Booroolong Frog (*Litoria booroolongensis*), which only lives along rocky sections of river. The critical habitat required for the persistence of the Booroolong Frog is rock crevices in shallow stream water, as this is where the female places her eggs during spring and early summer.



*Top: Bibron's Toadlet is the only frog in our region that lays its eggs on land*

*Middle: With its noisy 'bonk' call, many property owners are familiar with the Banjo Frog*

*Bottom: At night, Peron's Tree Frog will sit on windows and eat bugs attracted to the light*



*(article continued from previous page)*



*Top: A disease may have caused the Southern Bell Frog to disappear from the slopes and plains region*

*Middle: Populations of the endangered Booroolong Frog cannot persist without rock crevices in shallow water, which is where they lay their eggs*

*Bottom: An example of a well vegetated farm dam that is home to many different frog species*

A range of factors may cause the loss of these aquatic rock crevices, and subsequent loss of the Booroolong Frog. Removal of riparian vegetation and inappropriate grazing can cause erosion, and lead to large quantities of sediment entering the stream and smothering rocky sections. Heavy infestation by weeds such as willows will also result in loss of rocky stream habitat. Many farmers are now protecting their sections of stream by controlling weeds and implementing grazing practises that minimise erosion. These activities typically result in improved water quality and more productive grass growth, both of which also help maintain healthy livestock.

### ***The broader benefits of protecting and enhancing frog populations***

Protecting and enhancing habitat for frogs has direct and indirect benefits for the broader environment. Frogs play a valuable role in the food web and cycling nutrients within an ecosystem. This is because they often occur in very high abundance, and occupy both aquatic and terrestrial habitats. Tadpoles consume large quantities of food (algae and microorganisms) in wetlands, and then move onto the land. This process helps maintain nutrients within a local area, as opposed to being washed downstream where they then have the potential to cause problems like blue-green algal blooms. Tadpoles and frogs are also consumed by many other animals, such as fish and birds, and thus frogs are important for enhancing and maintaining broader biodiversity.

Like the Booroolong Frog, which relies on aquatic rock crevices, different frog species typically have different habitat requirements which are essential for their populations to survive. These requirements often relate to different parts of their life cycle, such as where they lay their eggs, what sort of wetland the tadpoles can survive in, or where the adult frogs like to shelter during hot dry summers. So the number of frog species living in an area is related to the variety of habitats available. Properties with a combination of well-vegetated dams, areas that become seasonally inundated, and patches of remnant woodland are likely to have a greater abundance and diversity of frog species.

In general, maintaining diverse and abundant frog populations on farms is conducive to promoting a healthy environment, and typically involves habitat protection and enhancement. It is clear that protecting habitat for species such as the endangered Booroolong Frog, or other more common frogs, has far reaching benefits for many other species and ecosystem processes. Moreover, enhancing ecosystem health in the agricultural landscape should provide benefits to farmers, in particular, providing greater resilience to extreme drought conditions. Hence, efforts to ensure the persistence of our biodiversity in the agricultural landscape should also assist in maintaining viable agricultural businesses into the future.

## Chronicling 25 years of Landcare history in the Tarcutta Valley

Kimberley Beattie

Hello Tarcutta Landcarers,

I'm working on a project I'm currently calling 'the TVLG history book', but which will eventually have a much catchier name. As some of you may know, I recently completed a book for the Kyeamba Valley Landcare Group (KVLG), recounting the 25 years of the Group's history, which was launched at their AGM this May. The book is entitled '*Kyeamba Valley Landcare Group: 25 Years of Landcare(rs) in the Landscape*'.

If you would like a copy of the KVLG book, please contact:

- Mardi Pillow (KVLG Secretary): [mpillow@bigpond.com](mailto:mpillow@bigpond.com), or
- Murrumbidgee Landcare: (02) 69 331 443.

You can also download a copy of the book from the Murrumbidgee Landcare website at: [www.mli.org.au/networks/KVLG](http://www.mli.org.au/networks/KVLG).

After the KVLG book was launched, Bob Schofield and Peter McCallum of the Tarcutta Valley Landcare Group put their heads together with Marion Benjamin from Murrumbidgee Landcare, and I was asked if I would like to put together a similar book for Tarcutta Landcare, which I began working on in June. Bob and Peter have provided me with 25 years worth of meeting minutes, officers' reports and newsletters, which are proving a great place to start, and I've spent many hours reading through these, taking notes and drafting an outline of the book to come. My hope is that between the information I already have available and input from various Group members as I go along, I will be able to get your book finished early next year.

However, I find myself in need of more information than I currently have at hand. Most of the pre-2005 information I have pertains to the Tarcutta Creek Catchment Committee and the Oberne-Tarcutta Landcare Group, which means I'm potentially missing out on a lot of information about the activities of the Landcare groups that used to be based at Humula, Courabyra, Carabost, Borambola and Lower Tarcutta, all of which formed an important part of Tarcutta's Landcare history.

I'd also like to gather copies of photos of Landcarers, Landcare activities and project sites from across the Valley over the years, along with project details, and personal insights from group members. One of the things I really enjoyed about researching and writing Kyeamba



*Above: Copies of the KVLG history book, "Kyeamba Valley Landcare Group: 25 Years of Landcare(rs) in the Landscape", at the book's launch in May this year*

Valley Landcare Group's book was the chance to speak with many of the current and past group members and gain an insight into their personal experiences with Landcare. First and foremost, Landcare is about the people involved, about our skills, knowledge, interests, passion, and experiences, and I think any book about community Landcare needs to reflect this.

To this end, I will be looking for Tarcutta Valley Landcarers – both past and current – to interview over the next few months, to ensure that the final book will be something that truly reflects your own Landcare experiences, and isn't just another dry report listing on-ground works and numbers of trees planted, while ignoring the heart and soul of Tarcutta Landcare.

If you are interested in being interviewed (and potentially quoted in the book), or if you have photos or project reports of Landcare works undertaken over the years that may be useful for my research, please contact me.

I look forward to working with you all.

### **Contact details**

Please contact Kimberley Beattie on:

Email: [kimberley\\_beattie@yahoo.com.au](mailto:kimberley_beattie@yahoo.com.au), or

Phone: 0408 264 894.



## The benefits of drought lot feeding facilities

Janelle Jenkins, Riverina Local Land Services

The impact of periodic dry conditions and drought can significantly affect the long term stability and sustainability of grazing systems in the moderate to high rainfall zones of the Murrumbidgee catchment. Drought lots have proven to be a useful tool to assist land holders to manage livestock and groundcover during dry conditions.

Over the past six years, the Murrumbidgee Catchment Management Authority (now the Riverina Local Land Services) has accessed public funding to assist land holders in the catchment to participate in Stockplan® training and then, if interested, undertake the development and building of drought lot feeding facilities on their properties.

Drought lots have substantial potential flow-on effects from land holders being able to better manage groundcover on their farms. Benefits to land holders from the maintenance of groundcover include:

- Protection and maintenance of biodiversity
- Better plant production post drought (resulting in significantly reduced costs of re-establishing pastures)
- Protection of the soil resource
- Reduction or elimination of siltation of on-farm dams and local creeks.

There are also substantial flow-on benefits to the areas surrounding the farm from improved on-farm

groundcover, including:

- Reduced erosion, waterway sedimentation and siltation (resulting in improved downstream water quality)
- Control and/or remediation of dryland salinity impacts
- Protection of native pastures
- An overall increase in the catchment's biodiversity and connectivity.

Stockplan® is a computer software package that contains decision support tools to assist livestock producers to formulate management decisions before and during seasonal dry periods or in the early stage of drought. The program and the accompanying training workshop encourage a proactive approach to drought, resulting in reducing environmental and financial impacts. Training in Stockplan® can help land holder's to design drought lots and plan for future dry conditions.

### Further information

For further information about Stockplan® training and the funding available for the construction of drought lots, contact Janelle Jenkins:

Ph: (02) 69 412 256, or 0427 639 947

Email: [janelle.jenkins@lls.nsw.gov.au](mailto:janelle.jenkins@lls.nsw.gov.au)

## Spring climate outlook for the Tarcutta Valley and region

Robbie Lennard, Wagga Bureau of Meteorology office

**Temperatures:** Warmer days and nights are likely, with a 65-70% chance of Spring temperatures exceeding the median maximum and minimum temperatures. For more info: [www.bom.gov.au/climate/outlooks/#/temperature/summary](http://www.bom.gov.au/climate/outlooks/#/temperature/summary).

**Rainfall:** A drier than normal Spring is likely, with a 65% chance that rainfall will be below the median rainfall for Spring. For more information: [www.bom.gov.au/climate/outlooks/#/rainfall/summary](http://www.bom.gov.au/climate/outlooks/#/rainfall/summary).

**El Niño:** Climate models suggest the chance of an El Niño developing in the coming months is at least 50%, which is around double the normal likelihood of an event. The El Niño-Southern Oscillation tracker status is currently at an El Niño WATCH level. Given current observations and model outlooks, if an event was to occur it is unlikely to be a strong event.

The Indian Ocean Dipole (IOD) remains negative, however models suggest it will return to neutral in early Spring. A negative IOD pattern typically brings wetter winter and spring conditions to inland and southern Australia. For more info: [www.bom.gov.au/climate/enso](http://www.bom.gov.au/climate/enso).

This seasonal outlook is based on data available in early September 2014. For further info, and regularly updated predictions, check out the Bureau of Meteorology seasonal outlook web pages provided.

## Tarcutta Creek Flood Remediation Field Day

Friday 10th October, from 10.30 am

Join the Tarcutta Valley Landcare Group to view works undertaken to repair damage to our Creek following the 2010 and 2012 floods.

Meet at the T-intersection of Westbrook Road and Oberne-Umbango Road. BBQ lunch will be provided following the inspection.

Please RSVP by 26th September to Richard Eggins (Tarcutta Valley Landcare Group):  
(02) 69 289 550, or  
[dellhaven@skymesh.com.au](mailto:dellhaven@skymesh.com.au)

Please wear suitable enclosed footwear.

## Paddock trees: Why they are worth saving

Mason Crane, Research Officer, Australian National University



Scattered paddock trees are a common feature across Australian agricultural landscapes, and are generally relics of the original woodlands and forests that once covered these landscapes. As I drove down the Hume Highway the other day, I tried to imagine the countryside without scattered paddock trees - it would look very foreign indeed and hard to picture. However that is the future many agricultural landscapes in our region are facing, given the current trend. A study conducted in the south west slopes predicts that within 120 years almost all paddock trees in the region will be lost, due primarily to a lack of recruitment.

### *The value of paddock trees*

Paddock trees are considered a 'keystone' structure in agricultural landscapes around the world. This means that they have a disproportional influence on how the environment functions. In Australia, paddock trees have been shown to enhance water infiltration and soil quality. They also have a disproportionately high value for biodiversity, providing superior habitat to other vegetation in the landscape for many species. Much of this can be attributed to the great age and size of these trees; not only do they provide habitat in their own right, but they can also increase the biodiversity value of other nearby habitats, such as tree plantings and small remnant patches.

Paddock trees also facilitate the movement of wildlife across the landscape. This is important for many reasons: it helps the various nomadic and migratory birds that occur in our region, it increases the opportunity for wildlife to disperse across the landscape to colonise new habitats, it ensures the flow of genetic material across the

landscape and between populations, and at a local level it helps animals gather the resources they require.

### *Threats to paddock trees*

Unfortunately, despite being such a crucial resource, paddock trees are under siege. They are typically the oldest living structures in the landscape, so natural attrition is inevitable. With a lack of regeneration over the past 100 to 200 years, there are few medium to large trees to take their place.

The rate of loss of these trees is amplified by a myriad of factors associated with being in a paddock environment, including:

- Spray drift will weaken paddock trees over time, inviting attack by insects and rot
- Increased nutrient loads from fertilisers and stock camps also make trees more susceptible to insect attack and drought stress
- Ploughing and stock camps damage the root zone, again weakening the tree
- Erosion and salinity also add extra stresses.

The accumulated impact of these stresses on paddock trees can be enough to cause their premature death, but it is often a wind storm or fire which is the final nail in the coffin for these already weakened trees. For example, last February I lost 10% of the paddock trees on my property in a 15 minute wind storm. Preliminary results from our study into the impacts of wildfire show that losses of 20-80% of paddock trees can occur. In addition, deliberate clearing of paddock trees still continues, particularly further west of our region (mostly associated with changing land management practices eg pivot irrigation).



*(article continued from previous page)*

### ***How landholder's can help protect paddock trees***

While the prospects of the paddock tree seem grim there are still a few things we can do to protect existing trees, recruit new trees, and take advantage of the habitat the existing trees provide while they are still about. If we can reduce the extra stresses on paddock trees, it's possible that some could survive another 100-200 years. Here are some tips:

- Respecting these centuries-old trees, and the contribution they make to a sustainable environment, is an essential first step
- Consider them when planning general farm management practices, such as spraying, fertilising and prescribed burning
- When considering environmental works on your property, paddock trees should be given high priority. Including paddock trees in tree planting programs can give your new plantings a 200 year head start, and the protection from wind, spray drift and insect attack the new plantings provide may also extend the life of the existing tree

### ***Planting new paddock trees***

Recruiting new paddock trees is also desirable, not only from an environment perspective but also for production reasons, such as stock shelter. There are a number of ways to do this effectively:

- Change grazing regimes, to allow time for the new tree to germinate, and to recover from grazing. This is particularly successful in pastures that are not heavily modified,
- Adopt the principles of whole paddock restoration, or plant a whole paddock with scattered trees, and remove grazing for 2 or more years until the new trees can withstand stock, or
- Plant individual trees with stock proof guards, or plant clumps of trees protected with temporary fencing.

Increasing the number of paddock trees within a paddock will not only reduce the stress on individual trees from the burden of stock camps, it can also increase the biodiversity values of that paddock. Studies conducted by the Australian National University show that

even a small increase in paddock tree density, from 2-4 trees/ha to 5-10 trees/ha, has a significant impact on the diversity of insectivorous bats and birds. However when considering this we must be mindful that the tree we plant today will not fully deliver the same benefits that most existing paddock trees provide - at least not in the next 150 years!

I am hopeful that through the innovation and adaptability that is continually shown by our rural communities we can address these issues, and that future generation will inherit agricultural landscapes that contain paddock trees.



*Top: A Travelling Stock Reserve near Ladysmith; even though it is often heavily grazed, the time between grazing has allowed trees to regenerate*

*Bottom: A great example of planting shrubs and trees around existing paddock trees, near Ladysmith*

## Coming events

### Tarcutta Valley Landcare Group meetings

All community members are welcome to attend our monthly Landcare group meetings. Meetings are held on the third Tuesday of the month, from 7.00 pm, at the Tarcutta RSL. All community members are welcome to attend!

### NSW Rural Women's Gathering

Friday 12th to Sunday 14th September, Coolamon. This year's gathering, with the theme "Heritage with heart", will bring hundreds of women and their partners to the region, and will be an opportunity for attendees to gather and share their unique experiences. For more info: [www.nswruralwomensgathering.org/tagged/about/chrono](http://www.nswruralwomensgathering.org/tagged/about/chrono)

### Landcare at the Henty Machinery Field Days

Tuesday 23rd to Thursday 25th September, Henty. Be sure to come along to the Landcare pavilion when you head to Henty this year, to talk to some of our members and find out more about what's happening with Landcare in our area. For more info about the HMFD: [www.hmfd.com.au](http://www.hmfd.com.au)

### "Confident livestock marketing" online course

Thursday 25th September, 9 am to 3 pm, online. Upgrade your marketing skills - without leaving home! The course is being delivered by AJM Livestock Solutions at a subsidised rate of \$27.50, through MLA's More Beef From Pastures program. Register by 17th September. For more info: [office@ajmlivestocksolutions.com.au](mailto:office@ajmlivestocksolutions.com.au), or (02) 69 284 245.

### Tarcutta Creek flood remediation field day

Friday 10th October, from 10.30 am. This field day is to view works undertaken to repair damage to our creek following the 2010 and 2012 floods. Please meet at the t-intersection of Westbrook Road and Oberne-Umbango Road. BBQ lunch will be provided at the Oberne Hall, following the inspection. Please RSVP by 26th September to Richard Eggins: (02) 69 289 550, or [dellhaven@skymesh.com.au](mailto:dellhaven@skymesh.com.au)

### Friends of Grasslands forum, "Valuing native grasslands"

Thursday 30th October to Saturday 1st November, Canberra. This forum on grassland conservation and management throughout south-eastern Australia will feature talks, discussions and field visits to local grasslands and grassy woodlands. For more info: [www.fog.org.au/forum2014.htm](http://www.fog.org.au/forum2014.htm)

## Key contacts

### Tarcutta Valley Landcare Group

Richard Eggins, Chair:  
Ph: (02) 69 289 550

Ainsley Wolter, Deputy Chair & Publicity Officer:  
Ph: (02) 69 289 584

Jenny Cowie, Secretary:  
Ph: (02) 69 288 238

Peter McCallum, Treasurer:  
Ph: (02) 69 289 563

Bob Schofield:  
Ph: (02) 69 289 561

### Murrumbidgee Landcare Inc

[www.murrumbidgeelandcare.asn.au](http://www.murrumbidgeelandcare.asn.au)

Jacinta Christie, Cross Property Planning project:  
Mob: 0431 953 778  
E: [jchristie@mli.org.au](mailto:jchristie@mli.org.au)

Wendy Minato, Regional Landcare Facilitator:  
Mob: 0487 953 777  
E: [wminato@mli.org.au](mailto:wminato@mli.org.au)

### Riverina Local Land Services

[www.riverina.lls.nsw.gov.au](http://www.riverina.lls.nsw.gov.au)

Rob Kuiper, Land Services Officer:  
Mob: 0428 493 187  
E: [rob.kuiper@lls.nsw.gov.au](mailto:rob.kuiper@lls.nsw.gov.au)

If you have any questions or comments about this newsletter, or would like to contribute any ideas, please contact Nicole Maher (Newsletter Editor):

[nmaher@mli.org.au](mailto:nmaher@mli.org.au), or (02) 69 310 981.

This newsletter has been supported by Murrumbidgee Landcare as part of its "Cross Property Planning to Balance Production and Biodiversity" projects, assisted with funding from the Australian Government's Clean Energy Future Biodiversity Fund and the NSW Government's Environmental Trust.

