



The National Landcare Facilitator

NEWSLETTER – November/December 2013

Bolstering the weed arsenal

By **REBECCA SHARPE** – *Rural Press* 25th November 2013

SPRAY it out or burn the lot used to be the “farmers’ way”, but increasing concerns about herbicide resistance is prompting a search for new control methods.

Cranbury Landcare Group, which re-grouped earlier this year after a decade-long hiatus, was successful in gaining funding from the Federal Department of Agriculture for their project, Measuring and Managing Herbicide Resistance in No-till Cropping.

The group includes members of the Cranbury district, located between Cudal and Canowindra, who have banded together to find a solution.



Grain Orana Alliance chief executive officer Maurie Street, Cranbury Landcare chairman Lawrence Balcomb and head of resistance testing at Charles Sturt University Wagga Wagga John Broster

Group chairman Lawrence Balcomb said weeds were becoming a major concern for farmers in the area. “In the past 20 years there has been a massive switch to no-till cropping with the majority of crops now sown in one pass, but this has put increased pressure on herbicides to control weeds,” he said. “There have been a few positive resistance tests and other anecdotal signs of resistance in our area.”

Mr Balcomb said the project aimed to provide a better understanding of how resistance occurred and the extent of the problem in the district. A field day held last month included a talk from head of the resistance testing program at Charles Sturt University, Wagga Wagga, John Broster, who will also conduct testing on Cranbury district samples.

Mr Broster said it was important, and usually more convenient, for growers to implement harvest weed seed control programs. “Most weed seeds exit in the chaff and straw from the back of the header,” he said. “The header is the most efficient tool to spread them back over the whole paddock.” Mr Broster said adjusting the height of the comb on the header could help control weeds common to the area including wild oats, wild radish, annual ryegrass and brome grass. “If you cut low enough you are going to collect (the seeds) so you can do something with them.”

Ag ‘n’ Vet Narromine agronomist Tim Wright said ryegrass in the area was resistant to all group A and a large percentage of group B herbicides. “Some growers in our area have been experimenting with windrow burning, green and brown manuring,” Mr Wright said. He said those methods were only in their infancy in the area. “If we want to keep our existing chemical controls working then these

practices may help,” he said. “Group approaches have proved to always be the most effective and sustained method of control.”

Mr Wright said it was a matter of changing management and preventing seed flow from the risky areas to the rest of the property and neighbouring properties. Grain Orana Alliance chief executive officer Maurie Street, Cranbury Landcare chairman Lawrence Balcomb and head of resistance testing at Charles Sturt University Wagga Wagga John Broster

Free AGDATA Offer for Landcare/Farming Systems Groups

After the recent National Landcare Webinar on “Little River Landcare – why it works” Stephen Dummett from AGDATA has kindly made the Landcare/farming systems groups the offer of a free download of an accounting package called “Phoenix Lite”.

“On the recent National Landcare Webinar on Little River Landcare “why it works”, Pip Job described that having sound business processes and tools in place was one of the key elements that helped reinvigorate Little River Landcare Inc. into one of the most dynamic Landcare Groups in the country. AGDATA Australia was on that webinar and thought that here was an opportunity to help these not for profit groups by providing their Treasurers with an accounting tool that could easily be moved from one Treasurer to the next with ease and was simple to use. Under their Community Involvement Program, AGDATA Australia is offering your group a free download of Phoenix Lite. To take advantage of this offer, send your Group and Treasurers contact details to stephend@agdata.com.au quoting Little River Landcare offer. You will then be sent a download URL and an activation code.”

If your group would like to take advantage of this offer, please contact Stephen directly at - AGDATA Australia Pty Ltd • 122 Russell St TOOWOOMBA Q 4350, P +61 7 4632 8488 • F +61 7 4638 2458 • www.agdata.com.au

National Landcare Webinars – Next Webinar February 12th 2014



The next National Landcare Webinar will be with Cam Nicholson from the Woody Yaloak Catchment Group in Victoria on the **12th February 2014 at 12.30 pm** (eastern daylight saving time).

“Landcare farming – makes sense and money” The Woody Yaloak Story”

REGISTER FOR THIS FREE WEBINAR AT:

<https://attendee.gotowebinar.com/register/5563444528868622849>

Landcare farming has been around in Australian agriculture for some time, in fact 2014 will mark the 25th anniversary of the declaration of the Decade of Landcare and the landmark partnership between the National Farmers Federation, Australian Conservation Foundation and the Federal Government. While much remains to be done, and it is clear that as a nation we are still at the beginning of

understanding how to farm in our environment, it is also equally clear that profound changes have been achieved not only in our landscapes and farming techniques, but also in our community.

Landcare farming has always been a vital component of the Landcare movement and the achievements over the last 25 years are impressive. You can look at this through national data which shows the uptake of practices such as minimum tillage, hectares of revegetation, km of creeks fenced off or the nearly \$2.4 billion annually that farmers spend on controlling pests and weeds. The 2012 National Landcare survey showed that 93% of Australian farmers said that they practiced Landcare on their farms and 73% said that they considered themselves part of the broader Landcare movement – this illustrates a significant cultural change which will have a long term positive legacy for the country.

However national results are all well and good, but it is not until you begin to look at the changes at the local level that some of this information really begins to make sense and become tangible. So it is timely to look at an example at the local level of the changes that Landcare farming has meant to a farm based Landcare group and its members – both in terms of improvements to their environment and farm viability.

The Woody Yaloak Catchment Group in rural Victoria was formed in 1992 when a number of Landcare groups came together over an area of 120 000 ha. The environmental challenges at the time were significant and extensive. Little remnant vegetation remained, weeds and rabbits were widespread, many waterways were unprotected and areas of salinity and erosion were having an impact on farm production. Gross farm income in the Woody Yaloak Catchment was 10% below monitor farms in western Victoria. Pastures were dominated by annual species, leaving the ground prone to erosion in summer. Most soils were deficient in nutrients and highly acidic.

The resources needed to address the issues were huge and would require a long term commitment by the majority of landholders in partnership with Government and the private sector. With most of the catchment used for agriculture, farms would need to be financially viable to generate the money required to address the environmental needs.

The Woody Yaloak Group has conducted surveys of its members that have allowed it to track the environmental and economic impact of their activities and those of its members since its inception and has most recently concluded a major assessment of the last 10 years. The results at both the environmental and farm viability level are impressive with farms now larger, more profitable and with greater equity. So join us on the 12th February for informative insights into the benefits of Landcare farming and the work of yet another great Landcare group.

Experts: World's soil is at risk

By Australian Soil Consortium - Wednesday, 13 November 2013



Image: Daniel Prudek/Shutterstock

The world now loses around 75 billion tonnes of topsoil a year, and this rate is liable to grow as demand for food increases and the climate changes. Around the world a silent crisis in building in the soil that feeds us, putting global food security at risk as demand for nutrition soars in the coming half century.

The Australian Soil Consortium, a group of leading Australian farmers and scientists, have called for Australia to take a leading role in overcoming the threat of land degradation. Scientists estimate the world now loses about 75 billion tonnes of topsoil a year as it tries to feed itself. This rate is liable to grow as demand for food increases and the climate changes.

“Recent satellite surveys have shown a one per cent decline in the world’s farmed and grazed area every year over the past quarter of a century, due to a combination of land degradation and urban sprawl,” says soils expert Professor Roger Swift of the ASC and University of Queensland. “Such losses are not sustainable and must cease if we are to avoid serious risk to food security in the mid-century. At present it appears we are mining the planet in order to feed ourselves.”

Members of the ASC say that Australia has a strong track record for reducing land degradation through the National Soils Program and Landcare movement, especially. “We need to share the keys to successful soils management globally at a much faster rate, in order to contribute to global food security into the future. There is a golden opportunity for Australia to show a world lead on this issue, which affects everyone – farmers and consumers alike.”

The Australian Soil Consortium is calling for a re-energised national research effort, focussed on:

1. Engaging Producers, Consumers and Policy-Makers – new knowledge about the economic and societal factors that will shape consumer preferences, social acceptability and the adoption of innovation by producers.

2. Measuring and Monitoring Soil Health – defining appropriate thresholds, methods and technologies for more accurate and rapid monitoring of soil health to drive productivity.

3. Innovative Farm Practices and Technologies – new technology, methods and knowledge that drive input efficiencies within the farming system.

4. Novel Soil-Plant Interfaces – new knowledge and models to identify plant traits for increased nutrient and water use efficiency.

“In particular we think there is exceptional potential to improve yields of food from existing farm land through novel technologies which help improve soil fertility and soil health,” says soil researcher Associate Professor Brajesh Singh of the University of Western Sydney. “For example, rapid and real-time soil-fertility assessment, new spectroscopy techniques used to analyse samples and produce site-specific soil maps for farmers, might help to halve the amount of fertilizer needed to improve food production.

“This can not only reduce costs for Australian farmers and improve their competitive position – but it could at the same time bring food self-sufficiency to places such as sub-Saharan Africa, where poor farmers can seldom afford to use modern fertilisers. “Just a small amount of fertiliser in the right place at the right time can lift food output 30-80 per cent in a developing country, making a dramatic difference to issues such as malnutrition and poverty.

“We must also recognise that world supplies of mined fertiliser nutrients are finite and could run low in the mid-century, so techniques like this are vital to avoid wasting them now and to extend their life in a world that may double its demand for food.”

Prof. Swift adds that Australia has a distinguished record of improvement in soil management extending over more than half a century. Having a hot, dry climate it has knowledge and experience that could prove vital in sustaining world food supplies, especially in countries with similar climates.

“Australian farmers are masters in raising crop and livestock yields under a highly variable climate that swings rapidly from flood to drought. According to the Intergovernmental Panel on Climate Change that is exactly what we can expect to see more often with two degrees or more of global warming by the mid-century.

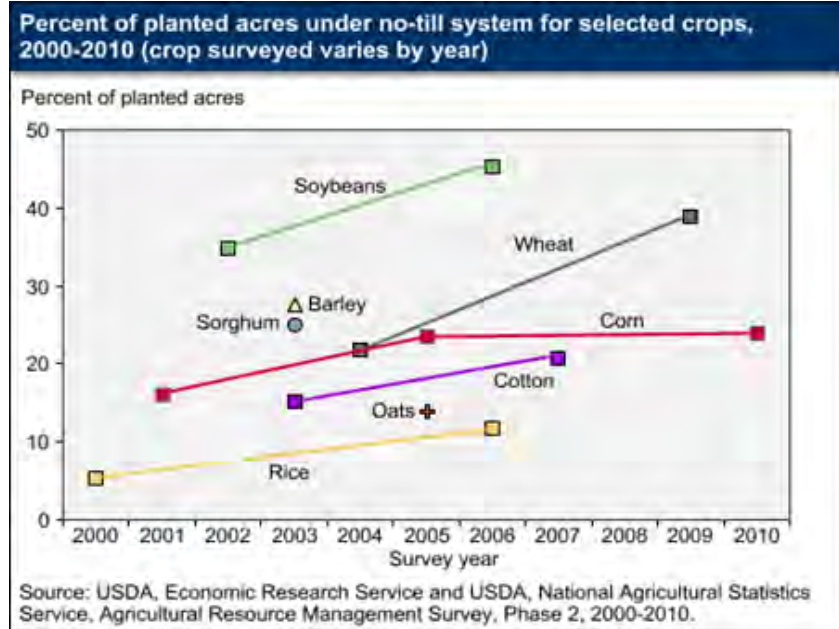
“Our knowledge, backed by a reinvigorated research effort, can make a real difference to these issues, which affect the future of all humanity – as well as delivering major economic, nutritional and environmental benefits to Australians.”

No-till farming is on the rise – That’s actually a big deal (USA)

By **Brad Plumer** -
Washington Post November
9th 2013

[Here's](#) a fascinating trend in U.S. agriculture that's been going on for the past few decades. It's the dramatic rise ... of no-till farming.

"No-till farming" sounds pretty dull at first. The term basically describes ways to grow crops each year without disturbing the soil through tillage or plowing. But it's an important idea. Plowing and tillage are major sources of soil erosion around the world — they were [key factors behind the Dust Bowl](#) in the 1930s.



What's more, churning up all that soil can release a significant amount of carbon dioxide into the atmosphere, helping to warm the planet. So, since the 1980s, more and more American farmers (and policymakers) have started taking no-till farming seriously. In the United States, no-till farming is now growing at a pace of about 1.5 percent per year, according to the Department of Agriculture. In 2009, about 35.5 percent of the country's cropland had at least some no-tillage operations — though [only 10 percent](#) were full-time no-till operations. (The rest involve a selective use of no-till or a mix of techniques.)

Why did no-till farming spread? This 2008 [report](#) (pdf) in Scientific American tells the broader back story. For most of human history, farmers plowed their soil to plant crops. The advent of tractors in the 20th century made it even easier to churn up fields. But as soil erosion became a massive environmental problem around the globe that slowly changed.

The advent of new herbicides such as atrazine and paraquat in the 1940s and 1950s allowed farmers to kill weeds without plowing up more soil. And the invention of specialized seeding equipment in the 1960s allowed farmers to plant while barely disturbing the soil. Various federal government subsidies for soil conservation also gave farmers incentives to switch practices — particularly after the [1985 farm bill](#). So did higher oil prices.



Soybeans grown into corn stalks in a no-till field in Union County, Iowa (USDA)

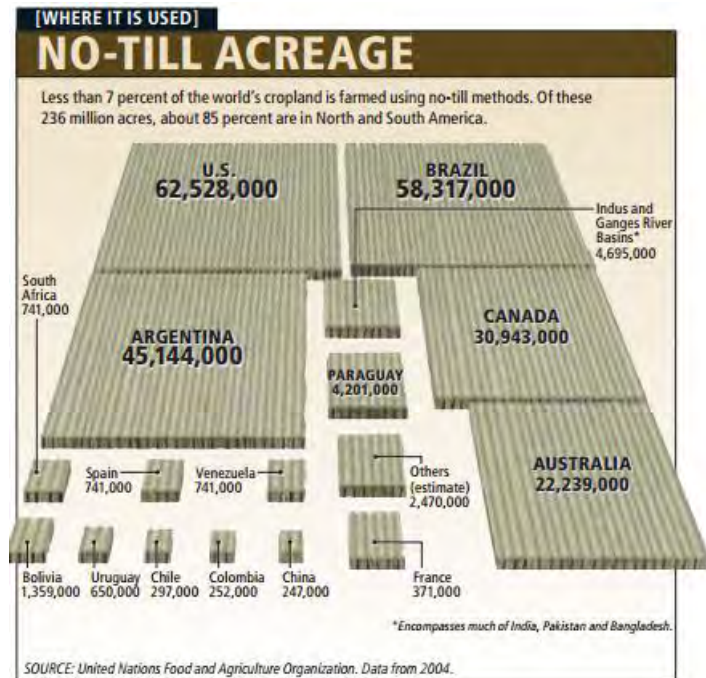
The pros and cons of no-till: As the technique became more widely used, U.S. farmers found that they could conserve water, reduce erosion and use less fossil fuel and labor to grow crops. Cropland erosion in the United States dropped nearly 40 percent between 1982 and 1997. But the practice can have downsides too: For one, it often leads to heavier use of chemical herbicides to kill weeds, which

makes many farmers and consumers uneasy. (It's worth noting, however, that heavy herbicide use may not be inevitable; [here's a look](#) at ongoing research on how to reduce it through the use of cover crops and other techniques). The specialized equipment can also cost more upfront, even if it eventually saves time and fuel.

In addition, the transition in farming methods can often be difficult. And there are still some clear advantages to conventional tilling, which can, for instance, allow farmers to start planting earlier in the year after heavy rains, since plowing helps dry out the soil sooner.

Will no-till farming keep spreading? Based on survey data, the Department of Agriculture expects no-till operations to keep spreading in the United States in the years ahead, "albeit at a much reduced pace among corn producers."

But what about the rest of the world? That's a trickier question. In 2004, farmers were practicing no-till operations on less than 7 percent of cropland worldwide — and most of that was in the United States, Brazil, Australia, Canada and Argentina. The practice has barely caught on in Europe, Africa or Asia. China has only recently begun taking an interest in the concept (see chart).



A [recent report](#) (pdf) from the U.N. Environment Program (UNEP) argued that, historically, governments have had to step in to encourage the practice to get it to spread — either by offering research and training or providing financial support to help ease the transition. Australia, for instance, has offered tax credits to farmers to pay for the climate-change benefits from no-till farming.

If that trend caught on, it could have a few big climate benefits. It would lock more carbon in the soil and curtail fossil-fuel use in farm operations. The UNEP estimates that no-tillage operations in the United States have helped avoid 241 million metric tons of carbon-dioxide since the 1970s. That's equivalent to the annual emissions of about 50 million cars. What's more, the practice could help farmers deal with drought, which [may become more prevalent](#) in parts of the world if the planet keeps heating up.

New 3rd Edition of In Safe Hands Toolkit & Workshop Series (Free)

Conservation Volunteers Australia and the Conservation Skills Centre are pleased to inform you that the REVISED and UPDATED [In Safe Hands Toolkit](#) (3rd Edition) is now available. Go to www.insafehands.org.au where you can DOWNLOAD the [In Safe Hands Toolkit](#) - FREE.



If you have previously downloaded [In Safe Hands Toolkit](#) then you are recommended to download the 3rd Edition with NEW inclusions.

What's NEW?

- Format easier to read
- New Safety Policies
- New Safety Guidance Notes
- New Safety Prompts
- New templates
- We have listened to users of the In Safe Hands Toolkit program and implemented updates.

If you have not got the 3rd Edition of In Safe Hands Toolkit then you will be missing out on all of the safety advice and systems now available.

IN SAFE HANDS TOOLKIT WORKSHOPS - Free

In the next few months there will be 30 workshops (1/2 day) to explain the In Safe Hands Toolkit and how it can be implemented. These are valuable sessions for any community group wanting to either commence implementation of safety management or revise current safety practice. **Go to www.insafehands.org.au to see workshop locations and to register your attendance.** Workshops are FREE to participants.

More details of the Workshop can be viewed at the In Safe Hands Toolkit website. It is recommended that 2 or more people from a community group attend a workshop. This is a unique opportunity to receive resources, training and support in safety management for community groups.

Download the In Safe Hands Toolkit and **Register** for a Workshop – today!



*This project is supported by
Conservation Volunteers
Australia, through funding from
the Australian Government.*

The Lorax Project – Revegetation (Victoria)

Since the devastating Black Saturday bushfires of Feb 2009, the Upper Goulburn Landcare Network in Victoria has been working with landholders and local communities in the Murrindindi and Mitchell Shires to rebuild and rehabilitate the local environment on private property.

The project got its name from the well known children's book "The Lorax" by Dr Seuss which has the lines - "Mister!" he said with a sawdusty sneeze, "I am the Lorax. I speak for the trees."



TAFE students at Devlin's Bridge Glenburn

Dr Seuss' Lorax was a revegetation advocate of the first order and obviously a Landcarer. His task was to redress the devastation wrought by the Once-ler and nurture trees back into a denuded landscape. This project is growing thousands of seedlings of local provenance with the help of: Euroa Arboretum, Rotary Club of Templestowe, Tasmanian Understorey Network, Landcare Australia Limited, Kevin Heinz Garden Centre, Scouts Victoria.

These seedlings will be used to revegetate areas of remnant vegetation and biodiversity plantations devastated by the Black Saturday fires. This year over 500 volunteers from NAB, ANZ and JBWere and students from Yea High School, Flowerdale and Kinglake Primary Schools and many

more planted over 10,000 plants on farms and properties from Strath Creek and Kinglake across the Upper Goulburn region to Marysville and Buxton.

If you are interested in volunteering with our Lorax Project in 2014 or a landowner thinking about revegetating a section of your property contact UGLN Landcare Coordinator Chris Cobern on 5736 0104. For more information on what the Lorax Project has achieved in 2013 go to : <http://landcarefirerecovery.blogspot.com.au/2013/11/lorax-project-2013.html>.

Australian native plants info in your pocket



The 'Native Plant Guide App' for your iPhone, iPad or iPod Touch has had an update and is available from the industry respected book and desktop application *The Australian Native Plant Guide* by Dr Peter Yau and Tim Langdon.

The guide delivers specific information about Australia's wonderful native flora to a global audience via a multitude of delivery platforms and its now had a general content update, been upgraded to work on Apple's latest operating system iOS7 and in addition now offers the capacity to enlarge images. Suitable for the iPhone, iPad and iPod Touch, The Native Plant Guide App has already changed the way many in the industry communicate information.

To purchase the 'Native Plant Guide App', please click <http://itunes.apple.com/au/app/native-plant-guide/id402131549?mt=8> or enter "native plant guide" in the search box at the App Store on your iPhone. (Compatible with iPhone, iPod touch and iPad. Requires iOS 3.0 or later and now upgraded to operate with iOS7.)

Other News & Funding

Victorian Landcare Council and Australian Landcare International have launched an Overseas Landcare Fund - Landcare is now in about 25 countries, especially in Africa. In Asia it is strong in the Philippines and evolving in Indonesia, Sri Lanka, Pakistan and Bangladesh. In the Pacific, Fiji and Tonga have several Landcare projects between them. In the developed world, Germany, USA, Canada, New Zealand and Iceland also run Landcare programs.

The **Overseas Landcare Fund**, launched in mid 2013 by Victorian Landcare Council (LFV) and Australian Landcare International (ALI), allows groups and networks to support community Landcare activities abroad. For now the fund confines itself to grants of \$500 Au, which gets a lot done in many developing countries. We hope this changes as the Fund's reputation and management skills grow.

So far we have helped Junior Landcare projects in Tanzania and Sri Lanka and a group in the Democratic Republic of the Congo revegetating degraded hilly farmland.

Coming up are a wetland restoration project in Laos, and tree nursery extensions in the Philippines and Indonesia. Thanks are due to the Upper Goulburn network and groups, networks on the Bellarine Peninsula and in Gippsland, and to private donors.

How does it work? How do we ensure the money is well spent? - We seek projects overseas—so far these have been readily located through ALI's extensive networks in international Landcare. Besides projects mentioned above, the Fund has applications from Nigeria, Malawi and Tonga, as well as others in the Philippines. In future, our website will also attract interest.

The two partners, helped by bankmecu, Australia's first customer-owned bank, which kindly donated \$1500, collaborate with reputable overseas NGOs to ensure projects are completed satisfactorily. Brief reports with project images will go onto ALI's website. The fund pays transfer fees set in Victoria, and a small monitoring fee to the NGO. **This means all money donated by Victorian groups, networks and private benefactors goes to designated projects on the ground.**

If groups choose to do so, and communication infrastructure permits, they can stay in contact with their overseas counterparts, and swap ideas and experiences, and maybe eventually exchange co-ordinators and members. A committee from ALI and VLC manages the fund; it comprises Horrie Poussard, Kaye Rodden and Rob Youl.

ALI is working on increasing fund-raising via the Landcare movement, and joint projects with service clubs and local councils and the corporate world, in particular Australian companies operating overseas. For more information go to: <http://www.australianlandcareinternational.com/>.

Primary Industries Partnerships in Schools (PIPS) Toolkit -

The Primary Industries Partnerships in Schools (PIPS) toolkit has been developed by PIEF to build links between agribusiness and school classrooms to open up a wide range of career opportunities in Australia's primary industries. PIEF plans to progressively expand the toolkit. If you are a teacher or in agribusiness and have experience of school partnerships that you would like to share with PIPS, please contact us. PIPS is supported by the Australian Government Department of Agriculture and NAB. More information is available [HERE](#).

PIARN (Primary Industries Adaptation Research Network) - is pleased to announce the publication of an extensive review of recent literature on the topic **of climate change adaptation and the Australian primary industries**. Written by PIARN Research Fellow Dr Lauren Rickards, the review is an interpretive overview of literature published between 2009 and 2012. It was stimulated by the updating of *Primary Industries Adaptation Research National Adaptation Research Plan*, organised by the Australian National Climate Change Adaptation Research Facility, and is structured around the Plan's original research areas and questions.

The publication was motivated by two objectives:

- 1) To illustrate the broad, systemic thinking needed to understand the adaptation challenge and its many closely inter-related issues.
- 2) To highlight the relevance of broader literatures to those working on climate change adaptation, and vice versa, to accelerate engagement between different researcher communities. Download the complete literature review from the [PIARN website](#).

NSW Review of Weed Management - The NSW Government is undertaking a major review of weed management in NSW. There is now an opportunity for ALL groups involved in or affected by weed management to contribute. If weeds are important to you, please consider contributing your comments.

As an initial step in the review, an issues paper has been drafted based on initial consultation and research. The purpose of this paper is to 1) clarify priority issues, 2) get stakeholder and community views about barriers and opportunities for more effective weed management, 3) seek to identify any additional issues, and 4) identify relevant evidence to inform the review. This paper is now open for public comment. For more information go to [9](http://engage.haveyoursay.nsw.gov.au/weed-</p></div><div data-bbox=)

[management-review](#) and for the process for submission of your comments. NOTE: submissions are **due by 6 December 2013.**

WetlandCare Australia Photo prize - What amazing creatures inhabit your local wetland? Can you hear frogs, birds and insects calling? Or is your local wetland filled with beautiful plants and recreational spaces? WetlandCare Australia is calling for photographic works exploring wetlands in all their wonder to be entered in our seventh annual Photography Prize. Your shot could win fantastic prizes from cash to gift vouchers, and there is a waterproof digital camera to be awarded to the lucky winner of the People's Choice prize. Information about the Prize and how to enter can be found on the WetlandCare Australia website www.wetlandcare.com.au or by calling 1800 816 147 during business hours. Entries close December 7 2013.

Basin Champions Program 2014 – After a successful pilot program in 2013, the Murray-Darling Basin Authority (MDBA) invites schools from across the Basin to participate in the Basin Champions Program in 2014. The Basin Champions program combines videoconferencing activities with an in-class investigation in which students look at the health of a river or creek near their school. To express your interest, or find out more email education@mdba.gov.au or phone the MDBA Education Team on 02 6279 0500.

Join the Stephanie Alexander Kitchen Garden National Program – It's affordable and flexible – schools use what they have. It's open to all Australian schools with a primary curriculum. Comprehensive training and resources equip teachers with everything they need. 2014 training is offered in all states and territories, metropolitan and regional. Register now to secure your place or contact support@kitchengardenfoundation.org.au.

New! Cotton Education Kit Launched – Cotton Australia has launched a new, comprehensive and interactive Cotton Education Kit to help senior secondary teachers and students understand the Australian cotton industry. The 73-page kit features detailed, but easily digestible information on the cotton process from fibre to fabric, from planting, growing and harvesting cotton to the ginning process, shipping and the manufacture of fabrics and clothing. The kit has a wealth of information and teaching aids about Australia's cotton industry and its history in Australia. Sample the education kit and tell Cotton Australia what you think of the new resource to go in the running to win an iPad Mini. <http://cottonaustralia.com.au/cotton-classroom/test>.

If you have any articles that you would like to submit for future newsletters or upcoming events – please email the address below.

To sign up for the NLF newsletter go to: www.landcareonline.com.au/about/the-national-landcare-facilitator/nlf-e-newsletter/

Brett de Hayr - National Landcare Facilitator

Ph: 0457 750 815, Email: brettdehayr@landcarefacilitator.com Twitter: [@Brettdehayr](https://twitter.com/Brettdehayr)

The NLF Program is an initiative of the



Australian Government