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## THREE VALLEYS LANDCARE

In the south west of the Hunter lie the Putty Valley (bordering the Hawkesbury-Nepean catchment), Garling Valley and Howes Valley. The two main river flows through this land are the Hunter and the Hawkesbury. The landscape varies in plant types and soil content. In the north there are pockets of rainforest, river flats, more moisture content and higher carbon levels. In the south are sandy soil flats, wider and shallower valley floors, higher aluminium and low ph (acidity) - good grazing country.

Three Valleys Landcare Group members are mostly producers, sharing their knowledge of farming systems, seeking ideas for new and innovative ways to produce food, improve local environments and properties for biodiversity.

Weed identification and control measures form a large part of our activities. Blackberry eradication is a never ending job! It does however result in a variety of landholder commitments to improve their properties. Landholder training workshops cover e.g. spraying methods and using cattle for grazing.

Cattle eat Bladey Grass or Carpet Grass, flatten it then eat the new growth thus slowing any re-growth. Repetitive oversight and control of these weeds has resulted in diminishing seed banks over the years. Use your cattle to do the control, know which are the appropriate grasses to have in your paddock and share your knowledge with other Landcarers and landholders!

CMA, Greening Australia, Envirofund grants allowed landholders to fence off creeks, dams and wetlands, establish soil control measures and replant natives, with long term environmental planning. Privet on kilometres of private and public land along Putty Creek has been gradually eradicated.

Properties with seasonal flooding need careful planning for new vegetation. Lomandra and other perennial grass plantings show good long term survival rates. Their intense root systems may have been the deciding factor in this.

Local landholders who sold cattle stock when food sources and waterways were depressed are now using sustainable farming methods.

A recent 3 day CMA Pasture to Pocket course on grazing and pasture management covered native vegetation, weed control, enhancing our soil, Carbon value adding, improving farm profit and farm biodiversity, planning, record keeping, fence design, plant ecology, water and pasture protein levels.

What did I learn? The importance of cattle rotation amongst pastures, height of pasture food for cattle health, to focus on the 'good grass' for maximum level of growth and nutrition in my stock. Regular oversight of these practices can result in 'the nasty little weeds' disappearing e.g. Carpet Grass, Fireweed, Thistle, Sporablis or Giant Parramatta Grass. Also ideas for pasture improvement to ensure viable winter crops like rye grass and oats for stock food and nutrition. This enables farmers to maintain core stock, improve herds, maintain profitability and increase lifestyle outcomes.

Now to fix the fencing damaged from the last lot of flooding, to keep the cattle out of my creek bank regeneration area!

Carol Gibson



## HRLN PROJECTS

- HRLN Website upgrade incl. Landcare Farming, Coastal & Riparian
- Long term research into climate change in the Hunter for Sustainable Farming initiatives
- River Redgum project—local provenance plantings along the Hunter River
- Educational resources - incl. mobile Puppet Theatre
- Workshops - Junior Landcare & Adult education incl. Wildlife Corridors
- Research project—Landcare & communities
- Landcare facilitation at a regional & state level - representation on Landcare NSW
- Local Council partnerships to address land and water conservation and rehabilitation needs

## ON THE VERGE OF WEEDING

Weather patterns across the Hunter have created ideal conditions for so many weeds to grow in paddocks, parks, backyards and street verges. Rain followed by sunny days has also created lovely conditions for weeding!

Most of us with a grass verge outside our home would have a set of gardening gloves and a garden tool or two. If we all weeded our own bit of verge and even roped in our neighbours and friends to do the same, our towns would be so much nicer. It could help kids gain pride in their street. They can discover what weeds to get out first and by the roots, which ones to leave for Mum or Dad to do, which are the nasties e.g. Khaki Weed or Bindi (Cat's head) and how to safely dispose of them. Litter in the street may even diminish.

Maybe your Local Council could help by support and promotion. If necessary, they could use their little steamroller to flatten and smooth grass paths while they are wet and soft. Both of these initiatives are great investments for tiny amounts of public money, free labour, great PR and cheaply improved safety! Far better than costly poisons which can affect local waterways and ecosystems. Far better than just mowing weeds with machines and better than laying concrete as an answer to weeds on verges.

Hand picked weeds can become mulch and compost, if done early. So before the seeds mature, let's get into it! Save our gardens from infestation, save the kids and dogs from painful sharp seeds and stop the spread via our car tyres.

How? A short weed blitz with follow up from time to time, on your own patch of street. Do I do this? Sure; I try to leave only the native grasses on my patch. Everyone has different ideas but we all hate weeds.

We can also make sure that quick-growing foliage is out of the eyes of people walking by and rocks are safely inside fences and

***Get your Local Councillors to have a family blitz on their own verge!***

Bev Atkinson

## ALGAE IS AMAZING

**Algae** - is the world's fastest-growing photosynthetic organism (a process where carbohydrates are synthesized from carbon dioxide and water while using light as an energy source). They also produce oxygen as a by-product.

**Cultivating algae** - algae can be grown in freshwater or marine environments; their biomass can double every 8-12 hours; they can produce oil all year; they are more productive than corn, soy or oil palm, with 10 times more oil than palms and require a tenth of normal land mass than other 'crops'.

**Adding value** - algae can add value to food for people. Animals, pigments, ethanol, hydrogen and biopolymers are some of the by-products. Algae make great bio-fertilizers, are eco-friendly and can be more cost-effective than chemical fertilizers. Like all bio-derived fuels, algae take CO<sub>2</sub> out of the air as they grow - carbon neutral fuel! Seaweed is harvested around the world but did you ever think of it as algae?

**Farming** - unlike some other crops, algae does not need to be grown on prime agricultural land. These micro-organisms can be grown on poor quality soil and can thrive on saline and brackish water and where excess nutrients in sewage waste water exist.

With enough water and other nutrients to support growth - nutrients like nitrogen, phosphorus, potassium, iron and the magic ingredient sunlight, algae can grow in desert areas. Using a closed system which traps water and does not evaporate is a good method to use.

Our metabolisms are like algae in some ways. Up to 80% of algae dry weight is amassed in oil. If we eat lots of carbon-rich carbohydrates we increase our oil (fat) production and storage. I think I will keep my fat production down!

Ruth Hardy

## WELCOME TO NEW MEMBERS

Three Individual Members

Three Landcare Groups

## CLEANING UP

Landcarers come in all shapes and sizes, they may have been 'produced' in different parts of the world and have a long life span. Goods we manufacture and the rubbish we leave behind could be similarly described. Our rubbish is not known for cleaning itself up, it waits for us to do that. It lies on the roadside, in parks, in the bush, drains, creeks, rivers and oceans. We may clear rubbish up individually, in groups or bank on our Local Council to do it.

On the first Sunday in March thousands of Australians all across the land got together for their annual, local Clean Up Australia Day. This year Lake Liddell Recreation Area Trust Board members, their families, the park managers, friends and local volunteers gathered together to clear rubbish along 4 kilometres of the main approach road leading from the New England Highway to the park (Hebden Road).

After days of rain a break in the weather allowed us to get on with the job. Kitted out with donated hats, gloves, caps, t-shirts etc. and armed with rubbish pickers we set out from the park. Over four hours we filled a 'donated for the day' dump truck with 1.2 tonnes of general rubbish - mattresses, white goods, tyres and other delightful goodies strewn along the roadside and bordering vegetation. We also collected 40 bags of recycling material.

With our work completed we all trooped back to the park for a well earned BBQ lunch. We watched the Swampheens, Ibis, ducks and Sea eagles overhead and in the reed beds and our Landcare guru, Stephen, answered questions on "What native tree is that" and "How long ago was it planted". A great way to finish off a tiring but rewarding morning.

Greg Sneddon



Photos Greg Sneddon

## REGIONAL LANDCARE UPDATE

Museum2you - is an environmental education program for communities across NSW. Community groups and organisations, Local Councils or local museums can host a mini exhibition on sustainability, climate change and biodiversity. A hire charge applies to each 7 week loan. Go to [www.australianmuseum.net.au/Museum-2-You](http://www.australianmuseum.net.au/Museum-2-You)

Bee Friendly - is a planting guide for European honeybees and Australian native pollinators. It lists herbs, shrubs, trees and other plants, advice for vegetation in gardens, streetscapes, urban open spaces, the bush and stationery beekeeping, listed under climate categories. Go to [www.rirdc.gov.au/pollination](http://www.rirdc.gov.au/pollination)

Backyard Buddies - tips on making your backyard safe and inviting for native animals and help them survive heat. For a list of local wildlife carers go to [www.backyardbuddies.net.au/Buddy\\_in\\_trouble.html](http://www.backyardbuddies.net.au/Buddy_in_trouble.html) or <http://fauna.org.au>

To sign up for B-mail, a free monthly newsletter go to [www.backyardbuddies.net.au](http://www.backyardbuddies.net.au)

The Weeds Network - has launched its on-line Sustainable Weeding guide. Go to [www.weedsnetwork.com](http://www.weedsnetwork.com)

The NSW Environmental Defender's Office - the latest issue of their bi-monthly bulletin on Climate Law issues and developments in Australia and overseas includes:

Thawing of Permafrost not accounted for in climate change predictions and likely global warming effects; the United Nations Development Program Biodiversity Plan; NSW Coastal Protection Act 1979 reforms - safety, environmental and economic risks. Go to [www.edo.org.au/edonsw/site/climate\\_law\\_bulletin/climate\\_law\\_bulletin.php](http://www.edo.org.au/edonsw/site/climate_law_bulletin/climate_law_bulletin.php)

## Funding Opportunities

- Indigenous Carbon Farming Fund. Go to <http://www.environment.gov.au/cleanenergyfuture/icff/>
- Coles Junior Landcare School Garden Grants - for schools/youth groups to establish gardens like bush tucker, water wise, vegetable. Round 2 closes May 10. Go to [www.juniorlandcare.com.au/grants-2/coles-grant](http://www.juniorlandcare.com.au/grants-2/coles-grant)
- Environmental Education grants - for building community skills to protect/promote sustainable behaviour. EOI closes April 26. Go to [www.environment.nsw.gov.au/grants/education.htm](http://www.environment.nsw.gov.au/grants/education.htm)



**Dates for diary:**

African Olive & Lantana Control Field Day April 6 at Maitland Vale RSVP. Email: [camilla.cowley@cma.nsw.gov.au](mailto:camilla.cowley@cma.nsw.gov.au) or Tel: 4930 1030

Local Land Services review workshops April 8 at Scone 9.00-12.00pm or Maitland 3.00-6.00pm. RSVP to [www.haveyoursay.nsw.gov.au/locallandservices](http://www.haveyoursay.nsw.gov.au/locallandservices)

Landcare Regional Awards Nominations close April 12 Guidelines & Form at [www.hcr.cma.nsw.gov.au](http://www.hcr.cma.nsw.gov.au) or [www.hunterlandcare.org.au](http://www.hunterlandcare.org.au)

HRLN members General Meeting April 13 at Gresford

Hunter Wetlands National Park Discovery Program - Hunter River Estuary Cruise, Kooragang Island, Hexham Swamp, April & May. Go to [www.hunterlandcare.org.au](http://www.hunterlandcare.org.au)

Tocal Field Days May 3-5 at CB Alexander Agricultural College, Tocal Road, Tocal 9.00-5.00pm. Go to [www.tocalfielddays.com](http://www.tocalfielddays.com)

World Environment Day June 5. Go to [www.unep.org/wed/](http://www.unep.org/wed/)

**ELEPHANT GRASS IS A “MAMMOTH” PROBLEM**

Once upon a time, long, long ago, a lady lived by a lovely creek in a little town called Abermain. One day she planted a little clump of bamboo in the corner of her backyard. Over the years the house changed hands with several owners. The bamboo (or Elephant Grass) just quietly grew - and grew - and grew under the fence, down the creek bank, spreading downstream and under the bridge, so slowly it was a long time before anyone realised it was choking the lovely creek and could create a dam in heavy rain.

Enter 4 oldies who wanted to have a go. They discovered that it would do no good to poison, slash or burn this Elephant Grass, it must be dug out roots and all. So with help from a Community Support Officer for Landcare and an Envirofund Grant, they hired an excavator to dig it all out from one side of their bridge. They replanted the bank with good things like Pink Tipped Bottle Brush and Lomandra. It was a big, big job so local school children helped the oldies.

But what to do with the other side of the bridge with its steeper banks and no room to use large equipment? “Ah” they said, “We will ask for a grant from the CMA”.....and so they did!

It came with a bonus – a land management worker to assist them. He knew a new, innovative excavator that had a very long reach, from an environmentally friendly company that treads lightly on the landscape. He finished his work, leaving the 4 oldies with new skills and knowledge. Staying at the local hotel and having his lunch packed for him was “wonderful” he said.

On National Tree Day the local Dingo digger driver spread mulch Council had donated. Then he left. Then he returned - with his children. They had helped with the first planting and took great delight in teaching Dad how to plant a tree. The Hotel donated a BBQ lunch for all the busy workers and a CVA team completed the planting a few weeks later. The CVA team had also not worked with bamboo before or used an auger so the 4 oldies taught them new skills.

By slashing and painting individual canes as they emerged there was less and less Elephant Grass to eradicate. Canes needed to be cut and painted with poison one at a time before they could self seal with sap.

As time went by 4 grants were received 2 NHT (Envirofund), 1 Rivercare (CMA) and 1 Small Equipment Grant (DOCS). The oldies thought “We had nothing but willing hands and our own garden tools, now we have a whipper snipper, Hamilton tree planters, safety clothes, safety glasses and a backpack weed sprayer”. Yippee! They celebrated at the hotel.

Sections of the bank were planted with Wattle, Lomandra and Callistemon. The old ladies, the school children and Dad saw their plants grow to maturity.

When a big flood came through the creek, submerging precious tools in the nearby Landcare shed the old ladies said “Oh well, one of us had better join the new Floodplain Management Committee at Council” .....and so one did.

Helen McClelland



Photos Phil Milling & Sarah Roberts

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