

ROYALLA  
LANDCARE INC.  
ABN 53 262 641 780

# Royalla Landcare

Autumn/Winter 2014

## Landcare update

It has been a little while since our last newsletter—and on that note, if anyone in the area is interested in becoming an active committee member of the landcare group, please contact us; new members always welcome and help increase the outcomes of the group.

Since our last newsletter the core group of members have continued regular activities, with a wrap-up of the year's events at the November 2013 AGM. This included the Bio Weed Control Workshop in August 2013, where around 20 participants learnt how mites could help control weeds such as St John's Wort and Patterson's Curse. Another approach to weed control to have in your toolkit!

Another 300 trees have gone in this year to assist in the rehabilitation of habitat for the vulnerable Glossy Black Cockatoo. Thanks to all involved in the planting, loan of vehicles to transport the equipment, and placement of the tree guards. Around 20 landholders planted another 700 trees on their properties. More is planned for this year. Hopefully the trees will have weathered the hot January days.

Pest control: Remember the landcare group has a fox trap for hire—there seem to be many foxes out and about lately.

A pindone program was run on six properties last year with some success. No new strain of calici virus has yet been released, but given the number of rabbits many of you are noticing around, we may consider running another one of the calici virus covered carrot baiting programs this year.

### Clean Up Australia Day 2014

With the assistance again this year of the Jerrabomberra Creek Rural Fire Brigade and a total of 8 volunteers Royalla Landcare Inc. organised the clean up of two sites on Clean Up Australia Day on Sunday, 2 March 2014. A total of 30 bags of rubbish and other items were collected during the event. At least half of the rubbish consisted of recyclable items, particularly drink containers. The Clean Up sites included a section of the Old Cooma Road



between the railway line and Jerrabomberra Creek and a section of Royalla Drive from the Monaro Highway. Unfortunately these sites are used for the illegal dumping of rubbish, and dumped items this year included a broken aquarium and outdoor bench. Our thanks are extended to the Jerrabomberra Creek Rural Fire Brigade and Royalla Landcare volunteers for their work on the day. The Queanbeyan City Council assisted with garbage collection and traffic control measures. We are hoping that more Royalla residents will assist us with the Clean Up in 2015. As the saying goes many hands makes light work.

#### Inside this Issue:

**Dung Beetles** —p2

**Fox Traps** —p3

**Feature Weed:  
Chinese Pistachio** —p4

**Workshop:  
Improving the value of  
your property Trees**—p5  
**Future workshop** —p8

**Water Testing** —p5

**Cheap Trees** —p6

**Soils need their crusts  
(part I)** —p6

**What about the Elms**  
—p7

**FUNDING success  
Glossy Black Cockatoo  
Habitat project** —p9

Injured wildlife—call  
**WILDCARE**  
**6299 1966**

## DUNG BEETLES

This brief summary outlines the very important role of dung beetles in our environment.

There are over 350 species of dung beetles native to Australia with about 200 in New South Wales. They are usually black, range in size from about 3mm to about 25mm and come in two general types. Some create dung balls that are rolled away from the dropping and buried. Others dig tunnels below the dropping and drag the dung down. Their eggs are laid in the dung that is used as a food source for both adults and larvae. While dung is their usual food source they may also feed on mushrooms and decaying fruit.

Apart from getting rid of droppings from the ground surface, the beetles also help to aerate the soil and recycle the carbon and other nutrients into the soil. The holes tunnelled help rain penetrate the soil and the nutrients deposited encourage more sustainable pasture growth.

The native dung beetles in Australia co-evolved with marsupials and are not able to handle the moist cattle dung. It was estimated that about 200,000 hectares of pastoral land was covered by cowpats per year and they take some years to decay naturally. As a result the CSIRO commissioned the Australian Dung Beetle Project (1965–1985) that was led by Dr George Bornemissza. He sought to introduce species of dung beetles from South Africa and southern Europe. Twenty-three species were successfully introduced. This has resulted in improvement of the quality and fertility of Australian cattle pastures, along with a reduction in the population of pestilent bush flies by around 90 percent! However, a review found that the introduced dung beetles had not become well established in the southern temperate livestock regions. The CSIRO now plan to re-introduce in Spring 2015 two species from France and Spain that failed to establish when previously introduced.

Some other things of interest about dung beetles:

- The 'roller' dung beetles tend to roll their balls of dung in a straight line regardless of the obstacles they encounter.



Photo  
source:  
wikipedia

## DUNG BEETLES cont...

- They can roll balls of dung up to 10 times their own weight and can pull over 1000 times their own weight.
- They find dung by using their sensitive sense of smell, and they will follow herds as they move about.
- Some have been found to be able to navigate by the stars.
- Birds will prey on dung beetles around a cowpat and bats probably catch some in flight.
- By burying the dung the beetles can significantly reduce infective worm populations in stock.
- But dung beetles are sensitive to parasiticides (such as drenches used to control parasites).
- Because few beetles are active over winter, the build up in dung probably explains the large numbers of pesty flies that usually appear in Spring.

The introduction of dung beetles into Australia is considered a major success.

John Feehan is a local expert on dung beetles and can provide advice and supply beetles. (See [www.dungbeetleexpert.com.au](http://www.dungbeetleexpert.com.au).)

### Further Reading:

[http://en.wikipedia.org/wiki/Australian\\_Dung\\_Beetle\\_Project](http://en.wikipedia.org/wiki/Australian_Dung_Beetle_Project)

<http://australianmuseum.net.au/Dung-Beetles>

<http://www.csiro.au/Outcomes/Food-and-Agriculture/DungBeetles/The-new-project.aspx>

<http://www.landcareonline.com.au/wp-content/uploads/2010/10/Part-Two-Section-1-Overview-of-Introduced-Dung-Beetles-in-Australia.pdf>

<http://www.burkesbackyard.com.au/factsheets/Conservation-and-the-Environment/Dung-Beetles/806>

## Other landcare activities:

We have recently submitted a Catchment Management Authority grant application, with further regeneration, landscaping or erosion control planned if that comes through.

### Frogwatch

Landcare members recorded data again in November for the Frogwatch program, with 5 different species at our test site recorded.



Unfortunately the Frogwatch Program funding will run out by the end of 2014, and the Ginninderra Catchment Group (GCG) is looking for ways to ensure that Frogwatch keeps going well into the future. Information on the current Frogwatch program can be found at <http://www.ginninderralandcare.org.au/frogwatch>.

### FOX TRAPS

Worried about feral animals (foxes, rabbits, cats)? You can pick up a Feral animal kit now, produced by the Molonglo Catchment Group. Or **hire a fox trap** (\$30). Contact Royalla Landcare. More info? Phone: 6280 4128 or E-mail: [royallalandcare@earthbasics.com.au](mailto:royallalandcare@earthbasics.com.au)

### Indian Myna Birds

If you are seeing more Indian Myna Birds in the area you might like to look at the following website and download a help sheet on trapping Indian Myna Birds.

<http://www.indianmynaaction.org.au/>

**Traps available from Royalla Landcare**

[royallalandcare@earthbasics.com.au](mailto:royallalandcare@earthbasics.com.au)

## Weed feature: *Pistacia chinensis* (Chinese Pistachio)

The following is information sent by the Molonglo Catchment Group for parkcarers and landcarers that you may find interesting:

Steve Taylor has advised that the ACT Weeds Advisory Group (WAG) have recommended that *Pistacia chinensis* (Chinese Pistachio) not be used in the Molonglo River development catchment. This species is now recorded as an Environmental Weed in South East Australia, including the ACT, in the University of Queensland's 'Environmental Weeds for Australia' database [http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pistacia\\_chinensis.htm](http://keyserver.lucidcentral.org/weeds/data/03030800-0b07-490a-8d04-0605030c0f01/media/Html/Pistacia_chinensis.htm).

Steve has recently removed some Chinese Pistachio at Tuggeranong Hill where it was forming a large patch (Privet like). He has also noted the following link to this species on a Texas web site - [http://www.texasinvasives.org/plant\\_database/detail.php?symbol=PICH4](http://www.texasinvasives.org/plant_database/detail.php?symbol=PICH4)

What is disturbing about this species is that maximum fruit production occurs in trees at the 20+ year age. We are already seeing a steady rise in naturalisation of this species from plantings in the urban area that are only 10 years old.

While the WAG can foresee problems with this species, as yet there is insufficient data on where it is naturalising, the density of infestations, and the types of sites where it is establishing.

The species is seen to be a very useful and attractive small tree for dense urban areas. A recent weed assessment by Geoff Butler stated:

THERE IS TOO LITTLE INFORMATION AVAILABLE ON THIS SPECIES TO UNDRTAKE AN ADEQUATE ASSESSMENT. IT IS HOWEVER IMPERATIVE TO START ACCESSING MORE ACCURATE DATA ON

THIS SPECIES AND THE PLACES IT IS GROWING, AS IT IS REGULARLY RAISED AS A CONCERN BY PARKCARE AND OTHER ENVIRONMENTAL GROUPS. MORE WILDLINGS THAN EVER BEFORE RIGHT ACROSS PARKS & RESERVES IN THE A.C.T. THIS SPECIES DISTRIBUTION ACROSS THESE PARKS AND RESERVES AND THE TYPES OF LOCALITIES IT IS OCCURRING IN WOULD BE A USEFUL FOCUS FOR THOSE PARKCARE GROUPS WHO WOULD LIKE TO CONTRIBUTE TO A BETTER UNDERSTANDING OF THIS SPECIES LOCALLY.

The Weeds Advisory Group are interested in hearing from any ParkCarers and Landcarers about their observations on this species in ACT Reserves. Please provide your feedback and observations to Steve Taylor: [steve.taylor@act.gov.au](mailto:steve.taylor@act.gov.au), or pass on to us at [royallalandcare@earthbasics.com.au](mailto:royallalandcare@earthbasics.com.au).



*Chinese Pistachio*

*Image source: wikipedia*

## Coming Soon!!

### A Workshop on 'Improving the Value of Your Property'

A Workshop for Burra and Royalla Residents was held on 22 Mar 2014 at Burra Hall. The focus of that Workshop was '**Wildlife Habitat in Burra and Royalla – Threats and Solutions**'.

Wildlife habitats around Burra and Royalla have undergone significant change since the arrival of European settlers almost 200 years ago. Initially it resulted from clearing and grazing of livestock, while in more recent times rural residential subdivision has introduced a new range of impacts. The Workshop was sponsored by **FuturePLANS** and **Molonglo Catchment Group** with funding from the Great Eastern Ranges Initiative and was facilitated by Greg Stone of Woodlands Environment Management.

It concluded that:

In the Burra/Royalla area, as an initial step, wildlife corridors should be protected, enhanced and established; and

A near-term objective was to increase community awareness of the values and benefits of best-practice environmental management. *See advertisement on page 9.*

Accordingly, a One-day Program comprising a half-day presentation and a half-day field visit under the banner of '**Improving the Value of Your Property**' is proposed. The detailed content is still being planned, but it is expected to cover such things as sustainable farming and grazing practices, native pastures, dams and wetland management, weed management, habitat restoration/rehabilitation and property management planning. However, there will be opportunities during the workshop for participants to get advice on other issues of concern; such as feral animals.

The date for this Workshop has now been set for **Saturday 23 August 2014** in Burra/Royalla. Why don't you come along and bring your friends. See advertisement on page 8.

#### **Jerrabomberra Creek Water Testing**

Jerra Ck Test date	Water temp	Ph	Elec Cond	Turbidity
18/04/14	10	6.9	240	0
16/03/14	15.5	6.5	450	10
16/02/14	22	7.5	530	15
19/01/14	23	7.1	590	0
22/12/13	22	6.9	530	<10
15/11/13	12	7	300	50
19/10/13	9.5	7.3	350	<10
21/09/13	7	6.9	140	30
17/08/13	5.5	7.4	370	<10

Parameter	Where it comes from	How it affects things	Local events
Temp	Sunlight and flow give a waterbody its temperature	High temperatures allow the water to lose dissolved gases; low temperatures may upset the rhythm of water life	The river at Wickerslack Lane is a little warm!
Electrical Conductivity	The ground water and soil determine the EC	Limey soils are naturally more conductive, more dissolved CO <sub>2</sub> ; waterlogging also increases mineral content.	Most of the rural creeks have both high conductivity and negligible flow.
Turbidity	This is how much light can penetrate the water.	Silt and dissolved humus change turbidity	Burra Ck and Chimney Ck are the highest, but they are not alone

Stephen Skinner recently wrote an interesting article on soils in the February edition of the Waterwatch catchment wrapup. I reproduce the introduction of it here with thanks, for those interested—and will repeat the remaining sections in our next newsletter.

## Soils need their Crusts!

Here we are again watching the bush and hoping there are no fires round here. For most of us, before last weekend (14–16 February) the last significant rain fell on the 5<sup>th</sup> of December last year. Since then Canberra has had at least 18 days where the daytime temperature has been 35°C or greater. Perhaps more significantly the 3:00pm relative humidity has been less than 40% on at least 56 days since that last rain, and has dropped as low as 6% one afternoon in January. We have also had some windy days in there! Our soils have very likely lost all their moisture and our vegetation is very dried out.

While there is a degree to which hot, dry summers are the natural state of affairs in rangeland on the western side of the Great Dividing Range, in years when we have a drop in summer rainfall our urbanised lifestyle contributes to the severity of the situation.

Built up areas are dominated by water repellent surfaces. That also means that below that water repellent surface there is a covered layer of what was once soil...and is now deliberately dried out. That leaves that small portion of garden and lawn to collect or lose all the available water for the whole area. We are all too keen on order and regimentation. So we mow that lawn, even in the height of summer. We weed and tidy the flowerbeds. We rake the pebble paths and remove the leaf litter. When the downpours come most of the water rushes past as overground flow, and ends up in the drains all because of our neatness. Then we complain about our water bills.

Public open space also falls foul of our desire to husband and control. The fear of fire combines with our sense of order. We mow the grassland. We prune the trees, mow round them and collect the debris. We abolish the understory...except in the rose beds, and they must be tidy and weed free. It perplexes me when I locate one of the mowing crew or at least his dust cloud: if it is that dusty, what is left of the soil crust that would hold in any moisture or absorb any small passing shower?

So, what are these soil crusts? Are they important? How do they work? Can we plant them? . Look out for Part 2 of this article in our next issue.

References: (1) Eldridge, D and Tozer, ME (1997) *A practical guide to Soil Lichens and Bryophytes of Australia's Dry Country* Department of Land and Water Conservation, Sydney. (2) Tongway, DJ and Ludwig, JA (2011) *Restoring Disturbed Landscapes Putting principles into Practice* Society for Ecological Restoration International Island Press, Washington.

## Cheap Trees for members:

Royalla Landcare offers **native tubestock** from Greening Australia at cost price, with free **tree guards**. Available to all members.

Minimum 1 tray of 20 at \$30-\$40 per tray. Species list available (over 80 species).

If you are interested in receiving some native plants in Autumn or Winter please contact Royalla Landcare to discuss your needs and choose species. We can help you select the most appropriate native plants for your property or to fit into your property plans. We can arrange a site visit if desired.

**Ring or email** to secure your order.

**Contact:** Royallalandcare@earthbasics.com.au or  
ph Maryke at 6280 4128 (w)



The following article was prepared by Stephen Skinner and included in a 2013 edition of the Waterwatch Catchment.—reprinted here with thanks.

Whilst we love our Elm grove at Royalla Common—it is a special site to maintain—if you are considering planting a grove on your property, contact Royalla Landcare Group for some alternative native plant suggestions...

## What about the Elms?

Have you noticed the elms lately? Don't they look a mess!

The English elm, *Ulmus procera*, is one of the great favourites in public plantings in south-eastern

Australia. They have been planted as stately avenues leading to public spaces; they line important roads; they stand proud among the grand garden landscapes in our public open spaces; they....

In their native north-western Europe they used to grow into tall stately forests that looked wonderful in the crisp flush of spring, gave deep, cool shade in summer and splendid golden vistas in autumn. In winter they evoked the gothic atmosphere of Brueghel or Rackham but it seemed appropriate for the landscape, gaunt black trunks against the hard white snow. They provided timber and firewood. The pews in the parish church and the cabinets in your house were elm. You could pollard them and they would return and return. They coppiced to give the wild wood that the Rat and the Mole trudged through to Badger's. Then Dutch Elm Disease struck...and they faded from the landscape.

In Australia they came with the colonists. Homesteads and parks from Toowoomba to Clare and south to Cygnet had stands, stately and elegant, just like home! They coppiced. They coppiced along the river banks, with their friends the Lombardy poplar, the aspen and the weeping willow. They met the silver birch, the cherry laurel and the cottonwood from North America and they coppiced with them too! They formed an extremely successful disclimax in the waterways around so many of our inland cities and towns. They expelled the manna gums and the sheoaks, the teatrees and the silver wattles. They drove out the local animals and provided a home for the blackberries, and the foxes and the rabbits. They coppiced into people's gardens from the churchyard next door. The coppiced under our roads and footpaths. They coppiced up our drains and around our gross pollution traps. They got heritage status in our landscape. Then the beetles came...

It is only a little beetle, with an enormous name *Xanthogaleruca (Pyrrhalta) luteola*. It is not as big as the gumleaf beetles that gang up on the red gums with the hatter caterpillars each year, and give them a good prune. It is about as big as a cockchafer, but skinnier. It lays its eggs, as does the gumleaf beetle, in two neat rows on the underside of the elm leaves. They germinate into tiny but typical Chrysomelid grubs...black with a yellow middle, like a tiny concertina. [Chrysomelid grubs mimic eucalyptus sawfly spitfires, or is it the other way about? They don't have many predators, anyway.] These grow rapidly, skeletonising the leaves around them. In the fullness of time they descend down the trunk and make their chrysalis down there. Out comes the yellow and black beetle, hungry and ready to put shot-holes in every leaf it can find. Quickly, every leaf on every elm in the coppice or avenue has browning, perforated leaves. This year's growth for the elms has been in vain! What a shame! If this goes on for three or four years the elms will have trouble recovering. They won't be so good at coppicing. They won't be so thick along the waterways. They won't fill your house with papery seed in October. They won't crowd out the manna gums and the sheoaks the riverbank restoration teams planted this year. They won't be there for the rabbits...



## WORKSHOP: IMPROVING MANAGEMENT OF YOUR PROPERTY

An 'Improving Management of Your Property' workshop will be held in the Burra - Royalla area on **Saturday 23<sup>rd</sup> August 2014**. The event will include a morning presentation at Burra Community Hall followed by an afternoon field trip to Royalla.

Guest presenter will be the experienced and knowledgeable Alison Elvin of Natural Capital, who has previously conducted several workshops in the local area relating to a variety of subjects such as the management of weeds, pastures, horses, and native flora and fauna.

The workshop will provide ideas and practical advice as to how overall property management can include both sustainable production and the protection of environmental values.

More details will be available later, but to register your interest, contact Melinda Hillery, Catchment Officer at Molonglo Catchment Group on 0422 881 685 or by email at [mcofficer@molonglocatchment.org.au](mailto:mcofficer@molonglocatchment.org.au)



## Call for expressions of interest GLOSSY BLACK COCKATOO HABITAT PROJECT

Royalla Landcare has been successful in obtaining funding from the **Capital Region Landkeepers' Trust** for a Glossy Black Cockatoo habitat restoration project. The landcare group will now develop a project plan outlining planned activities and timeframe for completion. The final report following successful implementation of the project will include images of plantings, landholder input of the works undertaken and a map of areas treated. Follow up information following completion of the project will be available on the Capital Region Landkeepers' website.

The intention is to create as much habitat as funding will allow. **Do you want to be involved?** It can be as small an involvement as accepting a free contribution of as little as 20 trees to plant. Or come and join the Royalla Landcare group to help prepare the project plan, distribute plants, or assist in the planting. The Landcare group will be involving other organisations to assist with mass plantings.

*Help 'Fifty' (pictured below), and others like him, find food and shelter.*

Express your interest in requesting plants or by otherwise being involved by Email to Maryke at [rroyallalandcare@earthbasics.com.au](mailto:rroyallalandcare@earthbasics.com.au) .

If you would like FREE  
*Allocasuarina verticillata*  
(drooping she-oaks)  
CONTACT US:

R o y a l l a l a n d c a r e  
@earthbasics.com.au  
or 6280 4128 (w).

The only thing you have to  
do is plant the trees, and  
watch them grow!



ROYALLA  
LANDCARE INC.  
ABN 53 262 641 780

Royalla Landcare Inc.  
PO Box 1573  
Fyshwick  
ACT 2609

Phone: 6280 4128  
E-mail: [royallalandcare@earthbasics.com.au](mailto:royallalandcare@earthbasics.com.au)

Royalla Landcare is an active group in the improvement and protection of the natural environment of the Royalla Area. The Royalla Area contains grassy box woodland and grassland communities, which are classed as Regionally Endangered in the Murrumbidgee / Molonglo Catchments.

Our projects aim to address the following issues:

- Enhancing local indigenous fauna and flora and avoiding loss of biodiversity.
- Preserving and enhancing remnant grassy woodland.
- Establishing linking wildlife corridors
- Raising community awareness and education about sustainable land management e.g. responsible grazing techniques, erosion and weed control, caring for native ecosystems.

### Membership

Membership entitles you to Royalla Landcare Group newsletters, guest speakers & events, Landcare support and Cheap Trees, and more importantly, it's your contribution to landcare activities in the region. Membership renewal was due at the AGM in Nov for the 2014 year. Cost is only **\$25 per property**.

### ROYALLA LANDCARE INC. MEMBERSHIP FORM for 2014

Name: \_\_\_\_\_

Property Address: \_\_\_\_\_

Postal Address: As above or \_\_\_\_\_

Phone: \_\_\_\_\_

Mobile: \_\_\_\_\_

Email: \_\_\_\_\_

#### Call for volunteers— many hands make light work

The landcare group is always seeking new members, and additional committee members to help plan future projects. Please join us. We encourage you to be involved—everyone is busy, but just a few hours every now and then helps get things off the ground—and we're a very friendly bunch! Contact for further information: Royallalandcare @earthbasics.com.au or phone 6280 4128 (w).

(Cheques payable to: Royalla Landcare Inc.)

ABN: 53 262 641 780

RETURN TO: or by E.F.T.

Royalla Landcare BSB: 032-729

PO Box 1573 ACCOUNT: 244866

Fyshwick Please include your name and

ACT 2609 E-mail a remittance to: [royallalandcare@earthbasics.com.au](mailto:royallalandcare@earthbasics.com.au)

