## Landcare UpHunter

Winter 2018

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## Winter Wanderings

In the colder months of the year some plants in our environment take the opportunity to 'have a rest' from growing, flowering, seeding, multiplying and producing edible foods
Despite the Winter climate, there are always tasks that need to be done in the garden, in public spaces or on the land-soil preparation, growing food, maintenance etc.

National Tree Day (NTD) is officially held in the last week of July. Schools, businesses and community groups undertake a wide range of activities like volunteer based site specific planting of native trees, shrubs, food sources, weed and other invasive plant control and educational events highlighting local environmental projects and outcomes.
Given differing geographic climatic conditions across Australia in Winter activities under NTD can be tasked at other times of the year. Just go to https://treeday.planetark.org Students at Ellerston Public School celebrated Schools Tree Day by planting Grevillea jenkinsii and Kunzea ambigua, adding to native bird habitat/food sources at the school.

Kunzea, for example, provides shelter and nesting space for small birds, insect and/or nectar food sources for species such as Willie Wagtail, Silvereye, Dusky Woodswallow, Speckled Warbler, Eastern Spinebill and various Honeyeaters, Robins and Wrens.
The same week, Murrurundi Public School students undertaking Winter activities in their Kitchen Garden added some Tahitian lime (Citrus latifolia), Eureka lemon (Citrus limon Eureka) and Dwarf golden delicious apple (Madus domestica) plants to their citrus patch.

Scone Landcare's Native Tree \& Photo Shoot Project provides farmers/other landholders with native tree tube stock for habitat and landscape improvement, shade for stock etc. Ongoing drought means many landholders are unable to plant trees and shrubs. A few, who have ready access to water, have recently planted Sydney blue gum (Eucalyptus saligna), Scribbly gum (Eucalyptus Rosii), Bull-oak (Allocasuarina leuhmanii), Blackbutt (Eucalyptus pilaris), White-feather honeymyrtle (Melaleuca decora) and Callistemon.
Landcare UpHunter held their stall at both the annual Bloom Market in Scone and at the bi-monthly Scone Market in July. Residents and visitors were able to access environmental resource information on native birds, animals, insects, bees, trees; weeds and weed control and energy efficiency. Dioramas of Rainbow Lorikeets, Echidna and native frogs were popular with children and adults.
"What is a Dragonfly nymph? How can I see one? I have green frogs at home but they are asleep now. We have a vegetable garden at school. I've seen a Tasmanian Devil in Tasmania, do they live here too? We have Kookaburras, Magpies and Eastern Rosellas at home". As usual there were lots of varied questions and comments from children visiting the stall.......and from parents too!
A native tree giveaway at Bloom Market saw some residents taking home Leptospermum, Callistemon, Melaleuca and Kunzea species for planting in their gardens. Even residents with a limited water supply welcomed one or two trees to plant in the garden.
Ruth Hardy


## Eastern Water Dragon

The Eastern Water Dragon (Itellagama lesueurii) is a native Australian reptile that can be found from Cooktown in far north Queensland way down to southern NSW (roughly to Kangaroo Valley). You might have seen them basking on a rock in the warmth of the sun, hunting about for food or scurrying from one patch of bush or garden to another in the course of their daily lives. Or maybe you have seen one swimming in a local stream or river. Its limbs are tucked in close to its body as it swims. Why is that so?
They can be hard to spot and watch as they often 'hear' us before we hear or see them, they can move quickly across the land and into water or be quite still while their natural colouring helps them to blend into the background.
How do you distinguish an Eastern Water Dragon from similar looking reptiles? You might have thought it rather dull in colour but it has a grey-brown colour with a thick black band running from the lower corner of its eye, over its 'ear 'and onto the neck. It has grey stripes on its legs and tail. Eastern Water Dragons have a prominent spiny crest along their back and distinctive yellow patterns on their face and sides. Mature males also have bright, brick red colouring on their belly and chest.
Reptiles do not have earlobes like we do. They have an external ear structure which usually looks like a small, raised disc on each side of their head which helps them "hear' by picking up airborne vibrations around them. If they hear us coming and dive into water they can stay submerged for over an hour! They can also drop from overhead branches they may have been lounging on.
As humans we have two sets of teeth during our lifetime, a small set when we are very young then another bigger set of teeth that start to grow through from around six years of age. The Eastern Water Dragon however has only one set of teeth that have to last for its whole life. Its teeth are fused hard to its jaw, making it very hard to lose any of them. It has a single row of sharp teeth that are designed to easily (and quickly) catch, hold and eat its food. It also has a wide, thick, pink tongue and a pink mouth inside.
They have scales over their body and at certain times of the year they shed them. This is called moulting, where old worn skin is replaced with new skin which is really important. As they grow from just out of their shell to juveniles and then to adults they need bigger scales to cover their skin. Moulting is essential for growth. Moulting helps them to get rid of parasites and mites as well.
Did you know that humans shed lots of tiny pieces of old skin every day, so tiny we may not notice it. Do you know why we do?
Eastern Water Dragons like a variety of food—insects, ants, spiders, crickets, caterpillars, earthworms, grasshoppers, locusts, cockroaches, slugs, feeder fish and small mice. Young dragons eat smaller insects until big enough to catch larger prey food.
Adult males can weigh around 1 kilogram and grow up to 1 metre in length. That may seem really big but two thirds of it is its tail.
Females usually breed and lay their eggs during the warmer months of Spring. They can lay two lots of eggs around 1 month apart with up to 18 eggs each time. They lay them on top of their nest and cover them with soil to incubate and protect them. The young hatch around three months later and are able to live independently from the start.
Eastern Water Dragons are more active during our warmer seasons. For the cooler Winter months they create burrows usually between logs and boulders on the side of riverbanks or close by, packing dirt into the entrance to seal it. Then they can slow their bodies down, having anywhere from a few weeks to four months of inactivity until the weather warms up or Spring is here again.
We use verbal language to communicate and talk to each other but Eastern Water Dragons can't do that. They communicate to each other by using various body movements like head-bobbing, saluting, doing 'push-ups', running with their back legs off the ground, or just standing and lifting their front legs.
They also have throat pouches which they can inflate. It helps them to appear as big as possible. Have you ever seen one puffing out its throat? In what situations do you think they might need to do that?
A useful website for lots of information about Eastern Water Dragons and other reptiles is called www.backyardbuddies.org.au
Ruth Hardy


## Caves, Climate \& Stargazing

A great Maths resource on the web for students and teachers is the Maths Inside project of the University of Technology Sydney. You can find, amongst other information and learning tools:

- Maths in 3-D: Zebedee a handheld 3-D mapping system giving detailed, accurate 3-D images including caves and forests
- Stargazing with the SKA: The Square Kilometre Array (SKA) multi-radio-telescope project. When it is completed this will be the largest radio telescope available for scientists to study and collect information about our universe.
- Modelling Climate Change: The foods our farmers grow, when and where they grow them are all subject to changes in our environment and how we view our environment. Mathematical models help scientists predict climate and weather patterns.
- Bees with Backpacks: Healthy Bee populations are essential for plant pollination, including for growing food. Australian scientists are fitting bees with electronic chips to help them build up a picture of the behaviour of a healthy Bee hive.
- Knowing Nutrition: The CSIRO shows how nutrition and health influences the way that young people develop. This section also looks at how scientists are using innovative ways to develop healthy eating and individual health approaches.
To find out more just go to https://www.uts.edu.au/research-and-teaching/our-research/maths-inside/maths-inside-resources


## Going Plastic Free

In July each year individuals and organisations celebrate "Plastic Free July", saying No to single use plastic and registering their own plastic free challenge activities. There are a wide range of simple actions we can do all year round for a healthier environment.

- Eating and Drinking out-take your own hot drink cup. Ask the restaurant/cafe you purchase your hot drink from if they will give you a discount if you have your own cup. The responsiblecafes.org website map lists many existing outlets that do so.
- Take your own filled drink bottle with you when going out, rather than buying water bottles when travelling or eating out.
- Take a reusable container with you as some food outlets accept BYO containers.
- Shopping-take your own non-single use bags, not just to the supermarket. Roll-up bags can easily be kept in your car.
- Choose groceries with minimal packaging or no covered plastic packaging e.g. fresh food section in-store or local market.
- Biodegradable bags \& compostable bags are a good option. Produced from plant-based renewables like corn starch and wheat, they biodegrade in the right conditions (although they may not completely in our landfill sites).
- At Home—use hand soap rather than shower gel and hand wash and maybe even a biodegradable bamboo toothbrush.

The Plastic Free July website has lots of handy tips on other sustainability aspects such as cooking, food storage, gardening, cleaning and pet care. It has recipes for make-your-own cat and dog biscuits through to cleaning products. Reducing landfill through recycling (including e-waste and furniture), avoiding plastics that can escape as litter, there is lots of useful information accessible on the www.plasticfreejuly.org website.
Plastic: It's not me, it's you! This is a funny, informative video with a focus on why everyone seems to be breaking up with plastic. Just go to www.youtube.com/watch?v=-DEc16dEMns and when you have looked at it and pass this link on to others.
Some Local Councils have installed solar-powered waste bins in public spaces. They can hold up to five times more waste than normal bins. A solar panel activates the composter mechanisms battery when the bin reaches its 'fill level', reducing the need to empty the bin as frequently.
Ruth Hardy

## Resources \& Funding

Dishing the Dirt on Agricultural Innovation-a Dirt Dude website which includes soil health for sustainable farming. Read about Aromatic Soil Biology—Buxton Black Truffles hunting with Lily the "Truffle Hound". Go to https://www.thedirtdude.com.au/
Food for Education-Phenomenon has a free digital program on food education for Years 3 to 6 students. There are 25 short episodes with a mix of live action and animation with a cast of children and "guests". Dig deep into worm farms, get dirt under your nails and be a Super Natural Learner with this Australian Curriculum aligned resource. Access is via http://phenomenon.com.au/
"Get Prepared for Emergencies" app—The Australian Red Cross has produced an app to assist people with their disaster readiness actions. Just go to https://www.redcross.org.au/prepare
"First Aid" app—a pocket guide form to First Aid and CPR at https://www.redcross.org.au/get-involved/learn/first-aid/first-aid-app
Humans v Birds: poorly managed urban growth squeezes biodiversity-The Guardian 3rd July 2018 highlights research on biodiversity outcomes for native species habitat in major Australian urban areas. Research compared inter-connected backyards and tree-lined streets $v$ medium-density housing that aligns with continuous environmental reserve areas. Just go to https:// www.theguardian.com/environment/2018/may31/chronic-inaction-call-for-planning-overhaul-as-population-growth-threatensbiodiversity
Understanding Environmental Flows-NSW Dept. of Primary Industries, with anglers from across the NSW Basin. It has five easy-to-read infographics which answer common questions on our river systems and how native fish interact with water flows e.g. the Murray-Darling Basin. To access this information go to https://www.dpi.nsw.gov.au/fishing/habitat/rehabilitating/fish-and-flows
Weeds app-NSW Dept. of Primary Industries. A great resource tool with information to assist landholders in reducing noxious and environmental weeds in NSW. Over 300 weeds listed, regulatory requirements, weed control mechanisms and regulated herbicide options are identified. To access the app just go to https://www.dpi.nsw.gov.au/biosecurity/weeds/nsw-weedwise-app
Managing Pests in NSW—Dept. of Primary Industries Q\&A resource for private and public land managers. It covers responsibilities in managing pest animals on their land. For information go to https://www.dpi.nsw.gov.au/biosecurity/vertebrate-pests/q-and-a

## Funding

Emergency Drought Relief Package—Dept. of Primary Industries covering landholder financial support in managing the effects of ongoing drought. Drought Transport Subsidies (freight costs for fodder, stock to agistment sites/market, stock water cartage costs.
Other support includes waiving of LLS fees in 2019, fixed charges component of water licences and Farm Innovation Fund interest charges for existing approved landholders and those submitted applications by 30th July 2018 are part of the package. To find out more information just go to https://www.dpi.nsw.gov.au/climate-and-emergencies/droughthub
Small Grants for Rural Communities—Foundation For Rural \& Regional Renewal funding includes an Enhancing Environmental Sustainability criteria section. Applications from communities with a 10,000 or less population will receive priority. Round 34 opens on 13th August and closes 26th September. Go to www.frrr.org.au or call FRRR direct on 1800170020 for more information.

## Events for your Diary

Landcare UpHunter stall—farming, environment, Landcare, education resources, plants/herbs. Visit us at: No stalls during August/September Other Events:
National Science Week—11th-19th August. Register your school/group event at www.scienceweek.net.au/
On-line Agricultural Careers ExpoRuralbiz Training on 14th August 11.00 am to 1.00 pm . To register go to www.ruralbiztraining.com.au
No Dig Garden Workshops-UHSC on 18th August at Scone Library, 130 Liverpool St, Scone 10-12pm or 1-3pm www.trybooking.com/WYEP
National Landcare Week—1st-9th September. For events/registration go to www.landcareaustralia.org.au For drought affected farmers \& community members-a social get together. First Friday monthly from 6.00 pm at Linga Longa Inn, 2 Riley St, Gundy. If eating at the Inn call 65458121 for dinner bookings. Threatened Species Day-7th Sept. go to www.environment.nsw.gov.au Glenbawn Catchment Landcare Group. Contact Gavin MacCallum glenbawncatchment@outlook.com Merriwa Landcare Group. Contact Jenny Lee on 0429337557
Murrurundi Landcare Group just Email Sandy@boydscreek.com.au
Pages River Warriors Working Bee Wilson Memorial Oval, Murrurundi 1st \& 3rd Sunday monthly (morning) Email Sandy@boydscreek.com.au
Landcare UpHunter \& Scone Landcare-refer details below

## Trailing Around Murrurundi

Living in a small rural town away from some larger mainstream or specialist resources can sometimes be an advantage. Local community organisations and members are often familiar with each others plans and activities, cross-sector partnerships may be common, with members working regularly on large and small actions as part of everyday work.
Murrurundi Landcare, through its Pages River Warriors group, have been cleaning up weeds and general rubbish, levelling up uneven land surfaces and clearing a pathway between Bush's Bridge \& the Swinging Bridge (behind the Bowling Club and Murrurundi Public School). Blackberry, Privet and Giant Reed along with much smaller weeds have outcompeted native flora in this riparian zone. Eradicating them is an ongoing process but already the area is more accessible by foot to the local community and visitors alike.
Now you can walk from Bush's Bridge to the Swinging Bridge without fighting the weeds.
Our fortnightly working bees continue all year round (for details see Events section on this page). It is amazing how much on-ground work is achieved by regular small tasks.
An outdoor classroom has recently been built on public land situated between the local primary school boundary fence and the proposed Pages River Walk. With the assistance of the local Murrurundi Men's Shed who built the equipment for us, the new structure is designed for specific education and general community use, providing a formal/informal learning area for young people to talk and learn about the environment and local habitat.
Situated on public land this learning area will also give access to the Pages River Walk.
On August 29th the classroom will be officially opened. When we originally planned the outdoor classroom we envisioned local school children would be able to plant natives at the opening but due to drought this may have to wait a while. Murrurundi township has been on Level 6 water restrictions for ages and there isn't any water in the Pages River!
We are maintaining original areas in Wilson Memorial Oval and over the road (the New England Highway) behind the Visitor Information Centre and across from Bush's Bridge.
One of the greatest achievements for us is Paradise Park, "Eye of the Needle' where we have placed a new map of the walk and produced a brochure for the Visitor Information Centre. A couple of our members have been diligently working on the trail to keep it clear for the many people who do take the walk every week and for visitors to Murrurundi.
Robyn Orman


Visit us at www.landcare.nsw.gov.au/groups/scone-landcare-group

