



LUCI Update No 33 ... October 2023

Welcome on a very 'summer-y' spring day!

Recent get togethers

Native seed propagation workshop

September 16th saw ten participants treated to a very comprehensive workshop presented by Karen Melissa, owner of [Tanglewood Natives Nursery](http://www.tanglewoodnativesnursery.com.au). Karen provided information on native fruit types, native seed collection, extraction, storage and pre-treatments, tools for the job and germination, pricking out and potting up processes.



Karen and workshop participants inspecting seedling trays.

A highlight was the hands-on component of the workshop, when participants were given a range of seed types to pre-treat and 'plant' in seed trays. Karen has since provided participants with a progress report on how well their propagation efforts are doing with a range of seedlings popping up including *Dodonaea viscosa*, *Daviesia ulicifolia*, *Eucalyptus moluccana*, *Flindersia xanthoxyla* and *Lomatia silaifolia* to name a few.

Due to popular demand, Karen has agreed to run another workshop in the new year (possibly January) and we'll keep you posted as to the date. As the group number is kept to 10, it is wise to get in early and book your place.

LUCI Spring Walk

Our walk on 23rd September was a great success with over 30 people joining Martin Bennett on Catherine Burton's Stockyard property. The walk focused on an area where Catherine's family has fostered regeneration of Brigalow and Dry Vine Forest patches for 40 years.

Thanks to Catherine for hosting the walk and Martin for guiding and offering the following highlights from the walk...

The Lockyer Valley form of Brigalow with its olive green and silver leaved form;

The knot vine *Hippocratea barbata*, which really does get itself tied up in knots;

Alectryon pubescens, a small tree;

Hairy boonaree with its exaggerated holly like leaves, much larger than its brother

Alectryon diversifolius;

Scrub boonaree with its smaller holly like leaves;

A great specimen of Orange mistletoe, *Dendrophthoe vitellina*, growing on a Scrub Whitewood, *Atalaya salicifolia*; and

A really attractive lichen, *Teloschistes* sp, Golden eye lichen, observed on branches.

Knot vine (left below) and Golden eye lichen (right below). Photos Martin Bennett.



Understorey Planting: Feeding foodwebs workshop

Invertebrate life in the bush is often overlooked and undervalued yet critical to the web of life on our planet, which is why LUCI engaged [Helen Schwencke](#) to present a workshop on the topic. The workshop was held on a Mount Whitestone property, on 21st October, and commenced with a talk on how to get your "eye-in" for spotting some of these small creatures, followed by a walk.

During the walk, Helen and her daughter Amelia encouraged participants to look at the vegetation through a different lens (figuratively and literally with hand lenses), which opened our eyes to an amazing world of invertebrates and signs of their activity. Who knew a species of Praying mantis could be so small or bumps on leaves were part of an intricate foodweb or *Alphitonia excelsa*, the Soap tree or Red ash, could be host for so many invertebrate species at different lifecycle stages?



Helen says there are so many signs of life on this leaf: A row of eggs possibly those of a species of katydid, though there are other possibilities - a cricket, grasshopper, or those of a true bug. The two bumps are galls and could be Hemiptera (a true bug - scale insect or thrip), Diptera (a fly), Lepidoptera (a moth), Coleoptera (a beetle) or Hymenoptera (a wasp). There is a trail that looks like it could be a leaf miner, or something that scraped the surface so could be from any type of plant-eating insect, with a slight possibility that it was made by a snail or slug. The silk can only really have been made by a spider or caterpillar, but which one? Helen's mantra? - there is no such thing as a bad leaf only a chewed leaf! Photo Diane Guthrie.

We ended the morning with a second talk by Helen highlighting how plant-insect

interactions are a core part of healthy ecosystems and feed much of the foodweb, including birds. A few of the many interesting takeaways from Helen's talk include the following insights:

- Around one-third of all named animal species are plant-eating insects and only a small portion of all the invertebrate species that exist have been named.
- Other than for butterflies and some larger moths, we have little idea of which species of plants support which insects, particularly their larval stages, with most relationships highly specialised between plants and the insects that eat them.
- Aside from birds known to be insectivorous, it is also understood that most Australian birds feed their nestlings insects, irrespective of what they eat as adults.
- While most insects and other invertebrates are eating each other in foodwebs, at some point both the plant-eating insects and their predators are also part of the diet, inadvertently, for many of the less overlooked animals, such as birds, frogs, lizards, fish and mammals, even herbivorous mammals.

As one participant noted, she would "never look at the bush the same way again".

Thanks to Jan and Jen Schafferius for hosting the workshop on their property.



Helen says the flat eggs (left) are likely to be from a species of Katydid. These types of animals are grouped with grasshoppers and crickets. Photo by Amelia Pasieczny.

Updates on grant funded projects

LUCI has been successful in applying for two new grants as follows:

We are grateful to **BirdLife Australia's Community Conservation Grants 2023** program for funding for our *Maintaining and Increasing Native Bird diversity in the Lockyer Uplands Project*. The support will enable LUCI to continue to build our baseline bird data on participating properties, better understand native bird habitat requirements in our landscape, particularly for woodland birds, and advocate for improved and extended bird habitat at the property and landscape scales.

We thank **Friends of Parks Queensland - Member Group Grant** program for funding to undertake weed management work and native species surveys in Flagstone Creek Conservation Park. The funds allow LUCI volunteers to purchase herbicides, tools and personal protective equipment to continue their volunteer efforts to address Velvet Tree Pear and lantana control work in access areas in Flagstone Creek Conservation Park and to engage professionals to undertake bird and flora surveys in the park.

Koala Climate Corridors project by Project Coordinator Justine Rice

With 12-months seed funding from Great Eastern Ranges and IFAW, LUCI's task is to help wildlife adapt to climate change as conditions and food sources shift across the landscape. LUCI is working with landholders and community groups across the Bunyas to the Border (B2B) landscape to implement a range of measures to improve, connect and supplement wildlife habitat resources.

The B2B project is off to an exciting start, and we've got a lot in store for the coming months! Our 12-month work plan is officially greenlit, and we're kicking things off with a splash—supplementary water stations for our furry friends like koalas and other tree-dwelling critters. As the

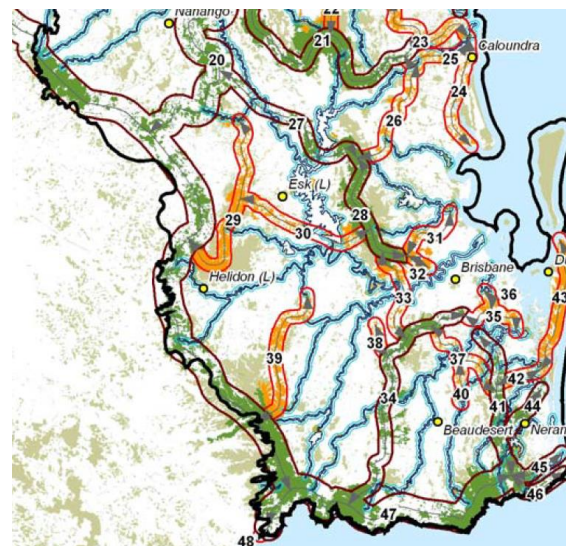
temperatures rise and water becomes scarce, these stations will be a saving grace.

Our tree planting plans are also taking root for our habitat restoration activity with ten locations earmarked for koala-friendly trees, that will also provide support to Greater Gliders and Grey-headed Flying Fox. The on-ground action starts in February 2024, but the prep work is already in motion, thanks to support from Martin Bennett at Lockyer Valley Regional Council.

By the end of 2023, potential sites for Greater Gliders and Brush-tailed Rock-wallabies will be identified by Wildlife Queensland's Paul Revie and mapped and referenced against suitable habitat to find prime areas for survey and monitoring activities. For those eager to dive into the world of wildlife surveys and conservation, we've got some exciting workshops in store.

As we roll into the new year, we'll be installing supplementary habitat, calling on our incredible community for planting support, and hosting some thrilling community workshop days in April and June.

A lot to look forward to, stay tuned!



The landscape focus of the B2B project and activities is the State Terrestrial Corridor Buffer (left corridor marked brown), linking Border Ranges in the south to the Bunyas in the north. Source *Biodiversity Planning Assessment, Southeast Queensland South Landscape Expert Panel Report (2006)*, Environmental Protection Agency. SEQ BPA v3.5.

NRRP funded weed management by Project Coordinator Joe Joseph

The National Resources Recovery program in the Lockyer Valley, funded by the Queensland Government and managed by Healthy Land & Water, is due to reach its halfway point in the coming months. LUCI landholders participating in the program can expect to receive property plans detailing weed management works shortly.

In the first phase of the program, surveys were conducted on participating properties to locate infestations of Madeira and Cats Claw Creeper vines and lantana followed by a workshop regarding the utilisation of biocontrols to reduce the threat of the aforementioned weeds in the Lockyer Valley. Workshop presenters included Emily Vincent of Watergum Community Inc, who spoke about biocontrols for Madeira and Cat's Claw Creeper, and Chris Hoffmann, LVRC Catchment Officer, who spoke about progress in the development of biocontrols for lantana.



Madiera beetles and "window" signs of adults feeding on Madeira vine leaves. Photo Diane Guthrie.

Looking to the future, we await the onset of rain as a signal to commence weed treatment, rain being a key component of this plan as it will increase (a) the survivability of our biocontrol beetles and (b) lantana leaf cover necessary for herbicide treatment, in turn, thereby the

long-term efficacy of protecting our environment.

***Watergum presenter Emily Vincent
provided the following resources...***

Madiera Resources

[Frequently Asked Questions about Madeira Vine Beetle](#)

[A leaf-beetle released for biocontrol of Madeira](#)

[South American beetle helps kills invasive weed in endangered Hunter Valley site](#)

Cats Claw Resources

[Hylaeogena jureceki, a jewel beetle released for biocontrol of cat's claw creeper](#)

[A new biological control for cat's claw creeper in Queensland](#)

[Frequently Asked Questions About: The Jewel Beetle](#)

Chris Hoffmann provided the following link to information on lantana biocontrols...

https://www.daf.qld.gov.au/_data/assets/pdf_file/0006/62358/IPA-Lantana-Biocontrol-1.pdf

Staying on weed management...

The dreaded Parthenium by LVRC's Martin Bennett

Of interest, the Lockyer Valley form of Parthenium (*Parthenium hysterophorus*) does not grow as high as it does out west or in northern Central Qld. The plant has grey/green, deeply divided leaves that are also hairy. It starts off as a rosette, and eventually grows more leaves, before sending up flower/seed heads on stems, to 60cm. This pest favours bare, disturbed ground and spreads.

Some landholders can become sensitive to this pest, which can cause rashes and breathing problems with, for some, over-exposure causing immediate reactions. Sensitivity can be severe enough that some people have to leave their land.



Photos of Parthenium rosette leaf structure (top) and flower heads (bottom). Photos Martin Bennett.

Everyone has a general biosecurity obligation (GBO) to actively treat this pest for which there are chemical treatments (see https://www.daf.qld.gov.au/_data/assets/pdf_file/0004/68602/parthenium.pdf)

Lockyer Valley Regional Council do have herbicide rebates and also free loan (bond required) of efficient herbicide spray equipment, twin quikspray trailers, and a boom spray with a single quikspray trailer. <https://www.lockyervalley.qld.gov.au>

[/our-services/environment-and-pest-management/pest-management](#)

There are biological agents for the treatment of Parthenium including:

- *Epiblema strenuana* - a stem-galling moth from Mexico established in all parthenium areas;
- *Zygogramma bicolorata* - a defoliating beetle from Mexico;
- *Smicronyx lutulentus* - a seed-feeding weevil from Mexico;
- *Conotrachelus albocinereus* - stem-galling weevil from Argentina;
- *Bucculatrix parthenica* - leaf mining moth from Mexico;
- *Carmenta ithacae* is a stem boring moth from Mexico which is becoming established at favourable sites in the northern Central Highlands;
- *Puccinia abrupta* var. *partheniicola* is a winter rust fungus from Mexico;
- *Puccinia xanthii* var. *parthenii-hysterophorae* is a summer rust fungus from Mexico that weakens the plant by damaging the leaves.

Feral deer: no room for complacency or 'bambi' attitudes

According to the Australian Government, feral deer are estimated to cost Australian communities and primary producers \$91 million a year.¹ Environmental damage by deer can take the following forms: males in rutting season strip the bark of saplings resulting in tree death; their cloven hooves pound the ground to a hard surface allowing water flow to speed up and cause erosion and dirty clean water such as in springs; their wallowing in dams and water holes again diminishing water quality; and making tracks by smashing through vegetation. In addition to the environmental and agricultural damage wrought by deer, they pose a biosecurity risk through the

¹ <https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/pest-animals-and-weeds/priority-pest-animals>

transmission of diseases and parasites and males in rutting season can pose a danger to people and wildlife.



A herd of *Cervus elaphus*, Red deer. Photo Geoff Niethe.

With six deer species established in Australia, it is estimated there could be between one and two million feral deer. The priority of the federal National Feral Deer Action Plan² is to limit the spread of feral deer into new areas and reduce the impacts of large populations of feral deer. The Plan states that "[a]t least 35% of feral deer need to be removed from a local population, each year, to have on-going reductions in impacts" and emphasises the need to coordinate control measures across property boundaries and landscapes to be effective.

How well do we understand the behaviour of deer in our landscape, and can a better understanding inform control methods? [Some interesting American research](#) into the behaviour of white-tailed deer would suggest yes. Now in its 10th year, the research project has found does exhibit high birth-site fidelity, a connection between deer health and population and fluctuating nutrients in forest vegetation, and how 'experienced' deer respond to hunting pressure.

There has been a persistent presence of deer in our Lockyer Uplands landscape for several years now. While many landholders have arrangements in place to cull deer on their properties, the abundance of feral

deer across our local landscape is an unknown quantity which becomes a problem when, as advocated by the National Feral Deer Action Plan, the goal is to remove at least 35 to 50 per cent of the local feral deer population (particularly females) each year. In the absence of an approximation of the local feral deer population, the best strategy is for landholders and regional pest officers to communicate and coordinate their control efforts.

Upcoming events...

LUCI AGM/GM and Christmas Party, 10:30am, Sunday 10th December, Ma Ma Creek Community Hall. We love to



celebrate the year's achievements with members, partners and supporters and to have your input into planning

for the new year. Our meetings (kept to a total 1 hour) will be followed by our special guest speaker on birds, UQ's [Professor Martine Maron](#), and then our usual hearty Christmas feast. Agendas and office bearer nomination forms and proxy vote forms will be emailed mid-November. Put the date in your calendars and RSVP at [LUCI info](#) will be essential for catering

An early heads up on **LUCI's Summer Walk, early February, on a property in the Hampton area.** Martin Bennett will be our guide on this large property, which is largely weed free with regenerating vines and shrubs following early clearing. A chat on long-term fire management will be a focus of the walk. More details in the new year.

A reminder... LUCI membership due 1st November. Only \$10 per person per year, join like-minded others and enjoy membership benefits such as free workshops, guided walks, access to grant programs to support property management, loan of fauna monitoring and weeding equipment, newsletters, and lots more.

² <https://feraldeerplan.org.au/the-challenge/#>

Interesting links to follow up...

[Twin koala joeys - a rare sight](#) Thanks Fiona.

[Recommended orientations for installing a wildlife box/hollow](#) Thanks Martin. Did you know that microbats prefer a hollow/nest box with a north to north-westerly aspect, while birds and mammals prefer an entrance that ideally faces in an easterly direction?

We have extolled the virtues of [Mistletoe: a keystone resource](#) in the past and can't emphasise enough their important ecological functions. If you would like to learn more about the (often) misunderstood mistletoes, listen to Professor David Watson discuss the [Myths about Mistletoe](#)



Dendrothoe vitellina Orange mistletoe. Photo Martin Bennett.

Little Liverpool Range is running an iNaturalist competition throughout the entire month of November with a bunch of great prizes to be won. Find out more at... <https://www.inaturalist.org/projects/little-liverpool-range-initiative-bioblitz-competition-2023>

Read how scientists called on indigenous knowledge of weaving to save golden-tipped bats as Black Summer bushfires destroy habitat <https://www.abc.net.au/news/2023-08-03/indigenous-knowledge-saving-golden-tipped-bats-black-summer/102669214>

Read about, and listen to, stories of wildlife and habitat conservation efforts in Australia through Great Eastern Ranges newsletters

<https://ger.org.au/newsletters/>

And Bush Heritage Australia's podcasts

<https://podcasts.apple.com/us/podcast/big-sky-country/id1604479601>

[Australian Succulents - The Unfriendly Ones](#), a book compiled by Australian succulent expert and author/photographer Attila Kapitany and Jennifer Silcock, is a "100-page photographic journey through the fascinating, often-cursed but seldom-appreciated world of Australia's spinescent succulents". Email Jen Silcock at j.silcock@uq.edu.au for further details.

If you're interested in how species adapt to changing climate conditions, follow this link... <https://edition.cnn.com/2023/01/30/world/dolph-schluter-profile-crafoord-prize-scn/index.html>

Read about the value of [Grasslands as carbon sinks](#) and how research shows [less intensively managed grasslands have higher diversity and better soil health](#).

Recent bird visitors...



Above Sacred Kingfisher and below Rainbow Bee-eater.



Flora snippets and photos...by Martin Bennett (LVRC Environment Officer)

A sighting of *Homalanthus stillingiifolius* Little Bleeding Heart, in the Flagstone Creek area, represents only the second record in the Lockyer. An uncommon, straggly shrub, it is usually only 1m tall in sandstone country although it can reach up to 2m. The name comes from the heart-shaped leaves that turn red when dead. The tiny white flowers appear on a spike and are followed by 5mm green fruits.



Homalanthus stillingiifolius Little Bleeding Heart.
Photo by Martin Bennett.

Another uncommon shrub observed at Flagstone Creek is *Pomaderris queenslandica*, Queensland pomaderris. Reaching to 3m, it has leaves which are dull green on top and white underneath with dead leaves turning red. Clusters of small white flowers occur at the end of branches. It belongs in the family *Rhamnaceae*, which also includes the commonly occurring *Alphitonia excelsa*, Soap tree.

The *Indigofera brevidens* Pink pea bush is not so common and is found in the western Lockyer on the Main Range to Bunyas bioregional corridor. It is often found on the margins of forests and woodlands and Semi Evergreen Vine Thicket. It grows as a shrub to 1- 1.5m with pale pink pea flowers, followed by cylindrical pods.

A more common find is the *Hovea planifolia* Broad leaved hovea which reaches to 2.5m. The underneath of the leaves can be

covered in fine grey or coppery short hairs. The flowers are of a medium size in the Hovea family, and are usually pale purple, followed by large hairy seed pods.



Pomaderris queenslandica, Queensland Pomaderris.
Photo by Martin Bennett.



Indigofera brevidens Pink pea bush. Photo by Martin Bennett.



Hovea planifolia Broad leaved hovea. Photo by Martin Bennett.

and a fauna snippet from Martin ...

A Mulgowie couple found this Koala skull, and bones under a tree on their property. The skeleton had a thick dead branch on top of it leading to speculation that the young Koala climbed up the dead branch, which failed, and stayed gripping it until it hit the ground killing the Koala. It goes to show that even fauna can have accidents, poor thing.



Koala skull photo by Tony and Sam Andreatta.

and me...

Recently, I found the skull below on our property and sent photos to Martin Bennett for identification. Martin confirmed a koala skull and noted defining features such as the huge blow hole and very deep jaw for grinding up tough, sclerophyll leaves.



Photo Diane Guthrie.

It is certainly uplifting to balance the opposite photos with this photo by Chris Hoffmann and Jacinta McMahon of a recent sighting of a Koala mum and her joey.



Important numbers:

Wildlife carers Kath and Steph 0410 334 661
(available 24/7)

Wildlife Rescue Education and Rehabilitation
(07) 4630 5208

Bat Conservation & Rescue Qld Inc
0488 228134

If you would like to share your stories and photos, we'd love to receive them. If you do not want to be included on the email list for this newsletter please let us know at [LUCI](#)

Newsletter Editor Diane Guthrie 0413 333 681

Stay connected, it's healthy!