



Quarterly Update No 12 ... April 2018

Autumn greetings ... enjoy LUCI's *Update!*

Conservation...on the brink or time for a rethink?

A debate in some conservation biology circles revolves around how we should value nature. Do we protect nature for its own sake or only where its protection produces benefits for humans?¹ Some argue that adopting the latter view is more likely to ensure continued investments in nature conservation. Others disagree arguing that we have not done so well protecting even those environmental attributes on which we rely (e.g. air, water, soil).

LUCI members are likely to have a range of views that motivate the value they place on the natural environment and their involvement in conservation activities. We thought we'd profile some of these views...

Why biodiversity matters to me...by Jim Kerr

We are not separate from nature. All life is interconnected right back to the very earliest forms when, for example, blue green algae put free oxygen into the air about three and a half billion years ago.



From there, we evolved along with all other forms of life following common biological processes. For example, we share 40% of our genes with a lettuce. It is often said there may be plants in the bush which hold genetic solutions to human ailments because of our evolutionary beginnings from plants and a common ancestor.

Older tribal people around the world have knowledge of our connectedness with the natural world from which, since the industrial revolution, modern humans, 'homo economica', seem to have become more and more divorced.

We destroy nature for 'economic reasons' before we even understand its processes. For example, it's estimated that the bulk of insect life is still unknown, particularly in rain forests throughout the world. Yet we, collectively, have been and continue to be responsible for the greatest extinction event since the demise of the dinosaurs sixty-nine million years ago. It's almost as though we are sawing off the branch upon which we sit.

Human population numbers are out of control with unsustainable numbers of people on the planet putting greater and greater strain on water, air and soil. It is said that we now need several planet earths to support the current population using the current technology.

I believe it behoves us to respect nature and retain and restore it, especially as we have the luxury of living in a wealthy, relatively unpopulated place like Australia. We have the resources to do this and it is our biological heritage. All living beings in nature have a right to exist because they predate us and we are connected in more ways than we can imagine to Mother Nature.

Why should I bother about conservation and biodiversity...by Peter Darvall

The benefits of nature conservation and biodiversity are constantly being discussed with new benefits regularly recognised. Undoubtedly, there are many benefits we have not yet consciously de-coded.

The therapeutic benefits of direct contact with biodiversity through, for example,

¹ Doak, Daniel F. et al (2014), What is the future of conservation? *Trends in Ecology & Evolution*, Vol. 29, No. 2, pp.77-81

walking tours, gardening, livestock work and boot camps, are all well documented in contributing to the rehabilitation and well-being of alcoholics, delinquents of all ages and post-traumatic stress sufferers. Even hard-nosed tourism and residential development industries use the soothing concept of biodiversity in their advertising, if not in practice.

People in dire humanitarian situations have many advocates trying to relieve their plight - with limited success and at great cost. Other species and habitats are facing extermination, whether by deliberate policy, neglect, exploitation or just "being in the way" yet enjoy minimal, and easily disregarded, advocacy. The imperative of biodiversity is not recognised or accepted.

All the above may be true, debatable, aspirational or worthless, depending on one's personal perspective. These problems for me are too overwhelming.

My support for biodiversity is entirely selfish. From a very young age - before clear memory - I derived pleasure, satisfaction and comfort from the living environment. Eighty years on, in a lifetime as an environmentalist and fifty plus years as a rural vet, I constantly give thanks for my good fortune. Do I feel charitable and wish to share my good fortune? My objective and achievement is to have given some living things - plant and animal - a chance at life they might not otherwise have had.



My answer to the question at the head of this article is, then, "why not bother?"

[We invite members/supporters to submit their views on why conservation/biodiversity matters to them.]

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

Lockyer Valley Biodiversity Network meeting

LUCI recognizes that our members' conservation efforts at the local level can be enhanced or diminished by what happens, or does not happen, at a regional scale. A seemingly isolated action in one area may adversely impact biodiversity values or conservation efforts in surrounding areas.

These thoughts prompted LUCI members to ask questions about regional biodiversity priorities for the Lockyer Valley. Are our combined efforts (i.e. government and community groups) supportive of each other's objectives and providing the best biodiversity value for our investments (money and labour)? In other words, do we have a coherent biodiversity strategy for the Lockyer Valley?

To consider these matters, LUCI convened a meeting of representatives from local government, non-government agencies, university, local environment groups and the education sector to begin discussions around significant biodiversity values of the Lockyer Valley. Twenty eight people met on 10th March at UQ Gatton campus.



Participants at the inaugural Lockyer Valley Biodiversity Priorities Meeting, UQ Gatton campus.

The meeting was a success in bringing together this range of stakeholders, for the first time, who, importantly, committed to ongoing collaboration in the collation, prioritisation and planning around biodiversity values in the Lockyer.

The next meeting is scheduled for 2nd June at which the non-government stakeholders will map and collate biodiversity data generated through their activities. LUCI

recognises that there may be other groups/interests not represented at the initial meeting and need to be included. If you wish to nominate a group/person to participate in the network meetings, please contact Diane on lucatchmentsinc@gmail.com

Citizen Science online for Queensland critters workshop

...by LUCI member Penny Kidd

On Sunday 25th February, LUCI member Roxane Blackley "walked" twelve people through the vast array of online data bases available to the public and critical to conservation activities. We learned about WildNet, the Queensland state government's fauna database, used to support government conservation legislation and assess development applications. All records in the database are validated by a qualified person (e.g. ecologists).

CSIRO's public database, Atlas of Living Australia (ALA), allows individuals to submit records and does not require scientific validation. ALA references hundreds of databases including WildNet, CSIRO, Bureau of Meteorology, University research and special interest groups. ALA has the capacity to filter out duplicate records.



Becoming acquainted with the many online data bases and mapping tools to assist in conservation planning.

Roxane noted a number of online sites that allow citizen participation in species data collection. For example, FeralScan <https://www.feralscan.org.au/>, Bowerbird <http://www.bowerbird.org.au/about> and EchidnaCSI <http://grutznerlab.weebly.com/echidna-csi.html>.

A number of online mapping tools were described including:

- BioMaps www.qldspatialinformation.qld.gov.au/biomaps/, which can be used to view species profiles at different spatial levels;
- Queensland Globe, which has more functionality than BioMaps allowing facet attributes (e.g. slope, gradient, aspect) to be downloaded and combined with species modeling;
- Google Earth Pro;
- QGIS <https://qgis.org/en/site/>, free software for individual property mapping, which adds ALA and WildNet attributes to an individual property and allows customisation of boundary lines to indicate locations of infrastructure, vegetation and fauna;
- ESRI software, which is available to not-for-profit organisations and can be used to build biomaps <https://esriaustralia.com.au/>; and
- Qimagery, which can provide historical aerial photos from 1944 to 2009. <https://qimagery.information.qld.gov.au/>.

Other snippets picked up during the workshop included...

- ✓ Morcombe's Birds of Australia audio app for an Android phone <https://play.google.com/store/apps/details?id=com.coolideas.eproducts.ausbirds&hl=en> and www.naturesound.com - maps, eggs, nests, audio also downloads to Android and iPhone smartphones (thanks Sheena Gillman)
- ✓ Microbats are the smallest mammal, as small as 3 grams with some moths larger in size (thanks Al Young)
- ✓ Platypuses have been identified at Murphys Creek and, in the past, in local waterholes near Stockyard.
- ✓ Swamp wallabies (Wallabia Bicolor - and also our favourite marsupial) are also known as "Stinkers".

*If you are interested in native grass species check out...
<http://ausgrass2.myspecies.info/>*

LUCI AGM/General Meeting,

Fifteen people attended the meetings on 17th March at Stockyard Creek Hall. President and treasurer reports were received and LUCI member Greg Stirling conducted the nominations and voting for 2018 office bearers. Committee members Diane Guthrie, Peter Darvall and Elseph Darvall were reelected as President, Secretary and Treasurer, respectively.

The General Meeting endorsed ongoing projects and outlined new initiatives for 2018 (e.g. look out for more information on our wildlife photography competition). Minutes for both meetings available upon request at lucatchmentsinc@gmail.com

Special Interest Autumn Walk

The special interest walk on Sunday 22nd April saw 15 people visit Peter and Elspeth Darvall's 450acre property at Mount Whitestone. Prior to setting out, long-time local resident Ken Kennedy shared his knowledge of the history of land uses on the property and his experiences of the changes in vegetation and fauna presence in the local area over the decades.



Participants on the Autumn Special Interest Walk

Lead by LVRRC's Land for Wildlife Officer, Martin Bennett, the group walked, approximately, 2.5 km through different Eucalyptus forests and grassy woodland vegetation communities (REs 12.8.14, 12.8.17

and 12.3.7). Peter has embarked on a lantana management program in the Eucalypt areas with the aim of improving forest regeneration.

Martin shared his extensive flora knowledge with the group identifying 117 flora species along the walking trail. It was a delight for the walkers to be able to learn the names of species that they recognised from their own properties.

LUCI member Chris Cameron focused on the bird life along the trail and recorded the presence of 31 birds over the three hours. As usual, the walk ended with a hearty morning tea and a chance to chat and learn from each other. Martin's flora species list and Chris' bird list are available on request from lucatchmentsinc@gmail.com

Lockyer Uplands Glossy Black Cockatoo Project: Phase 2

At least 600 *Allocasuarina* trees have now been tagged across eight properties and Dwyers Scrub and two more properties are yet to be surveyed. The first of the three- and six-monthly follow up surveys have now commenced. The project focuses on the relationship between the occurrence of GBC feeding and the flowering, pollinating and growth cycles of (at this stage) four *Allocasuarina* species, *torulosa*, *littoralis*, *inophloia* and *crustata*.



A male and female pair observed feeding during surveying in early April.

Given the range of properties involved in the project, we should learn more about GBC habitat connectivity in our local landscape.

For more information on the GBC, check out the Glossy Black Conservancy at http://www.glossyblack.org.au/correct_id.html

Lockyer Uplands Koala Project

A number of LUCI members have reported koala sightings or evidence of koala scats on their properties. We are able to say that koalas are present in our Lockyer Uplands landscape on members' properties from Fordsdale, through Mount Whitestone, Stockyard and Rockmount.

If you would like to know whether koalas are using your property and to what extent, consider having a survey of your property. The survey can be undertaken by you (with family and/or a team of friends) with some prior instruction or with assistance from LUCI members trained in the survey method. LUCI's koala project is mentored by Dr Guy Castley, Griffith University. For further information, contact Diane at lucatchmentsinc@gmail.com



One of six koalas observed on a LUCI member's property over the past year. Photo by Barb Lindberg

Junior Citizen Science

LUCI will be partnering again with Mount Sylvia SS Principal, Mark Thompson, on a project that aims to embed on-ground practical experiences in the science curriculum. This term students will be studying soil as part of their earth science module and delving into the benefits of composting and worm farming for improving soil. LUCI members, Chris and Roxane, will be contributing to the program with practical expertise and teaching resources.

Friends of Dwyers Scrub Project

The Friends of Dwyers Scrub team met with QPWS Senior Rangers Tim Wood and Rod Hobson and local ranger Chris Job at Dwyers Scrub on 17th April. The FoDS volunteers were keen to show QPWS staff the challenge they are facing with keeping on top of the Cat's Claw regrowth and to review the appropriateness of their current methods of control.



FoDS team meet with QPWS rangers to discuss long term strategies for the park

Upcoming tasks for the FoDS volunteers are to improve the definition of our weeding grids for monitoring purposes and inventory and map the ever-increasing variety of weeds in the park. FoDS discussed with the rangers the option of including, along with herbicidal treatments, biological control methods for treating Cat's Claw, for example, use of jewel beetles. This method could augment the development of a native fungi intervention proposed by UQ's (Gatton) Associate Professor Vic Galea.

If you are interested in joining the Friends of Dwyers Scrub team for a few hours weeding each month, contact Paul Stevens on 0429 880 144 or Jim Kerr on 5462 6724.

Need help with your lantana or tree pear problem? LUCI has two splatter guns and a tree spear for member hire. Contact Peter Darvall on 5462 6841 or Paul Stevens on 0429 880 144.

Local plant profile

...by LUCI member Karen Gruner

It's easy to spot a native tree when it is in flower, and right now, the Sally Wattles (*Acacia salicina*) can be seen all over the Lockyer Valley, displaying their spherical cream/pale yellow flowers. Several Acacia species have the reputation for being short-lived, but the Sally Wattle lives for many years and is a good sized tree, reaching up to fifteen metres. It has a lovely weeping habit, and I think it would be a great substitute for the exotic Weeping Willow tree.



Over the past five years, I've observed the fauna activity that occurs within the Sally Wattle and it's impressive. The furrowed bark of the trunk provides habitat and hiding spots for

an array of spiders, beetles, and other insects. A good bug supply will almost certainly attract many feathered friends, and I've witnessed many species, including Honeyeaters, Sitellas, Whistlers, Robins and Silvereyes to name a few, systematically cleaning the Sally Wattles of any insects they can find. Many birds will make repeat visits throughout the day.

The flower nectar is an attractant to birds and bees, and the pods that follow house shiny black seeds surrounded by an orange aril. Ants love to eat the aril, and the seed-eating birds will consume the seed.

The first revegetation work that I undertook on my property included planting underneath Sally Wattles. It is those understory trees and shrubs which have really thrived, enjoying the partial shade and the nitrogen fixing qualities that the *A.*

salicina trees provide. I've also attached a King Orchid (*Dendrobium australasicum*) in the fork of one of the wattles, and it is doing well.

You may have seen ball-shaped foliage hanging from our local Sally Wattles. It is a variety of Mistletoe (*Amyema* sp.), that uses *A. salicina* as a host tree. The Mistletoe flowers attract the handsome and very vocal Mistletoebird, (*Dicaeum hirundinaceum*), during January and February.

In conclusion, the Sally Wattle is very beneficial to wildlife, and to surrounding flora, and requires minimal maintenance. It's an overall winner!

Karen Gruner

tanglewoodnatives@gmail.com

Test your acacia knowledge...

(Answers over page)

Do you know the common and/or scientific name of the following?



Photos by Martin Bennett

Of interest...

Birdlife Southern Queensland and Birds Queensland are hosting their bi-annual *Queensland Ornithological Conference* on Saturday 23rd June at Ladies College, UQ St Lucia campus. Excellent speakers, guided bird walks and great prizes are part of the fare. For more details go to...
<https://www.birdsqueensland.org.au/qoc2018.php>



If you would like to submit an item or photo for the newsletter or you have any suggestions and/or concerns that you would like LUCI to consider, send us an email...remember...

Stay connected, it's healthy!

If you do not want to be included on the email list for this newsletter please let us know at lucatchmentsinc@gmail.com.
Newsletter Editor Diane Guthrie 0413 333 681

How did you go on the test...

- ✓ *Acacia conferta*
 - ✓ *Acacia complanata c*
- (Thanks Martin)

Upcoming events ...

- ☞ *Saturday June 2nd Lockyer Valley Biodiversity Priorities Meeting.*
9:00am-12:30pm, UQ Gatton Campus.
If you would like to nominate yourself or a representative of your group to contribute to the collation of Lockyer Valley's biodiversity information or you would like to know more about this event, please contact Diane on 0413 333 681 or lucatchmentsinc@gmail.com
- ☞ *Sunday June 24th LUCI Breakfast with guest speaker Dr Des Hoban*
<http://www.deshobanbushcare.com/>
Arrive 7:30am for 8:00am start at Stockyard Creek Hall, Stockyard Creek. \$10 for a hearty breakfast (children free) and a thought provoking talk on "How well are we managing the Australian bush?". RSVP essential for catering purposes
lucatchmentsinc@gmail.com.
- ☞ *Sunday July 22nd Biodiversity Property Planning Workshop*
9:00am-12:30pm, venue to be advised.
Would you like to undertake native vegetation and/or habitat restoration on your property but don't know where to start? Then come along and let Martin Bennett, LVRC's Environment Officer, take you step by step through a property planning process that allows you to best manage your project. Martin will demonstrate how to use online databases and mapping tools to build up your biodiversity property plan. As places will be limited, please indicate your interest at
lucatchmentsinc@gmail.com