



Quarterly Update No 13 ... July 2018

Greetings all... enjoy LUCI's Update!

A housing shortage in the bush!

"Destroying living or dead hollow-bearing trees displaces or kills wildlife dependent on those hollows."¹ Tree hollows, whether in live or dead trees, are as essential to life for many native animals as is a house for a human family. It is a place to nest, breed, raise a family and provide protection. Over 130 species of wildlife in South East Queensland are identified as hollow-dependent for survival.²

The increasing shortage of hollows will mean many of our birds and animals will never be able to get into the hollow market. Why? Because hollows usually occur in trees 100-200 years old! How many of those do we have left? How many of those are we likely to have in the future?



Hollows are foundational for maintaining healthy habitats and, hence, biodiversity. All shapes and sizes of hollows as well as

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<http://www.environment.nsw.gov.au/resources/nature/Factsheet5TreeHollows.pdf>

² <https://www.lfwseq.org.au/wp-content/uploads/2016/11/The-Value-of-Habitat-Trees.pdf>

trees with multiple hollows are needed in the landscape to meet the differing requirements of the many hollow nesting species.³



LUCI encourages landholders to become aware of existing and potential hollow-bearing trees on their properties and manage their retention. ***Reduce fire impacts on hollows by reducing the fuel load around the tree base. When collecting firewood, avoid harvesting mature and dead trees that are in the process of producing hollows.***

Like LUCI member Peter Darvall, start...

Thinking about nesting sites on my property...by Peter Darvall

For some years we have watched a resident adult pair of Kookaburras at our place, constantly foraging, occasionally engaging in duet, but, so far, never appearing with offspring. Have they a nesting site? If so, is it too vulnerable to predators for eggs or nestlings to survive? Are they living here in hope of finding a home, part of our young generation that cannot afford a home?

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https://www.researchgate.net/publication/295254964_Effects_of_entrance_size_tree_size_and_landscape_context_on_nest_box_occupancy_Considerations_for_management_and_biodiversity_offsets

A pair of Pale Headed Rosellas lives near our northern boundary, sometimes appearing in a group of three to five. Presumably they are breeding successfully, if irregularly, and have an adequate nesting site, or sites. It could well be they have found a hollow in an old strainer post; a habit described by a Land for Wildlife (LFW) member in the October 2016 LFW Newsletter.⁴

A pair of Wood Duck regularly grazes the roadside near our northern boundary in the same area as the Rosellas. With semi-permanent water within a few hundred metres, I am fairly sure they have nested locally as, at times, they are accompanied by a few immature birds. Wood ducks nest in tree holes near or above water, often using the same site.⁵

Various small species of Gliders and Bats occur locally and have been observed seeking shelter in crevices, under bark and in ceilings where "squeeze-in" access is available.

The above are examples of very limited local populations. The question is, of course, if there were more hollows to choose from, would there be more dense populations?

What do we know about nest site replacement?

Ecologists, David Lindenmayer and colleagues, monitored a nest box project designed to offset environmental damage caused by widening of part of the Hume Highway⁶. The highway developers had to comply only to the extent of installing nest boxes. Effectiveness was not a requirement. The ecologists note their concerns that offsetting is increasingly misused and abused. The offset project

was a total \$200,000/60 nest boxes failure, which does nothing for the public's faith in offsetting! Another study of 144 nest boxes with six different entrance sizes situated in four different landscape contexts found the boxes had limited effectiveness as a substitute for natural hollows.⁷

A number of councils in South East Queensland are addressing nesting site replacement via the use of nest boxes. Brisbane City Council used "artificial trees" (multiple nest boxes on poles) in an offset revegetation project⁸ while Gold Coast City Council has embarked on a program to create "new" hollows in suitable living tree to counter habitat loss through development.⁹ While initial results from both Council exercises are said to be promising, medium to long-term effects are yet to be established.

Lockyer Valley Regional Council recently sponsored a Land for Wildlife event, which included a session on nest boxes presented by Alan and Stacey Franks of *Hollow Log Homes*¹⁰. Alan emphasised the knowledge to be gained from properly conducted and monitored nest box projects. Of particular interest was his report of a ten year monitoring exercise in a forest red gum revegetation project, where two vertebrate species not previously known to breed in the area were using the boxes. Previous survey methods had missed them.

The LFW Queensland Note A2 on nest boxes provides a comprehensive overview on hollows as a critical habitat requirement,

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https://www.researchgate.net/publication/295254964_Effects_of_entrance_size_tree_size_and_landscape_context_on_nest_box_occupancy_Considerations_for_management_and_biodiversity_offsets

⁸ https://www.lfwseq.org.au/wp-content/uploads/2018/01/LFW_Newsletter_Jan2018_web.pdf

⁹ ABC News report July 2018

¹⁰ For further information on construction and advice see the Stacey's book "Nest Boxes for Wildlife - A Practical Guide"

⁴ <https://www.lfwseq.org.au/wp-content/uploads/2016/11/Land-for-Wildlife-Newsletter-Oct2016.pdf>

⁵ <https://australianmuseum.net.au/australian-wood-duck>

⁶ <https://theconversation.com/the-plan-to-protect-wildlife-displaced-by-the-hume-highway-has-failed-78087>

the value of nest boxes, nest box requirements and the maintenance of nest boxes.¹¹

What can I do?

My area of forest regrowth, with trees up to 25m, is too young to have hollows, but perhaps nest boxes ...the opportunity is there, the ever-expanding information is there: all I need is a very long ladder and a couple more life-times!



Continuing our April story "why conservation matters to me"

Words and photos by LUCI member Joanne Cork

I'm not quite sure how to explain why I value nature. I guess I love living in a natural environment. I grew up in Fordsdale, attended local schools and, after working as a teacher in Brisbane and various regional Queensland towns, returned to Fordsdale to be close to my ailing mother.

My 220ha property, *Pyecroft*, includes creek flats along Heifer Creek rising to



mountain tops on either side of Heifer Creek Road (now known as Gatton-Clifton Rd). *Pyecroft* had previously passed

through the hands of my great grandparents (John and Kate Pye), my great uncle George Pye (who married local May Vogler) and my uncle Jim Cork, before being purchased by my parents (Dick and May Cork).

My focus is not grazing or cropping, but retention of native vegetation and elimination of weeds, especially lantana and cats claw creeper. I would also like to

revegetate some mountain slopes which have been eroded through fire and subsequent heavy rain. However, we all know that this is a difficult job. I am happy that some native fauna can live on my land, though there are threats from wild pigs lately. I don't know a lot about plants but I do know quite a bit about animals.

During my teaching career, I resurrected many birds and several animals brought to me by students.



I hope that my daughters and grandchildren will eventually enjoy living at Fordsdale, roaming over *Pyecroft*, the property I love.

Lockyer Valley Biodiversity Priorities meeting 2nd June

Twenty-three people attended the UQ Gatton Campus for the second meeting, convened by LUCI, of Lockyer Valley biodiversity stakeholders. The meeting was attended by Lockyer Valley Regional Council representatives (Councillor Rick Vela and Environment and Pest Coordinator, Belinda Whelband) and involved local community groups and researchers presenting overviews of their environmental activities and their knowledge of the Lockyer's biodiversity.



Participants at the 2nd Lockyer Valley Biodiversity Priorities Meeting, UQ Gatton campus.

Participants learned about the work of Friends of Lake Apex members, their observations of bird populations at the site over the years, issues around sedimentation

¹¹ https://www.lfwseq.org.au/wp-content/uploads/2016/11/LFW-Note-2016_A2.pdf

run-off in the area and progress in the arboretum. LUCI's presentation outlined members' strategy and projects for achieving landscape conservation in the Lockyer Uplands, demonstrated through landholders' Lockyer Uplands Glossy Black Cockatoo Project. Participants also learned about Lockyer Community Action's citizen science Koala project and the establishment of a long-term Glossy Black Cockatoo research and monitoring site on a member's property. Dr Patrick Webster (UQ) described his research on mapping the distribution of Black-breasted Button-quail across Queensland and confirmed their presence in the Lockyer Valley.

Lockyer Valley Regional Council's Belinda Whelband noted that the information presented on the day would be followed up in more detail with each group during Council's development of a Natural Resource Management Plan for the region. A third meeting of the Biodiversity Priorities network was suggested for later in the year to be coordinated by Council stakeholders.

If you are interested in being part of this network or would like to discuss biodiversity priorities for the Lockyer please email us on lucatchmentsinc@gmail.com

LUCI Breakfast at Stockyard 24th June

On quite a chilly morning, 45 people arrived at the Stockyard Creek Community Hall to enjoy a wonderful breakfast spread and hear guest speaker, Dr Des Hoban. Des provided an overview of national environmental policy from the mid '60s to now, noting that there is "an expanding catalogue of issues, proliferating programs and 'promotional' reporting of outputs not outcomes." He highlighted the lack of, and need for, genuine performance evaluation to be built into project design if policy is to be effective.

Des walked us through his concerns about governments' capacity for "bushcare" i.e. the protection of listed/protected species in

the bush. Des described the historical increase in numbers of endangered species. As a private citizen, Des audited the environmental performance of the combined efforts of government and land managers in pastoral areas of western Queensland. The result was a "fail" on biodiversity and a "pass" on sustainability indicators. Des proposed a model for independent (non-government) reporting to parliament on biodiversity and sustainability performance, as a future solution.

Des has written on these topics in his book "Bushcare. A Citizen's Audit" (2016) and is currently planning a follow-up book.¹² LUCI thanks Des for his generosity in speaking at the breakfast and to all who made the event such a success!

Biodiversity Property Planning Workshop Sunday 22nd July

LUCI conducted a workshop on property planning for biodiversity outcomes with a group of landholders representing ten properties. The aim of the workshop was to (a) increase landholders' knowledge of their property's land type, representative flora and fauna, its landscape connections and any special considerations and (b) assist landholders develop a practical plan for biodiversity management on their property.



LVRC's Land for Wildlife Officer, Martin Bennett, provided each landholder with a property "stewardship" folder containing a collection of contour and vegetation maps of

¹² <http://www.deshobanbushcare.com/>

their property and information on their property's Regional Ecosystems and representative flora and fauna. Participants were also provided with a number of links to public access data bases (e.g. Wildnet, Atlas of Living Australia) for further exploration of their property's ecological values.

The property stewardship folder also contains a number of planning exercises for landholders to complete. As a work in progress document, it would describe the history of a landholder's vision, plans, activities and results for their property over the period of ownership.

Ongoing projects...

- * **Friends of Dwyers Scrub** - if you have a morning to spare once a month and would like to do voluntary work, come along and help control weeds in Dwyers Scrub Conservation Park, East Egypt Road, Mount Whitestone. Our work focuses on clearing the Cats Claw from the endangered Semi-evergreen Vine Thicket areas in the Park. We usually end our morning's work with a shared brunch.
Interested? Contact Paul Stevens 0429 880 144 or Jim Kerr 5462 6724.
- * **Lockyer Uplands Glossy Black Cockatoo Project: Phase 2** - LUCI's Glossy Black Cockatoo (GBC) project is now in its third year and involves landholders in a range of monitoring activities on their properties from monitoring (a) the presence of GBCs, (b) evidence of GBCs feeding from presence of orts (chewed she-oak cones) and (c) the flowering and fruiting seasons of the GBC feed trees (*Allocasuarina* and *Casuarina*). The project is mentored by Dr Guy Castley of Griffith University. If you would like to join the project and help add to our knowledge of GBCs and their habitat, **contact Diane Guthrie 0413 333 681**
- * **Junior Citizen Science Project** - our partnership program with Mount Sylvania SS Principal, Mark Thompson, is underway with LUCI members Chris and

Roxane contributing teaching material and mentorship on soil nutrition, good composting and non-toxic production of food. On ground activities will form part of the students' earth sciences program.

Local plant profile

...by LUCI member Karen Gruner

So many of our local native plants have sharp thorns on the leaves and/or branches, and *Bursaria incana*, also known as the Prickly Pine (Prickly *Bursaria*, Frosty *Bursaria*), is no exception. The word 'Pine' used in one of its common names is a bit misleading, because *B. incana* is not a pine at all. It is a small tree which grows to about six metres, and is found in dry rainforest areas. *Bursarias* are members of the Pittosporaceae family which among others, includes *Pittosporum*s, (e.g. Gumbi Gumbi - *Pittosporum angustifolium*), and *Hymenosporum* (Native Frangipani).

The tiny leaves have white hairs on the underside which gives the foliage a bi-colour appearance - green on the top and silver/grey underneath. The new shoots are also hairy, and as the branches grow, they produce thorns all along the stems. The thorns are reduced in the more mature branches. In spring, sprays of sweet smelling small white star-shaped flowers appear, which are not only appealing to us, but attract many pollinating insects such as beetles, butterflies and bees.



Bursaria incana flowers with the Brown Flower Beetle (*Glycyphana stolata*). Photo by Martin Bennett

What follows is the formation of clusters of round woody pods that remain on the tree for months, eventually cracking open to reveal tiny brown seeds. I've successfully germinated the seeds, but it does take the best part of a year for those seedlings to be ready for planting out.



Bursaria incana seed pods. Photo by Martin Bennett

About five years ago, my very first planting on the property included about half a dozen *Bursaria inacanas*. Their growth in the first year was slow, but then they shot up quite quickly and have reached maturity. They are located in an area which is susceptible to frost, and have not shown any signs of frost damage. I really like the shape of the trees; they are quite narrow, so it's easy to fit several other plants around them, and the older branches have an attractive slight weeping habit. The leaves are very small and make a nice contrast growing beside other trees with larger foliage.

An unexpected surprise occurred last summer: I went wandering through that same planted area and noticed that every *Bursaria* tree had a finch nest in its centre! They would belong to either the Red-browed Finch (*Neochmia temporalis*), or the Double-barred Finch (*Taeniopygia bichenovii*). The nests are ball-shaped with a small entrance hole. Such small birds are taking advantage of the marvellous protection from predators that the thorns and the dense foliage provide.

Karen Gruner www.tanglewoodnatives.com.au

Upcoming events ...

☛ *LUCI's inaugural Lockyer in the Wild Nature Photography Competition*

From Monday 13th August, LUCI invites budding wildlife photographers to submit their best photos of the Lockyer Valley's own fauna, flora or fungi for judging. Entrants have a chance to win cash prizes from major sponsor Lockyer Valley Regional Council and prize donors Lockyer Printing, jAK & Mo Taste Co, Rosier Futures and Dawn Properties.

Entry forms with submission and prize details will be available from the 13th August on the LUCI website (see link below). Winners will be announced at an exhibition of shortlisted entries to be opened by LVRC Mayor, Ms Tanya Milligan, at 5:30pm on Saturday, 3rd November at Stockyard Creek Community Hall. Enquiries contact Penny Kidd 0407 581 996 www.lockyeruplandscatchmentsinc.wordpress.com

☛ *Spring Walk, Sunday 23rd September Arrive 7:15am for 7:30am start*

The special interests of LUCI's Spring Walk will be bird life and flora in Semi-evergreen vine thicket areas on a member's property. The walk's co-leaders will be Deb Metters (Healthy Land and Water) and LVRC's Environment Officer Martin Bennett. The morning will conclude with the usual BYO morning tea to share. *Numbers will be limited, so book your place through Peter Darvall on 5462 6841.* Sturdy shoes will be in order and remember your hat, sunscreen and water bottle.

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

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Test your spider knowledge...

(Answers bottom of page)

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



Photo credit Robert Ashdown.



Photo credit Robert Ashdown



Photo credit Robert Ashdown.

Thanks to Lockyer Valley Regional Council

LUCI was successful in gaining a grant in LVRC's Community Environment Grant 2018. With the grant monies, LUCI has purchased (a) fieldwork equipment, which will add rigour to our Glossy Black Cockatoo project data collection and (b) presentation equipment, which will professionalise our community education activities. LUCI values Council support in helping to achieve our landholders' conservation objectives.

*Join like-minded others in caring
for native habitats...*

*Become a LUCI member
Only \$5/year, children free.*

*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 spider test?

1. Toowoomba Funnelweb *Hadronyche infensa*.
2. Newly moulted Golden Orb Weaver *Nephila edulis* female and smaller male
3. Underside of female Redback Spider *Latrodectus hasselhi*.

*[Thanks to Robert Ashdown for
contributing his photographs and to
Rod Hobson for facilitating the
process.]*