



Quarterly Update No 14 ... October 2018

Greetings all... enjoy LUCI's Update!

Without the humble she-oak...¹

The Glossy Black Cockatoo (GBC) is listed as **Vulnerable** under the Queensland Nature Conservation Act 1992, which means the GBC population is considered to be decreasing and GBC habitat is at risk from threatening processes.

Generally confined to eastern Australia, GBC populations predominate in northern New South Wales and southeast Queensland, while one GBC subspecies inhabits Kangaroo Island.

GBCs are **Vulnerable** because:

- ✳ GBCs are highly specialised feeders exclusively dependent on foraging the minute seeds in she-oak (*Casuarina* and *Allocasuarina*) cones.
- ✳ *Allocasuarina* have a poor survival rate during periods of drought stress.
- ✳ Fire, even low intensity fire, can cause *Allocasuarina* to shed its seeds and delay its foraging potential for a number of years.
- ✳ GBCs are obligate tree-hollow nesters, needing hollows around 26cm wide and up to 1.4m deep, found mainly in Eucalyptus species.
- ✳ Tree hollow nests are required for egg laying and incubation (one month) and nestling (three months).

- ✳ GBCs usually produce one egg every two years, laid between Autumn-Winter, and raise only a single chick per year;
- ✳ Fragmentation of habitat makes it energetically inefficient for the GBC to forage over long distances between feeding patches.
- ✳ Inability to forage long distances has consequences for breeding productivity, chick growth and survival and, ultimately, could lead to population decline.

The main threats to GBC survival are threats to their habitat, for example, through clearing for agriculture and settlements, firewood harvesting of she-oaks, frequent intense fires adversely affecting she-oaks and "improvements" that see the removal of the she-oak understory.



Our local Lockyer Uplands landscape has long been a favoured foraging landscape for Glossy Black Cockatoos because of our stock of Black she-oak, Forest she-oak, Stringy bark she-oak and Belah.

The three essentials for GBC habitat are ... she-oak cones, tree hollows and water.

Let's keep the GBCs in our landscape!

¹ Unless otherwise referenced, the content of this item is taken from the following:

- a) Murdoch, M (2008) *Factors influencing the conservation status of the Glossy Black-Cockatoo (Calyptorhynchus Lathamii Ltahami) on the Gold Coast, Queensland. Griffith University Gold Coast Campus: Griffith School of Environment.*
- b) NSW Scientific Committee (2008) *Glossy Black-Cockatoo Calyptorhynchus lathamii. Review of Current Information in NSW.*

Continuing our members' stories "why conservation matters to me"

... Paul Stevens



I see how we are contaminating our environment, that is, the natural systems that sustain our lives and should provide clean air and clean water. I see how "development" (and money) comes before the care of these natural systems. I read somewhere that the way we treat the planet says something about the way we treat ourselves and each other.

Humans seem to think the planet exists for them only. I want to say "it doesn't, you are not the only ones." We share our natural systems with thousands of other species, we are just one of many species. I care that other species need their places to live, the same as we do. I care about and respect the beauty of our natural areas. Let's look after the natural world because it's the only one we and all the other species have.

LUCI Spring Walk 23rd September

The special interests for LUCI's Spring Walk on a Stockyard property were flora and birds. Twelve walkers were fortunate to have Martin Bennett (Environment Officer, Lockyer Valley Regional Council) and Deborah Metters (Land for Wildlife Regional Coordinator, Healthy Land and Water) as their guides. LUCI thanks Penny and Mark Kidd for hosting the walk on their beautiful and diverse property and Martin and Deb for generously sharing their time and amazing knowledge with us. Here are their accounts of the day...

... by Martin Bennett

Located on a large ridgeline in the western Lockyer, the property is 152 ha of mainly basaltic to sandstone soils with deep drainage gullies from the ridgeline. State Government mapping for the property shows 5 regional ecosystems, including Narrow leaved Ironbark and Blue gums on sandstone

woodland, Fringing forest on waterways, Semi-evergreen vine thicket on basaltic rock scree (dry rain forest), Thin-leaved stringybark, grey gum, yellow box, blue gum, and pink bloodwood woodland on basalt soil (mixed Eucalypt forest), and Silver leaved ironbark with narrow leaved ironbark, Blue gum, smooth barked apple, and Moreton bay ash woodland on basalt soil.

The entire property is an ecotonal² wonderland, with forest meeting woodland, meeting dry rainforest, meeting fringing forest. Within these ecotonal communities we see representatives from all the above communities making for a very rich diversity of species. This Spring walk yielded yet further species that had been missed in the past 4 trips here.

Setting off in the Silver leaved and Narrow leaved ironbark woodland, the group walked through the Mixed Eucalypt forest to the Semi evergreen vine thick on the rock scree. On the way out at the end of the day, Deb Metters and I went for a bit of a poke around towards the entrance of the property and found that there was indeed Narrow leaved ironbark and Blue gum on sandstone soils although more ground truthing is required before we can be confident of the ecosystems on site.

Floral highlights included the discovery of a large 20m high *Brachychiton x turgidulus*, a hybrid that occurs in a restricted range naturally between the Kurrajong and the Qld Bottle tree.



Photo by
Martin
Bennett

² Ecotone is the transition area between two different vegetation communities.

This tree is quite variable, and is also fertile, therefore it can reproduce successfully. It shares characteristics of both parents, it has a swollen trunk, not as big as the bottle tree, but larger than the Kurrajong, with adult leaves of the bottle tree and open form of the kurrajong and flowers more like the bottle tree except a lot more colourful. An additional highlight was the discovery of a super big Peanut tree that was growing on a basaltic rock scree, it was indeed an impressive specimen with a trunk diameter approximately 70cm and height >20m. It was leafless, as they are this time of year; just waiting for the flowering then the fruiting that will follow although there was still some old fruit in the upper branches. The Indigenous folk would roast the black pea-like seeds, which would have the taste of a peanut; while raw they taste like a pea.

...by Deb Metters

On our walk, we recorded 24 species of bird, which are recorded on the eBird list here <https://ebird.org/australia/view/checklist/548684184>

Highlights were hearing the Noisy Miner raptor alarm call and then eagle-eyed Peter spotting a Brown Goshawk overhead - certainly the culprit of the miner's alarm.

Just as we were heading back along the ridgeline, the sky came alive with woodswallows circling overhead. They can be difficult to identify on the wing, but with photos I took, I can confirm that we had both White-browed Woodswallows and a few Masked Woodswallows in the flock. Both species are uncommon in south-east Queensland, preferring drier habitats out west, but with the drought, these birds are moving east into our region.

A pair of White-winged Trillers was also a delightful surprise as were their companions - Rufous Whistlers and a Varied Sitella. Most of the birds we saw were insectivores indicating there are still good numbers of invertebrates in these forests to support

these birds. I would suspect that diversity and abundance of nectar, seed and fruit-eating birds would increase in greener times.

Thank you LUCI for inviting me on your Spring Walk.

Biodiversity Property Planning Group meeting 28th October

Following our July introductory workshop on Biodiversity Property Planning (see *Quarterly Update No 13*), a group of LUCI members representing eight properties expressed interest in meeting on a regular basis. The first follow-up meeting, hosted by Penny and Mark Kidd on their property, focused on what each landholder wanted to get out of group meetings and how they would like the group to function.

Landholders confirmed the value of approaching conservation management on their property through a planned process and, importantly, through a shared learning process. Comments from participants included: "The planning process gave me a new perspective on my property", "Planning helps prioritise", "Writing down what you're going to do is a reality check" and "I want to find out if there are others doing things differently to me".



Some of the members from the Biodiversity Property Planning Group hear about Penny and Mark Kidd's plans.

The group decided that the most helpful structure for each meeting would involve: a **Practical** section where landholders talk about their on-ground achievements; a **Knowledge** sharing section around a particular topic of interest, which may involve the input of an invited expert; and a **Networking and Education** section to

discuss how the group can link with like-minded others and share learnings.

At this initial meeting, Penny and Mark Kidd talked about their property planning process and how it had given them a new perspective on both their priorities for conservation management on their property and how they would need to structure their time and finances to resource their plan. Recently, LVRC's Land for Wildlife Officer Martin Bennett spent a day "ground truthing" the Regional Ecosystem mapping of the Kidd's property to provide them with a basis for making their planning decisions. The exercise highlighted for Penny and Mark the significant ecological values of a number of ecosystems on their property and better informed where and how they could direct their conservation energies.

The next meeting of the group will be held on Sunday 13th January. If you are interested in Biodiversity Property Planning and/or would like to share your conservation journey with like-minded others, let us know on lucatchmentsinc@gmail.com

Glossy Black Cockatoo Project

We are so fortunate in our local landscape to continue to enjoy the presence of the *Vulnerable Glossies*, thanks to landholders who value and conserve our local she-oak stock. I am a GBC tragic and last week was so excited to spend more than an hour in our black she-oak forest watching and listening to seven Glossies (and six the following day) feeding and calling to each other. I had been noticing their chewings in the area for some weeks and to see them was just magical.

LUCI's five-year project to study GBCs use of our local landscape and the flowering and fruiting seasons of the GBC feed trees progresses steadily. As well as monitoring the continuing presence of Glossies in our landscape, the project aims to tell us which feed trees are being used one year to the next, the continuity of the food source and

what tree characteristics are related to seed desirability.



Example of Allocasuarina (she-oak) male flower carrying pollen on left and female flower on right.

The project involves eight properties and Dwyers Scrub Conservation Park with LUCI members undertaking the surveying. To date, we have tagged 636 trees many of which have now undergone their third six-monthly survey. Our project mentor Dr Guy Castley, of Griffith University, will be meeting with the group next month to discuss progress and any early trends in the data.

If you are interested in joining the project or can add to our local knowledge of GBCs and their habitat contact us on lucatchmentsinc@gmail.com

Lockyer Uplands Koala Project

LUCI's interest in recording the presence of Koalas in our local landscape ticks away in the background although, due to our many activities, does not get the attention that is needed. While there have been some local sightings of Koala, most of our local records are based on Koala scats. Members find these scats while either walking on their property or engaged in Glossy Black surveying. Our scat findings are confirmed by Dr Guy Castley before they are recorded on WildNet.

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If you would like to learn more about koala scats or are interested to know if Koalas are present on your property let us know at lucatchmentsinc@gmail.com



Koala scat samples from 32 locations on four members' properties ready for expert confirmation

Our long held plan is to undertake more structured Koala surveys on interested members' properties using a grid-based survey method. However, this plan requires more human on-the-ground resources than we can currently muster at present. Nevertheless, the goal remains.

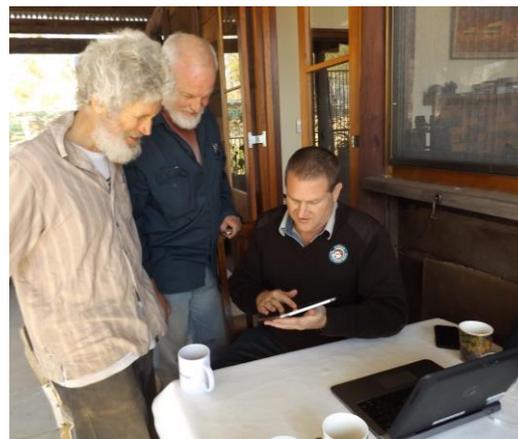
Friends of Dwyers Scrub

FoDS volunteers believe they are finally seeing a marked change in the level of Cats Claw infestation of Semi-evergreen Vine thicket areas in Dwyers Scrub. The team is optimistic that they can win the battle against the canopy killer while recognising there is still a way to go and continuing vigilance will be the key.

The FoDS team is pleased to have met a number of times this year with QPWS contact persons, Senior Ranger Tim Wood, and local Ranger in Charge Chris Job. Recently, Tim inducted the FoDS team in the use of an alternative herbicide to our current use of Glyphosphate. The new product does not involve a spray and is brushed on to the cut stump. As well, QPWS have provided the team with additional tools and protective equipment.

Part of the volunteers' work agreement with QPWS is to prepare maps (with suitable base mapping software) of the Cats Claw infested areas in the park and create a data base that includes an inventory of weed species in the infested areas. Consistent with QPWS' mapping software, the FoDS team has opted to use Avenza mapping software and a hand held device to digitally track, while walking, the outer limits of the Cat Claw infestation. The software allows volunteers to insert GPS coordinates for other weed species found in the area which is being mapped, along with comments and photos in real time.

If you are interested in volunteer work and have a morning to spare once a month, consider joining us at the Park in our battle against the canopy killer. Contact Paul 0429 880 144 or Jim 5462 6724 to learn more.



FoDS volunteers Jim Kerr and Paul Stevens learning about Avenza mapping from QPWS Senior Ranger Tim Wood.

****EXPRESSION OF INTEREST****

Come and join us in the Qld Museum Workshop; get behind the scene and learn about preserved animals, scats and the discovery of new species within the Museum collection from some very talented staff. Lunch supplied. Interested? Get in early as...

NUMBERS ARE LIMITED

Contact lucatchmentsinc@gmail.com

Local plant profile

...by LUCI member Karen Gruner

Of all the plant species found in the regional ecosystems of the Lockyer Valley, *Carissa ovata* (*Carissa spinarum* - Native currant or Kunkerberry) is a shrub that occurs commonly throughout many vegetation communities, and I just love it! It's a tough shrub that always looks good. The species is a member of the Apocynaceae family along with Hoya, Frangipani, Alyxia and Parsonsia, among others. As the species name implies, the leaves are ovate (egg-shaped), with quite a rounded edge, and they are bright green and glossy all year. There are spines which form along the stems at the nodes.

In late spring, early summer, *Carissa* gets covered in sweet smelling clusters of white flowers that attract a variety of insects.



Photo by Martin Bennett

What follows are the currant-like fruits which start off green and ultimately turn a glossy black colour. They too are a food source for birds. Apparently, the fruit is edible to us, although I can't say I've tried one; the milky sap that exudes from the stems is toxic, so I'm guessing that the fruit needs to undergo leaching or other treatment prior to eating.

The size of the shrub varies. Often, it has a sprawling habit and grows to about two metres in height, yet I've found that in some areas on the steep sandstone slopes of my property, it towers over me, reaching more like three to four metres.



Photo by Martin Bennett

There is only tank water on my property, so when undergoing any revegetation works, the seedlings get a drink at the time of planting, and that's they're lot until it rains. Before we had this wonderful recent (October) rain, I went to an area that was planted out about six months ago, to see what was still alive after months of drought. Much to my delight, the *Carissa ovata* plants were lush and healthy, looking back at me as if to say, "What drought?"

Small birds will use *Carissa* in their flight path, travelling from shrub to shrub foraging for insects, and animals such as bandicoots, snakes, and rodents can hide underneath the prickly foliage as a safe refuge. Last summer, when I was collecting fruit, I noticed a large Joseph's coat moth (*Agarista agricola*) larva feeding on the foliage.

I've had successful germination of the seeds extracted from fresh fruit, and then soaked overnight. *Carissa* can also be propagated from cuttings in spring. It is a slow growing shrub, but so attractive and hardy - well worth the wait.

Karen Gruner www.tanglewoodnatives.com.au

Birding tips...by Deb Metters

Birding is a wonderful past-time. An opportunity to connect with nature and to forget about life's worries. Birding is about using all your senses - not just bird "watching". We all know the call of the kookaburra, and with practice and repetition, we can learn many other bird calls too.

Learning bird calls has been difficult for me as I am not naturally an auditory person, but there are tricks and tips to help learn. Firstly, confirm what you do know. Each time you hear a Laughing Kookaburra or Pied Currawong, say their name in your head. Then start to branch out from there.

Target a specific call you don't know and try to work it out using logic (big or small bird) and birding apps or the free xeno-canto website. <https://www.xeno-canto.org/>

The new CSIRO *Australian Bird Guide* is a hefty book, but well worth the \$50 to purchase. It is the definitive guide to identifying Australian birds. <https://www.publish.csiro.au/book/6520/>

The smaller *Birds of South East Queensland* is only \$15 and has simple photographs of each local species and no descriptive text. It is a great resource if you are just starting out on your birding journey. <http://www.birdlife.org.au/locations/birdlife-southern-queensland/bsq-shop>

Of interest...by Martin Bennett

The meaning of the Latin and ancient Greek words for the Bottle tree family is interesting. *Brachy* means short and *chiton* refers to a coat that was once worn, which describes the mass of short hairs that coat the seeds. With *Brachychiton rupestris* (Qld bottle tree), *rupestris* refers to a rock loving plant, while *populneus*, in *Brachychiton populneus* (Kurrajong), refers to the similarity of the leaves to the European Poplar tree. Indigenous uses for the *Brachychiton* included eating the seeds, raw or roasted, and the new shoots. Even the

root of the small plants, which was often larger than the trunk, was dug up and chewed to extract water, lots of water; gallons have been reported. European explorers also learned to utilise these plants by roasting the seeds, and then grinding them into a bush coffee that was quite tasty. Chewing the pith was claimed to be another tasty treat, and of course the this tree family is well known for its fodder uses in hard times. The mucilaginous exudate believe it or not was eaten by Indigenous and Europeans alike, and is said to be quite nice to eat. I must try some next time they are exuding!

Upcoming events ...

LUCI's inaugural Lockyer in the Wild Nature Photography Exhibition

Come along and see Lockyer's native flora, fauna and fungi through 100 photographs at **5:30pm on 3rd November at Stockyard Creek Community Hall**. There will be a presentation of awards and prizes to photographers by LVRC's Deputy Mayor. Stay on for the Hall's monthly community barbeque. Enquiries contact Penny Kidd 0407 581 996 or download the exhibition poster at www.lockyeruplandscatchmentsinc.wordpress.com

LUCI AGM/GM and Christmas lunch

Have your say in the election of LUCI office bearers for 2019 and share your ideas on current and future LUCI projects. This year our AGM/GM meetings will be combined with a shared Christmas lunch starting at **11:00am on Sunday 25th November (venue to be advised)**. Following the meetings and lunch, attendees may like to join the FoDS volunteer team for a walk in Dwyers Scrub to check out our weeding achievements.

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

Test your knowledge...

(Answers bottom of page)

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



Photo by Diane Guthrie



Photo by Martin Bennett

*Join like-minded others in
caring for native habitats...
Become a LUCI member
Only \$5/year, children free.*

***2019 Memberships due**
1st November 2018*

*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?

- 1. Centropus phasianinus or
Pheasant Coucal
<http://www.birdsinbackyards.net/species/Centropus-phasianinus> (thanks
Deb Metters)*
- 2. Gymbidium canaliculatum or Black
orchid (Thanks Martin Bennett)*